

Level of Autonomy and Antenatal Services Utilization among the Women of Reproductive age Group Residing in an Urban Municipality of Lalitpur

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INTRODUCTION

Maternal mortality continues to be a major health problem in developing countries. In the 20 years' time period from 1996 to 2016 the maternal mortality ratio (MMR) in Nepal has decreased to about half from 539 to 239 maternal

deaths per 100,000 live births.¹ However, this ratio is among the highest in Asian countries. In its Sustainable Development Goals (SDGs) 3, Nepal targets to reduce MMR to less than 70 per 100,000 live births by 2030 in

Abstract

Introduction: Antenatal care is one of the pillars of a safe motherhood programme in improving maternal and child health. Women's autonomy is seen as an important factor in utilization of maternal health services. Therefore, the objective of study was to find the level of autonomy and utilization of antenatal services among the women of reproductive age group.

Methods: A descriptive cross-sectional study design was used. A total of 151 women of reproductive age group having at least one child in the age group of less than one year were selected using non probability purposive sampling technique from four randomly selected wards of Godawari Municipality. A validated and pretested Nepali version interview schedule was used to collect data from the respondents through door-to-door visit. Descriptive statistics such as frequency, percentage, mean, standard deviation and inferential statistics i.e. Fisher's exact test was used to analyze data.

Results: The study findings revealed that the majority (58.3%) of respondents had a lower level of overall autonomy. The highest autonomy was seen in decision making and lowest in financial related issues. Almost all (96%) of the respondents had fully utilized antenatal services. There was significant association between antenatal services utilization with women's autonomy (p-value 0.041). Education of women and their husbands (p-value 0.009 and 0.013 respectively) as well as easy access to health facilities and availability of private transportation (p-value 0.005 and 0.039 respectively) were significantly associated with utilization of antenatal services.

Conclusions: This study concludes that women' autonomy tends to influence their antenatal services utilization. Likewise, education of women as well as their husbands tends to facilitate utilization of antenatal services. The study also concludes that easy access to health facilities and availability of private vehicles facilitates utilization of antenatal services.

line with the global target.² Worldwide only half of the women receive the recommended amount of care during pregnancy. Eighty six percent of pregnant women receive antenatal care from skilled health personnel at least once.³ ANC services offer pregnant women an entry point to the health care systems, appropriate screening intervention and treatment throughout pregnancy and encouraging women to seek a skilled birth attendant for their delivery.⁴ The ANC guideline includes a significant new recommendation that pregnant women have eight contacts with the health system during each pregnancy.⁵ WHO (2016) in its recent ANC guideline had included health system interventions to improve the utilization and quality of ANC and women's positive experience of pregnancy.⁶

Approximately 830 women die every day from preventable causes related to pregnancy and childbirth. The goal of the National Safe Motherhood program is to reduce maternal neonatal morbidity and mortality and improve maternal and neonatal health through preventive and promotive activities and by addressing avoidable factors that cause death during pregnancy, childbirth and postpartum period.⁶ According to Nepal Demographic health survey 2016, 84% of women received ANC in their most recent birth from a skill provider, 69% of women had at least four ANC visits.⁷ The proportion of pregnant women coming to their first ANC visit declined from 70% of expected life birth to 60% in 2018 / 19. The proportion of pregnant women attending at least four ANC visits has also declined from 53% in 2017 / 18 to 50% in 2018 / 19 at the National level. However, there is sharp decline in the percentage of women who had four ANC per the protocol for province 3 from 68% to 49%.⁸ Various researches done in Nigeria and Bangladesh showed that there is a strong relationship between women decision making autonomy and ANC services.^{9,10} Limited women's autonomy in maternal health care are the main underlying causes of poor utilization of maternal health care services and high maternal morbidity and mortality in developing countries.¹¹

The cross sectional study done in Kapilvastu showed that antenatal services utilization was higher among those women who had autonomy in household decision (32%) compared to those women who did not have autonomy 24.5%.¹² The objective of the study was to find out the level of autonomy and antenatal services utilization among the women of reproductive age group (WRAG) in a municipality of Lalitpur, Nepal.

METHODS

A descriptive cross-sectional study design was used to identify the level of women autonomy and antenatal services utilization among WRAG who have at least one child under the age of one year. The study was conducted

at Godawari Municipality, Lalitpur, Nepal.¹³ It is divided into 14 wards committees. Out of these 14 wards, four (Ward no. 3, 6, 10 and 12) were selected randomly through the lottery method. Non probability purposive sampling technique was used with the total sample size 151.¹⁴ The semi-structured interview schedule was developed by researchers through literature review. It consisted of three sections consisting questions related to socio demographic, obstetrics and services factors, women's autonomy and antenatal service utilization. Regarding women's autonomy the validated tool was used.¹⁵ Content validity of the instrument was ascertained. Reliability test was done by using Cronbach's alpha tools and score was 0.735. Data collection was initiated after getting ethical approval from Institutional Review Committee (IRC) of NAIHS and written permission from Godawari municipality. Informed written consent was obtained from each respondent before interviews. Different descriptive and inferential statistics were used for analysis. Data were taken from the primary source.

