A CALL FOR ACTION TO FURTHER IMPROVE MATERNAL HEALTH AND REDUCE MATERNAL DEATHS IN NEPAL

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According to the World Health Organization (WHO), "A maternal death is defined as death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of pregnancy, from any cause related to or aggravated by pregnancy or its management". Annually approximately half a million women die because of complications during pregnancy or childbirth and many of them encounter serious problems.[1] The majority of these problems occur in developing countries, where poverty increases sickness and reduces access to care. These deaths occur within a context of gender-based, economic, political and cultural services.

Most of these deaths are caused by hemorrhages, sepsis, hypertensive disorders, prolonged or obstructed labor, and unsafe abortions.[2] The tragedy is that these deaths are largely preventable. The progress in maternal health has been uneven, inequitable, and unsatisfactory. The risk of a woman dying as a result of pregnancy and childbirth during her lifetime is about 1 in 6 in Afghanistan compared with 1 in 30,000 in Northern Europe.[3]

The ratio of maternal mortality reveal large levels of inequity between and within countries – 99 % of maternal deaths occur in developing countries and only 1 % of deaths in developed countries.[4] Sub-Saharan Africa leads this death toll, accounting for 50 % of all maternal deaths worldwide (900 deaths per 100,000 live births), and South Asia accounts for another 35 % (500 deaths per 100,000 live births), which is in extreme contrast with the high-income countries (9 deaths per 100,000 live births).[5]

The current trend of maternal mortality ratio gives an estimate of 5 women dying every day in Nepal due to pregnancy and its complications.[6] The Nepal Demographic Health Survey (NDHS) 2016 reports 239 maternal deaths per 100,000 live births[6] which is a tremendous decrease from 901 maternal deaths per 100,000 live births in 1990.[7] In 2017, maternal causes are ranked in the third place after cancer and cardiovascular diseases for death among women of reproductive age (15-49 years) in Nepal.[8,9]

Intervention taken by Nepal Government to reduce Maternal Mortality

1. Nepal received the Millennium Development Goals (MDGs) award in 2015 for the remarkable progress in the last two decades in decreasing maternal deaths and improving women health.[7] This achievement is attributed to the Safe Motherhood program including the strengthening of the birthing centers; Aama Surakshya program promoting antenatal check-ups and institutional deliveries; expansion of the 24 hour emergency obstetric care services and safe abortion services. Under the Aama program, women receive incentives for four ANC visits/ postnatal care and transport incentive for institutional deliveries. All institutional deliveries in Nepal are provided free of cost to the women and the government reimburses the health institutions for the cost of the delivery care services.[6] Presently 58% deliveries are conducted by skilled birth attendants, 57% institutional deliveries and 57% postnatal follow-ups.[8]
2. Family planning (FP) reduced maternal mortality by enabling women to prevent conception, which in turn eliminates the risk of unwanted pregnancy and mortality related to pregnancy. The NDHS 2016 further reports a gradual progress on the contraceptive prevalence rate for modern methods (44%).[6]
3. Legalization of safe abortion in 2002. First-trimester surgical abortions were made available throughout the country in 2004. Second-trimester abortion training began in 2007, and medical abortions were introduced in 2009. Currently about 42% of all abortions are conducted by a government recognized abortion center, which is expected to increase in the coming years.[8]
4. The decreased anemia among pregnant women because of free distribution of iron capsules.
5. Financial incentive for women who deliver babies in health institutions. In Nepal, most births take place at home and many, particularly in rural areas do not meet the recommended four prenatal visits. The NDHS 2016 reports antenatal coverage for four or more visits as 69%.[6]

6. Nepal has an established system of female community health workers who, if trained and engaged effectively, have the potential to improve early detection of pregnancy, awareness of legal abortion, and referrals to services.[10]

Barriers to implementation of a standard maternal health care in Nepal

- Geography imposes severe restrictions on the provision of health services in many low income countries where challenges exist in reaching populations in remote, mountainous locations.[11] In Nepal for example, the utilization of a health facility for the delivery of a child is considerably lower in the mountains than in the country's two other ecological regions, the terai (i.e. the plains) and the hills.[6] Geographical inaccessibility to health services features in the mountains owing to scarce and dispersed populations, tough terrain with no transport or difficult road conditions, seasonal isolation, and remoteness.[12]
- Limited public awareness of the importance of antenatal check up and compulsory institutional deliveries to reduce any unwanted pregnancy complications.
- Limited access to primary and specialized obstetrics services. There is mal-distribution of health services, with specialized health services being available only in the major cities of the country.
- Low literacy rate of 57% and 66% in females and males respectively, many Nepalese patients may not have the capacity to obtain and understand the basic health information necessary to be able to make appropriate health decisions.[13] One of the biggest challenges to improving health outcomes is educating women and empowering them with the health knowledge necessary to seek appropriate health care and make informed decisions.

