

**Factors affecting the utilisation of skilled birth attendants for delivery in a
western hill district of Nepal**

By

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A thesis submitted to the

Faculty of Social Sciences and Humanities

In part of fulfilment of the requirements for the

Degree of Doctors of Philosophy in Public Health Policy

London Metropolitan University

London, UK

November 2014



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Yuba Raj Baral

June, 2014

London, UK

DEDICATIONS

I would like to dedicate this work to women all those who are poor, deprived and lack of access to quality skilled birth attendants during pregnancy and childbirth.

Yuba Raj Baral

June, 2014

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ACKNOWLEDGEMENTS

Writing this Ph.D. thesis has been in turn a struggle and joy and its completion is a tribute to my supervisors, family, friends, colleagues and the women, mothers-in-law, fathers-in-law and husbands and health professionals who have contributed along the way.

I acknowledge and I am very indebted to the London Metropolitan University which provided me with a Vice Chancellor Ph.D. Scholarship. The award and funding have allowed me the space to undertake the research and precious time to write.

I would first like to thanks all my supervisors for their constant support and guidance while I have been at the London Metropolitan University. Profound thanks to Professor Karen Lyons, Jo Skinner (London Metropolitan University), and Professor Edwin van Teijlingen (University of Bournemouth). Their unconditional support, clarity in subject, wise counsel and useful feedback helped focus my thinking and kept me on topic. Without their kind attention and support this research work would not have been successfully completed.

I would like to thank staff members in the Faculty of Social Sciences and Humanities, London Metropolitan University, who supported me and heightened my confidence to complete this study. I am also grateful to other individuals not mentioned by name for supporting me all the way towards accomplishing this prestigious award.

I am most indebted to the women, mothers-in-law, husbands, fathers-in-law who welcomed me into their homes: they provided valuable information and shared their experiences and stories as reflected in this thesis. I would like to thank the staff in the maternity services working in the both public and private hospitals for sharing their views, opinions and experiences, in spite of their busy working schedule. Without the valuable time, information, views and experiences of all respondents none of this work would have been possible. I would also like to thank the female interviewer for her kind support during data collection stage; the local school head teacher who helped connect me to the community; and Anne for her support in editing this thesis.

I am very grateful to my family, especially my wife, *Rita Baral*, for her constant and unconditional support and moral encouragement, her patience and love through the years of this process. I am also very thankful to my daughter, *Sampada Baral*: her every smile encouraged me and provided me with strength to carry out this piece of work. I wish also to thank other relatives and friends who supported me directly and indirectly during good and hard times throughout the study.

Thank you

Yuba Raj Baral

June, 2014

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KEYWORDS

Access of maternity services
Choice of service
Developing country
Labour and delivery care
Maternal health care services
Nepal
Pregnancy
Service utilisation
Skilled birth attendance
Skilled birth attendants
Use of skilled delivery care
Women autonomy and status
Women's perceptions

ABBREVIATIONS & ACRONYMS

ADB-Asian Development Bank
AHW-Auxiliary Health Workers*
AIDS-Acquired Immune Deficiency Syndrome
ANC- Antenatal Care
ANM-Auxiliary Nurse Midwife*
BEOC-Basic Emergency Obstetric Care
BOC- Basic Obstetric care
CA-Constitutional Assembly
CBS-Central Bureau of Statistics
CDR-Central Development Region
CEDAW-Convention on the Elimination of all form of Discrimination against Women
CINAHLCumulative Index to Nursing and Allied Health
CMACE-Centre for Maternal and Child Enquiries
CMA-Community Health Assistant
CS-Caesarean Section
DAA- Department of Drug and Administration
DC-Delivery Care
DDA-Department of Drug Administration
DFID-Department of International Development
DH-Department of Health
DoA-Department of Ayurved
DoHS-Department of Health Services
DPHR-District Public Health Report
EDR- Eastern Development Region
EMBASE-Excerpta Medica Database
EMOC-Emergency Medical Obstetric Care
EOC- Emergency Obstetric Care
EOC-Emergency Obstetric Complication
FCHVs-Female Community Health Volunteers
FHD- Family Health Division
FPMCHC-Family Planning and Maternal Child Health Care
FSSH-Faculty of Social Sciences and Humanities
FWDR- Far-Western Development region
GDP-Gross Domestic Products
GoN-Government of Nepal
GOs-Government Organisations
GYN-Gynaecologist
HA-Health Assistant*

HBM-Health Belief Model
 HDI-Human Development Index
 HIV-Human Immune Virus
 HoS-Head of State
 HP-Health Post
 HRH-Human Resources for Health
 ICPD-International Conference on Population and Development
 IEC-Information Education Communication
 INGOs-International Non-Governmental Organisations
 KM-Kilo Metre
 LMU-London Metropolitan University
 MBBS-Bachelor of Medicine and Bachelor of Surgery*
 MCHVW-Maternal and Child Health Volunteer Workers*
 MDG-Millennium Development Goal
 MDGP-Master Degree in General Practitioners*
 MMR-Maternal Mortality Ratio
 MOH- Ministry of Health
 MOPH-Ministry of Population and Health
 MWDR-Mid-Western Development Region
 NDHS-Nepal Demographic Health Survey
 NGOs-Non-Governmental Organisations
 NHRC-Nepal Health Research Council
 NSMNH-LTP-National Safe Motherhood and Newborn Health Long-Term Plan
 NSMP-National Safe Motherhood Programme
 OBGYN-Obstetrician/Gynaecologist and Paediatrician*
 OBs-Obstetricians
 Ph.D.-Doctor of Philosophy
 PHCC-Primary Health Care Centre
 PHC-Primary Health Care
 PNC-Post Natal care
 PPP-Purchasing Power Parity
 PRSP-Poverty Reduction Strategy Paper
 RCP-Radio Communication Project
 RHP-Radio Health Program
 S.L.C-School Leaving Certificate
 SBA-Skilled Birth Attendance
 SBAs-Skilled Birth Attendants*
 SE- Socio-Ecological Model
 SHP-Sub Health Post
 SLTHP-Second Long Term Health Plan

SN-Staff Nurse*

SOLID-Society for Local Integrated Development

SPSS-Statistical Package for Social Sciences

TBAs-Traditional Birth Attendants*

TB-Tuberculosis

UK-United Kingdom

UNDP-United Nation Development Plan

UNFPA-United Nations Fund for Population Activities

UNICEF-United Nation International Children and Education Fund

UN-United Nations

US-United States

VDC-Village Development Committee

WB-World Bank

WDR-Western Development Region

WHO-World Health Organisation

*Definitions are in the glossary-appendix

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ABSTRACT

Nearly three hundred thousand maternal deaths occur worldwide every year. More than 99% of deaths occur in developing countries. The use of skilled birth attendants is low in those countries where maternal mortality rates are high and most of these deaths could be prevented if skilled birth attendant services were available. Only 36 percent of women use skilled birth attendants in Nepal. There are many reasons for non-use of skilled birth attendant services, such as inequalities, lack of access to services, role of gender and culture and lack of women's autonomy in decision-making. The purpose of this study was to explore the views, experiences and perceptions of women influencing utilisation of skilled birth attendants in rural Nepal. Listening to the women's voices and views were central to this study in order to understand why women use or does not use skilled birth attendants. Women's individual characteristics, family, community and organisation factors are interconnected in regards to uptake of skilled birth attendants, as well as policy factors.

A case-study approach using mixed methods was taken to explore the women's experiences and perceptions in a hill district of western Nepal. Interviews were conducted with 24 'new mothers' aged 18-49 years and five mothers-in-law, two husbands and a father-in-law. A survey was conducted of 100 qualified skilled birth attendants (doctors, nurses and midwives) to understand service providers view towards women's use of skilled birth attendant in two hospitals (one private and one public hospital): 56 SBAs responded. The qualitative data were analysed using a thematic analysis approach and descriptive statistics were derived from the quantitative data.

The study found that individual characteristic of women, the location and infrastructure of health facilities, cultural and gender factors, including women's expectations and preferences about skilled care use, affected uptake of skilled birth attendant services. Socio-cultural and political contexts were found to be interconnected in health service utilisation. Socio-economic inequality based on caste and gender, access to qualitative services and women's lack of autonomy are some of the factors that influence the uptake of care by skilled birth attendants.

This study asserts that capturing women's experiences and perceptions is essential in order to improve the uptake of skilled birth attendants. Understanding women's views and voices provided a clear picture of what women want and need during pregnancy and childbirth. The empirical evidence derived from this study about the poor standards of care received in hospital and the preference for locally based services could be used along with other evidence to review current policy and inform future plans. Development should be aimed at improving professional standards and access while making maternal health services in Nepal more women centred.

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London, UK,

June 2014

CHAPTER ONE: INTRODUCTION

1.1 INTRODUCTION TO THE STUDY

Health as a human right has been accepted in principle by many countries including Nepal since 1948 (United Nation [UN], 1948). However, the Interim Constitution of Nepal 2007 has recently declared and enshrined the state's commitment to and responsibility for people's health for the first time in the history of Nepal (Ministry of Health and Population [MoHP], 2008). To ensure that the health sector actively and consistently contributes to realisation of that vision is the guiding principle for the policies plans and programmes (MoHP, 2008).

A recent estimate shows a figure of nearly 289,000 maternal deaths worldwide every year: more than 99% of these occur in the developing world and most could be prevented if available of skilled care during pregnancy, labour, delivery and after childbirth were available (Hogan et al. 2010). Increasing the proportion of birth attended by a skilled person is one of the important indicators to reduce the maternal mortality as declared by Millennium Development Goal 5 (MDG) but the availability of skilled birth attendants (SBAs) is low in many developing countries where maternal mortality ration (MMR) is very high (World Health Organisation [WHO], 2009).

The ratio of MMR is 170 per 100,000 live births is a significant reduction although it is still one of the higher MMRs among the developing countries of the world (WHO et al. 2012; Hussein et al. 2011). The ratio of MMR is reducing and the number of women delivering their babies with the help of skilled attendants has increased from 13% in 2001 and 18% in 2006 to 36% in 2011. Underutilisation of skilled maternal health services is one of the factors among many contributing to high MMRs, where three quarters of births take place at home, many without the presence of a skilled attendant (Nepal Demographic and Health Survey [NDHS], 2011)

In the last decade the reduction in maternal mortality has been attributed to a number of factors including: a decline in the total fertility rate, increased age on marriage, legalisation of the abortion, increase in the use of family planning methods, improved antenatal and postnatal care, expansion of the immunisation and awareness programmes, including an increases in nurse-assisted deliveries in the rural areas (Pant et al. 2008). However, major challenges remain to reducing maternal morbidity and mortality. Currently, in Nepal a woman dies of pregnancy-related causes every four hours (Witter et al. 2011).

Despite the fact that an increase in deliveries more than threefold (10% to 36%) between 1996 and 2011, the overall proportion of women in Nepal delivering with the help of SBA is still remains low. Mass poverty, illiteracy and unequal access to limited health services for many households is contributing to this (NDHS, 2011). To reach the MDG targets (MMR of 134/100,000) by 2015 Nepal need to do more. This study explores women's perceptions and experiences influencing them use of skilled maternity services during pregnancy and childbirth with specific focus on skilled birth attendants (SBAs) in a western hill district of Nepal. To understand women's experiences and perceptions towards skilled maternity care, women both service users and non-users, people involved in maternity care (such as mothers-in-law, fathers-in-law and husbands) as well as service providers (doctors, nurses and midwives) were included.

This qualitative study tried to explore 'what' are the factors and 'how' they influence in the use of SBAs. It employed a mixed method strategy within a case study design. The next section discusses background information of Nepal.

1.2 BACKGROUND INFORMATION OF NEPAL

This section provides the country's profile including political and administrative distribution. The economic situation of the country, gender inequality in health service use, development of information and communication and current political development that affect for provision of health service are discussed in brief. The next section describes profile of Nepal.

1.2.1 Country profile

Nepal is a landlocked country with high mountains, and hills. It lies in South Asia between China and India. It has a northern border with the Tibetan Autonomous Region of the People's Republic of China and eastern, southern, and western borders with India. It occupies an area from 26°22' to 30°27' North latitude and 80°4' to 88°12' East longitude (Central Bureau of Statistics [CBS], 2001).

Nepal is rectangular in shape and averages 885 kilometres (KM) in width (East to West) and 193 KM in length (North to South). The total land area of the country is 147,181 square KM and 29.6 million people live in the country and more than half of them are women. It is predominantly rural with only about 17 percent of urban population (CBS, 2011).

1.2.2 Political and administrative distribution

Topographically, Nepal is divided into three distinct ecological zones named Mountain, Hill, and Terai (Plains). Furthermore, it has been divided into five development regions, 14 zones, and 75 districts for administrative purposes. Districts are further divided into Village Development Committees (VDCs), Municipalities, Sub-Metropolitan and Metropolitan cities. VDCs and Municipalities are further divided into smaller units. A VDC consists of nine wards, while the number of wards in an urban municipality depends on the size of the population as well as on political decisions made by the municipality itself. At present, there are 3753 VDCs and 130 urban areas including 125 Municipalities, four Sub-metropolitans and one Metropolitan city (*The eKantipur National Daily*, May, 8, 2014).

Nepal was a Hindu kingdom with a majority of its population being Hindus religion followed by Buddhists and Muslims respectively (CBS, 2011). Nepal is a multiethnic and multilingual society. The 2011 Population Census of Nepal identified more than 100 castes/ethnic groups and subgroups of the population. Among many Chetri, Thakuri, Brahmins, Magar, Tharu, Rajbanshi, Newar, Tamang, Rai, Kiranti, Gurung, Kami, Damai, Sarke, Pode (a major occupational group that

originated in the hills), Yadav, Ahirs and Muslims are main ethnic groups. Nepali is the official language (CBS, 1995).

1.2.3 The economy of the country

Nepal is a poor country where more than 25% of people live in poverty (United Nation Development Programme [UNDP], 2009). The annual per capita income is US \$1530, among the lowest in the world (Chin et al. 2011). Civil unrest over the last two decades has occurred. The political instability and diverse geographical terrain (from Himalayan mountain range to the flat Terai) have been key challenges for equal socio-economic development of the country (Hussein et al. 2011).

Despite the poverty and low economic status and other constraints, such as persistent social and economic inequalities and poor service access in remote area, Nepal has made a substantial progress in the maternal health in the recent year. Recent progress has been especially striking. For example, there has been an improvement in both infant and under-five mortality including a remarkable reduction in maternal mortality over the past decade. Infant and child mortality rates are important indicators of women's status for two reasons. First, they reflect social attitudes towards male and female children. Secondly, they also throw light on the health situation of women as mothers (Asian Development Bank [ADB], 1999; Hussein et al. 2011).

The maternal mortality rate has come down to 170 per 100,000 live births from 539 per 100,000 live births in 1996 (WHO et al. 2012). Although there have been improvements in women's education, and health status, there is still lack of communication, awareness and information. Despite the improvement the MMR in Nepal is still high. Recent national Demographic and Health Survey of Nepal has shown that use of SBAs is varies substantially across region of the country (NDHS, 2011).

A significant level of inequity in health outcomes still exists in Nepal (Pant et al. 2008; Bennett et al. 2008). Life expectancy is 74 years in the capital, Kathmandu but only 44 years in the remote mountainous district of Mugu. The life expectancy of

Dalits (the so-called untouchables of the Hindu caste system) wherever they may live, remains far below the national average (Bennett et al. 2008). A real difference has been seen in the infant and maternal mortality rate when the data is disaggregated according to geographical regions, by economic status, and by educational level (NDHS, 2011).

1.2.4 Political context and efforts for health service development

During the Panchayat regime (1962-1990) the state attempted to build a ‘modern’ and ‘unified’ nation. Nepal abolished caste-based discrimination in 1963. But the diversity of languages, kinship systems, spiritual outlooks and gender issues, were framed as barriers to development that had to be merged into a common modern Nepali culture. Cultural unity was projected as essential to nation-building and the maintenance of independence (Bennett, 2005).

The Constitution of 1990 drafted after the Jana Andolan (People’s Democratic Movement), which had risen against the Panchayat regime, established Nepal as a more inclusive state. It describes the country as ‘multi-ethnic, multi-lingual and democratic’ and states that all citizens have equal rights irrespective of religion, race, gender, caste, tribe or ideology they follow. The statute also gave all communities the right to preserve and promote their languages, scripts and cultures, to educate children in their own mother tongues, and to practise their own religion (Bennett, 2005).

In February, 2005 “the then King began ruling directly, as a head of state and chair of the council of ministers. Some new institutions reporting directly to the King were created, strong controls were placed on the media and civil society organisations and there was a widespread sense that constitutionally guaranteed freedoms were under threat” (Bennett, 2005. p.7). Writing in 2005, Bennett stated that “the parliamentary parties have continued to protest against direct rule and demanded restoration of irreversible democracy. Nepal’s efforts to change the lives of the poor and excluded were caught up in uncertainty resulting from the unresolved three-way political conflict between the King, political parties and the Maoists” leading to a country in conflict (p. 7-8).

Since the Peoples' Movement II of 2006, and the signing of a series of political agreements, Nepal has entered a republican state with transitional government (MoHP, 2008). The elections of April, 2008 created a Constituent Assembly (CA) and gave a mandate to form a new transitional government to see the country through to the promulgation of a new constitution in 2010 (MoHP, 2008). The Interim Constitution, which enshrined health care as a human right, basic free care as a right of all Nepali, and reproductive rights for all Nepali women, is the supreme law of the country (MoHP, 2008). The MoHP has produced its Ten Point Policy Guideline and three Year (2007/8-2009/10) Health Plan. The Policy Guideline and Interim Plan, MoHP has shown a very high level of political commitment toward equitable healthcare delivery, and has moved effectively to create a sustained and sustainable health policy during the transitional period (MoHP, 2008).

Since 1950, Nepal has developed many health plans and policies to improve peoples' health. The Tenth Plan/Poverty Reduction Strategy Plan (PRSP) is the most serious and comprehensive government statement about inclusion to date (MoHP, 2008). It identifies social exclusion as one of the three main aspects of poverty and the main reason for deprivation of certain caste and ethnic groups, women and people living in remote areas (MoHP, 2008). The Tenth five years plan identified that lack of voice of poor people, political representation and empowerment as important dimensions of poverty that are linked to economic and human development. It also understands exclusion as one of the factors behind the conflict. It includes a detailed caste, ethnicity, and gender-disaggregated analysis showing Dalits at the bottom of almost all human development indicators (Bennett et al. 2008).

The Three Year interim Plan (2007/8-2009/10) has outlined objectives and strategies to put into operation the Ten Point Policy Guideline, and sets out strategies to implement 'Basic Health Care as a Human Right' as included in the Interim Constitution of Nepal, 2006 (MoHP, 2008). The focus of the plan was to create a foundation for building a country with economic prosperity, good governance, social justice and inclusive development processes, giving priority to reconstruction, rehabilitation and social reintegration, and the reduction of poverty through employment-oriented and inclusive economic growth (MoHP, 2008). The present

government has initiated important policies targeted towards increasing access to basic health services by the poor through its universal and targeted free health service programmes.

The ten year long Maoist internal conflict (1996 to 2010) significantly influenced health services provision in Nepal. During the Maoist insurgency the destruction of health infrastructure made it difficult to maintain health service provision. This had negative impact on health provision in many ways for example, lack of basic health services in facility, free movement for health service providers and looting of drugs from the community drug programme by the armed rebels were big threat to provide health services in rural areas (Devkota, 2005).

The primary health care centre has an important role to play to improve the availability and access to essential health care services at the community level. There was a feeling of general fear, isolation and lack of support among the community level service providers due to conflict. Personnel incharge of the health facilities of many remote areas were relocated to the district head quarters for security reasons. The village health workers and maternal child health workers were providing the services with very little time for community work, for running the outreach program or supervision. Conflict impacted on health workers since they were instructed by the insurgents to be on standby to provide treatment to their cadres. Abduction of health workers was common. The rebels were actively involved in destroying government health programmes in conflict affected areas. In many places the armed rebels urged health service providers to attend mass meetings, made them express their views regarding the armed conflict in public gatherings, and compelled them to pay levy to support them. In many conflict districts health service providers were even harassed by the security personal and the insurgents made it difficult to provide health services (Devkota & Teijlingen, 2010).

It was very difficult to supply essentials commodities during the conflict time. Continuous strikes, road blockades, and destruction of the bridges and airport towers made health service provision difficult during the conflict period. Conditions for health workers work in rural areas were very unfavourable due to the fear created by Maoists. The private sector, non-government organisations and external partners for

working in the health sector were also not able to reach those areas since the Maoist rebels targeted them (Devkota, 2005).

Health care services are provided at three different levels in Nepal. Tertiary level of care based on urban hospitals, and primary and secondary levels are mainly based at district level and health posts in the rural areas (DoHS 2011). The Maoist-armed insurgency has made provision of adequate health care services to the rural population very difficult. According to the Ministry of Health, hundreds of community health posts have been destroyed, dozens of health care workers have lost their lives, and many have fled their posts since the beginning of the conflict (DoHS, 2011). Delivery of health services has been completely disrupted in the many rural areas. In addition, due to the lack of health care providers the distribution of services has been extremely difficult which has had a negative impact on health service uptake.

1.2.5 Caste system and social inequality

Nepal was a Hindu kingdom where most of the people are socially defined by the caste system. The caste system has been a major determinant of the people's identity, social status and life chances. There are four broad *Varnas* (groups) in the Hindu caste system. They are known as Brahmins (priests), the Kshatriya (kings and warriors), the Vaishya (traders and businessmen) and the Sudra (peasants and labourers) called *Dalit* (low caste or untouchable) (Bennett et al. 2008).

Occupying places at the both the top and the bottom of caste system were the hill Hindus or *Parbatiya* who migrated into Nepal from the western hills. They were from the Indo-European language group and spoke a Sanskrit-based language (Khas) from which the modern Nepali language emerged. They brought with them their traditional caste-based social structure which already allocated the highest rank to the *Bahun*s (Brahmans) and the *Chhetris and Thakuris* (Kshatriya) (Bennett et al. 2008).

People from the pure middle-ranking *Vaishya and Sudra* do not seem to have come along with these Hindus on their migration eastward through the hills, but the occupational groups, *Kami* (blacksmiths), *Damai* (tailor/musicians) and the *Sarki*

(cobblers) did. Falling within the 'impure' group, collectively called *pani nachalne* or 'those from whom water cannot be accepted' by the higher castes, they were ranked at the very bottom and classified as '*achut*' or 'untouchable' (Bennett et al. 2008).

In the Nepal hill and mountain areas the middle rank was accorded to the existing indigenous groups, belonging to mainly the Tibeto-Burman language group. Since many of these groups consumed homemade beer and spirits, they were called 'liquor-drinkers' or '*matwali*' by the higher caste e.g. *Brahmans* and *Chhetris* whose caste status did not allow them to take alcohol which was considered polluting. In contemporary Nepal these various ethnic groups are now referred to as the *Adivasi Janajati* (indigenous nationalities) (Bennett et al. 2008).

Social exclusion and discrimination against *Dalits*, *Janajatis*, *Muslims* and *Madhesi* is now open in discussion (Bennett, 2005). Discrimination against women which has been talked about for decades, but never taken seriously by politicians or bureaucrats is now given much more importance (Bennett et al. 2008). One of the major demands of the *Jana Andolan II* (peoples' war II) was not just democracy, but more inclusive democracy and greater government attention to overcoming the persistent disparities between the dominant high caste *Brahmins* in the hills and the urban *Newars* (along with a few other *Janajati* groups and certain powerful *Madhesi* castes) and the rest of the country (Bennett et al. 2008).

The key issues in the social sectors remain unequal access of various groups of the population to basic human rights such as educational, employment, health facilities, shelter and communication. There is an unequal services distribution, the low quality of services that are supplied show that the government's failure to ensure equal access to basic human rights (Bennett, 2005). There is a social inequality in public service distribution e. g. health and education including opportunities to those lower in the caste/ethnic hierarchy, to women and to those from the High Mountain, Hills and Terai/Plains region. In general, women in Nepal from the high mountains and remote hills and economically disadvantaged groups face greater accessibility problems than women in the better-off households, urban areas, and the Terai/Plains (Bennett et al. 2008).

1.2.6 Gender disparity in health

Despite the cultural diversity, the majority of communities in Nepal is patriarchal-a woman's life is strongly influenced by her father and husband, as reflected in the practice of patriarchal residence, and by inheritance systems (the system that property automatically transfers to son after death of father) and family relations (Bennett, 2008). Such patriarchal practices are further reinforced by the legal system (Hofer, 1979). According to Hindu tradition, marriage is essential for all, whether man or woman (ADB, 1999) but it is overwhelming importance in a woman's life in Nepali culture. The event of marriage determines almost all her life options and subsequent livelihood. While a man's life is not considered complete without a wife, a woman has no option but to marry. In the Indo-Aryan culture, in particular, girls are encouraged to marry in their early teens or even earlier by their parents. Early marriages are rooted in both the concept of purity of the female body (Bennett & Singh, 1979).

In education, both the low level of women and the gender gaps in literacy rate, school enrolment rates, and attainment rates are low among the girls (Government of Nepal [GON], 2012). Household income, workload for girls, and the level of concern of parents with the purity (the culture of marriage a girl before her first menstruation) of the female body which leads to their early marriage, are important variables in decision-making regarding sending girls to school. When resource constraints arise in the household, the first to suffer is the female child's education (GON, 2012).

Even now, mainly in the disadvantaged groups and remote areas gender disparity in educational and health status is still increasing, with more and more men getting access to modern avenues of education and health care facilities, leaving women far behind (Acharya, 2007). The feminisation of poverty in Nepal is not visible in terms of size of landholdings and income of female-headed households (GON, 2012). It is visible more in terms of their impact on women's access to food, education, and health facilities, and their long working hours (Acharya, 2007). Children, especially girls, have to start working early and daughter-in-law has to eat food last whatever left (GON, 2012). Gender, poverty, and exclusion overlap in many ways. Although

not all women are poor nor are all people in excluded groups but being female, poor and from excluded women suffers more than the men also impact in the health service use (Acharya, 2007).

1.2.7 Role of awareness campaigns in public health

Effective communication is an important part in the use of public health services. Failure to provide clear information is one of the important factors in the use of unsafe cares (Grilli et al. 2002). Communication issues are particularly important in maternity services where there may be several stages that are involved such as labour time, duration of labour, transfers between home settings and hospital and in an emergency situation (Ministry of Health [MoH], 2003).

Lack of public health awareness, adequate communication and information contribute to low use of health service (MoH, 2003). Therefore, health education can be useful and effective tool to inform people health awareness from centre to local level for health service use. For this, different media including political workers, teachers, students, social organisations, religious and women's including volunteer groups can play significant role in the public health awareness. The electronic media, community display, folk performance, special events and contests, groups exhibition, seminars and workshops (MoH, 2003) are particularly important to create awareness and communicate in public. Increasing health awareness providing information, education and communication through mass media and developing positive attitudes and behaviour through different social campaign may help improve in service use (MoH, 2003; Karki & Agrawal, 2008).

Print and electronic media also have important roles in providing message on different health service information and its benefit. The National radio service, FM radio programmes, television and newspapers are the important source of mass information. A research study from Nepal by Nepal Family Health Program II and New ERA (2010) shows that radio and television programmes such as '*Sathi sanga manka kura*' (Secret matter with friend), *Radio Doctors*, include news and advertisements, drama, serials, jingles, talk shows and documentary were good source providing reproductive and sexual health related information for younger and

teen age groups. The same study shows that radio was the important sources of information for all age groups of people (Nepal Family Health Program II & New ERA, 2010). Furthermore, a range of other community awareness activities such as village meetings and rallies, distribution of leaflets including erecting hoarding boards at main highway junctions and putting posters at health service facilities also found help to increase public health awareness (Karki & Agrawal, 2008).

A study on effects of communication campaigns on the health behaviour of women of reproductive age in Nepal by Karki and Agrawal in (2008) found that the Radio Health Program (RHP) (established in 2004 but no longer in operation) was one of the important sources of information for provide public health information and mass communication. It was helpful to develop an interpersonal communication intervention for female community health volunteers (FCHVs).

Several radio health programme such as '*Jana Swasthya Karyakram*' (Public Health Programme) '*Gyan nai Shakti Ho*' (Knowledge is Power) and a series of radio drama were also good sources of health information to the general public (Karki & Agrawal, 2008). The same study have shown that having access the radio, household ownerships of television, landline telephone, access to mobile phones and internet has significant effect to increase communication and awareness level (Karki & Agrawal, 2008). Several health service organisations from government and private level such as the Family Health Division (FHD), Department of Health Services (DoHS), Ministry of Health and Population (MoHP), including many other Non-Government Organisations (NGOs) and International Non-Government (INGOs) organisation and private sectors are also involved to improve people's health providing information and awareness (MoHP, 2008).

1.2.8 Maternal health indicators in Nepal

The NHDS (2011) data have shown that utilisation of services has been improving. Use of maternal health services such as antenatal care (ANC), delivery care (DC), post-natal care (PNC) and use of skilled birth attendants (SBAs) has been increasing in the last ten year period. The following (Table 1.2.8) shows that some maternal

health indicators from different Demographic and Health Surveys of Nepal from 2001 to 2011.

Table: 1.2.8 maternal health indicators Nepal, 2001-2011

Maternal health Indicators	NDHS 2001	NDHS 2006	NDHS 2011
Under-five mortality rate (per 1,000 live births)	91	61	54
Infant mortality rate (per 1,000 live births)	64	48	46
Proportion of 1 year-old children immunised against measles	71	85	88.0
Proportion of births attended by skilled health personnel	13.0	18.0	36.0
Contraceptive prevalence rate	39.3	44.2	49.7
Adolescent birth rate	-	-	81.0
Antenatal care coverage: at least 1 visit by skilled health professional	48.5	44	58.3
Antenatal care coverage: at least 4 visits by any provider	28.0	29.0	50.1
Women median age at marriage	16.2	17.5	17.8
Maternal Mortality (per100,000 live births)	539	281	170
Postnatal care coverage	21.0	33.0	45.0
Unmet need for family planning	39%	25%	27%

Source: NDHS, 2001; NDHS, 2006; NDHS, 2011; WHO et al, 2012

1.3 SAFE MOTHERHOOD AND SKILLED BIRTH ATTENDANCE IN NEPAL

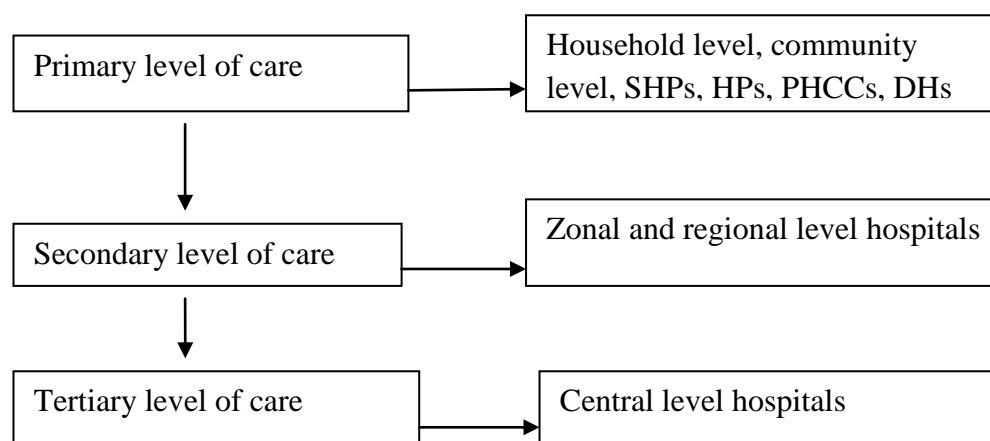
Nepal has a long history of traditional medicine, including: *Faith Healing, Naturopathy, Youga, Ayurved and Homeopathy*, but the history of modern health services in the country is not long though Government of Nepal (GoN) is committed to improve maternal health through various modern health care activities, especially delivery by skilled birth attendance (Baral et al. 2012). Most recently, the GoN has been given high priority to the National Safe Motherhood Programme (NSMP) within Nepal Health Sector Strategy Plan that was formulated in 1997 for the first time (MoHP, 2008). Nepal health sector sets a goal of meeting the five years Plan/Poverty Reduction Strategy Paper (PRSP) and MDG to reduce the MMR by three quarter by 2015. The Second Long Term Health Plan (SLTHP) 1997-2017 has the goal of increasing the percentage of deliveries attended by trained personnel to 95% by the end of the plan (Devkota & Putney, 2005).

The NSMP was revised into National Safe Motherhood and Newborn Health Long-Term Plan (NSMNH-LTP 2006-2017) in 2006. This is the Second Long Term Health Plan of Nepal known as Nepal Health Sector Programme Implementation Plan and Millennium Development Goals. The overall goal of this plan is to improve maternal and neonatal health and survival focussing on among poor and socially excluded communities including reduction of maternal mortality ratio to 134 per 100,000 live births by 2017 (MoHP, 2006). The purpose of the plan is to help delivery of babies in well-managed health facilities with the help of skilled birth attendants by 60% and increase in the number of deliveries in health facilities to 40% by the years of 2017. The plan set targets of met needs for delivery services which should be increased by three percent each year and the met need for Caesarean Section (CS) by four percent each year (MoHP, 2006). The long-term health plan has identified eight indicators and key activities to improve the maternal and neonatal health including human resource development by focussing on skilled birth attendant strategy (MoHP, 2006). The next section discusses Nepal's maternal health policy development over time.

1.3.1 Maternal health service delivery system in Nepal

The Department of Health Services (DoHS) is responsible for the health service provision in Nepal under the Ministry of Health and Population (MoHP). There are six divisions and three departments under the MoHP to provide preventive, promotive and curative health care services throughout the country. The DoHS, Department of Ayurved (DoA), and Department of Drug Administration (DAA) are responsible for programme policy and plans, implementation, management of financial resources, monitoring and evaluation of the programmes (DoHS, 2011). To provide effective maternal health services three levels of care exists: primary, secondary and tertiary. Sub-Health Posts (SHPs), Health Posts (HPs) Primary Health Care Centre (PHCCs) and District Hospital (DHs) provide the primary level health care. Zonal and regional level hospitals provide the secondary level of care. The central level hospitals are providing the tertiary level of care. The following Figure presents the maternal health service delivery systems of Nepal (see Figure 1.3.1).

Figure: 1.3.1 maternal health care delivery system in Nepal



Source: DoHS, 2011

1.3.2 Maternal health policy in Nepal

The Ministry of Health (MoH) was established in 1956 in Nepal giving priority to control of communicable disease such as Malaria, Leprosy, Tuberculosis and Smallpox. The scope of work of the MoH expanded in 1987, with expansion of five regional health directorates and 75 district public health officers and offices (DoHS, 2010). The National Health Policy was adopted in 1991 to bring about improvement in the health conditions of the people with emphasis on preventative, promotive, curative and basic primary health services along with reproductive and maternal health services. By then the GoN adopted many initiatives to reduce the maternal morbidity and mortality (DoHS, 2010).

Since the early 1980s Family Planning and Maternal Child Health Care (FPMCHC) service have been given utmost priority in delivery of health services through public health facilities. Primary Health Care (PHC) services are provided at District Health Office clinics and PHCC, HP and SHP level facilities.

At household level, Female Community Health Volunteers (FCHVs) provide counselling to mothers and distribute condom, pills, folic acid, Vitamin A and oral rehydration packets. The Maternal and Child Health Worker (MCHW) position was created and personnel were trained to provide antenatal care (ANC), delivery care and, post-natal care (PNC) from SHP as well as making home visits. They were also trained to give first aid treatment to complicated obstetric cases before referring to appropriate service centre. An Emergency Obstetric Complication Kit box (EOC Kit) with life saving obstetric medicines was given to them. MoHP is working towards better access and higher quality service to improve maternal health. A maternal Incentive Scheme has been adopted since 2005 to increase demand for maternity services along with a focus on improving access to such services (DoHS & WHO, 2010).

The main aim of the National Safe Motherhood Programme (NSMP) is to reduce the high levels of maternal morbidity and mortality caused by pregnancy and childbirth related complications through providing 24 hours quality emergency obstetric care services including ensuring the presence of a skilled birth attendant at every delivery

whether at home or in a health facility (MoHP, 2006). The Family Health Division (FHD) and DoHS developed the National Safe Motherhood Plan [NSMP] (2002-2017), which was revised in 2006 to take into account new developments in global learning regarding improvement in the maternal morbidity and mortality.

This 15 years plan aims to establish basic and comprehensive emergency obstetric care services in all 75 districts of the country. The National Policy on Skilled Birth Attendants was established in 2006 with the aim of increasing in the percentage of births assisted by an SBA including expansion of the number of the training sites throughout the country to meet the required members and training needs. The main objectives of the National Policies on Skilled Birth Attendants are to reduce maternal morbidity and mortality by ensuring the availability, access to and utilisation of skilled care at every birth (MoHP, 2007). The policy has specific objectives including: ensuring sufficient SBAs are trained and deployed, at primary health care levels with necessary support; strengthening referral services and SBA training facilities; strengthening support and supervision systems; and developing regulatory and accreditation systems for SBAs (MoHP, 2007).

The policy emphasises the need for in-service training of SBAs, expansion of the training sites and pre-services training so that all graduating staff can possess competency as defined SBAs according to World Health Organisation (WHO, 2004). The Nepal Health Sector Programme-Implementation Plan 2004-2009 (NHSP-IP) was designed for implementing the health sector reform strategy for reducing maternal morbidity and mortality rates by increasing the use of skilled birth attendants and increasing the knowledge and awareness for service utilisation (MoHP, 2007). The following (Table 1.3.2) shows Nepal's maternal and reproductive health service policies with the priority areas for reducing the maternal morbidity and mortality since 1975 to 2009.

Table: 1.3.2 maternal health policies Nepal (1975-2009)

Maternal health policies	Priority areas for improve maternal health
Long Term Health Policies-I 1975-1990	<ul style="list-style-type: none"> - Integrated community health including maternal health through primary health care
National Health Policy 1991	<ul style="list-style-type: none"> - Identified safer motherhood as a major component - Priority for reducing MMR - Strengthen Family Planning, referral system, EMOC - Invest in MCHW and ANMs at village level
National Safe Motherhood Plan of Action 1994-97	<ul style="list-style-type: none"> - Identified priority activities for Safe Motherhood - Identified MMR as a major public health problem - Set priority to SMP to reduce maternal morbidity and mortality
Long Term Health Plan-II 1997-2017	<ul style="list-style-type: none"> - Improve health status of vulnerable group of people including women - Ensuring provide quality health care with technically competent health personnel
National Safe Motherhood Policy-1998	<ul style="list-style-type: none"> - Strengthening maternity care including family planning services at all levels of the health care delivery system - Strengthening technical capacity of maternal health care providers at all level - Strengthening referral for EOC services

Safe Motherhood Plan of Action 2001-2015	<ul style="list-style-type: none"> - Establishment of BOC and EOC services in all 75 districts - Increase SBA birth and access to emergency fund and transportation
National Safe Motherhood Plan 2002-2017	<ul style="list-style-type: none"> - Envisage establishment of BEOC and EOC in 75 districts - National and local advocacy and BCC to keep safe motherhood on the national policy agenda and to influence family and community attitudes - Increase emergency fund and transportation - Increase prioritisation of SBA strategy - Pilot and scale up of interventions to increase utilisation of SBA and EOC services - Strengthen FCHV programme by motivation and education to FCHVs and mothers for the best utilisation of available services
Tenth Five Year Plan 2002-2007	<ul style="list-style-type: none"> - Emphasis on the safe motherhood programme through expansion programme for vaccination, FP, RH and FCHVs - Propose for CEOC in 10 Hospital and BEOC in 50 hospital throughout the nation
Nepal Health Sector Programme Implementation Plan 2004-2009	<ul style="list-style-type: none"> - Emphasises provision of round the clock EOC - Ensuring the presence of SBAs deliveries, especially in the home setting - Advocates multi-sectoral approach including health and non health intervention to promote utilisation of

<p>National Policy for Skilled Birth Attendants 2006</p>	<p>services</p> <ul style="list-style-type: none"> - Address the challenges related to human resources development and management, socio-economic and cultural barriers to accessing SBAs, high unmet need for EOC, and weak referral back-up - Emphasis on the availability, access and utilisation of skilled care at every birth for reducing high MMR - Ensure that sufficient numbers of SBA trained and deployed at primary health care level with the necessary support system - Strengthen referral systems for safe motherhood and newborn care, particularly at the first referral level (district hospital) - Strengthen pre-service and in-service SBA training institutions to ensure that all graduates will have the necessary skills - Develops regulating, accrediting and licensing system for ensuring that all SBAs have the abilities and skills to practise in accordance with the required core competencies
<p>Safe Motherhood and newborn Health Long Term Plan 2006-2017</p>	<ul style="list-style-type: none"> - Improve maternal and newborn health and survival especially for the poor and excluded - Improve equity/access services, public private partnership, decentralisation, human resource development (SBA strategy), information management, physical asset, procurement and

<p>Three Years Interim Plan 2007-2009</p>	<p>finance</p> <ul style="list-style-type: none"> - Improve health status of all Nepalese people with provide equal opportunity and quality health services for all - Increasing community health investing in rural health
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Source: DoHS, 2010; DoHS, 2011

As presented above, Nepal has proposed many policies and programmes to improve maternal health services over the past two decades. It shows steady improvements and positive impact in improving maternal health indicators. More recently there are many maternal health policies have been advanced such as, improving maternal and newborn health and survival focusing on people who are poor and excluded, strengthening referral systems and increasing SBA in rural areas. However, implementing of these policies is lacking for several reasons for example, a lack of political will power, poor implementation of existing policies, lack of resources and trained health personal and rural women still facing considerable problem in uptake of maternal health services.

1.4 RATIONALE OF THE STUDY

There is a difference in utilisation of skilled maternity care services between resource rich and resource poor countries. In some developed countries (such as US and most European countries), almost all births take place assisted by skilled birth attendants. In some countries such as Sweden and United Kingdom (UK), a small number of births take place at home attended by highly trained midwives (Carlough

& McCall, 2005). But in many parts of the developing world, such as countries in Sub-Saharan Africa and the South Asia women deliver their babies at home without the help of SBAs and a higher number of maternal deaths occur due to this direct cause (UNICEF, 2008).

It is a big challenge to reduce the maternal mortality rate to 75% by 2015 especially in those regions (e. g. Asia and Sub-Saharan Africa) where the delivery of the baby with the help of SBAs is very low (Campbell & Graham, 2006). There is growing concern to increase the use of skilled birth attendance in those regions where maternal mortality is high (Koblinsky et al. 2006). However, for various reasons provision of skilled birth attendants (SBAs) is limited, particularly in the countries with highest MMR (Anwar et al. 2008). It has been reported that 46% in Sub-Saharan Africa and 50% of women in South and South East Asia are attended by SBAs (UN, 2011).

Nepal is a less developed country and a large proportion of its population are living in poverty. The situation for women is worse than the men (Do & Iyer, 2009). Mostly women in rural Nepal are poor, uneducated, unemployed and lack social interaction compared to men. Only one in three women delivers her baby with the help of skilled birth attendants in Nepal. This rate of SBA use varies according to dwelling place (NDHS, 2011).

Some research studies have examined whether or how various factors relate to the use of SBAs in Nepal (Furuta & Salway, 2006; Sreeramareddy et al. 2006). This study explores women's role and choice of SBA service use for delivery in Nepal. At the start of this study, very little research had been undertaken to understand women's experiences and perceptions of SBA use, suggesting the need for in-depth exploration of the issues affecting SBA use in Nepal. This qualitative study explores issues in terms of whether service user perspectives affect use or non-use of SBAs. It explores 'how' and 'why' the above mentioned socio-economic, cultural, religious, and family, community and institutional including personal factors influence in the use of SBA during pregnancy and childbirth.

1.5 THE AIM OF THE STUDY

The general aim of the study was to explore the women's experiences and perceptions of using skilled birth attendants for delivery in a western hill district of Nepal.

1.6 OBJECTIVES OF THE STUDY

The objectives of the study are to explore:

- The factors affecting the use of skilled birth attendants for delivery in a western hill district of Nepal;
- Women's perceptions in the use of skilled birth attendants during labour and delivery of the baby;
- Women's experiences and choices regarding maternal health care services during labour and delivery;
- Reasons for women's preference in relation to using skilled birth attendant or not during labour and delivery;
- Issues associated with women's role in relation to maternal health care services utilisation in Nepal.

1.7 RESEARCH QUESTIONS

In order to address the research objectives, the following research questions were formulated:

- What are the barriers to the use of skilled birth attendants during delivery time in Nepal?
- What are the factors influencing the use of SBA for delivery?
- Why are these factors affecting the use of SBA services?
- How do the different factors influence the use of skilled birth attendance?
- How are cultural, traditional practices and religious factors associated with the uptake of SBAs in delivery?
- How do gender role and responsibilities play a part in use of SBAs in delivery?

- How does women's status, in terms of education, employment, autonomy and in decision-making affect the use of skilled birth attendants during labour and delivery time?
- How might the low use of SBAs in Nepal be addressed?

1.8 SIGNIFICANCE OF THE STUDY

Understanding the factors influencing the use of skilled birth attendants during labour and delivery can be useful in the efforts to increase SBA use and encourage women to utilise the services. Elaboration of the issues may be helpful in planning efficient health service policies for the future. Developing the relevant maternity policies can help increase the use of SBAs during pregnancy, labour and delivery leading to improvement in maternal morbidity and mortality rates.

Women have a low socio-economic situation especially in the rural areas of Nepal. Providing the appropriate SBA services to all women before, during and after pregnancy could improve women lives. The design of maternal health campaign services in Nepal could encourage interventions which support community development and attitudinal change, leading to improved rates of utilisation of skilled maternity care. This study will further contribute to increasing the knowledge and understanding of women's perceptions on uptake of SBA services in Nepal. The next section presents the structure of the thesis.

1.9 STRUCTURE OF THE THESIS

Chapter one provides an introduction to the research. Some background information to Nepal is presented, such as the economic and political context, the caste system and social inequality, gender disparity and public health awareness; all factors influence maternal health service use. The statement of the problem is highlighted. Nepal Safer Motherhood and maternal health policies in Nepal are presented in brief. The general aim and objectives of the study are outlined and research questions are formulated. The contribution of the study is highlighted and chapter concludes with the summary.

Chapter two discusses the conceptual framework based on a literature review from the different sources. The literature review method is highlighted and definitions of the key terms used in the study are presented. Factors affecting the use of skilled birth attendants are discussed. Findings of research studies about factors influencing service use are presented from many developing countries and set in a Nepalese context.

Chapter three presents theoretical perspectives that are relevant to utilisation of maternal health services. This chapter further discusses basic concepts of public health promotion including the role of theories and models in health service utilisation. Health promotion theories and models, such as the Health Belief Model, Community Development Theories, and Socio-Ecological Model in Health Service Utilisation, the Anderson and Newman's framework for health service utilisation, Cultural theories in childbirth practices and equity of access models in health service utilisation are discussed.

Chapter four outlines the research design and methodology. In this chapter, data collection technique, data sources, data collection procedure and methods of data analysis are presented. Furthermore, ethical considerations and the theoretical framework of the research methods are highlighted.

Chapter five analyses the collected data and presents the findings of both qualitative and quantitative information. This chapter is divided into the two sections. The first section presents the qualitative results derived from women, mothers-in-law, a father-in-law and husbands. The second section presents the findings of quantitative data derived from doctors, nurses and midwives working in maternity services in two hospitals in a western hill district of Nepal. Chapter six provides more detailed discussion of the study findings and evaluates the research objectives. Chapter seven concludes the study with a summary of the findings, the conclusion and policy implications as well as recommendations for further research.

1.10 SUMMARY

This chapter introduces the major issues influencing the use of skilled birth attendants during pregnancy and childbirth. It provides background information on Nepal and political and administrative organisation in brief. Furthermore, the economic situation, political changes and efforts made towards health service development over time are discussed. The socio-cultural situation of Nepal and its effect on maternal service use is described. Similarly, some maternal health indicators are presented. Nepal's safe motherhood policy and developments over the period are discussed. The rationale of the study and the research aims and objectives are stated. The research questions are listed and the significance of the study is described. The next chapter will extensively discuss the literature review.

CHAPTER: TWO

FACTORS AFFECTING THE USE OF SKILLED BIRTH ATTENDANTS: THE LITERATURE

2.1 OVERVIEW OF THE CHAPTER

This chapter presents a review of the literature on the use of skilled birth attendants (SBAs). It outlines the factors influencing utilisation of SBAs in developing countries including regions such as Asia and Sub Saharan-Africa. Particular attention is given to use of SBAs during labour and delivery. Delivery with the help of SBAs is one of the important factors in reducing maternal morbidity and mortality. However, the use of SBAs is limited in rural Nepal.

The literature on maternal health service utilisation is considerable. The purpose of this chapter is to inform a study focussing on use of SBAs in developing countries as well as in the context of rural Nepal. It also aims to identify gaps in the literature in SBA use. Different factors affect the use of SBAs during labour, delivery and after childbirth such as women's individual behaviour, family and community influences, socio-cultural factors, access and economic resources; and gender roles in decision making. These factors are evidenced by previous studies from developing countries and Nepal. The global picture of maternal morbidity and mortality during pregnancy and childbirth is described.

While these are studies of the socio-economic, individual, family and community factors affecting maternal health service utilisation, there are a very few studies which include the women's own perceptions and experiences of SBA use. Transportation, distance and infrastructure of the health facilities are discussed repeatedly but women's experience of health services, for example, regarding providers' attitudes and choices in service use, are absent from the literature. It has been observed that there has been progress in maternal health service utilisation over the past decade but little attention has been paid to how service users' perceptions influence health seeking behaviour. Service users' and health professionals' views are included in the current study in order to understand women's perceptions and experiences of SBA use. Special attention was given to different issues such as

socio-cultural situation, women's individual characteristics, choice, access and distributions of services.

Issues relevant to this study include questions such as what and how individual, family, community and organisational and wider health policy factors affect SBA use and these are discussed in the literature review. Women's individual characteristics, including education and employment, age and parity, perceptions of safer delivery and women's previous pregnancy history, are important factors affecting SBA use. Moreover, the cost of services, inequity in access and distribution of SBA services, gender roles in decision making, cultural and traditional beliefs about pregnancy and delivery, women's autonomy and decision making for service use and family's financial and economic status are analysed. This chapter also describes the literature search strategy, international context of SBA use, and the Millennium Development Goals (MDGs) with particular reference to MDG five and Nepal. The next section presents the search methods for the literature review.

2.2 SEARCH STRATEGY

A systematic search strategy was applied using a range of electronic data bases for searching factors affecting utilisation of skilled delivery care to explore women's experiences and perceptions of maternal health service utilisation during delivery and childbirth. The data bases such as CINAHL (Cumulative Index to Nursing & Allied Health), MEDLINE (Medical Literature Analysis and Retrieval System), Science Direct, EMBASE (Excerpta Medica Database), WEB of Science, Pubmed and JSTOR (Journal Storage) were searched for the relevant literature. Qualitative, quantitative and mixed methods studies relating to maternal health service utilisation were searched. Maternal health service utilisation-related editorials, book chapters, review papers and systematic reviews of literature published between 1990 up to 2012 were searched. The following key words were used for literature search: skilled birth attendance/attendants, service utilisation, maternal health care service, use of skilled delivery care, access to maternity services, choice of service, women's perceptions, pregnancy, delivery care, women's autonomy, women's status, developing country and Nepal. Key words were combined with 'OR', 'AND',

‘NOT’. Most of the studies found are quantitative in nature with very few qualitative studies in Nepal: no qualitative study was found similar in nature or rural context to the one here reported. A bibliometric study on health and medical research by Simkhada and colleagues (2010) also shows that more research in Nepal was conducted using quantitative methods as opposed to qualitative ones.

In addition, search engines such as Google, Yahoo and Google Scholar were also used to find maternal health related articles, reports and news. Furthermore, gray literature, such as published and unpublished reports, policy documents and facts sheets on maternal health, news items and committee reports were searched to identify the publication lag. In some cases contact was also made by e-mail with authors of articles and scientific papers. Key organisations in Nepal such as the Ministry of Health (MoH), Department of Health Services (DoHS) and District Public Health Office (DPHO) in the study district were contacted and visited for reports and bulletins. Hand searches were also made for related resources such as books, journals, newsletters and editorials. Maternal health reports published between 1990 up to 2012 by Government Organisation (GOs), Non-Government Organisation (NGOs), and International Non-Government Organisation (INGOs), World Health Organization (WHO), United Nations Fund for Population Activities (UNFPA), United Nation International Children and Education Fund (UNICEF), Ministry of Health and Population of Nepal (MoHP), and Nepal Health Research Council (NHRC) websites were also searched to identify the issues affecting health service utilisation. Similarly, maternal health research related news, press releases, and papers presented in different conferences were also searched. The following sections present a definition of SBAs and summarise the international context of maternal health.

2.3 DEFINITION OF SBAs

The WHO (2004, p.1) stated that “skilled care refers to the care provided to a woman during pregnancy, childbirth and immediately after birth by an accredited and competent health care provider who has at her/his disposal the necessary equipment and the support of a functioning health system, including transport and referral facilities for emergency obstetric care”.

The WHO (2004) defined an SBA as “an accredited health professional such as a midwife, doctor or nurse who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns” (WHO, 2004, p.1). The next section discusses the international context of SBA use.

2.4 THE INTERNATIONAL CONTEXT OF MATERNAL HEALTH

In the year of 2000, 149 Heads of State (HoS) and 189 Member States jointly endorsed the Millennium Declaration which committed signatories to achieving various goals by 2015. Nepal is one of the signatory countries. The reduction of maternal mortality is one of the important goals among the eight Millennium Development Goals (MDGs). Table 2.1 presents a summary of the eight MDGs: the reduction of maternal mortality is the fifth such goal (UN, 2008).

Table: 2.1: Summary of the eight Millennium Development Goals

<p>The following are the Eight MDGs</p> <p>Goal One: Eradicate extreme poverty and hunger</p> <p>Goal Two: Achieve universal primary education</p> <p>Goal Three: Promote gender equality and empower women</p> <p>Goal Four: Reduce child mortality</p> <p>Goal Five: Improve maternal health</p> <p>Goal Six: Combat HIV/AIDS, malaria, and other disease</p> <p>Goal Seven: Ensure environmental sustainability</p> <p>Goal Eight: Develop a global partnership for development</p> <p>(Source: UN, 2011)</p>
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The MDG five purposed two indicators for monitoring progress towards reduction in maternal mortality. The goal is to reduce the maternal mortality ratio (MMR) by

three quarters between 1999-2015 and increase the proportion of deliveries carried out with the assistance of skilled health personnel (UN, 2011).

Complications during pregnancy and childbirth are a leading cause of death and disability among women of reproductive age in the developing countries of the world (WHO et al. 2012). Koblinsky and colleagues (2000) found that the presence of SBAs during pregnancy and childbirth significantly reduces maternal morbidity and mortality. The United Nations (UN, 2011) has noted that in many developing countries the level of maternal morbidity and mortality has been reduced. However, complications during pregnancy and childbirth remain one of the major public health problems in many countries of the developing world and 99% of maternal deaths occurred in those countries (UN, 2011). The availability of SBAs could help to reduce maternal deaths but there are proportionally fewer SBAs in the developing countries where significant numbers of women deliver their babies without the help of skilled care (UN, 2011).

The WHO (2005) has stated that reducing maternal morbidity and mortality and increasing the survival rates of pregnant women and newborn babies require skilled care during pregnancy and childbirth. However, around the world, one third of births take place at home without the assistance of skilled attendants (WHO, 2008). Delivering a baby without skilled care in an unsafe environment can contribute to increased risk of maternal morbidity and mortality. The WHO strongly advocates “skilled care at every birth” to reduce the global burden of maternal deaths as well as stillbirths and newborn deaths (UN, 2012; WHO et al. 2007).

Ensuring skilled care during pregnancy and childbirth is a critical intervention for making pregnancy and childbirth safer. Evidence from developed countries about maternal health suggests that skilled care during childbirth and immediately afterwards can have a significant impact on reducing maternal deaths. For example, in the late 19th century in many countries of Europe and the United States (US) maternal mortality was as high as or higher than in today’s developing world (Loudon, 2000). Several factors, such as improvements in knowledge, choice and better access to services, equality in service distribution and health infrastructure developments have contributed to a reduction in maternal mortality in economically

developed countries. A universal provision of skilled care during pregnancy and childbirth is one of the important factors for saving women and newborn life in those countries (Safe Motherhood, 2002).

2.5 MATERNAL HEALTH IN DEVELOPING COUNTRIES

The Universal Declaration of Human Rights (UN, 1948), Article 25 declares that health is one of the fundamental rights of every human being. The WHO (2002) stated that everyone has the right to the highest attainable standard of physical and mental health, access to medical care, sanitation, food, housing and a clean environment. Promotion of human rights is relevant to health care in many ways, including prevention of harmful practices and of violence and discrimination against women; and recognition of women's right to health, autonomy, education, and nutrition (WHO, 2002). The United Nations Human Rights Council highlighted that maternal mortality is not just an issue of development but also of human rights (UN, 2011). Thus a human rights perspectives can enhance accountability for preventable maternal mortality through providing access to hospital care, medicines and doctors, which are available and acceptable for everyone on an equitable basis, when and where needed (UN, 2011). Article 25 also emphasises that health care systems must be guided by the key human rights standards and principles such as universal access to services, availability, acceptability, quality, non-discrimination, transparency, participation and accountability (UN, 2011). The Convention on the Elimination of all form of Discrimination against Women (CEDAW) (UN, 1979) also promotes the equal rights of men and women without distinction of any kind. However, this principle is not in practice in many countries in the world.

