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Women's autonomy and maternal health service utilization among the women's having less than two years age children in Rautahat district, Nepal

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ABSTRACT

Background: Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. Despite various attempts and schemes made by government. maternal mortality remains as one of the biggest public health challenges in Nepal. The aim of the study was to assess the association of women autonomy with maternal health service utilization among the women having 2 years children in Paroha municipality ward no. 3 and 4, Rautahat, Nepal. **Methods:** Cross sectional study was conducted. Simple random sampling was used to select respondents. Data were collected through face to face interview. Data were entered in Epi data and analyzed using SPSS. Chi square test was applied to test the significance of association at 95% confidence interval.

Results: Majority (76.8%) of the respondents had antenatal care visit and more than half of them had four or more antenatal care visits. similarly, overwhelming majority (88.4%) of the birth were institutional delivery. Almost (91%) of the women had postnatal care visit for their last child. The study indicates that almost (95.5%) of the decisions were made without the involvement of the women. Most of women had medium level autonomy in all aspect (score= 17-32). Autonomy was positively associated with use of maternal health services i.e.; ANC visit (p=0.000), place of delivery (p=0.036), PNC visit (p=0.045).

Conclusions: Findings of the study show that if women autonomy will be higher, there will be increase in maternal service utilization. Whereas autonomy has link with better education and employment opportunity of the women.

Keywords: Women's autonomy, Maternal health, Service utilization

INTRODUCTION

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. Motherhood is often positive and full of experience, but it is also associated with suffering and ill health sometime resulting to death.

Some 1,400 women dies every day in world from pregnancy related problems and more than thousand experiences complication which are life threatening for women as well as for children. The health care that a woman receives during pregnancy, at the time of birth and

after delivery is most important for survival and well-being of both mother and child. 1,2

The global maternal mortality ratio has fallen from 385 maternal deaths per 1,00,000 live births in 1990 to 216 deaths per 100,000 live births in 2015.³

The new Sustainable Development Goals, also known as the global goals, call for bringing the maternal mortality ratio down to 70 deaths per 1,00,000 live births by 2030.⁴ It has been shown that 80% of worldwide maternal death could be prevented if women had access to fundamental health care services.⁵ Therefore, to reduce maternal

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mortality and morbidity increase in use of reproductive and maternal health services are essential.

Autonomy is the ability to obtain information and make decisions about one's own concerns.⁶ Early literature defined autonomy as 'the degree of access to and control over material and social resources within the family, in the community and in the society at large'.⁷ Recently, the definition of autonomy has been broadened to include "the ability to influence one's personal environment or 'the ability to obtain information and make decision about one's private concerns and those one's initiates'.^{6,8}

Women's autonomy in health care decision making is extremely important for better maternal and child health outcomes also as indicator of women's empowerment. Evidence from other developing countries showed that women's age and family structure are the strongest determinants of women's authority in decision making. 10

A Nepal Demographic Health Survey (NDHS) shows that women are generally less educated than men. The survey reveals that 37% of currently married women participated in all four of the important household decisions that were investigated: their own health care, major household purchases, purchases of daily household needs and visits to her family or relatives; while 31% did not participate in any of these decisions.¹¹

In Nepal maternal mortality is 239 per 100,000 live births. ¹² Earlier studies have found that various sociodemographic factors such as early marriage, young age at pregnancy, lack of formal education, low income, distance to health facility, transportation problems etc. are associated to low utilization of maternal health care services. ¹³ Some of the earlier studies reported that delay in seeking health care is due to cultural beliefs, financial problems, transportation problems and decision making power in household. ¹⁴ However, women autonomy (self-decision making power of women) plays even vital role for the utilization of health care services.

Numbers of researches have been conducted regarding the factors contributing to low utilization of health care services and most of them are found to be focused on provision and geographic accessibility of services. But very few studies concentrate on women's autonomy and the use of maternal health care services. ⁹

The aim of the study was to determine the association between women's autonomy and the utilization of maternal health care in Paroha, Rautahat.

