Maternal Health Issues of Nepal and Ways Forward

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ABSTRACT

Accelerating maternal health and achieving the Millennium Development Goal (MDG) 5 leftovers a challenge to the Nepal. There is a need to collect and manage reliable information on maternal health for creation and right distribution of resources. This paper aims to assess the issues of maternal health in Nepal. Literature search from PubMed, Medline, Lancet, WHO and Google web pages published from 2000 to 2012 was the method adopted for review. All the related references were cited and organized by using referencing software Zotero Standalone. A decline in the maternal mortality ratio of Nepal has been reported between the years 1990 and 2011. Even though there remain numerous issues and challenges of maternal health. Based on the findings of the searched literatures, the common issues are categorized in different groups by concentrating on mortality and morbidity of women, access to the health services, performance of health system, socio-economic and cultural practices, conflicts and political system and other underlining causes such as illiteracy, unemployment, different violence against women, girls trafficking and status of women rights and human rights throughout the country. Considering the issues and challenges of maternal health, Nepal should deliberate to increase access and utilization of health services, minimize direct and opportunity cost, create the demand, produce and train skilled human resources, decentralize the health care facilities, aware the community against adverse cultural and religious practices to improve the maternal health.

Key words: *Access to care, Health care system, Issues, Maternal health, Millennium Development Goal 5.*

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INTRODUCTION

The maternal health is a central issue in each country as well as in the global community. It refers to the health condition of women during pregnancy, childbirth and the postpartum period. While motherhood is often a positive and fulfilling experience, it is many times associated with suffering, ill-health and even death of women. The most common causes of maternal morbidity and mortality include haemorrhage, infections, high blood pressure, unsafe abortion, and obstructed labour, particularly in developing and under developed countries.[1-3]

Maternal health status of each mother depends upon the available facilities of the maternal health care in their access. Normally, antenatal, intranatal and postnatal cares come in the maternal health care package which prevent pregnancy related deaths and complication. The quality of cares is crucial to achieve the aim of a healthy mother and a healthy baby at the end of a pregnancy. Mostly, maternal mortality is measured by maternal mortality ratio, maternal mortality rate and lifetime risk. The lifetime risk of maternal death accounts probability of becoming pregnant and the risk of death due to pregnancy-related cumulated causes in a woman's reproductive age.[2]

Maternal mortality is a true representative of the reproductive health and indicates the availability and utilization entire reproductive cares with reference to women's status in a society. Maternal mortality, currently an issue of concern on the international health agenda, remains one of the most important public health problems in developing countries.[4]

Maternal Health in Global Context

Each year over 7 million pregnancy-related deaths (mothers, newborns and stillbirths) occur worldwide; out of these 99% happens in developing countries. Out of the total deaths75% can be prevented by the access of skill birth attendants and emergency obstetric care. The deaths are more common in rural, illiterate, poor and remote communities whereas not available skill birth attendants and emergency obstetric care.[5-6]

Millennium Development Goal 5 is to improve maternal health and aims to reduce by three quarters the maternal mortality ratio between 1990 and 2015.[7] The estimates of WHO, UNICEF and UNFPA for the years 1990, 1995 and 2000 indicate that more than half a million women die every year from complications of pregnancy and childbirth, of which more than 50% occur in Africa and 40% in Asia. But between year 1990 and 2008, maternal mortality worldwide has dropped by one third.[8]

Maternal Health in Nepal

Maternal mortality has been recognised a public health problem in Nepal. The situation concerning maternal mortality, Nepal remained unexplored and blurred till the early 1990s. It is influenced by place of residence, region, ethnic and religious groups, age at death, and parity. The pregnancy and its related causes account nearly one third deaths of women in reproductive age.[9]

As a signatory country of the Millennium Declaration-2000,

Nepal has agreed to achieve the Development Goals (MDGs) by the year 2015. Now, Nepal is committed to reduce maternal mortality ratio by three quarters between 1990 and 2015. Improving maternal health is a priority program of Nepal and focused it in the different development plans of Nepal. However, several issues and challenges remain to achieving the MDG-5 in Nepal.