Reducing maternal mortality by 75% by 2015 in the region with the highest maternal morbidity and mortality, Sub-Saharan Africa and South Asia, is a big challenge (UNFPA, 2010). There are challenges in providing universal access to SBAs during pregnancy and delivery time in many regions of the developing world for several reasons. These include lack of health professionals and equipment, unequal access to services and cost related issues (Campbell & Graham, 2006). In many developing countries, most of the deliveries occur at home without the help of skilled health professionals (Kruk et al. 2008; UN, 2008). In some cultures and communities

women perceive pregnancy and childbirth as a natural process which does not require specialist care unless there are complications (Team et al. 2009). But people may not recognise pregnancy related complications such as pre-eclampsia, haemorrhage and obstructed labour until it is too late (Team et al. 2009).

In many communities of rural Nepal (Pradhan et al. 2010) women may not go to a health facility for delivery. The reasons for not going to hospital for delivery may be related to the accessibility and availability of transportation services and distance to the health facility. A survey on the clinical assessment of maternal and child health workers in some urban areas of Nepal (n=104) by Carlough and McCall (2005) has shown that lack of awareness, cultural beliefs, perceptions of safer pregnancy and cost related issues are important factors in not going to hospital for delivery.

A study by the WHO and others (2012) estimated that among the developing countries, the Sub-Saharan African countries have the highest risk of women dying due to pregnancy related causes. The WHO estimated that one woman in 39, in Sub-Saharan Africa, one in 130 in Oceania, one in 160 in South Asia, one in 290 in South-East Asia have a chance of dying due to pregnancy and childbirth related complications compared to an average of one in 3,800 women in developed countries (WHO et al. 2012).

Globally each year nearly three million women die because of complications related to pregnancy and childbirth. Among those, two third of maternal deaths occurred in Sub-Saharan Africa alone and a third took place in South Asian countries (WHO et al. 2012). According to UNICEF (2008), Sub-Saharan Africa and South Asian countries accounted for 84% of global maternal deaths. The leading causes of all deaths in those regions are haemorrhage, sepsis, prolonged or obstructed labour, the hypertensive disorders of pregnancy, especially pre-eclampsia and complications deriving from unsafe abortion (UNICEF, 2008).

A WHO report (2012) has shown that maternal mortality ratio has halved in the last ten years. The MMR per 100,000 live births in Sub-Saharan Africa is 500 followed by South Asia with the number of 220 (WHO et al. 2012). The MMR is 170 in 100,000 live births in Nepal (WHO et al. 2012) while it was 281 in 2006 (NDHS,

2006). According to WHO (2012) several factors have played a role in the improvement of MMR over the last decade including awareness, education and access to skilled care services and government commitment to achieving the MDG.

The uptake of SBAs during delivery was 46% in Sub-Saharan Africa and 50% in Southern Asia (UN, 2011) where as these rates in developed countries are almost universal. A quantitative data analysis on the use of professional maternity care by Koblinsky and colleagues (2006) in developing countries, including in Africa and Asia, has shown that the average utilisation of SBAs was slightly less than 50% and the use of skilled care was less than this in rural areas. The National Demographic and Health Survey of Nepal (NDHS, 2011) showed that an average of 36% of women delivered their babies with the help of skilled care while this rate was 18% in 2006, and the same survey reported that this rate is less in rural areas.

The reduction of maternal mortality by 75% in between 1990 and 2015 as an agreed MDG is challenging in the resource poor countries such as Nepal (UN, 2008). A study on reducing maternal mortality in developing countries by Campbell and Graham (2006) mentioned that increased delivery with the help of SBAs requires a massive improvement in a health delivery system, increasing the number of SBAs, access to services and timely referral systems for complications including emergency care services. However, there are problems addressing these issues in those countries due to lack of health care providers, lack of political stability, poor policy implementation and lack of financial resources. Timely access to services and referral to a health facility in an emergency situation is an even greater problem in rural Nepal (NDHS, 2011).

Koblinsky et al. (2006) stated that there is a growing focus on the availability of SBAs, particularly trained midwives, as the main factor which could play a significant role in reducing global maternal mortality. However, a systematic analysis of maternal mortality in 181 countries 1980-2008 by Hogan and colleagues (2010) shows that the availability of SBAs is limited, particularly in the less developed countries where maternal morbidity and mortality is high.

Delivery by SBAs serves as an indicator of achieving progress towards reducing maternal mortality worldwide and Nepal has committed to increasing skilled delivery care (WHO et al. 2012). Globally, the proportion of deliveries assisted by SBAs has become an indicator for measuring maternal mortality reduction, including the 75% reduction called for by the fifth MDG (AbouZahr & Wardlaw, 2001; Koblinsky et al. 2006; Harvey et al. 2007). However, increasing the coverage of delivery by skilled birth attendants in a high maternal mortality region has been slow due to various obstacles. These include slow progress on expanding care services, scarcity of skilled providers, poor health system infrastructure and poor quality of care as well as women's reluctance to use skilled care (Koblinsky et al. 2006).

More than 80% of maternal deaths worldwide are due to five direct causes: these are haemorrhage, infection, high blood pressure, unsafe abortion and obstructed labour (UN, 2008; WHO, 2005). Most of these deaths could be prevented if women have access to essential skilled care in pregnancy, during labour and delivery and after childbirth (Graham et al. 2001). In most situations, the lower the percentage of SBA use during labour and delivery, the higher the lifetime risk of women dying in that region or country (Carlough & McCall, 2005). A study in four developing countries (Benin, Ecuador, Jamaica and Rwanda) that assessed SBAs competence and implications for safe motherhood (Harvey et al. 2004) showed that the higher the uptake of SBAs use the lower the rate of maternal morbidity and mortality.

A systematic review on incentive policies in maternal health service uptake (Murray et al. 2014) shows that the incentive policies have positive impact on maternal health service utilisation. Studies from many developing countries in many south Asian countries such as Nepal (Jackson & Hanson, 2012); Bangladesh (Ahmed & Khan, 2011); and Pakistan (Agha, 2011) have shown that maternal incentive policies for example, free maternity care, cash transfer to encourage institutional deliveries, and also cash payment to mothers who deliver in the obstetrics facilities have increases health service utilisation.

Rapid economic growth in Asia and the Pacific has led to a dramatic reduction in extreme poverty that is people living at below \$1.25 per day. However, poverty is still a great challenge to improving public health in developing countries. According

to (Asian Developing Bank [ADB] 2014) the extreme poverty rate had declined from 54.7% in 1990 to 20.7% in 2010 in Asia. Reducing extreme poverty by 2015 is one of the MDG; it would not have been possible reduce extreme poverty figures if Asia was excluded. However, the poverty level is still high in Asia and Pacifica region (ADB, 2014).

A deeper look at Asia's poverty by Asia Development Bank considers three basic elements such as, food- insecurity and poverty; poverty and vulnerability; and natural calamities which play a significant role in reducing poverty levels according to World Bank standards. A report by Asian Development Bank (ADB, 2014) shows that rapidly rising food prices increase food insecurity, threatening the very survival of the poor, particularly the landless and urban poor. The poor spend far more of their income on food than the non poor. In recent years, vulnerability to natural calamities has been increasing in both frequency and severity especially in East, South, and Southeast Asia. In addition, globalization has led to the increased possibility of economic shocks affecting the region (ADB, 2014).

Dreze and Sen (2013) explain that economic and social indicators also reflect health service utilisation. In general, higher the economic and social indicators such as gross domestics product (GDP), life expectancy between male and female, infant mortality rate, literacy ratio among male and female, youth literacy ratio, years of spent in the school by male and female students and gender related indicators such as, female, male ratio in the population, female labour participation rates influence maternal health improvement (Dreze & Sen, 2013). If you compare these indicators with maternal health you can see the links between them. For example, the female labour participation rate is 80% in Nepal and while, India and Bangladesh rates are only 29% and 57% respectively (Dreze & Sen, 2013). If you compare maternal mortality ratio between these three countries Nepal has a much lower MMR than India and Bangladesh. Similarly, youth education ratio and years spent in school play an important role in reducing maternal mortality and morbidity. For example, in Nepal and Bangladesh youth literacy ration (15-24 years) were 78% each and 99% in Sri-Lanka, while this rate is only 61% in Pakistan. If you compare this among Nepal, Bangladesh and Sri-Lanka's the maternal mortality ratio is far better in those countries than in Pakistan's maternal mortality. Similarly, gender differences in

education also link to maternal health indicators for example, Sri-Lanka has a youth literacy rate of 99% and maternal mortality is only 35 per 100,000 live births while in Pakistan the literacy rate is 61% and MMR is 260 per 100,000 live births. The proportion of the population below the international poverty line also has the close links to maternal health service improvements such as, India has 68% of its population living below the international poverty level (PPP below \$ 2 per day) while this rate is only 29% in Sri-Lank (Dreze & Sen, 2013).

2.6 NEPAL AND MILLENNIUM DEVELOPMENT GOAL FIVE

The Government of Nepal (GoN) is committed to improving maternal morbidity and mortality rates (MoH, 2004; WHO, 2007) providing equitable and highest attainable standards of health services. In recent years (MoHP, 2007) high priority has been given to the National Safe Motherhood Programme (NSMP) within the Nepal Health Sector Strategy Plan (GoN, 2006). The Nepal health sector has set a goal of meeting the five years Plan/Poverty Reduction Strategy Plan and MDG to reduce the MMR by 75% by 2015 through an increase in the number of SBAs, increased use of contraception, lowering the total fertility rate and increasing the average age at marriage (GoN, 2006).

The National Policy on Skilled Birth Attendants 2006 aims to increase the percentage of births assisted by an SBA through expanding the number of SBA training centres in the country to meet the required training needs (MoHP, 2007). The First Long Term Health Plan (1975-1990) focussed on integrated community health development. National Health Policy-1991 established a policy frame work for health sector development with the objective of providing primary health care and effective health services relevant to the needs of rural people (WHO, 2007). The National Health Policy 1991 identified safe motherhood as a priority area to reduce MMR through primary care. The Second Long-Term Health Plan (SLTHP) 1997-2017 has the goal of increasing the percentage of deliveries attended by trained personnel to 95% (Devkota & Putney, 2005).

The national Demographic and Health Survey of Nepal shows that only 36% of births were assisted by SBAs during labour and delivery (NDHS, 2011). The MMR

in Nepal is 170 per 100,000 live births (WHO et al. 2012). Over a decade ago it was estimated that if there were SBAs at all deliveries in developing countries, maternal mortality could be reduced by 13-33% (Graham et al. 2001). A quantitative study in 15 urban areas of Nepal by Carlough and McCall (2005) has shown that there are also clinical reasons for a focus on skilled attendance to reduce maternal morbidity and mortality. Health professionals with up to date training, appropriate knowledge, skills and performance are important to reducing maternal mortality. Logistical and policy support are also required to increase the use of maternity services.

As already discussed, globally, some 80% of maternal deaths are the direct result of obstetric complications but most could be prevented if women could access an SBA and necessary medical services during pregnancy, labour and after childbirth (UN, 2008). The remaining 20% of maternal deaths are due to underlying causes like severe Anaemia, Tuberculosis (TB), Malaria and Human Immunodeficiency Virus (HIV) and the Acquired Immune Deficiency Syndrome (AIDS) (WHO, 2005). The indirect causes of maternal deaths, for example, infection also require the assistance of SBAs during pregnancy, delivery and post partum period for the survival of the mothers (de Bernis et al. 2003).

The National Health Survey of Nepal (NDHS, 2011) estimated that 64% of deliveries occurred at home without the help of SBAs. The main birth attendants are female family members (mostly mothers-in-law), neighbours and friends and traditional birth attendants, although some women unintentionally deliver without anyone's help (NDHS, 2011). Women living in rural areas are less likely to access SBAs, thus MMR is higher in rural areas. The same survey shows that among total births in Nepal, one in three women is assisted by an SBA during childbirth. However, this rate differs between rural and urban areas if the data are disaggregated at the regional level. In many rural areas and among some ethnic and cultural groups most women still prefer to have a home delivery with the help of traditional birth attendants (UNICEF, 1998a; Pradhan et al. 2010; NDHS, 2011), believing pregnancy and childbirth to be a natural phenomenon not requiring formal health service interventions. The next section discusses factors affecting the use of SBAs.

2.7 FACTORS AFFECTING THE UPTAKE OF SBAS IN NEPAL

Studies on the maternal health service in Nepal have identified several factors influencing SBA use during delivery (Pradhan et al. 2010; Acharya et al. 2010; NDHS, 2011; Furuta & Salway, 2006; Wagle et al. 2004; Acharya & Cleland, 2000; Osrin et al. 2002; Matsumura & Gubhaju, 2001). Studies reviewed utilised different methodologies such as quantitative, qualitative and mixed methods. Studies from Nepal on maternal health service use have shown that a wide range of factors influence SBA use; these include: transportation, distance and road links to the health facilities; geographical barriers; poor communication systems; staff attitudes towards service users; inadequate numbers of SBAs and lack of female SBAs (Wagle et al. 2004; Furuta & Salway, 2006; Shrestha, 2008; Pradhan et al. 1997; Simkhada et al. 2010; Dhakal et al. 2011; NDHS, 2011; Bogren et al. 2013).

The service delivery system, the poor physical infrastructure of the health facilities and lack of privacy and confidentiality also influence the uptake of SBA services (Sharma, 2004; Pant et al. 2008; Subedi et al. 2009). Furthermore, women's socio-economic and demographic characteristics, e. g. age, parity, education, employment and income, perceptions of safe delivery, dwelling place (e. g. rural/urban), decision-making power and women's autonomy, gender inequality, cultural practices and religious beliefs also influence the uptake of SBAs (Baral et al. 2012; Borghi et al. 2006; Acharya & Cleland, 2000; Osrin et al. 2002; Matsumura & Gubhaju, 2001).

Literature on maternal health in Nepal shows that there are few qualitative studies on maternal health service utilisation. Most of the studies from Nepal focussed on quantitative aspects of service use and did not answer how and why those factors influence service use. There is a clear gap in the literature covering women's experiences and preferences regarding use of skilled delivery care during pregnancy and childbirth.

Economic, geographic, cultural and religious factors all affect the uptake of SBAs but the health service delivery system also plays a significant role in SBA service use (Furber, 2002; Jackson et al. 2009; Pradhan et al. 2010). Staff attrition due to migration abroad for better jobs and income, staff leave, retirement or death and

unfilled posts, limited availability of services, lack of support from colleagues, and high workloads, lack of up to date training as well as shortage of medicine and equipment and a poor referral system all contribute to the low uptake of SBA services (Pradhan et al. 2010; Pant et al. 2008; Furber, 2002; Mesko et al. 2003; UNICEF, 1998b; Ratnaike, 1984). Furthermore, political instability also affects health service utilisation (Devkota & Teijlingen, 2010).

A systematic review of literature of factors affecting the utilisation of antenatal care services in developing countries by Simkhada and colleagues (2008) shows that individual, family and community factors e. g. maternal education, husband's education, availability of services, cost, family income, women's employment, media exposure and history of obstetric complications and cultural beliefs and ideas about safer pregnancy also influence SBA use. Studies from different countries such as Afghanistan (Mayhew et al. 2008), Bangladesh (Edmonds et al. 2012), Cambodia (Yanagisawa, 2006), Pakistan (Mumtaz & Salway, 2007), rural China (Harris et al. 2010) and Tanzania (Mrisho et al. 2009) have reported similar factors as affecting SBA use during labour and delivery. The following subsections elaborate on how the above mentioned factors influence SBA use.

2.7.1 Geographical factors affecting service use

Topographically Nepal has challenging terrain and poor communication networks making travel to health facilities problematic for people living in the hill and mountain districts of the country (Borghi et al. 2006). The poor road condition or lack of roads in many rural areas means that transport is an important barrier to reaching the health facility during labour and delivery (Pradhan et al. 2010; Simkhada et al. 2006). The distance to the health facility and limited availability of transportation services have a significant impact on timely access to skilled care (Futura & Salway, 2006). In rural areas travel to health facilities can take hours or even days rather than minutes because of poor roads and lack of transport (Acharya & Cleland, 2000; Hotchkiss, 2001). Studies on determinants of maternal health service utilisation have found that in many developing countries, such as Afghanistan (Mayhew et al. 2008), Bangladesh (Anwar et al. 2008), Malawi (Kamwendo & Bullough, 2005), and Nepal (Wagle et al. 2004; Borghi et al. 2006),

living one hour away from a health facility increases a woman's chance of a home delivery without help of SBAs.

In Nepal, the health care facilities are concentrated in urban areas and health care services are not easily accessible for people living in rural areas, further affecting the use of SBAs (Futura & Salway, 2006; Baral et al. 2012). The Government of Nepal provides emergency services at the regional level and comprehensive health facilities are located in the urban areas (Furber, 2002). In the remote districts, access to specialised care needs air travel, as there are no roads for transportation to go to hospital and no access to skilled care locally. It is expensive and beyond most people's ability to pay for some services and transportation (Thapa, 1996; Baral et al. 2010). This has made utilisation of skilled maternal health services difficult in the hill and mountain districts where most people are poor (Furber, 2002; Simkhada et al. 2006; Baral et al. 2010). Lack of access to transport or their high cost and the distances to health facilities are therefore barriers to reaching a health facility in time (Borghi et al. 2006). The lack of provision of skilled health attendants and the poor quality of health services in rural communities makes a significant difference to the uptake of maternity services (Acharya & Cleland, 2000; Hotchkiss, 2001).

Furthermore, political instability in many developing countries affects service provision (Kaufmann et al. 2008). In Nepal, a period of armed conflict (1996-2006) has made additional difficulties with regard to uptake of health services (Devkota & van Teijlingen, 2010) and changes in governments over a short period have led to changes in health policy and limited availability of health services, adversely affecting service use (Devkota & van Teijlingen, 2010). In addition, women's access to emergency obstetric care may be limited because of increased travel and security risks associated with reaching the health facility (Thapa, 2003; Rath et al. 2007).

2.7.2 Place of residence and uptake of SBA

Easy access to skilled health care services according to dwelling place makes it more likely that women use services during labour and delivery time. Use of skilled delivery care varies within and between developing countries of the world. As mentioned, more women are delivered at home without skilled attendants in the rural

areas compared to urban centres (Koblinsky et al. 2000). A systematic review of literature on inequalities in the use of maternal health care in developing countries shows that, within countries, urban and/or wealthier women had more access to SBAs than rural and poor women (Say & Raine, 2007). In urban areas of Nepal, the proportion of institutional deliveries is three times higher than in rural areas (NDHS, 2011) though in urban areas like Kathmandu (capital of Nepal) a significant proportion of women still deliver at home without skilled attendants (NDHS, 2011). There may still be access problems related to costs, attitude of SBAs, women's poor experience of hospital delivery and cultural beliefs and traditional practices in childbirth (Sreeramareddy et al. 2006; Bolam et al. 1998).

A survey in two rural districts of Nepal by Wagle et al. (2004) showed that a very large proportion of deliveries took place at home without SBAs. Among total births only six percent of those deliveries were attended by SBAs in hospital. A review of literature on maternal health service utilisation in Nepal by Baral et al. (2012) and a Nepal Demographic and Health Survey (NDHS, 2011) report show that there are marked differences in health facility deliveries with the help of SBAs between ecological and development regions of the country. The women living in the mountain region show the lowest use of SBAs (19%) compared to those living in the Terai (Plains) region (41%). Institutional deliveries range from a low of 29% in the Far-western and Mid-western regions (the country's less developed regions) to a high of 40% in the Eastern (relatively developed) region, and women most frequently use SBAs in the Eastern Terai sub-region, where one in two mothers deliver in a health facility with the help of SBAs (NDHS, 2011). This indicates that place of residence and access to a health facility significantly influences the use of SBAs during pregnancy, labour and delivery (Baral et al. 2012).

2.8. HUMAN RESOURCES AND SERVICES DELIVERY SYSTEM

Access to quality health services is important in order to increase health service use (Goddard & Smith, 2001). However, Bolam et al. (1998) reported that increasing the quality of services does not ensure their utilisation. Research on maternal health service utilisation in other developing countries, such as Kenya (Izugbara et al. 2009) and Ghana (D'Ambruoso et al. 2005), shows that the behaviour of health staff

is an important issue affecting the uptake of SBA services during labour and delivery of the baby (see also WHO, 2010a).

Staffs' positive and negative attitudes play an important part in SBA use. A qualitative study using in-depth interviews and focus groups with women in Ghana by D'Ambruoso and colleagues (2005) showed that a positive attitude by staff during labour and delivery (e. g. giving reassurance, encouragement and politeness) encouraged women to use SBAs in hospital. The same study suggested that other quality of care factors, such as poor outcomes of the previous pregnancy, general environment of the facility (e. g. level of noise, orderliness, water and light, sanitation and privacy) as well as an inadequate number of staff, discouraged women from using SBA services.

A quantitative study of skilled attendants in rural Kenya by Cotter et al. (2006) suggested that the attitude of health staff is as important as the physical quality of health services while a review of literature on maternal health service utilisation in Malawi (Kamwendo & Bullough, 2005) showed that the negative attitudes of staff (such as rudeness, shouting at patients, lack of empathy, refusal to assist, lack of moral support and making patients wait for checkups and giving priority based on links to staff) play a part in utilisation of SBA services.

Similarly, a review of literature on Nepalese women's reproductive rights and future directions for Nepalese women suggested that staff workloads and the overcrowding of outpatients in a health facility make it difficult to manage privacy and confidentiality (Sharma, 2004). A lack of adequate training of service providers with regards to privacy and confidentiality matters also discourage women from the use of SBA services during delivery of the baby (Sharma, 2004; Subedi et al. 2009; Baral et al. 2010).

The fifth UN MDG recommended that the most important intervention to reduce maternal mortality is the care provided by the SBAs working within a supportive environment (WHO, 2004). As discussed earlier, the role of SBAs is important in saving some women's lives during the pregnancy, delivery and the post partum period (WHO, 2004). But sufficient numbers of SBAs are not available in many

developing countries (Koblinsky et al. 2006) where a majority of women still deliver in unsafe environments, putting them at risk.

In the late 20th century, a number of key factors, such as limited access to health care, poor condition of the health infrastructure, lack of financial resources and the lack of availability of skilled health professionals in the rural areas, have affected service use (Hotchkiss, 2001) and subsequent literature suggests that these factors persist. Skilled human resources are an important factor in health care provision and reduction of maternal mortality is related to the availability of skilled health care providers (WHO, 2010a). As in many developing countries, rural health services in Nepal are facing numerous problems that affect the uptake of SBAs (Baral et al. 2010; DoHS, 2011; Bogren et al. 2013). There is a lack of skilled health providers in Nepal which can be seen in the physician and nurse ratios, five and 26 per 100,000 people respectively (Hongoro & McPake, 2004). Midwifery is not yet recognised as an autonomous profession for promoting maternal and family health and the congress on Midwives has not yet been reached in Nepal, also indicating a lack of necessary health professionals (Bogren et al. 2013).

An earlier analysis of Nepal's Demographic Health Survey 2006 by Pant et al. (2008) showed that uptake of skilled maternity care at a health facility had been increasing in Nepal over the previous decade due to increased awareness and improvements in services, and government health policy. However, a national health survey (NDHS, 2011) and Department of Health Services report (DoHS, 2011) indicate that these improvements are not sufficient to meet the MDG target of a three quarters maternal mortality reduction by the end of 2015.

In addition, such qualified health professionals as exist (doctors, nurses and midwives) often prefer to work in urban areas and in relatively developed regions of the country (Carlough & McCall, 2005; Hotchkiss, 2001; Hounton et al. 2008). SBAs preferences for urban locations are partly related to better health facilities and but also due to the availability of other services (e. g. good schools for children) (Subedi et al. 2009). There is, therefore, a chronic shortage of skilled attendants in rural areas of Nepal (MoHP, 2011).

Frequent transfers of staff, unfilled sanctioned posts, staff on leave and low numbers of staff overall contribute further to staffing problems in this sector. Studies in many developing countries, such as Bangladesh (Amin et al. 2010), Malawi (Kamwendo & Bullough, 2005) and Nepal (Carlough & McCall, 2005) have shown that death or retirement of staff or emigration overseas in search of better pay and working conditions are further reasons for shortage of SBAs in many developing countries, including Nepal. Overall, rural women are more likely than urban dwellers to lack the opportunity to utilise SBA services even if they wish to (Pradhan et al. 2010). There is evidence from the developing countries about how to increase rural services for example, Sri-Lanka and Malaysia created the trained rural midwives for example, “auxiliary nurse midwives” (ANMs) to provide maternal and child health services. These countries showed greater improvement in achievement to improve maternal mortality and morbidity rates through ANMs deployed in rural communities (MacDonagh, 2005). Sri-Lanka’s model can be a good example for developing and deploying skilled care providers in rural community facing financial constraint.

As many births are take place at home in many developing countries including Nepal, it is necessary to come up with an option to provide skilled birth attendance at community level. Lack of qualified midwives in rural areas is a major challenge for providing skilled care for rural women. However, the Nepal government has not developed the policy for well trained midwives in the community nor even in urban hospitals. In some cases, nurses were rotated in all the departments of the hospital, thus they did not develop any expertise in midwifery, and there may not be specialist midwifery training programmes. As a consequence, although female nurses and ANMs are automatically registered as midwives thus there is lack of professional/skilled midwives to support women during pregnancy and childbirth.

In Nepal, midwifery care providers often lacked even basic midwifery skills despite having received pre-service and in-service training in basic and advanced maternal care. As such they cannot be considered to be skilled attendants according to the international standard. Following the introduction of competency-based training, complemented with quality assurance guidelines and facility based supervision; some providers were still unable to demonstrate the skills to provide normal

midwifery and EMOC skills (ODC, 2004). In many developing countries, in some settings staff graduated without any 'hands-on' clinical experience in their training. There are examples from some south Asian countries of tutors without any midwifery skills being given responsibility for midwifery training (Kamal 2000). An evaluation study in Indonesia raised concerns about the short in-service training programmes to produce competent midwives and suggests that such an approach cannot replace adequate pre-service training (Ronsmans et al. 2001). Interpersonal skills are also important and are known to influence uptake of care (Ashwood-Smith & Simpson 2003).

2.8.1 SERVICE DELIVERY SYSTEM AND USE OF SBAS

A health system consists of all the organisations, institutions, resources and people whose primary purpose is to improve public health (WHO, 2000). High quality health service delivery systems are essential for the improvement of the population's health including social determinants. Furthermore, effective infrastructure of the health facility, such as buildings, power supply, clean water, transportation and communication, are important factors in providing effective services (WHO, 2010b). So in countries, like Nepal, low use of SBAs during pregnancy and delivery is not only affected by economic, geographic, cultural, and religious aspects but also by institutional problems (Pradhan et al. 2010) as women have to pay for transportation, food and accommodation. Research studies on women's status and maternal health service utilisation in Nepal (Matsumura & Gubhuja, 2001; Pradhan, 2005; Pradhan et al. 2010) have shown that poor quality of services, unavailability or inaccessibility of SBAs, lack of medicine and equipment and poor referral systems are some reasons for low uptake of SBAs. Lack of equipment and drugs are common problems in many health facilities, particularly in rural Nepal (Subedi et al. 2009; Acharya & Cleland, 2000).

Pradhan et al. (2010) concluded in their study of maternal morbidity and mortality that limited staff knowledge and competence, lack of proper training and up to date knowledge about new developments, inadequate payment, unsupportive management and lack of support from colleagues are some of the constraints on

providing effective maternal health services. So without a supportive environment SBAs alone may not be able to reduce maternal mortality and morbidity. Despite the government's efforts to improve the service delivery system, including expanding the network of maternal health clinics in rural areas and the training of Auxiliary Nurse Midwives (ANMs), there continues to be low use of SBAs in Nepal (ADB, 1999; DoHS, 2011).

However, governance issues in the health service are not the whole cause. Health care choices might be influenced by factors within a local community and by social networks (Baral et al. 2012). Choices are likely to be affected by costs, geographical and climatic constraints and cultural factors. Moreover, the time of day and season that labour occurs and types of complication experienced also play a part in SBA use.

2.8.2 EQUITY IN SERVICE DISTRIBUTION

Whitehead (1992, p. 430) defined health inequities as “differences in health that are unnecessary, avoidable, unfair and unjust”. Braveman and Gruskin (2003) stated that health inequality is unjust or unfair according to social justice theories. The concept of health equity focuses attention on the distribution of resources and other processes that drive a particular kind of health inequality that is a systematic inequality in health or inequality in health service distribution according to social determinants between more and less advantaged social groups (Braveman & Gruskin, 2003).

A global study on maternal health services utilisation by Anwar et al. (2008) shows that inequities in access to maternal health services occur everywhere, both between and within many developing countries of the world. Similarly, Dahlgren and Whitehead (1991) concluded that equity in health service access based on individual characteristics, social-cultural environment and economic condition of people also significantly influence the use of health services.

Goddard and Smith (2001) stated that equity of access is a “purely supply side consideration, in the sense that equal services are made available to patients in equal

need’’ (p.1149-1150). However, Kruk et al. (2008) stated that utilisation of health services is a function of demand and supply. Poor availability of health services and lack of resources is a major constraint to utilisation. A study on equity in SBA utilisation in developing countries by Kruk et al. (2008) found that different factors such as lack of supply of services, quality and outcome of the services, costs, cultural practices and attitudes of service providers play a significant role in variations in the equal distribution of services and equality of access. The same study mentioned that choice and preference regarding the services, poor physical accessibility and distribution of the health care resources and lack of female service providers also affected services use. The Nepal Demographic and Health Survey (2011) reported that there is unequal health service distribution in Nepal across the region of the country affecting maternal health service use.

Availability and access to equal and appropriate health care services is one of the important factors influencing the use of health care services (Baral et al. 2012). Many countries have developed health policies focussing on access to health services for all people as a central objective (Goddard & Smith, 2001) but it remains a significant problem to provide appropriate services to all. Studies on inequality in maternal health service utilisation in many countries such as in India (Kesterton et al. 2010; Pathak et al. 2010), Bangladesh (Anwar et al. 2008), Indonesia (Hatt et al. 2007), Nepal (NDHS, 2011), and other developing countries (Say & Raine, 2007) suggest that there are inequities in availability of skilled maternity care between different socio-economic groups of people (such as poor and rich, and according to area of residence and distances to the health facility) affecting service use. There are substantial socio-economic disparities in access to SBAs in low-and middle-income countries (Gwatkin et al. 2007; UNICEF, 2008). A recent national health survey (NDHS, 2011) of Nepal shows that inequity of access to skilled maternity care varies according to the socio-economic status of people and dwelling place (Baral et al. 2012; Chin et al. 2011).

2.8.3 SERVICE USERS CHARACTERISTICS

2.8.3.1 Women's education and uptake of SBA

Education is one of the important determinants for health seeking behaviour and other aspects of daily life. Educated women take more initiatives regarding their health care compared to less educated or uneducated women. There is a strong relationship between the mother's education level and use of SBA services (Ensor & Cooper, 2004). The Nepal Demographic and Health Survey (2011) shows that the proportion of deliveries in a health facility with the help of SBAs is nearly four times higher among births to mothers with a School Leaving Certificate (SLC) than women with less education. Seventy-five percent of women educated to or above SLC level use SBAs compared to only 19% of women with no education. Women who completed primary level of schooling (at least five years) are more likely to deliver in a health facility with help of SBAs relative to those who have not completed primary education. Similarly, women who work in a modern occupation are more likely to use SBAs services than those working in the household and agriculture (Matsumura & Gubhaju, 2001; Acharya et al. 2010).

Husbands' educational and occupational status also has a positive association with the use of SBAs (Gubhaju & Matsumura, 2001). A quantitative study (Furuta & Salway, 2006) on women's position in the household and use of maternal health care in Nepal reported that women with better-educated husbands have a higher chance of using SBA services during pregnancy, delivery and after childbirth. A qualitative study on gender, pregnancy and uptake of antenatal care service in Pakistan by Mumtaz and Salway (2007) found that closeness between husbands and wives and communication about reproductive health related matters are important factors in making decisions to take up SBA services.

2.8.3.2 Women's age and parity

In many developing countries young people constitute a high proportion of the population and Nepal is in this situation (CBS, 2011). Early marriage and child bearing at a young age is still common practice in Nepali culture. The average age of

marriage for Nepali women is 17.8 years and 74% of women are married by the age of 20. Fifty percent of women have given birth by the age of 20 (NDHS, 2011).

Women who have married young are most likely to give birth at a young age increasing their chances of having more children during the reproductive life span. Younger women (15 to 19 years) and those over 35 years are at greater risk during pregnancy and childbirth (Matsumura & Gubhaju, 2001; Furuta & Salway, 2006; NDHS, 2006).

Young women (under 20 years) may experience more complications, lack pregnancy experience and knowledge or their bodies may not be ready for reproduction (Pandey et al. 2012). Similarly, a high number of births and older age are also linked with high maternal morbidity and mortality (Graham et al. 2001). According to the NDHS study (2011) first time mothers are more likely to use SBA care (73%) than the mothers of six and higher birth order babies (20%). Women of 35 years and over who have more than three children are less likely to use SBAs (NDHS, 2006). Several studies on maternal health and childbirth from Nepal (Wagle et al. 2004; Simkhada et al. 2008; Bolam et al. 1998) and other developing countries e.g. Cambodia (Yanagisawa et al. 2006) and Burkina Faso (Hounton et al. 2008) have shown that women who married at an early age and did not have antenatal checkups show a high prevalence of home delivery without the help of SBAs. A survey of determinants of SBA use in Afghanistan by Mayhew et al. (2008) suggested that low female literacy and older age (30-39 years) were also associated with lower use of SBAs relative to women who were younger and literate.

2.8.3.3 Women's socio-economic status

There is a clear relationship between socio-economic status of women and uptake of SBA services. For instance, Caldwell (1996) writing about Sri-Lanka demonstrated that women with low socio-economic status are less likely to use modern health care facilities, whereas women with higher socio-economic status take the initiative in seeking health care for themselves and their children. Despite the many efforts to improve women's situation, women's status in Nepal is still low and the use of SBAs is poor (NDHS, 2011). Nepal has limited resources and poor communication systems. There is less involvement of women in the media which also affects health

service use (Bennett, 2008). Low life expectancy, women's low literacy rates, early and almost universal marriage rate, high rate of teenage pregnancy and a high concentration of unemployment in rural areas are common characteristics among Nepalese women affecting service use (Pradhan et al. 2010; Baral et al. 2012).

There is a strong relationship between economic conditions of the family and SBA use (NDHS, 2011). A systematic review of literature in developing countries by Say and Raine (2007) shows that women who belong to high wealth quintile families have a higher rate of SBA use compared to those in the lowest quintile groups. The Nepal Demographic and Health Survey (2011) showed that delivery in a health facility with the help of SBAs is significantly lower among women in the lowest wealth quintile (11% compared to 78% in the highest wealth quintile group). Studies in Nepal (Furuta & Salway, 2006; NDHS, 2006; NDHS, 2011) have shown that there are close links between the indicators of women's status, educational level, income and wealth, power over resources, household position and reproductive health awareness and SBA use.

2.8.4 COSTS AND SBA SERVICE USE

Studies from many developing countries such as Nepal (Simkhada et al. 2012), Bangladesh (Nahar & Costello, 1998; Koblinsky et al. 2008), India (Kesterton et al. 2010), Kenya (Mbuga et al. 1995) and South Africa (Wilkinson et al. 2001; Levin et al. 2000) have shown that the affordability of skilled maternity services is a further determinant of care seeking during pregnancy and childbirth. A quantitative study on user cost and informal payment in a public maternity hospital in the capital city of Nepal by Simkhada and colleagues (2012) showed that costs of services have a direct impact on SBA use. Similarly another survey on physical distance to the maternity hospital and use of skilled care in Nepal (Wagle et al. 2004) showed that distance to the health facility adds to the financial burden faced by households through transport charges and time spent by family members to accompany women going to the hospital. Quantitative studies in many developing countries such as Nepal (Borghi et al. 2006), Bangladesh (Koblinsky et al. 2008), and Tanzania (Koblinsky et al. 2002) have shown that indirect costs for SBA use also significantly influence the use of skilled delivery care.

The Nepal National Safe Motherhood Programme (NSMP) since 1997 has been seeking to improve maternal morbidity and mortality by providing quality services and reducing access barriers through partnership working with different organisations and communities from local to national level. To achieve this goal NSMP identified costs as one of the major barriers to accessing skilled delivery care during pregnancy and childbirth (MoHP, 2006). Similarly, another study from Nepal by Borghi and colleagues (2006) mentioned that more than a fifth of women who delivered at home stated that cost was the main reason for not delivering at a hospital (with the help of skilled attendants) and for delays in the decision to seek care. The same study mentioned that most public hospitals claim to fully or partially exempt some women from charges. In practice, however, the actual costs to households were found to vary (Borghi et al. 2006; Simkhada et al. 2012). According to NDHS (2011) five percent of women reported costs as a barrier to having a delivery at hospital with the help of SBAs.

Studies in many developing countries, Nepal (Simkhada et al. 2012; Ensor, 2004; Borghi et al. 2006; Acharya & Cleland, 2000), Bangladesh (Blum et al. 2006; Koblinsky et al. 2008), India (Bhatia & Cleland, 2001), Pakistan (Shaikh & Hatcher, 2005), and Malawi (Seljeskog et al. 2006), show that the cost of drugs and unofficial charges, costs of food and washing materials, transportation fees and opportunity costs are significant barriers to the use of skilled delivery care in a hospital.

In the recent decade Nepal has been experiencing emigration of large number of (mainly) men for search of employment due to the lack of job opportunities in Nepal. One study shows an increase in household spending on health due increase in remittances from migrants' workers (Engel et al. 2013). This trend has a positive impact on the family economy and in many cases has facilitated women's autonomy and maternal health service utilisation. Due to the remittance from migrant workers family incomes is rising and other household behaviours (such as, investing in girls' education, women's employment, and use of contraceptives methods) are changing. In addition, unwanted pregnancies and total fertility rate have also declined sharply in the last two decade (NDHS, 2011).

A study on health financing and maternal health improvement by Prasai and Adhikari (2012) shows that gross domestic product per capita has a significant impact on reducing child mortality and increasing life expectancy. Poverty at the one dollar per day level has declined dramatically in Nepal over the past two decades which has direct impact on education, food and nutrition and health service expenditure. Poverty is also significantly lower according to the national poverty line, falling from 42% to 25% in the past two decades (WHO, 2012). Poverty is significantly higher in the rural areas relative to urban ones and the vast majority of people living in rural areas. The remittances from migrant workers have played a positive part in poverty reduction in Nepal over the past two decades. Remittances now account for over 20% of Nepal's GDP, having risen from relatively low levels (between 1% and 2% of GDP) before 2001 (WHO, 2012). A total of 56% of Nepali households receive remittances, up from 23% in the mid-1990s (NDHS 2011). The data from different studies have showed that the remittance from migrants' workers has positive impact on family economies, women's health and girl children's education as well as increasing the overall country GDP. However, it is also important to evaluate how large scale of out migration impact on the country's economy in the future as well as the social and cultural cost.

2.8.5 DECISION-MAKING

Family and community members (e. g. husband, mother-in-law, traditional healer and traditional birth attendants) have a big influence over decisions regarding the use of SBAs. Koblinsky et al. (2000) stated that several factors, such as women's low status in family and community, limited physical mobility and participation in social interaction (including their lower level of education) limit the women's involvement in decision-making. Nepalese society is predominantly patriarchal (ADB, 1999) and men are the primary decision makers in most Nepalese families (Matsumura & Gubhaju, 2001). Women lag far behind men in education, economic resources and opportunities to be involved in community activities and most are involved in subsistence agricultural work and household activities (ADB, 1999; Matsumura & Gubhaju, 2001; GON, 2012).

An analysis of Demographic and Health Survey 2006 data by Acharya et al. (2010) has shown that women's decision-making for health care is directly associated with age, wealth, caste/ethnicity, and residence type (rural/urban), level of deprivation, education level, job and income, including number of living children. Previous research studies on maternal health service utilisation in Nepal (Matsumura & Gubhaju, 2001; Furuta & Salway, 2006) and Indonesia (Hatt et al. 2007) have also shown that those women who completed at least a primary level of education and who are involved in paid employment outside the home have more involvement in decision-making about the use of SBAs compared to women with less than primary level of education and without a paid job. A qualitative study on antenatal care use during pregnancy from Nepal by Simkhada and colleagues (2010) has shown that mothers-in-law and other family members have a significant influence on decision-making for uptake of antenatal care during pregnancy.

2.8.6 PERCEPTIONS OF SAFER DELIVERY

Several studies (Manadahr, 2000; Pant et al. 2008; Pradhan et al. 2010; Baral et al. 2010) reported that most Nepalese people perceive pregnancy and childbirth as a natural process and a private matter for women. As a result, issues related to reproductive health are not discussed openly in the family and community unless necessary (Pradhan et al. 2010). Several studies on women's status and maternal health service utilisation (Matsumura & Gubhaju, 2001; Thapa, 1996; Baral et al. 2012) showed that women's low status and the culture of silence in reproductive health related issues, as well as women's socially and culturally low involvement in activities outside the home, affect SBA use in Nepal. A questionnaire survey on home delivery and newborn practices among urban women in western Nepal by Sreeramareddy et al. (2006) also noted that cultural and traditional beliefs towards pregnancy and childbirth as well as socio-economic factors significantly influence SBA use.

In most developing countries, culturally many women perceive pregnancy as a natural process which does not require professional help during childbirth (Koblinsky et al. 2000). A study on maternal health service utilisation in Nepal by Pant and colleagues (2008) showed that the most common reasons for women not

using SBAs during delivery were that women believed it was not necessary (as childbirth is a normal phenomenon) and the health facility was too far to go. As a result, in some cases, the baby was born on the way hospital before a woman could actually reach the facility. An effective use of SBAs during pregnancy also requires understanding by the family and at community level.

Information about the reasons for delivering at home without the help of SBAs is also necessary for policy and planning of appropriate maternity services. Although there is access to health services in urban Nepal (NDHS, 2011) the use of skilled delivery care is still low. Sreeramareddy et al. (2006) suggested that information about the reasons for delivery at home and care of mothers and newborns without skilled care in urban areas is not sufficient. It is necessary for the mother, her family and community members to understand different aspects of pregnancy and newborn care and to be aware of potential danger signs (Koblinsky et al. 2000). In most communities within Nepal, for various reasons, there is little or no encouragement or support for women who have pregnancy complication to seek appropriate care; and women, as well as family members, may not be aware of the life threatening danger signs in pregnancy or birth related complications (WHO, 2004).

2.9 CONCLUDING SUMMARY

The review of the literature in this chapter suggests that maternal health service utilisation is influenced by several factors: these include the characteristics of individual women and of families and communities; the infrastructure of health facilities; and public health policies. However, there are some questions related to women's experiences and choices that have not been directly explored in past and current studies. This study aims to investigate women's perceptions and contribute further to the literature about how different factors influence their choices regarding SBA use. Despite the recent improvement in uptake of SBAs in Nepal there are still many issues, including changes in individual behaviour, family and community attitudes and organisational factors, which need to be addressed to increase SBA use in order to reduce maternal morbidity and mortality.

In addition to the individual factors affecting uptake, the literature on maternal health service utilisation suggests that policies regarding the availability of health services do not sufficiently address women's needs. Lack of access to the right services at the right time, especially in rural areas, is a main barrier to SBA use. For several reasons women sometimes fail to seek professional assistance and care even when problems arise. There is a gap in the literature not only regarding the importance of women's individual experiences but also the perceptions of family members which could be important in increasing health seeking behaviour during pregnancy and childbirth.

The literature suggests that women's low socio-economic status, poor access to services, lack of information and attitudes towards pregnancy and childbirth influence the uptake of skilled delivery care. Maternal health seeking behaviour is related to multiple factors and, overall, no single issue is more important than others. However, exploring women's individual experiences and perceptions towards service use could help to improve the uptake of skilled care use by identifying issues at family, community, organisational and public health policy levels. The study takes account of the broader socio-economic, cultural and political context of Nepal, with the aim of providing information relevant to developing more appropriate, responsive and culturally appropriate maternal health policies and maternity services.

Before describing the research approach and methodology used in this investigation, the next chapter discusses the international policy context and theoretical perspectives on maternal health service utilisation.

CHAPTER: THREE

THE INTERNATIONAL POLICY CONTEXT AND THEORETICAL PERSPECTIVES ON HEALTH SERVICE UTILISATION

3.1 INTRODUCTION

This chapter discusses underpinning theories; policies and models in the field of public health that contribute to understanding variables and their interaction that affect health service utilisation. The international policy context is discussed and related to maternal health service utilisation in Nepal. Theories and models can be applied to help to research questions about factors that are barriers to the use of skilled delivery care. Selected psychological and social theories and models on decision making in health service utilisation are presented to describe women's perceptions and experiences of maternal health service utilisation to illustrate how different variables may influence health seeking behaviour.

As identified in the literature, maternal health service utilisation can be influenced by many factors including: individual behaviour and socio-environmental systems (such as family, community, workplace, beliefs, culture and tradition) and the economic as well as the political and physical environments. Many theoretical frameworks that analyse these problems are important for this study.

The Socio Ecological (SE) Model of health service utilisation is the one mainly used to inform this study since this model addresses both individual and socio-ecological aspects influencing health service utilisation. Using a theory or model may facilitate understanding of social issues (Davies & Macdowall, 2006). They may inform social issues in many ways, for example, by clarifying how society works, how organisations operate and why people interact in certain way (Reeves et al. 2008).

This chapter discusses the importance of theory or models in understanding social issues specifically as related to factors affecting utilisation of health services. The aim of this study is to explore women's experiences and perceptions in the use of skilled delivery care. Theories and models provide perspectives on complicated

social issues from different angles in relation to health service utilisation.

Brofenbrenner (1977) stated that theories and models also contribute to policies promoting health service use through increased education, knowledge and awareness of individuals and communities including effecting changes in people's attitudes, skills and behaviour.

Using a particular theory or model in relation to this study may not be able to address all the issues surrounding health service utilisation because multiple factors are interdependent in maternal health service utilisation. For example, the Health Belief Model is focussed on psychological aspects of individual behaviour while gender theory focuses on gender related issues affecting service use. The SE model covers the wider socio-economic environment including individual and community factors affecting health service utilisation while the Equity of Access model emphasizes equal access to services for all. However, the SE model of health utilization (McLeroy et al. 1988) has been adopted as the main theory informing this research since this model describes the psychological, social, environmental and economic factors influencing health seeking behaviour including in maternal health care. The SE model is most relevant to this study because health service utilisation is influenced by several individual, community and socio environmental factors.

However, selected elements of other theories are presented to provide an understanding of the social phenomena in health-seeking behaviour. Other models described are Health Beliefs Model (Rosenstock et al. 1994), Andersen and Newman's Model of Health Service Utilisation (Andersen & Newman, 1973; Andersen, 1995), the Choice-Model for Service Use (Young, 1981), the Social Model of health (Dahlgren & Whitehead, 1991), Community Development Theories (Tan, 2009), and Culture and Gender theories (Team et al. 2009; Naraindas, 2009). Such theories can offer explanations about how and why something happens and are useful in identifying the complex issues affecting the effectiveness and sustainability of health service utilisation (DiClemente et al. 2002; Airhihenbuwa & Obregon, 2000).

Janz and Becker (1984) noted that most health service utilisation theories come from the behavioural and social science disciplines. However, they borrow from distinct

disciplines, such as psychology and sociology and from different subject areas, such as management, consumer behaviour, marketing and social behaviour (Rosenstock et al. 1988; Bryant, 2002). Such diversity reflects the fact that health seeking behaviour is not only a function of individuals (Airhihenbuwa & Oberegion, 2000; de Zoysa et al. 1998) but is also influenced by the ways in which society is organised, including through public health policies and organisational structures (Bhuyan, 2004).

Nepal is a multi-cultural society where people have different socio-cultural backgrounds (in terms of dwelling place, education, wealth, caste, religion and occupation), and health service facilities are not equally accessible to all. People may have varieties of perceptions related to health seeking behaviour. Health services facilities are mainly located in urban areas which adversely affect health seeking behaviour by rural people. Furthermore, the topography and unstable political situation also influence health service utilisation in Nepal.

Dahlgren and Whitehead (1991), discussing the social model of health service utilisation, proposed that health promotion has become an essential part of improving individual health seeking behaviour. Health promotion is the process of enabling people to increase control over the determinants of health and thereby improve their health. However, in Nepal, many factors are beyond the control of individuals (for example, transportation, roads and distance to a health facility) and are therefore not amenable to health promotion policies. This study looks at multiple factors and their impact on health seeking behaviour. Theory assists with the development of a health promotion programme, by helping to answer key questions such as 'what', 'why' and 'how' (DiClemente et al. 2002) in relation to factors affecting maternal health service utilisation in rural Nepal.

Green (2000) commented that all forms of health intervention programmes are not equally able to address people's health needs. Evidence from many countries in Europe (Swann et al. 2009) and the US (National Cancer Institute, 2005) shows that health promotion programmes are most likely to be successful when the determinants of a health problem or issue are well understood and the needs and motivations of the target population are addressed and when the context in which the

programme is being implemented has been taken into account. For example, in their efforts to address the lack of public transportation and distance to health facilities, the Government of Nepal provides NRs 1,000-1,500 (equivalent to £8.00-£12.00 at the time of writing) as an incentive to pregnant women to cover the cost of transportation to hospital for delivery of babies (with the aim of increasing the use of SBAs and thus improving maternal morbidity and mortality) (DoHS & WHO, 2010).

3.2 PUBLIC HEALTH AND HEALTH PROMOTION

The World Health Organization [WHO] (1948) defined health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” (WHO, 1948; UN, 1995). The WHO (1986) stated that public health promotion is characterised by an explicit concern for health and equity and a positive health impact. However, there are several challenges in Nepal to promoting public health due to lack of resources, an unstable political situation and lack of commitment to policy implementation. The WHO (1988) stated that developing appropriate health policies may encourage health seeking behaviour and increase health service utilisation.

The WHO (1988) further stated that different factors play important roles in improving people’s health such as individual, family and community factors, as well as government actions. The WHO emphasised that not only different factors but also different sectors, such as agriculture, trade, education, industry, infrastructure development and communications, as well as the health sector itself, play an important part in improving people’s health (WHO, 1988).

In 1979 the WHO adopted ‘health for all by the year 2000’ as a global strategy to improve people’s health. It emphasised primary health care as the key to reaching this goal (WHO, 1981). The International Conference on Population and Development (ICPD) plan of action adopted health as a human right and acknowledged the relationship between population development and individual wellbeing (UN, 1995). It also emphasised the need to secure sexual and reproductive health, reproductive rights and the rights of adolescents to information,

communication and services (UN, 1995). As mentioned in Chapter Two, the United Nations set eight MDGs to improve social well being by 2015. These included targets for combating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women (UN, 2008).

A specific goal focuses on improving maternal health by reducing the MMR by three quarters. This could be achieved through use of SBAs and provision of universal access to reproductive health services (UN, 2008). Nepal is one of the member countries of the United Nations and has committed to improving maternal health through improvements in people's socio-economic status, information and communications and access to primary health services for all rural people as declared in MDG5.

Merzel and D'Aflitti (2003) wrote that governments, through public health policy, have a special responsibility to ensure basic conditions for people to make healthier and easier choices to lead a healthy life. Mavalankar and Rosenfield (2005) suggested that social units and agencies such as family, community groups, national and international institutions also have an important role to play in improving maternal health. Merzel and D'Aflitti (2003) suggested that public health programmes can improve the well-being and self-sufficiency of individuals, families, organisations and communities and that, achieving effective health status requires behaviour change at different levels including individual, organisational and national policy making.

Maternal health service utilisation in Nepal is affected by multiple factors including the socio-cultural and individual characteristics of women. Maslow (1970) propounded the model of a hierarchy of needs and focussed at the individual level. In the "hierarchy of needs" model, five levels are identified as needing to be met to fulfil people's needs. They are: (1) biological and physiological needs; (2) safety needs; (3) belongingness and love needs; (4) esteem needs; and (5) self-actualisation needs. Maslow (1970) stated that one must achieve satisfaction of the lower levels of basic needs (i.e. air, food, drink, shelter, warmth, sex, sleep, rest) before progressing to meet higher level needs (i.e. realising personal potential, self-fulfilment, seeking personal growth and peak experiences and achieving one's full potential). According

to this model, health is seen as a resource for everyday life, not the objective of living (Maslow, 1970). Health is a positive concept emphasising social and personal resources, as well as physical capacities. Therefore, providing health services to all is not just the responsibility of the government and a response to individual needs, but is interrelated with other systems (such as community, family, organisations) also concerned about healthy life-styles and the well-being of people in general (WHO, 1986). Improving women's socio-economic and individual status and change in community perceptions could increase maternal health service utilisation.

3.3 THEORIES AND MODELS IN HEALTH SERVICE UTILISATION

According to Nutbeam (1998) theories and models are changing phenomena that can be applied to all issues in all circumstances. In health seeking behaviour, some of the theories and models that have been applied have been refined and developed based on past experience (Nutbeam, 1998). The range and focus of theories and models have also been expanded over the years from a focus on changing individual behaviour, to recognition of the need to influence and change a broad range of social, cultural, economic and environmental factors that influence health, alongside individual behavioural choices and service utilisation (Nutbeam, 1998).

Theory can help in understanding health related behaviour and situations in a systematic way. For example, Kerlinger's definition of a theory advanced in 1979 (p. 64) is still useful and relevant to health seeking behaviour. He stated that a theory is "a set of interrelated constructs (variables), definitions and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining natural phenomena". By nature "theories are abstract and don't have a specified content or topic area" (National Cancer Institute, 2005, p. 4).

Theories can be used to construct and develop principles and they become useful when applied to practical topics, goals and problems (National Cancer Institute, 2005; Davies & Macdowall, 2006). In this Ph.D. study women's perceptions and experiences regarding utilisation of skilled delivery care, including access and choice of maternity services, are explored. In this study, several health service

utilisation theories (such as culture, gender and community development theories) and models (such as socio-ecological and choice making model in health service utilisation) are presented to describe ‘how’ and ‘why’ different factors are interrelated in SBA use.

All of the theories and models described below could be useful in understanding factors affecting SBA use. They were helpful in developing this study and in analysing the data from the empirical research, not least the ones relating to culture and gender. However, as stated, the SE model of health service utilisation has particular relevance and provides the main theoretical framework to inform wider perspectives on maternal health service utilisation.

3.4 THEORETICAL PERSPECTIVES ON HEALTH SERVICE UTILISATION

3.4.1 SOCIO-ECOLOGICAL MODEL OF HEALTH SERVICE UTILISATION-1988

The conceptual framework provided by the SE model of health service utilisation (McLeroy et al. 1988) is most relevant to this study since it addresses both individual behaviour and socio-ecological determinants aimed at improving health seeking behaviour at multiple levels (Rotter, 1966; Brofenbrenner, 1977). The SE model of utilisation of health care services has five components namely: (1) intrapersonal factors; (2) interpersonal processes and primary groups; (3) institutional factors; (4) community factors; and (5) public policy relevant to the service (McLeroy et al. 1988). The SE model focuses attention on both the individual and the social environment as the influencing factors for health service utilisation and behaviour change (McLeroy et al. 1988). In the SE model interpersonal behaviour (Figure 4.3.1), community perceptions and public health policy are all important factors influencing change in people’s behaviour. This model further assumes that appropriate changes in the social environment may affect changes in individuals’ behaviours (McLeroy et al. 1988). For instance, women’s attitudes to service utilisation, such as not needing to use skilled delivery care if their condition is ‘normal’ and the caste system of Nepal, influence health seeking behaviour (Pradhan et al. 2010).

The SE model is widely used in health behaviour research (Elder et al. 2007) because it covers individual and community factors affecting health service utilisation. The SE model emphasises the importance of addressing public health problems at multiple levels and it stresses the interaction and integration of factors within and across levels (Gregory, 2002). The SE model for health service utilisation focuses attention on both individual and social environmental factors as targets for addressing health problems.

McLeroy et al. (1988) stated that the SE model incorporates the importance of interventions directed at changing interpersonal, organisational and community behaviour and public policy, including discovering factors which support and maintain unhealthy behaviour. The SE model assumes that appropriate changes in the community perceptions will produce changes in an individual and that support of individuals in the population is essential for effecting beneficial environmental changes (McLeroy et al. 1988; Elder et al. 2007).

Figure: 3.4.1 The Social-Ecological model for health services utilisation



Source: McElroy et al. (1988).

McElroy and colleagues (1988) stated that health promotion programmes are developed based on people's beliefs and understandings in the community. All five levels of determinants of individual behaviour change play an important role in health service utilisation. The factors operating at different levels (see Figure 3.4.1) are now further discussed.

