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Utilization of Maternal Health Care Services in Province 2, Nepal

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Abstract

This study aims at assessing the utilization of maternal health care service in province 2. Maternal health still remains a public health problem in province 2 though it has been improving in the last decade since the number of women seeking antenatal care has increased. This study helps to analyze the pregnancy risk can be identified, control, managed and contributes to reducing factor the maternal mortality. This study is based on data of Nepal Demographic and Health Survey 2016. The sample size consists of 571 currently married women, age groups 15-49 who had a live birth in the 5 years preceding the survey. This study showed that dependent variables means women who had attend ANC as 4 or more visits and the women who had attended ANC as less than 4 times visits. In this study the utilization of maternal health care based on factors like women's age, level of education, poor wealth quintile are responsible. In province 2, fewer women are using ANC services. In order to address the existing gap and variation in ANC service utilization, particular attention should be given to women from less education, poor wealth quintile, utilization of services among older age group. In province 2, ANC visit and 4 times is highest of age group 35-49 (44%) followed by 25-34 age group (31%) and least of age group 15-24 (29%) mothers are using ANC services. While talking about education level, near about one-third percent (32%) of respondents do not have any formal education. These factors still make problem to mothers using of ANC services .Special emphasis on women's education plays a vital role to increase the utilization of maternal health care. This study put forward the need for efforts from government and other agencies should implement the proper policies and programs to bring an improvement in the use of maternal health care services in Nepal.

Keywords: Antenatal visit, determinant, maternal health, pregnancy risk, & utilization.

Introduction

Maternal health refers to the health of women during pregnancy, childbirth and the postnatal period, Each stage should be a positive experience, ensuring women and their

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babies reach their full for potential for health and well-being. Although there has been a reduction in pregnancy-related mortality in Nepal from 543 deaths/100,000 live-births in 1996 to 259 deaths/100,000 in 2016 (Ministry of Health and Population, 2017) there is much more to achieve.

The Sustainable Development Goals (SDGs) framework has given a high level of priority assigned to health, including maternal, newborn and child health recognizing the critical importance for millions of women and their families. Under the health goal, SDG3.1 has set the target for maternal mortality reduction: "by 2030 reduce the global maternal mortality ratio to less than 70 per 100,000 live births specific maternal health indicator,"? The Ending Preventable Maternal Mortality (EPMM) goal set a global average of a global average target of 70 deaths per 100,000 live birth, for which each country will need to contribute a two- thirds reduction in its maternal mortality ration (MMR) by 2030, regardless of their MMR at baseline. To eliminate the wide inequality MMRs between countries, a secondary goal is that by 2030, no country should have an MMR that is more than 140, or twice the targeted global average MMR. For countries with very high baseline MMR (greater than 420) a steeper decline will be therefore necessary. In addition to reducing their national average MMR, all countries are called upon to focus on equity and eliminate disparities in maternal mortality among sub-populations (United Nations, 2015). Maternal health remains a significant public health challenge in most developing countries (World Health Organization, 2015). In 2013 alone, world statistics indicated that about 289,000 women died due to causes associated with pregnancies and childbirth (WHO, 2014).

In Nepal, the level of maternal and infant mortality and morbidity are among the highest in the world. One explanation for poor health outcomes among women and children is the non-use of modern health care services by a sizable proportion of women in Nepal. Many previous studies have clearly demonstrated that the utilization of available maternal health services is very low in the country. Several studies in the 2010 have shown that about 25 percent of Nepali women received antenatal care and less than 10 percent received professionally assisted delivery care (MoHP, 2017)

In keeping with the overall focus of the SDG framework on equity, poverty reduction, human rights, gender equality and empowerment of women and girls, the EPMMT target and strategies call on countries, global partners, donors and implementer', and all decision makers to take a people- centered, context- specific, rights-focused approach, grounded in implementation effectiveness and accountability, to plan for maternal and newborn health and mortality reduction in the post -2015 period (United Nations,2014). Most importantly, report of the United Nations Secretary-General on the Framework of

Actions for the follow-up to the Programme of Action of the International Conference on Population and Development (ICPD). Beyond 2014 has highly emphasized that to eliminate preventable maternal mortality and morbidity, member states should strengthen health systems, including by training midwives and other skilled providers, investing more in emergency obstetric care, and delivering sexual and reproductive health services closer to where people live, especially in rural, remote and impoverished urban areas (UN, 2015).