As different estimates of maternal mortality, it has come down with different figures and there is need to validate the entire available figures for accepting the exact figure. According to National Demography and Health Survey 2011, maternal mortality ratio was 229 deaths per 100 thousands live births.[10] Approximately, every hour a woman dies due to pregnancy related causes and its complications in Nepal.[11]

LITERATURE SEARCH METHODS

The aim of this paper is to assess the issues and challenges of maternal health and health care in Nepal by reviewing the available literature. The literature search focused on the health status and health problems of the Nepalese women during pregnancy, intranatal and postnatal period. Literature published in Pub Med, Lancet, Medline, WHO and Google web pages from 2000 to 2012 were used to prepare this paper. Referencing software EndNote was used to manage the literature.

MATERNAL HEALTH ISSUES IN NEPAL

Available literature show that maternal health is distressed by various socio-economic and health system issues in Nepal. This paper states common issues and challenges of maternal health of Nepalese women as follows:

Health System: Issues

Low Antenatal Coverage: The antenatal coverage is the proportion of women attended at least once during their pregnancy by skilled birth attendants (SBAs) with total pregnant women.[12] The antenatal care is assessed by total percentage of women who received antenatal care from skilled health personnel at least once and at least four times during pregnancy. In Nepal, 58.3% women received at least once which is lower than the average of South East Asia Region (76%).[13] Similarly, only 50.1% women received four or more than four times.[10,14]

Low Births Attended by Skilled Health Professionals and Institutional Deliveries: The Medical care and sanitary environment during delivery can lessen the risk of complications and infections. For reducing the risks to mother and child, there should increase institutional delivery under the closed supervision of health professionals. In Nepal the proportion of deliveries attended by skilled health workers over the last five years has almost doubled, from 19% in 2006 to 36% in 2011, whereas the proportion of deliveries conduction in a health facility has increased from 18% in 2006 to 35.5% 2011. The proportion of delivery conduct by SBAs and institutional delivery is nearly two folds higher in younger age women and urban dwellers against older age and rural women.[10,14]

Meagreness of Emergency Obstructive Care: Emergency obstetric care (EmOC) can minimize the second and third delays for seeking in delivery care. The second delay reduces delay in reaching care in time such as geographical constraints, transportation cost and time. Similarly, the third-delay occurs in seeking adequate care at health facilities. It depends upon skill, numbers and attitude of the health works, logistic supplies and time. The basic EmOC includes antibiotics, oxytocics, anticonvulsants, manual removal of placenta, and instrumented vaginal delivery for improving the chance of survival.[15-16]

Unsafe Abortion: Ending the silent pandemic of unsafe and sex selective abortion is an urgent public-health issue in Nepal. Despite the introduction of legal provision for safe abortion from 2003, unsafe abortion was still high and it was the cause of 20% to 27% of maternal deaths in Nepal.[17-18]

Low contraceptive prevalence: It is a proportion of women of reproductive age or whose sexual partners who are using a contraceptive method at a given point in time.[12] Nepal has only 49.7% contraceptive prevalence which is below the regional average (57.5%) of the South East Asia. It is the percentage of women married or cohabiting who report use of at least one method of contraception.[10,13]

Limited Health Infrastructure for Maternal Care: The civil war (1995-2006) in Nepal had led to widespread destruction of limited infrastructure and had adversely impacted in access to health care services and human resources, affecting family planning, maternal and child health program and immunization services throughout the countries.[19]

A new Local Infrastructure Development Policy has been approved by Nepal in late 2004. This policy covers infrastructures for local transportation, irrigation and river control, small hydro-power and alternate energy, drinking water, sewerage and sanitation, housing, building and urban development, management of solid waste and social infrastructure including government offices, health facilities, educational institutions, agricultural institutions.[20]

During civil war and insurgency period, there were massive destruction and the internal strife obstructed most of the local level public infrastructures including health facilities. Due to the constraints of resources and political instability, still these are under the construction and establishment.

Morbidity and Mortality: Issues

Higher Fertility and Maternal Mortality: Nepal is on track in achieving MDG target of reducing maternal mortality ratio, which declined from 850/100,000 live births in 1990 to 415 in 2000 and further to 229 in 2011.[10,21] The target of MDG 5 is to reduce maternal mortality ratio up to 134/100,000 live births by 2015. Similarly, the total fertility rate furthermore decreased, from 5.2 in 1990 to 2.8 in 2009 and 2.6 in 2011.[11]

Adolescent/Teenage Pregnancy: Adolescents – young people between the ages of 10 and 19 years are often thought of

as a healthy group. Nevertheless, many adolescents do die prematurely due to accidents, suicide, violence, pregnancy related complications and other illnesses that are either preventable or treatable.[22-23]