- (1) **Intrapersonal factors**-McElroy and colleagues (1988) found that individual characteristics, such as age, educational level, knowledge and awareness and/or intention to comply with certain behavioural norms influence health service utilisation. Changing individual perceptions about health seeking behaviour can help increase health service use. For instance, in recent years improvement in communication and information about reproductive health and maternal health service utilisation in Nepal through media and community awareness have led to an increase in a positive perceptions of healthy life and health seeking behaviour (Karki & Agrawal, 2008).
- (2) **Interpersonal relationships**- the relationships with family, friends, neighbours, co-workers and other social connections are important influences on the health seeking behaviour of individuals (McElroy et al. 1988). An individual can belong to one or more social groups. Through these different social networks (e.g. family, friends, neighbours) people acquire norms and such groups can have a significant effect on changing people's health related behaviour. In rural Nepal peer group and community norms influence pregnant women's expectations and behaviour, for example, neighbourhood, community pressure groups and mothers' groups have a significant role in effecting change in health seeking behaviour (Morrison et al. 2005).
- (3) **Organisational factors**- within the ecological framework, organizational characteristics are influential factors in behavioural change (Elder et al. 2007; McElroy et al. 1988). Different organisations, e. g. school, university, work place, religious institutions (church or temple), may have positive or negative effects on the health of their members since they are important sources and transmitters of social and cultural norms. The organisations can provide the opportunity to build social support for a desirable behaviour change. This model emphasises the organisational

changes needed to support long-term behavioural changes among individuals. For example, in the rural context of Nepal, health posts provide primary health care but lack the resources and qualified health service providers to provide maternity care thus affecting health service utilisation (DoHS, 2011).

- (4) Community factors-community can refer to the face-to-face primary groups to which an individual belongs. Different groups of people (e.g. groups based on caste, ethnicity or religion, youth or women groups) in the same community may have different attitudes and perceptions towards health seeking behaviour. Community organisations, such as family, church, informal social networks and neighbourhoods, may be important bridges to provide social identity and resources (McElroy et al. 1988; Elders et al. 2007). Community can also be concerned with the relationships among organisations within a political or geographic area for example, village committees (McElroy et al. 1988). Lack of resources (e. g. financial, human and physical infrastructure) usually negatively influences the use of health services. Co-ordination and coalition among community groups, such as village committees, different political groups and mothers' groups are vital in planning health promotion programmes (Elders et al. 2007; McElroy et al. 1988). These groups play a crucial role in defining the community health problems as well as in allocating its resources. McElroy and colleagues (1988) stated that unequal access to and distribution of health services also creates health problems and influence people's behaviour in the community. Least access to health services is associated with a low position in the power structure (McElroy et al. 1988). In Nepal, people who are poor, uneducated, unemployed and from lower caste/ethnic groups and some religious groups face more problems in health service utilisation than those in higher socio-economic and power groups (Bennett et al. 2008).
- (5) Public policy- the provision of public health services focuses on the health of the wider population not on the individual or particular groups (McElroy et al. 1988). In Nepal regulatory policies, procedures and laws at national, state or local level help protect the health of communities (DoHS, 2011). These policies have been mainly focused on control and reduction of morbidity and mortality from infectious agents and other causes. Success in disease control has led to the development of public policy in the area of public health programmes and health service utilisation (DoHS,

2011). As a part of the policy development process, increasing the public's awareness of health and policy issues is important (McLeroy et al. 1988). The SE model identifies different factors which affect health seeking behaviour at different levels. However, it fails to address gender and cultural issues in particular. In the Nepalese context gender and cultural norms are one of the important factors affecting maternal health service utilisation and gender and cultural theories will be presented later.

3.4.2 HEALTH BELIEF MODEL-1950/1988

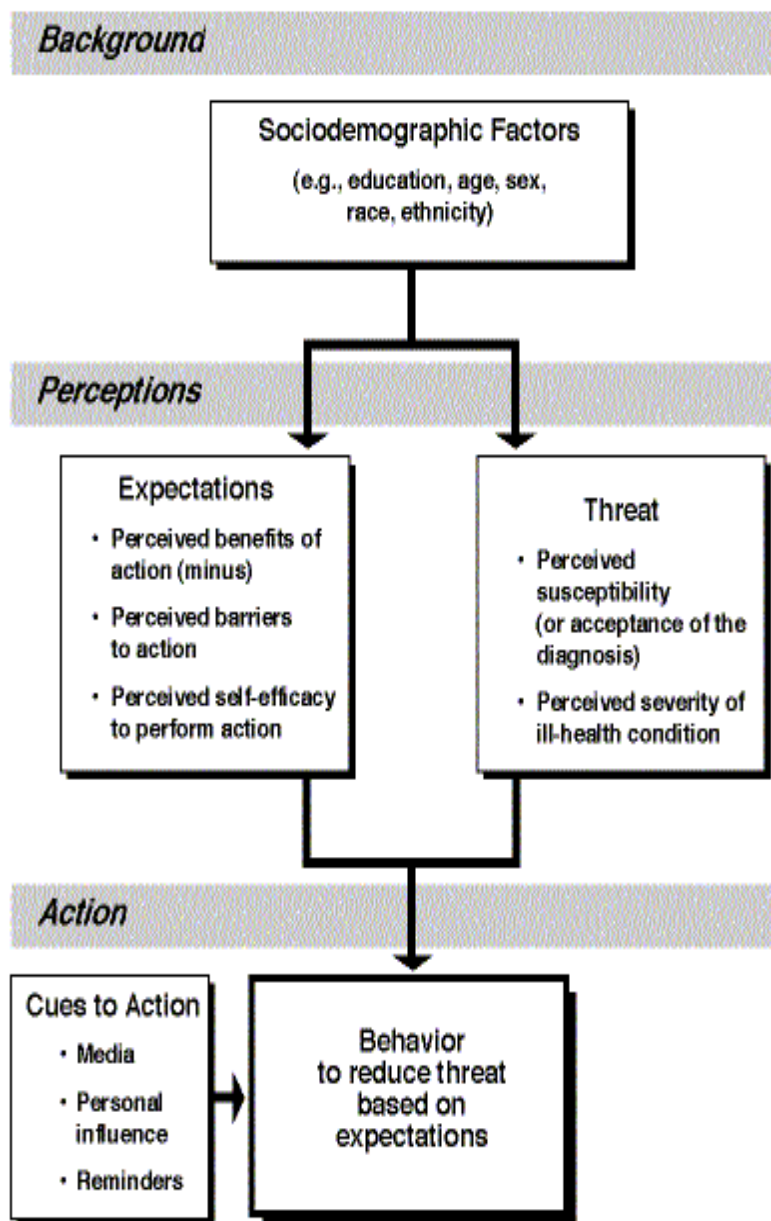
The Health Belief Model is useful to understand people's health seeking behaviour because this psychological model assumes that health service utilisation depends on individual beliefs and perceptions about health. The Health Belief Model (HBM) was developed in the early 1950s by social psychologists in the United States (US) Public Health Service in an attempt to explain the lack of public participation in health screening and prevention programmes (Rosenstock et al. 1994). It is a psychological model that attempts to explain and predict health seeking behaviours by focusing on the attitudes and beliefs of individuals in health service utilization (Rosenstock et al. 1994). The HBM was adapted by Rosenstock and colleagues in 1988 to explore a variety of long-and short-term health behaviours and policy intervention in different areas of public health since it was introduced (Rosenstock et al. 1994).

The HBM is one of the longest established theoretical models to explain health behaviour by understanding people's individual beliefs about health (Turner et al. 2004). Becker and Rosenstock (1984) reported that although HBM was originally articulated to explain why individuals participate in health screening and immunisation programmes in the US, it has been developed for application to other types of health behaviour, including eating habits, diet, exercise, healthy life style, smoking and health promotion programmes, across the world.

The HBM is a conceptual framework used to understand health behaviour and possible reasons for non-compliance with recommended health actions (Rosenstock et al. 1988; Becker & Rosenstock, 1984). This model attempts to explain health

behaviour in terms of individual decision-making and proposes that the likelihood of a person adopting a given health related behaviour is a function of that individual's perception of a threat to their personal health and their belief that the recommended behaviour will reduce this threat (Rosenstock et al. 1988; Becker, 1974; Janz & Becker, 1984). Use of HBM in this study helps to understand women's psychological perceptions of decision making in health service utilisation while the SE model attempts to look at the wider socio-cultural and economic environment that affects health service utilisation. Rosenstock and colleagues (1994) identified the following as the key variables of the HBM (Figure 3.4.2).

Figure: 3.4.2 Health Belief Model



Source: Rosenstock et al. (1994, p.5-24)

- (1) **Perceived threat:** this consists of two parts: perceived susceptibility and perceived severity of a health condition.

Perceived susceptibility: one's subjective perception of the risk of contracting a health condition. For example, women's perception of pregnancy and whether they need to use skilled delivery care or not. Individual feelings may vary in service use

e. g. some women may feel that delivery of a baby is a natural process not needing professional intervention while others will favour assistance from health professionals.

Perceived severity: feelings concerning the seriousness of contracting an illness or of leaving it untreated (including evaluations of both medical and clinical consequences and possible social consequences) (Rosenstock et al. 1994). Women may feel that the place of delivery of the baby does not matter, whether in hospital or at home if their condition is ‘normal’. The outcome of the treatment also impacts on service use.

- (2) **Perceived benefits:** the believed effectiveness of strategies designed to reduce the threat of illness (Rosenstock et al. 1994). There may be different problems associated with reaching a health facility including costs and time. Thus women may decide to deliver at home even if they understand the benefits of SBA delivery. Women may not be interested in using health services unless they feel delivery in hospital would have a positive effect.
- (3) **Perceived barriers:** the potential negative consequences that may result from taking particular health actions, including physical, psychological and financial matters (Rosenstock et al. 1994). The poor financial situation of many families, lack of appropriate health services, distance from the health facility, distribution of health services and access to SBAs all significantly affect service use (Borghi et al. 2006; Simkhada et al. 2012). Women may also be concerned about the potential negative impact of hospital delivery e. g. fear of pain and time taken to reach hospital and cost related issues. Other factors like family support and gender of service provider members also impact negatively on service use.
- (4) **Cues to action:** events, either bodily (e. g. physical symptoms of a health condition) or environmental (e.g. public health campaigns about antenatal care and delivery with the help of SBAs) can motivate people to take action (Rosenstock et al. 1994). Women’s psychological state and community factors influence service use, for example women’s physical condition during pregnancy and previous obstetric history. Moreover, information and awareness, community support and appreciation

of benefits of service use also influence health seeking behaviour for antenatal care and at birth.

- (5) **Other variables:** diverse demographic, socio-psychological and structural variables affect an individual's perceptions and thus indirectly influence health related behaviour (Rosenstock et al. 1994). Infrastructure of health facilities, transportation and literacy status indirectly influence health service utilisation.
- (6) **Self-efficacy:** the belief in being able to successfully execute the behaviour required to produce the desired outcomes (Bandura, 1977). Women may believe that SBA care is not necessary or may not be able to judge the benefits of health service use or they cannot take a decision for a variety of other reasons.

The foregoing discussion on the HBM shows that individual perceptions influence service use during pregnancy and childbirth. Furthermore, this model helps to understand the psychological factors affecting health service utilisation related to women's individual characteristics.

3.4.3 ANDERSEN'S AND NEWMAN'S FRAMEWORK OF HEALTH SERVICE UTILISATION-1973/95

Andersen's and Newman's behavioural framework of health service utilisation was created to test empirically hypotheses about inequity of access to health services in the US (Andersen & Newman, 1973). This model addresses the concern that some sectors of society, in particular people from ethnic minority groups, those living in poverty, people who live in inner cities and people who live in rural areas, receive less health care provision than other groups of the population (Andersen & Newman, 1973). Andersen's and Newman's (1973) model views access to services as a result of decisions made by an individual, which are constrained by their position (age, gender, education, employment, level of awareness and position at home) in society and the availability of health care services. Initially, this model was focused on the family as the unit of analysis to develop policies related to why families use health services and to measure equitable access to health care in developing policies to

promote access (Andersen & Newman, 1973). Andersen (1995) later updated the model focused on the individual as the unit of analysis.

Theories and models used in this study originated from developed countries such as Europe and the US, so the socio-economic environment and health policies could be different between developed and developing countries. However, the concepts used in the theories and models are useful to describe health seeking behaviour in different settings. Andersen's and Newman's model discussed decision making for health service utilisation as influenced by individual characteristics, access to services and societal factors which are relevant to this study.

According to Andersen and Newman (1973), the model contains three sets of predictive factors: these are *predisposing factors*, *enabling factors* and *need factors*. This model describes a series of factors within these three factors which determine utilisation of health services. Andersen and Newman (1973) and Andersen (1995) stated that individual factors (such as age, education, income, level of awareness, caste/ethnicity, decision making) and community environment (external environment, health care system, culture and tradition) affect health service use. The model posits that certain factors limit utilisation of the health service while other factors enable service use. The following is the description of the series of factors described in Andersen's model for service utilisation (1995).

(1) Predisposing factors- the socio-cultural characteristics of individuals that exist prior to illness, for example, cultural and traditional beliefs and decision making in health service utilisation. According to this model the following factors are included in predisposing factors that affect service use (Anderson, 1995).

Social structure- education, occupation, ethnicity, social networks, social interactions and culture are important factors in health service use (Anderson, 1995). Less educated, unemployed, rural and poor women (including lower caste or ethnic groups of women) are less likely to use skilled delivery care than women with more advantages (Osariemen, 2011).

Health beliefs- peoples' health related attitudes, values and knowledge concerning the health care system (Anderson, 1995). The cultural and traditional beliefs towards pregnancy and childbirth, including women's autonomy in decision making, may impact on service use.

Demographic factors- age, sex and gender roles also influence the use of health services and decisions on health seeking behaviour (Anderson, 1995; Chakraborty et al. 2003).

(2)Enabling factors- the following factors are included in enabling factors for health service utilisation (Anderson, 1995; Osariemen, 2011).

Personal/Family- access to health services, women's income, husband's employment, income and health insurance status, availability of care, travel options, extent and quality of social relationships all influence service utilisation.

Community- community influence e. g. available health personnel and facilities, time taken to reach a health facility, waiting times and health system related factors influence health service use (Anderson, 1995; Morrison, 2005).

Possible additions- this includes genetic factors, physical situation and psychological characteristics of an individual e. g. beliefs and perceptions regarding health services (Anderson, 1995).

(3) Need factors: need is considered to be one of the most immediate causes of health service use (Andersen, 1995; Amin et al. 2010).

Perceived need- how people perceive their own general health situation and need for skilled care use. How they experience symptoms of illness, pain and worries about their health. How they judge their problem and whether they see the need to seek professional help (Andersen, 1995).

Evaluated need- professional judgment (for example, suggestions from doctors and nurses) about people's health status and need for health service utilisation (Andersen, 1995).

3.4.4 CHOICE-MAKING MODEL IN HEALTH SERVICE UTILISATION-1981

Young (1981) proposed a choice-making model which is based on his ethnographic studies of health services utilisation in two Mexican villages. According to Young (1981) four components are essential in health service utilisation and an individual's health service choice.

- (1) **Perceptions of gravity**- this includes both the individual's perception and their social network's consideration of illness severity. Gravity is based on the assumption that the culture classifies illnesses by level of severity (Young, 1981). In most Nepali cultures, pregnancy and childbirth are perceived as a natural phenomenon and not as an illness. Some women, families and communities may feel no need for any professional assistance for the delivery of a baby.
- (2) **The knowledge of a home treatment**- Young (1981) stated that if a person knows a home remedy that is efficacious, they will be likely to utilise that treatment before utilising a professional health care system. That kind of knowledge is based on lay person referral (i.e. non-professional persons, such as family members, relatives or friends or traditional attendants). So, for instance in Nepal, women may prefer home delivery with help of TBAs or female family members for various reasons e. g. all available TBAs are female and a comfortable environment and good care at home relative to the burdens associated with going to the distant hospital (for example, time and money spent on hospital delivery).
- (3) **Faith in the remedy**- the individual's belief in the efficacy of treatment for the present illness. An individual will not utilise the services if they do not believe the treatment is effective (Young, 1981). Women, family and community members may have a strong faith in the traditional health system (e. g. delivery

of the baby with the help of TBAs or older women). Culturally some women would prefer to use traditional methods for childbirth rather than going to hospital for professional care.

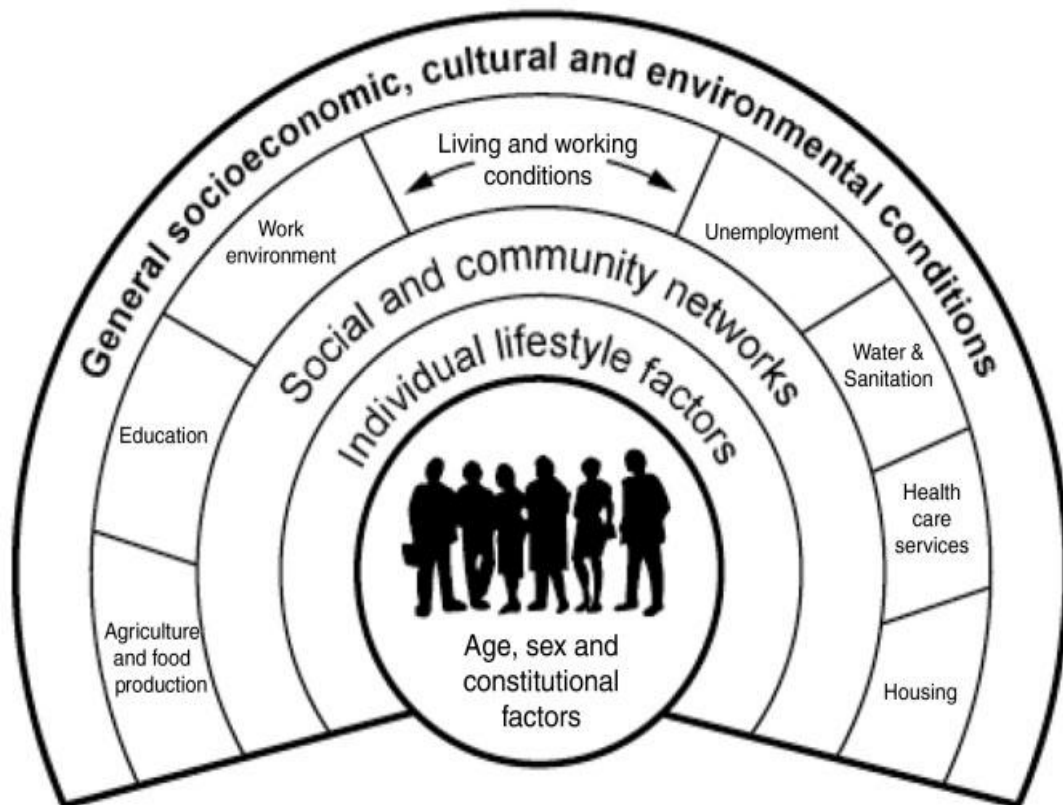
(4) The accessibility of treatment- the individuals' evaluation of the cost of health services and the availability of those services (Young, 1981). Accessibility and availability of services e. g. transport availability; road conditions and distance to a health facility are also important factors influencing service use. Costs of services, both direct and indirect, timely access to services, long waiting times and the health facility environment may be other factors influencing choice of service use. Illness beliefs, accessibility of modern health care services, quality of services and knowledge of health care services all affect service use.

3.4.5 DAHLGREN AND WHITEHEAD'S SOCIAL MODEL OF HEALTH-1991

In 1991, Dahlgren and Whitehead presented a 'rainbow model' of health service utilisation. They concluded that several factors such as age, sex, life style, social and community networks and the general socio-economic situation influence health service utilisation. Dahlgren and Whitehead (1991) discuss the layers of factors influencing health service utilisation. They stated that individual behaviours, social, cultural, environmental and economic conditions are important factors which influence people in the use of health services. Individual behaviour and ways of living influence the use (or not) of health services. First, individuals are affected by friendship patterns and socio cultural norms of their family and community. Secondly, community and society have both positive and negative influences on health service utilisation. Society and community can provide mutual support for members of the community in adverse situation. However, they can also provide no support or have a negative influence on health seeking behaviour. The third layer includes structural factors: living conditions, working conditions, employment, access to services and provision of essential facilities have a significant influence on service use. Some of the factors in Dahlgren and Whitehead's Social Model overlap with the SE model of health service utilisation. However, Dahlgren and Whitehead's Social Model of Health Service Utilisation emphasises improvements in general

socio-economic, cultural and environmental conditions which can be useful in decisions for service use.

Figure: 3.4.5 Social Model of Health-factors influencing health service utilisation



Source: Dahlgren & Whitehead, 1991

Health service utilisation is influenced by multiple factors so it is not easy to identify which determinants are most influential in decision making (Rosenstock et al. 1994). However, according to the social model of health (Dahlgren & Whitehead, 1991) individual and community factors, such as socio-economic status, availability of the services, perceptions, awareness, employment, education and knowledge, beliefs, age, sex, gender and socio-cultural factors (including decision making processes), have a causal relationship to health seeking behaviour.

3.4.6 EQUITY OF ACCESS MODEL IN HEALTH SERVICE UTILISATION- 1990/2001

Whitehead (1990) stated that the equity of access model is aimed at improving the actual differences in health status between countries and between groups within countries and improving the level of health of disadvantaged nations and groups. Access to appropriate health care services plays an important role in use of health services (Goddard & Smith, 2001). Gulliford and colleagues (2002) suggested that health care systems in high-income countries focus on access to the health services of all people by removing the financial barriers and creating easy access to the services as a central policy of the government. However, this policy has not been working systematically, not only in developing countries but also in developed countries.

Mooney and colleagues (1992) stated that the concept of equity is inherently normative - that is, value-based, while equality is not necessarily so (Whitehead, 1992). The concept of health equity (Braveman & Gruskin, 2003) focuses attention on the distribution of resources and other processes that lead to a systematic inequality in health (or in its social determinants) between more and less advantaged social groups, in other words, a health inequality that is unjust or unfair.

Aday and Andersen (1974) stated that access has been taken as a synonym for the availability of resources. Several studies have shown that rural and urban people do not have equal access to health services (Aday & Andersen, 1974; Goddard & Smith, 2001; Say & Raine, 2007). People living in the rural areas and deprived groups of people are lacking in access to professional medical persons, physical health care facilities and ability to afford the financial costs of illness (Gulliford et al. 2002; Goddard & Smith, 2001; Andersen, 1995).

Many scholars (Mooney et al. 1992; Oliver & Mossialos, 2003; Goddard & Smith, 2001) argue that equity of access is a supply-side consideration, in the sense that equal services are made available to patients in equal need, but some argue that utilisation is a function of both supply and demand (Mooney, 1983). Uses of health care services arise from the interaction between supplies of the services relative to

people's needs. The receipt of health care is also affected by accessibility and availability of services; the nature and quality of services; costs of services and culturally appropriate services, as well as by choice of and preference for the services (Mooney, 1983; Goddard & Smith, 2001). Unequal distribution of services leading to lack of access for people living in rural areas, as well as high cost and poor quality of services, affect health service utilisation.

Gulliford and colleagues (2002) stated that access is a complex concept in terms of health care provision. They emphasised that at least four aspects are important in health service utilisation: (1) availability of health care services; (2) adequate supply of health care services; (3) opportunity to obtain the health care services that exist; and (4) access to services. Moreover, individual, financial, organisational, social, and cultural factors play a significant role in health service utilisation (Guillford et al. 2002).

3.4.7 COMMUNITY DEVELOPMENT THEORIES IN HEALTH SERVICE UTILISATION-1950/2006

It is difficult to get a common definition of community development. For Sanders (1958) community development is both a process and a product for addressing community needs. Jones and Silva (1991) identified that community development includes problem solving; community building; and system interaction for advancement, betterment, capacity building, empowerment and enhancement of people's life in a community. Tan (2009) proposed that community development involves working with people as they attempt to define their own goals, mobilize local resources and develop action plans for meeting the needs they have identified collectively (individuals, groups and organisations) in a community to solve social problems. Community development is not only betterment of people's living conditions but is also an important means to consensus building concerned with the development and enrichment of social institutions (Sanders, 1958).

Ife and Fiske (2006) mentioned that community development has roots in several theoretical frameworks and models to promote people's health, such as health beliefs model, SE model and choice-making model in service use. Ife and Fiske (2006)

further discussed theories about social systems and social networks (including social support and the rights and responsibilities of individuals collectively) which are also relevant. Due to changes in socio-economic structures and in people's life style, several social models of health have emerged aimed at improving people's health over the past few years (Ife & Fiske, 2006). Bhuyan (2004) mentioned that determinants of community development and improvements in health service utilisation need inter-sectoral collaboration. This includes developments of policies to reduce social inequities and to empower families, individuals and communities, as well as legislation to enable access to health care for all.

3.4.8 CULTURAL THEORIES IN PREGNANCY AND CHILDBIRTH PRACTICES

Culture plays a major role in the way a woman perceives and prepares for her birthing experience. Giving birth is a universal event for women: however, each woman's experience is unique in the culture where she gives birth (Greene, 2007). Keesing (1974) described cultures as systems of socially transmitted behaviour patterns that people follow over the generations. These serve to relate human communities to their ecological settings. These ways-of-life of communities include technologies and modes of economic organisation, settlement patterns, modes of social grouping and political organisation, religious beliefs and practices. Later, Greene (2007, p. 33) defined culture as a ‘‘particular group of peoples’ beliefs, norms, rules of behaviour and life style practices that are learned and shared and guide decisions and actions in a patterned manner’’.

Douglas (1982) stated that cultural theory describes forms of social solidarity which shape world views and influence judgements about fairness, trust and accountability. Cultural theory states that people will react to risks in accordance with the way society itself is perceived and the legitimacy which people ascribe to institutions and rules of procedure (Douglas, 1982; Douglas & Wildavsky, 1982). For example, childbirth in many South Asian countries is perceived as a natural phenomenon that does not need medical care unless there is a problem (Team et al. 2009; Pradhan et al. 2010; Naraindas, 2009).

Sargent and Bascope (1996) stated that each culture has its own values, beliefs and practices related to pregnancy or women during childbirth. Davis-Floyd and Sargent (1997) described childbirth as a universal biological event, which occur in all cultures and therefore may seem independent of any specific cultural influences. Davis-Floyd and Sargent (1997, p. 2) highlighted that “culturally based beliefs and values, however, influence women's experiences of childbirth and determine the practices a society believes appropriate for providing care for pregnant and postpartum women. Therefore views and beliefs about the events surrounding pregnancy, labour, delivery and infant care vary by culture across the countries of the world”.

Team and colleagues (2009) advocate understanding cultural beliefs and traditions which help to further explain the wider social impact on the use of health services. Recognition of such beliefs and traditions also helps in providing culturally appropriate services, thus reducing the maternal morbidity and mortality through increasing uptake of services. Team et al. (2009) further mentioned that there is enormous diversity of all cultures and communities in all populations. In all societies, there are sub-cultures and important differences between different groups. These include differences between rural and urban dwellers and among different classes and genders. Even within these groupings, individuals can vary to the extent that they believe in or follow particular cultural practices (Team et al. 2009).

The book *Childbirth and Authoritative Knowledge* highlights the role of cultural influences on women's childbirth experiences around the world. Davis-Floyd and Sargent (1997, p. 2) stated that “birth is almost never simply a biological act; on the contrary..... birth is everywhere socially marked and shaped”. They further added that “cultural views about women, women's bodies and reproduction lead to a wide variation in the kinds of care pregnant women receive around the world” (Davis-Floyd & Sargent, 1997, p. 4).

The Polynesian culture, for example, “values women's bodies and confers high status on pregnant women. Pregnant women are treated with great consideration and benefit from the attention of respected midwives” (Davis-Floyd & Sargent, 1997, p. 4). In contrast, in many developing countries (such as Bangladesh, rural north India,

Pakistan and Nepal) menstruation and childbirth are regarded as ‘unclean’ and ritually polluting (Pradhan et al. 2010; Naraindas, 2009) and “women are reluctant to assist other women in childbirth, since, if they do, they will also be tainted by the pollution of birth” (Davis Floyd & Sargent, 1997, p. 4).

In many South Asian cultures pregnancy is considered as a normal phenomenon that does not require any intervention by health care professionals and women only seek medical advice in the event of a problem (Pradhan et al. 2010; Naraindas, 2009; Team et al. 2009). Health-related behaviour is mainly dominated by traditional Ayurvedic principles in such countries (Team et al. 2009). In contrast, in many developed countries, for example Japan, US and many European countries, good health is associated with purity and the notion of purity equally applies to the various aspects of health care, such as hygiene, moral values and behaviour (Team et al. 2009). In Malaysian culture, social interaction is concerned with the maintenance of harmonious relationships between individuals. This type of communication is desired to avoid the discomfort associated with shame. In the traditional culture of Papua New Guinea, healing through ancestors and spirits, to some extent has been replaced by church healing, prayers and groups gathering to pray for health. However, in some communities people may still believe in the power of spirits, sorcery and black magic as causes of illness and death (Team et al. 2009).

Advancements in technology over time may also influence childbirth practices. For example, Fiedler (1997, p. 160) claims that “the technology also affects the dominant views on childbirth. A culture that highly values technology, such as Japan, most of the European countries and US, tend to view the process of childbirth as requiring a high level of medical intervention”. As a culture experiences growth and change, views towards childbirth may change as well. In Japan, for example, the majority of births before the 1960s occurred at home, attended by a traditional midwife (Fiedler, 1997). In recent years, most Japanese births have taken place in hospitals. Although traditional midwives may still be present, they defer to the authority of the obstetrician (Fiedler, 1997).

3.4.9 GENDER INEQUALITY IN HEALTH SERVICE UTILISATION

Gender and health are related through multiple pathways (Firkee & Pasha, 2004). Gender roles and norms and the gender based division of labour interrelate with education, employment status, income, culture, household position, age and physical and social environments (Furuta & Salway, 2006; Pradhan et al. 2010). Gender related issues, such as young women's lack of opportunity to discuss pregnancy related matters within the family, low educational status and shyness or shame, lack of pregnancy related knowledge and women's lack of autonomy over resources are important factors in health seeking behaviour (Kululanga et al. 2012; Pradhan et al. 2010; Furuta & Salway, 2006). It is widely accepted that increased gender equality is a prerequisite for achieving improvements in health service utilisation (Firkee & Pasha, 2004). In most South Asian countries women have a lower position than men in society and they are socially, culturally and economically dependent on men. Men are largely influential in decisions regarding health seeking behaviour (Firkee & Pasha, 2004). In Nepal, past research in maternal health service utilisation has suggested that gender roles play a significant part in decisions regarding health seeking behaviour (Furuta & Salway, 2006).

Nussbaum (2000) has suggested that gender inequality is the most important barrier to development of health promotion programmes. Nussbaum (2000) stated that women's full potentials are undermined due to the unequal power between men and women and its effect on social, political and economic opportunities in a household, in a community and at national and global levels. A study on maternal morbidity and mortality (Pradhan et al. 2010) in Nepal has shown that there is a direct link between gender roles and women's status in the family and community in decisions to use health services. Pokhrel and colleagues (2005) suggest strongly that gender bias, for example women's low status in the family and community, is responsible for determining health seeking behaviour.

Gender differences, such as women's lack of freedom of movement and socialisation, low educational status and economic dependency before and after marriage, also force women to depend on their family or their husbands when seeking decisions on their own health care (Pandey & Rimal, 2009). Moreover, in

many cultures being pregnant is considered as a shameful stage rather than as a joy of giving a new life which also influences seeking health care. In many cultures not involving male members and relatives (who are often the primary decision makers in family) in pregnancy and childbirth related matters, delays decisions and influence health seeking behaviour (Mumtaz & Salway, 2007).

3.5 SUMMARY

This chapter has presented some social and psychological theories and models that are relevant to this study. The SE model of health service utilisation is identified as the main theory because this model is able to address both individual and wider socio-ecological aspects influencing service use. Health care utilisation behaviour is a complex phenomenon with various interrelated components. Theories and models have been advanced from distinct disciplines; they consider the relative contributions of individual behaviour and social, environmental and economic determinants of health. Theories and models of health promotion are directed towards improving and controlling the determinants of community and individual health. They are helpful in explaining the relationship between different variables.

Some models have overlapping elements and no single theory or model is exclusively important in helping to explain health behaviour. The varied social and psychological theories and models can be applied to different socio-economic groups of people or cultures and geographical locations to promote public health. However, a health problem or issue should be well defined and include identification of the needs of the target population before utilising a theory or model to enhance health service utilisation.

Some widely used psychological and social models of health as well as development theories and models of health promotion with relevance to this research topic have been presented. The SE model of health service utilisation, the Health-Belief model, Andersen and Newman's framework for health care utilisation, the Choice-Making model for service use, Dahlgren and Whitehead's Social Model of health, Equity of Access model, Community Development theories in health service utilisation and Cultural and Gender theories in relation to pregnancy and childbirth practices have

been summarised. Special attention has been paid to the SE model assessed as being better fitting i.e. most relevant and useful for this study.

Health promotion is an integral aspect of improving the public health services. Behavioural and social science theories contribute to understanding the diverse issues (such as individual, familial, social and cultural factors) that influence an individual and community in health service utilisation. Thus, theory and models are useful to explain the relationships between variables. They help to inform policy, planning and implementation of effective health promotion programmes and thus improve health seeking behaviour. The next chapter discusses the research methodology used in the study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 INTRODUCTION

This chapter outlines the research design employed to address the research question which was informed by the review of the literature and underpinned by selected theories. The decision for the research strategy and the design are explained. A case-study design was adopted to explore women's perceptions and experiences of SBA usage. Research design provides conceptual frameworks and action plans for the study, for example, what data should be collected and conclusions of the study to be drawn from the initial questions (Yin, 1994).

Baxter and Jack (2008) stated that case-study is one of the most widely used methodologies in qualitative research in the social sciences to explore complex phenomena within the contexts. This study explored the factors affecting the uptake of SBA services and how they influenced SBA use during pregnancy and childbirth. To explore the issues a mixed-methods strategy was adopted within a qualitative framework. This comprised a survey of SBAs and semi-structured interviews with mothers, mothers-in-law, a father-in-law and husbands. The ethical issues, research methods, study site, study population, research instruments and methods of both qualitative and quantitative data collection and analysis are explained. The chapter also discusses the trustworthiness of the study as well as its constraints, potential biases and limitations.

4.2 AIM OF THE STUDY AND THE RESEARCH QUESTION

The main aim of the research is to understand women's experiences and preferences and their reasons for use, or not, of SBAs for delivery in a rural area of Nepal. In order to explore perceptions of the use of SBAs a range of respondents were included in the study. Literature on maternal health service utilisation was reviewed extensively and a range of factors affecting SBA use were identified. These included choice; access; culture; gender and other inequalities, and perceptions about SBA use. Women who had recently given birth (both SBA users and non-users), mothers-in-law, a father-in-law and husbands were included in the interview sample. Also, in

order to understand SBAs' views on women's use of skilled delivery care, SBAs (doctors, nurses and midwives) themselves were included in the survey sample. The main research questions were: 'What are the factors influencing the use of SBA in a rural area?' and 'How do different factors affect the uptake of SBA services by women?' Mertens (2010) identified three components of social science research: (1) Axiology - what do I value as knowledge from the data I gathered in the field?; (2) epistemology - what am I researching and how do I know the reality? and (3) ontological assumptions - what is the reality of my research? These three components inform the research design and methodology (Carter & Little, 2007; Johnstone, 2004; Mertens, 2010; Cresswell, 1994).

4.3 RESEARCH DESIGN AND RATIONALE

4.3.1 Case study approach as a research design

A case-study approach was adopted to explore the women's experiences and perceptions regarding use of SBAs during delivery. A qualitative case-study design explores a small area and particular phenomena of interest and thus enables the researcher to understand social phenomena from the participants' own perspective (Yin, 1981; Bryman, 2012). The case-study is useful for exploring the complex nature of social settings and behaviour (Bowling, 2002; Bryman, 2012). It is a powerful tool for the researcher to understand individual, social, political and cultural issues (Brown, 2008) and is appropriate for exploring women's perceptions and experiences in relation to SBA use in rural Nepal. The case study provides much detailed information. However, case studies are lengthy in narrative form and it is not possible to generalise from one case to another.

This study focuses on a particular group of women in a rural community in the western hill district of Nepal. The most common use of the term 'case' associates the case study with a location such as a community or organisation. The emphasis tends to be upon an intensive examination of the setting and population. Some scholars (Merriam, 1998) argue that case studies are associated with qualitative research only, but others argue that such identification is not appropriate (Yin, 1981). It is true that "the nature of the case study design often favours qualitative methods for

detailed examination of a particular case. However, case studies are frequently used for the employment of both qualitative and quantitative research” (Bryman, 2012, p. 66). Case study methodology helps to make sense of and interpret these varied phenomena. Three social science scholars in particular, Stake (1978), Yin (1981), and Merriam (1998), have advocated the case-study as a research methodology. Their ideas are summarised below since they are relevant to justifying the use of this approach for understanding women’s experiences and perceptions on maternal health service utilisation as discussed in this study.

4.3.2 Stake, 1978

This study was designed to understand women’s individual experiences of SBA use including interpretation of situations and the context of individual behaviour. The case study explored views on factors affecting SBA use through description of phenomena in the real life setting of selected women, their relations and some SBAs. Stake (1978, p. 5) stated that case studies are useful in the study of “human affairs because they are down-to-earth and attention-holding ”.

The use of the case-study in qualitative research “makes sense to readers because it resembles our understanding of the naturalistic world through our personal experiences and observations” (Stake, 1978, p. 6), for example, the influence of gender and culture on decision making regarding choice from SBA use during pregnancy and childbirth. Stake commented that case studies will often be the preferred research method because they may be “epistemologically in harmony with the reader’s experience” (Ibid, p. 19). However, Stake also acknowledged a negative bias against the case study design. He observed, “The more episodic, subjective procedures, common to the case study, have been considered weaker than the experimental or co-relational studies for explaining things” (Ibid, p. 20).

4.3.3 Yin, 1981

Yin (1994) stated that it is important to think carefully when designing a case study about different issues such as: what are the research questions? who is the study population? what data should be collected and how? and how should the results be

analysed? These issues were considered before deciding on the study design and throughout the different stages of study, for example, through a wide literature review before development of the research questions; through choice of relevant study populations before data collection began; and through consideration of appropriate data analysis techniques.

Yin (2003) provided a comprehensive and systematic outline for undertaking the design and conduct of a case study including preparing for the data collection, collection of the evidence and analysis of the evidence. Furthermore, Yin suggested that, during the data collection stage, the researcher needs to utilise particular skills: these include the ability to ask a question, active listening, adapting to any unexpected situation that may arise, grasping the issues being addressed and identification of personal bias (Yin, 1981/1994/1999). The researcher was able to employ these skills when conducting semi-structured interviews.

4.3.4 Merriam, 1998

Stake (1978) and Merriam (1998) presented similar views i.e. that the case study is a natural approach to understanding how and why individual perceptions are different in different socio-cultural contexts. Merriam (1998) suggested that a case-study design is a way to gain understanding of the particular situation where the process of inquiry (as much as the outcome of research) is of interest to the investigator. However, she warned that “those with little or no preparation in qualitative research often designate the case study as a sort of catch-all category for research that is not a survey or an experiment and is not statistical in nature” (Merriam, 1998, p.10). She states that the case study provides an opportunity to extend experiences, discover new meanings and explain the reasons for a problem by presenting information from a variety of sources and viewpoints (Merriam, 1998).

Merriam (1998) further states that the “single most defining characteristic of case study research lies in delimiting the object of study: the case” (Ibid, p. 27). The case is a unit, entity, or phenomenon with defined boundaries that the researcher can demarcate or “fence in” (Ibid, p. 27) and therefore, it can also determine what will not be studied. She further suggested that the case may place a limit on the number

of people to be interviewed, a fixed or limited time-frame for observations or the instance of some issue, concern or hypothesis. In this type of study, the researcher is challenged to describe and explain the unit under study (Merriam, 1998). The case-study design provides more detailed information than available from other methods, for example, surveys. However, in case studies multiple methods of data collection, such as survey, interview or documentary review, can be used to produce rich data.

4.4 MIXED-METHODS APPROACH FOR DATA COLLECTION

This study utilised the mixed-methods approach to address research questions and objectives (Johnstone, 2004; Bryman, 2012). In recent years, the mixed- methods research strategy has been increasingly accepted as an approach to investigate social phenomena, for example, health service research (Bryman, 2012; O’Cathain et al. 2007; Sandelowski, 2000). There are still debates about “different methodological paradigms in social sciences research and there are some paradigmatic misconceptions about the relative merits of qualitative and quantitative approaches to investigate social issues” (Johnstone, 2004, p. 260). Creswell (1994, p. 176) concludes that “social science researchers should be more careful to make the most efficient use of both paradigms in understanding social phenomena” according to the research aim and study questions. A positivist/constructivist model is an “epistemological position that advocates the application of the methods of the natural sciences to the study of social reality and beyond. In contrast, interpretive/phenomenological research takes a different position” (Bryman, 2012, p. 27-28). In this study, the research was clearly located according to the interpretive/phenomenological paradigm in which constructivism is central.

Searle (1995) stated that constructivism is built upon the principle of a social construction of reality. Crabtree and Miller (1992) commented that one of the advantages of a qualitative case study is the close collaboration between the researcher and the participant, enabling participants to tell their own stories using face-to-face conversation in their preferred place. Lather (1992) highlighted that the participants are able to describe their views of reality in their own words and this enables the researcher to better understand their social reality. This was the basis for the interviews with mothers and those who cared for them in a particular village.

This study explored women's behaviour and experiences of factors affecting SBA use in their own words: SBA views were also included to obtain a more rounded picture of women's maternity service use.

Using mixed methods of data collection the case-study allows the researcher to explore in different settings simple to complex issues and relationships between communities (Yin, 2003). This was the reasoning behind the decision to survey SBAs in two hospitals serving the rural community. A case-study method facilitates exploration of issues using a variety of data sources (in this case, through interviews with SBA users and a small survey of providers) and different lenses which inform multiple facets of social reality (Baxter & Jack, 2008). The case-study approach is a valuable strategy for health-service research due to its flexibility. Results of case studies can be used to develop health planning, health promotion and evaluation programmes and to inform health-policy interventions (Yin, 2003; Stake, 1995).

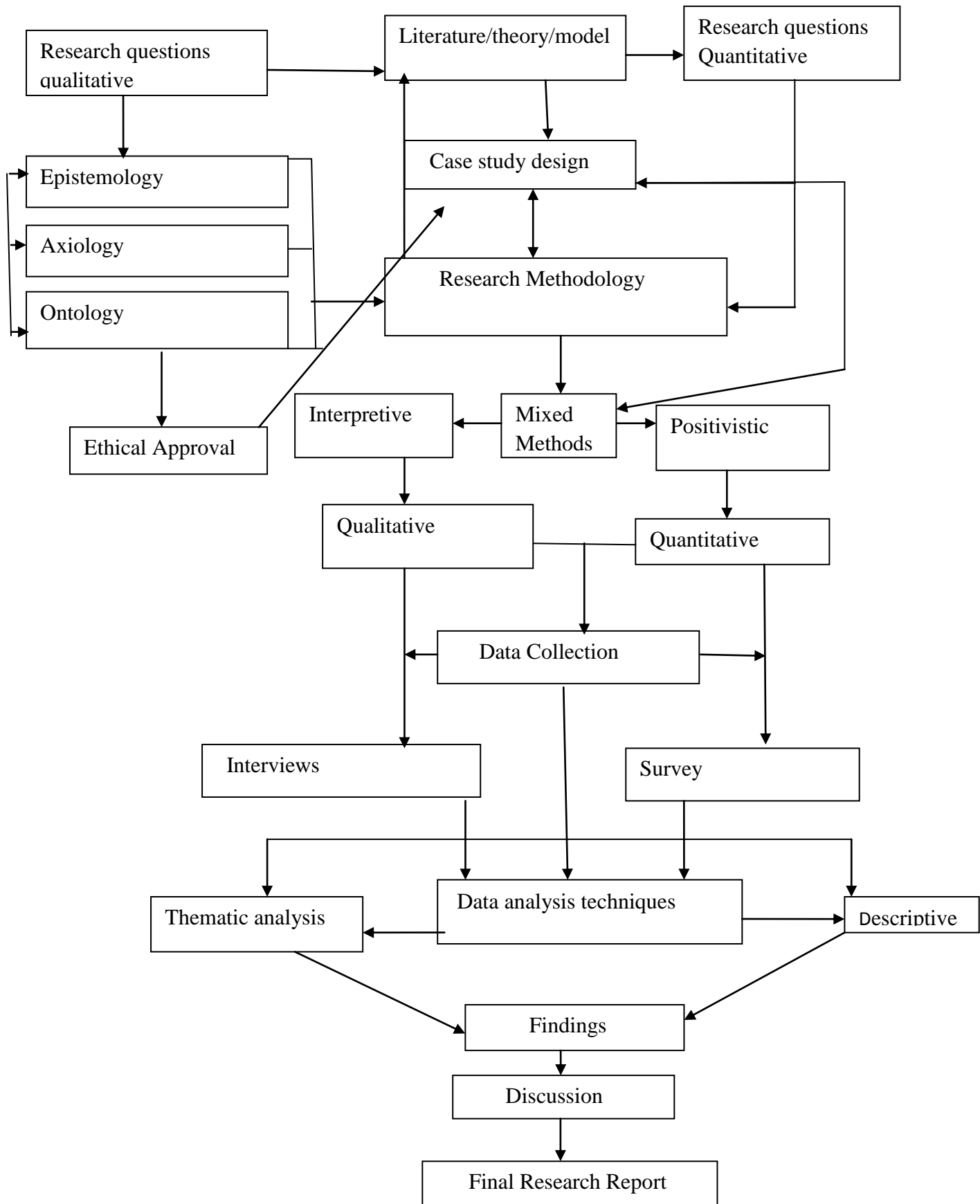
4.5 DATA COLLECTION

Face-to-face interviews were used to collect qualitative data and a survey was conducted to obtain some quantitative data. Morese (1991) stated that mixed-methods enable a more complete understanding of human behaviour and experiences by using more than one method within a study and there has been increased interest in using mixed methods recently in investigating health and social care issues (Johnson et al. 2007; Bryman, 2007; Jeanty & Hibel, 2011). A mixed method of data collection provides an opportunity for a more complete understanding of the factors associated with use of SBAs during delivery. There are many reasons why mixed methods should be used (Johnstone, 2004) such as exploring community perceptions, service providers' views and individual behaviour in making choices in health care utilisation.

Triangulation of data from different sources or methods enhances the reliability of a study's findings (Johnson et al. 2007; Miles & Huberman, 1994; Tashakkori & Teddlie, 1998). In this case, rich data was obtained through qualitative and quantitative methods within a design informed by the qualitative paradigm. Figure 4.5.1, shows an overview of the case-study design and methods relevant to the study

undertaken. Using a case-study design enabled different types of research questions, objectives and a geographical entity to be explored. The case study design was useful not only to identify study participants for qualitative and quantitative data but also for identifying the study site, data collection procedure and analysis techniques (including thematic analysis for qualitative data and descriptive analysis for quantitative data).

Figure: 4.5.1: Case study research design and methods



Source: Carter & Little, 2007

4.5.1 Qualitative methods

The research design was intended to address a gap in the knowledge because, to date, studies on SBA use in Nepal have predominately utilised quantitative approaches (Samkhada et al. 2010). Qualitative and quantitative methods constitute distinctive research approaches (Johnstone, 2004) to investigations in the health service. Both these methods can provide valuable information in public health research (Mertens, 2010). A basic difference is that qualitative methods deal with text data rather than numerical data (Creswell, 2003): and these qualitative data can be analysed in their textual form, rather than converting them to numbers, in order to understand the meaning of human action. A qualitative method was the principal means of data collection in this case-study. Semi-structured interviews, with open-ended questions, were used to explore, in depth, women's reasons and experiences of SBA use-or not. This was therefore an example of exploration of phenomena as they occur in particular circumstance rather than testing predetermined hypotheses (Carter & Little, 2007).

Qualitative research has been increasingly utilised in health-service research as a methodology due largely to its ability to generate rich descriptions of complex social phenomena (Bryman, 2012; Chenail & Maione, 1997; Crabtree & Miller, 1992). Using this method in this study the research was able to explore women's maternity experiences and needs. Golafshani (2003) commented that qualitative research is a naturalistic approach that seeks to understand phenomena in context-specific settings, that is, 'natural' and 'real world' settings. This study was able to explore rural women's experiences and maternity needs on their own words.

Patton (2002) stated that qualitative research does not attempt to manipulate the phenomenon of interest but to open it up in its natural setting with use of the participants' own words. Strauss and Corbin (1990, p. 17) discussed qualitative research, which they broadly defined as, "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification". Instead, it is the kind of research that produces findings derived from real-world settings where the "phenomenon of interest opens out naturally"

(Patton, 2002, p. 39). Qualitative research does not seek causal determination, prediction and generalisation of findings, for example, regarding women's access and choice of services-or culture and gender roles in decision-making, but seeks understanding and extrapolation to similar situations (Hoepfl, 1997).

4.5.2 Quantitative methods

In this study using a quantitative method for data collection was useful to gain SBAs views on women's maternity service use, from a small sample of SBAs themselves. It was anticipated that collecting information from SBAs would be helpful to understand issues related to maternity service use, for example, to identify gaps in perceptions between service users and providers. Denzin and Lincoln (1998) posit that quantitative research emphasises the measurement and analysis of causal relationships between variables. In quantitative research, measurement takes a central place because it provides the essential connection between empirical observation and mathematical expression of quantitative relationships (Tashakkori & Teddlie, 2003).

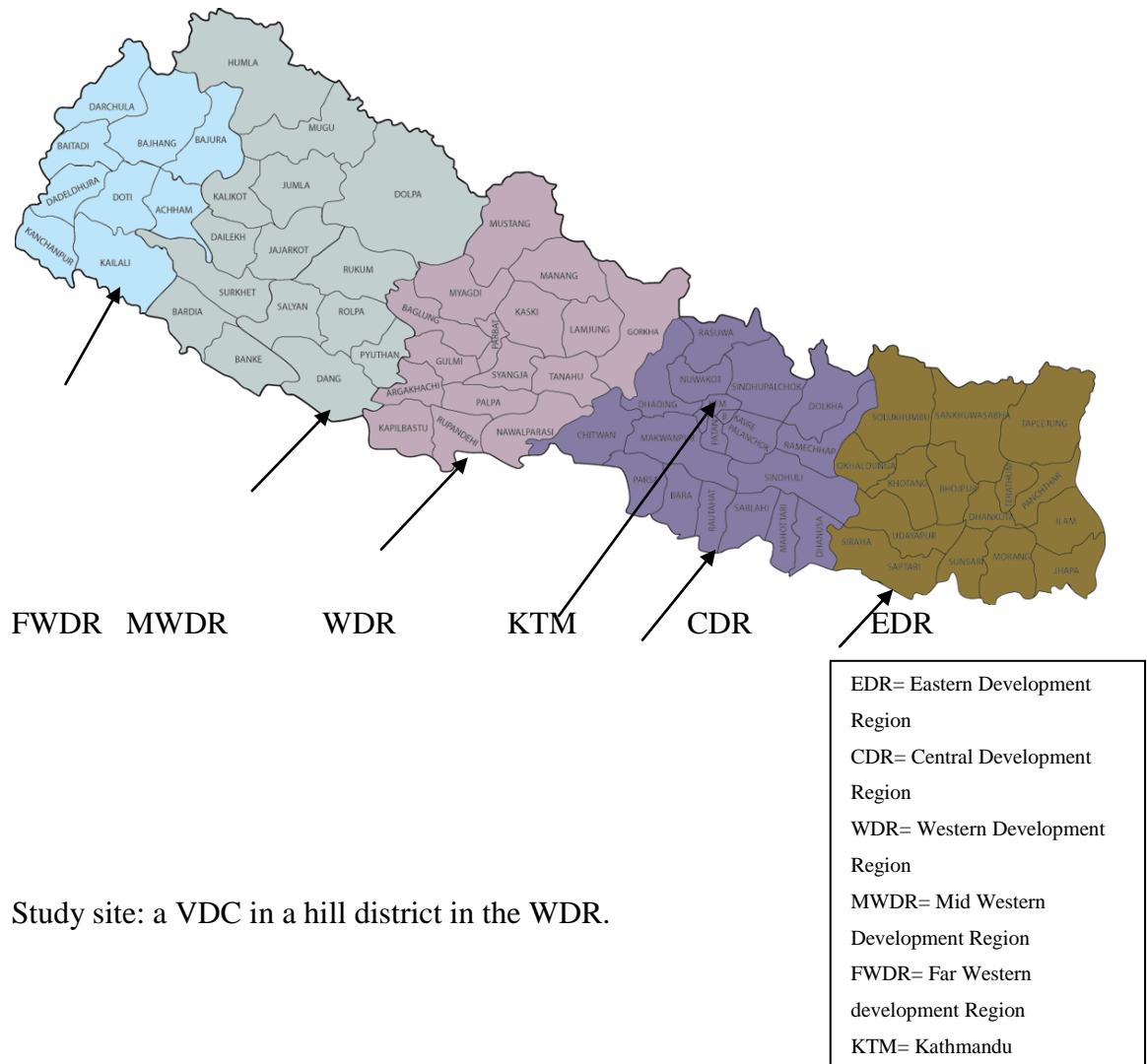
This study included the gathering of some quantitative data but this was mainly for descriptive purposes: the research design precluded the testing of hypotheses and there was no intention to prove causal relationships from statistical data. The quantitative data were collected in order to understand better SBAs' views on women's maternity service use; and to provide the opportunity for triangulation of data from different sources. The use of triangulation helps to establishing trustworthiness of a qualitative study (Shenton, 2004). In this study, triangulations was made in different ways through the methodology used in the research, namely, triangulating the data collection from women and SBAs and environment triangulation, that is, data were collected from a rural community and two urban hospitals. In addition, the use of female assistant to interview some women constituted a form of investigator triangulation.

4.6 STUDY SITE

The fieldwork was conducted in a rural area west of Kathmandu, the capital of Nepal. A Village Development Committee (VDC) area in Heritage district (district name changed for anonymity) comprised the study area. This is one of the 16 hill districts of the Western Development Region (WDR) of Nepal as indicated on the map 4.6.1. The Heritage district is divided into sub-metropolitan, municipality and VDC areas. The VDC is the smallest unit of local government for administrative purposes. The VDC is further divided into smaller units called wards consisting of nine wards in each VDC (District Profile, 2011). In terms of primary health care services this district has maternal and child health clinics (MCH), health posts (HP) and sub-health posts (SHP). The study site was in the South-East part of the district. The total population of married women of reproductive age group was 97,009 in the district with expected pregnancies per year of 13,861 (District Annual Report, 2011).

In urban areas of Heritage district there were 10 hospitals (including both private and public ones), five of which provided maternity services. Two hospitals (one public and one private) in Heritage district were selected for inclusion in the case study on the basis that they are the major hospitals serving the region and providing maternity services to women from the neighbouring districts and villages and study site. These hospitals are expected to be able to deal with both routine and emergency situations. For the qualitative information all the women interviewed were from one VDC of Heritage district. The particular site was chosen since people living in the village were of diverse socio-economic and cultural backgrounds. This district has a higher than average range of socio-economic indicators compared to other districts of the WDR of Nepal and, in general, the Human Development Index (HDI) is higher than the national average (District Profile, 2011). The study site has links to the Sub-Metropolitan city of Heritage district but poor rural road links and lack of regular public transportation can cause problems in accessing the health facility, particularly in emergencies.

Figure: 4.6.1 Map of Nepal and showing region where the study site is located in Heritage district



Study site: a VDC in a hill district in the WDR.

4.7 STUDY POPULATION

To answer the research questions women (both SBA users and non-users), husbands, parents-in-law and SBAs were included in the study. 24 mothers aged 18 years and above were interviewed. Some relatives were also interviewed as key informants. For the quantitative data SBAs working in maternity services in two hospitals were surveyed.

4.7.1 Study population for qualitative data

The study population consisted of 24 married women (16 SBA users and eight non-SBA users) aged 18-49 years who had given birth within the three years prior to the time of interviews. Eight relatives who were involved in decisions about the birthing process, i.e. five mothers-in-law, two husbands and a father-in-law, were also interviewed.

4.7.2 Study population for quantitative data

SBAs working in maternity services in two hospitals were surveyed: the study population consisted of 56 qualified SBAs (only 56 questionnaires were returned out of 100 questionnaires distributed) including five midwives, 33 nurses and 18 doctors.

4.8 SAMPLE SIZE AND SAMPLE CRITERIA

The sample is the number drawn from a population using the relevant sampling method, depending on whether a quantitative or qualitative data collection method is being used.

Two types of sampling technique were utilised, because of the nature of the study and the wish to collect data based on both interviews and a survey. Neergaard et al. (2009) identified different sampling techniques, such as snowball sampling or purposive sampling, to determine sample size in qualitative research. Kemper and Teddlie (2000) suggested three important components for choosing an appropriate sample for a study. First, the sampling technique should stem logically from the conceptual framework, for example, the Ecological model of health service utilisation and the research questions. In this case study, women who had delivered a baby with or without the help of SBAs; relatives involved in delivery care and maternity health service providers were selected to explore the main research question. Secondly, the sample should generate sufficient data on the phenomenon being studied. Thirdly, the sample should reasonably lead to the possibility of making clear inferences or credible explanations from the data.

4.8.1 Qualitative sample selection

Qualitative research is generally based on a small sample (Bryman, 2012; van Teijlingen et al. 2011; Bowling, 2002; Creswell et al. 2003). In this study, snowball sampling techniques (Bryman, 2012) were used to identify interview respondents of women and their relations in the village. Initially, one female community health volunteer (FCHV) in the research village was asked to identify women in the local community who had recently given birth. (The FCHV was contacted through a local school head teacher known to the researcher). Then the women were asked to identify other possible participants who had recently given birth.