METHODS

The cross-sectional study was conducted in Paroha municipality ward no. 3 and 4 of Rautahat district. 233 women of reproductive age group were selected through simple random sampling and sampling frame was obtained from the health post record. The selected sample should be

married once, and have at least a child of less than 2 years age were included with their full interest in participation. In case of neonatal mortality, the participant was excluded. A well-structured questionnaire administered by the researchers which contained different sections i.e.; (I) socio demographic information (II) maternal service related information (III) health facility related information (IV) Autonomy related information. The questionnaire was developed on the basis of NDHS and other related studies. Pre-testing of the tool was done in ward no 9 of the paroha municipality among 24 womens and necessary modification was done. The data was collected through face to face interview with the women.

Data coding and editing was done manually and data entry and analysis were done using SPSS (Statistical Package for Social Science) version 16 software program. Basic sociodemographic variables were described by descriptive statistics. Association between women's autonomy and maternal health service utilization was assessed by using chi-square tests. Similarly, variables with p value<0.05 with 95% confidence interval was interpreted as statistically significant. Also, for the cell value having less than 5 counts, the cells were clubbed or merged to perform Chi square test.

Before actual data collection approval was taken from research committee of Yeti Health Science Academy. And also, approval was taken from Nepal Health Research Council (NHRC) verbal informed consent was taken from the participant before starting the interview. The objectives of the study were explained. Respondents were not forced for participation. Participants were assured that the collected data was only for the study purpose and the confidentiality of the information was maintained.

RESULTS

Table no 1 showed that the socio-demographic information of 233 respondents which is categorized according to their present age, ethnicity, religion, educational qualification, marital status and also the occupation.

Majority of respondent belongs to the age group 21-24 (51.5%), Similarly, majority of the respondent were Hindu (68.2%). Also, ethnicity wise majority of the respondent were Madeshi (60.9%), followed by Muslim (31.3%) and Dalit (5.2%), minority of respondent were Bramin/Chhetri (2.6%). The study shows that majority of the respondent have completed their primary level education i.e.; (58.2%) followed by secondary level (28.3%) and higher secondary or above (13.6%) and (21%) of the respondent were illiterate.

Similarly, regarding the marital status majority of the respondent were married (97%), minority of them were widow (1.7%) and separated (1.3%). Similarly, study revealed that majority of respondent was housewife (82.8%), followed by farmer (13.7%) and minority of the

respondent was involved in business (1.7%) and service (1.7%). Table 2 represent the information regarding maternal services. Study revealed that majority of the respondent (76.8%) had gone for ANC checkup. Average percentage of respondent i.e.; 50.8% had completed 4 ANC visit. Also, few of the respondents were found completing more than 4 ANC visits (1.1%). Regarding delivery services, it was found that maximum delivery was conducted at health post i.e.; 57.9% followed by hospital delivery (27%) and few were conducted at private hospital (3.4%) Also it was found that around 11.6% of deliveries were at home. Similarly, it was found that the maximum of the respondent had gone for PNC visit i.e.; 91%. Similarly, majority of respondent had their first PNC checkup within 24 hours (97.16%) and few had checkup within 1-3 days (1.94%) and 3-7 days (0.9%). Table 3 represent the information regarding the autonomy of the women from various aspect like decision making, financial control and movement freedom. Among 233 respondents maximum were having medium level autonomy (73%) regarding decision making, followed by women having high level autonomy (20.2%) and few having low autonomy i.e.; 6.9%. similarly, majority of women have medium level autonomy (61.8%) regarding movement freedom followed by women having low autonomy (25.8%) and high autonomy (12.4%).

The study also shows that 54.5% women have medium autonomy in terms of financial control, followed by women having low autonomy (41.2%) and only few of them have high autonomy 4.3%.

Table 4 showed that the association between different variables and the level of autonomy. The study found that women education (p=0.043) and their occupation (p=0.044) were statistically significant. Similarly, the maternal health services i.e.; ANC visit (p=0.001) delivery service (p=0.000) and PNC visit (p=0.045) were found to be associated with the level of women autonomy.