Adolescent pregnancy is common world-wide, but is especially prevalent in developing countries. In developed countries, adolescents are more likely to deliver low birth weight and preterm infants than older women. 24 Worldwide, about 16 million girls aged 15 to 19 give birth every year. In Nepal, nearly a quarter of women give birth before the age of 18 and over 50 percent women give birth by the age of 20.[17] It has higher adolescent fertility (106/1000) with compared to regional average of South East Asia region (54/1000).[14,23] According to the Nepal Demography Health Surevy-2011, it is declined to 81/1000 but there is huge inconsistency between urban (42/100) to rural (87/1000).[10,14]

Uterine Prolapse: Uterine prolapse is a significant public health problem in Nepal.[25] Genital prolapse is one of the commonest reproductive morbidity in developing country. The common predisposing factors are multi-parity, hard-works in postpartum period, higher age, home delivery and menopause.[26] The global prevalence of genital prolapse is estimated to be 2-20% in women under age 45. In Nepal, genital prolapse appears to be widespread, but little published evidence exists to support this claims.[27] According to UNFPA, 600,000 women in Nepal suffer from uterine prolapse and 200,000 women need immediate surgery. A high 69.1% of the women have first degree pelvic organ prolapse, and the other 30.9% suffer from second and third degree utero-vaginal prolapse.[28]

STD, HIV-AIDS and Single Women: The National Estimates of Adult (15-49 years) HIV prevalence of Nepal at December 2009 was 0.39%, amounting for a total of 63,528 people living with HIV in the country. This includes 3,544 children within 0-14 years and 59,984 individuals with age 15 years and above. Women 15-49 years accounted for 28.6% of total infected population. Nepal is categorized as a "concentrated" epidemic country with some of the sub-population groups having more than 5% of prevalence.[29] According to WHO, Nepal has higher prevalence than the regional average (0.30%) and it has secured third position after Thailand and Myanmar.[13]

High Prevalence of Smoking and Alcohol: A case control study conducted in western part of the Nepal showed that the average prevalence of smoking and alcohol used were 30.3% and 11.2% respectively, but there was strong association between smokers and alcohol users. A significantly higher proportion of smokers (27.1%) reported having consumed alcohol in the past week with compared to those who did not smoke (4.2%).[30] The prevalence of smoking and alcohol was higher among the women of rural, remote areas, backward castes and ethnic groups.

Prevalence of Anaemia: Anaemia was been a major problem in Nepal, especially among young children and pregnant women. The major causes of anaemia were dietary deficiencies and infestation of malaria and other parasites. 34.8% of reproductive age group women were suffering from any types of anaemia in Nepal. Low coverage of antenatal care and institutional delivery were the other leading causes of micro nutrient deficiencies such iron folic acid and vitamin-A among the reproductive age group women in Nepal.[31]

Access to Health Services: Issues

Access means ease to reaching or using a facility or service. Therefore, it concerns the affordability of people and the availability of services. Affordability is associated with mobility of the people which can be affected by transport infrastructure as well as the means of transport and cost. Access can be improved either by enhancing mobility by developing of infrastructure or by making the needed facilities and services closer to the doorstep of the people. Locating facilities at a closer distance and improved management of service provision are key elements for the access and utilization of services.[20] Due to geographical and transportation constraints, access of the maternal health care does not improve as expectation and target. According to the official estimates, 78.83% people have access to the essential health care services.[32]

Socio-cultural and Political: Issues

Low Involvement of Male in Maternal Care: The major barriers of male's involvement in maternal health care were knowledge, social stigma, shyness and works responsibilities. Most of the time providers create obstacles due to hospital policy, manpower and space problems even though they unanimously felt the option of couples-friendly maternal health services would enhance the quality of care and understanding of health information given to pregnant women.[33]

Cultural and Religious Discrimination: Due to the cultural preference of home delivery, family members as well as women refute to move to the health facilities before a delivery even with financial incentives.[34] Women face discrimination, particularly in rural areas, whereas religious and cultural tradition, lack of education and ignorance of the law remain hurdle to adopt the basic rights such as the right to vote and to clutch property in their own names. Women were discriminated in the job markets, wages, working hours and wage reimbursement.[35]