I asked each woman I interviewed whether she knew of any other women in the same community/village who had delivered a baby recently or during the last three years. (If the last delivery was more than three years ago, women were not included in the study). The reason for choosing a three-year period was to capture women's recollections of obstetric events and subjective elements related to their labour and delivery while their reminiscences were still fresh and relevant to the local situation in maternity care (D'Ambruoso et al. 2005).

The snowball sampling technique was also used to identify mothers-in-law, a father-in-law and two husbands to augment the data provided by the women themselves. Firstly, a woman was asked to identify a mother-in-law, and then a mother-in-law was asked to identify husbands and a father-in-law.

4.8.2 Qualitative sample size

As mentioned, a total of 32 interviews were conducted with women, mothers-in-law, a father-in-law and husbands using a semi-structured interview schedule (Appendix, 7). 'Theoretical sampling' was utilised to locate the study population, as suggested by Glaser and Strauss (1967, p. 73). "Theoretical sampling is the process of data collection whereby the analyst jointly collects, codes and analyses data and decides what data to collect next" (Glaser & Strauss, 1967, p. 45). In this approach the researcher carries on collecting data through the theoretical sampling stage until theoretical saturation point is reached. "Saturation means that no additional data are

being found whereby the researcher can develop properties of the categories’’ (Glaser & Strauss, 1967, p. 61). According to this norm, when new interviews were producing the same information in the same categories, it was concluded that the data had reached saturation point and no new respondents were requested. Due to the time limitations only a small number of other key informants (relations) were interviewed. It is possible that saturation point was not reached with this small number. However, the information received from these interviews was helpful in supporting an in-depth understanding of the data from the new mothers.

4.8.3 Quantitative sample selection

SBAs working in two hospitals in Heritage district in the WDR of Nepal were surveyed. Prior to the research, both hospitals’ directors of maternity departments were contacted by e-mail from London, to ascertain the total number of SBAs working in their maternity services. After two months, no response had been received to the first e-mail so a repeat request was sent-this also failed to elicit a response. Attempted phone calls were also unsuccessful and the total number of SBAs was never ascertained. It was hoped that going to Nepal and meeting directors of maternity services in person would enable me to get accurate numbers of SBAs working in maternity services but even after meeting with them, this information was not forthcoming. Therefore, a purposive sampling strategy was adopted and, with the agreement of the managers, 100 structured self-administered questionnaires were sent to the hospitals for completion by SBAs. In total 45 questionnaires were sent to the private hospital and 55 to the public one, since the public hospital has more bed capacity. It was therefore assumed that a) more births take place in the public hospital than in the private one and b) that more staff work in the public one.

4.8.4 Quantitative sample size

Accessing the sample of SBAs followed an initial meeting with the directors of the maternity departments in each hospital before data collection started and obtaining agreement of the directors to support the circulation of questionnaires to SBAs. Following this initial meeting three visits were made to administer the questionnaires; (a) to leave the questionnaires with agreement of the head of facility;

(b) to collect completed questionnaires a week later and to remind non-respondents; and (c) to collect questionnaire subsequently. Out of the total of 100 self-administered questionnaires 56 completed questionnaires were returned to a box left for the purpose (33 from the public hospital and 23 from the private one) by the time of the final visit.

4.9 ETHICAL APPROVAL

Ethical approval is very important in all fields of social research not least in the health field. Before conducting the research, it is essential to obtain ethical approval and obtain permission to conduct research from the relevant authorities (van Teijlingen & Simkhada, 2012). In this study, first ethical approval was obtained from London Metropolitan University (LMU), Faculty of Social Sciences and Humanities (FSSH, 20th January 2011), UK (Appendix 3) before applying for ethical approval in Nepal. Approvals for research were obtained from both hospitals (Appendices 4 & 5) before an application by e-mail was made to the Nepal Health Research Council (the Government's ethical clearance body) for ethical approval. Ethical clearance was received from the Nepal Health Research Council (NHRC, Reference No: 853/2011) for the research (Appendix 6). To get access to conduct research in the relevant departments of the hospitals, permission was sought directly from the directors of the maternity services after ethical clearance from London Metropolitan University, hospital approvals and ethical clearance letter from NHRC had been received.

4.10 ETHICAL CONSIDERATIONS

As a male researcher, requesting personal information from women on childbirth was considered to be a sensitive matter. I was conscious that women might not be willing to talk to an unknown man about pregnancy and childbirth due to gender norms in Nepal and cultural sensitivity about this topic and its association with sexual activity. It was therefore important to describe the research purpose before consent was obtained. I recruited a female interviewer in order to address these issues and trained her before the interviews took place.

The ethical issues to be considered included the type of participants to be recruited; the need for permission to record the interviews; the anticipated interview schedule/time; the location of the interviews; and the language to be used before, during and after the interviews took place. Appointments were made before the interviews were scheduled and confidentiality was assured. Interviews were conducted in an environment in which the women could feel most comfortable. In most cases they were carried out in the participants' own homes (as they preferred); in one case in the local teashop; and in another, in a small garden near to the participant's home as requested. Active listening, patience, politeness and flexibility were applied while conducting the interviews with the aim of showing respect to the participants. The interviews were stopped if other people arrived during the interview or if participants were not willing to share their experiences. In one case the interview was stopped due to other people arriving during the interview but in no cases were women unwilling to share their experiences. Furthermore, enough time was given between agreeing to participate and the actual interview to prevent coercion or a feeling of obligation: women were also assured that they could withdraw from the study at any stage, if they wished.

The female interviewer who was recruited to interview women lived in the local area: she held a college degree and was a mother of two children herself. Recruitment of a local female interviewer made it easier for me to become trusted to the community, to reach the respondents and to build up rapport during the initial contact. A further reason for recruiting a female interviewer was to demonstrate cultural sensitivity. Pregnancy and delivery is "a woman's matter" so women might hesitate to share their ideas with a male researcher resulting in a lack of respondents. Reproductive and sexual health related issues are regarded as private matters which can be embarrassing or even taboo (Naraindas, 2009; Pradhan et al. 2010; Davis-Floyd & Sargent, 1997), so women do not like to talk with an unknown person, particularly with a male, but there was no such problem as the female interviewer and I worked together during the fieldwork. As mentioned, the female researcher was provided with training before any interviews took place.

Some of the participants were illiterate and thus could not read the information or sign the consent form. The research was described to the women and verbal consent

was taken from them by the female interviewer before interviews started to ensure that participants were informed and were willing to take part in the research (van Teijlingen & Cheyne, 2004).

Respondents' verbal consent was also taken by the female interviewer to record the interview before the interview took place. The women were told that the information they provided would be kept secure (Harris et al. 2011) and that they could withdraw from the interview at any time if they wished. The women were encouraged to ask questions regarding the information provided before the interview started. The participants were assured from the beginning of the study that their identity would be protected and their responses would remain anonymous. Participants were assured that the information they provided would not be used for any other purposes than this research study. Moreover, they were informed that personal information would not be disclosed to others.

During the interviews the beliefs (for example, their ideas and beliefs on traditional methods), values, attitudes and individual autonomy of the respondents were fully respected (Chowdhury et al. 2003; van Teijlingen & Cheyne, 2004). From my previous field experience I knew that some women would expect some money at the end of the interview. I was aware of this as an ethical issue: offering direct benefit to respondents may influence their perception and responses so I did not give any direct incentives because they may have participated on the basis that they would get an incentive.

Permission was also sought verbally to record the interviews with mothers-in-law, husbands and a father-in-law. In some cases women hesitated to be interviewed if their parents-in-law or husbands were at home because of gender norms and young women's low status in the family hierarchy. In that case, consent was taken verbally from a senior member of the family (parents-in-law or husband) before proceeding with an interview, taking into account the cultural norms and sensitivity regarding the role of head of the household. Consent was then taken from women who were interviewed in a separate room to ensure confidentiality. Also, to maintain women's privacy, if someone came into the interview place, interviews were stopped in the interests of confidentiality and anonymity but no such incidence happened.

Participants were informed that the recorded interviews, transcriptions and (in the case of the SBAs) completed questionnaires would be securely held and then destroyed five years after completion of the study. The quantitative data were collected from SBAs by self-administered questionnaires. The ‘informed consent’ aspect was clearly positioned at the top of each questionnaire stating the purpose of the study and that all information given would be kept confidential and anonymous (Appendix 1). By returning the questionnaires SBAs provided consent to the study.

4.11 PILOT STUDY

A pilot study can test the appropriateness of the research methods and tools (van Teijlingen & Hundley, 2005). The pilot study can play a significant role in improving the quality of the study in many ways, for example, it can identify problems with wording, structure, instructions, instruments and other practical aspects of the research design (Bryman, 2012). Pilot studies to ‘test’ the interview schedule and survey questionnaire were carried out in both the community and hospital settings separately before actual data collection started.

4.11.1 Pilot study for interviews

In this study, before the actual interviews, pilot interviews were conducted with three eligible women from the study village by me and the female researcher. After these three interviews I identified where there were gaps in the schedule or other things that needed to be addressed, for example, the way of asking a particular question, specific wording and sitting arrangements. This pilot study followed training of the female interviewer and the pilot study interviews were conducted by her, although I was present as an observer. The female interviewer became more confident in her interview techniques during the course of the pilot study. The pilot of the interviews helped me to better understand the interview procedure, ways of asking ice breaker questions, specific wording and sitting arrangements and building rapport with the respondents. Moreover, a pilot study proved useful in accessing study participants and for identifying methodological issues. These included the place of interviews, time taken to complete them, and use of the recording device (Yin, 2009). Furthermore, the pilot study clarified the appropriateness of particular

questions and any aspects which posed particularly sensitive or ethical issues, for example, if women had had some tragic event around childbirth in the past. I did not conduct a pilot study with mothers-in-law and male relatives as these were only a small number in the study, and due to time restraints.

4.11.2 Pilot study for the survey

For the survey, the pilot study was undertaken with seven SBAs altogether-three nurses, two doctors and two midwives-from both hospitals in the middle of May 2011 (specifically, two nurses, one doctor and one midwife from the public hospital and one of each from the private hospital). I was able to identify the weaknesses of the questionnaire (e.g. wording and ordering of questions) after completion of seven questionnaires by SBAs.

Overall, the two pilot studies helped to: assess the adequacy of the research instruments, the feasibility of the study, and issues related to the appropriateness and recruitment of the samples (van Teijlingen & Hundley, 2005): they also contributed to planning for the later stages, for example, collection of completed questionnaires and data entry. The pilot studies helped me to identify a range of issues. These included time taken for interviews or completion of questionnaires; resources needed, for example, time and travel costs; and potential technical problems that could appear during the data collection stage. However, fortunately, there were no technical problems during this stage.

The suggestions, feedback and comments received from the pilot studies were used to modify the data collection instruments. For example, the survey questionnaire and interview schedule were revised using more appropriate wordings. In addition, there were adjustments regarding the time and place of interviews, as well as in locating possible participants for the interview stage. The questionnaires were refined in terms of the clarity of words used and the consistency of questions, while the pilot interviews indicated the tentative time that individual interviews might take (Appendix 1).

4.11.3 Field procedure

The field procedure was started at the same time in both sites. I conducted fieldwork in Nepal over a four month period from April to July 2011. The field process started with the recruitment of the female interviewer and meeting the directors of the maternity department in hospitals.

4.11.4 Survey procedure

The survey procedure started with meetings with the directors of maternity services of the two hospitals, arranged with the help of the personal assistant of the head of each facility. Prior appointments were made for both meetings as suggested by the personnel assistant. The help of the directors of maternity department made it easier for me to collect quantitative data. I agreed the process to deliver the questionnaires to the SBAs. I handed questionnaires to the directors of maternity departments in both hospitals to circulate to SBAs. The directors of maternity departments, in turn, asked ward sisters to circulate questionnaires to SBAs. Once the survey procedure had been established in the hospitals training was undertaken for the female interviewer for preparation of qualitative data collection.

4.11.5 Interview procedure

In order to recruit a female interviewer initially contact was made with a high school head teacher in the study area. The head teacher recommended a woman and made the arrangements for me to contact her. The purpose of the study was discussed. Payment (Rs 10,000 equivalent to £85.00) for completion of the all interviews was agreed and paid by me. The female researcher was from the local area and familiar with culture, location and people and known as a community health volunteer. I provided her with three-days training to familiarise her with the research questions, the interview techniques and issues associated with this investigation.

After completion of the training we arranged a mock interview with a local volunteer woman to develop the female researcher's confidence before proceeding to the pilot interviews. The researcher and the female interviewer generally worked

together in the field. It was the rainy season and women were busy preparing for the rice planting so it was sometimes difficult to meet them at home. Sometimes we met the women in the fields and asked them if we could arrange to interview them. Most of the women could not be interviewed on the same day but in any case, it would have been ethically inappropriate to recruit women for interview on the same day. I therefore interviewed women on another day at home or at another location, giving them enough time in between to consider their involvement. We accepted the time and place women requested: sometimes we interviewed up to three women in one day but mostly only one per day.

All interviews were conducted in the Nepali language. Having interviewed women for the pilot study I listened carefully to the interviews and reflected on them. I also translated the first three interviews into English and sent them to my academic supervisors in the UK to get feedback. The translated data were discussed carefully and any inconsistencies resolved. Their suggestions, comments and feedback (such as prompts, clarification of issues raised and clarity of the interview process) were incorporated. In addition, my own experience at the pilot stage prompted some revision and development of the interview schedule and interviewing techniques (e. g. adapting language according to women's educational status, flexibility with regard to timing of interviews and taking account of women's living arrangements).

4.12 METHODS OF DATA COLLECTION AND TOOLS

As described, different tools were used to collect data. Westbrook (1994) stated that there is no single approach fit for every problem in data collection. I used both open-ended and closed questions in this study for data collection (Appendices 1 & 2).

4.12.1 Semi-structured face-to-face interviews

Interviewing participants is a widely used and valuable method of qualitative data collection (Bryman, 2012; Golafshani, 2003; Westbrook, 1994). Glaser and Strauss (1967, p. 273) stated that there are several strengths in semi-structured interviews, for example, the fact "that it permits the respondent to move back and forth in time". This method is helpful to interact with respondents and useful for deep

exploration and understanding of women's experiences and perceptions in a natural setting. The semi-structured interviews provided the opportunity to explore new ways of understanding women's experiences in health seeking behaviour.

Westbrook (1994, p. 244) stated that "the flexibility of the technique allows the investigator to probe, to clarify and to create new questions based on what has already been heard". The semi-structured interview also allows preparation of questions ahead of the interview time and gives respondents confidence in the researcher competence. Lincoln and Guba (1985, p. 269) stated that "the structured interview is the mode of choice when the interviewer knows what he or she does not know and can therefore frame appropriate questions to find it out". However, semi-structured interviews allow the participants the time and capacity to speak about their opinions on a particular subject in their own words and the researcher can focus on particular areas of interest.

"The semi-structured face-to-face interview is more like a 'guided conversation' where the researcher can establish rapport with participants, ordering of the questions is less important and the interviewer is free to probe interesting areas as they arise and can follow the respondents' interests or concerns" (Smith & Eatough, 2006, p. 304). The researcher can explore the main themes (e.g. individual characteristics, gender and culture, costs, choice of and access to services) using open-ended questions to reach an in-depth understanding of the issue under exploration, from the respondents own words. The interviewer can follow an idea or a comment made by a respondent in detail. It also allows the interviewer some control over the line of questioning during the interview (van Teijlingen & Forrest, 2004) while respondents are still free to express their ideas.

I asked the women whether they would prefer to talk to a male or female interviewer. If they preferred a female interviewer for the interview, the female interviewer conducted the interviews. Some women participants said they did not mind talking to either a male or a female and in that case, I conducted the interviews. I interviewed 14 women and I felt that all were able to respond well to me. Five interviews were conducted jointly, as women preferred, and five women were interviewed only by the female interviewer. I conducted all the interviews with the

male respondents (i.e. husbands and a father-in-law). I suggested that the female interviewer should interview mothers-in-law but they were happy to talk to either me or a female interviewer so I interviewed all the mothers-in-law. Almost all mothers-in-law were aged sixty plus and were illiterate. One husband was young (in his mid-20^s), the other one was in his early 30s, and the father-in-law was over 60. All male respondents were literate.

All interviews were conducted in the Nepali language with native speakers since both the woman interviewer and I are native Nepali speakers. During the interview simple words were used regardless of the women's status so that the questions were easily understood (van Teijlingen & Forrest, 2004). All interviews were recorded using a digital recorder. Semi-structured interviews generally last a considerable length of time (usually an hour or more), depending on the particular topic (Smith & Eatough, 2006). However, the length of interviews partly depends on the respondents' socio-cultural and individual background (e.g. age, education and employment). Some participants were talkative and had more knowledge about the issues than other respondents so the length of the interviews varied. In this study some of the interviews lasted more than an hour while others were between 30 to 45 minutes long. All interviews were completed in one sitting (Belgrave et al. 2002).

4.12.2 Self-administered questionnaires

I developed the self-administered questionnaires for the quantitative data collection based on the literature review to understand SBAs views on maternity care use. Quantitative, qualitative and mixed methods studies (including published and unpublished reports) were reviewed to identify factors affecting maternity service use. Key issues such as individual characteristics, attitudes, quality and nature of SBAs, and the infrastructure of the facility were identified.

The survey questionnaires for the SBAs consisted of 26 questions aimed at understanding SBAs views on the characteristics of women using SBA service and factors affecting SBA use. It was estimated from the pilot survey that the questionnaires would take 30 minutes to complete (Appendix 1). There is the possibility that SBAs working in maternity services in Nepal come from other South

Asian countries as they can travel and work throughout the region. Thus, the questionnaires were developed in the English language because it was likely that some SBAs would not speak, read or write Nepali language. However, this may have discouraged some Nepali SBAs from completing the questionnaires. In self-administered questionnaires, the respondents answer the questions by themselves, completing the forms at their own convenience (Bryman, 2012). Self-administered questionnaires can be circulated to respondents using different methods, such as post or online (Bowling, 2002).

Delivering and collecting questionnaires by post might have been preferred but distributing questionnaires by hand was the best method as I was staying near the hospitals. Further, the postal service is not reliable and it is not widely used for research in Nepal. It would have been difficult to meet SBAs individually to interview them in the hospitals due to the nature of their work and their busy schedules. I therefore decided to circulate questionnaires directly to the SBAs in both hospitals with the help of directors of maternity services and ward sisters (as described earlier). The SBAs questionnaires were therefore delivered personally to their place of work and following completion, the questionnaires were deposited by SBAs in a box that I had provided in the staff room. I followed up with the ward sisters and arranged when to collect the completed questionnaires since I had no direct access to the staff room. The completed questionnaires were dropped in the box provided in the staff room by each staff member. I phoned each ward sister after a week to get access and thus was able to collect the completed questionnaires from the box. Out of 56 questionnaires returned, only 14 (25%) completed questionnaires were collected on the first visit, 31 (55%) on the second visit and 11 (20%) of completed questionnaires were collected on a third/final visit.

4.13 DATA STORAGE AND MANAGEMENT

The collected data in the form of hard copies of questionnaires were kept securely by me in a locked cupboard while in Nepal and in a locked filing cabinet on return to the UK. The recorded interviews were stored electronically in a personal computer and are password protected. The data collected are being used for Ph.D. research and are not being used for any other purposes. The completed survey questionnaires and interviews will be destroyed five years after completion of this study. It can be noted that sometimes people from the local area asked to listen to the recorded interviews of other women (because they wanted to know what women had said) but I declined for reasons of confidentiality.

4.14 DATA ANALYSIS AND INTERPRETATION

Bryman (2012) points out that qualitative data are mainly in an unstructured textual form so, unlike quantitative data, there are no straightforward rules for analysing qualitative data. Sometimes, in qualitative research, the data analysis process begins even during the data collection stage (Pope et al. 2000). Initially, transcription and translation started after a few interviews were completed. Despite the lack of a single appropriate method for qualitative data analysis there is general agreement that analysis begins in the early stages of data collection and continues throughout the study (Bradley et al. 2007). Different processes were employed to analyse and interpret the qualitative and quantitative data in this study. The following section describes the qualitative data analysis processes.

4.14.1 Transcription and translation

All interviews were recorded using a digital recording device. They were first transcribed verbatim in the Nepali language and these were then translated into English by me. Nepali is my native language and my command of the English language made it relatively straightforward to translate the interviews. There are some words which are specific to the topic and were harder to translate, for example *laz* (shame), *Narawan'* (naming ceremony), *pani nchalne jat* (untouchable), *sudeni* (Traditional Birth Attendants), *salnal* (placenta) and *Jhulungo* (a traditional stretcher

made from wood and blanket). These transcribed words were translated to English as closely as possible. Thus, there were no significant issues affecting the study regarding translation of the interview data and meaning of the words. Three transcripts were ‘back translated’ (Small et al. 1999) into Nepali by a person who had knowledge of both English and Nepali language for quality purposes and to ensure the accuracy of the translation. Any issues that were unclear or ambiguous were discussed with academic supervisors and resolved (Twinn, 1997), for example, with regards to cultural and traditional issues.

4.14.2 Qualitative data analysis

Silverman (2006) stated that different approaches to qualitative analysis exist and researchers are faced with the decision about how to analyse qualitative research data. In this study, a thematic analysis process was applied. In thematic analysis a number of themes are identified in the textual data. Silverman (2006) suggested that thematic analysis is more flexible than other specialised qualitative data analysis techniques and it is frequently used in the health and social sciences to analyse narratives, often in the form of interview transcripts, to identify patterns or trends in the form of themes.

4.14.3 Thematic analysis

The analysis of qualitative data involves “discovering the patterns, themes and categories in one’s data and findings emerge out of the data, through the analyst’s interactions with the data” (Patton, 2002, p. 453). Silverman (2006, p.166) stated that thematic analysis provides “an indication as to the recurring themes within the data set. The initial phase of carrying out thematic analysis is for one or more researchers to review the dataset and derive a set of themes that appear throughout”. In this study, individual characteristics of women making choices, access to services, decision-making, cultural practices in childbirth and gender were all identified as themes.

Thematic analysis is the dominant method which has been used to analyse data in primary qualitative research in recent years (Thomas & Harden, 2007). Coding is

one of the central processes in qualitative data analysis. I identified themes from each interview, and then compared across the interviews and rechecked for concurrences (Patton, 2002). Chatman (1984) suggested that in qualitative research 'coding' is a shorthand device to label, separate and compile data in original types of information. In the beginning, I identified possible patterns, categories and themes based on interview transcriptions as suggested by Strauss and Corbin (1998): meanings and relationships emerged from the data according to the 'Grounded Theory' approach (Glaser & Strauss, 1967). Coding was an inductive process (Strauss & Corbin, 1990) and was based on reading interviews line by line and sentences of translated interviews to understand their true meaning.

In thematic analysis, there are different stages in the data coding process, for example, open, axial and selective (Strauss & Corbin, 1990). In the initial stage I developed themes for translated data, for instance, culture, and gender, individual and community perceptions using the transcripts of interviews. It is confusing to analyse the data without appropriate classification so in the second stage I identified sub-themes and classified these into categories and labelled them. Finally, the main themes emerged and the qualitative data were analysed and categorised accordingly. The above three stages were followed to generate the main themes and sub-themes.

Several sophisticated computer software programmes, for example, Nvivo, QSR, ATLAS.ti have been developed to make it easier to analyse qualitative data (Bryman, 2012; Pope et al. 2000). However, the processes are the same whether doing it manually or with the assistance of a computer programme (Patton, 2002). Having completed the field work and returned from Nepal to the UK I considered using a software programme and enquired about Nvivo training. However, it was not possible for the university to provide this within the appropriate time frame so I decided to analyse the data using a Microsoft Word programme on the computer.

I therefore analysed the qualitative data with the help of Microsoft Word documents (e. g. naming a theme, grouping materials on a similar topic, developing patterns and categories) using options such as bold, highlighting and track changes, italics and underlining (Appendix, 8) the main themes, sub-themes and categories (Belgrave et al. 2002). I created a file for each different theme and category as word documents

(Microsoft word file) and moved relevant themes to the main themes using copying and pasting methods as appropriate (Patton, 2002).

4.14.4 Quantitative data analysis

The self-administered questionnaires collected from both hospitals were checked for completeness, first in the hospital during the collecting period and then in the UK before coding and entering the data. Any spoilt data would have been discarded but there were no such questionnaires among those returned. First, the data were transcribed manually onto separate sheets of paper in tabular form. Later a Microsoft Word file was created and information transformed into tabular form and discussed with academic supervisors. As the sample was small (56 all together) it was not appropriate to use a computer software programme, for example, Statistical Programme for Social Sciences (SPSS) for data analysis nor to apply complicated statistical tests. I double checked the entered data to reduce the errors. I also cross checked data for their consistency by tallying the related numbers and items. Descriptive analysis of quantitative data was carried out (including percentage and frequency) to understand the SBAs views on maternity service use during labour and delivery.

4.15 TRUSTWORTHINESS OF THE DATA ANALYSIS

Issues of reliability and validity are important in both qualitative and mixed-methods research for establishing and assessing the quality of research so it is vital that these should be addressed carefully throughout a study (Kirk & Miller, 1986; Bowling, 2002; Johnson et al. 2007). There are several key elements such as: clearly written research questions and propositions; appropriate case study design to explore the research questions, purposeful sampling strategies, systematic collection and management of data and correct analysis of the data. Reviews of existing research and identification of pitfalls in their methodology used, for example, sampling procedures, also helped to increase trustworthiness of this study. These elements were addressed to ensure trustworthiness in the study (Baxter & Jack, 2008).

Eisner (1991) stated that three features are important for judging qualitative research-coherence, consensus and instrumental utility. He asks whether the reported findings make sense and asks other questions including: ‘how have the conclusions been supported?’ and ‘have multiple data sources been used to interpret the information?’ To establish trustworthiness in the data the research questions were clearly stated; data were collected from different participants using flexible research tools; an appropriate research design was devised and mixed methods of data collection were employed. Thus information was gained from different perspectives and triangulation of those data enhanced the trustworthiness of the study.

Efforts should be made to maintain reliability and validity by establishing a logical link between the research objectives and questions and using appropriate research tools for the data collection (van Teijlingen & Forrest, 2004). In this case study the research question was addressed with a relevant study population and appropriate methods were used to gather data. The methodology included training of an interviewer to explore women’s experiences and perceptions of SBA use and the pre-testing of the interview schedule and questionnaire used in the survey through pilot studies in the relevant settings. Use of appropriate data analysis process also helped to increase the trustworthiness of the research instruments and the validity of the research itself.

4.15.1 Reliability of the data

The term ‘reliability’ is a concept used for testing or evaluating quantitative research but nowadays it is also used in qualitative research (Golafshani, 2003). Reliability is concerned with the question of whether, if a study were to be repeated, would the same results be obtained each time (Bryman, 2012; Ryan et al. 2001). In quantitative research reliability is “the extent to which results are consistent over time and an accurate representation of the total population under study.

If the results of a study can be reproduced under a similar methodology, then the research instrument is considered reliable” (Leininger, 1985, p. 69). However, this term does not have the same meaning in qualitative research when “reliability focuses on identifying and documenting recurrent, accurate and consistent

(homogeneous) or inconsistent (heterogeneous) features, as pattern, themes, values and worldviews, experiences and other phenomena confirmed in similar or different contexts” (Leininger, 1985, p. 69). While reliability is a concept to evaluate quality in a quantitative study with the “purpose of explaining”, the concept of reliability in a qualitative study has the purpose of “generating understanding” (Stenbacka, 2001, p. 551). This study was able to generate data about individuals and community perceptions, culture, gender and social inequalities as well as choice of and access to services to enable an understanding of the factors affecting SBA use by rural women.

4.15.2 Validity of the data

In quantitative research, reliability and validity are considered separately but these terms are not viewed separately in qualitative research (Onwuegbuzi & Johnson, 2006). Other terms, such as credibility, transferability and trustworthiness, tend to be used instead of validity in qualitative research (Golafshani, 2003). In quantitative research “validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit “the bull’s eye” of your research objective?” (Joppe, 2000, p. 1).

Wainer and Braun (1998) described validity in quantitative research as “construct validity”. The construct is the initial concept, notion, question or hypothesis that determines which data are to be gathered and how it is to be gathered. However, some writers Bryman (2012) and Sandelowski (1986) have suggested that qualitative studies should be evaluated differently from quantitative research.

Lincoln and Guba (1985) proposed that it is necessary to specify terms and ways of establishing and assessing the validity of qualitative research. They proposed two main criteria for assessing reliability and validity in qualitative research, they are: (1) trustworthiness, and (2) authenticity. They further identify four components in trustworthiness: (I) credibility; (II) transferability; (III) dependability and; (IV) conformability, as being particularly important for the validity of qualitative research. Authenticity is another criterion for reliability and validity in qualitative

research. In this criterion, they suggested five components: (I) fairness; (II) ontological authenticity; (III) educative authenticity; (IV) catalytic authenticity and; (V) tactical authenticity as important for the validity of the study.

Reliability and validity have been carefully considered at different stages of this study such as in development of questionnaires, choice of study site, sample selection and pilot studies, interviewing of participants and use of appropriate data analysis techniques. An extensive literature review was conducted before the survey questionnaire and interview schedule were developed. The purpose of the study was explained to the respondents clearly before interviews took place. I applied the mixed-methods approach to data collection, which provided me with an opportunity to assess the transferability and trustworthiness of the study throughout the research process. Use of different methods, tools and sample populations in data collection and triangulation of the data would also identify whether there were inconsistencies in the data. Consistency of the data obtained by different methods and by different people (female and male researcher) supported the reliability and validity of the data in the study.

4.16 CONSTRAINTS, BIASES & LIMITATIONS OF THE STUDY

Several constraints, biases and limitations were met during the study. However, there was no evidence that the findings were significantly affected by either constraints or biases. The following section discusses constraints, biases and limitations as they occurred in this study.

4.16.1 Constraints of the study

Several problems were encountered during the study. The study site was in a rural setting. There were no good transportation links and it took nearly two hours of travel on poor rural roads to reach the field. The field study started at the beginning of the rainy season in late April, so it was difficult to meet the women because most of the people were busy on the farm engaged in preparation for rice planting. The study population consisted mainly of women (aged 18-49 years) who had given birth recently or up to three years before the interviews took place. In some cases, it was

difficult to conduct interviews at the appointed time due to the needs of the baby, in which case we had to wait, for example, for the woman to settle the baby.

Some participants were less educated and initially not willing to talk to strangers. It took more time to build rapport, describe the study purpose and reassure them. The female researcher played an important role in bridging the gap between the researcher and the respondents. Some of the participants were suspicious of me because I was not known in that locality. People did not trust a stranger in the village and hesitated to talk to me which may be a result of various taboos surrounding male/female communication (for example, 'why she is talking to a strange man?'). The respondents were curious about where I came from and whether I was from a Non-Government Organisation (NGO). In addition, they wondered why I was collecting the information and what could be the benefit to them of giving the interviews.

My university identity card was shown and my status described as a research student and when the purpose of the study was stated as being to obtain a University degree then they were happy to take part in the study. The female interviewer helped to build up trust as she was from the local area.

Limited financial resources was an additional problem, as payment had to be made to the hospital ethical board, to NHRC for research approval and to the female interviewer as well as meeting the cost of travel from UK to Nepal and other costs during the field visit itself, such as food and accommodation, travel costs to the study site and time available for field work. Women living in the extended family hesitated to provide information if someone else was at home at the interview time (particularly their mother-in-law or father-in-law) because of the living arrangements. It was difficult to maintain confidentiality in that situation though we were able to interview women in a separate room with the permission of the household head without any interruption. In the rural areas of Nepal it is common for neighbours 'drop in' if an unknown person comes to visit someone.

Occasionally, neighbouring women gathered in the house during the interview to listen to what was being talked about: even if the woman wanted to the interview to

continue, this made it difficult to ask questions since other women sometimes gave the answer before the interviewee. In one case I cancelled the interview and in another case I postponed the interview for half an hour with the woman's permission.

There were other factors affecting the data gathering stage. For instance, due to the nature of the work, the health service providers were busy so it was difficult to get completed questionnaires from them on time. It took a lot of time to follow up and remind them about completing their questionnaires. Moreover, poor electricity supplies and regular 'black outs' caused problem in data translation and recharging the electronic recording device.

Another factor related to the political situation in Nepal. This was unstable and affected the field procedure in various ways. In a two-month period I experienced eight days of strikes making it difficult to travel to interview women on some of the appointed days. Therefore, there was pressure to complete the fieldwork within the limited time allocated for the visit and with the limited financial resources available.

4.16.2 Possible biases of the study

There is always the possibility of interviewer bias with semi-structured interviews particularly if the interviewer is inexperienced and not well trained (Bryman, 2012). On the basis of experience from the past in qualitative interviewing, training during university courses and discussion with academic supervisors I was confident about interviewing people. I provided three days of training to the female interviewer and she conducted a mock interview with a local woman to reduce biases.

The interviewer should present as neutral, non-judgmental and should not ask questions in a leading or ambiguous way (Bowling, 2002). Also respondents have to remember their history or experiences so there is the chance of error in recall or memory bias from the participants during the interview. In interviews and also in self-administered questionnaires there is also the possibility that respondents give 'desirable answers' (Bowling, 2002) as respondents want to present themselves and their experiences in a positive light. It is possible that some of these particular biases

existed in the study including those related to the power difference between the researcher and respondents.

Interviews were digitally recorded, so respondents might be uncomfortable with recording their experiences but an atmosphere that encouraged respondents to speak freely and to focus on the issue being researched was provided. The female interviewer lived locally; she was known as a community volunteer and was familiar with the women so there might be biases in terms of her asking women about their experiences. However, I am not aware of any significant examples of bias occurring or adversely affecting the quality of the data.

4.16.3 Limitations of the study

This mixed-method study covered only one village and two hospitals in one particular geographical area in a certain time frame. The study focuses on a particular group and asked about the women's experiences at a specific point in time. However, service use is a dynamic process and can change over a period. This study employed snowball techniques for recruiting participants. The sample selection does not represent all the different characteristics of mothers and their relatives. For example, the study only interviewed rural women so it may be that urban women have different experiences. Also mothers aged under 18 were excluded and this might be another limitation of the study since early marriage and childbearing is still common in Nepal.

The study included only married women and those who had had live babies so the findings might not be generalisable to women aged less than 18, or to unmarried mothers or those who experienced late miscarriage or still birth relative to the wider population of women of reproductive age in Nepal, especially non-rural women. A further limitation of the study was that only two husbands, one father-in law and five mothers-in-law were included due to time and financial constraints. The mothers-in-law included in the study were aged around 60 years and were illiterate: these characteristics may be typical in rural communities but not representative of all mothers-in-law in Nepal.

All husbands interviewed were involved in agriculture work and their views might be different from those husbands who were employed in the formal sector, for example, as teachers, business men or government officials. The purposive sample was employed to collect qualitative information so it is not supposed to be representative of the wider population. Due to the small sample surveyed, the data may not represent the entirety of SBAs views. However, even this small sample provides a valid perspective on health service utilisation.

4.17 SUMMARY

This chapter described the research design and methodology used in this thesis. The case-study model was employed with a mixed-methods approach in order to collect the data and generate ideas which would address the aims and objectives of the study and the research questions. A thematic analysis was carried out for the qualitative data interpretation and descriptive statistics were used for analysis of the quantitative data. The study was conducted in a rural area where most of the population was poor, illiterate and lacking ready access to health services.

Twenty-four women who had delivered a baby up to three years prior to the study, five mothers-in-law, a father-in-law and two husbands were interviewed for the qualitative information and 56 SBAs were surveyed to gather quantitative data. Flexible methods and tools (semi-structured interviews and self-administered questionnaires) were employed to gather the information and efforts were made to maintain a balance between academic integrity, confidentiality, research ethics and respondents' beliefs, values and attitudes during the whole study. The study might have been affected by some biases on the part of both study participants and the researcher. However, no constraints or significant biases were identified beyond the limitations mentioned, and the researcher was not aware of events that might adversely affect the quality of study. The next chapter presents the findings that emerged from the analysis of the data.

CHAPTER FIVE: FINDINGS OF THE STUDY

5.1 OVERVIEW OF THE CHAPTER

This chapter presents the findings that emerged from both the qualitative and quantitative data collection. To understand women's experiences of SBA use, 24 women, including 16 SBA users and eight non-SBA users, were interviewed for qualitative data collection. Five mothers-in-law, a father-in-law and two husbands were also interviewed as key informants. A survey was conducted of SBAs in two hospitals to understand health professionals' views regarding women's SBA use. The chapter is divided into two sections, 5A and 5B.

In section A5, the qualitative information obtained from semi-structured interviews with women, mothers-in-law, husbands and a father-in-law is presented. The section starts with a description of the socio-economic and demographic characteristics of the women interviewed. Then, information about the current situation regarding skilled delivery services is presented, including the experience of women who used maternity services, followed by women's choices and preferences regarding skilled maternity services.

In section B, quantitative information is presented from the self-administered survey questionnaires completed by doctors, nurses, and midwives working in maternity services in two hospitals. The quantitative data were collected to understand health professionals' views regarding women's use of skilled maternity services during pregnancy and childbirth. This section describes the characteristics of SBAs, their views of women's socio-economic and demographic status during service use, and the SBAs' views on factors affecting provision of SBA services.

SECTION 5A: QUALITATIVE FINDINGS

This section provides a detailed account of the qualitative results in relation to the research questions raised in the study. It is based on the analysis of the qualitative data. Thematic analysis of the qualitative data was undertaken based on reading and re-reading of the interview transcripts to understand basic issues raised by women,

mothers-in-law, husbands and a father-in-law regarding factors affecting the utilisation of SBAs. Based on qualitative data four main themes emerged from the qualitative data as follow:

- (1) Individual characteristics of women relative to SBA use;
- (2) Location and infrastructure issues affecting SBA use;
- (3) Cultural and gender factors affecting decision-making in SBA use;
- (4) Women's plans, expectations and preferences in SBA use.

Important sub-themes were also identified in the analysis. Four main themes with sub-themes are as follows:

- (1) Characteristics of women relative to SBA use: age of the mother, parity and number of living children, women's pregnancy history, women's education, women's employment, women's caste and ethnicity, women's position in the household and decision to SBA use including knowledge about SBA services;
- (2) Location and infrastructure factor affecting SBA use: transportation, road and distance, direct and indirect costs of SBA services and infrastructure of the health facilities including choice and access to SBA services in the village;
- (3) Cultural and gender factors affecting decision-making in SBA use: culture and gender roles in decision-making in service use, husband's employment and income, family living arrangements and mother-in-law's influence as well as gender differences in SBAs providing service, discrimination in service use and political situation of the country;
- (4) Women's plans, expectations and preferences in SBA service use: planned use of SBAs, women's expectations before SBA use then experience during hospital delivery and women's plans for future use of SBAs. Four main themes are discussed next.

A5.1 CHARACTERISTICS OF WOMEN RELATIVE TO SBA USE

The semi-structured interviews (with both women SBA users and non-users) were conducted with twenty-four married women, aged 18-49 years, who had given birth within three years prior to the interview. Two husbands, five mothers-in-law, and a father-in-law were also interviewed to explore the issues that affect the utilisation of

SBAAs during delivery. The semi-structured interview schedule (See appendix 2) related to the age of the mother, parity, number of living children, and pregnancy history. Education, employment, caste and ethnicity related issues were included. The women's own words are used to describe different aspects of their status.

A5.1.1 Age of the mother, parity, and number of living children

Participants who were young, first time mothers, who had delivered one or two children were more likely to use SBA services than those who had more than three children and/or who were aged thirty years and older. One of the younger, first time mothers said about hospital birth:

‘It was my first delivery..... I was too young to give birth at the age of 18..... I know it was not an ideal age for delivery so I asked my husband to take me to the hospital for delivery. Due to my age, there was chance of high risk during delivery. I was desperate to go to the hospital’ (SBA user woman 1).

Women who had delivered more than three times and/or were aged over 30 years reported that they were less likely to use SBA services. However, one woman gave safety due to her “old” age and the number of deliveries she had had as the reason for using SBA services. She stated:

‘I went to the hospital for safety reasons. I was 38 years old during the last delivery..... It was my sixth pregnancy, and my age was not ideal for birth. I felt weak due to my age and number of pregnancies so my husband made me go to the hospital for safety’ (SBA user woman 12).

Some non-SBA user women, though they were young and first time mothers, mentioned their different circumstances as reasons for not using SBA services, even if they had intended to. For example, a woman described a reason for non-use of SBA services as:

‘It was my first time though no one helped me during the delivery. All of my family members were at work on that day and they did help to take me to hospital later. I

was walking here and there due to labour pains, the baby was born in the cowshed on the way to the toilet'' (Non-SBA user woman 5).

A5.1.2 Women's (pregnancy) history and SBA use

Women interviewed said that their previous pregnancy history played a significant role in whether to use SBA services or not during labour and delivery. According to the women, those who had a shorter labour, felt less pain and had no complications during the last delivery were less likely to use SBA services, assuming that the same situation would apply the next time:

‘‘There was no problem and a very short labour for the first birth so I did not have any difficulty delivering at home.....I thought this time would be the same but it was more painful and a longer labour than the first one. I planned to go to hospital if labour lasted longer but the baby was born at six o'clock in the morning after 12 hours of labour’’ (Non-SBA user woman 6).

Another woman had a very short labour and no complications in the last delivery. She had hoped it would be the same this time but she had more difficulty including a longer labour than the last:

‘‘I had no problem for the first two births but this time I had a long labour and much more pain than the last two. I had severe labour pains for more than two days this time. I knew the baby was in the opposite position (breech). The leg of the baby appeared first and then my husband hired a van to go to the hospital’’ (SBA user woman 5).

Several women reported that they had faced some pregnancy related complications during their last pregnancy and said they were more likely to use SBA services during labour and delivery in the future. They had more concern about pregnancy related health. A woman who had complications in her last pregnancy described her experience as follows:

“I had gone several times for antenatal checkups..... I had problems in a previous pregnancy..... I had one miscarriage before this birth. When I knew I was pregnant then I went for monthly antenatal checkups. I had seven or eight antenatal checkups altogether before I delivered the baby in the hospital” (SBA user woman 16).

A5.1.3 Women’s education and SBA use

The study shows that education is one of the most important factors affecting use of SBA services. Generally, women are less educated in Nepal than men. The women in this study who reported less education and who married at an early age were less likely to be service users during pregnancy and delivery stages. Women who had dropped out of school at an early age tend to have less knowledge about safer pregnancy and delivery services. Other women also stated that educated mothers were more likely to use SBA services during delivery of the baby. One non-SBA user stated her views as:

“Girls are less educated in our society than the boys.....Daughters are married at a younger age than the son in the family.....When the daughter enters into puberty and menstruates for the first time parents are more worried about getting her married rather than sending her to school. Those who were married young and dropped out of school early do not have knowledge about safe delivery” (Non-SBA user woman 1).

Fathers-in-law and husbands also expressed their views about women’s education and its relation to safer delivery. According to one husband:

“The literacy rate among women is poor in this village and girls are married at a younger age than the boys. Women lack information especially for first births. They have difficulty sharing ideas due to shyness, lack of knowledge and teenage pregnancy” (Husband 2).

However, participants reported that over the last few decades, use of the maternal health service is increasing related to raised awareness due to expansion of education, communication networks and media coverage. One father-in-law stated:

“The use of maternal health services during pregnancy and delivery is increasing in the last few years because of education and expansion of communications and awareness.....The enrolment of girls in school is increasing and people have started to give importance to education for daughters (like sons)” (Father-in-law1).

A5.1.4 Women’s employment and SBA use

Women’s employment and income play a significant role in use of SBA services during pregnancy and delivery. The education level of rural women is low and a majority of the women interviewed reported that their main employment is unpaid housework. Some women who worked outside the home reported that they would be more likely to use SBA services compared to those who did not have paid work. One woman who had a paid job and earned some money stated:

“I had a paid job during pregnancy and I earned Nepali Rupees (NPRs) 150-200 a day.....I didn’t depend on anyone for money to go to the hospital for pregnancy checkups. I had saved some money to go the hospital for delivery of the baby” (SBA user woman 4).

Conversely, one woman who was involved in household work and did not earn any money stated:

“I did not work outside the home for money.....I did not earn any money during my pregnancy. I had to ask for money from family members to go to the hospital for antenatal checkups..... I did not like asking for money from others to go to the hospital for pregnancy checkups because I had to justify everything to them when asking for money” (Non-SBA user woman 6).

A5.1.5 Women's caste/ethnicity and SBA use

Some participants reported that caste and ethnicity play important roles in use of SBA services. Almost all interviewees reported that higher caste women (e.g. *Brahmin, Chhetri and Newar*) made more use of SBA services than lower caste women did (e.g. *Kami, Damai, Sarki, Pode and Suwnar, etc*). One father-in-law expressed his views as follows:

“There is a strong caste system in Nepali society called Thulo Jati and Sano Jati (upper caste and lower cast)..... If people know that some lower caste people, called Pnai nachalne (‘untouchable’) are working as a doctor or nurse people really don’t like to take service.....But this is changing compared with the past. There is still that kind of tradition in the village. The upper caste people do not allow lower caste people to come inside their home and touch things” (Father-in-law 1).

Women from lower castes tend to be deprived and less educated compared to those in higher castes including having less knowledge about pregnancy related services. Participants stated that lower caste people are poor and uneducated so they made less use of SBA services during delivery. One woman stated:

“Lower caste women do not have knowledge about where they can get pregnancy related services..... Mainly, lower caste women have a higher rate of home delivery without the help of skilled health professionals in this area because they are poor and uneducated” (SBA user woman 2).

A5.1.6 Women's position in the household and decision-making for SBA use

Women reported that a woman's position in the household was influenced by age and level of education, having a paid job, and that these influence decision-making in SBA use. A woman who had some earnings reported:

“In our community women's positions in household such as age, level of education and having a paid job and income, influence decisions whether to use or not use skilled delivery care.....I worked during pregnancy and earned some

money. I saved some money for hospital delivery. I did not have money problem to go to hospital for delivery..... I discussed in the family about going to hospital for delivery and made the decisions regarding delivery in the hospital’’ (SBA user woman 2).

Women who were living in a nuclear family reported that they were more likely to make decisions by themselves or in discussion with their husband regarding SBA service use. A woman who considered herself as a head of household living in a nuclear family system stated:

‘‘My husband was abroad for work when I was five months pregnant.....I was living with my daughters so I am the person in the family making decisions in the absence of my husband. I did not get any help from other family members because I was already living separately..... My parents-in-law came to my home only for ‘Narawan’ (naming ceremony) 11 days after the birth of my son. The rest of the time, they did not care about me. I never asked for help or discussed this matter with them (SBA user woman 10).

A non-SBA service user woman living in a nuclear family reported that she was involved in the decision-making regarding SBA service use, even though she had no income. She said:

‘‘I did not work outside the home for money.....I did not earn any money..... Therefore, I have to depend on my husband for everything though my husband asks me before doing something. Both of us discuss and decide what it is best to do’’ (Non-SBA user woman 1).

A5.1.7 Knowledge about the SBA services

Levels of knowledge about skilled care varied according to the education level of mother and related to her age at marriage. Women reported that use of SBA is highly related to knowledge and awareness. Those who had less than five years schooling and married as teenagers reported that they lacked knowledge about safe pregnancy and delivery. Such women reported that they had no idea where they could get

maternity services and how to access them. One of the women who had married young said:

‘I was married early, at the age of 16, and delivered my first baby when I was 17 years old.....I had no idea where I could get maternity services at that time..... I had urination problems after eight months of pregnancy then my father-in-law took me to hospital for checkups. After ultrasound in the hospital, I was told, I am carrying twins then my father-in-law asked for a hospital delivery to be safe’’ (SBA user woman 11).

The influence of family and friends played a role in the use of SBA services by increasing the access to knowledge about safe delivery. Lack of knowledge about safe delivery and the availability of services were contributing factors in SBA use. A woman shared her experience:

‘I had no knowledge about safer maternity services..... One of the sisters in my neighbourhood suggested to me to go to hospital for antenatal checkups when I was six months pregnant but I had no idea where and who I had to meet in the hospital’’ (SBA user woman 3).

As Nepal is a male dominated society, women have less involvement in social activities and therefore some women have less chance to communicate about different issues (especially reproductive health related matters) both within and outside the home. Some women have no idea what kind of maternity services are available in the country. Due to social and cultural beliefs, first time mothers in particular feel embarrassed during pregnancy and therefore did not discuss openly about pregnancy related issues. A husband stated:

‘Women are less involved in communications and outside movements in our community. They have less knowledge about the maternity services of the country..... Especially women lack information about the safer maternity services for the first time birth. In addition, they feel embarrassed during pregnancy, it makes it difficult to discuss what kind of maternity services they need’’ (Husband 2).

A5.2 LOCATION AND INFRASTRUCTURE AFFECTING SBA USE

In this section, the findings about location of maternity services, and how these services affect SBA use are presented. Factors affecting availability of SBA services including transportation, road conditions and distances, infrastructure of the health facilities and choice and access to SBA services at village level as well as the direct and indirect costs associated with hospital attendance are described.

A5.2.1 Transportation services, roads and distances to the health facilities

Rural women living in remote villages face numerous problems in accessing appropriate maternity care during pregnancy and delivery. Women reported that limited or lack of public transport services and poor rural roads make SBA service use difficult. The timing of the transport and distance to the health facility added further difficulty and costs to use of services particularly during labour and delivery stages. A woman reported her experience as:

“The road and transportation services are the main problems in going to the hospital. The bus service is not regular.....Jerking made it more difficult and painful to travel by bus on this poor road. I thought I might die on the way to hospital due to the poor road condition. The road is so bad it is easier to walk rather than to go by bus”..... (SBA user woman 11).

Similarly, another woman described her reasons for non-use of SBA in her last delivery:

“I delivered the first two babies in hospital but there was a problem going to hospital due to the transportation.....Men carried me in a Jhulungo (a traditional stretcher made from wood and blankets); I really don't want to go to hospital like that. The hospital is too far to go..... It takes nearly 3-4 hours to reach so I decided to deliver at home this time” (Non-SBA user woman 7).

Mothers-in-law and fathers-in-law reported that availability of the rural health service is much better now compared to the past but is still not sufficient. A mother-in-law reported:

“Compared to the past there are more facilities now than in our time, like roads and transportation, phones, hospital and doctors..... But there are still some problems such as the hospital is too far to go, there is no regular bus service and road conditions are poor” (Mother-in-law 3).

Similarly, a father-in-law expressed his view regarding the access to maternity services:

“My son and daughter-in-law are living in the city. That is why all of my grand children were born in hospital. The health facilities are near them and it is easier to go to the hospital than in the village” (Father-in-law 1).

A5.2.2 Time of labour and delivery season

The time of the day and season of labour affect travel to the health facilities which constitutes another barrier to SBA use in the rural areas of Nepal. Participants, including SBA users and non-users, mentioned time of labour and season of the delivery as influencing SBA service use. If labour occurred in the evening or at night there were particular problems going to the hospital. As one woman stated:

“There is a big problem at night-time with transportation to go to the health facility..... There were no options but to wait until next day if labour occurred at night..... There were no regular bus and transportation facilities at all in the rainy season because the rain caused landslides” (SBA user woman 1).

Similarly, one of the women described her circumstance for SBA use during labour and delivery:

“My labour started at five o’clock in the evening. There was no vehicle going to the hospital in the eveningI had no option but to wait until the next morning.

Luckily, the baby was born at 9 o'clock at night after four hours of labour without anyone's help..... If there had been transportation, I would definitely have delivered in the hospital'' (Non-SBA user woman 8).

Several interviewees mentioned that there was no transportation at night or in the rainy season and in the case of emergency. A husband stated:

“The labour started all of a sudden four weeks earlier than the expected due date. It was the rainy season and night-time. We were walking to the hospital because there was no transportation facility at all in the evening and the baby was born half way to hospital at night” (Husband 3).

A5.2.3 Direct and indirect costs of services in SBA use

Many participants reported that costs are a significant constraint in seeking maternal health care services during pregnancy and delivery. These costs are not only the direct costs of services but also involve indirect costs. Some women, mothers-in-law, husbands and father-in-law interviewed reported that both direct and indirect costs have a significant effect on the use of SBA services. The latter include loss of earnings, food and accommodation for person accompanying women to hospital. Physical access to the services also plays an important role in their use. Women commonly reflected these views during the interviews. One woman said:

“The cost of transportation is high and it is not available in time even if you are ready to pay. Before getting to the main road, a woman has to be carried for more than 30 minutes. At least 2-3 people need to go to hospital to care for the newborn and mother..... There are extra burdens of food, accommodation and other matters for hospital delivery. If you deliver at home, it is easier and cheaper” (Non-SBA user woman 6).

Some of the women mentioned that it was difficult to find a large sum of money for childbirth in hospital even if they got some incentive from the government towards hospital delivery. A woman stated:

‘I spent about NPRs 6,000 (£48.50) including transportation costs for the hospital birth.It is expensive and difficult to manage SBA service use for poor people like us.....My husband did not work for a week due to the hospital delivery. If the hospital were near, he would not lose his wages for a week. We have to buy everything there even hot water for drinks. The hospital delivery is expensive though the government gave NPRs 1,000 (£7.50) incentive towards SBA service use’’ (SBA user woman 3).

Likewise, a husband described both direct and indirect costs of service for hospital delivery:

‘Delivering the baby in the hospital is more expensive than the home.....Due to the distance and poor rural road, more than half of the costs go on transportation..... The cost of delivery in hospital is nearly NRs Six to Seven thousands (£48-56.00). The average monthly income is eight to nine thousands Nepalese rupees if you work as a labourer. Not all households can afford that big amount of money for childbirth. There are extra costs for hospital delivery, like food, clothes, accommodation for persons who accompany the mother’’ (Husband 2).

A5.2.4 Infrastructure of the health facilities

Of the women who used SBAs for delivery of their babies in the public hospital infrastructure of the health facility significantly affects their views with regard to use of SBA services. Poor infrastructure in the health facility (e.g. lack of beds for sleep during labour and after delivering the baby, poor sanitation/hygiene including poor waste disposals, level of noise or lack of light and long waiting times) make women less likely to use SBA for the next delivery. A woman reported that:

‘The labour and delivery room of the hospital was dirty, unclean, and smelly; blood and water spots were lying on the floor..... There were no lights in the room and not enough running water for washing and cleaning.....The labour room in the hospital was crowded because of too many women. I slept on a bench on the first night and another woman was on the floor. I shifted to another bed after birth because of a bed shortage. I give it to another woman the next day..... I waited

outside the room in the corridor for a few hours before being discharged from the ward'' (SBA user woman 5).

Poor service quality for various reasons and lack of resources also discouraged women from use of SBA services in the future. A husband reported:

‘‘The public hospital is always crowded. There were not enough beds in the wards for women to sleep after childbirth..... There were 6-8 people in a small room including visitors..... Lack of running water and electricity are common problems in the hospital’’ (Husband 2).

A woman who delivered in a private hospital reported that it provided a better service:

‘‘I delivered my baby in the private hospital. I heard from my friends who delivered in the public hospital that it has not got good facilities.....I feel the private hospital provides better services, such as good care, sanitation and other facilities, than the public one..... However, private hospital are expensive and not everyone can afford the private services’’ (SBA user women 8).

A5.2.5 Lack of choice and access to delivery services in the village

The availability and choice of SBA services at the local level are important factors affecting use of maternity services during pregnancy and delivery. Participants stated that they had no genuine alternative health facilities for labour and delivery of the baby at the local level. Traditional birth attendants and community health assistants are the only persons supporting women during labour and delivery in the village. Some participants reported that traditional birth attendants are not qualified and cannot provide quality services. One woman said:

‘‘There were no alternative maternal health services for delivery in the village. There is a private medical shop run by a CMA (Community Medical Assistant). She did not have sufficient knowledge about delivery though she helps in a normal situation.....There is a Health Post (HP) in the centre of the village.

*However, I heard from others that there are no qualified nurses (midwives).....
If women have any problem they have to go to the city either to the public or private
hospital for delivery of the baby'' (SBA user woman 1).*

Similarly, a non-SBA service user woman said:

*‘‘Umma If there were safe delivery facilities in the village, I would go there but
there were no such safe delivery services in this village. We had no options except
going to hospital in the city’’ (Non-SBA user woman 4).*

Participants raised the issue of availability of local health facilities and the quality of the health service providers. A father-in-law mentioned;

*‘‘There is a local medical shop in the centre of the village. A woman is providing
this service. She is not qualified for delivery though she assists in normal cases.
There is a health post in the village but no qualified staff for delivering the baby’’
(Father-in-law 1).*

Participants reported that there was no choice of SBA facility in the village. If someone wanted to use SBA service, she had to go to hospital in the city. Women reported that, if there were a choice, they would choose to deliver the baby at home with the help of a trained health professional. Women mentioned that their first choice was home birth but that they would go to the hospital for risk reduction if there were complications during labour and delivery. Women said the issues associated with going to the hospital were costs and inconvenience due to the distance to the health facility. They said that if there were an SBA facility in the village, it would be cheaper, less time-consuming, and easier for all women. One of the women reported:

*‘‘In my opinion home is a good place for delivery but hospital is safer in the event of
complication though there are several burdens of going to the hospital including
transportation and money..... Laugh.....you could buy Khurak (nutritious
food) with the money spent in hospital but there is no choice for safe delivery in this
village’’ (SBA user women 4).*

Women who delivered in hospital reported that they would choose home for delivery in the case of normal conditions if there was a choice at the local level. The reasons for choosing home was good care, good food at a time they wanted to eat, reduced cost, better communication and relaxed environment. On the other hand, some women mentioned that the reason for choosing the hospital was just for safety. They said complications are unpredictable during labour and delivery and there were no safe delivery options in the village, so they would need to go to hospital in the city in case of emergency. One woman said:

‘Hospital is a better place for delivery than home in the case of complications.....If you need to have an operation or blood transfusion and other emergency services, you can get them in hospital but these facilities are not available at home. It is a more relaxing environment at home because there are family members and relatives at home for care and you can get food at a time whenever you like..... so I would prefer home in normal circumstances but there was no choice in this village for safe delivery’ (SBA user woman 3).