Table 1: Socio-demographic information of respondents (N=233).

| Variables | Frequency | Percentage (%) |
|------------------------|-----------|----------------|
| Present age (years) | | |
| 17-20 | 49 | 21.0 |
| 21-24 | 120 | 51.5 |
| 25-28 | 58 | 24.9 |
| >28 | 6 | 2.6 |
| Religion | | |
| Hindu | 159 | 68.2 |
| Muslim | 74 | 31.8 |
| Ethnicity | | |
| Brahmin/Chhetri | 6 | 2.6 |
| Dalit | 12 | 5.2 |
| Muslim | 73 | 31.3 |
| Madhesi | 142 | 60.9 |
| Education | | |
| Primary level | 107 | 58.2 |
| Secondary level | 52 | 28.3 |
| Higher secondary level | 25 | 13.6 |
| Illiterate | 49 | 21.0 |
| Marital status | | |
| Married | 226 | 97.0 |
| Widow | 4 | 1.7 |
| Separated | 3 | 1.3 |
| Occupation | | |
| Service | 4 | 1.7 |
| Business | 4 | 1.7 |
| Farmer | 32 | 13.7 |
| Housewife | 193 | 82.8 |

Table 2: Information regarding maternal services.

| Variables | Frequency | Percentage (%) |
|----------------------|-----------|----------------|
| ANC check-up (N=233) | | |
| Yes | 179 | 76.8 |
| No | 54 | 23.2 |

Continued.

| Variables | Frequency | Percentage (%) |
|------------------------------------|-----------|----------------|
| Number of ANC visit (N=179) | | |
| 1 time | 52 | 29.1 |
| 3 time | 34 | 19.0 |
| 4 time | 91 | 50.8 |
| More than 4 time | 2 | 1.1 |
| Place of delivery (N=233) | | |
| Health post | 135 | 57.9 |
| Hospital | 63 | 27.0 |
| Private hospital | 8 | 3.4 |
| Home | 27 | 11.6 |
| PNC check-up (N=233) | | |
| Yes | 212 | 91.0 |
| No | 21 | 9.0 |
| Time of first PNC check-up (N=212) | | |
| Within 24 hours | 206 | 97.16 |
| 1-3 days | 4 | 1.94 |
| 3-7 days | 2 | 0.9 |

Table 3: Information on autonomy (N=233).

| Variables | Frequency | Percentage (%) |
|--------------------------|-----------|----------------|
| Decision making autonomy | | |
| Low autonomy | 16 | 6.9 |
| Medium autonomy | 170 | 73.0 |
| High autonomy | 47 | 20.2 |
| Movement autonomy | | |
| Low autonomy | 60 | 25.8 |
| Medium autonomy | 144 | 61.8 |
| High autonomy | 29 | 12.4 |
| Financial autonomy | | |
| Low autonomy | 96 | 41.2 |
| Medium autonomy | 127 | 54.5 |
| High autonomy | 10 | 4.3 |

Table 4: Association between autonomy and maternal health services.

| Variables | Level of autonomy | | P value |
|-----------------------------|-------------------|-----------------|---------|
| variables | Low autonomy | Medium autonomy | |
| Education (N=233) | | | |
| Literate | 82 | 102 | |
| Illiterate | 14 | 35 | 0.043 |
| Occupation (N=233) | | | |
| Farmer | 7 | 25 | |
| Service | 7 | 6 | 0.044 |
| Housewife | 82 | 106 | |
| ANC visit (N=233) | | | |
| Yes | 84 | 95 | 0.001 |
| No | 12 | 42 | |
| Number of ANC visit (N=179) | | | |
| 1 time | 14 | 38 | 0.000 |
| 3 time | 6 | 28 | |
| 4 time and more | 64 | 29 | |
| Place for ANC visit (N=179) | | | |
| Hospital | 34 | 14 | 0.000 |
| Health post | 50 | 81 | |

Continued.

| Variables | Level of autonomy | | P value |
|----------------------------------|-------------------|-----------------|---------|
| variables | Low autonomy | Medium autonomy | |
| Place of delivery (N=233) | | | |
| Home | 12 | 15 | |
| Hospital | 34 | 29 | 0.036 |
| Health post | 50 | 93 | |
| PNC visit (N=233) | | | |
| Yes | 86 | 126 | 0.045 |
| No | 10 | 11 | |
| Time for first PNC visit (N=212) | | | |
| Within 24 hours | 77 | 122 | 0.030 |
| After 24 hours | 9 | 4 | |