Son Preference and Female Feticide: Sex-selective abortion is deliberately forbidden in Nepal, but limited evidence suggests that it is occurring nevertheless.[36] There was a highly significant decrease in proportion of female births for third and consecutive births. Altered sex ratio at birth is strong indicator of sex selective abortions. Sex selection is currently possible through advanced technology and it is also misused to diagnose sex of the foetus and abort the unwanted sex.[37]

Socio-Economic Constraints and Gaps: Nepal is one of the poorest countries in the world. Rebels, led by the Communist

Party of Nepal (Maoist), have been fighting so-called civil war with the government forces, led by the Royal Nepalese Army, since 1996. It was Originating from the western hilly parts of Nepal, which were the least economically developed and most inaccessible regions of the country, the conflict has spread to nearly all over the 75 districts of Nepal.4 There has estimated more than 10,000 lives killed, led to widespread destruction of infrastructure and obstruction of essential services as well as seriously violated human rights.[38] Due to more than a decade long domestic conflict, economic growth of the nation has been declining and growing political instability in country which also are affecting to the health care system of the country.

Women's Position in Household and Affordability: A sample study showed that more than 80% household headship was under the male supervision.[39] Improvement of women's position within household is seen one of the most cost-effective interventions of maternal health care. A study recommended that to improve husband-wife communication and strengthen women's influence within households to deserve sustained support of maternal health in Nepal. Similarly, that study further recommended increasing female literacy and girl's school enrolment for enhancing the access to comprehensive maternal health care.[40]

A sample survey study showed that the utilization rate of maternal health care services was poor among the Nepalese women. Among the service utilized people, the proportion of poor and medium groups is lower with compared to the rich group. Antenatal service utilization was higher than delivery and postnatal cares. Similarly, this study further confirmed that among the antenatal care receivers 57% were using government health facilities.[41]

Low Female Literacy Rate: Female literacy rate is low in Nepal about 42.8 per cent while that of male is about 65 percent. It is a given fact that despite the efforts to raise educational status of women through literacy program, women haven't benefitted from it. After marriage women are still dependent on their husband. Nepalese society is dominated by male members and this much change. In rural areas girls are not encouraged to go to school and rather looked down as work force doing household chores. Being a female and illiterate makes them unqualified for any jobs or excluded from family decision. Violence against women is still a serious problem.[42]

Low Status of Women in Decision-Making and Property Right: For Nepalese women, independent decision-making is highly restricted. Lack of decision making power has deprived women of the basic elements of a decent life such as food and nutrition, education, skill development, health, and family planning. This has ultimately undermined their access to gainful employment opportunities and participation in professional jobs.[35]

Political Instability: The political instability in the country is regarded as one of the biggest challenges to improving the country's healthcare system. The political situation affects Nepal's healthcare system in a number of ways. First, the frequent turnover of ministers creates a situation where little progress can be made because much time is devoted to convincing each new minister of a particular program or approach. The political system also exerts great influence on the health sector as some politicians put people from their own party, whether the most qualified or not, to fill top positions. There is a strong feeling of frustration with the government in Nepal, and critics argue that the politicians are so busy fighting among themselves they have little time to work on the nation's development.[43]

Other Issues

Domestic Violence: Domestic violence is defined as the use of force or threats of force by a husband or boyfriend for the purpose of coercing and intimidating a woman into submission. The violence can take the form of pushing, hitting, choking, slapping, kicking, burning, or stabbing.[44-45]

In Nepal, nearly one-third (34%) women age 15-49 years have ever experienced physical violence since age 15 years and nine percent of these women reported experiencing physical violence within the past 12 months. Women in the Terai region are more likely to experience physical violence than women in hill and mountain regions. The proportion of women who have ever experienced physical violence is highest among illiterate women (51%) with comparison to educated women. Level of education and degree of domestic violence are seen negatively correlated.[11]

Girls Trafficking: Human trafficking is known as a criminal activity even though it is growing industry in the world. It is an issue of right and responsibility but due to the lacking of information and accountability national as well as international authority; numbers of the people are suffering and compelling to be a victim of human smugglers. Trafficking of girls and women for the purpose of sexual exploitation is a problem worldwide, particularly in South Asia.[46-47]

Trafficking of Nepalese women and girls to Indian brothels was started since 1960s. About 50% of Nepal's female sex workers have previously worked in Mumbai and different parts of India and more than 200,000 Nepalese girls are involved in the Indian sex trade. According to the working agencies in anti-trafficking activities in Nepal, there is increasing tendency in trafficking among middle class women who are being trafficked to Gulf countries under the veil of attractive jobs and handsome salaries. The magnitude of trafficking has increased over the years, but neither the extent not the real expansion has been verified. The illegal structure of trafficking, community vested interests, and lack of actual information/data and networking among stakeholders are the major constraints to prevent trafficking of Nepalese women and girls.[46]