Another non-SBA service user woman commented on the lack of services in the village:

‘I delivered both of my sons at home.....It is dangerous to deliver at home without help of skilled persons but what could we do. There was no choice in the village..... Laugh..... I was lucky, nothing bad happened to me. When I remember my very long labour, I regret the decision made to deliver at home..... If something went wrong, I could have died’ (Non-SBA user woman 1).

During the interviews, the participants emphasised the need for a functioning HP with trained health professionals in the village. Participants suggested that if the services were easily available in the local area it would help to increase SBA use during delivery of the baby. One woman said;

‘It would be better if there were a Health Post with trained doctors and nurses in the village..... There are many problems going to the city due to poor road

conditions, transportation, distance and costs. If the facility was nearer to the village, it would be easy during the night-time and in an emergency'' (SBA user woman 13).

Women reported that the availability of SBA services at local level could increase SBA use through reducing the time taken to travel long distances to a facility. They also mentioned that access to reliable transportation services could help timely access to a service. If there were trained health personnel available, women could also take advice from them if complications arose during delivery. A non-SBA user woman stated:

‘‘It would be good if there was a Health Post with qualified nurses in this village.....If the facility is near it is easier to go. If there were some trained nurses or midwives in the village women could ask them for advice about safe delivery..... After I delivered the baby, I hung the trowel for two hours to bring the placenta out. If there were qualified health people, they would stop such kind of harmful practices’’ (Non-SBA user woman 8).

Key informants also reported that distance to the health facility and factors related to the health system are barriers to choosing SBA use. A father-in-law said:

‘‘The government may not be able to provide facilities in every home from home; we are not hoping for that.....But it took nearly 3-4 hours to reach the health facility in the city from this village. If there were a HP with qualified persons, it would be cheaper and less time consuming..... Women could get services easily in an emergency and at night’’ (Father-in-law 1).

A5.3 CULTURAL AND GENDER AFFECTING DECISION-MAKING IN SBA USE

This section presents the gender factors affecting decision-making regarding use of SBA services and reflects cultural and traditional norms regarding the role of family members (for example, mothers-in-law) as well as other gender factors in SBA use. Attitudes and gender of SBAs; discrimination faced during service use; and the political situation of the country are also discussed in this section.

A5.3.1 Family living arrangements and decision-making in SBA use

Family living structure may be a proxy indicator for decision-making processes related to maternity service use. Women living in a nuclear family (household with two related adults of opposite sex and normally only two generations) are more likely to be involved in decision-making relative to women living in an extended family (households with two/three or more related adults and normally more than two generations). A woman who lived in an extended family said:

“It was family pressure to have a baby.....My mother-in-law always said to me that we have no children in our family for a long time. She wanted to see a grandchild. She asked me to give her grandchildren all the time..... We had planned not to have a baby for a couple of years. After pressure from the family, both of us (husband and myself) discussed and planned to have a baby at this early age” (SBA user woman 2).

Likewise, a non-SBA service user woman living in an extended family system mentioned her lack of participation in decision-making for SBA service use:

“My husband was abroad during the delivery time and my parents-in-law didn’t support me well.....They made all the decisions about service use without asking me. I had to get permission from mother-in-law for whatever I wanted to do. I never did anything without asking her” (Non-SBA user woman 8).

A mother-in-law reported her view regarding the role of women in decision-making for SBA use in the family. She said most Nepalese people live in extended family arrangements with two or more generations. She considered that senior people (especially the mother-in-law and father-in-law) have a bigger role in decisions to use SBAs than the pregnant woman herself:

“There is a big role for family members in our society where most people live in an extended family arrangement. The household head (generally a man) has a big role in decision-making. They arrange money and other matters and the mother-in-law especially plays a big role in overall care during pregnancy and after delivery of the baby” (Mother-in-law 4).

A5.3.2 Gender factors in decision-making regarding SBA use

Gender plays an important role in decision-making in Nepali society where men are considered as more important than women socially and culturally. Participants reported that male family members had more influence in decision-making than females. An SBA non-user woman reported on the role of gender in decision making in maternity service use:

“Men are the main breadwinners in most households in our society. In general, women do not work outside the houseso they have to depend on the husband’s income.....People listen to men’s voice more than women’s in this society. If you have any problem during labour and delivery, if there is an adult man in the family you can get more help than a family who has no adult male member. If you need to borrow money people trust a man more than a woman..... Our society is male dominated. If there is a male member in the family, women also feel more secure” (Non-SBA user women 1).

A husband mentioned that labour and delivery is a “women’s matter” so mothers-in-law had a significant role in decision making for service use. However, in Nepalese patriarchal society men also have a major say in decision-making relative to women. He elaborated:

“Labour and delivery is a women’s matter so mothers-in-law can play an important role in making it easier..... However, in our patriarchal society men have a big voice in the family. The men have more value than the women in this society in many ways..... Most families have a male-headed household so he has a vital role in decision making for health seeking behaviour and many more matters such as education, travel, and work” (Husband 3).

A5.3.3 Husband’s employment and income in decision-making for SBA use

Women whose husbands had paid employment had a greater chance of involvement in the decision-making for service use than women whose husbands did not have paid employment. One woman described her husband’s income and the impact on her decision to use SBA services:

“Obviously, there are positive impacts in the family if a husband has a paid job and independent income.....The family members listen to your voice if your husband has some income.....The husband can persuade his parents in decision-making for SBA service use if he has a job and income” (SBA user woman 5).

Conversely, the influence of husbands in decision-making if he has no paid job or independent income during pregnancy, labour and delivery was commented on.

“My husband was unemployed when I was pregnant. He had no income at that time.....He had no vital role in decision-making in the family because he just had to follow whatever his parents asked him to do..... If he had had paid employment and been independent, definitely he would be involved in decision-making” (SBA user woman 11).

As mentioned earlier, Nepal is a male dominated society so husbands have a higher position not only in the family but also in the wider society compared to the females. Men are the main earners and household heads in most families and if they have better education and paid work, there is a big role for husbands in decision-making concerning SBA use during the delivery.

“Generally, men have a higher position in our society..... Husbands have a high position in the family so there is a direct effect of the husband’s job, income, and education in decision-making..... It has effects not only in the family but also in the community. People in the community listen to men more if someone has a good education and income” (Husband 2).

A5.3.4 Cultural and traditional beliefs and SBA service use

Cultural and traditional beliefs affect skilled maternity service use. Some social norms and beliefs discourage women from seeking appropriate care during delivery and after childbirth. These include that childbirth is a normal process not requiring any help from others; that pregnancy is a private matter; and that the 10 days after childbirth is a ritually polluted period. Some of the participants suggested that the views of family members, particularly mothers-in-law, restricted women’s access to care, owing to their cultural and traditional beliefs. The mother-in-law believed that a daughter-in-law should follow tradition as had been done in the past: experience of traditional birth attendants’ use in the past still plays an important role in restricting SBA use now. A woman reported her recent experience of help from a traditional birth attendant as follows:

“The placenta did not come out for two hours after the delivery. The Traditional Birth Attendant asked me to hang a trowel over the placenta for two hours.....My mother-in-law made me vomit by putting hair in my mouth and asked for Pani fukara khane (drink of healing water and mantra by traditional healer). I tried all those things but they did not work..... It was hard to do all those things. Later the TBA inserted her hand into the vagina and took the placenta out” (Non-SBA user woman 8).

The older generation of women, particularly mothers-in-law believe that pregnancy and childbirth is a normal process not requiring special care. They had neither experience of professional care nor a tradition of going to the hospital for delivery of the baby. One mother-in-law stated:

“There was no tradition of going to the hospital for delivery in our time..... Women delivered all their children at home without anyone’s help. We did not even know what a doctor or nurse was but these days women are prepared to go to the hospital when labour starts..... We were working all day and delivering babies at night without anyone’s help. Some of the women delivered the baby in the jungle while collecting firewood and grass for cattle ” (Mother-in-law 2).

Mothers-in-law mentioned that cultural and traditional beliefs were strong in the past. However, there have been changes over time regarding the care of pregnant women and the availability of maternity services. In the past, there was no access to modern services and women had no options except to follow the traditional practices. A mother-in-law described changing her view over time in relation to SBA use:

“Cultural and traditional beliefs were high in our time.....I had a problem with expelling the placenta for my fifth birth. It did not come out for three days. At that time people gave me healing water to drink. I tied a trowel over placenta, tried to vomit by putting hair into my mouth, and tied a rail ticket to my back but all those did not work.....There were no doctors at that time so these were common practices during delivery of the baby but nowadays women go to hospital if they have such problems ” (Mother-in-law 5).

Some husband reported that despite the increase in education status and age at marriage over recent years there are still other factors affecting SBA use. A husband stated:

“I live in an extended family so my father makes final decisions though we discuss things in the family beforehand..... Regarding delivery matters, mothers-in-law also play a significant role in decision-making. It also depends on support from family member, finance and time of labour in the day and availability of transport to go to hospital ” (Husband 2).

A5.3.5 Mothers-in-law influence and decision-making in SBA use

Mothers-in-law have a strong influence in SBA service use in Nepal where most people are still living in extended families. In Nepali society, a senior woman has a higher position in the family than a younger woman so she has power over her daughter-in-law's decision-making and management of pregnancy and childbirth. In the family hierarchical system, older women, especially mothers-in-law, are responsible for managing household matters. Mothers-in-law also have control of resources in the family. Furthermore, traditionally and culturally, a mother-in-law has the main responsibility to care for her daughter-in-law in pregnancy and childbirth because they are experienced in such matters. One mother-in-law stated:

“Her first and second babies (addressing daughter-in-law) were born at home without any difficulties.....Therefore, I decided not to take her to hospital for the third one. We had hoped she can deliver like before but she had a long labour this time..... She had more pain and a more difficult labour this time than the first two” (Mother-in-law 1).

Participants, irrespective of the socio-economic circumstances and living conditions (whether in a nuclear or extended family) reported that mothers-in-law had a big influence on SBA use during pregnancy and for delivery of the baby. Women reported that mothers-in-law are experienced so they can discuss pregnancy related problems with their mother-in-law. Mothers-in-law mostly arrange household duties while men work outside the home. A woman stated:

“In our society, concerning maternity services.....for example, antenatal checkups or childbirth, the mother-in-law has a big influence because they have more experience about pregnancy and delivery..... It is easier to share problems with a mother-in-law than with other members in the family. Husbands are mostly working outside the home so they do not know much about pregnancy matters. Mothers-in-law can provide good food, rest and other care as they have more responsibility inside the house” (SBA user woman 15).

Women reported that mothers-in-law have power in decision-making and control over the resources in the family. As a senior woman, a mother-in-law usually has a good relationship with her husband and her son and this can be helpful in guiding and controlling her daughter-in-law and other junior family members. Relationships between mother-in-law and daughter-in-law, including mother-in-law's own delivery experience, all influence the use of SBA services during labour and delivery. A woman said:

‘Mothers-in-law have a big influence regarding maternity service use during pregnancy and delivery of the baby..... I am very unlucky in this case; my mother-in-law was not supportive or helpful. She expected me to do more work even in the pregnancy stage. If I cannot manage to work she shouts at me saying ‘we were also pregnant like you’ you are lazy.....you want to sit every time, who will give you food without work?.....She said; we worked hard in our time even during pregnancy..... I have to get permission from her whatever I want to do, even to go to the hospital for antenatal checkups..... I did not go out that much unless it was extremely necessary because of her. If I go by myself, she scolds me when I come back’ (SBA user woman 6).

Another woman reported that the relationship between mother-in-law and daughter-in-law was helpful to her regarding SBA use:

‘I got every help from my mother-in-law. She was always happy even if I delivered up to six times. I gave birth to five daughters continuously but she did not complain, misbehave, or say bad words to me. She always supports me in work, cares for me well, and gives me good food and rest during pregnancy and after delivery’ (SBA user woman 12).

Likewise, other non-service users reported that mothers-in-law had a significant influence over their decisions during pregnancy and delivery of the baby. One said:

‘There is a big influence of mothers-in-law for use of SBA services during pregnancy and delivery time. They can help care for women as they have already had lots of experience about pregnancy.....I got every support during pregnancy

especially from my mother-in-law.....They can encourage going for antenatal checkups. Mothers-in-law can provide a more relaxed environment during pregnancy because they have more power as the senior member in the family''
(Non-SBA user woman 7).

Several women reported that the mother-in-law's position, power in the family and control over the daughter-in-law affected SBA use during delivery. Most mothers-in-law follow the traditions that they have practised in the past and want to follow that tradition in relation to their daughter-in-law. One woman said:

‘‘If my mother-in-law did not give me permission I would not go to the hospital for delivery of the baby.....There is no chance to do whatever I want without her permission. I have to ask her before doing something. If she disagrees, I just listen to her..... She expects me to work all the time. She has power and a strong position in the family as a senior person..... Whatever she did in the past she wants to continue that tradition. She wants to control her daughters-in-law in that way’’
(SBA user woman 13).

None of the mothers-in-law interviewed had any experience of using SBAs during pregnancy and delivery so perhaps they have different perceptions of safe delivery and would expect daughters-in-law to follow suit. Some younger mothers who were from higher socio-economic and educational backgrounds perceived the use of SBAs as important for both the health of the mother and the newborn, as complications are unpredictable. A woman stated:

‘‘My mother-in-law always talked about things in her time, but times have changed. It is not like before. She described hard work during her pregnancy and did not have any troubles in delivery.....If you work hard during pregnancy, it will be easier for labour and delivery. She never had antenatal checkups with health professionals. She suggested that pregnancy is a natural process and there is no need for special care..... She said she delivered all her children at home without anyone's help’’ (SBA user woman 11).

A5.3.6 Attitude of skilled birth attendants providing service

Women mentioned that the positive behaviour of the SBAs during labour and delivery would encourage women to use the SBA service. However, most of the women who had delivered in the public hospital with help of SBAs commented that the staffs were rude, impolite and disrespectful to women during labour and delivery. One of the SBA user women described her experience:

‘I stayed in hospital for one week after I delivered the baby. I found that some of the nurses were very mouthy..... They did not understand labour pain. They use very rude language saying that they are not going to have a baby in their life. They did not say anything bad to me; maybe I was so weak due to an operation..... I heard that a nurse told a woman next to me that it is easy to sleep with the husband but why are you crying now?another woman asked for help to change bed sheets, but a nurse told her to do it by herself. However, a few of them are very kind and polite too’’ (SBA user woman 6).

Some women reported that the poor behaviour of the SBAs (e.g. lack of care of the women, impolite and uncooperative behaviour) discouraged both women and their family members from using SBA services. One husband said;

‘There is a problem in the public health sector everywhere in our country..... The health professionals’ behaviour to people is rude and impolite. I saw a woman in hospital crying due to labour pain, a nurse came and shouted at her saying stop crying; you are not the only woman in this delivery room but there are other women too..... The doctors did not care about the women; they visited the whole ward within 15 minutes in their round. There was a considerable scale of negligence in hospital for providing the services’’ (Husband 2).

A5.3.7 Gender of SBAs during service use

Women were disinclined to use SBAs partly because of the male gender of some of the SBAs, usually doctors. Women felt uncomfortable and embarrassed about delivery with the help of a male doctor even though they felt they needed help.

Women mentioned that it would be more comfortable if there were female SBAs to help during labour and delivery. One SBA user woman elaborated:

“The male doctors were there helping with delivery..... Laugh..... laz ta lagyo ne tara ke garne (I feel shy but what could I do) the pain was bigger than the embarrassment at that time..... I closed both eyes and did not look anywhere when male doctors were helping with the delivery..... I thought it would be better if there were female doctors to handle delivery. It would be more comfortable to talk about your problems and show your body parts to female doctors” (SBA user woman 1).

Some women reported that they found male SBAs were considerate and respectful though they would have preferred female SBAs. They said they felt embarrassed and could not ask questions openly because of the male doctors. One of the women explained her experience:

“The male doctor behaved well towards me, I had no problem with him although I was in a panic during the antenatal checkups because..... It was difficult to discuss problems with a man in a closed room..... I feel embarrassed when a male doctor asked me to pull up my blouse and touched my tummy while checking” (Non-SBA user woman 2).

Several participants reported that male doctors provide maternity services during pregnancy and the delivery of the baby in the hospital. Gender is a big issue in SBA use in the hospital particularly for the first time mothers from the rural area. A husband stated:

“There was a big issue of gender of the health service providers.....Most of the male doctors helping women during delivery make women uneasy especially first time mothers from the village” (Husband 3).

A5.3.8 Discrimination during SBAs service use

Discrimination, based on the status of women, could discourage use of SBA services during pregnancy and delivery. Some women interviewed reported that there was no discrimination based on caste/ethnicity and socio-economic status of women, although poverty, costs and lack of education are significant factors affecting the use of SBAs by women in this village. One of the lower caste SBA user women stated:

‘I did not find any discrimination based on caste, poverty or wealth and educational status during my stay in hospital for delivery.....In this village, Dalit (lower caste) people are poor and uneducated..... They have to live on day-to-day earnings. They cannot afford the services so Dalit have less hospital deliveries than upper castes’’ (SBA user woman 2).

Other women reported discriminatory behaviour from SBAs during service use. The women reported that some doctors were working for both public and privately owned facilities. The doctors who worked in both hospitals asked women to go to the private health facility for better and faster services than in the public hospital. One of the women stated:

‘Some doctors are working in the private hospital and government hospital too; I did not find good behaviour from them.....They asked to me go to the private hospital for better and faster services instead of coming to the public hospital..... They did not care for the women. They did not even talk politely if you asked some questions’’ (SBA user woman 16).

Participants reported that they thought that discrimination was higher in the past based on the status (e.g. caste, religion and wealth) of the women and health service providers. However, many participants mentioned that times have changed and discrimination has less effect at present for SBA use. A mother-in-law said:

‘People had deep rooted traditional beliefs about caste and religion in the past. This had a negative effect on use of maternal health services during pregnancy and delivery.....People did not want to go to hospital if there are not recognised

doctors or nurses working there. Thus if some knew that a Tallo Jat (lower caste) person was working as a health professional people hesitated to go for services from them.....Discrimination was based on poverty, wealth and caste/ethnicity and religion in the past but these days this has a very low effect though people still follow such traditions in the village'' (Mother-in-law 1).

A5.3.9 Political situation of the country

Politically Nepal is in a transitional phase following a ten-year long Maoist insurgency and after entering into a republican state. The struggle for power between political parties causes political instability. Different groups have organised frequent strikes to meet their demands. Participants reported that the country's political situation is a barrier to better health care services. For example, frequent strikes and the closure of the transportation system caused additional barriers to reaching the hospital in time if labour occurred on strike days. A woman stated:

‘‘The health facilities are too far from here, it takes more than three hours to reach there. There is no ambulance facility available in an emergency. The political parties organised frequent Nepal bandhas (strikes) which made it more difficult to go to the hospital if labour occurred on that day’’ (Non-SBA user woman 4).

Similarly, another woman commented on the effect of the political situation on the country during labour, delivery and after childbirth:

‘‘I stayed two nights and a day in the hospital after I delivered the baby.....On the day of discharge from the hospital there was a Nepal Bandha (strike) organised by the political parties and no transportation services at all due to that..... We stayed with a neighbour in a rented room and went back home the next day’’ (SBA user woman 3).

Likewise, one mother-in-law reported:

‘‘The strike organised by the political party made it difficult to go to the hospital if labour occurred on that day’’ (Mother-in-law 1).

A5.4 WOMEN'S PLANS, EXPECTATIONS AND PREFERENCES REGARDING SBA USE

This section presents findings regarding the plans, expectations and preferences of women in relation to SBA use. Findings are presented about women's planned use of SBA, delivery preferences, women's feelings during pregnancy and plans for SBA use in future.

A5.4.1 Women's expectation before SBAs service use

The women were asked about their expectations relative to their experiences of childbirth and how this affects future decision about service use. Women had a positive expectation about quality services before SBA use. Women expressed a desire to have staff with positive attitudes. These include giving reassurance and encouragement during labour and delivery, providing a faster service (e.g. less waiting time for being seen by SBA or getting a bed), with co-operative and polite behaviour from the SBAs. However, they found things different in reality. One of the SBA user women reported:

“I had hoped for faster services in the hospital. I had thought that the health personnel would behave nicely and politely but I found the reverse of what I hoped.....I found most of them were impolite and rude.....You can get more treatment in hospital than at home in case of complications but they did not care about women in a normal situation. Some of the doctors and nurses were not experienced” (SBA user woman 9).

Similarly, a non-SBA user woman reported her expectations before service use:

“There was big queue of women in the hospital when I went for an antenatal check up. I found it was different from what I had hoped before going to hospital for service use.....There were no female doctors. The male doctors were there to do check-ups..... The doctors pressed my tummy hard and I had pain due to that” (Non-SBA user woman 1).

A5.4.2 Planned use of SBA

Women, irrespective of socio-economic conditions, had made some plans and preparation for delivery. Women reported that they saved some money in case they needed to go to the hospital for delivery of the baby. First time mothers aged 20-29 years old planned more for SBA use relative to teenage mothers and mothers aged more than 30 years.

Participants from the families with better socio-economic status had more planned SBA use. Some women reported good support from family members (e. g. mother-in-law and husband) and help for them had more planned SBA use. Some mothers from poor status families and lower caste groups reported less planned SBA use. Women who had experienced complications in a previous pregnancy had planned SBA birth. One of the women said:

“Yes, I had planned to go to hospital for delivery.....I had problems with my first pregnancy and I was not sure what will happen this time so I already planned for hospital delivery. If I had no problems in the first delivery, I might not be going to the hospital for delivery this time” (SBA user woman 9).

Women who had a normal delivery previously reported that they were not planning SBA use, assuming the conditions remained the same as last time. One woman stated:

“I delivered at home for the first time without problems so this time I had hoped it would be the same. That is why I did not plan to go to the hospital for delivery. However, my husband and I discussed going to the hospital if any problem appeared including long labour” (Non-SBA user woman 3).

Women who were aged more than 30 years and/or higher birth order mothers and those who had no complications in previous delivery reported that they did not plan to use SBAs for delivery. However, some women mentioned that they used an SBA due to feeling weakness even if they had no initial plan for SBA use. A woman stated:

“I had not planned go to the hospital for delivery if everything remained normal.....I felt unwell as the delivery date came nearer and nearer then I decided go the hospital for delivery..... I think my age and number of children caused weakness this time. I did not feel like this for previous births” (SBA user woman 4).

Timely access to services was a problem even if women had planned SBA use during delivery. One husband reported that:

“My wife and I had planned to go to the hospital for delivery but the baby was born four weeks earlier than the expected due date..... Suddenly, labour occurred in the evening and she started bleeding then we rushed to the hospital...” (Husband 3).

A5.4.3 Delivery preferences

Women had varying experiences and perceptions regarding the choice of SBA use during labour and delivery. Participants reported that the idea of using the SBA was not very important unless there were complications in pregnancy. Women preferred to deliver at home if the pregnancy was normal. Furthermore, they stated that the reason for preferring a home delivery was that going to hospital involved many burdens to arrange things (both direct and indirect costs) and travel on poor roads. A woman stated:

“I would prefer to deliver at home because there are loads of stresses involved in hospital delivery e.g. transportation, road and money.....At least, two people need to go to hospital to care for mother and newborn. There is a problem of arranging food and accommodation for everyone in hospital..... Delivery in the hospital is more costly than at home. If you delivered at home, there were no extra burdens” (SBA user woman 8).

Some women participants mentioned that they would prefer to deliver at home if there was an SBA available during labour and delivery but there was no access to skilled health providers in the village during this time. A woman stated:

‘‘It would be good to deliver at home if there were some trained health people available. There are only TBAs and older women to assist in delivery of the baby in the village.....They have no formal training or medical knowledge about complications so they can follow harmful practices..... It would be better to have a skilled person but it is not possible in this village’’ (Non-SBA user woman 7).

Some women mentioned preferring home delivery because of the gender of SBAs in hospital and the quality of SBA services. A woman shared her experience:

‘‘I prefer delivery of the baby at home. There were male doctors helping to deliver that made me embarrassed even during the labour pain.....The other thing is they cut the vagina and stitch it.....laugh.....if you deliver at home it may not be so..... I had more pain from the stitches and did not get well for more than one month after birth’’ (SBA user woman 1).

Some women reported that they preferred to go to the hospital giving the reason as more safety in hospital, in case of complications. They frequently mentioned fear of different traditional birth practices and high risk at home, as there was no SBA and modern health facility if needed. One of the women stated:

‘‘I prefer going to hospital for delivery. There were no trained professionals for delivery at home in the village..... Different women came to our home and suggested different practices for delivery based on their experience. I really do not like that.....If you go to the hospital; you are safer than at home..... There are health facilities like health professionals and equipment for treatment but nothing in the village. There was high risk in delivering at home’’ (SBA user woman 2).

Older generation respondents (e.g. mothers-in-law and father-in-law) mentioned that use of SBAs during delivery has been increasing over the last few years. In their time, there were no modern facilities such as hospitals and doctors so all of the women delivered at home without anyone’s help or with the help of a TBA. TBAs had neither training nor knowledge about safe delivery. A mother-in-law who

considers herself as a TBA reported that she did not recommend that other women should work as a TBA without proper training. She prefers women to go to the hospital but sometimes they have to help a woman deliver the baby in the community. She said:

“It is too scary to help in delivery without training but I do not do anything if there is a high-risk situation.....I ask women to go to the hospital as soon as possible for safety..... No, I do not recommend other women to do such work without training because there is danger to life if something goes wrong with delivery but we need to help in the community sometimes” (Mother-in-law 2).

Some women reported that family, friends and neighbourhood women who had already delivered with the help of an SBA had a big influence on SBA use. A woman said:

“I knew about safe delivery from neighbours and friends..... The neighbourhood sister and friend of mine who delivered babies in the public hospital suggested that I go to the hospital for delivery of the baby. They suggested it is better to go to the hospital for antenatal checkups as well” (SBA user woman 2).

However, one mother-in-law commented on her perception of SBA use and said that pregnancy is a natural process with no need for special care during that period.

“I delivered nine children at home without anyone’s help.....I never saw doctors for delivering a baby in my lifetime..... Nowadays women already know about the sex of the baby in the womb whether it is boy or girl. Today’s women consider birthing a baby is very difficult but it is a natural phenomenon so there is no need to worry” (Mother-in-law 3).

A5.4.4 Privacy and confidentiality matters during delivery

Women reported that the difficulty of maintaining privacy and confidentiality is another barrier to SBA use. Women reported that this was a source of shame. They were shy about showing body parts to other people, especially to males (e.g. legs

above the knee, arms and genitals are exposed during vaginal examinations). Some of the women interviewees (both SBA users and non-users) said they were unwilling to go to the hospital due to fear and a sense of shame. It was shameful to show body parts to others and embarrassing when the doctor touches the body during labour. In addition, the hospital room was open with no curtains and no way of maintaining privacy after the baby was born. A woman described it thus:

‘‘The male doctor inserted his hand into my vagina and other nurses were standing looking at that, Pause for a while..... maybe they were in training.....I feel bad seeing that group of people looking at me. There were no curtains and no private room so this made it difficult to change my clothes and breastfeed the baby after delivery..... We can see each other and other people (visitors) can see us easily. One bed for each woman after birth of the baby and private rooms or curtains around the bed to avoid seeing others would be more comfortable for all women’’ (SBA user mother 1).

Women highlighted the importance of female staff to give help during labour and delivery. One woman said:

‘‘I had four antenatal check-ups during my pregnancy. There was a male doctor for antenatal checkups.....I felt uneasy during antenatal checkups with a male doctor. I felt embarrassment and did not ask any questions about my pregnancy situation..... It would be a more relaxed and comfortable situation if there were female doctors for antenatal checkups. It is more comfortable to share the problems with a female than a male doctor’’ (Non-SBA user woman 6).

A5.4.5 Women’s feelings during pregnancy and delivery

As mentioned, many women especially less educated, first time and young mothers considered that being pregnant is shameful. Women reported that they had less knowledge about safer pregnancy. They cannot discuss pregnancy related matters with family members due to shyness or lack of knowledge. Some women felt embarrassed when they knew they were pregnant for the first time rather than feeling happy. Some of the traditions affect the timely access to services, for

example, due to shame about the pregnancy some women kept it secret from others until their stomach grew. A woman said:

‘I was young the first time I was pregnant at the age of 16. I had no specific ideas about pregnancy and safe delivery.....It was embarrassing when my stomach started to grow. What should I do to tackle the embarrassment about what has already happened.....uha... I used to wear big and loose clothes and did not want to go anywhere outside home and chat to other people due to shyness’’ (SBA user woman 5).

Similarly, some women mentioned that they were worried about how to birth a baby but were less concerned about pregnancy care e.g. antenatal checkups and delivering baby with the help of SBAs. They kept their pregnancy secret for up to six months. One non-SBA user woman described her feelings during pregnancy as follows:

‘I was embarrassed in the beginning and scared about how I would give birth to a baby.....I was not interested in talking with other people and did not want to go anywhere to see relatives, visiting parents and shopping, or even antenatal checkups, due to shyness..... I was feeling discomfort when my stomach started to grow. I always wore big clothes to hide my stomach from othershahaha’’ (Non-SBA user woman 6).

A5.4.6 Future use of SBA services

Women had mixed reactions regarding the future place and use of SBAs during childbirth. Women who had delivered in hospital said they wanted to use SBAs in the future for safety. However, a few women said they were not planning to go to hospital again if everything went normally. The reasons included staff behaviour and gender, hospital environment and difficulties regarding transportation and costs. Similarly, women who delivered at home without help of SBAs and without complications stated that they would prefer to be at home for the next delivery. Several women reported a dilemma concerning the future use of SBAs regardless of last delivery history. They could not indicate plans for SBA use because it depends on the situation. One woman said:

“I want one more baby.....Laugh... I want to go to the hospital if everything goes ok but it depends on the situation-what happens at that time. I cannot say anything right now on use or non-use of SBA service for a future delivery” (SBA user woman 13).

A non-SBA service user woman said:

“I haven’t planned yet to have another baby for a couple of years because my daughter is too young. I am not sure about SBA service use in future for delivery of a baby. I think it all depends on the situation but if everything remains like this time, I would prefer home” (Non-SBA user women 2).

A5.5 SUMMARY OF QUALITATIVE FINDINGS

The findings of the study show that a wide range of factors influence SBA use. These include individual characteristics of the women themselves and of their families and communities as well as organisation of services and wider public policy. The data revealed that woman's individual characteristics, community perceptions and socio-economic status of the family, as well as women's experiences of SBA services, influence SBA use. Women's individual characteristics, such as age at childbirth, parity, previous pregnancy history, education and employment status, caste and ethnicity all affect use of SBA services. The direct and indirect costs of services, cultural and traditional beliefs; and gender roles in decision-making are other factors affecting SBA service use.

Findings of the study show that access to and availability of SBA services influences their use during labour and delivery. Transportation, road conditions, and distance as well as infrastructure of the health services affect SBA use. In addition, family and community factors, such as women's position in the household, husband's employment and income, family living arrangements and women's autonomy in decision-making have a significant influence on SBA use.

Women's personal experiences, such as the gender of SBAs and their behaviour and attitudes, discrimination during service use, meeting women's expectations, maintaining privacy and confidentiality during labour, delivery and after childbirth, influenced SBA use. Moreover, time of the day and season of labour as well as the adverse political situation of the country also affects the use of SBAs, as does the availability of other options according to women's preferences. The next section describes the quantitative findings of the study.

SECTION B. QUANTITATIVE FINDINGS

B5. OVERVIEW OF THE SECTION

This section presents quantitative information as provided by the SBAs involved in maternity care services in two hospitals (one private and one public) in the Western Development Region of Nepal. The SBAs' views towards women's utilisation of skilled delivery care were collected to augment the understanding of the factors affecting the use of SBAs.

Structured questionnaires (including multiple-choice questions) were used to obtain information from the respondents. Fifty-six SBAs working in the maternity services in both hospitals were included in the study. The questionnaire explored factors associated with the utilisation of the skilled birth attendants during labour and delivery. The following section presents the findings of the quantitative information derived from the self-administered questionnaires completed by 56 SBAs.

B5.1 CHARACTERISTICS OF SKILLED BIRTH ATTENDANTS

Characteristics of the SBAs included place of work, language spoken, current position, period of qualification and training attended, experience of working in rural areas, types of skilled maternity care provided by the hospital and SBAs perceptions of emergency services used during labour and delivery time.

B5.1.1 Place of work of SBAs

The table below (B5.1.1) shows that out of 56 skilled birth attendants 59% worked in the public hospital and 41% of respondents worked in the private hospital.

Table B5.1.1 Place of work of skilled birth attendants (No=56)

Work Place	Total No=56	%
Public hospital	33	59.0
Private hospital	23	41.0

B5.1.2 Language spoken by SBA

The table below shows language in use by SBAs. Out of 56 SBAs, the majority (87.5%) speak Nepali as their first language while the remainder speak other languages. No one reported speaking a language other than Nepali in the public hospital but, among the 23 SBAs, working in the private hospital, seven (30%) reported speaking other languages (such as English and Hindi) for communication with the women using the services.

Table B5.1.2 Language spoken in hospital by SBAs (No=56)

Language	Public (N=33)	%	Private (N=23)	%	Both (N=56)	Total (%)
Nepali	33	100	16	69.6	49	87.5
Other (e. g. English, Hindi)	0	0.0	7	30.0	7	12.5

B5.1.3 Current position of SBAs

Table B5.1.3 below presents the current positions of SBAs in both private and public hospitals. More than half of the respondents (59%) were nurses and Auxiliary nurse midwives (ANMs) working in both hospitals. In general, more nurses and ANMs than doctors were involved in providing maternity services (58.9% versus 32.1% in both hospitals). The doctors constituted 43.5% of staff responding from the private hospital but only 24% from the public hospital. The data suggests that a higher proportion of doctors and Obstetricians/Gynaecologists (Obs/Gyn) (relative to patients) are working in the private hospital than in the public one.

Table B5.1.3 Current position of SBAs (No=56)

Current position	Public =33	%	Private= 23	%	Total (N=56)	%
Doctor/Obs/Gyn	8	24.3	10	43.5	18	32.1
Nurse/ANMs	25	75.7	8	34.8	33	58.9
Other(unpaid/vol	-	-	4	17.4	4	7.1
untary/training)	-	-	1	4.3	1	1.9
No response						

B5.1.4 Length of time SBAs were qualified

Table B5.1.4 indicates that, out of a total of 56 SBAs, 22 (39.2%) reported that they were qualified less than one year, slightly more than a quarter had qualified in three to five years (26.7%) and 19.6% in one to two years. In both private and public hospitals, small numbers of SBAs (36.3% and 43.5%) were qualified less than one year. More SBAs who were qualified more than five years were working in the private hospital (17.4%) with only 6% of more experienced SBAs in the public hospital.

Table B5.1.4 Length of time SBAs were qualified (No=56)

How long been qualified	Public N=33	%	Private N=23	%	Total= 56	%
Less than one year	12	36.3	10	43.5	22	39.2
One to two years	8	24.2	3	13.0	11	19.6
Three to five years	9	27.2	6	26.0	15	26.7
More than five years	2	6.0	4	17.4	6	10.7
No response	2	6.00	-	-	2	3.5

Table B5.1.5 Period of time since last attended update training

The table below (B5.1.5) shows the length of time since staff last attended update training. Out of 56 respondents, only 23.2% had attended update training in the last six months, and slightly more than half (51%) attended last update training more than five years ago. This proportion was higher in the public hospital (57.6 %) than in the private hospital (43.5%).

Table B5.1.5 Attended last update training by SBAs (No=56)

Attended update training	Public N=33	%	Private N=23	%	Total N=56	%
In the last six months	7	21.2	6	26.1	13	23.2
6-12 months	-	-	3	13.0	3	5.3
One to five years	6	18.2	4	17.4	10	17.9
More than five years	19	57.6	10	43.5	29	51.7
No response	1	3.0	-	-	1	1.8

B5.1.6 When last attended update training according to SBAs position

The table below (B5.1.6) shows when last update training was received by SBAs according to their position. Out of the total of 30 nurses, less than half (40%) reported that they attended update training in the last six months followed by 26.6% of nurses who reported that they attended last update training more than five years ago. Only 33% of doctors reported that they attended last update training between one and five years and 50% reported that they had attended update training more than five years ago. Out of four ANMs, half of them reported that they had not attended any update training. Other staff (e.g. unpaid or voluntary health professionals) specified that they did not get any chance to attend SBA update training.

Table B5.1.6 Attended last update training according to SBAs position (No=56)

Position	When attended last update training according to SBA position						%
	Last six months	6-12 months	1-5 years	More than 5 years	No update training at all	Total= 56	
Doctor/ Obs/Gyn	2 (11.11%)	-	6 (33.33%)	9 (50%)	1 (5.5%)	18	32.1
Nurse	12 (40%)	1 (3.33%)	5 (16.66)	8 (26.66%)	4 (13.33%)	30	53.57
ANMs	-	-	-	2(50%)	2(50%)	4	7.14
Other	-	-	-	-	4(100%)	4	7.14

B5.1.7 Staff experiences of working in rural areas

According to table B5.1.7 out of 56 respondents, a majority of respondents (75%) reported that they had never work in the rural areas. This table shows that 27.8% of public hospital SBAs had worked in the rural areas at some time and 21.7% of staff in the private hospital had previously worked in the rural areas.

Table B5.1.7 Ever worked in rural areas according SBAs (No=56)

Ever worked in rural areas	Public N=33	%	Private N=23	%	Total N=56	%
Yes	9	27.8	5	21.7	14	25.0
No	24	72.2	18	78.3	42	75.0

B5.1.8 Reasons for not working in rural areas

The table below (B5.1.8) presents the reasons for not working in rural areas according to SBAs. Of total responses, nearly a quarter (23.2%) reported that they never had the need to work in the rural areas followed by 17.8% who cited poor

facilities in the rural areas as a reason for not working there. Others mentioned family commitments or said that they were not paid for their work. Out of the total numbers, 25% of SBAs did not give a reason for not working in a rural area.

Table B5.1.8 Reasons for not working in rural areas according to SBAs (No=56)

Reasons for not working in rural areas	Number of SBAs=56	% of SBAs
Never had the need to work in rural area	13	23.2
Poor facilities in rural area	10	17.8
Family commitments	5	8.9
Don't want to work in rural area	6	10.7
Other (Unpaid)	8	14.3
No response	14	25.0

B5.1.9 Types of maternity services provided by hospital

According to SBAs, both hospitals offered a full range of maternity services before or during pregnancy and childbirth. Out of total responses, almost all SBAs (94.6%) said that antenatal, labour and delivery care are universally available and 86.6% said that postnatal and emergency care services were also available. Data suggested that both hospitals provide important maternity services in the locality including antenatal, delivery and postnatal care.

B5.1.10 SBAs perceptions of use of emergency services

Table B5.1.10 shows SBA perceptions of the use of emergency services by women in the last year according to their place of residence. Out of the total 56 responses, nearly two-thirds (64.2%) responded that rural dwelling women made more use of emergency services than urban women did. The data suggests that slightly more than two-thirds of rural women (69.7%) used emergency services in the public hospital and 56.5% women used them in the private hospital but more urban women (43.5%)

used emergency services in the private hospital than rural women (30.3%) during the last year.

Table B5.1.10 SBAs estimates of the use of emergency services in the last year by place of residence (No=56)

Emergency service use by	Public N=33	%	Private N=23	%	Total N=56	%
Rural women	23	69.7	13	56.5	36	64.2
Urban women	10	30.3	10	43.5	20	35.8

B5.1.11 Stages of labour of women who attended for SBA services

Table B5.1.11 shows SBAs estimates of the stages of labour when women attended hospital. Out of the total 56 responses, slightly more than half (53%) reported that women attended in the early stages of labour followed by a quarter who reported that women attended in the third stage with delivery complications.

Table B5.1.11 Stages of labour of women who attended hospital according to SBAs (No=56)

Stages of labour of women who attended for SBA services		
Stage of labour	No. of SBAs	% of SBAs
Early labour	30	53.6
Second stage	10	17.8
Third stage with complications	14	25.0
No response	2	3.6

B5.2 USE OF SBA SERVICES AND WOMEN'S INDIVIDUAL CHARACTERISTICS ACCORDING TO SBAs

This section describes the SBAs perceptions of the socio-economic and demographic characteristics of women who use SBA services. Ranking questions were asked of the SBAs about women's service utilisation during labour and delivery stages.

Women's age, parity, education, employment, religion and caste/ethnicity were included in the questions. The ranks were given as 'most frequent, frequently, occasionally and rarely' for birth order and age of women. Similarly, 'high, medium and low' likelihood of use were used for the different variables such as education, employment, religion and caste of women.

B5.2.1 SBA service use and birth order of women according to SBAs

The table below (B5.2.1) shows SBA service use relative to birth order of women according to the SBAs. Out of the total responses, a majority (38 out of 56 SBAs) responded that first time mothers made 'most frequent' use of SBA services and 16 SBAs reported that second birth order women made 'frequent' use of SBA service. The data shows that SBAs consider that third and fourth birth order women only occasionally or rarely made use of SBA services.

Table B5.2.1 Service use and birth order of women (No=56)

Birth order	Most frequent	Frequently	Occasionally	Rarely
1 st	38	7	-	-
2 nd	11	16	1	-
3 rd	3	7	12	2
4 th +	3	3	-	21
No response	1	26	43	33

B5.2. 2 SBA service use and age groups of women according to SBAs

Table B5.2.2 shows the use of SBAs during delivery relative to age groups of women according to SBAs. The majority of respondents (44 out of 56) reported that women age 20-29 years old made ‘most frequent’ use of SBA services followed by those aged 15-19 years. Half the SBAs reported that women aged 30-39 years only used SBA services occasionally. Almost two-thirds of SBAs (35) reported that women in the highest age group (40-49) years’ rarely used SBA services during labour and delivery of the baby.

Table B5.2.2 Service use and age groups of women (No=56)

Age group	Most frequent	Frequently	Occasionally	Rarely
15-19	9	29	8	-
20-29	44	6	3	-
30-39	-	10	28	4
40-49	1	-	4	35
No response	2	11	13	17

B5.2.3 SBA service use and educational level of women according to SBAs

Table B5.2.3 shows the use of SBA services relative to the educational level of women according to SBAs. Out of the 56 respondent, 23 reported that women who had completed secondary level of education made most use of SBA services during delivery, followed by women who had completed primary level education. Twenty-seven SBAs reported that uneducated or illiterate women made minimal use of SBA services during delivery of the baby.

Table B5.2.3 SBA service use and educational level of women (No=56)

Education level	Very high	High	Medium	Low
Primary (1-5 yrs)	6	17	7	11
Secondary (6-10yrs)	23	13	17	-
Higher (SLC+)	2	7	14	13
Illiterate	7	2	-	27
No response	18	17	18	5

B5.2.4 SBA service use by employment of women

Table B5.2.4 shows SBA service use relative to types of employment of women according to SBAs. Women who make the most use of SBA services are in agricultural and/or unpaid work. Relatively fewer women who have their own business and only a minority who are in professional work use SBA services. The data suggests that large numbers of women who use SBAs are in agricultural work and many are unpaid homemakers. In rural Nepal, there are fewer women in professional work or owning a business. Therefore, this means that they are less numerous among service users overall but it does not mean that they make less use of services.

Table B5.2.4 SBA service use and types of employment of women (No=56)

Employment	Most	High	Medium	Low
No paid work	29	10	2	1
Agricultural	22	19	5	-
Own business	1	2	18	7
Professional	1	2	10	19
*No response	3	23	21	29

B5.2.5 SBA service use and religion of women

Table B5.2.5 presents the religious status of women as perceived by SBAs. Out of total respondents, the majority of SBAs (46) reported that the highest proportion of service users' are believed to be followers of the Hindu or Buddhist religions while small proportions are Christian or Muslim.

Table B5.2.5 SBA service use and religion of women (No=56)

Religion	Most use	High use	Medium use	Low use
Hindu	46	4	1	5
Buddhist	2	39	10	-
Christian	-	8	22	16
Muslim	1	-	19	21
Other	1	-	2	3
No response	6	5	2	7

B5.2.6 SBA services use and caste of women

Table B5.2.6 shows SBA service use and caste of women according to SBAs. A majority of respondents (39 out of 56) reported that most women using services were of the Brahmin caste followed by Chhetri and Gurung. Data shows that Newar caste women were also well represented in service use while lower castes (Kami, Damai, Sarki and Pode) apparently made less use of SBA services.

Table B5.2.6 SBA services use and caste of women (No=56)

Castes	Most use	High use	Medium use	Low use
Brahmin	39	9	2	-
Chhetri	15	20	8	-
Gurung	9	18	16	2
Magar	7	12	6	11
Newar	5	10	7	30
Other	12	-	-	13

B5.3 FACTORS INFLUENCING PROVISION OF SBA SERVICES

This section presents findings about the factors influencing the provision and use of SBA services during labour and delivery stages according to SBAs. The self-administered questionnaires sought to identify SBAs' understanding about factors affecting use of the SBA services. In addition, barriers to SBA service use, factors influencing provision of effective SBA services and how SBA service use can be increased during pregnancy and childbirth are included in this section.

B5.3.1 Reasons for not using SBA services

Table B5.3.1 shows SBAs' understanding of why women are not using SBAs for delivery. Out of total responses, the majority of SBAs (73.2%) reported that the main reason affecting the use of SBA services was decision of the head of household while cultural factors and cost of services were cited by 71.4% and 62.5% respectively. Out of the total, 41.1% and 37.5% of SBAs reported that lack of privacy and confidentiality and infrastructure of the facility are other reasons that discourage use of SBA services during delivery. Regarding the other factors 'recommended by friends' was also recognised as influencing non-use of SBA services.

Table B5.3.1 Reasons for not using SBA services (No=56)

Reasons for non-use of SBA	No. of SBAs	% SBAs
Decisions required by household head	41	73.2
Cultural factors	40	71.4
Cost of services	35	62.5
Religious factors	30	53.6
Privacy and confidentiality	23	41.1
Infrastructure of the facility	21	37.5
Not recommended by friends	21	37.5
No health need	14	25.0
Other	13	23.2

Table B5.3.2 Barriers to SBA service use according to SBAs

Table B5.3.2 shows the barriers to SBA service use according to SBAs. Out of total respondents, a majority (85.7%) think that distance to the facility and lack of transportation and roads are the main barriers to use of SBA services followed by non-availability of services and lack of female SBAs (66.1% and 64.3% respectively). Out of all respondents, 39.3% and 35.7% of SBAs reported that quality of services and lack of culturally appropriate services are also barriers to SBA use during labour and delivery.

Table B5.3.2 Barriers to SBA service use (No=56)

Barriers to SBA services use	No. of SBAs	% of SBAs
Lack of transportation, roads and distance	48	85.7
Limited availability of Services	37	66.1
Lack of female SBAs	36	64.3
Poor quality of services	22	39.3
Lack of culturally appropriate services	20	35.7
Cost of SBA services	11	19.6
Women don't want to use SBAs	10	17.8

Table B5.3.3 Factors influencing the provision of SBA services

Table B5.3.3 shows the factors influencing the provision of good services according to SBAs. Out of all responses, a majority of SBAs (89.3% and 80.3%) responded that appropriate equipment and number of qualified staff are the main factors influencing the provision of good services. Similarly, supports from colleagues' (67.8 %) are other factors that influence provision of services. Slightly more than half of the SBAs (55.3%) reported that communication with women influences the provision of service during SBA use.

Table B5.3.3 Factors influencing the provision of SBA services (No=56)

Influencing factors	No. of SBAs	% of SBAs
Appropriate equipment	50	89.3
Number of qualified staff	45	80.3
Support from colleagues	38	67.8
Availability of appropriate training	34	60.7
Communicate with women	31	55.3

B5.3.4 Three important factors for providing effective SBA services

Table B5.3.4 shows that SBAs consider that there are three other important factors for providing an effective SBA service during labour and delivery time. The majority of respondents (87.5%) identified a functioning referral system and 83.9% mentioned that increasing clinical proficiency are important factors in providing effective services. Likewise, three quarters (75%) of the respondents reported that establishing an enabling working environment is another important factor influencing provision of effective SBA services.

Table B5.3.4 Three other important factors for providing effective SBA services (No=56)

Three most important factors	No. Of SBAs	% of SBAs
Functioning referral system	49	87.5
Increase clinical proficiency	47	83.9
Enabling working environment	42	75.0

B5.3.5 How SBA use could be increased according to SBAs

Table B5.3.5 shows how utilisation of SBAs could be increased according to SBAs. Out of all respondents, a majority (87.5%) responded that free health services to poor and rural women plus the expansion of rural roads and transportation are the most important factors to increase SBA use. Of the total, 84% of respondents also

agreed that improving the infrastructure of the hospital and 78.6% identified increasing the number of SBAs in the community as being factors that could help increase SBA use. Less than half (46.4%) of all respondents mentioned that provision of partial funding (e.g. through insurance, community payment scheme, pre-payment, social insurance and direct incentives) could help increase service use during pregnancy and delivery.

Table B5.3.5 How SBA use could be increased according to SBAs (No=56)

How SBA use can be increased	No. of SBA	% of SBAs
Free health services to poor and rural women	49	87.5
Expansion of rural road and transportation system	49	87.5
	47	83.9
Improve infrastructure of hospital	44	78.6
Increase number of SBAs in community	26	46.4

B5.4 SUMMARY OF QUANTITATIVE FINDINGS

The findings of the quantitative data revealed that, of the respondents, more SBAs were working in the public hospital. None of the SBAs reported speaking a language other than Nepali in the public hospital but in the private hospital, a few SBAs used other languages to communicate with women. In general, more nurses than doctors were involved in service in both hospitals. About 40% were qualified as SBAs for less than one year followed by three to five years (26.7%). Only a quarter of SBAs attended update training in the last six months but a majority of doctors reported attending last update training between one and five years ago compared to fewer nurses. Three quarters of SBAs had never worked in rural areas giving ‘no need to work in rural area’, ‘poor health facilities’ and ‘family commitments’ as the main reasons. SBAs felt that women from rural areas used emergency services more than the urban women did. About two-thirds (64%) of SBAs reported that women attended hospital in the early stages of labour.

Quantitative findings show that staff reported variations in the use of SBA services according to socio-economic and demographic status. First time mothers made more frequent use of SBAs than second and third time mothers did. Women in 20-29 years age groups made most use of SBA services relative to other age groups. Older age groups, 30-39 years and 40-49 years used SBA services only occasionally and rarely. Women who had a secondary level of education (6-10 years) were more likely to use SBA services for delivery than all other educational groups. By employment status, the highest numbers of users of SBA services were likely to have no paid work or to be employed in agricultural work. A majority of SBAs (82%) reported that most of the women using services were Hindu or Buddhists. The higher castes, Brahmin, Chhetri and Gurung women, were also more prevalent than the other castes in use SBA services.

Decisions by the household heads, cultural factors and cost of services were the main reasons cited by SBAs for not using SBA services. Distance to the health facility, lack of or poor transportation services, limited availability of SBA services and lack of female staff were further barriers to use of SBA services. Appropriate equipment, an adequate number of qualified staff, support from colleagues and

manageable workloads were cited as the main factors influencing the provision of good services. A higher proportion of SBAs (88%) reported that a functioning referral system and 83.9% also reported increased clinical proficiency as important in providing effective services. Respondents suggested that provision of free health services to poor rural women and expansion of rural road and transportation system would be the most important factors for increasing SBA use.

B 5.5 SUMMARY

The findings from the quantitative survey are consistent with those from the qualitative interviews. There were no particular differences between the answers of the staff in the public and private hospitals. However, responses suggest that a higher proportion of better-qualified staff work in the private hospital than in the public one.

Findings from the interviews and the hospitals survey demonstrated that factors such as women's individual status within the family and community, and the health service delivery system itself influence SBA use. Cultural and traditional beliefs and gender related norms influence SBA use, as do various aspects of women's individual characteristics. The financial status of the family and costs of services also significantly influenced SBA use.

Access to and availability of SBA services at local level as well as the infrastructure of the health facility itself and transportation, road and distance to the health facility are factors influencing SBA use. In addition, the husband's employment, family living arrangements and women's decision-making powers are factors affecting SBA use. Women's personal experiences (such as the attitude of SBAs during service use, outcome of services, gender of SBA, women's expectation and experiences) are important issues that may encourage or discourage women in SBA use. The influence of others, such as family members, friends, neighbours or community groups also affect decisions about current and future service use, as do perceptions regarding safe delivery and access to SBA services in the local area. The next chapter discusses these findings

CHAPTER SIX: DISCUSSION

6.1 INTRODUCTION

The purpose of this chapter is to discuss the findings of the research regarding rural women's views, experiences and perceptions influencing use of skilled birth attendants (SBAs) in the wider context of Nepal's socio-economic, political and health conditions. This chapter discusses women's choices and barriers to use of services and how these influence SBA use through the lens of 'new mothers'.

Women's views and voices are central to this study to help understand their experiences and options concerning SBA use. This study asked a range of questions including "What are the women's experiences of SBA use? How do they influence SBA use? What are women's preferences? Why are women's views important in improving maternal health service utilisation?" The views of SBAs on women's utilisation of skilled maternity care are also included.

The discussion considers the women's experiences in relation to the socio-economic, cultural and political context of Nepal and their relevance for maternal health service utilisation. Women's lack of autonomy in decision-making and factors related to service providers themselves are highlighted. More specifically, the implications of social inequality as related to caste and gender and a lack of health service provision in rural areas are discussed.

This study shows that an improvement in the rate of maternal health service utilisation is affected by a range of different factors. Some of these can be changed in the short term and with limited resources but others are more fundamental and impossible or too costly to change, e.g. the nature of the terrain affecting access to urban based facilities. However, there are indications in the data of some changes already taking place, albeit slowly, (e.g. cultural shifts); and of how other things could be changed, e.g. related to staff training and development of rural services. These follow from two major findings related to women's actual experiences of hospital births and to the stated preferences by many for home births supported by locally based services. The discussion is presented under the three main headings: Women's status and inequalities in Nepal; SBA services: issues of access and

quality; and Women's characteristics, experiences and preferences regarding SBA use.

6.2 WOMEN'S STATUS AND INEQUALITIES IN NEPAL

Nepal is a multicultural and diverse society with more than one hundred different castes/ethnic groups and ninety-two different mother tongues (CBS, 2003). There are differences in health beliefs, practices and care seeking behaviour among different cultural and ethnic groups of women regarding childbirth (Manadaha, 2000). The 1990 Constitution of Nepal guaranteed fundamental rights to all citizens without discrimination based on caste/ethnicity, age, sex, gender, culture, education, employment, religion, political belief or place of residence (ADB, 1999). This includes the right to provision of health services. There has been some positive impact on women's life in terms of access to health services through increased awareness (Acharya, 2007). However, findings from this study suggest that it is still the case that higher caste women and those from educated and more affluent socio-economic groups make more use of health services (being more likely to have babies delivered with the help of SBAs) than poor, low caste and illiterate women.

Women's lack of autonomy in decision-making is a major factor influencing use of SBA services. Limited autonomy is based on cultural and gender norms [See section A5.3.2]. Data from this study suggests that there is some evidence of changing societal perceptions and cultural shifts as, for example, in the existence of nuclear families (including female headed households). Additionally, some women have their own income which also has a positive impact on SBA use.

Despite such small indications of shifts in societal perceptions and in the views of women themselves towards SBA use, the data in this study indicates that gender and other divisions are still strong in Nepali society. Women in this study usually held lower status not only than men but also than older women [See section A5.3.2]. In the family hierarchy young women are near the bottom in terms of decision-making due to their age, gender and lack of economic autonomy (Matsumura & Gubhaju, 2001). Educated women are more likely to make decisions for themselves regarding maternal health service utilisation (Acharya et al. 2010). This is related to the role of

education in giving women confidence and knowledge in their approaches to problems, as well as making it more likely that such women have some economic autonomy [See section A5.1.3].

However, even better educated women may not feel able to challenge the age and gender norms in decision-making associated with the wider societal culture (Acharya, 2007). This reflects women's overall status in society as well as cultural beliefs about childbirth. Limited involvement (even of educated women) in decision-making reflects the continuing importance of the older generation regarding younger women's choices. In fact, women are often culturally isolated during pregnancy and many lack knowledge about reproductive health and reproductive rights. Pregnancy is widely considered as a taboo subject based on gender norms that pregnancy is a 'women's matter' (Pradhan et al. 2010). In many South Asian countries, including Nepal, there is lack of open discussion related to pregnancy due to its association with sexual activities and sometimes the view continues that women should not be seen to be pregnant (Mumtaz & Salway, 2009). Culturally, some first time mothers are likely to feel embarrassed and hesitate to share their news about the pregnancy, which also influences the use of antenatal care early on pregnancy. Culturally in many rural communities, some women, especially those who are young and illiterate, may perceive pregnancy as shameful (Pradhan et al. 2010).