DISCUSSION

In this study, majority of the respondent were of age group 21-24 years (51.5%). And maximum of them were Hindu (68.2%) followed by Muslim (31.8%). Regarding the educational qualification maximum of the respondents were found to complete their primary education (58.2%) followed by secondary level (28.3%) and minority of them had completed higher secondary level (13.6%). this was quite similar to the study conducted by Adhikari et al in 2016 where around 40% of the respondent were of age group 15-24 years. An overwhelming majority of women believe Hindu religion (83%). Only about two in five women (36%) had secondary or above education.¹⁶ The finding regarding the utilization of maternal services shows that majority of the respondent has ANC check-up (76.8%), had institutional delivery (88.3%) and had PNC check-up (91%). Similarly, half of the respondent had completed 4 and more ANC visit (51.9%). Similarly, around 97.16% respondent had their first PNC within 24 hours

In the study done by Adhikari et al, in 2016 shows that only half of the women who had given birth had 4 or more ANC check-up for their last birth. Similarly, 40% of the women had delivered their last child at the health facilities, whereas slightly higher than two in five women (43%) reported that they had post-natal check-up for their last birth. This could be due to difference in study area, sample size. Similarly, the national level ANC 4th visit (as per protocol) as percentage of expected pregnancy is 52%. The institutional delivery is 57% and women who received first postnatal care at the health facility among expected live births is 51%. ¹⁶

The study revealed Among 233 respondents maximum were having medium level autonomy in various aspect like decision making (73%), financial control (54.5%) and movement freedom (61.8%). But this situation actually, does not mean that women do not have any autonomy to make sole decision. But the experience of people closer to the women highly decides in their behalves. In the NDHS 2016 it is found that the 35% of women make decision regarding their health care by themselves. Similarly, a qualitative study conducted by Simkhada et al in 2010 in Nepal also mentioned that women have little or no power

in their marital home and are almost entirely at the mercy of their mother in law's perception of their pregnancy and delivery care needs. Regarding the association, as do many other studies, this study also shows that education and occupation is associated with the level of autonomy It could be that educated women are more capable to change the traditional balances of power and autonomy in familial relationships, with profound effects on health care. Another reason could be that schools are institutions that transform young girls into empowered, assertive, and confident women. ^{17,18} The study shows that there is strong association between the ANC service utilization and level of autonomy. The study also revealed that complete 4 ANC visit and place for the visit was strongly associated with level of women autonomy. However, autonomy only cannot be taken as the absolute determinants of complete ANC visit. Similarly, the association between the levels of autonomy with place of delivery was statistically significant. It indicates that mothers having high autonomy are more likely to deliver at health institution. The association of the PNC visit with level of autonomy was found to be statistically significant.

Hence, the women's autonomy has positive and statistically significant effect on maternal health service utilization. The results indicate that women who have high autonomy were more likely utilized all maternal health service compared with those who did not have autonomy. A study in north India by Bloom et al 2001 shows that higher freedom of movement was to be found positively associated with the utilization of maternal health care services which is contradictory to this study. 19 The overall utilization of maternal health care services is still low in Nepal. Various factors hinder the utilization of different aspects of maternal care i.e.; antenatal care, delivery care and postnatal care.²⁰ But the findings of this study show the overall utilization of maternal health care services was quite satisfactory in Paroha municipality. This study may not establish causal relationship as confounders may not be well adjusted. Recall bias may occur because participants need to recall the past events.

CONCLUSION

The findings showed that the majority of the women were married before the age of 18 and most of them were

pregnant before the age of 19 years. This might be the reason that only 13.6% respondent got higher education resulting in 82.8% of women being housewife. Despite the low education, and no any occupation the maternal health service utilization percentage was found slightly higher compared to national data in Paroha municipality. This might be due to availability of health institution nearby, presence of competent health work force, awareness campaign. The secondary reason might be the husband education, their economic status etc.

The level of the women autonomy was found to be medium in Paroha municipality. Most of them were good at making decision in household level but were slightly lower in making decision regarding financial and movement. Similarly, majority of the decision were being made by their family members about seeking women health care.

The finding of this study revealed that autonomy plays an important mediating role for the utilization of the maternal health services. The study concluded that there is strong association between women autonomy and maternal health services utilization in Paroha Municipality ward no. 3 and 4.

Similarly, it is found that educated and independent women are more likely to utilize maternal health services. Thus, to improve the health of women there is need of an integrated/holistic approach, that will promote income generating activities among women, encourage their education and enhance women's position in the household.

Also, the study results suggest that increase women's autonomy at home could be effective to assure good maternal health. So, to increase autonomy level, the women should be provided with better education, employment opportunity and more over an enabling environment where women have equal right take major decisions.

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