Despite the fact that maternal health care utilization is essential for further improvement of maternal and child health status, little is known about the current magnitude of use and factors influencing the use of these services in Nepal. This review different studies that set parameters to maternal health care services utilization from various parts of the world. Maternal health care services is defined as the services that women obtain in order to acquire quality of maternal health at prenatal/antenatal, childbirth in public health facilities and postnatal /postpartum care facilities(Aregay et al., 2014:Dairo et al., 2010;Dhaheer et al., 2008). Over time, maternal health services utilization has been a public challenge, more prominently among the marginalized and vulnerable population sectors (Sepheri et al., 2008). Various studies have attributed this to perceive barriers that continuously prevent the marginalized societies to utilize maternal child health services, especially in low income countries. The barriers include direct and indirect costs that affect having socioeconomic burden (Parkhurst et al., 2009; Nabukera et al., 2006; Kowaleswski et al., 2002). The direct costs are related to transport costs and distance to inaccessible health care facilities as well as quality of care (Gabrysch et al., 2009). On the contrary, in Nigeria, extensive capacity support in health care even among women who are marginalized and financially disadvantage women even in rural regions (Findley et al., 2013; Okoli et al., 2012). Furthermore, the study found that the quality of care improved with the scaling up of healthcare; not only in infrastructure, but also in investment in equipment (Ujah et al., 2005). Such scaling up development has improved and reduced maternal mortality levels to preventable direct causes such as haemorrhage, sepsis, eclampsia, obstructed labour and spontaneous abortion (Kerber et al., 2007; Ujah et al., 2005). Available evidence revealed that inadequate in policy and lack of priority settings, poor governance and lack of political will have stalled balanced investment in health sectors, which in the long term affects effective and efficient operation of maternal healthcare facilities in lowest income countries (Prata et al., 2010; Campbell et al., 2006).

Maternal health care services, institutional delivery, allows detection and management of risk during labor and childbirth so that effective interventions can be provided by medically trained personnel at a health facility (Hatt et al., 2009). In Nepal maternal

health is one of the national priorities and improving maternal health is a major focus of the current national development plan. The government of Nepal is promoting safe motherhood programs through various initiative such as providing free delivery care and transportation incentives to women delivering in a health facility (MoHP, 2017). The government of Nepal initiated the free delivery care services in 2005, through the 'Maternal Incentives Scheme' to increase health facility delivery. In 2009, the Nepal introduced the "four ANC incentive program" to improve ANC attendance (Bhatt et al., 2018). Considering the importance of maternal health, this study has examined the antenatal care and delivery care of mothers in province 2. Data has been analyze to the according to the different background characteristics such as mother's age at birth, place of residence, occupation, education level and wealth quintile.

Objectives

The main objective of this study is to analyze the utilization of maternal health care services in Province 2. The specific objective is to identity the level of maternal health services utilization in Province 2.

Methodology

Nepal Demographic and Health Survey (NDHS) 2016 data is used for the analysis. This survey 2016 is a nationally representative cross-sectional survey. The NDHS 2016 is the ninth in a series of national- level population and health surveys conducted in Nepal. It is the fifth nationally representative comprehensive survey conducted as part of the global Demographic and Health Survey (DHS).This study therefore aims to fill this gap using data from the 2016 Nepal Demographic and Health Survey (DHS). The purpose of this study is to understand the current status of utilization of maternal health services in Nepal by revealing the various factors influencing the use of these services in the country. The distribution of percent of women age 15-49 who had live birth in the 5 years preceding the survey by the number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Nepal DHS 2016 were 3998 for all province. From province 2, the sample size consists of 571 currently married women, age groups 15-49 who had a live birth in the 5 years preceding the survey. This study is considered only current married women aged 15-49 years who had a live birth in the 5 years preceding the survey by umber of antenatal care (ANC) visit for the most recent live birth. This study analyzed with descriptive statistics to understand the distribution of different independent variables in relation to outcome variables which is current ANC practice. The most important factors contributing to high level of maternal and neonatal mortality in Nepal

may be low utilization of maternal health care services in Province 2.

Results and Discussion

Maternal health services utilization has been a public health challenges, more prominently among the marginalized and vulnerable population sectors (Sepeheri et al., 2008). Prenatal heath care checks services such as early detection of maternal complications, early treatment on morbidity affecting women during pregnancy through a wide array of immunization in addition to provision of micro-nutrients supplementation (Van den Broek et al., 2003). Province 2 is the most populated province of Nepal. Maternal health is not good condition because of low education level, lack of knowledge about maternal health. In province 2, maternal health affects the lives of many women and children every year.