In this study some participants were shy and reluctant to express their needs during pregnancy [See section A5.4.5]. The shyness surrounding pregnancy reflects the culture of silence surrounding sexual matters. Some rural women did not want to discuss their pregnancy, assuming that it is a private matter, which in turn leads to problems accessing pregnancy care on time (Mumtaz & Salway, 2009). As data from this study show, pregnancy makes some first time and young mothers worried about their health [See section A5.4.5] but they fail to discuss their concerns with anyone. Women may need more support (e.g. more rest or nutritious food during pregnancy and childbirth) but in many cases pregnancy is considered as a 'normal process' not requiring any special care or interventions [See section A5.3.4].

During the interviews it was observed that women from higher castes were better educated and economically better off compared to those from lower caste ethnic

groups. A study in Nepal on use of health care services among different castes/ethnic groups of Nepali women (Bennett et al. 2008) illustrates that a large proportion of higher caste/ethnic groups of people are in the highest quintile of wealth groups. In contrast, the lower castes are in the bottom wealth quintile and use less maternal services.

While the caste system still largely determines people's socio-economic position and indicates someone's status in Nepali society (Bennett et al. 2008), the findings of this study suggest that social inequality may not be as apparent in a rural community. It can be questioned whether this is partly be due to political changes. The abolition of the monarchy and establishment of Nepal as a republic in 2006 may be influencing cultural changes in every aspect of people's lives. The establishment of a republic may have led some to believe that a more egalitarian society was 'born' in which people substituted democracy for a traditional ruling elite exercising power. This could affect views in relation to basic human rights.

However, there are still social inequalities based on gender, caste, economic status and place of residence, affecting women's lives in many ways, including health service utilisation. Continuing gender discrimination can be seen in the difference in the literacy rates between males (71%) and females (46%) aged over 15 years (CIA, 2013) with significant implications for women's life chances and choices. It is likely that these differences are higher in low caste ethnic and deprived groups (GoN, 2012).

After marriage, it is customary for a woman to move in with her husband's family (Mullany et al. 2007) and traditionally, most rural families in Nepal still live in extended families (Matsumura & Gubhaju, 2001). As a daughter-in-law a young married woman has to perform her duties under the supervision of her mother-in-law and follow her ideas and suggestions. In such situations the senior member of the family is the final decision-maker. Thus, a daughter-in-law, as a junior member of the family, cannot make her own decision if her ideas and wishes do not accord with those of her mother-in-law [See section A5.3.5].

A mother-in-law's power and her position in the family hierarchy, her relationship with her daughter-in-law, cultural beliefs and perceptions towards pregnancy may not be the only influential factors in decision-making. There may also be financial and economic constraints on the family regarding decisions about SBA use, which for rural women in this study meant going to hospital for childbirth. There is a paradox to be addressed in the roles of mothers-in-law and husbands in decisions about younger women's/wives' reproductive health care. As stated, pregnancy and childbirth are regarded as a women's issue but men have a lot of power over women's lives in Nepali culture (Mullany et al. 2007). Socially and culturally there is a big gender gap between men and women from childhood on. Based on gender norms men not only have more life chances and opportunities than women (in terms of health, education and employment), but they also generally control the use of financial resources within the family (GoN, 2012). Although men are normally responsible for the financial support for the family, in the absence of a male breadwinner (e.g. if he is working away from home or abroad), mothers-in-law have more responsibilities for the care and management of the household.

In any case in extended families mothers-in-law have more responsibility for caring for their daughters-in-law during and after pregnancy. Moreover, a mother-in-law's age, experience and gender also give her more authority to make pregnancy-related decisions. The gendered nature of pregnancy and childbirth generally makes it easier for the daughter-in-law to share pregnancy related experience with her mother-in-law. However, as mentioned, the embarrassment and taboo surrounding reproductive and sexual matters may make intergenerational communications difficult, including in relation to the health needs of young women, also impacting on service uptake.

In Nepalese society therefore, mothers-in-law play an important role in women's decision making regarding SBA use. In this study it was found that most mothers-in-law seemed to see the value of using SBAs, despite the fact that they had little education and had used TBAs themselves [See section A5.3.5]. It also seemed that they had relatively more authority in decisions regarding service use than men although there were some indications of changes in awareness and attitudes of family and community members regarding SBA use. For instance, there was mention of husbands' involvement in their wives' antenatal care. This study

therefore suggests [See section, A5.1.3] a shift in societal perceptions, including positive support for SBA use from family members.

This is important, considering the persisting inequalities in decision making. Such shifts could be related to the expansion of technology and spread of information through access to televisions, mobile phones and the internet. However, this study did not find evidence of any particular measures at community level focusing on maternal health. This included a lack of programmes which might have addressed mothers-in-laws' or husbands' attitudes and need for information.

As mentioned, by tradition in many Nepali communities, pregnancy and childbirth is considered to be a 'woman's issue' and men are excluded. For example, generally husbands are not allowed to be present in the labour/delivery room in the hospital although women may feel discomfort in an unfamiliar environment and some might want support from husbands. However, in Nepali culture men are considered only as resource providers with regards to health care use [See section A5.3.2] and in some communities a man is considered shameless or cowardly if he shows an interest in his wife's pregnancy in front of his family members or friends. This limited role in their wives' pregnancies and related health matters in Nepali culture (Mullany et al. 2007) has been noted as similar to the situation in other South Asian countries (Mumtaz & Salway, 2007). This can be contrasted with the situation in many developed countries: for example, the involvement of husbands or partners in pregnancy matters (including at childbirth) is reported to be almost universal in the UK (Redshaw & Heikkila, 2010).

Data from this study suggests that women's perceptions about SBA use are changing in the context of increased knowledge and awareness about pregnancy and childbirth. However, cultural traditions persist among some rural women [See section A5.3.4]. As noted elsewhere (Teijlingen, 2005) childbirth is a social as well as a biological process and less educated, unemployed and deprived women are more likely to favour traditional methods relative to educated women from better off families. In some cases, women prefer to deliver in a homely environment with the help of female family members and a traditional birth attendant (TBA) who understands the community norms and customs rather than going to hospital [See

section A5.2.5]. Some participants indicated that, if something goes wrong in childbirth, it would be better to be in hospital. However, the experience of SBA use by some rural women did not necessarily ensure plans for use of SBAs in a future pregnancy (See following sections 6.3 and 6.4) and a significant number of rural women continue to deliver their babies in an unsafe environment, putting themselves and their babies at risk (NDHS, 2011).

Although the mothers-in-law interviewed in this study generally favoured use of SBAs, there is sometimes a divide between younger and older generations of women regarding care in pregnancy and childbirth [See section A5.3.4]. Some mothers-in-law adhere to traditional beliefs favouring use of a TBA during labour and childbirth thus preventing a daughter-in-law from obtaining maternal health services. With regard to cultural traditions, culture is a major determinant of people's identity and social status [See section A5.1.5]. In Hindu society there is a hierarchy in the caste system and higher caste and lower caste indicate people's social status and are linked to service use (Bennett et al. 2008). There are also some specific traditional beliefs according to caste and ethnicity which influence health service utilisation. For example, some women think that they should not travel during pregnancy. Going to hospital would mean crossing a river which is considered as sinful and harmful to the foetus [See section A5.3.4]. Belief in ghosts and evil spirits or witchcraft also limits women's use of SBAs (Pradhan et al. 2010).

Returning to the links between socio-economic status and health service use, this study has confirmed that poverty is a major factor limiting maternal health service utilisation. In addition, living in a rural community compounds other inequalities affecting service use. Nepal is one of the poorest and least developed countries in the world: 81 percent of its population is rural (CBS, 2011) and more than 25 percent of its population survive on less than one dollar per day (CIA, 2013). Agriculture is the main livelihood of the population and 38 percent of Nepal's GDP comes from the agricultural sector. However, 46 percent of its population are unemployed or working only in subsistence agriculture (CIA, 2013). The rate of unemployment would be higher in the rural population if the data were disaggregated based on place of residence.

One alternative for unemployed men from rural areas is to seek employment in cities or abroad. In this study it was reported that some husbands were abroad as migrant workers (particularly in the Middle East) [See section A5.3.1]. If remittances were delayed or irregular or not paid at all families could be suffering more and unable to plan for health service use. At the time of writing it was reported that, over the period of a year, 185 construction workers from Nepal had died in the Middle East due to work related accidents (*The Guardian*, Friday 24 January, 2014). If the male bread winner gets ill or dies while abroad the entire family faces the likelihood of being plunged into extreme poverty. The employment conditions of men therefore impact on inequalities in the use of maternal health services which are greater in developing countries of the world and affect poorer women the most (Say & Raine, 2007).

The statistical data shows that Nepal's maternal mortality rate have significantly declined over the last two decades (NDHS, 2011). Several social factors for example, education and income, reduction in poverty and a decrease in gender gap impact on shaping of maternal service uptake. Pant et al. (2008) show that a reduction in the total fertility rate, increased age at marriage and increase used of contraceptives play apart in declining rates of maternal mortality in Nepal. These factors all have a positive impact on SBA uptake. Due to an increase in educational level some women are able to discuss the importance of contraception with their partners or family members and even in the community. Girl children spending more years in school impacts on their life in many ways, including awareness of women's reproductive rights and reproductive health increasing the likelihood of decision making on their own health.

The uptake of maternal health service (for example, antenatal care, postnatal care and family planning services) has improved in recent years in Nepal. Examples of positive outcomes include a decline in the fertility rate and success of family planning programmes, while the introduction of legalised abortion has also reduced the health risk for women. Given the recent establishment of safe abortion services, this trend is likely to continue as abortion-related deaths can be averted (Pant et al. 2008). Evidence from this study suggests that there are positive views towards maternal health service utilisation but that the level of care in rural areas should be

increase at the childbirth stage to effect further improvement in the rates of maternal morbidity and mortality. The data from this study suggests that the care of maternal health services is improvements even in the conflict situation of the country. However, there is still a large groups of women still remain excluded from care during pregnancy and childbirth since many women do not have access SBAs services even if they wanted to use them.

6.3 SBA SERVICES: ISSUES OF ACCESS AND QUALITY

This study shows that a number of factors affect rural women's access to maternity services. These include the location and quality of services as well as the availability of skilled care providers. Specifically, there is currently a lack of skilled care providers in rural Nepal [See section A5.2.5] and an overall lack of fully trained midwives. To date the Government of Nepal has implemented various measures to encourage SBA use. These include provision of free SBA services (for example, free antenatal and delivery care) in hospitals located in urban areas and provision of grants (NR 500-1,500) to meet the transportation costs of going to a health facility (DoHS & MoHP, 2006). These policies may be helpful to some people but the actual amount of money provided in grants is very low when compared with the country's inflation rate and the policies may not address other factors which inhibit SBA use.

These include issues related to the transport and communications infrastructure. Despite the fact that the majority of people live in rural areas, there has been no improvement in road links and public transportation to reach health facilities. Therefore, women who live at a distance from health facilities have less chance to deliver at hospital and hence are unable to benefit from either free delivery care or transportation grants. Even if women go to the hospital they may lack knowledge about the current incentive policies and there are questions about how transportation grants, for instance, are distributed. For example, when is the grant paid and to whom? Does it go directly to the woman at the hospital or to someone else later? The grants system is supported by external donor agencies and apparently sometimes no grants are paid at all if the government budget has not been allocated on time or if the allocation had been used up (Ensor et al. 2009). In theory, these incentives could be a great help for some poor women from rural areas but there is

no evidence from this study that this is the case. The evidence has rather suggested that a policy which has concentrated maternity services in urban hospitals is

a) Not currently accessible to many rural women and; b) may not provide a high quality service when accessed due to lack of appropriately trained personnel and the physical conditions of the facilities.

6.3a) Issues related to distances and transportation to health facilities

Data from this study confirm that rural women face inequalities in health service provision due to difficulties in accessing urban based health facilities. This is partly related to the mountainous terrain and high costs of developing the roads and transport infrastructure. In recognition of this unchangeable characteristic of the topography, the Government of Nepal had previously (MoHP, 2007) established a policy to increase the number of maternity care centres in rural areas (MOHP/NHSSP, 2012; Ensor et al. 2009) but there is no evidence from this study that this has yet addressed the challenges which rural women face in accessing maternity related health care (see later).

On the contrary, the data from this study support those of a national Demographic and Health Survey of Nepal (2011), (n=12,918) which showed that 14 percent of women reported not using SBAs due to the fact that the hospital was too far away and transportation services were not available in time. Eight percent of women in the same national survey reported that the baby was delivered on the way to the hospital before reaching it. These types of cases would be higher if only rural women were surveyed. The data of this study [See section A5.2.1] supports the findings of other studies on maternal health service utilisation regarding the country's poor infrastructure, related to absence of roads; distances from hospitals; and lack of transportation services: these factors discouraged rural women from SBA use by rendering the hospital services inaccessible and disproportionately expensive (Choulagai et al. 2013; Borghi et al. 2006; Jackson et al. 2009; Ensor et al. 2009; Thapa, 1996).

As mentioned earlier, the Government of Nepal has introduced various policies to increase maternal health service utilisation since 1990, including some efforts to

improve road links to urban based health facilities (Ensor, 2009). However, poor roads and lack of public transportation continue to be a major problem for rural women and only 36% delivered with SBA care (NDHS, 2011). Poor rural women do not have their own transport, hiring a private vehicle is expensive and might not be available in time even if a family is able to pay. There are additional difficulties if an emergency situation occurred. In addition, adverse weather added extra difficulties in getting to hospital in time. These findings were similar to a qualitative study about 'choice' and place of delivery in remote and rural areas of Scotland (Pitchforth et al. 2009) despite the significant differences in socio-economic and political characteristics of the two communities.

On another point related to hospital location and transport issues, the data from this study illustrate that conflict and instability increase security risks when travelling to health facilities. A struggle for power between the political parties in opposition and government means continuing political instability in Nepal. Frequent strikes organised by different political parties increase the financial cost and security risks to women, family and persons accompanying them to hospital. A study on armed conflict and health outcomes in Nepal by Devkota and van Teijlingen (2010) has shown that the adverse political situation has had a negative effect on the use of health services as echoed in this study.

The Interim Constitution of Nepal, 2007 stated that health care is a basic human right and declared that it is the State's responsibility to ensure the provision of health services and to design health policies and programmes which are available to all people without any discrimination (GoN, 2007). This provision in the constitution has increased pressure on the government to improve people's socio-economic status including health and educational provisions at grassroots level as well as addressing inequalities related to cultural factors and rural living conditions. The government is one of the key actors in providing services but there are both resource and governance issues affecting development of the transport infrastructure and health services.

With regards to resourcing, the Government of Nepal spends 5.6% of its Gross Domestic Products (GDP) on health (Shrestha et al. 2012). However, Nepal has

lower health indicators and a higher maternal mortality ratio than Sri-Lanka which spends only 3.4% of its GDP on health (De Alwis et al. 2011). Nepal's poor health indicators include ineffective resource management; lack of transparency and responsiveness; and high levels of corruption as well as the country's difficult terrain (Transparency International Nepal [TIN], 2012).

The UN et al. (2007) stated that good governance is one of the important factors affecting availability of public services. There is an interconnection between different factors in good governance including participation, rule of law, transparency, responsiveness, consensus oriented, equity and inclusiveness, effectiveness, efficiency and accountability (UN et al. 2007). All these factors can reinforce each other to minimise corruption, increase autonomy, transparency and encourage vulnerable communities to be involved in decision-making processes.

Good governance is relevant to transport infrastructure developments as well as effective health care provision and tackling inequalities, more generally. However, in a recent study, Nepal was ranked 139th out of 176 countries in terms of corruption with a transparency score of only 27 out of 100 (TIN, 2012). Poor rule of law, lack of transparency, less involvement and participation of vulnerable groups, unequal access to services all contribute to increased social inequality (TIN, 2012) affecting uptake even of such services as exist.

6.3b) lack of appropriately trained personnel and poor quality hospitals

In addition to issues of access, the findings of this study also showed that women had concerns about the quality of maternity services provided in the public hospital which all SBA user respondents attended, partly related to the SBAs themselves. Positive interpersonal aspects of maternity care are crucial to ensure that women take up SBA services. For pregnant women the relationship with the care providers and the maternity care system influences service use [See section A5.4.1]. The 'concept of safe motherhood' concerns not only the physical safety of women but is also related to deep cultural and personal feelings. 'Motherhood' is specific to women and related to a gendered notion: thus safe motherhood must be expanded beyond the prevention of morbidity or mortality to encompass respect for women's

basic human rights, as well as respect for women's autonomy, dignity, feelings, choices, and preferences (including for companionship) during pregnancy and childbirth (Bowser & Hill, 2010).

The data from this study shows that some women who had their first babies in hospital reported changing their minds about delivering subsequent babies in the hospital [See next section, 6.4] after unsatisfactory experiences of SBAs which they felt led to poor quality of care [See section, A5.3.6]. Lack of privacy, health workers' disrespect and poor confidentiality are important issues influencing whether women go to hospital for childbirth (Thwala et al. 2012). This study showed a lack of respectful care or efforts to maintain women's dignity by SBAs in the hospital, although a distinction should be drawn between medically trained SBAs and nurses. While the women had no specific complaints about the treatment received from the medically trained staff (gynaecologists and obstetricians) there was a gender related issue, since women expressed shame and embarrassment about being examined by a male doctor. In Nepal, due to traditional factors associated with educational opportunities and gender discrimination, it is likely that medical training has mostly only been open to men.

As previously mentioned there is a big gender gap in school enrolment between boys and girls: boys are more likely to spend more years in school than girls and to have more opportunities to progress to higher education. Women face discrimination in many areas affecting their equal participation in society (GoN, 2012) and the chances of them being able to take up medical training, even in areas specifically related to women's health are still very limited. However, the involvement of male SBAs in the delivery of babies was found to have a negative influence on perceptions of SBA use [See section, A5.3.7].

There is also a gender dimension in the characteristics of the female SBAs since, while few doctors are female (and non in this study), all trained nurses tend to be female. However, this in itself did not ensure a satisfactory experience for the women SBA users in this study who had many complaints about the treatment received from the nurses. The service users in this study reported disrespectful care in the hospital, such as physical abuse, clinical care without the woman's consent,

lack of confidential care, and undignified care (including verbal abuse or discrimination based on patients' status). Some women experienced rude behaviour from SBAs which may have been related to discrimination, although SBAs themselves thought that there was no direct discrimination based on the socio-economic status of the service users.

D'Ambruso et al (2005) stated that a positive attitude by SBAs (providing respectful care and encouragement through polite behaviour) could promote women's use of SBAs in future, while negative attitudes (neglect, shouting and use of rude language) are discouraging. In some instances reported in this study SBAs behaved in a superior way to women rather than showing respect through polite behaviour and communication. It may be the case that SBAs consider themselves to be special people and/or that there are status differences between service providers and rural women. However, a difference in women's status is not a reason for lack of respectful care or discrimination based on the power, education and caste of SBAs.

Poor communication in public hospitals could also be a result of staff working long hours (e.g. twelve hour shifts) and staff shortages, resulting in less time being available for each woman care (Pant et al. 2008; Sharma, 2004). Patient overload and inadequate training as reported by SBAs themselves in this study are possible reasons for poor practice [Table B5.1.5] and these findings are similar to previous studies in Nepal (Sharma, 2004) and in other developing countries such as Ghana (D'Ambruso et al. 2005), Kenya (Cotter et al. 2006) and among rural women in Swaziland (Thwala et al. 2012).

Rude behaviour and poor practices suggest a lack of appropriate training for SBAs in college and university courses which fail to address attitudes and the interpersonal aspects of professional behaviour. In addition, there may be a lack of appropriate staff supervision and effective monitoring procedures by the health service management and professional bodies. It should be noted that, while some nurses specialise in maternity services, midwifery is not yet established as an independent profession in Nepal (Bogren et al. 2013) and lack of proper regulation and a professional body means that there is a lack of accountability. There are as yet no professional codes and standards relating to maternity service provision:

establishment of these could improve the quality of services and responsiveness to women's views and needs.

While there are likely to be differences in staff attitudes and behaviour between staff working in private hospitals and those in the public sector, some of the women interviewed in this study had used these facilities. However, SBAs in a private hospital were also surveyed and their responses together with those of a key informant suggested that standards of care and behaviour, as well as staffing levels and training, are better in the private sector. The private sector also makes a small contribution to the training of staff (for example to the pre-service training of health workers) (MOHP/NHSSP, 2012). A report by Nepal's Society for Local Integrated Development (SOLID, 2012) shows that 89.9% of the health work force is trained in private teaching institutions, 96% of which are located in urban areas. However, some institutions did not meet or follow the international standards for training and course duration for quality human resources in health. The SOLID, Nepal (2012) report stated that, in the Nepali context, private sector institutions often do not meet the standards and guidelines that specify criteria for medical education as developed by relevant professional councils, thus leading to the production of a poorly skilled health workforce.

Moreover, specialised health care education in private institutions is expensive since it is established for profit making and predominately used by wealthy people who can afford it. It is beyond the means of poor people from poor and low caste families and girls especially have less access to such education. Moreover, people who have invested large sums of money in their education are more likely to work in private facilities in urban areas where there are more career opportunities. Thus, even after significant financial investment, the private sector may not contribute to improving rural people's health unless there is some coordination between the public and private sectors.

Furthermore, the private hospitals may be able to recruit better trained staff from abroad while the staffing and infrastructure of the public health system is weakened by the emigration of a significant number of qualified health workers from Nepal. As in many other developing countries well qualified staffs migrate to developed

countries for better opportunities and pay (SOLID, 2012). A study by Zimmerman and colleagues (2012) shows that a significant number of the trained health workforce from Nepal migrated abroad: 36% of these were qualified doctors.

Effective management of human resources is a vital component in the delivery of quality health services in any context (McLoughlin, 2012). How resources are prioritized and used can bring important changes. Some small changes related to staff training and management might not be costly but could have a positive impact on service utilisation, for example, staff treating women in an ethical and equitable manner. But the public sector currently seems unable to train and recruit Human Resources for Health (HRH) to a sufficient standard and in sufficient numbers needed by the country. A Government of Nepal report shows that 60% of the population used curative health services from government facilities and among them more than 85% received these services from primary level facilities, e.g. health posts and sub-health posts (MOHP/NHSSP, 2012). However, the data from this study [See section A5.2.5] indicated that there is a lack of resources and maternity trained health care providers in primary care facilities available to rural women.

Although there was health post in a village near to the one where interviews were carried out, staff working there are not qualified to the SBA standard (as described by World Health Organisation) so women do not want to use this facility to deliver their babies [See section A5.2.5]. As mentioned, some women prefer to call on TBAs rather than going to the health post, not least because the costs of TBA services are cheaper and methods of payment (cash or kind) are easier. Furthermore, as Pradhan et al (2010) had also found, these TBAs are sometimes local women who have known mothers-in-law and pregnant women for a long time and they are able to give women more emotional support during labour and childbirth.

The Government of Nepal has limited capacity to generate more resources specifically focussing on rural areas and the 1997 policy statement referred to earlier has not been implemented. The Government specified that health service workers must have worked in a rural area for at least two years in order to gain experience in different geographical regions and to be considered for promotion (GoN, 1997) but this has been disregarded and is an example of ineffective implementation of the law

and regulation and lack of accountability on the part of professional staff and organisations. Despite the ten year long armed conflict and limited resources the government has attempted to improve peoples' health in a number of ways which would support socio-cultural change and moves towards equality through improvements in public health including maternal and child health services (MoHP, 2007). However, the government has not been able to address adequately issues related to the training and deployment of professional staff.

Some women in rural Nepal still believe that childbirth is a natural process, not needing any biomedical intervention unless there are complications but empirical studies from many developed countries, such as, Australia (Team et al. 2009), Western Europe (Bradley & Bary, 1996) and America (Jordan, 1987; Davis-Floyd & Sargent, 1997) as well as Japan (Fiedler, 1997) suggest that use of SBAs significantly reduces maternal morbidity and mortality. Participants interviewed in this study also stated their views that increasing access to quality SBA services could improve maternal health service utilisation but were not convinced of the value of hospital provision based on western models.

Given the socio-political changes slowly occurring in Nepali society it may be that views are changing towards health as a basic human right but attitudinal and behavioural changes on the part of service providers are slow and there has been less attention to the respectful care agenda in research and policy studies than to barriers to service use. A friendly manner in communication by the SBAs to women could build trust and increase SBA use. However, some SBAs behaved towards women in a repressive and dictatorial manner [See section A5.3.6]. This experience was compounded by a sense of shame and unfamiliarity with the hospital environment discouraging women from future attendance, especially by poor and uneducated rural women. Sharma (2004) commented on lack of ethical practices during service provision (e.g. not taking women's consent and lack of attention to confidentiality and privacy) as factors influencing the quality of care: women in this study expressed similar views, suggesting that little has changed in nearly a decade.

Finally (in this section) there were other factors influencing women's experience of use of hospital based SBAs and these related to the conditions of the hospital itself.

These ranged from conditions which should be susceptible to change by the hospital staff themselves, for example, the cleanliness of the surroundings and efforts to provide a little privacy for the women in labour, through to resource issues (such as the lack of beds for the number of women needing them) through to issues related to wider design and infrastructural factors, such as poor sanitation and irregular supply of electricity. Again, Sharma (2004) commented on similar poor facilities in public hospitals discouraging women from going there for childbirth even if there is access to services. Similarly, security issues related to the unstable political situation and problems of poor governance mentioned above sometimes lead to shortages of the necessary medicinal drugs and interruption of the provision of other medical supplies.

6.4 WOMEN'S CHOICES, EXPERIENCES AND FUTURE PREFERENCES IN SBA USE

The women interviewed in this study were mainly poor and uneducated, as well as living in a rural location, but the views of the women who experienced SBA care in hospital are important since they significantly influence preferences with regards to future service use: women's childbearing is spread over a number of years and memories of the first experience are long-lasting and often shared with other women [See section A5.3.6]. As stated, women's individual characteristics and knowledge influence their choice of and access to services, but other factors (including the family's economic status and lack of women's power over use of the financial resources, as well as community relationships) widen the gap in health service utilisation. Data from this research suggests that understanding women's experiences and preferences could significantly influence uptake of SBAs, if taken into account in service development. However, there has been a lack of exploration of women's views as well as limited research into the views of other stakeholders.

As discussed in the previous two sections there is some evidence of changes in individual and community attitudes, including among family members and women who have worked as TBAs. There is official recognition of maternal health as a woman's right, as well as being a basic human right. The government of Nepal's health policy aimed at reducing maternal mortality in line with the Millennium

Development Goal is helpful in increasing rural women's awareness and positive attitudes towards SBA use (WHO et al. 2012) but progress is slow and rural women continue to have problems accessing maternal health services. In this section:

a) The 'choices' women made and their experiences of maternity care are discussed before and; b) considering their preferences with regard to future service use.

6.4a) women's 'choices' and experiences

As previously discussed, the decision to use health services might be seen as an individual choice (and related to individual characteristics, such as education and employment) but cultural norms and values, gender inequality in decision-making, the views of the household head and women's low autonomy in financial matters all play a part at the household level. Most women interviewed required the permission of a senior member of the family (usually the mother-in-law) for health service utilisation, [See section A5.3.3] but the findings also showed that some men play a part in decision-making about SBA service utilisation. Several studies on maternal health service utilisation and decision-making in many developing countries including Nepal (Acharya et al. 2010; Matsumura & Gubhaju, 2001), Bangladesh (Chakraborty et al. 2003), and Pakistan (Mumtaz & Salway, 2009) have reported that men are the main earners and key decision-makers, thus affecting women's access to skilled care when needed. Gender inequality therefore continues to be a major factor influencing the choices that women make in all area of their lives, including maternal health care. Although attitudinal changes are important, there could be improvements in gender equality if women gained more control over financial resources, for example, if parental properties were transferred equally to sons and daughters after parents died.

It is important here to draw a distinction between the 'choices' the women in this study made (and potentially will make in future) with regards to SBA care and their reasons for going to hospital. While many women interviewed stated a preference for SBA use, the main reason given for going to hospital was 'for safety reasons' [See section A5.4.3]. However, some suggested that they would not make this choice again if they had a 'normal pregnancy' and/ or if SBA care were available locally (See later). Similarly, other women 'chose' to use a TBA and other studies

have found that lack of SBA services compelled some rural women to deliver their babies at home without the help of skilled care (Harris et al. 2010; Anwar et al. 2008). However, some women from both groups in this study identified some actual or potential benefits of a home birth. These included a more relaxed and known environment with support during labour from their mother-in-law or other female family members, as well as privacy during labour, delivery and after childbirth and better, cheaper food.

As previously discussed, culture and tradition as well as women's individual characteristics have a profound influence on decisions to use SBA. For instance, the age of a woman on marriage is closely linked to health service utilisation [See section A5.3.4]. The legal age for marriage is 20 years but early marriage and childbirth is common in Nepal. This is partly because there are still fairly high rates of teenage pregnancy and, since it is culturally unacceptable to give birth before marriage; early marriage is directly related to childbirth. The trend is towards a decrease in teenage marriages but progress is slow, particularly in the rural communities. In fact, more than 50% of women give birth by the age of 20 and more than 75% of women give birth before they are 25 years old (NDHS, 2011). Women who have married young are likely to have less autonomy in decision-making over service use.

Decisions to use SBAs for childbirth are also related to early warning of possible complications at the delivery stage. Women are more likely to get information about the importance of SBA use during antenatal check-ups when any danger signs or risks to delivering the baby might be detected. Thus, use of antenatal care is related to increased SBA use (WHO & UNICEF, 2003). Women who have not received the recommended four antenatal check-ups are less likely to use SBAs during childbirth (WHO & UNICEF, 2003). Women's limited autonomy and/or socio-economic status and concerns about direct or indirect cost are linked to antenatal care use as well as to care at the delivery stage (NDHS, 2011). Findings from this study also showed that women who are poor and illiterate are less likely to use ante-natal care than better educated women from better off families [See section A5.4.5], particularly if there is no provision of SBA services in the (rural) locality.

Different community based surveys on determinants of maternal health service utilisation in developing countries, such as Afghanistan (Mayhew et al. 2008), Bangladesh (Amin et al. 2010), and Kenya (van Eijk et al. 2006) have reported similar findings to this study, namely that poor, illiterate and deprived women are less likely to use antenatal care; and studies in developed countries have also found similar trends. A national survey of women's experience of maternity care (n=10,000) in the UK (Redshaw & Heikki, 2010) reported that lone mothers with less than 11 years of schooling and/or women living in the most deprived areas and/or from ethnic minority groups made less use of professional care during pregnancy.

Irrespective of their socio-economic and individual characteristics, many women had some planned for SBA use associated with safety rather than other needs [See section A5.4.2]. Saving some money for an emergency is the main form of planning for a safe delivery for some women as they were only intending to go to hospital if there was a problem during labour. This means that many women were aware of possible complications during childbirth and indicates that women may prefer to use SBAs if they know they will need skilled care. Women with more education and higher socio-economic backgrounds were more likely to have planned SBA use based on support from family members or greater financial autonomy and positive planning [See section A5.4.2]. Poor, low caste and uneducated women had less planned SBA use, reflecting the likelihood that poor women have problems meeting their daily needs and cannot save money for additional expenses.

Therefore, the issue of costs is a major barrier to accessing SBAs among rural women in Nepal even though some SBA services are free in hospital (Borghi et al. 2006). The direct and indirect costs of going to hospital impose extra burdens on the family and limit some women's choices about SBA use [See section A5.2.3].

Moreover, rice planting or harvesting times are also critical to service use since a large proportion of the rural population is involved in agricultural work. These qualitative findings are consistent with those from studies on the economic costs of SBA care in Nepal (Borghi et al. 2006; Ensor et al. 2009). In this study a high proportion of SBAs (80%) considered that hospital costs are not a major barrier to choosing a hospital delivery but SBAs did cite transportation as a big problem

influencing SBA use. As mentioned earlier the Government of Nepal has implemented free SBA delivery in the hospital (MoHP, 2007) but there are additional costs for medicinal drugs and other supplies as well as for accommodation for persons accompanying women (Simkhada et al. 2012): these all put an extra financial burden on the family.

As discussed previously, husbands who had an independent income were not only more positive about service uptake but also prepared to meet the cost of their wives' delivery in hospital [See section A5.3.3]. Being able to afford hospital care was linked to social prestige as well as the family's financial situation. Poor, uneducated or unemployed husbands were less likely to encourage delivery in hospital [Section A5.3.3] since they usually could not afford such services even if they were aware of the importance of skilled care. If men were not earning money, women had to depend on other family members for childbirth expenses in the hospital. Studies in Nepal (Borghi et al. 2006; Simkhada et al. 2012) and other developing countries, such as Bangladesh (Koblinsky et al. 2008), and India (Bhatia & Cleland, 2001; Pathak et al. 2010) show that the family's financial situation influences choices made about health service utilisation. Similar experiences were reported by mothers in other developing countries including Afghanistan (Mayhew et al. 2008), Pakistan (Shaikha & Hatcher, 2005), Ethiopia (Tayelgn et al. 2011), and Ghana (D'Ambruoso et al. 2005).

A number of factors have previously been identified as affecting women's experiences of SBA care in the public hospital. Use of SBAs in future is related partly to how well women's expectations have been met in the past and whether their previous experience of service use was satisfactory with a good pregnancy outcome [See section A5.4.3]. However, findings from this study show that many SBA users had negative experiences in the hospital, including in their treatment by some SBAs including refusal to assist during labour and lack of empathy and moral support: such experience tended to discourage women from going to hospital for subsequent births [See section A5.3.6]. Furthermore, if rural women do not have a choice of services locally or cannot afford the costs of going to hospital, they may prefer to deliver their babies at home with the help of a female TBA, as in this study. These findings were similar to studies on maternal health service utilisation in other

developing countries, e.g. Afghanistan (Mayhew et al. 2008); Bangladesh (Amin et al. 2010) and rural Tanzania (Mrisho et al. 2009).

6.4b) women's preferences for future SBA use

As indicated earlier, plans for the future use of SBAs is influenced by recollection of previous birth experiences and outcomes. The burden of going to the distant hospital and the behaviour some women faced there also influence preferences regarding future SBA use. While some higher caste women from better off families may be more likely to prefer to use SBA services in private hospital facilities in future this is not an option for many rural women.

Women who did not have any complications during their previous pregnancy and did not have a long labour or too much pain stated that they were less likely to attend hospital for the next pregnancy. Women appeared to assume that their birth experiences will remain the same. By contrast, where women had had a long labour and/ or complications in their last delivery they were more likely to express a preference for going to hospital next time, assuming that there might be similar problems [See section A5.1.2].

A population-based survey of determinants of skilled birth attendance among 950 women in rural Cambodia (Yanagisawa et al. 2006) showed that women who had prolonged labour in a previous pregnancy were more likely to seek SBA help for delivery of the next baby relative to those who did not have a prolonged labour. It was reported that women who had experienced spontaneous abortions, severe bleeding and other complications in the previous pregnancy were making more use of SBAs to deliver a subsequent baby in case the condition reoccurred: similar views were expressed in this study [See section A5.1.2].

However, a number of women in this study expressed the view that, if SBAs were available locally, they would prefer to give birth at home. Currently lack of services to meet this preferred option is a great problem [See section A5.3.3] and findings from this study suggest that there is a significant unmet need in the maternal health care system. As mentioned previously, the lack of rural health infrastructure and the

reluctance of SBAs to work in rural areas [See Table B5.1.8] are factors widening the gap in terms of SBA provision and use. Nepal's current policies have not been developed to address this issue. Professionalization of the SBA services and establishing community midwives as an autonomous profession could be an important step to meeting this need. If such services were coordinated with secondary and tertiary levels of care this could be a cost effective way to improving rural maternal health.

It might be argued that lack of resources; political will and policy implementation make the provision of rural SBA services unrealistic in the short term in Nepal. However, well trained community based or peripatetic SBAs could have an important role in supporting a range of developments including family planning advice (reducing unwanted pregnancies) and antenatal care (contributing to identifying problems in pregnancy) thus improving rural maternal health. The link between antenatal care and SBA use at the delivery stage has already been discussed and family planning also has a significant role to play in maternal health care. There are many health benefits associated with contraceptive use to delay motherhood or to make active choices about birth spacing and number of children.

Moreover, consistent and correct use of condoms can significantly reduce sexually transmitted infections including HIV/AIDS (Smith et al. 2009). An NDHS study (2011) reported that there is high unmet need (27%) for spacing and limiting births among married couples and this rate might be higher if only rural women were surveyed. Despite the benefits, contraceptive use overall is still low due to various socio-cultural factors in rural Nepal and some women may lack autonomy and choice in contraceptive use due to their husband's views since, as stated, many women's lives are still controlled by men.

This suggests that, as well as direct provision of rural services, there is a need for community based educational programmes aimed at attitudinal change, requiring the training of both health professionals and community members and the establishment or expansion of specific programmes and facilities employing variously trained staff. The history of the development of midwifery and current models of community based care in some industrialised countries may offer Nepal and other developing

countries pointers to establishing midwife led services for rural women, from the antenatal period through to post-partum care (Schölmerich et al. 2014; Loudon, 2001; Loudon, 1992; De Brouwere et al. 1998). In addition, the potential role and contribution of International Non-governmental Organisations in sponsoring pilot programmes and providing resources for capacity building in local communities could be explored.

As previously discussed, there are gender related issues in the current staffing of maternity services. The fact that all locally available TBAs are women and the unavailability of female medical staff in the hospital are likely to be factors in some women's reluctance to express a preference for hospital births in future. In the absence of female doctors or qualified and respectful midwives, women were hesitant to consult openly about their problems and felt shame and embarrassment when examined [See section A5.3.7]. Improvements in educational opportunities for girls; the opening up of medical training to a wider range of people; the development of midwifery as a profession; and the training of some rural women as paraprofessionals to run educational programmes in communities could contribute to raising women's status and job prospects as well as to service development and use.

A Government of Nepal report (2012) showed that only a relatively small proportion (5.3%) of women in Nepal are involved in paid work, and 11% of these work in the government sector. A smaller proportion currently works in the health sector, but the majority of women are involved in agriculture or informal domestic work. Even though a large proportion of women are formally 'unemployed' they are an important part of the country's work force, contributing to the nation's economic development (e.g. through care of children and older people and household management). However, women's contributions have been poorly evaluated in economic development which has a direct impact in women's autonomy and decision-making power. In addition, due to the lack of job opportunities, women's low position relative to men and gender inequality, fewer opportunities are available to women in paid work even if they are educated (GoN, 2012).

Data from this study suggested that women living in a nuclear family are in a better position to make their own decisions: they are more likely to have some financial

autonomy and to engage in discussion about pregnancy related matters with their spouse, irrespective of the family's socio-economic status [See section A5.3.1]. They may have some independent income and greater freedom to make choices about the health services they want to use. Future choices may also be informed by generational changes. As findings from this study showed, some of the younger generation of women are already benefiting from improvements in education and community awareness about reproductive health, leading to increased trust in biomedical services and a move away from traditional beliefs and practices. In general, changing attitudes in society have been reflected in statements about equal opportunities in education and health: these can promote increased autonomy for women.

However, such positive developments have been slow to reach rural areas, where many women remain poor and uneducated and continue to favour traditional practices in childbirth [See section A5.1.2]. With regard to generational differences, this study has also shown that the more knowledgeable mothers-in-law were usually supportive about current and future SBA use but only one mother-in-law was literate out of five mothers-in-law who were interviewed in this study (Appendix 7) reflecting the fact that many mothers-in-law in Nepal are illiterate and lack awareness about skilled care. They may believe that involvement in physical work until delivery makes childbirth easier, impacting on sympathy for the view that pregnant women need better nutrition and more rest and on timely uptake of services. However, mothers-in-law play a significant part in decisions about maternal care and support for pregnant women and their potential to contribute to future maternity developments should be acknowledged in planning rural services.

6.5 SUMMARY

This study has tried to capture the essence of women's experiences and perceptions with regards to maternal health service utilisation in Nepal and thus contribute to an understanding of why women do or do not use SBAs. Previous studies have suggested a wide range of factors affecting take-up of services and these were significantly confirmed by analysis of the data from this study. Factors that predictably influence SBA use include cultural factors affecting women's lack of autonomy in resource control and decision-making as well as access issues related both to the status of respondents as members of a rural community and to the economic circumstances of individual families. The difficult terrain of the country; widespread poverty and illiteracy; limited resources (or their mismanagement) for the improvement of existing services as well as traditional cultural attitudes and gender related factors pose challenges when considering how policies could be changed and services developed to meet the needs of rural women who are pregnant.

However, the qualitative data about women's actual experiences of hospital based maternity care and their preferences with regard to future service use have yielded new knowledge and two findings in particular have implications for improvement of existing services and development of new ones. Respondents who had attended hospital in order to receive care by SBAs generally described this as a negative experience, due to the rude behaviour of female SBAs and the poor physical standards of the facility, with direct implications for the training and management of staff. In addition, many of the respondents said that they would prefer to have their babies at home, if they had access to SBA care in the village.

There have been some improvements in health outcomes in Nepal over the last few decades (reductions in maternal mortality, infant and child mortality rates and total fertility rates, as reported by NDHS, 2011), but there are still significant challenges to increasing the efficiency and quality of the health service, including the training, deployment and management of SBAs themselves. To date women's experiences and preferences have been overlooked in service design and development, and there is a specific need for maternity service developments in the rural areas. The establishment of a fully trained cadre of midwives, operating according to a

professional code of ethics, could improve the quality of care in existing (hospital) facilities. In addition, the deployment of some personnel as community midwives could offer antenatal and postnatal care to rural women as well as undertaking home confinements or advising on timely transfer to hospital where indicated.

Despite political instability and limited resources, the government has attempted to take some initiatives which would support gender equality and more specifically improved access to maternity services. However, the measures taken (e.g. help with transport costs) cannot overcome the unchangeable aspect of the country's topography and urban based services remain difficult and costly or even impossible for many rural women to access. The evidence from this study supports the proposition as outlined by McLeroy and colleagues in 1988 in the SE model of health service utilisation. Uptake of SBAs is affected by individual, interpersonal, community, organisation and public policy factors. Generally, rural women are disadvantaged at each of these levels and, given that such a high proportion of the population still lives in (often remote) rural areas, government and professional efforts in health care need to be directed at organisational and policy levels in favour of rural communities. The final chapter presents overall conclusions to this thesis and summarises the implications of these research findings.

CHAPTER SEVEN: CONCLUSIONS

7.1 INTRODUCTION

This chapter presents the key conclusions of this doctoral thesis and considers some implications of the findings for improving the uptake of skilled birth attendants in the rural areas of Nepal. The research used a qualitative approach to collect data from a variety of sources: most importantly it gives voice to the experiences and views of women in a rural area who had recently given birth, with or without the assistance of SBAs. Two findings in particular shed new light on women's experiences of hospital based SBA care and indicate that many would prefer to use locally based SBAs to support home births if these were available. These conclusions have significant implications for planning and investment in relation to the development of the Nepal's health care system, with particular reference to maternity care.

The findings of this study confirmed those from other studies in suggesting that many inter-related factors affect service use. These include inequalities related to gender and caste, affecting the low status of women and their lack of autonomy; economic constraints on both the choices open to families and the quality of services; and issues related to the overall political situation in the country. Since use of services is significantly affected by the prevailing cultural norms and the socio-economic status of many rural women, wider service developments (e.g. education) and policies and programmes aimed at attitudinal change and income generation could also play a part in increasing service use. Good governance and political stability are also important for enabling Nepal to meet the goals of MDG 5. In the following text strengths and weakness of the study are summarised before considering further the key conclusions and their implications.

7.2 STRENGTHS AND WEAKNESS OF THE STUDY

This study used a case-study design and multiple methods of data collection to explore the factors affecting take up of maternal health services at the point of childbirth. New mothers (24), both SBA users and non-users, in a rural community

were interviewed to explore their experiences and preferences; the views of a small number of members of the local community (eight), relations of other women in the village who had given birth were also sought through interviews; and SBAs in a public and private hospital were surveyed to elicit their experience and perceptions.

7.2a) Strengths

No previous studies had been conducted focussing on an in-depth exploration of the views and experiences of new mothers regarding their care in childbirth. In recognition of the cultural norms of the society and sensitivity of the subject matter, the principal researcher (male) employed and trained a woman interviewer. All interviewees were given a choice as to who should be present and conduct the interview. The woman interviewer was known in the local area facilitating access to respondents. As native Nepalis, both the researcher and the interviewer understood the local dialect making it easier to explore the topic and understand the socio-cultural context of the community. The researcher's knowledge of both the Nepali language and English also had positive implications for the translation (into Nepali) of two of the research instruments (semi-structured questionnaires used with mothers and relations) and of the data obtained from the interviews (Nepali to English). This familiarity with the language meant that what was said was not mediated through an interpreter. The researcher was also sensitive to the local culture when carrying out the data collection and knowledgeable about the national context at the data analysis stage and when considering the 'meaning' and implications of the findings.

The numbers of women interviewed yielded rich data which in turn produced some original findings. The data from other members of the local community generally supported and sometimes amplified the findings from the mothers. The data from the SBAs provided an alternative perspective on the issue of maternal health care at the point of delivery: they indicated some of the differences (e.g. in staffing) between the public and private hospitals as well as giving some possible reasons for the poor standards in the public hospital.

The study adds to the literature about barriers to the use of SBAs services. Some of the findings and conclusions drawn corroborate those of other studies in Nepal and

other developing countries as reported in the literature. However, exploring women's experiences and views in their own words is a unique feature of this study and adds new knowledge about women's experiences and preferences in relation to maternal health service utilisation. The findings therefore could be important in contributing to the development of services which are better adapted to the needs and wishes of women living in rural areas of Nepal.

7.2b) Weaknesses

The fact that this was a small scale study in one locality with a limited number of respondents (both interviewees and survey respondents) could be seen as a weakness by those who are generally critical of qualitative research designs and methodologies. However, leaving this aside, there may be other weaknesses related to this study in particular.

One of these might relate to the choice of respondents. The women interviewed were all married, predominantly in their 20s, and living in one VDC. It may be that older or younger women (particularly teenage mothers) and those living in an urban area would have different views based on different experiences. Similarly, the number of key informants was limited by time and financial constraints and a wider range of respondents in this category might have yielded a wider range of findings. In particular, it would have been interesting to hear the views of more husbands.

More particularly, the relevance of surveying staff in a private hospital could be questioned since almost all of the women who had used SBAs had attended the public hospital. However, the hospital survey was commenced before the interviews (so this fact was not known) and the data did in any case reveal some interesting, if predictable, comparisons between staffing and standards in the two hospitals.

Another limitation relates to the characteristics of the interviewees and the ethical aspect of this research. It was only possible to provide a verbal description of the project and take verbal consent due to the low levels of literacy among the majority of respondents. Similarly, some participants expressed their views in very short and simple ways because of their lack of education and were unable to elaborate on a topic. Additionally, some women may not have shared their true or full story due to

shyness and embarrassment about childbirth. However, the methods used for the study aimed to address these issues through the phrasing of the questionnaire and recruitment of the female interviewer.

7.3 KEY CONCLUSIONS AND IMPLICATIONS OF THE STUDY

Two conclusions stand out from the range of findings from this study. One is that the rural women interviewed who had sought SBA care in childbirth had a poor experience in a public hospital. The other is that there is a need and preference for SBAs trained and located to support rural women having their babies at home. These findings have particular implications for the development and staffing of maternity services. However, in analysing the findings and linking them to the characteristics of Nepali society as a whole, other conclusions can also be drawn with wider implications. The two specific conclusions will be discussed further before considering the wider aspects of the findings.

7.3a) Improving hospital based services, training and regulation of SBAs

Understanding service users' views, experiences and preference can play a vital role in informing policy makers and service providers about the range and standards of services needed. However, to date it seems that pregnant women's views have not been explored or taken into account in developing plans and provisions in maternal health. In developing its health care system, and particularly its maternal health policies, the Nepali government has concentrated provision in urban hospitals which are difficult to access for the majority of women (most of whom live in rural areas) for reasons of topography and cost.

However, even when accessed, the women interviewed cited many instances of poor standards and practices in the public hospital and cited these as discouraging them from seeking SBA assistance in hospital in future. The criticisms related to both the physical aspects of the hospital (e.g. lack of cleanliness and privacy) and to the attitudes and behaviour of the staff themselves. Both aspects could be addressed through improved training, management and accountability of hospital staff. The fact that the medically trained staffs were exclusively male was an additional factor

detering women from future hospital use but this is related to wider issues of gender and cultural factors affecting service provision and choices and requires societal changes affecting opportunities for women in addition to changes specific to the maternal health sector.

Findings from this study indicated that rural women in Nepal preferred to receive care from other women, even if this meant calling on the services of a TBA or receiving care from SBAs who behaved in disrespectful ways. Specifically, the lack of a professional group of midwives trained according to international standards affects the standards of care in existing facilities and prevents the development of more appropriate services for rural women (see next section).

In the short term it is important to improve the quality of SBAs through updating their training, including addressing issues related to interpersonal skills and ethical behaviour. Thereafter a programme of continuous professional development should be implemented. Effective management of staff is also needed, both for monitoring purposes and to try to improve the stressful conditions under which the SBAs themselves work. Partnership working between the public and the private hospital could play a part in skill development, including at management level. For example, providing senior nurses or managers with training in a private hospital while also arranging for private hospital staff to have temporary secondments to the public hospitals could be helpful. Similarly, introducing a code of ethics to govern staff behaviour towards service users could be important to underpin improvements in the quality of services. This might go in tandem with establishing midwifery training and qualifications.

Improving the hospital environment and hygiene standards might be addressed through better management; and even relatively inexpensive measures (such as the erection of curtains or screens to give women some privacy) would signal a more respectful attitude to women in childbirth. Overcrowding issues might be addressed through the development of alternative services (see next section). In addition this problem-and that of costs generally for women who need to attend hospital-might be partly met by providing inexpensive accommodation close to the hospital for rural women and their relatives to stay in just before their due date or if there are delays

returning home after delivery. Provision of nursing homes for women in the later stages of pregnancy who need bed rest and nursing care rather than medical interventions could be more cost effective and offer a better environment than hospital admission.

7.3b) Development of rural health services and deployment of SBAs

This study has shown that many women either had no choice but to deliver their babies at home (whether or not they actually favoured TBA use over SBAs) or they expressed a view that they would prefer to deliver their next baby at home, particularly if this could be with the help of an SBA. At the time of writing, women in this research-and in most other rural areas of Nepal-have no access to SBA services in their localities, despite a policy suggested nearly two decades ago for provision of rural health services. While the literature (including government reports) suggests that there has been some improvement in use of maternity services in Nepal (with concomitant improvement in health indicators) there are still substantial barriers to uptake for rural women and universal access to reproductive health care services is far from achieved. While the shortfall in services is partly related to resource issues it is also related to policy and professional choices about location of services and rural women are particularly disadvantaged.

As mentioned above, the introduction of midwifery as a profession could be important in raising standards of maternity care and this would be particularly so if linked to the development of rural maternal health care services employing either community based or peripatetic midwives. Such staff could play an important role in development of antenatal, delivery and postnatal care, as well as referral of pregnant women for whom childbirth in hospital was advised.

Subsidised training and perhaps the support of the UNDP or an INGO engaged in capacity building would probably be needed in order to develop such training and recruit the necessary students but development of the profession would have 'spin-offs' in terms of introducing professional codes and accountability and providing support for other community based initiatives such as recruitment and training of paraprofessionals or volunteers who could deliver related services (e.g. family

planning) and educational programmes. Such developments might also be helpful in raising the status of women, expanding their employment opportunities and bringing other socio-economic benefits to rural communities.

Development of rural health services might be facilitated by making rural placements a necessary part in the training of all medical and nursing staff and by implementing the dormant policy which proposed that rural experiences are essential to career development and promotion to a higher post in the future. Implementation of such a policy could increase professional appreciation of rural issues, as well as contributing to the longer term development of locally based services. Incentives for qualified doctors and nurses to work in rural areas or establishment of peripatetic rural posts could also assist with the supervision of trainees and monitoring of service standards. It would also be possible to provide supervision by experienced (urban based) personnel through the use of satellite technology (e.g. Skype) and the development of rural specialists could provide additional training for community based health staff.

Access to maternal health services for rural women could also be increased through other public health measures, for example, establishing telephone help lines services to provide information. The telemedicine model could be helpful to support home births over large and sparsely populated areas, e.g. lesson can be learnt from Australia. Women's access to current SBA services is limited by poor roads; and quality of services is also impacted by irregular power supply. Even if rural maternal health services are established attention is still needed to these infrastructure issues to improve the quality of life of all rural people and retain staff in rural services. Strategic improvement of the road system would enable use of some vehicles (e.g. three wheel motor bikes) for transporting peripatetic staff in emergencies or for routine appointments in more isolated settlements. The problem of the electricity supply could be addressed by government through seeking funding to construct alternative power supplies through the use of wind and solar power technology.

7.3c) Women, cultural change and socio-economic development

This study has confirmed the theoretical view that maternal health service utilisation is influenced at various levels, from the individual characteristics of the women themselves through family, community and organisational characteristics, as well as by national public health policies and programmes. Findings from this study also confirmed that societal norms and cultural factors, particularly related to gender and caste, have a considerable bearing on women's socio-economic status and their lack of autonomy in making choices, even if there are different options for service use. Thus, most mothers interviewed had not made decisions themselves about whether to use SBAs or TBAs. There was some indication of a slight shift in women's position and family members' attitudes (for example, not all the women lived in extended family households and some had discussed birth spacing with their husbands) but generally the findings confirmed the key role of mothers-in-law in pregnancy related matters in what is otherwise still a strongly patriarchal society.

Addressing issues related to the status of women as well as the wider inequalities in society must be a goal of both education and economic policies. To some extent the changes and service developments needed require attitudinal changes within families and communities as well as society as a whole, as well as new investment or redirection of existing resources. Use of the media and information and communication technologies can play an important role in public awareness campaigns, and there is scope for more targeted educational programmes within rural communities.

Data from this study supported the findings of other studies that less educated women made less use of maternity services. Educational programmes at the school stage and aimed at adults can be important in offering factual information about different aspects of health care and encouraging health seeking behaviour as well as beginning to challenge attitudes and practices which disadvantage girls and women more generally. Such programmes should aim to increase knowledge about reproductive and sexual health so that unwanted pregnancies can be avoided and pregnancy itself is seen, not as a shameful state, but as one for which women can seek professional advice and care. In addition and in general, it is believed that

expanding the educational opportunities to girls not only improves their own life chances but contributes to improved socio-economic conditions for families and communities as a whole.

As mentioned, health seeking behaviour is also related to the family's financial circumstances and family poverty is a major factor limiting women's access to maternity care. Apart from the need for free education for women, other strategies are also needed for increasing the opportunities for women to earn money. This could be done through income generation schemes, for example, as sometimes offered by INGOs aiming to build community capacity. Community capacity is the combined influence of peoples' commitment living in the particular community (e.g. political groups, policy makers, people from different profession and religious or ethnic groups), resources and skills that can be deployed to build on community strength and addresses the community problems and win the opportunities.

Community can be act based on a shared awareness of problems and workable solution. Community capacity also refers to heightened ability to address opportunities, solve the problems and strengthen community responses through the use of available resources for example, financial, natural and human assets including skills. These include all the talents and expertise of the individual or organisation that can be marshalled to address problems, grab opportunities and to add strength to exist and emerging community institutions. In general, different issues such as, effort, will, initiative and leadership are important to shape the community capacity.

In addition, the government should develop short, medium and long term plans aimed at improving women's autonomy, such as through providing incentives in education and training, some of which could be targeted at improving the skill mix of health staff including those working in maternity services in rural areas. Involving women in the political arena, whether locally or nationally, could raise women's voices and confirm their right to access services.

This study confirmed that women who accessed antenatal care were more likely to use SBAs in childbirth. Apart from increasing availability of such clinics locally, increased awareness and information about their importance could be provided at the

community level through different forums, e.g. women's groups, youth groups and through mobilising female community volunteers. Women's access to media and telephone help-lines can extend the reach of programmes aiming at education and attitudinal change about reproductive and sexual health related matters. In addition, involvement of fathers in educational programmes and at the antenatal care stage could lead to changes in men's attitudes and increasing uptake of family planning and maternity services. Providing services in health facilities which are appropriate to current cultural traditions, recognising the role of mothers-in-law in women's pregnancy matters but which also encourage more active participation by husbands, could have longer term positive benefits, in terms of SBA use and women's health generally.

7.4 CONCLUSION

This study offers a unique insight into women's experiences of childbirth and preferences regarding SBA use in a rural area of Nepal. While some strides have been made in terms of meeting MDG 5 goals and improving maternal health, more remains to be done and data from this study could provide important evidence for making improvements in current services and informing future plans and developments.

As a developing country Nepal is a country in transition between a paternalistic and caste based society and signs of more modern thinking and practices, for instance, in talk of healthcare as a right for all. However, it is also predominantly a rural society where traditional views and practices remain strong and services and resources available to rural communities are limited. In addition, the country lacks the economic resources to address its substantial infrastructure and service needs; and problems are compounded by political conflict, poor governance and lack of sufficiently trained personnel in many sectors.

These tensions were reflected in the findings of this study, which suggested that, although some small signs of cultural change were indicated, use of SBAs was limited by individual, family and community attitudes, as well as by poverty and the location of existing services. The needs of a majority rural population have to date

been largely ignored and the experiences and preferences of women using maternity services have not been investigated.