Economically Non-Countable Daily Work Load: In Nepal, in addition to the work women do for pay, rural women report

spending 13 hours a day on household work, while urban women report spending nearly 10 hours. The total value of that unpaid household work performed by women is about US$11.25 billion, or about 91.3% of the country's Grand Domestic Product.[48]

THE WAYS FORWARD

Improve Access and Increase Utilization of Health Services

For aaddressing the geographical and transportation constraints, there is needed to extend health facilities at the community level. The best way of increasing health service access is a participatory approach in planning, implementation and utilization of the programs. In Nepal, most of the women are suffering from social discrimination, disparities and inequities.[15-18] For improving the socio-economic status of the women, different intervention programs such as awareness, income generation, legal provision, reservation are needed for tackling the real needs of the rural women thorough out the nation.[19,32]

Make Maternal Services Affordable at All Levels for Creating Demand

Due to higher female illiteracy, poor access of mass media, socio-economical and cultural constraints women have less access to information about health services. For increasing the access to the health services there is necessary free and subsidized maternal health care to socially disadvantaged and marginalized and deprived people. Distance barrier also seems a major barrier of access to the health services. The distance increased the direct and opportunities costs. For address the demand of needy people and root cause of the poor access, maternal health services should be decentralized at community level.[21,39,40,46,47]

Produce and Train Essential Skilled Human Resources

Skilled and trained human resource is an evitable dimension of the health care delivery system. There should produce and train essential human resources within the country. It is needed to give priority to the local dwellers to study and employment in the rural areas for the sustainable solution of the human resource scarcity. In Nepal, from last some years is increasing the brain-drain problem drastically. There is need to create career development opportunities and job markets to prevent the brain-drain and solve the human resource shortfall in the different parts of the country. As such public responsibility, state should establish quality assurance and quality control mechanism to assure the quality of produced human resources and available facilities particularly in private sectors.[22-24]

Expansion and Decentralization of Health Facilities

Expansion and decentralization of health facilities should be carried out based on the geographical condition, transportation facilities, existing and increasing trend of population. There is need to functionalize the obstructed health facilities during people's war and insurgency period in the last years.[32,38]

Intervention against Adverse Socio-Cultural Practices

For minimizing the adverse maternal health issues to some extent there should be defined and addressed cross-cutting issues of society such as education, politics, economics and nutrition. There should be guaranteed the basic aspects of human right including reproductive right of women. For control over the adverse practices upon women, they should be endowed with skill, property and legal provision.[26,30,34,37]

Increase Involvement of Male in Maternal Health Care

In the indigenous society, blind faiths and superstitions strongly deep rooted in Nepal. Still there is poor involvement of male for looking after female during antenatal care, delivery care and postnatal care. For improving the involvement of male in maternal health care, there are needed interventions like as provider's positive attitude, economical incentives and awareness on importance of maternal health care.[32]

Improve Women Status in Household and Society

For improving the women's status in household and society, they should be involved in decision-making process. Education, employment, skill-training, political involvement, income generation are the popular to enhance the women status in the society.[33-35]

Establish Communication Network and Develop Awareness on Maternal Health Care

Being an underdeveloped country, there is scarcity of communication and health infrastructures at rural areas. For improving the health management and information system, recording and reporting system should be restructured and developed data bank. For increasing the awareness on maternal health care to the people, there is needed to establish accessible communication network between community and health system.[35,42]

CONCLUSION

In Nepal, maternal health seems below the standard of South East Asia Region as well as other regions of the world except Africa. Here many issues and challenges are drawn from the analysis of the available literature and concluded as follows-

- *In Nepal, there is Limited coverage of maternal health services particularly among the people of rural, illiterate, poorer and remote areas.*
- *Geographical constraints, low transportation facilities and adverse socio-cultural practices such as stigma, discriminations and disparities are the major access barriers of health services.*
- *Even though there are higher maternal morbidity and mortality, it seems too likely towards the Millennium Development Goal 5 by the year 2015.*
- *Socio-economic status, cultural practices, political instability and conflicts are the major underlining causes of lower access and utilization of maternal health services.*

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