Apart from the above barriers, Cultural, religious and traditional health practices plus the economical barriers add to the challenges.[14]

A promising way forward to improve maternal health

1. Consistent political will.
2. Universal National health programme to combat maternal mortality.
3. Universal health coverage.
4. Skilled birth attendance at most deliveries. Increase in female trained community workers has yet to be widely implemented, especially to rural areas of the country.
5. High quality of care from trained midwives attributed to decrease in MMR. Active midwife commitment to mother and child health and their approach is an inspiration to South Asia.[15]
6. Studies have shown that prenatal care helps to reduce maternal mortality through identification of potential risks earlier, thus, allowing planning for safe delivery.
7. School Health Programme includes assessments of nutritional status, detection of health problems and provides immunization in young adolescent girls.
8. Free school education without discrimination for girls. This will contribute greatly to delaying the age at marriage, thereby reducing teenage pregnancies. Education also empowers women and gave them access to electronic and print media which have enabled them to have a greater awareness regarding health.[16]
9. The important health interventions would be a gradual expansion and enhancement of the healthcare facilities ensuring easy accessibility of organized primary and tertiary healthcare.[17]
10. Conducting workshops and seminars concentrating on management and prevention of post partum hemorrhage, eclampsia as well as the prevention of morbidity and mortality due to sepsis.
11. Equal distribution of medical officers to all parts of the country.[18]

Moving from the MDGs to the Sustainable Development Goals (SDGs) era, the health system of Nepal is gearing up to achieve the 'SDG3*:* Ensure healthy lives and promote well-being for all at all ages'. Maternal health is covered in the target of SDG3, which is set to reduce the maternal mortality ratio to less than 70 per 100,000 live births. The indicators to monitor this target are 'maternal mortality ratio' and live births attended by skilled birth attendants'.[17] In order to meet this target by 2030, the Government of Nepal has projected to reach the MMR of 69 maternal deaths per 100,000 live birth and attain the coverage of 90% of all births conducted by skilled birth attendants.[18] Meeting the SDG3 depends on a multitude of factors in health including universal health coverage (UHC)[17], health literacy and responsiveness of the health systems.[13] With the population of Nepal reaching close to 30 million, 80% of the people living in rural areas, 15% of people living below the poverty line , UHC services index of 62%, health expenditures as Out-of-pocket expenditure as 60%, more than 10% people making catastrophic expenditure on health along with the ongoing restructuring of the federal health system together creates web of challenges that Nepal has to overcome in order to achieve the targets set for the SDG3.[18] Apart from pregnancy and its complications, women in Nepal are also facing a surge of the non-communicable disease (NCDs) like cancers and cardiovascular diseases.[9] While the health system is preparing to combat the NCDs, preparing the health system for addressing the gynecological cancers including the hereditary cancers also needs to be prioritized for discussions at policy level.[19]

Although the position of women has improved substantially in Nepal over the past decades, progress has been uneven and multiple challenges remain. Despite great improvements in health in the past 30 years, many women are yet to benefit. Maternal mortality is a serious public health problem in Nepal and other developing countries. More than 80% of these deaths, which are caused by hemorrhage, sepsis, unsafe abortion, obstructed labor and hypertensive diseases of

pregnancy, are preventable when there is access to adequate reproductive health services, equipment, supplies and skilled healthcare workers.[20,21]

Majority of the causes of maternal mortality includes postpartum haemorrhage, postpartum infections, pre-eclampsia/eclampsia, complications from delivery and unsafe abortions.[21] The effective implementation of the existing interventions and increasing the coverage of these interventions including tetanus toxoid vaccination, four or more antenatal care visits, appropriate use of antibiotics, skilled birth attendance, institutional deliveries and clean birth practices can save 87% of preventable maternal deaths worldwide.[21] As there is good evidence that the existing interventions are highly effective, the Safe Motherhood program needs to focus on increasing the population coverage of these services.[21] Further to this, the Government of Nepal's spending on health needs to be increased prioritizing on the 'Best Buys' interventions for maternal health, improving the quality of care and most importantly addressing the equity gap within the population. Identifying the vulnerable in health has always been a challenge to ensure that 'no one is left behind'.

Evidences have shown that collective effort of different governmental and international organizations, education institutions, local NGOs, mothers group, mass media to implement community-based interventions have been successful to lower maternal deaths. Authorities need to emphasize not only in implementing of interventional programs but also on keeping track of their success rates and drawbacks. Also, special consideration must be given to sustain such programs in the future.

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