Based on the conclusions presented above, and given the stated desire of the national government to improve maternal health through increased use of SBAs, this study has various implications for resource allocation and service development. Notable among these are the need to establish midwifery as a profession-aimed at raising standards in the care of pregnant women generally-and to make maternity services more readily available to women in rural areas. Policy makers need to develop short, medium and long term plans aimed at improvement of maternal health services which are relevant to Nepali conditions while also fostering improved socio-economic circumstances of rural families. A range of measures could be aimed at improving the status of women and giving them more choices and autonomy, not least in relation to use of health care services. Working together with different partners, including professionals, academics, NGOs and INGOs the government could bring positive changes to community services and perceptions. However, the voice of the service user also needs to be heard in improving services and the choices available to women.

References

- AbouZahr, C., & Wardlaw, T. (2001). Maternal mortality at the end of a decade: Signs of progress? *Bulletin of the World Health Organisation*, 79, 6:561-568.
- Acharya, DR., Bell, JS. Simkhada, P. van Teijlingen, ER. & Regmi, PR. (2010). Women's autonomy in household decision-making: A demographic study in Nepal. *Reproductive Health*, 7:15.
- Agha, S. (2011). Impact of maternal health voucher scheme on institutional delivery among low income women on Pakistan. *Reproductive Health*, 8; 10.
- Ahmed, S. & Khan, MM. (2011). Is demand-side financing equity enhancing? Lessons from a maternal health voucher scheme in Bangladesh. *Social Science Medicine*, 10:1704-1710.
- Acharya, LB., & Cleland, J. (2000). Maternal and child health services in rural Nepal: Does access or quality matter. *Health Policy & Planning*, 15, 2: 223-229.
- Acharya, M. (2007). *Gender equality and empowerment of women in Nepal*. UNFPA, Kathmandu, Nepal.
- Aday, LA., & Andersen, RM. (1974). A framework for the study of access to medical care. *Health Service Research*, 9, 3:208-220.
- Airhihenbuwa, CO., & Obregon, R. (2000). A critical assessment of theories/models used in health communication for HIV/AIDS. *Journal of Health Communication*, 5:5-15.
- Amin, R., Shah, NM. & Becker, S. (2010). Socio-economic factors differentiating maternal and child health-seeking behaviour in rural Bangladesh: A cross-sectional analysis. *International Journal for Equity in Health*; 9:9.
- Andersen, RM. (1995). Revisiting the behavioural model and access to medical care: Does it matter? *Journal of Health Sociology and Behaviour*, 36, 1:1-10.

Andersen, RM., & Newman, JF. (1973). Societal and individual determinants of medical care utilisation in the United States. *Milbank Memorial Fund Quarterly-Health and Society*, 51, 1:95-124.

Anwar, I., Sami, M. Akhtar, N. Chowdhury, ME. Salma, U. Rahman, M. & Koblinsky, M. (2008). Inequity in maternal health-care services: Evidence from home-based skilled-birth-attendant programmes in Bangladesh. *Bulletin of the World Health Organisation*, 86, 4:253-259.

Asian Development Bank. (1999). *Woman in Nepal, country brief paper*. Asian Development Bank Programme Department, West Division 1, Kathmandu, Nepal.
Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behaviour change. *Psychological Review*, 84, 2: 191-215.

Asian Development Bank. (2014). *Poverty in Asia: A deeper look. Key indicators for Asia and the Pacific 2014, 45th edition*. Asian Development Bank, Asian Development Bank.

Ashwood-Smith H. & Simpson H. (2003). An observational study of obstetric care in Southern Malawi, Malawi Safe Motherhood Project Report.

Baral, YR., Lyons, K. Skinner, J. & van Teijlingen, ER. (2010). Determinants of skilled birth attendants for delivery in Nepal. *Kathmandu University Medical Journal*, 8, 3: 325-332.

Baral, YR., Lyons, K. Skinner, J. & van Teijlingen, ER. (2012). Maternal health services utilisation in Nepal: Progress in the new millennium? *Health Science Journal*, 6, 4:618-633.

Bastola, TS., & GC, RK. (2003). *A perspective on population census 2001. Population Monograph of Nepal, volume I*. Central Bureau of Statistics, Ram Shah Path, Kathmandu, Nepal.

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13, 4:544-559.

Becker, MH. (1974). The health belief model and personal health behaviour. *Health Education Monographs*, 2: 324-508.

Becker, MH., & Rosenstock, IM. (1984). Compliance with medical advice In Steptoe, A. & Matthews, A (eds.). *Health care and human behaviour*, London: Academic press, 135-152.

Belgrave, LL., Zablotsky, D. & Guadagno, MA. (2002). How do we talk to each other? Writing qualitative research for quantitative readers. *Qualitative Health Research*, 12, 10: 1427-1439.

Bennett, L., & Singh, S. (1979). *Tradition and change in the legal status of Nepalese women*, Centre for Economic Development and Administration, Tribhuvan University, Kathmandu, Nepal.

Bennett, L. (2005). Gender, caste and ethnic exclusion in Nepal: The policy process from analysis to action. *Arusha Conference “New Frontiers of Social Policy” - December 12-15*.

Bennett, L., Dahal, DR. & Govindasamy, P. (2008). *Caste, ethnic and regional identity in Nepal: Further analysis of the 2006 Nepal Demographic and Health Survey*. Calverton, Maryland, USA: Macro International Inc.

Bhatia, JC., & Cleland, J. (2001). Health-care seeking and expenditure by young Indian mothers in the public and private sectors. *Health Policy & Planning*, 16; 1:55-61.

Bhuyan, KK. (2004). Health promotion through self-care and community participation: Elements of a proposed programme in the developing countries. *BMC Public Health*, 4:11.

- Blum, L., Sharmin, T. & Ronsmans, C. (2006). Attending home vs. clinic-based deliveries: Perspectives of skilled birth attendants in Matlab, Bangladesh. *Reproductive Health Matters*, 14, 27: 51-60.
- Bogren, MU., van Teijlingen, ER. & Berg, M. (2013). Where midwives are not yet recognized: A feasibility study professional midwives in Nepal. *Midwifery*, 29, 10:1103-1109.
- Bolam, A., Manandhar, DS. Shrestha, P. Ellis, M. Malla, K. & Costello, AM. (1998). Factors affecting home delivery in the Kathmandu valley, Nepal. *Health Policy & Planning*, 13, 2:152-158.
- Borghi, J., Ensor, T. Neupane, BD. & Tiwari, S. (2004). *Coping with the burden of the costs of maternal health*. Nepal Safer Motherhood Project, DFID, Family Health Division Department of Health Services Ministry of Health, GoN, Kathmandu, Nepal.
- Borghi, J., Ensor, T. Neupane BD. & Tiwari, S. (2006). Financial implications of skilled birth attendance at delivery in Nepal. *Tropical Medicine & International Health*, 11, 2: 228-237.
- Bowling, A. (2002). *Research methods in health: investigating health and health services (2nd edn.)*. Open University Press, Buckingham, Philadelphia.
- Bowser, D., & Hill, K. (2010). *Exploring evidence for disrespect and abuse in facility based childbirth: Report of a landscape analysis*. Bethesda, MD: USAID Traction Project, University Research Corporation, LLC, and Harvard School of Public Health.
- Bradley, EH., Curry, LA. & Devers, KJ. (2007). Qualitative data analysis for health services research: Developing taxonomy, themes and theory. *Health Service Research*, 42, 4:1758-1772.

- Bradley, PJ., & Bray, KH. (1996). The Netherlands' maternal-child health programme: implications for the United States. *Journal of Obstetric, Gynaecologic & Neonatal Nursing*, 25, 6: 471-475.
- Braveman, PA., & Gruskin, S. (2003). Defining equity in health. *Journal of Epidemiology & Community Health*, 57:254-258.
- Brefenbrenner, U. (1977). Towards an experimental ecology of human development. *American Psychologists*, 32, 7: 513-531.
- Brown, PA. (2008). A review of the literature on case study research. *Canadian Journal for New Scholars in Education*, 1, 1:1-13.
- Bryant, T. (2002). Role of knowledge in public health and health promotion policy change. *Health Promotional International*, 17, 1:89-98.
- Bryman, A. (2007). Paradigm peace and the implications for quality. *International Journal of Social Research Methodology*, 9, 2:111-126.
- Bryman, A. (2012). *Social research methods*, (4th edn.). Oxford University Press, Oxford.
- Caldwell, B. (1996). The family and demographic change in Sri-Lanka. *Health Transition Review*, 6: 45-60.
- Campbell, OM., & Graham, WJ. (2006). The Lancet maternal survival series steering group. Strategies for reducing maternal mortality: Getting on with what works. *The Lancet*, 368, 9543:1284-1299.
- Carlough, M., & McCall, M. (2005). Skilled birth attendance: What does it mean and how can it be measured? A clinical skills assessment of maternal and child health workers in Nepal. *International Journal of Gynaecology & Obstetrics*, 89, 2: 200-208.

Carter, SM., & Little, M. (2007). Justifying knowledge, justifying method, taking action: Epistemologies, methodologies, and methods in qualitative research. *Qualitative Health Research*, 17, 10:1316-1328.

CBS. (1995). *Population monograph of Nepal 1997*. Central Bureau of Statistics, Ram Shah Path, Kathmandu, Nepal.

CBS. (2001). *Statistical year book of Nepal 2001*. Central Bureau of Statistics, Ram Shah Path, Kathmandu, Nepal.

CBS. (2003). *Population monograph of Nepal*. Central Bureau of Statistics, Vol. 1, Ram Shah Path, Kathmandu, Nepal.

CBS. (2011). *Preliminary results of national population census 2011*. Central Bureau of Statistics, Ram Shah Path, Kathmandu, Nepal.

Central Intelligence Agency. (2013). *The world facts book. Nepal economy overview*. Available in http://www.indexmundi.com/nepal/economy_overview.html, accessed on 26 February, 2014.

Chakraborty, NM., Islam, AM. Islam, RC. Bari, W. & Akhter, HH. (2003). Determinants of the use of maternal health services in rural Bangladesh. *Health Promotion International*, 18, 4: 327-337.

Chatman, EA. (1984). Field research: Methodological themes. *Library & Information Science Research*, 6, 4:425-438.

Chenail, RJ., & Maione, P. (1997). Sense making in clinical qualitative research. *The Qualitative Report*, 3, 2:1-9.

Chin, B., Montana, L. & Basagan, X. (2011). Spatial modelling of geographic inequalities in infant and child mortality across Nepal. *Health & Place*, 17, 4: 929-936.

Choulagai, B., Onta, S. Subedi, N. Mehata, S. Bhandari, GP. Poudyal, A. Shrestha, B. Mathai, M. Petzold, M. & Krettek, A. (2013). Barriers to using skilled birth

attendants' services in mid-and far-western Nepal: A cross-sectional study. *BMC International Health & Human Rights*, 13:49.

Chowdhury, A. MR., Mahbub, A. & Chowdhary, A. (2003). *Skilled attendance at delivery in Bangladesh: An ethnography study*. BRAC, Research and Evaluation Division, Dhaka, Bangladesh.

Cotter, K., Hawken, M. & Temmerman, M. (2006). Low use of skilled attendants' delivery services in rural Kenya. *Journal of Health Population & Nutrition*, 24, 4:467-471.

Crabtree, BF., & Miller, WL (eds.). (1992). *Doing qualitative research*. Newbury Park, CA: Sage Publication.

Creswell, JW. (1994). *Research design: Qualitative and quantitative approaches*. Thousand Oaks, CA: Sage Publication.

Creswell, JW. (2003). *Research design: Qualitative, quantitative and mixed methods approach (2nd edn.)*. Thousand Oaks, CA: Sage Publication.

Creswell, JW., Plano-Clark, VL. Gutman, ML. & Hanson, WE. (2003). Advanced mixed methods research designs. Tashakkori. A. & Teddlie, C (eds.), *Handbook of mixed methods in social & behavioural research*. Thousand Oaks, CA: Sage Publication.

Dahlgren, G., & Whitehead, M. (1991). *Policies and strategies to promote social equity in health*. Stockholm: Institute for Future Studies.

D'Ambruso, L., Abbey, M. & Hussein, J. (2005). Please understand when I cry out in pain: Women's accounts of maternity services during labour and delivery in Ghana. *BMC Public Health*, 5:140.

Davies, M., & Macdowall, W. (2006). *Health promotion theory*. Open University Press, Berkshire, England.

Davis-Floyd, R., & Sargant, C. (eds.) (1997). Introduction: *The anthropology of birth. Childbirth and authoritative knowledge: Cross-cultural perspectives*.

Berkeley: University of California Press, p1-54.

De Alwis, SS., Fernando, T. & Rannan-Eliya, RP. (2011). *Sri-Lanka Health Accounts: National Health Expenditure 1990-2008*. Health Expenditure Series No. 2. Colombo, Institute for Health Policy.

de Bernis, L., Sherratt, DR. Abouzahr, C. & van Lerberghe, W. (2003). Skilled attendants for pregnancy, childbirth and postnatal care. *British Medical Bulletin*, 67:39-57.

De Brouwere., V. Tonglet, R. & van Lerberghe, W. (1998). Strategies for reducing maternal mortality in developing countries: What can we learn from the history of the industrialised West? *Tropical Medicine & International Health*, 3, 10:777-782.

de Zoysa, I., Habicht, JP. Pelto, G. & Martines, J. (1998). Research steps in the development and evaluation of public health interventions. *Bulletin of the World Health Organisation*, 76, 2: 127-133.

Denzin, NK., & Lincoln, YS (eds.). (1998). *The landscape of qualitative research: Theories and issues*. Thousand Oaks: CA: Sage Publications.

Devkota, B., & van Teijlingen, ER. (2010). Understanding effects of armed conflict on health outcomes: The case of Nepal. *Conflict & Health*, 4, 20.

Devkota, MD. (2005). *An assessment on impact of conflict on delivery of health services*, Nepal health sector program, Ministry of Health and Population, Kathmandu. Nepal.

Devkota, M., & Putney, P. (2005). *Support to safe motherhood programme, Nepal. A part of HMGN Nepal national safe motherhood programme (NNSMP)*. Reducing consensus on a minimum package of MHN services. Increasing access to essential care for the mothers, newborn and children in Nepal, 630/04/DFID, Kathmandu, Nepal.

Dhakal, S., van Teijlingen, ER. Raja, A. & Dhakal, KB. (2011). Skilled care at birth among rural women in Nepal: Practice and challenges. *Journal of Health Population & Nutrition*; 29, 4:371-378.

DiClemente, RJ., Crosby, RA. & Kegler, MC. (eds.) (2002). *Emerging theories in health promotion practice and research: Strategy for improving public health*. Jossey-Bass, A Wiley Imprint, Sanfrancisco.

District Annual Report. (2011). *District annual report fiscal years 2066/67*. Ministry of Health and Population, Department of Health Services, Western Regional Health Directorate, District Public Health Office, Kaski, Pokhara, Nepal.

District Profile. (2011). *District development committee, information, and data collection centre*, Kaski District Health Services, Pokhara, Nepal.

Do, QT., & Iyer, L. (2009). *Geography, poverty and conflict in Nepal*. Working Paper 07-065, Harvard Business School.

DoHS & WHO. (2010). *Primary health care revitalisation in Nepal*. Department of Health Services, Kathmandu, Nepal.

DoHS (2011). *Annual health report 2011*. Government of Nepal, Ministry of Health and Population, Department of Health Services, Kathmandu, Nepal.

DoHS. (2010). *Annual Report 2010*. Ministry of Health and Population, Department of Health Services, Kathmandu, Nepal.

DoHS. (2011). *Annual Report 2011*. Ministry of Health and Population, Department of Health Services, Kathmandu, Nepal.

DoHS., & MoHP. (2006). *National safe motherhood and newborn health long term plan (2006-2017)*. Family Health Division, Department of Health Services, Government of Nepal and Ministry of Health and Population, Kathmandu, Nepal.

Douglas, M. (1982). *Cultural bias*. Occasional Paper, 35: Royal Anthropological Institute. London: Routledge and Kegan Paul, 183-254.

Douglas, M., & Wildavsky, A. (1982). *Risk and culture: An essay on the selection of technological and environmental dangers*. Berkeley: University of California Press.

Dreze, J. & Sen, A. (2013). *An uncertain glory: India and its contradictions*. Penguin Book Limited, London.

Edmonds, JK. Paul, M. & Sibley, L. (2012). Determinants of place of birth decisions in uncompleted childbirth in Bangladesh: An empirical study. *Midwifery*, 28:554-560.

Eisner, EW. (1991). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*. New York: Macmillan Publishing Company.

Elder, JP., Lytle, L. James, F. Sallis, JF. Young, DR. Steckler, A. Morton, DS. Stone, E. Jobe, JB. Stevens, J. Lohman, T. Webbere, L. Pate, R. Saksvig, BJ & Ribisl, K. (2007). A description of the social-ecological framework used in the trial of activity for adolescent girls (TAAG). *Health Education Research*, 22, 2: 155-165.

Engel, J., Glennie, J. Adhikari, SR. Wagle, S. Prasai, DP. & Samuels, S. (2013). *Nepal's story: understanding improvements in maternal health*. London, ODI.

Ensor, T. (2004). Financing the costs of maternal care: Cross-read of recent studies. Prepared for Nepal Safer Motherhood Project, Options, Kathmandu, Nepal.

Ensor, T., & Cooper, S. (2004). Overcoming barriers to health service access: Influencing the demand side. *Health Policy & Planning*, 19, 2:69-79.

Ensor, T., Clapham, S. & Prasai, DP. (2009). What drives health policy formulation: Insights from the Nepal maternity incentive scheme? *Health Policy*, 90, 2-3: 247-253.

Fiedler, DC. (Robbie Davis-Floyd and Carolyn Sargent, eds.) (1997). Authoritative knowledge and birth territories in contemporary Japan. *Childbirth and authoritative knowledge: Cross-cultural perspectives*. Berkeley: University of California Press, 159-181.

Fikree., FF. & Pasha, O. (2004). Role of gender in health disparity: The South Asian context. *British Medical Journal*, 328, 7443: 823-826.

Furber, AS. (2002). Referral to hospital in Nepal: Four years experience in one rural district. *Tropical Doctor*, 32, 2: 75-78.

Futura, M., & Salway, S. (2006). Women's position within the household as a determinant of maternal health care use in Nepal. *International Family Planning Perspectives*, 32, 1:17-27.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, Aldine.

Goddard, M., & Smith, P. (2001). Equity of access to health care services: Theory and evidence from the UK. *Social Science & Medicine*, 53, 9: 1149-1162.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report*, 8, 4:597-606.

Government of Nepal. (1997). *Health Service act 1997* (3rd amendment, 2006). Nepal Law Commission, Singh Durbar, Kathmandu, Nepal, available in <http://www.lawcommission.gov.np/en/prevaling-laws/func-startdown/654/>, accessed on 18 March, 2014.

Government of Nepal. (2006). *National safe motherhood and newborn health-long term 2006-2017*. Ministry of Health and Population, Department of Health Services, Family Health Division, Kathmandu, Nepal.

Government of Nepal. (2007). *The Interim Constitution of Nepal, 2007*. Nepal Law Commission, Singh Durbar, Kathmandu, Nepal, available in [http://www.lawcommission.gov.np/en/documents/prevaling-laws/constitution/Prevailing-Laws/Constitution/Interim-Constitution-of-Nepal-2063-\(2007\)/](http://www.lawcommission.gov.np/en/documents/prevaling-laws/constitution/Prevailing-Laws/Constitution/Interim-Constitution-of-Nepal-2063-(2007)/) accessed on 11 March, 2014.

- Government of Nepal. (2012). *Women development programme annual progress report, 2010-2011*. Women Children and Social Welfare Ministry, Department of Women and Children, Shreemahal, Lalitpur, Nepal.
- Graham, W., Bell, JS. & Bullough, CHW. (2001). Can skilled attendance at delivery reduce maternal mortality in developing countries? *Studies in Health Services Organisation & Policy*, 17:97-129.
- Green, J. (2000). The role of theory in evidence-based health promotion practices. *Health Education Research*, 15, 2:125-129.
- Greene, MJ. (2007). Strategies for incorporating cultural competence into childbirth education curriculum. *Journal of Perinatal Education*, 16, 2:33-37.
- Gregory, S (eds.) (2002). *Guidelines for comprehensive programmes to promote healthy eating and physical activities*. Nutrition and physical activity work group, California, USA.
- Grilli, R., Ramsay, C. Minozzi, S. (2002). Mass media interventions: Effects on health services utilisation. *Cochrane Database of Systematic Reviews Issue 1. Art. No: CD000389. DOI: 10.1002/14651858.CD000389*.
- Gulliford, M., Figueroa, JM. Morgan, M. Hughes, D. Gibson, B. Beech, R. & Hudson, M. (2002). What does access to health care mean? *Journal of Health Services Research & Policy*, 7, 3:186-188.
- Gwatkin, DR., Rutstein, S. Johnson, K. Suliman, E. Wagstaff, A. & Amouzou, A. (2007). *Socio-economic differences in health, nutrition and population within developing countries: An overview*. World Bank, Washington.
- Harris, A., Zhou, Y. Liao, H. Barclay, L. Zeng, W. & Gao, Y. (2010). Challenges to maternal health care utilisation among ethnic minority women in a resource-poor region of Sichuan Province, China. *Health Policy & Planning*, 25, 4:311-318.

- Harris, FM., van Teijlingen, ER. Hundley, V. Farmer, J. Bryers, H. Caldwell, J. Ireland, J. Kiger, A. & Tucker, J. (2011). The buck stops here: Midwives and maternity care in rural Scotland. *Midwifery*, 27, 3: 301-307.
- Harvey, SA., Ayabaca, P. Bucagu, M. Djibrina, S. Edson, WN. Gbangbade, S. Binns, M. & Burkhalter, BR. (2004). Skilled birth attendant competence: An initial assessment in four countries and implications for the safe motherhood movement. *International Journal of Gynaecology & Obstetric*, 87: 203-210.
- Harvey, SA., Blandon, Y. Binns, A. Sandino, L. Urbina, L. Rodriguez, C. Gomez, I. Ayabaca, P. Djibrina, S. & the Nicaraguan maternal and neonatal health quality improvement group. (2007). Are skilled birth attendants really skilled? A measurement method, some disturbing results and a potential way forward. *Bulletin of the World Health Organisation*, 85, 10:783-790.
- Hatt, L., Stanton, C. Makowiecka, K. Adisasmita, A. Achadic, E. & Ronsmansb, C. (2007). Did the strategy of skilled attendance at birth reach the poor in Indonesia? *Bulletin of the World Health Organisation*, 85, 10:774-782.
- Hoepfl, MC. (1997). Choosing qualitative research: A primer for technology education researchers. *Journal of Technology Education*, 9, 1: 47-63.
- Hofer, A. (1979). *The caste hierarchy and state in Nepal: A study of the Muluki Ain of 1854*. Patan, Nepal: Himal Books.
- Hogan, MC., Foreman, KJ. Naghavi, M. Ahn, SY. Wang, M. Makela, SM. Lopez, AD. Lozanna, R. & Christopher, MJL. (2010). Maternal mortality for 181 countries, 1980-2008: A systematic analysis of progress towards Millennium Development Goal 5. *The Lancet*, 375, 9726:1609-1623.
- Hongoro, C., & MCPake, B. (2004). How to bridge the gap in human resources for health. *The Lancet*, 364, 9443: 1451-1456.
- Hotchkiss, DR. (2001). Expansion of rural health care and the use of maternal services in Nepal. *Health & Place*, 7, 1: 39-45.

- Hounton, S., Menten, J. Ouedraogo, M. Dubourg, D. Meda, N. Ronsmans, C. Byass, P. & Brownwore, VDe. (2008). Effects of a skilled care initiative on pregnancy-related mortality in rural Burkina Faso. *Tropical Medicine & International Health*, 13, 1:53-60.
- Hussein, J., Bell, J. Ilang, MD. Mesko, N. Amery, J. & Graham, W. (2011). An appraisal of the maternal mortality decline in Nepal. *PLoS ONE*, 6, 5.
- Ife, J., & Fiske, L. (2006). Human rights and community work: Complementary theories and practices. *International Social Work*, 49, 3:297-308.
- Izugbara., C. Ezech, A. & Christophe, FJ. (2009). The persistence and challenges of homebirths: Perspectives of traditional birth attendants in urban Kenya. *Health Policy & Planning*, 24, 1:36-45.
- Jackson, TP. & Hanson, K. (2012). Financial incentives for maternal health: Impact of a national programme in Nepal. *Journal of Health Economics*, 31, 1: 271-284.
- Jackson, TP., Morrison, J. Tiwari, S. Neupane, BD. & Costello, AM. (2009). The experiences of districts in implementing a national incentive programme to promote safe delivery in Nepal. *BMC Health Services Research*, 9:97.
- Janz, NK., & Backer, MH. (1984). The health belief model: A decade later. *Health Education Quarterly*, 11, 1:1-47.
- Jeanty, GC., & Hibel, J. (2011). Mixed methods research of adult family care home residents and informal caregivers. *The Qualitative Report*, 16, 3: 635-656.
- Johnson, RB., Onwuegbuzie, AJ. & Turner, LA. (2007). Toward a definition of mixed-methods research. *Journal of Mixed Methods Research*, 1, 2: 112-133.
- Johnstone, PL. (2004). Mixed methods, mixed methodology health services research in practice. *Qualitative Health Research Journal*, 14, 2: 259-271.
- Jones, B., & Silva, J. (1991). Problem solving, community building, and systems interaction: An integrated practice model for community development. *Journal of the Community Development Society*, 22, 2: 1-21.

Joppe, M. (2000). The research process. Retrieved on May 25, 2012, accessed on <http://www.ryerson.ca/~mjoppe/rp.htm/>.

Jordan, B. (1987). The hut and the hospital: Information, power, and symbolism in the artefacts of birth: *Issues in Perinatal Care and Education*, 14, 1: 36-40.

Kamwendo, LA., & Bullough, C. (2005). Insights on skilled attendance at birth in Malawi: The findings of a structured documents and literature review. *Malawi Medical Journal*, 16, 2: 40-42.

Kamal, I. (2000). Situation analysis of midwifery training in Sindh. NCMH/ UNICEF/ RAHNUMA.

Karki, YB., & Agrawal, G. (2008). *Effects of communication campaigns on the health behaviour of women of reproductive age in Nepal: Further analysis of the 2006 Nepal Demographic and Health Survey*. Calverton, Maryland, USA: Macro International Inc.

Kaufmann, D., Kraay, A. & Mastruzzi, M. (2008). *Governance matters VII: Aggregate and individual governance indicators, 1996-2007*. In World Bank Policy Research Working Paper No 4654 Washington DC: World Bank.

Keesing, RM. (1974). Theories of culture. *Annual Review of Anthropology*, 3, 1:73-97.

Kemper, EA., & Teddlie, C. (2000). Mandated site-based management in Texas: Exploring implementation in urban high schools. *Teaching & Change*, 7, 2:172-200.

Kerlinger, FN. (1979). *Behavioural research: A conceptual approach*. New York: Holt, Rinehart and Winston.

Kesterton, AJ., Cleland, J. Sloggett, A. & Ronsmans, C. (2010). Institutional delivery in rural India: The relative importance of accessibility and economic status. *BMC Pregnancy Childbirth*, 10:30.

Kirk, J., & Miller, ML. (1986). *Reliability and validity in qualitative research*. Beverly Hills: Sage Publications.

- Koblinsky, M., Conroy, C. Kureshy, N. Stanton, ME. & Suzanne, J. (2000). *Issues in programming for safe motherhood. Mother Care Arlington, VA: John Snow Inc.*
- Koblinsky, M., Mujina, P. & Jahn, A. (2002). Can mothers afford maternal health care costs? User costs of maternity services in rural Tanzania. *African Journal of Reproductive Health*, 6, 1: 65-73.
- Koblinsky, M., Matthews, Z. Hussein, J. Mavalan, D. Mridha, MK. Anwar, I. Achadi, E. Adjei, S. & van Wim, P. (2006). Going to scale with professional skilled care. *The Lancet*, 368, 9544:1377-86.
- Koblinsky, M., Anwar, I. Mridha, MK. Chowdhury, ME. & Botlero, R. (2008). Reducing maternal mortality and improving maternal health: Bangladesh and MDG 5. *Journal of Health Population & Nutrition*, 26, 3:280-294.
- Koch, E., Calhoun, P. Aracena, S. Gatica, S. & Brave, M. (2014). Women's education level, contraceptive use and maternal mortality estimates. *Public Health*, 1-4.
- Kruk, ME., Prescott, MR. & Galea, S. (2008). Equity of skilled birth attendant utilisation in developing countries: Financing and policy determinants. *American Journal of Public Health*, 98, 1: 142-147.
- Kululanga, LI., Sundby, J. Chirwa, E. Malata, A. & Maluwa, A. (2012). Barriers to husbands' involvement in maternal health care in a rural setting in Malawi: A qualitative study. *Journal of Research in Nursing and Midwifery*, 1, 1:1-10.
- Lather, P. (1992). Critical frames in educational research: Feminist and post-structural perspectives. *Theory into Practice*, 31, 2: 87-99.
- Leininger, MM. (1985). *Qualitative research methods in nursing*. New York, Grune & Stratton Inc.
- Levin, A., McEuen, M. Dymatrachenko, T. Sengooba, F. Mangani, R. & Dyck, VG. (2000). *Costs of maternal health care services in three Anglophone African*

countries. Special Initiatives Report 22, Partnerships of Health Reform, Abt Associates, Bethesda.

Lincoln, YS., & Guba, EG. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publication.

Loudon, I. (1992). *Death in childbirth. An international study of maternal care and maternal mortality 1800-1950*. Oxford University Press, Oxford.

Loudon, I. (2000). Maternal mortality in the past and its relevance to developing countries today. *American Journal of Clinical Nutrition*, 72, 1: 241-246.

Manadhar, M. (2000). *Ethnographic perspectives on obstetric health issues in Nepal. A literature review*. Nepal safer motherhood project. Department of Health Services, Ministry of Health and Department of International Development, Kathmandu, Nepal.

Maslow, AH. (1970). *Motivation and personality (2nd edn.)*. Harper and Row, New York.

Matsumura, M., & Gubhaju, B. (2001). Women's status, household structure and the utilisation of maternal health services in Nepal. *Asia Pacific Population Journal*, 16, 1: 23-44.

Mavalankar., DV. & Rosenfield, A. (2005). Maternal mortality in resource poor settings: Policy barriers to care. *American Journal of Public Health*, 95, 2:200-203.

Mayhew, M., Hansen, PM. Peter, HD. Edward, A. Singh, LP. Dwivedi, V. Mashkoor, A. & Burnham, G. (2008). Determinants of skilled birth attendants' utilisation in Afghanistan: A cross sectional study. *American Journal of Public Health*, 98, 10:1849-1856.

Mbuga, JK., Bloom, GH. & Segall, MM. (1995). Impact of user charges on vulnerable groups: The case of Kibwezi in rural Kenya. *Social Science & Medicine*, 41, 6: 829-835.

- McLeroy, KR., Bibeau, D. Steckler, A. & Glanz, K. (1988). An ecological perspective on health promotion programmes. *Health Education Quarterly*, 15, 4: 351-377.
- McLoughlin, C., & Batley, R. (2012). *The effects of sector characteristics on accountability relationships in service delivery*. Working paper, 350. London: ODI.
- Merriam, SB. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Mertens, DM. (2010). Philosophy in mixed methods teaching: The transformative paradigm as illustration. *International Journal of Multiple Research Approaches*, 4, 1: 9-18.
- Merzel, C., & D’Afflitti, J. (2003). Reconsidering community-based health promotion: Promise, performance and potential. *American Journal of Public Health*, 93, 4: 557-574.
- Mesko, N., Osrin, D. Tamang, S. Shrestha, BP. Manadhar, DS. Manandhar, M. Standing, H. & Costello, A. (2003). Care for perinatal illness in rural Nepal: A descriptive study with cross sectional and qualitative components. *BMC International Health & Human Rights*, 3, 3.
- Miles, MB. & Huberman, AM. (1994). *Qualitative data analysis: An expanded sourcebook (2nd edn.)*. Sage Publication, Thousand Oaks.
- MoH. (1997). *Nepal family health survey 1996*. Family Health Division, Department of Health Services, Ministry of Health, Kathmandu, Nepal.
- MoH. (2003). *Health education, information and communication (HEIC) programme in Nepal*. National Health and Education and Information and Communication Centre, Teku, Ministry of Health, Kathmandu, Nepal.
- MoH. (2004). *Annual health report-2004*. Ministry of Health, Department of Health Services, Kathmandu, Nepal.

- MoHP & NHSSP. (2012). *Human resources for health strategic plan 2011-2015*. Strengthening health system and improving-services, Draft. MoHP, Kathmandu, Nepal.
- MoHP. (2006). *National safe motherhood and newborn health long-term plan 2006-2017*. Family Health Division, Department of Health Services, Kathmandu, Nepal.
- MoHP. (2007). *National in-service training strategy for skilled birth attendants 2006-2012*. National Health Training Centre, Ministry of Health and Population, Kathmandu, Nepal.
- MoHP. (2008). *Taking stock report Nepal*. Ministry of Health and Population, Government of Nepal, Ram Shah Path, Kathmandu, Nepal.
- Mooney, GH. (1983). Equity in health care: Confronting the confusion. *Effective Health Care*, 1, 4: 179-185.
- Mooney, GH., J. Donaldson, C. & Gerard, K. (1992). Reweighing heat. Response to Culyer, van Doorslaer and Wagstaff. *Journal of Health Economics*, 11, 2: 199-205.
- Morrison, J., Tamang, S. Mesko, N. Osrin, D. Shrestha, B. Manadhar, M. Manadahr, D. Standing, H. & Costello, A. (2005). Women's health groups to improve perinatal care in rural Nepal. *BMC Pregnancy childbirth*, 5:6.
- Morse, JM. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research*, 40, 2:120-123.
- Mrisho, M., Obrist, B. Schelllberg, JA. Haws, RA. Mushi, AK. Mshinda, H. Tanner, M. & Schellenberg, D. (2009). The use of antenatal and postnatal care: Perspectives and experiences of women and health care providers in rural Southern Tanzania. *BMC Pregnancy Childbirth*, 9:10.
- Mullany, CB., Becker, S. & Hindin, MJ. (2007). The impact of including husbands in antenatal health education services on maternal health practices in urban Nepal: Results from a randomized controlled trial. *Health Education Research*, 22, 2:166-176.

- Mumtaz, Z., & Salway, S. (2007). Gender, pregnancy and uptake of antenatal care services in Pakistan. *Sociology of Health & Illness*, 29, 1:1-26.
- Mumtaz, Z., & Salway, SM. (2009). Understanding gendered influences on women's reproductive health in Pakistan: Moving beyond the autonomy paradigm. *Social Science & Medicine*, 68, 7:1349-1356.
- Murray, SF. Hunter, BM. Bisht, R. Ensor, T. & Debra, B. (2014). Effects of demand-side financing on utilisation, experiences and outcomes of maternity care in low-and middle-income countries: a systematic review. *BMC Pregnancy & Childbirth*, 14:30.
- Nahar, S., & Costello, A. (1998). The hidden cost of 'free' maternity care in Dhaka, Bangladesh. *Health Policy & Planning*, 13, 4: 417-422.
- Naraindas, H. (2009). Selin, H. (eds) A sacramental theory of childbirth in India. *Childbirth across the cultures: The history of non-western sciences* 5. Springer Science + Business Media B.V, p. 95-106.
- National Cancer Institute. (2005). *Theory at a glance: A guide for health promotion practices* (2nd edn.). United States, Department of Health and Human Services, National Institutes of Health.
- NDHS. (2001). *Nepal Demographic and Health Survey 2006*. Nepal Ministry of Health, New ERA, and ICF International, Calverton, Maryland.
- NDHS. (2006). *Nepal Demographic and Health Survey 2006*. Nepal Ministry of Health, New ERA, and ICF International, Calverton, Maryland.
- NDHS. (2011). *Nepal Demographic and Health Survey 2011*. Nepal Ministry of Health and Population, New ERA, and ICF International, Calverton, Maryland.
- Neergaard, MA., Olesen, F. Andersen, RS. & Sondergaard, J. (2009). Qualitative description-The poor cousin of health research? *BMC Medical Research Methodology*, 9:52.

- Nepal Family Health Program II & New ERA. (2010). *Family planning, maternal, newborn and child health situation in rural Nepal: A mid-term survey for NFHP II*. Kathmandu, Nepal.
- Nussbaum, M. (2000). Women's capabilities and social justice. *Journal of Human Development*, 1, 2:220-247.
- Nutbeam, D. (1998). Evaluating health promotion-progress, problems and solutions. *Health Promotion International*, 13, 1: 27-44.
- O'Cathain, A., Murphy, E. & Nicholl, J. (2007). Why, and how, mixed methods research is undertaken in health services research in England: A mixed methods study. *BMC Health Services Research*, 7:85.
- ODC. (2004). Study of quality of care approach in selected health facilities of Nepal, executive summary. Nepal Safe Motherhood Project, Kathmandu, Nepal.
- Oliver, AJ., & Mossialos, E. (2003). Equity of access to health care: Outlining the foundations for action. *Journal of Epidemiology Community Health*, 58:655-658.
- Onwuegbuzie, AJ., & Johnson, RB. (2006). The validity issue in mixed research. *Research in the Schools*, 13, 1: 48-63.
- Osariemen, GA. (2011). Theoretical issues in the understanding of maternal health services utilisation in Lagos state, Nigeria. *European Journal of Social Sciences*, 22, 3: 431-442.
- Osrin, D., Tumbahangphe, KM. Shrestha, D. Mesko, N. Shrestha, BP. Manandhar, MK. Standing, H. Manandhar, DS. & Costello AM. (2002). Cross sectional, community based study of care of newborn infants in Nepal. *British Medical Journal*, 325, 7372:1063-1076.
- Pandey, PA., & Rimal, D. (2009). Selin. H. (eds) Pregnancy and childbirth in Nepal: Women's role and decision making-power p.137-145. *Childbirth across the cultures: The history of non-western sciences*5. Springer Science + Business Media B.V.

- Pandey, S., Lama, G. & Lee, H. (2012). Effects of women's empowerment on their utilisation of health services: A case of Nepal. *International Social Work*, 55, 4:554-573.
- Pant, PD., Suvedi, BK. Pradhan, A. Hulton, L. Matthews, Z. & Maskey, M. (2008). *Investigating recent improvements in maternal health in Nepal: Further analysis of the 2006 Nepal Demographic and Health Survey*. Calverton, Maryland, USA: Macro International Inc.
- Pathak, PK., Singh, A. & Subramanian, SV. (2010). Economic inequalities in maternal health care: Prenatal care and skilled birth attendance in India, 1992-2006. *PLoS ONE*, 5, 10.
- Patton, MQ. (2002). *Qualitative evaluation and research methods* (3rd edn.). Thousand Oaks, CA: Sage Publication.
- Pitchforth, E., van Teijlingen, ER. Watson, V. Tucker, J. Kiger, A. Ireland, J. Farmer, J. Rennie, AM. Gibb, S. Thomson, E. & Ryan, M. (2009). "Choice" and place of delivery: A qualitative study of women in remote and rural Scotland. *Quality & Safe Health Care*, 18, 1:42-48.
- Pokhrela, S., Snow, R. Dong, H. Hidayat, B. Flessa, S. & Sauerborn, R. (2005). Gender role and child health care utilisation in Nepal. *Health Policy*, 74, 1: 100-109.
- Pope, C., Ziebland, S. & Mays, N. (2000). Qualitative research in health care: Analysing qualitative data. *British Medical Journal*, 320, 7227:114-116.
- Pradhan, A. (2005). Situation of antenatal care and delivery practices. *Kathmandu University Medical Journal*, 3, 3: 266-270.
- Pradhan, A., Aryal, R. Regmi, G. Ban, B. & Govindasamy, P. (1997). *Nepal family health survey 1996*. Kathmandu and Calverton: Ministry of Health, Nepal, New ERA, Macro International.
- Pradhan, A., Subedi, BK. Barnett, S. Sharma, SK. Puri, M. Poudel, P. & Chitrakar Rai, S. KC, NP. & Hulton, L. (2010). *Nepal maternal morbidity and mortality study*

2008/2009. Family Health Division, Department of Health Services, Ministry of Health and Population, Kathmandu, Nepal, Programming for Safe Motherhood. Mother Care Arlington, VA: John Snow Inc.

Prasai, D. & Adhikari, S. (2012). *Progress in maternal health of Nepal: An analysis of health financing. Background Paper commissioned for Development Progress*. London: ODI.

Rath, DA., Basnet, I. Cole, M. Subedi, HN. Thomas, D. & Murray, SF. (2007). Improving emergency obstetric care in a context of very high maternal mortality: The Safer Motherhood Project 1997-2004. *Reproductive Health Matters*, 15, 30:72-80.

Ratnaike, R., O'Neil, P. & Chynoweth, R. (1984). Village health workers and malnutrition: A project that failed. *World Health Forum*, 5, 4:316-318.

Redshaw, M., & Heikki, K. (2010). *Delivered with care: A national survey of women's experience of maternity care 2010*. The National Perinatal Epidemiology Unit, University of Oxford, UK.

Reeves, S., Albert, M. Kuper, A. & Hodges, BD. (2008). Why use theories in qualitative research? *British Medical Journal*, 337, 631-634.

Ronsmans, C. Endang, A. Gunawan, S. Zazri, A. McDermott, J. Koblinksy, M. & Marshall, T. (2001). Evaluation of a comprehensive home-based midwifery programme in South Kalimantan, Indonesia. *Tropical Medicine & International Health*, 6, 10: 799-810.

Rosenstock, IM., Strecher, VJ. & Becker, MH. (1994). In DiClemente, RJ and Peterson, JL (eds.), *preventing AIDS: Theories and methods of behavioural interventions*. The health belief model and HIV risk behaviour change, 5-24, New York: Plenum Press.

Rosenstock, IM., Strecher, VJ. & Becker, MH. (1988). Social learning theory and the health belief model. *Health Education Quarterly*, 15, 2:175-183.

- Rotter, J. (1966). Generalised expectancies for internal versus external control of reinforcements. *Psychological Monographs, Whole No. 609*, 80, 1:1-28.
- Ryan, M., Scott, DA. Reeves, C. Bate, A. van Teijlingen, ER. Russell, EM. Napper, M. & Robb, CM. (2001). Eliciting public preferences for the healthcare: A systematic review of techniques. *Health Technology Assessment*, 5, 5.
- Safe Motherhood. (2002). *Skills care during childbirth information booklet*. Secretariat of the Safe Motherhood Inter-Agency Group: Family Care International, New York, USA.
- Sandelowski, M. (1986). The problem of rigor in qualitative research. *Advances in Nursing Science*, 8, 3: 27-37.
- Sandelowski, M. (2000). Focus on research methods combining qualitative and quantitative sampling, data collection and analysis techniques in mixed method studies. *Research in Nursing & Health*, 23, 3:246-255.
- Sanders, IT. (1958). Theories of community development. *Rural Sociology*, 23, 1:1-12.
- Sargent, C., & Bascope, G. (1996). Ways of knowing about birth in three cultures. *Medical Anthropology Quarterly*, 10, 2: 213-236.
- Say, L., & Raine, R. (2007). A systematic review of inequality in the use of maternal health care in developing countries: Examining the scale of the problem and the importance of context. *Bulletin of the World Health Organisation*, 85, 10: 812-819.
- Schölmerich., LN. Posthumus, G. Ghorashi, H. Waelput, A. Groenewegen, P. & Denktas, S. (2014). Improving inter-professional coordination in Dutch midwifery and obstetrics: A qualitative study. *BMC Pregnancy & Childbirth*, 14:145.
- Searle, JR. (1995). *The construction of social reality*. Harmondsworth, Penguin Books Ltd.

- Seljeskog, L., Sundby, J. & Chimango, J. (2006). Factors influencing women's choice of place of delivery in rural Malawi: An explorative study. *African Journal of Reproductive Health*, 10:3:66-75.
- Shaikh, BT., & Hatcher, J. (2005). Health seeking behaviour and health service utilisation in Pakistan: Challenging the policy makers. *Journal of Public Health*, 27, 1:49-54.
- Sharma, S. (2004). Reproductive rights of Nepalese women: Current status and future directions. *Kathmandu University Medical Journal*, 2, 1: 52-54.
- Shenton, AK. (2006). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22: 63-75.
- Shrestha, AD. (2008). *Multi sectoral determinants of maternal mortality in Nepal*. United Nations Economic and Social Commission for Asia and Pacific Health Bureau of Anhui Province, China. Paper presented workshop on addressing multi-sectoral determinant of maternal mortality, 20-22, Oct, 2008.
- Shrestha, BR., Gauchan, Y. Gautam, GS. & Baral, P. (2012). *Nepal National Health Accounts, 2006/07-2008/09*. Health Economics and Financing Unit, Ministry of Health and Population, GoN, Kathmandu, Nepal.
- Silverman, D. (2006). *Interpreting qualitative data: Methods for analysing, talk, text and interaction (3rd edn.)*, London: Sage Publication.
- Simkhada, B., Porter, MA. & van Teijlingen, ER. (2010). The role of mothers-in-law in antenatal care decision making in Nepal: A qualitative study. *BMC Pregnancy & Childbirth*, 10: 34.
- Simkhada, B., van Teijlingen, ER. Porter, M. & Simkhada, P. (2006). Major problems and key issues in maternal health in Nepal. *Kathmandu University Medical Journal*, 4, 2: 258-263.

- Simkhada, B., van Teijlingen, ER. Porter, M. & Simkhada, P. (2008). Factors affecting the utilisation of antenatal care in developing countries: Systematic review of the literature. *Journal of Advanced Nursing*, 61, 3: 244-260.
- Simkhada, PP., Baral, YR. & van Teijlingen, ER. (2010). Health and medical research in Nepal: A bibliometric review. *Asia-Pacific Journal of Public Health*, 22, 4: 495-500.
- Simkhada, PP., van Teijlingen, ER. Sharma, G. Simkhada, B. & Townend, J. (2012). User costs and informal payments for care in the largest maternity hospital in Kathmandu, Nepal. *Health Science Journal*, 6, 2: 317-334.
- Small, R., Yelland, J. & Lumley, J. (1999). Cross-cultural research: Trying to do it better. 2. Enhancing data quality. *Australian and New Zealand Journal of Public Health*, 23, 4:390-395.
- Smith, JA., & Eatough, V. (2006). Interpretative phenomenological analysis, in Breakwell, G. Fife-Schaw, C. Hammond, S. & Smith, JA (eds.) *Research methods in psychology* (3rd edn.) London: Sage Publication.
- Smith, R., Ashford, L. Gribble, J. & Clifton, D. (2009). *Family planning saves lives* (4th edn). Population Reference Bureau, Washing DC.
- Society for Local Integrated Development (SOLID). (2012). *Distribution and skill mix of human resources for health in Nepal: Barriers to effective policy implementation and management of human resources for health in Nepal*. Kathmandu, Nepal.
- Sreeramareddy, TC., Joshi, SH. Sreekumaran, VB. Giri, S. & Chuni, N. (2006). Home delivery and newborn care practices among urban women in western Nepal: A questionnaire survey. *BMC Pregnancy & Childbirth*, 6:27.
- Stake, RE. (1978). The case study method in social inquiry. *Educational Researcher*, 7, 2: 5-8.

- Stake, RE. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publication.
- Stenbacka, C. (2001). Qualitative research requires quality concepts of its own. *Management Decision*, 39, 7: 551-555.
- Strauss, A. (1987). *Qualitative analysis for social scientists*. New York, Cambridge University Press.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory, procedures and techniques*, California; Sage Publication.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research (2nd edn.); techniques and procedure for developing grounded theory*. Thousand Oaks, CA; Sage Publication.
- Subedi, BK., Pradhan, A. Barnett, S. Puri, M. Chitrakar, SR. Poudel, P. Chitrakar Rai, S. KC, NP. & Hulton, L. (2009). *Nepal maternal mortality and morbidity study 2008/2009: Summary of preliminary findings*. Family Health division, Department of Health Services, Ministry of Health, Kathmandu, Nepal.
- Swann, C., Carmona, C. Ryan, M. Raynor, M. Baris, E. Dunsdon, S. Huntley, J. & Kellt, MP. (2009). *Health systems and health-related behaviour change: A review of primary and secondary evidence*. Centre for Public Health Excellence, National Institute for Health and Clinical Excellence, WHO, EUROPE.
- Tan, A. (2009). *Community development theory and practice: Bridging the divide between 'macro' and 'micro' levels of social work*. Paper presented at North American Convention of Social Work, Oct. 2009.
- Tashakkori, A., & Teddlie, C. (1998). *Mixed methodology: Combining qualitative and quantitative approaches*. Thousand Oaks, CA; Sage Publication.
- Tashakkori, A., & Teddlie, C. (eds.) (2003). *Handbook of mixed methods in social and behavioural research*. Thousand Oaks, CA; Sage Publication.

Tayelgn, A., Zegeye, DT. & Kebede, Y. (2011). Mothers' satisfaction with referral hospital delivery service in Amhara Region, Ethiopia. *BMC Pregnancy Childbirth*, 11:78.

Team, V., Vasey, K. & Manderson, L. (2009). *Cultural dimensions of pregnancy, birth and post-natal care*. Social Science and Health Research Unit, School of Psychology, Psychiatry and Psychological Medicine, Faculty of Medicine, Nursing and Health Sciences, Monash University, Australia.

Thapa, D. (2003). *A Kingdom under siege: Nepal's Maoist insurgency, 1996-2003*. The Print House, Kathmandu, Nepal.

Thapa, S. (1996). Challenges to improving maternal health in rural Nepal. *The Lancet*, 347, 9010:1244-1247.

The Ekantipur national daily (Thursday 8 May 2014). *Govt declares 72 municipalities (with list)*. Available in; <http://www.ekantipur.com/2014/05/08/top-story/govt-declares-72-new-municipalities-with-list/389310.html>. Access in 26 Oct 2014.

The Guardian. (Friday 24 January, 2014). *Qatar World Cup: 185 Nepalese died in 2013-official records*. Available in <http://www.theguardian.com/world/2014/jan/24/qatar-2022-world-cup-185-nepalese-workers-died-2013>, accessed on 17th February, 2014.

Thomas, J., & Harden, A. (2007). *Methods for the thematic synthesis of qualitative research in systematic reviews*. National Centre for Research Methods Working Paper Series Number (10/07), London.

Thwala, S., Jones, L. & Holroyd, E. (2012). An ethnographic account of the beliefs, values and experiences of rural Swazi women during childbirth. *Evidence Based Midwifery*, 10, 3:101-106.

Transparency International Nepal. (2012). *Transparency International-Nepal Report 2012*. Available in http://www.tinepal.org/TI-Nepal_Report_2012.html, accessed on 24 July, 2013.

- Turner, LW., Hunt, SB. Dibrezzo, R. & Jones, C. (2004). Design and implementation of an osteoporosis prevention programme using the health belief model. *American Journal of Health Studies*, 19, 2:115-122.
- Twinn, S. (1997). An exploratory study examining the influence of translation on the validity and reliability of qualitative data in nursing research. *Journal of Advanced Nursing*, 26, 2: 418-423.
- UN. (1948). *The universal declaration of human rights*. United Nations, New York.
- UN. (1979). *Convention on the elimination of all forms of discrimination against women*. Office of the High Commissioner for Human Rights, Geneva, Switzerland.
- UN. (1995). *Reports of the international conference on population and development, Cairo, 5-13, 1994*. New York.
- UN. (2008). *Delivering on the global partnership for achieving the Millennium Development Goals, MDG Gap Taskforce Report*. New York.
- UN. (2008). *End poverty 2015 makes it happen Millennium Development Goals, high-level event on the Millennium Development goals*. United Nations, New York.
- UN. (2008). *The Millennium development goals report 2008*. United Nations Department of Economic and Social Affairs, New York.
- UN. (2011). *The Millennium Development Goals Report 2011*. United Nations, New York.
- UNDP. (2009). Human Development Report, 2009. Human Development Indicators Nepal. Available in <http://hdrstats.undp.org/en/countries/profiles/npl.html>. Access on 18th October, 2012.
- UNFPA. (2010). *The maternal health thematic fund annual report 2010*, UNFPA.
- UNICEF. (1998a). *Skilled care during childbirth policy review*. Available at <http://www.whiteribbonalliance.org/Resources/Documents/Skilled%20Care%20Duri>

[ng%20Childbirth_Policy%20Brief_Family%20Care%20InternationalInc.pdf](#)

(accessed on 3rd July, 2010).

UNICEF. (1998b). *Health seeking behaviour of women in five safe motherhood districts in Nepal*. Kathmandu, United Nations Children's education Fund.

UNICEF. (2008). *The state of the world's children report: Maternal and newborn health*. New York, USA.

United Nations Economic and Social Commission for the Asia and Pacific, UNDP, & ADB. (2007). *Access to basic services for the poor: The importance of good governance*. Asia Pacific MDG study series, Poverty and Development Division, United Nations Economic and Social Commission for Asia and the Pacific, United Nations Building, Bangkok, Thailand.

van Eijk, AM., Bles, HM. Odhiambo, F. Ayisi, JG. Blokland, IE. Rosen, DH. Adazu, K. Slutsker, L. & Lindblade, KA. (2006). Use of antenatal services and delivery care among women in rural western Kenya: A community based survey. *Reproductive Health*, 3:2.

van Teijlingen, ER., & Cheyney, H. (2004). Ethics in midwifery research. *The Official Journal of Royal College of Midwives*, 7, 5: 208-210.

van Teijlingen, ER., & Forrest, K. (2004). The range of qualitative research methods in family planning and reproductive health care. *Journal of Family Planning and Reproductive Health Care*, 30, 3:171-173.

van Teijlingen, ER. (2005). A critical analysis of the medical model as used in the study of pregnancy and childbirth. *Sociological Research Online*, 10, 2.

van Teijlingen, ER., & Hundley, V. (2005). Pilot studies in family planning and reproductive health care. *Journal of Family Planning and Reproductive Health Care*, 31, 3: 219-221.

van Teijlingen, ER., & Simkhada, PP. (2012). Ethical approval in developing countries is not optional. *Journal of Medical Ethics*, 38, 7:428-430.

van Teijlingen, ER., Simkhada, B. Porter, M. Simkhada, P. Pitchforth, E. & Bhatta, P. (2011). Qualitative research and its place in health research in Nepal. *Kathmandu University Medical Journal*, 36, 4:301-305.

Wagle, RR., Sabroe, S. & Nielsen, BB. (2004). Socio-economic and physical distance to the maternity hospital as predictors for place of delivery: An observation study from Nepal. *BMC Pregnancy & Childbirth*, 4, 8.

Wainer, H., & Braun, HI. (1988). *Test validity*. Hilldale, NJ: Lawrence Earlbaum Associates.

Westbrook, L. (1994). Qualitative research methods: A review of major stages, data analysis techniques and quality control. *Library & Information Science Research*, 16: 241-254.

Whitehead, M. (1990). *The concepts and principles of equity and health*. World Health Organisation, Regional Office for Europe, Copenhagen.

Whitehead, M. (1992). The concepts and principles of equity and health. *International Journal of Health Service*, 22, 3:429-445.

WHO & UNICEF. (2003): *Antenatal care in developing countries: Promises, achievements and missed opportunities: An analysis of trends, levels, and differentials: 1990-2000*, Geneva and New York.

WHO, UNICEF, UNFPA. & WB. (2007). *Maternal mortality in 2005: Estimates developed by WHO, UNICEF, UNFPA & World Bank*. WHO, Geneva.

WHO, UNICEF, UNFPA. & WB. (2012). *Trends in maternal mortality: 1990 to 2010*. WHO, Geneva.

WHO. (1948). *The international health conference, New York, 19-22 June 1946, official records of the World Health Organisation, no. 2, p. 100*, New York.

WHO. (1981). *Global strategy for health for all by the year 2000. Health for all series no. 3*, WHO, Geneva.

WHO. (1986). *The Ottawa charter for health promotion*. First International Conference on Health Promotion, Ottawa, Canada.

WHO. (1988). *Second international conference on health promotion*. Adelaide, South Australia, 5-9 April 1988. Available in <http://www.who.int/healthpromotion/conferences/previous/adelaide/en/index1.html> Accessed on 06 October, 2012.

WHO. (2000). *World health report 2000. Health systems performance assessment*. WHO, Geneva.

WHO. (2002). *Health and human rights*. Health and human rights publication series issue no.1. WHO, Geneva.

WHO. (2004). *Making pregnancy safer: The critical role of the skilled attendant. A joint statement by WHO, ICM & FIGO*. WHO, Geneva.

WHO. (2005). *The WHO and the Millennium Development Goals. Fact sheet no. 290*. WHO, Geneva.

WHO. (2007). *Policy papers on health Nepal*. World Health Organisation country office for Nepal, Kathmandu, Nepal.

WHO. (2008). *Proportion of births attended by a skilled health worker-2008 updates* available in http://www.who.int/reproductive_health/global_monitoring/data.html, accessed on 24 August, 2010.

WHO. (2009). *Achieving Millennium Development Goal 5: Target 5A and 5B on reducing maternal mortality and achieving universal access to reproductive health. Briefing note on achieving Millennium Development Goal (MDG) 5*. Department of Reproductive Health and Research, WHO, Geneva.

WHO. (2010a). *Monitoring the building blocks of health systems: A handbook of indicators and their measurement strategies*. WHO, Geneva.

WHO. (2010b). *Working with individuals, families and communities to improve maternal and newborn health*. Department of Safer Pregnancy. WHO, Geneva.