Table 1: Percentage distribution of respondents according to background characteristics, 2016 in Province 2

Background characteristics	**Number**	**Percent**
Age of mother		
15-24	229	40.1
25-34	290	50.8
35-49	52	9.1
Number of living children		
1	214	37.5
2-3	262	45.9
4-5	69	12.0
6 and higher	26	4.6
Education level		
No education	180	32.0
Primary	111	19.0
Secondary and higher	280	49.0
Wealth index		
Poor	237	41.5
Middle	123	21.5
Rich	211	37.0
Total	**571**	**100.0**

Source: Datasets of NDHS, 2016

Table 1 shows that higher proportions of the respondents are in the middle age groups. More than 51 percent of them are age group 24-34 years. Younger age respondents are 40 percent of age group 15-24 years and 9 percent of 35 and above. The distribution of respondents by number of living children shows that more than two fifth of women (46%) have 2-3 children, about 38 percent have 1 children, 12 percent have 4-5 children , 5 percent have more than 6 children. While talking about education level, near about one- third percent (32%) of respondents did not have any formal education. One-fifth (19%) of respondents had primary education and remaining 49 percent have attended the secondary education. Likewise, similarly about 42 percent of the respondents were from poor household wealth.

Table 2: Percentage distribution of respondents' by antenatal visit, 2016 in Province 2

Number of ANC visits	**Number**	**Percent**
First ANC visit	20	3.7
Second ANC visit	46	8.6
Third ANC visit	75	14.0
Fourth + ANC visit	396	73.7
Total	**537**	**100.0**
Timing of first ANC visit (months)	**Number**	**Percent**
<4	371	69.1
4-5	134	25.0
6-7	26	4.8
8 and higher	6	1.1
Total	**537**	**100.0**

Source: Dataset of NDHS, 2016

(Note: The no ANC visit women's were excluded from the above table 2. The total number is 537 only because 34 number of no ANC visit respondents were excluded)

Table 2 shows that antenatal visits coverage, first ANC visit is very low 3.7 percent. Women has at least four ANC visits during their entire pregnancy 69 percent. 74 percent of women had at least four ANC visit during their entire pregnancy. Almost two-third of women (69%) received first ANC visit less than four month of pregnancy. ANC First visit at 4-5 months has 25 percent of women pregnancy. The timing of the ANC visits in 8 and higher months has very low percentage 1 percent.

Table 3: Percentage distribution of women age 15-49 with a live birth in the 5 years by visiting ANC for their most years, according to background characteristics Nepal, 2016 in Province 2

Background characteristics	**ANC Visit**					
	Less and 4 times		**4 times and higher**		**Total respondents**	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Age of mother						
15-24	65	28.38	164	71.61	229	100.0
25-34	89	30.69	201	69.31	290	100.0
35-49	23	44.24	29	55.76	52	100.0
Number of living children						
1	38	17.76	176	82.24	214	100.0
2-3	85	32.44	177	67.56	262	100.0
4-5	36	52.17	33	47.83	69	100.0
6 and higher	16	61.54	10	38.46	26	100.0
Education level						
No education	91	50.56	89	49.44	180	100.0
Primary	39	35.14	72	64.86	111	100.0
Secondary and higher	43	15.36	237	84.64	280	100.0
Wealth index						
Poor	85	35.86	152	64.14	237	100.0
Middle	41	33.34	82	66.66	123	100.0
Rich	42	20.00	169	80.0	211	100.0

Source: Dataset of NDHS, 2016

It is revealed from table 3 that the ANC visit less and 4 times is highest of age group 35-49 (44%) followed by 25-34 age group (31%) and least of age group 15-24 (29%). This results show that an increase in educational levels lead to a significant increase in the use of antenatal care services. Nearly 50 percent of mothers with no education make adequate ANC visit and higher percentage of women 85 percent with secondary education have adequate ANC visit. Poor household mothers had less antenatal visit than rich household mothers (64 Vs 80.0%).This shows that who's economic status increase, they use regular ANC visit.

Conclusion

This study examines the factors affecting the utilization of antenatal care (ANC) in Province 2 visiting in Nepal using data from NDHS, 2016. The utilization of maternal health care services among women of reproductive age in Nepal is still inadequate. This study shows that large variation and gaps in the utilization of ANC at least 4 times on the basis of demographic, social and economic characteristics of women's age, number of living children, levels of education, province and wealth index. The utilization of maternal health care based on factors like women's age, level of education, poor wealth quintile are responsible. In province 2, ANC visit less and 4 times is highest of age group 35-49 (44%) followed by 25-34 age group (31%) and least of age group 15-24 (29%) mothers are using ANC services. While talking about education level, near about one-third percent (32%) of respondents did not have any formal education .These factors still make problem to mothers using of ANC services. Special emphasis on women's education plays a vital role to increase the utilization of maternal health care. Government and other agencies should implement the proper policies and programs to bring an improvement in the use of maternal health care services in Nepal. Government efforts should be designed to enhance female education at least secondary level for future favorable health outcomes. To achieve the goals of universal health coverage, focus should be given to women from poor economic and social status those with less education, utilization of services among older age group should be encourage.

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