WHO. (2012). *Accountability for maternal, newborn and child survival: An update on progress in priority countries*. Geneva: WHO.

Wilkinson, D., Gouws, E. Sach, M. & Karim, S. (2001). Effect of removing user fees on attendance for curative and preventive primary health care services in rural South Africa. *Bulletin of the World Health Organization*, 79, 7: 665-671.

Witter, S., Khadka, S. Subedi, HN. & Tiwari, S. (2011). The national free delivery policy in Nepal: Early evidence of its effects on health facilities. *Health Policy & Planning*, 26, 2:84-91.

Yanagisawa, S., Oum, S. & Wakai, S. (2006). Determinants of skilled birth attendance in rural Cambodia. *Tropical Medicine & International Health*, 11, 2:238-251.

Yin, RK. (1981). The case study crisis: Some answers. *Administrative Science Quarterly*, 26, 1:58-65.

Yin, RK. (1994). *Case study research: Design and methods* (2nd edn.). Newbury Park, CA: Sage Publications.

Yin, RK. (1999). Enhancing the quality of case studies in health services research. *Health Services Research*, 34, 5:1209-1224.

Yin, RK. (2003). *Case study research: Design and methods* (3rd edn.). Newbury Park, CA: Sage Publications.

Yin, RK. (2009). *Case study research: Design and methods* (4th edn.). Newbury Park, CA: Sage Publications.

Young, JC. (1981). *Medical choice in a Mexican village*. New Brunswick, NJ: Rutgers University Press.

Zimmerman, M., Shakya, R. Pokhrel, B. Eyal, N. Rijal, BP. Shrestha, RN. & Sayami, A. (2012). 'Medical students' characteristics as predictors of career practice location: Retrospective cohort study tracking graduates of Nepal's First Medical College'. *British Medical Journal*, 345.

APPENDICES

APPENDIX 1: RESEARCH TOOLS

SELF-ADMINISTERED SURVEY QUESTIONNAIRES AND INFORM CONSENT

Survey of Skilled Birth Attendants utilisation for delivery in a western hill district of Nepal.

Namaste, My name is **Yuba Raj Baral**, and I am a student in the London Metropolitan University, United Kingdom. I am studying PhD in area of Public Health and Social Policy. I would like to ask you some questions about the factors affecting utilization of maternity health services during the pregnancy. I would very much appreciate your participation in this study. The survey will take between 30-40 minutes. Whatever information you provide will be kept strictly confidential and will not be shown to other people. You do not have to write your name and identification, so the result is strictly anonymous and confidential. Participation in this survey is voluntary and you can choose not to answer any individual questions or all questions. However, I hope that you will participate in this survey since your views are very important. If you have any questions about the survey please feel free to ask me.

Thank you very much

Question 1

Where you work?		
1	Gandaki regional hospital	
2	Manipal teaching hospital	

Question 2

Do you speak Nepali language?		
1	Yes	
2	No (Please specify)	

Question 3

Are you qualified Skilled Birth Attendant? As define by WHO ¹		
1	Yes	
2	No	

Footnote ¹ (WHO SBA definition): an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficient in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns (WHO 2004).

Question 4

How long you been qualified as SBA?		
1	Less than one year	
2	One to two years	
3	Three to five years	
4	More than 5 years (Please specify.....)	

Question 5

What is your current position? Please tick one		
1	Doctor (general/not obstetrician)	
2	Auxiliary Nurse Midwife	
3	Nurse	
4	Other (Please specify:)	

Question 6

When did you last attend an updated training for SBAs services? Please tick an appropriate box		
1	In the last six months	
2	6- 12 months	
3	One to five years ago	
4	More than five years ago	

Question 7

Have you ever worked in the rural area?		
1	Yes (if yes go to question 9)	
2	No	

Question 8

What are reasons not working in the rural? Please chose one		
1	I don't want to work in the rural areas	
2	Poor new facilities in rural areas	
3	Family commitment (e.g. School for child)	
4	Other (Please specify....)	

Question 9

What types of maternity services are provided by this Hospital? Tick all that apply		
1	Antenatal care	
2	Care in normal labour and delivery	
3	Emergency care e.g. (Obstructed labour)	
4	Post natal care	
5	Special care baby unit	
6	Other (Please specify.....)	

Question 10

Which one of the primary SBA service is offered by this hospital? Tick all that apply		
1	Services based in the hospital only	
2	Based in community only	
3	Both hospital and community-based services	
4	Other (Please specify.....)	

Question 11

In your opinion what percent of women attending this hospital for delivery were from rural or urban areas in the last one year?		
1	rural areas	
2	urban areas	
3	Total	

Question 12

From where women mostly use emergency service during the delivery in this hospital in last one year?		
1	rural areas	
2	urban areas	

Question 13

Which one of the following birth order women usually come for SBAs delivery in hospital? Rank in order 1= Most frequent 2= frequently 3= Low 4= very low			
1	First delivery		
2	Second delivery		
3	Third delivery		
4	Higher order births		

Question 14

At what point during labour do women normally attend the hospital for delivery?			
		Yes	No
1	Early labour		
2	When they cannot manage at home		
3	Third stage with complication		
4	Other (Specify.....)		

Question 15

What age groups of women mainly come in the hospital for delivery? Please rank in order 1= Most frequent 2= frequently 3= Low 4= very low	
15-19 years	
20-29 years	
30-39 years	
40-49 years	

Question 16

In which age group women are most likely to die in childbirth? Rank in order 1= Most frequently 2= frequently 3= Medium 4= Low	
15- 19 years	
20-29 years	
30-39 years	
40-49 years	

Question 17

What educational status of women who delivered in this hospital? Rank in order	
1=Very high 2=High 3=Medium 4= Low 5=Very low	
Primary level (1-5 class)	
Secondary level (6-10 class)	
Higher secondary level (11-12 class)	
Higher degree level	
Illiterate	

Question 18

What types of employment are women mostly involved during pregnancy? Rank in order	
1=Most 2= High 3= Medium 4= Low 5=Very low	
Not paid work	
Agricultural work	
Own business	
Professional, Managerial, Technical or Clerical position	
Other (Specify.....)	

Question 19

What religious background women come to this hospital for delivery?	
Rank in order 1= Most frequent 2= Frequent 3 = Medium 4 = Low 5= others	
Hindu	
Buddhist	
Christian	
Muslim	
Other (Specify.....)	

Question 20

What caste/ethnicity woman is come in this hospital for delivery?	
Rank in order 1= Very high 2= High 3= Medium 4= Low 5= very low 6= others	
Brahmin	
Chhetri	
Newar	
Magar	
Gurung	
Other (Specify.....)	

Question 21

What are the main reasons for non-use of hospital for delivery?				
		Yes	No	No opinion
1	Cultural factors			
2	Religious factors			
3	Due to privacy			
4	Confidential practice			
5	Cost of services			
6	Particular health needs			
7	Infrastructures in the facility(e.g. water, light, sanitation etc)			
8	Recommended by friends			
9	Required by household head			
10	Other factors (Specify.....)			

Question 22

In your opinion, what are the main barriers to use of SBAs during delivery?				
		Yes	No	No opinion
1	Availability of SBAs			
2	SBAs service is expensive			
3	Lack of female SBA			
4	Women do not want to use SBAs birth			
5	Culturally appropriate services are not available			
6	Distance to the facility			
7	Lack of transportation			
8	Quality of services			
9	Other (Specify.....)			

Questions 23

From an SBA perspective what are the factors influence to provide good services in this hospital?				
		Yes	No	No opinion
1	Appropriate equipment			
2	Communicate with women			
3	Availability of drugs and medicine			
4	Staff Number			
5	Number of qualified staff			
6	Support from staff/colleagues			
7	Availability of appropriate training			
8	Other (Specify.....)			

Question 24

In your opinion, what are the three most important factors for providing the effective Skilled Birth Attendant services for women during delivery?		
1	Enabling working environment	
2	Privacy and confidentiality for women	
3	Functioning referral system	
4	Increase clinical proficiency and communication skills	
5	Other (Specify.....)	

Question 25

In your opinion, what needs to be done to increase SBAs during delivery?				
		Yes	No	No opinion
1	Providing free health service to the poor and rural women			
2	Providing partial funding (e g community payment scheme, insurance programmes, pre payment scheme, private or social insurance, provide subsidies for poor)			
3	Expansion of road link in rural areas			
4	Increase number of ANMs in community			
5	Improve infrastructure of the hospital			
6	Provide more mobile SBA services			
7	Other (Specify.....)			

26 Have you any other suggestions about how to improve the maternal health services availability of skilled birth attendants for delivery in your area?

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Thank you so much for completing the questions. I can assure you that all your responses will be treated in absolute confidence. Your answer will help in improving maternity services in Nepal.

Please return this questionnaire to researcher by in the box provided in the staff sitting room.

Thank you very much

Yuba Raj Baral

APPENDIX: 2 INTERVIEW GUIDELINES

SEMI-STRUCTURED INTERVIEW GUIDELINES AND INFORM CONSENT

Namaste, My name is Yuba Raj Baral, and I am a Nepalese student in the London Metropolitan University, United Kingdom. I am studying PhD in area of Public Health Policy at Faculty of Applied Social Sciences. I would like to interview you about the factors affecting the utilization of skilled birth attendants for delivery in Nepal. I would like to ask you some questions about the maternity health services you used during the pregnancy. I would very much appreciate your participation in this study. The interview will take between 45 minutes to one hour to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other people. I am going to tape record information that you provide, I hope you will give me permission for this. You do not have to tell your name and identification, so the result is strictly anonymous and confidential. If you do not want to answer any questions, just let me know and I will go on to the next question or you can stop the interview at any time. However, I hope you will participate in the study since your views are important. At this time, if you have any questions and queries regarding the study, you could ask me. May I begin the interview now, please?

Principal researcher

Yuba Raj Baral, London Metropolitan University

1 Background question related to SBA service utilisation

- What was sex of the baby?
- How was baby health at the time of birth?
- How did your last pregnancy go?
- Who delivered your baby? Were you happy with that?
- What do you think where is the better place to give birth?

2 Factors that influencing using the SBA for delivery

- 3 Experience of SBA birth (why: both positive and negative aspect)
- 4 What do you think the SBA service offers?
- 5 What was your expectation of SBA birth?
- 6 What are the barriers to use of SBA?
- 7 What would help to increase the SBA use?
- 8 What kind of maternal health services are available? (Was there choice of services?) (What are the alternatives?)
- 9 Did you go for Antenatal check up during pregnancy? How many times?
- 10 How can increase women knowledge for SBA use for delivery?
- 11 How did you decide which service is use for the birth of your baby? Was that your choice?
- 12 What are the influencing factors in decision making for SBA use for delivery?
- 13 How were you involved in decision making for SBA use for delivery?
- 14 Do you think you are able to make decision on your own?
- 15 Why use SBA (advantages and disadvantages)? How much the cost of SBA delivery?
- 16 How to use SBA?
- 17 What are the alternatives if there is no SBA service for delivery?
- 18 Were you plan to use SBA for delivery
(E.g. yes/no (a) planned and use (b) No planned but used (c) planned but not use. Why? Due to emergency causes?
- 19 Were you working at the time of pregnancy? (What? How? Why?)
- 20 Gender roles and responsibilities for SBAs use (How, why and who?)
- 21 Are there any barriers to using SBA? What? How?
- 22 Cultural issues and SBA use?
- 23 Were your religion affect the use of SBA for delivery?
- 24 In an ideal world what sort of maternal delivery services would you like?

- 25 What could improve women's ability to SBA use?
- 26 If there is no barriers would you like to go use SBA services?
- 27 What do you think the advantages of using SBA?
- 28 When you were pregnant what do you think it is easy for delivery if there was SBA? (PNC, labour and delivery time?)
- 29 Please could you tell me in your opinion, how home delivery might be improve during delivery?
- 30 In your opinion what would have made to make better experience during child birth?
- 31 In your opinion how SBA service utilisation could be increased in your village?

Thank you very much

Yuba Raj Baral

महिलाहरुको अन्तरवार्ता/ कार्यतालिका प्रश्नवली (सुरक्षित जन्मको लागी महिलाहरुको भूमिका तथा स्वास्थ्यसेवा रोजाई र यसको उपयोगितामा प्रभाव पार्ने कारणहरु) नमस्कार, मेरो नाम युबराज बराल हो। म बेलायतको लन्डन स्थीत लन्डन मेट्रोपोलिटन बिश्वबिधालय अन्तरगत स्वास्थ्य बिज्ञान बिभागमा अनुसन्धानको बिधार्थी हु। मेरो अध्यनको बिषय नेपालमा मात्री स्वास्थ्य सेवाको उपयोगिता र यसलाई प्रभाव पार्ने तत्वहरुको बारेमा हो। म यस बिषयमा तपाईसग केही प्रश्नहरु सोध्न चाहन्छु। तपाईले सहयोग गर्नु हुनेछ भन्ने म आशा गर्दछु। अन्तरबार्ता करीब एक घन्टा लामो हुनेछ र तपाईले दिएको सबै बिबरण गोप्य राखीनेछ। तपाईको नाम,उमेर,ठेगाना,सबै अज्ञात र गोप्य राखीनेछन। यदि तपाईलाई कुनै प्रश्नको उत्तर दिन मन लाग्दैन भने मलाई थाहा दिनुस म अर्को प्रश्नमा जान्छु। तपाई कुनै पनि बेला अन्तरबार्ता छोड्न सक्नुहुनेछ तर तपाईका बिचारहरु महत्वपूर्ण हुने भएकोले म आशा गर्दछु तपाईले यो अन्तरबार्ता पूरा गर्नुहुने छ। यदि यो अनुसन्धानको बारेमा तपाईलाई अरु जिज्ञासा छ भने कृपया मलाई प्रश्न सोध्न सक्नुहुन्छ। के म अन्तरबार्ता सुरु गर्न सक्दछु ?

१ महिलाहरुको सामाजिक तथा जनसांख्यिक स्थिति

जिल्लाको नाम

गाउँको नाम

वार्ड न

प्रश्नवलीको भाषा

परिवारको बनावट

परिवार मुलीको लिंग

सहभागीको उमेर

पहिलो बिबाह गर्दा को उमेर

पहिलो बच्चा जन्मदाको उमेर

सहभागीको धर्म

सहभागीको जात/जाति

सहभागीको कुल बच्चा/बच्चीको जन्म संख्या

जीवित बच्चा/ बच्चीको संख्या

सहभागीको शैक्षिक स्थिति

लोग्नेको काम

बसाइ सराइको स्थिति

२ जन्मस्थान र स्वास्थ्य सुबिधाको खोजि सम्बन्धि

तपाईं सुत्केरी सम्बन्धि कुराहरु परिवारसंग गर्नु हुन्छ या हुन्न? यदि गर्नु हुन्छ भने को संग

? हुन्न भने किन?

सुत्केरी सम्बन्धि समस्या पर्दा कहाँ जानुहुन्छ ?

तपाईंले आफ्नो बच्चा कहाँ जन्माउनु भएको हो ?

बच्चा जन्माउन कसैले सहयोग गरे कि गरेनन ?

तपाईं लाई सुत्केरी बेथा कति लामो समय सम्म लाग्यो ?

तपाईं सुत्केरी अबस्थामा कहाँ सुत्नु भयो ? किन ?

सुत्केरी अबस्थामा, सुत्केरी हुनु भन्दा पहिला र पछि तपाईंको स्वास्थ्य को सग जचाउनु भयो ? कहाँ ? किन?

३ बच्चा कहाँ जन्माउने भन्ने सम्बन्धि निर्णय

तपाईं आफु खुसि बाहिर घुम्न जान सक्नु हुन्छ कि हुन्न? किन?

बाहिर जान परिवार, साथी वा इस्टमित्र भेट्न कोही सग आनुमति लिनु पर्छ कि पर्दैन ?

परिवारमा बच्चा कहाँ जन्माउने भन्ने बिषयमा मुख्य निर्णय कर्ता को हो ?

बच्चा अस्पतालमा वा घरमा जन्माउने भन्ने सम्बन्धि निर्णय कसले गर्छ?

तपाईं स्वास्थ्य सुबिधा कहाँ लिने भन्ने निर्णय गर्दा सहभागी हुनु भयो कि भएन?

सहभागी किन नभएको ?

४ अस्पताल सुबिधा युक्त ठाउमा सुत्केरी हुन नजानुका कारणहरु ?

अस्पताल जाने अनुमती नभएर

अस्पताल जाने पैसा नभएर

अस्पताल जान मन नभएर

समाज र असुरक्षाको कारणले गर्दा

अस्पतालमा महिला स्वास्थ्य सेविका नभएर

अस्पतालमा औषधि नभएर

अस्पतालमा राम्रो स्वास्थ्यकर्मी नभएकोले

अस्पतालमा राम्रो सुबिधा नभएकोले

अस्पतालमा गोपनियता राम्रो नभएकोले

स्वास्थ्य सेवा कहाँ लिने भन्ने रोजाई नभएकोले

५ काम र मात्त्री स्वास्थ्य सुबिधाको उपयोगको सम्बन्धमा

तपाईं गर्ब अबस्थामा कुनै काम गर्नु हुन्थो ?

कस्तो किसिमको काम गर्नु हुन्थो ?

त्यो काम गरे बापत तलब के पाउनु हुन्थो ?

काम बाट पाएको पैसा आफु खुसि खर्च गर्न पाउनु हुन्थो ?

६ लिङ्ग र मात्त्री स्वास्थ्य सुबिधा उपयोगमा सम्बन्ध

तपाईंको विचारमा कम उमेरको महिला भन्दा बढी उमेरको महिलामा निर्णय गर्ने शक्ति

(अधिकार) बढी हुन्छ? कीन होला ?

गर्ब अबस्थामा सुरक्षित मात्त्रीतोको लागि लोग्ने मानिसको सहभागीता कतिको आवश्यक

छ? की छैन ? कीन ? सुरक्षित मात्त्रीतोको लागि लोग्ने मानिसले कस्तो भूमिका खेल्न

सक्छन होला ?

७ यातायात, दुरी र स्वास्थ्य सुबिधा उपयोग सम्बन्धमा

यहाँ बाट अस्पताल कति टाढा पर्छ ?

यातायातको मुख्य साधन के हो ?

यातायातको मूल्य (भाडा) कति पर्छ ?

यातायातको सुबिधा नपाउनुका मुख्य कारणहरु के के हुन् ?

८ तपाईंको विचारमा हाम्रो धर्म संस्कृतिले सुरक्षित मात्त्री स्वास्थ्य सुबिधाको उपयोगको

बारेमा कस्तो भूमिका खेलेको छ?

भूत/बोक्सीमा विश्वास गर्नाले

नदि पार गर्न र यात्रा गर्न नहुने

उपचार गर्न भन्दा भगवानमा विश्वास गर्नाले

संस्कृति र धार्मिक विश्वास राखी ढिलो उपचार सुरु गर्नाले

खाने कुरामा रोक लगाउने

९ गर्भ अवस्थालाई तपाई कसरी लिनुहुन्छ ?

१० गर्भ अवस्थामा परिवारका सदस्यहरु बाट सहयोग पाउनु भयो की भएन? कीन र कस्तो ?

११ तपाईको विचारमा बच्चा जन्मदाको अवस्थालाई कसरी रमाइलो बनाउन सकिन्छ होला ?

१२ तपाईको विचारमा बच्चा जन्मन भन्दा पहिला, जन्मिने बेला र जन्मपछी डाक्टर, नर्स र अनमी को सहयोग आवश्यक छ कि छैन? कीन ?

१३ तपाई स्वास्थ्यकर्मीहरुको सहयोगबिना घरमा बच्चा जन्माउन रोज्नु हुन्छ

कि स्वास्थ्यकर्मीको सहयोग सहित अस्पतालमा बच्चा जन्माउन रोज्नु हुन्छ ? कीन ?

१४ तपाईको विचारमा यो गाउँका महिलाहरुले गर्भ अवस्था र बच्चा जन्मउदाको अवस्थामा भोगेका मुख्य मुख्य समस्याहरु के के हुन् ?

१५ तपाईको विचारमा यो गाउँमा गर्भ अवस्था र बच्चा जन्मउदाको अवस्थामा तत्काल सुधार गर्नु पर्ने कुरा हरु के के हुन् ?

१६ तपाईको विचारमा घरमा नै बच्चा जनमाउदाको स्थीतिमा कसरि सुधार गर्न सकिन्छ होला ?

युबराज बराल

धन्यबाद

APPENDIX 3: ETHICAL APPROVALS

ETHICAL APPROVALS FROM LONDON METROPOLITAN UNIVERSITY



Yuba Raj Baral

C/o Faculty of Applied Social Sciences

London Metropolitan University

Ladbroke House

London N5 2AD

January 20th 2011

Dear Yuba

Research ethics application: 03.01.2011

Factors affecting the utilization of skilled birth attendants for delivery in Nepal

Thank you very much for your application for research ethics review and I am now able to give full approval for this very interesting project.

Please let me know should you make any changes to the research which may affect the research ethics approval you have received.

We wish you every success with the research and look forward to hearing how it has gone.




Yours sincerely

Georgie Parry-Crooke

Chair Social Sciences Research Ethics Review Panel,

Tel. 020 7133 5092, Email. g.parry-crooke@londonmet.ac.uk

**APPENDIX: 4 RESEARCH APPROVALS FROM GANDAKI HOSPITAL,
KASKI NEPAL**

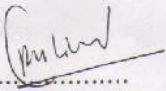

Government of Nepal
Ministry of Health & Population
Western Regional Hospital
Development Committee
Ramghat, Pokhara

Date : 27th Dec. 2019

To whom it may concern

Subject – Regarding the research approval

Mr. Yuba Raj Baral , a resident of Pokhara sub metropolitan, ward no 9
currently Phd student in London metropolitan university at applied social
science, United Kindom. Mr. Baral is doing doctorate in maternal and newborn
health issues topic on " Factor Affecting Utilization of Skilled Birth Attendance
for Delivery in Nepal". We give him permission in our organization to collect
necessary data to support his study.


.....
Dr. Buddhi Bahadur Thapa
Medical Superintendent
western Regional Hospital , Pokhara .

**APPENDIX 5 RESEARCH APPROVALS FROM MANIPAL TEACHING
HOSPITAL, KASKI, NEPAL**



MANIPAL COLLEGE OF MEDICAL SCIENCES
POKHARA, NEPAL

(AFFILIATED TO KATHMANDU UNIVERSITY)

MEMG/NHRC/GA

14th January 2011

Mr Yuba Raj Baral
PhD Student
Pokhara-9, Kaski

Subject : Permission for Research.

Dear Mr Yuba Raj Baral,

1. Reference your application dated 20 Dec 2010.
2. Permission is hereby accorded for research project namely, **"Factors Affecting Utilization of Skilled Birth Attendants for Delivery in Nepal"**.
3. You will have to personally meet the following prior to commencement of any research work in Manipal Teaching Hospital :-
 - (a) Hospital Director
 - (b) HOD, OBG
 - (c) Director Academics

Yours sincerely,

Dr VM Alurkar
Member Secretary
IRC, MCOMS, Pokhara

APPENDIX: 6 ETHICAL APPROVALS FROM NEPAL HEALTH RESEARCH COUNCIL



Nepal Health Research Council



NHRC

Ref. No. 853

Executive Committee

Executive Chairman

Dr. Chop Lal Bhusal

Vice - Chairman

Dr. Rishi Ram Koirala

Member-Secretary

Dr. Shanker Pratap Singh

Members

Dr. Narendra Kumar Singh

Dr. Meeta Singh

Dr. Suman Rijal

Dr. Samjhana Dhakal

Dr. Devi Gurung

Representative

Ministry of Finance

National Planning Commission

Ministry of Health & Population

Chief, Research Committee, IOM

Chairman, Nepal Medical Council

March 10, 2011

Mr. Yuba Raj Baral

Principal Investigator

London Metropolitan University

Department of Applied Social Sciences, London

Ref: Approval of Research Proposal entitled **Factors Affecting the Utilization of Skilled Birth Attendants for Delivery in Kaski District of Nepal**

Dear Mr. Baral,

It is my pleasure to inform you that the above-mentioned proposal submitted on 23 Jan, 2011 has been approved by NHRC Ethical Review Board on 4 March 2011 (2067-11-20).

As per NHRC rule and regulation, the investigator has to strictly follow the protocol stipulated in the proposal. Any change in objective(s), problem statement, research question or hypothesis, methodology, implementation procedure, data management and budget that may be necessary in course of the implementation of the research proposal can only be made so and implemented after prior approval from this council. Thus, it is compulsory to submit the detail of such changes intended or desired with justification prior to actual change in the protocol.

If the researcher requires transfer of the bio samples to other countries, the investigator should apply to the NHRC for the permission.

Further, the researchers are directed to strictly abide by the National Ethical Guidelines published by NHRC during the implementation of your research proposal and submit progress report and full or summary report upon completion.

As per your research proposal, your research is self-funded and NHRC processing fee is US\$ 100.

If you have any questions, please contact our research section.

Thanking you.

Sincerely Yours,

Dr. Shanker Pratap Singh
Member Secretary

APPENDIX: 7 SOCIO-DEMOGRAPHIC CHARACTERISTIC OF PARTICIPANTS

Socio-demographic characteristics of women (No=24)			
Variables	Categories	SBA users =16	SBA non-users =8
Age	18-24	10	3
	25-34	5	5
	35+	1	-
Caste	Upper caste	10	6
	Lower caste	6	2
Family living arrangements	Extended	11	5
	Single	5	3
Women's education	1-5 yrs	5	2
	6-10 yrs	7	4
	SLC+	3	2
	Illiterates	1	-
Place of delivery	Hospital	16	0
	Home	-	8
Number of deliveries	1	8	2
	2	4	5
	3	4	1

<i>Socio-demographic characteristics of men (No=3)</i>		
Men's education	Literate (Husbands)	2
	Illiterate (father-in-law)	1
Age	Less than 40 yrs (Husbands)	2
	More than 40 yrs (father-in-law)	1
<i>Socio-demographic characteristics of mothers-in-law (No=5)</i>		
Mothers-in-law's education	Literate	1
	Illiterate	4
Age	Less than 60	2
	More than 60	3

APPENDIX 8 MAIN THEMES WITH SUB-THEMES GENERATING

1. Transportation, Road condition and distance to the health facilities

The **main problem is road condition in this place**. No regular bus services to go to the health facility from this place (SBA service user woman 4).

Hospital is far from here it take nearly 4 hours reached to hospital. **There is no good transportation if you called taxi cost too much**. They don't like to come in this poor rural road. If they come I cannot afford (SBA service user 5).

Road and transportation systems are not good in this place. There were no bus services at night. It cost more than double at night than the day if you asked bus to go. It is further difficult to go hospital in rainy season (SBA service user woman 34 years 7).

Road and transportations are main problems in this village. There are no regular bus services it takes 1.5 to 2 hours to reach the hospital by van in this rural road (SBA user woman 9).

There is no good road and regular bus services. It is very difficult at night time.

Hospitals are very far to go (SBA service user 13).

Road and transportation services are very poor and public bus service is not regular. I used a motorbike to go hospital. I fainted when labour start, it take long time to wait bus. Motor bike was ready at home so we used that to go. We three people were travel I was in the middle of the motorbike (SBA service user woman 15).

Hospital is too far from the village its takes 3-4 hours to reach hospital. There is no good road and regular bus service. Last year my sister-in-law carried on shoulder half way to main road to go to hospital (SBA service user woman 20).

I walked down to the road and then take a bus to go the hospital. *Jerking made me more difficult and pain travel by bus in this poor road. I thought I might be dead on the way to hospital.* The road is really bad it is easier to walk rather than go by bus..... (SBA user woman, 25).

The road and transportation are the main problem in this village to go hospital for delivery. The hospital is too far and no regular bus service (SBA service user woman 26).

The road is not good and bus services are expensive and not regular. Hospital is too far to go (SBA user woman 29).

There is no ambulance service in this village. If you call taxi from Pokhara they don't want to come due to road condition and charge high if they come. The hospital is too far and no regular bus service. There are more problems if labour occurs during the rainy season and night time (SBA service user woman 30).

There is main problem of road and transportation to go hospital from this village.

Road is very poor and bus service is not regular. This time I go by a truck in the evening. The truck loaded stone on the way; it takes nearly 4 hours to reach hospital..... That was really hard time for me (SBA user woman 31).

There is not good road and transportation facility. It is very difficult to go in rainy season. Hospital is too far to go; you have to spend more money to go. Two to three people need to go for care of mother and newborn in hospital (SBA service user woman 32).

2. Access of the services for SBA use

There are no any alternative maternal health services for delivery. There is a private medical shop run by a (CMA) community medical assistant. She does not have sufficient knowledge about the delivery though she helps in normal delivery. There is a (SHP) Sub Health Post in Kalika Chowk (centre of the village) but there is no qualified nurse and doctor. If you have problems and go to that SHP office is closed most of the time. It is difficult to meet health post staffs in office in the day time. If we have any problem we have to go Pokhara either Gandaki hospital or Manipal teaching hospital or private nursing homes (SBA user 1).

There are no any alternative services for safe delivery in this area. There is a private local medical shop in the centre of the village. You can get small treatment (e. g cuts, fever, cough, diarrhoea, pregnancy test etc) but not for delivery. There is Health Post (HP) top of the village but no one want to go there. If you go there you cannot meet staff in the day time. As I heard from other there are no qualified nurses (Woman SBA service user 5).

There is a health post in the village for antenatal check up for every Thursday but no delivery facilities are there. Female community health volunteers are working there. They are not qualified health persons as I know from other (SBA service user woman 29).

Yes it is easier at home in case of love and care. You can get good food and other facilities at home but if there is any complication during delivery no any safe delivery service except going hospital for that (SBA service user woman 31).

There is a health post top of the village. There are no qualified health persons. There is no meaning to go in the health post. It was only waste of time and people do not trust the person who works in the health post (SBA service user woman 32).

3. Age of mother, parity and number of living children

I was only 19 years old when I was pregnant. I was thin and feeling weak so it would be better to go to hospital than stay at home; every one suggested going to hospital for delivery (SBA user young age mother1).

It was my first delivery. I was too young for giving birth at the age of 18. I know it was not appropriate age for delivery so I requested husband all the time to go to hospital for delivery. My husband also interested to go the hospital for delivery. Due to my age there was chance of danger during delivery so I was planned to go the hospital. My husband also agree for that if he disagrees with my ideas definitely I would go to hospital convincing him advantages of hospital delivery (woman SBA user 7 class passed 4).

I have three sons and one daughter. All of my three sons are born at home in India when my husband was working there. Younger daughter was born at hospital in Pokhara. I feel so weak in my last delivery. I think hospital is safer place to deliver baby in that situation..... Laugh (SBA users 34 years old woman7).

I was only 18 years old when I was pregnant. After 8 months of pregnancy I have problem for urination then I go for video x-ray. It came to know I have twins baby then my father-in- law asked to go hospital for safe delivery(SBA user 20 years old woman 25).

No it was not my choice to go hospital for deliver baby. My husband asked to go hospital for safe. I was so weak due to age and number of children (Woman 38 year old SBA user 26).

I go to hospital for the security reason. I have six children and my age was not appropriate for birth (SBA user 38 years old woman 26).

I was only 18 years old when giving first birth. It was not appropriate age for birth. If I was not young I would try at home for deliver baby but it is danger at home if some complication during labour. Family members also not sure I can give birth easily or not due to young age. If something complication there was no any health facilities at home so we decided to go hospital for deliver baby (SBA user woman 30).

I was only twenty years old when I pregnant for the first time. **I have no basic ideas of safer pregnancy. I works, walk, carry heavy load and did not care much about the pregnancy may be due to that but don't know** exact reasons about that miscarriage (SBA user woman 32).

APPENDIX 9: GLOSSARY

Traditional Birth Attendants (TBAs): Traditional birth attendants are part of the birthing process throughout the developing countries assisting in the substantial portions of new birth. The majority was illiterate and had learned their skills through working with other TBAs and usually self-taught or informally trained (United Nations Population Fund, 1996).

Maternal and Child Health Village Workers (MCHVW): MCHWs are local, married women of 18-30 years of age, minimum of qualification 8 years schooling and 6 months training for the maternity health care. They who meet criteria are being offered possibility to take auxiliary nurse midwife course. They can provide the services like Antenatal care (ANC), Post Natal care (PNC), delivery care, Emergency obstructed care (EOC) first aid services and family planning.

Auxiliary Nurse Midwife (ANM): Minimum of 10 years of schooling with 18 months training for maternal health care services. They are qualified for ANC, PNC, and family planning counselling. Sometime they have been given in service training for basic emergency obstructed lifesaving skills.

Auxiliary Health Workers (AHW): Minimum of 10 years schooling including 18 months training. They are qualified for treatment of minor illness related to pregnancy, infant and children including family planning counselling.

Health Assistant (HA): Minimum qualification of School Leaving Certificate (SLC) with two years training for health assistant. They are qualified for family planning services and counselling, treatment of minor illness related to pregnancy, infant and children and referral.

Staff Nurse (SN): Minimum 10 years of schooling with three years training. They are qualified for ANC, PNC, delivery, limited first aid services, and referral.

Medical Officer (MBBS): Minimum qualification of Intermediates in Science (ISc) with five year training. They are qualified for delivery, basic EOC services, family planning, management of immunisations preventable, management of neonatal complications and reproductive morbidity.

General Practitioners (MDGP): Minimum five years plus extra three years MDGP training qualification. They are qualified for delivery, comprehensive EOC services, family planning, management of immunisation, preventable ARI (Acute Respiratory Infection) and Diarrhoeal diseases treatment, management of neonatal complications and reproductive morbidities.

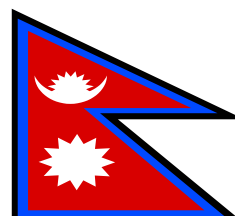
Obstetrician/Gynaecologist (OB/GYN): Minimum qualifications of MBBS plus specialist training plus two years for DGO (Doctorate in Gynaecology and Obstetrics), plus three years for OB/GYN. They are qualified for comprehensive EOC services; voluntary surgical contraception, management and treatment of reproductive morbidities including cancer and paediatrician can management of neonatal complications including intensive care services.

Skilled Birth Attendants (SBAs): “an accredited health professional-such as a midwife, doctor or nurse who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns” (WHO, 2004).

APPENDIX 10: POSTER PRESENTED

Doctorate Student Research Conference, University of Sussex, 21st July 2011

Yuba Raj Baral, Prof. Karen Lyons, Jo Skinner, Prof Edwin van Teijlingen



Title: Uptake of skilled birth attendants in Nepal

Introduction

A large proportion of women in Nepal do not have a skilled person attending them during childbirth. Although some quantitative research studies have examined factors affecting uptake of SBAs (skilled birth attendants), this study tries to explore women's perceptions of how and why these factors are associated with the uptake of SBAs services for delivery. Qualitative research will elicit more in-depth knowledge about the problems of utilisation of SBA services for delivery. This study will contribute to increasing the understanding of the issues associated with limited uptake of SBAs service for delivery in Nepal.



Visitors in a delivery room in public hospital

Aim: to explore the factors affecting the utilization of skilled birth attendants for delivery in Kaski district of Nepal.

The Objectives are to:

- clarify the range of SBAs health services utilization
- identify patterns of use of maternity services utilisation

- explore the factors affecting the use of skilled birth attendants
- explore women's role and ability to have a choice of SBAs

Methods

- Case study design using mixed methods in Kaski district of (western) Nepal with population of 380,527. The study community was within 4-5 hours walking distance to the facility
- Questionnaires to SBAs (based on WHO definition) working in maternity services in two hospitals
- Interviewed with 15 currently married women age 18-49 years who have given birth within three years at the time of survey
- 10 persons who were involved in birthing process including a husband, mother-in-law, chaperone were interviewed
- Time frame for research project: 2010-2013



Interviewing a woman in a village

Data Collection and Analysis

- Structured self-administered survey questionnaire in English
- Semi structure face to face interviews in Nepali language were digital recorded
- A female researcher was recruited for interview women
- Individual verbal consent was obtained by female researcher before interview
- Confidentially and anonymity will be maintained
- Quantitative data will be analyzed by using SPSS
- Qualitative data will be analyzed using a thematic analysis



A woman in corridor after giving birth in public hospital

Ethical approval obtained from

- Ethical approval has been sought from London Metropolitan University and the Nepal Health Research Council, Nepal
- From two hospital before applying Nepal Health Research Council approval
- Verbal consent was taken before interview women

Preliminary findings: Challenges for Uptake of SBA services for Delivery

- Transportation and distance to the hospital
- Staff attitude towards service users
- Lack of female SBAs
- Number of giving birth and living children
- Place of residence
- Socio-political situation
- Decision making power
- Media and communication
- Choice of and access to care
- Respectful care and quality of services



Women in recovery room in private hospital

References

Bowling A (2001). *Research methods in Health, Investigating health services* (Second Edition) Open University press.

Bryman A (2008). *Social Research Methods* (Third Edition) Oxford University Press

CBS (2003). Population Census of Nepal 2001. National Planning Commission, Kathmandu, Nepal

NDHS (2006). Nepal Ministry of Health, New Era and ORC Macro, Calverton, MD, USA: ORG Macro International.

Supervisors: Jo Skinner, Karen Lyons & Edwin van Teijlingen

For correspondence

Yuba Raj Baral (PhD Student)

Faculty of Applied Social Sciences,

London Metropolitan University, 62-66 Highbury Grove London N5 2AD, UK

E-mail: yrb0009@my.londonmet.ac.uk

baral_yubaraj@hotmail.co.uk

APPENDIX 11: ABSTRACT PUBLISHED

FIRST HEALTH PROMOTION CONFERENCE IN NEPAL, 30th MAR-1st,
APRIL, 2013, KATHAMNDU, NEPAL

Factors affecting utilisation of skilled birth attendants in a western hill district of
rural Nepal - a mixed method study

Yuba Raj Baral, Jo Skinner, Karen Lyons, Edwin Van Teijlingen

Faculty of Social Sciences and Humanities, London Metropolitan University

166-220 Holloway Road, London N7 8DB, +44 (0) 020 7133 2961

baral_yubaraj@hotmail.co.uk

Background

The proportion of deliveries where skilled attendance care used is one of the indicators of the progress of Millennium Development Goal 5 (MDG5) to improve maternal morbidity and mortality. All women need skilled maternity care in pregnancy, childbirth and after delivery. However, around the world, one third of births take place without the assistance of a skilled attendance. In developed countries almost all births are assisted by skilled attendants but it is only 36% in Nepal and this rate is much higher in rural area. The general aim of the study was to explore the women's experiences and perceptions of using skilled birth attendants for delivery in a western hill district of Nepal. Following are the objectives of the study: (a) to explore the factors affecting the use of skilled birth attendants for delivery in a western hill district of Nepal: (b) to explore women's perceptions in the use of skilled birth attendants during the labour and delivery of the baby, (c) to explore the women's experiences and choice of skilled birth attendants services during pregnancy, labour and delivery time.

Methods

A mixed methods design was utilised to address research objectives with a case study approach. The quantitative information was collected using self administered structured survey questionnaires for doctor, nurse and midwives in two (one private and one public owned) hospital. Qualitative data was collected using semi-structure face to face interview with women age 18-49 years who had given birth within three years at the time of interview. Study site was chosen a rural area from western hill district of Nepal. All interviews were under taken in Nepali and digital recorded.

Results

This study explored that different factors influencing SBA use: they are (1) women's individual characteristics, perceptions and experiences, (2) economic, family and community influence in service use, (3) attitudes for and nature and quality of service, (4) Gender roles and cultural aspects of services, (5) access to SBA services relative to women's socio-economic positions and, political situation, (6) changing society views through traditional to modern e. g. living in nuclear family system, modern views in younger generations on health services, and inequality in health service distribution. Moreover, women's individual characteristics such as age of the mother, parity, and number of living children, women's previous pregnancy history, women's educational and employment status, caste/ethnicity including costs of service and health service delivery system also some factors influenced SBA use during pregnancy and childbirth.

Conclusions

The findings of the study show that different factors namely: individual characteristics such as age, education, employment, household position, knowledge and attitude, interpersonal relationships e. g. family, friends, neighbours, co-workers, and their links, and organisational factors e. g. the role of different organisations, e. g. school, university, different groups of people, community and professional groups affecting service use. Furthermore, community factors such as family, relationship between community groups and social networks and, and wider public health policies, and procedure (e. g. transportation policy, economic policy and incentive policy) influence in maternal health service use.

Keywords- Maternal health, skilled birth attendants, service utilisation, pregnancy, developing country, Nepal

**THIRD POST GRADUATE RESEARCH STUDENT CONFERENCE
LONDON METROPOLITAN UNIVERSITY 18th NOV, 2012, LONDON, UK**

Women's perceptions and experiences of using skilled maternity care: A qualitative study in a western hill district of Nepal

Yuba Raj Baral, Jo Skinner, Prof. Karen Lyons, Prof. Edwin Van Teijlingen

Background

The proportion of deliveries where skilled attendance care used is one of the indicators of the progress of Millennium Development Goal 5 (MDG) to improve maternal morbidity and mortality. All women need skilled maternity care in pregnancy, childbirth and after delivery. However, around the world, one third of births take place without the assistance of a skilled attendance. In developed countries almost all births are assisted by skilled attendants but it is only 36% in Nepal.

Aim of the study

To explore women's experiences of using of skilled birth attendance for delivery in Nepal.

Objectives

- To explore the factors affecting the use of skilled birth attendants for delivery in Nepal
- To explore issues associated with women's role of maternal health care services utilisation in Nepal
- To explore the women's preference of maternity service utilisation

Methods

A case study approach was used to address the research aim. Mixed methods strategy was employed to meet the research objectives. The quantitative information was collected using self-administered survey questionnaires for doctor, nurse and midwives. Qualitative data was collected using semi-structure face-to-face interviews with women age 18-49 years that had given birth within three years at the time of survey. All interviews were under taken in Nepali and digital recorded.

Results

The findings of the qualitative information shows that various factors such as socio-economic situation of women including lack of information, perceptions of safe delivery, SBAs attitude and gender, access of services, transportation and distance to the health facility, gender role, costs of service, cultural beliefs and traditional practice, lack women autonomy, influence of households head and family members, husband education and income play significant role in the use of SBA.

Conclusion

Socio-cultural, economic and individual factors are associated with utilisation of skilled birth attendance during pregnancy and delivery time. This study is tried to explore how these factors influence for utilisation of skilled maternity services in Nepal.

Yuba Raj Baral, PhD student

London Metropolitan University UK

baral_yubaraj@hotmail.co.uk

FIRST POST GRADUATE RESEARCH STUDENT CONFERENCE
LONDON METROPOLITAN UNIVERSITY 5th OCTOBER, 2010, LONDON,
UK

Factors affecting the utilization of skilled birth attendants for delivery in Nepal

Background: Maternal and newborn health is a serious public health problem in the developing world. The morbidity and mortality rates in pregnant women and mothers remain unexpectedly high in the developing countries of the world. Each year, globally, more than five million women die of pregnancy or childbirth related causes – 99% of them are in developing regions. The available data shows that one in 16 in Africa and one in 43 women in Asia die every year due to maternal and pregnancy complications compared to 1 in 2,500 in United States (Global Health Initiative 2008). The 5th Millennium Development Goal (MDG) calls for a 75% reduction in maternal mortality by 2015. Delivery by skilled birth attendants (SBA) serves as an indicator of progress towards reducing maternal mortality worldwide, the fifth MDG. Nepal has committed to reduction of maternal mortality by 75% by 2015 through ensuring accessibility to the availability and utilization of skilled care at every birth. Research suggested that since 1996 Nepal is working towards achieving MDG 5. However, only one in five women in Nepal currently gives birth with the help of a skilled birth at the riskiest moment in her reproductive life. Nepal has 281 maternal deaths per 100,000 live births.

Aim and objectives: The aim of the study is to explore the factors affecting the uptake of skilled birth attendants for delivery in Nepal. The objectives of the study are (a) to identify the range and patterns of maternal health services in Nepal (b) to explore the factors affecting the use of skilled birth attendants for delivery in Nepal (c) to explore issues associated with women's role and choice of maternal health care services in Nepal.

Methods: A case study design will be used to address the research aim. This design is useful to explore the complex nature of social settings and behaviour. To address the objectives a mixed methods approach will be used, utilising both qualitative and quantitative methodologies. This method is useful to answer different research questions: use of both methods provide complimentary data and can fulfil the gaps left by one another. The quantitative data will be collected using self administered

postal survey questionnaire. For the qualitative information semi-structure face to face interview will be conducted.

Results (preliminary literature review): Available literature shows that several socio-economic, cultural and religious factors play a significant role in the use of SBAs for delivery in Nepal. Availability of transportation and distance to the health facility, poor infrastructure and lack of services, availability and accessibility of the services, cost and convenience, staff shortage and attitude, gender inequality, status of women in society, women's involvement in decision making and women's autonomy and place of residence are significant contributing factors uptake of SBAs for delivery in Nepal.

Conclusion

It was found from the literature review that there were more quantitative research studies exploring the determinants of utilization of the maternal health services during pregnancy in Nepal. Findings of quantitative research show that different social, economic, socio-cultural and religious factors are responsible for the utilization of maternal health services but very few studies discussed how and why these factors are responsible for utilization of SBAs for pregnancy. It is seen from the review that there is need to do more qualitative research to explore the women's role and choice regarding use of SBAs services and to find out how and why these factors are responsible for utilization of SBAs for delivery. Qualitative research will enable further exploration of the issues and contribute to improvement of maternal health services.

Keywords–Maternal health, Skilled birth attendants, Pregnancy, Developing Country, Nepal

Yuba Raj Baral

Date: 5th Oct 2010

10th NEPAL BRITAIN STUDY COUNCIL CONFERENCE, 19-20 APRIL, 2012, READING, UK.

Utilisation of Skilled Birth Attendants for delivery- A mixed methods study in the Kaski District of Nepal.

Background

The proportion of deliveries where skilled attendance care used is one of the indicators of the progress of Millennium Development Goal to improve maternal health. All women need skilled maternity care in pregnancy and childbirth. In Nepal, only 19 percent of women attended skilled birth attendants during delivery of the baby.

Aim

To explore women's experiences of using of skilled birth attendants for delivery in Nepal.

Objective

To explore women perceptions and choice of maternity care during pregnancy and childbirth.

Methods

Mixed methods design was used to address research objective. The quantitative information was collected using self-administered structured survey questionnaires. Qualitative data was derived using semi-structured face-to-face interviews with women aged 18-49 years who had given birth within three years at the time of interview.

Results

Data shows that several factors influence under skilled birth attendant use: lack of information and perceptions of delivery, health service providers' attitudes, access of services, distance and transportation, gender role, costs, culture beliefs, lack of decision-making power and influence of households head are some reasons.

Conclusion

Different socio-demographic, cultural, economic, and individual factors are associated with utilisation of skilled birth attendants during the pregnancy and childbirth. This study tried to explore how these factors influence utilization of skilled maternity services in Nepal.

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APPENDIX 12: BLOGS PUBLISHED WHITE RIBBON ALLIANCE

Challenges of Family Planning in Nepal Blog Published 1st Nov 2011

<http://www.whiteribbonalliance.org/blog/post.cfm/challenges-of-family-planning-in-nepal>

The use of contraception is one of the key determinants of fertility. Fertility is directly related to maternal morbidity and mortality. It is documented that if the existing demand for family planning services were met maternal deaths in developing countries could be reduced by 20% or more. Over the past decade in Nepal, the use of modern family planning methods has been increasing steadily and fertility has dropped from 4.6 children per woman in 1996 to 3.1 in 2006. So it can be assumed that the risk of life time maternal mortality of Nepali women has declined, simply because women have fewer births than in the past. According to different research findings the unmet demand of modern family planning methods still high in Nepal. The Nepal Demographic Health Survey (NDHS 2006) reports that there is high unmet demand, as 25% of married women could not access modern contraceptive services.

Family planning is given a high priority in maternal health policies with the aim of providing and sustaining adequate family planning services through community level health facilities in Nepal though all women are not able to get those services easily. According to NDHS 2006 shows that knowledge of at least one modern contraceptive methods of family planning is universal among currently married women but there are substantial differences in the use of contraceptive methods among subgroups of currently married women. Women in urban areas are more likely to use modern contraceptive methods than rural. Similarly, married women in the Terai (the plain area in the south of Nepal) have higher use than hill and mountain women. This perhaps reflects the easier access and wider availability of these methods in the Terai and urban areas. The impact of education on contraceptive use is mixed. Wealth is positively correlated with contraceptive use. The use of modern contraceptive methods between the highest and lowest quintile women are vast differences. Married women who have three to four living children are more likely to use modern contraceptive methods than married women who have

no living children, presumably because they latter may wish to have children and do not want to prevent pregnancy.

Experience from many developing countries of Asia and Africa (e.g. Malaysia, Sri Lanka, Thailand, and Tunisia) and also Jamaica, suggest that some countries are able to reduce maternal mortality through providing universal access to family planning and skilled birth attendance with back-up emergency support. Many of these countries have reduced their maternal mortality rates by more than half within a ten-year period. Evidence from Nepal suggests that over the past decade, Nepal has achieved significant improvement in levels of maternal morbidity and mortality but still higher than most of the other developing countries.

In Nepal, the available research findings have shown that utilisation of family planning services vary according to the socio-economic and demographic status of women. Poor rural road links and lack of access to health services are some factors that hinder the utilisation of services. Higher status women (e.g. measured by education level, wealth and urban dwelling) make better use of family planning services including for maternity care. In order to increase family planning services utilization priority should be given to poor and rural women with least access to facilities by providing sufficient support (e.g. finance, free education, health insurance, free health service and other health incentives) together with increasing reproductive health education. The government should also prioritise the establishment of new health facilities in remote and less developed areas together with developing road links to major urban areas of Nepal where main health facilities are located.

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Use of Skilled Birth Attendants in Nepal. Blog Published 20th Sept 2011

<http://www.whiteribbonalliance.org/blog/post.cfm/use-of-skilled-birth-attendants-in-nepal>

This September, while world leaders gathered at the United Nations General Assembly, WRA called on our members to submit stories and photographs that illustrate the progress that is being made to maternal and newborn health, as well as the efforts of advocates to hold governments accountable to commitments that have been made to Every Woman, Every Child. This posting comes from Yuba Raj Baral, a PhD student at London Metropolitan University. He is researching maternal and newborn health issues in Nepal. Research is a necessary in order to hold governments accountable in their commitments to Every Woman, Every Child because it provides evidence of the on-going problems, where a government's commitments have fallen short of expectations and where more assistance is necessary to reducing maternal mortality. Read an abstract of Yuba Raj Baral's work below.

Background

The proportion of deliveries where skilled attendance care used is one of the indicators of the progress of Millennium Development Goal 5(MDG5) to improve maternal health. All women need maternity care in pregnancy, childbirth and after delivery. However, around the world, one third of births take place without the assistance of a skilled attendant. In developed countries 99% of births are assisted by skilled attendants but it is only 19% in Nepal.

Aim

To explore women's experiences of using of skilled birth attendants for delivery in Nepal.

Objectives

- To explore the factors affecting the use of skilled birth attendants for delivery in Nepal
- To explore issues associated with women's role of maternal health care services utilization in Nepal
- To explore the women's preference of maternity service utilization

Methods

A case study approach was used to address the research aim. Mixed methods design was used to address research objectives. The quantitative information was collected using self-administered structured survey questionnaires for doctors, nurses and midwives. Qualitative data was collected using semi-structured face-to-face interviews with women age 18-49 years who had given birth within three years at the time of interview. All interviews were undertaken in Nepali and digitally recorded.

Results

Data shows that different factors influence under Skilled Birth Attendant use including: lack of information and perceptions of safe delivery, health service providers' attitudes, access of services, distance, road conditions and transportation, gender role, cost of services, culture and ritual beliefs, lack of decision making power and influence of households head, husband education and income are some factors.

Conclusion

Different socio-cultural, economic and individual factors are associated with utilisation of skilled birth attendants for skilled delivery in Nepal. This study explored how these factors influence utilization of skilled maternity services in Nepal. The study can contribute for policy and planning to improve maternal health service utilisation in Nepal.

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APPENDIX 13: PRESENTATIONS GIVEN

Women's perceptions and experiences of using skilled maternity care: A qualitative study in a western hill district of Nepal-3rd Post Graduate Research Conference
London Metropolitan University, 29 Nov 2012

Women's perceptions and experiences of using skilled maternity care: A qualitative study in a western hill district of Nepal



Yuba Raj Baral, PhD student
Faculty of Applied Social Sciences and Humanities
29 Nov, 2012

6/24/2014

London Metropolitan University

Uptake of skilled birth attendants for delivery in Kaski district of Nepal- paper presented in Central Department of Population Studies, Tribhuvan University, Kathmandu, Nepal, 12th June 2011.

Factors Affecting the Utilization of the Skilled Birth Attendants for Delivery in Kaski District of Nepal



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12 June 2011

6/24/2014

London Metropolitan University

Factors affecting utilization of skilled birth attendants for delivery in Nepal- paper presented in 1st Post Graduate Research Conference, London Metropolitan University, UK, 12th Nov 2010.

APPENDIX 14: PAPERS PUBLISHED IN PEER REVIEWED JOURNAL

Quarterly scientific, online publication by Department of Nursing A',
Technological Educational Institute of Athens

REVIEW

Maternal health services utilisation in Nepal: Progress in the new millennium?

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ABSTRACT

Aim: This review was to explore the range and pattern of maternal health services utilisation in Nepal over the past decade.

Method: It is based on Nepal demographic and health surveys 2001 and 2006, and literature reviewed from across the globe and related to the Nepalese context. Different aspects of maternal health care, i.e. antenatal care (ANC), postnatal care (PNC), delivery care, skilled birth attendance (SBA) and family planning (FP) services were reviewed.

Results: There is significant difference in utilisation of maternal health services according to the socio-economic status of women and geographical location. Several factors affect the uptake of maternal health services, including (a) the woman's age, her level of education, employment and income, wealth, location (e.g. rural/urban, ecological and development region), and number of living children in the family. The review found that educated women, those who live in urban areas and central and western regions of Nepal, who are the better-off households, are more likely to use maternal health services than others. Similarly, women who have more than three living children are less likely to use maternal health services (except for family planning services) than others.

Conclusions: It is suggested that the government should give priority to women from lower socio-economic groups in different community interventions (e.g. providing schemes for partial funding community payment or pre-payment schemes, insurance programmes, private or social insurance, through subsidies). The government should also prioritise the establishment of new health facilities in remote and less developed areas together with developing road links to major urban areas of Nepal.

Key words: Developing country, maternal health, pregnancy, South Asia, service uptake.

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Maternal health services utilisation in Nepal: Progress in the new millennium?

Determinants of skilled birth attendants for delivery in Nepal

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Kathmandu Univ Med J 2010;8(31):325-32

ABSTRACT

This review is to explore the factors affecting the uptake of skilled birth attendants for delivery and the issues associated with women's role and choices of maternal health care service for delivery in Nepal. Literature was reviewed across the globe and discussed in a Nepalese context. Delivery by Skilled Birth Attendance serves as an indicator of progress towards reducing maternal mortality worldwide, the fifth Millennium Development Goal. Nepal has committed to reducing its maternal mortality by 75% by 2015 through ensuring accessibility to the availability and utilisation of skilled care at every birth.

The literature suggests that several socio-economic, cultural and religious factors play a significant role in the use of Skilled Birth Attendance for delivery in Nepal. Availability of transportation and distance to the health facility; poor infrastructure and lack of services; availability and accessibility of the services; cost and convenience; staff shortages and attitudes; gender inequality; status of women in society; women's involvement in decision making; and women's autonomy and place of residence are significant contributing factors for uptake of Skilled Birth Attendance for delivery in Nepal.

The review found more quantitative research studies exploring the determinants of utilisation of the maternal health services during pregnancy in Nepal than qualitative studies. Findings of quantitative research show that different social demographic, economic, socio-cultural and religious factors are responsible for the utilisation of maternal health services but very few studies discussed how and why these factors are responsible for utilisation of skilled birth attendants in pregnancy. It is suggested that there is need for more qualitative research to explore the women's role and choice regarding use of skilled birth attendants services and to find out how and why these factors are responsible for utilisation of skilled birth attendants for delivery. Qualitative research will help further exploration of the issues and contribute to improvement of maternal health services.

Key Words

Asia, developing country, maternal health, pregnancy, skilled birth attendance

INTRODUCTION

Pregnancy and child birth complications are a leading cause of death and disability among women of reproductive age in the developing countries of the world. A bibliometric study in Nepal shows that more research was published using a quantitative approach than other methods to describe the issues associated with maternity care and uptake of SBAs.¹ The presence of a skilled birth attendant is important for averting maternal morbidity and mortality. The World Health Organization (WHO) defines a skilled birth attendant (SBA) as "an accredited health professional—such as a midwife, doctor or nurse— who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns".²

In September 2000 the members of the United Nations (UN) adopted the Millennium Declaration and set eight millennium development goals, one of which is reducing maternal mortality.³ Delivery by SBAs serves as an indicator of progress towards reducing maternal mortality worldwide and is the fifth Millennium Development Goal (MDG). Use of SBAs during pregnancy, labour and delivery during the postpartum period could prevent many instances of maternal morbidity and mortality. Unfortunately, qualified midwives, nurses and doctors are often not available in the rural areas of many developing countries where most women are delivered.⁴

Although all women and babies need pregnancy care, care in childbirth is most important for the survival of pregnant women.⁵ However, around the world, one third of births take place at home without the assistance of a skilled attendant.⁶ The WHO strongly advocates for "skilled