RESULTS

The mean age of women was 26.66 years (SD \pm 4.96) from Janajati ethnic group and joint family. Almost all (91.4%) respondents and their husbands (96.7%) could read and write. The majority of respondents were home makers and majority (53.3%) had only one child and an accessible health facility was a Government / semi Government hospital that was 90%. Almost all (92.7%) respondents were residing up to 30 minutes walking distance from the health facility. Majority of respondents had access to public vehicles to visit the health facility for antenatal services.

Table 1. Respondent's Score on Different Components of Autonomy

Variables	Mean	Mean score Percentage	Standard Deviation
Autonomy in decision Making	11.0199	55.09	2.09911
Autonomy in mobility	6.2450	44.60	4.28636
Autonomy in financial aspect	5.4901	31.21	4.11642

Table 1 shows that the maximum autonomy was in decision making autonomy mean = 11.02 \pm 2.1 followed by mobility autonomy mean 6.2 \pm 4.3 while there was least autonomy in financial related issue with mean as 5.5 \pm 4.1.

Table 2 - Overall Autonomy

Level of Autonomy	Number	Percentage
Low (< 24)	88	58.3
High (> 24)	63	41.7
Total	151	100.0

Table 3 - Level of Antenatal Services Utilization among the Respondents in their Last Pregnancy

Antenatal Service Utilization	Number	Percentage
Fully utilization (> 50%)	145	96.0
Underutilization (< 50%)	6	4.0
Total	151	100.0

Table 4 - Association of Level of Antenatal Services Utilization with Socio-demographic and Services-related Variables (n =151)

Variables	Level of Utilization of Antenatal Services		# p-Value
	Fully Utilized	Under utilized	
	No. (%)	No. (%)	
Educational status of the respondents			
Can read and write	135 (97.8)	3 (2.2)	0.009*
Cannot read and write	10 (76.9)	3 (23.1)	
Educational status of the respondents' husbands			
Can read and write	142 (97.3)	4 (2.7)	0.013*
Cannot read and write	3 (60.0)	2 (40.0)	
Time required to reach health facility for antenatal services by walking			
Up to 30 minutes	137 (97.9)	3 (2.1)	0.005*
Above 30minutes	8 (72.7)	3 (27.3)	
Transportation facilities used			
Private vehicle (two/four wheels)	64 (100.0)	-	0.039*
Public vehicle	81 (93.1)	(6.9) 6	

*p-value significant at <0.05; # Fisher's exact test

Table 4 shows that status of women and husband education of respondents were significantly associated with antenatal service utilization indicating that higher proportion of respondents who can read and write had fully used ANC services that those who cannot read and write (p-value = 0.009 of respondents' education and p-value = 0.013 of respondents' husband education). Time required to reach health facilities for antenatal services by walking and transportation facilities were significantly associated with antenatal services utilization (p-value = 0.005 of distance to health facilities by walking), (p-value = 0.039 of transportation) respectively. There were no significant associations between antenatal services utilization with obstetric factors.

Table 5 - Women's Autonomy and Antenatal Services Utilization (N = 151)

Women's Overall Autonomy Level	Utilization Level		p-value #
	Fully Utilized (%) .No	Under utilized No. (%)	
Low	82 (93.2)	6 (6.8)	0.041 *
High	63 (100)	-	

*p-value significant at <0.05, # Fisher's exact test

Table 5 reveals that there was significant association between antenatal services utilization and women's autonomy (p-value 0.041).

DISCUSSION

The present study revealed that in relation to decision making autonomy 24.5% of respondents decided independently in daily household whereas only 0.7% decided independently in purchasing major goods. These findings are in agreement with a study done in Bangladesh where 29% of women decided independently in making household purchases for daily needs and a small proportion of women (8.2%) had made decisions independently in making large household purchases.¹⁶ Present study finding is in contrast with the finding of study done in Philippines where 61% of women decided alone on purchase for daily household needs.¹⁷ In present study, 11.9% women made decision on children's health care. But this finding is in contrast with finding of study in Bale Zone where 49.6% of women were autonomous to take their child to health facility.¹⁸ In this study only 14.6% of respondents did not need permission for going to a natal family. This finding is in contrast with a study in a North Indian city where 58% of women could go to their natal home when they wished.¹⁹ These differences among various researches may have been resulted due to different settings, sample sizes, social and cultural aspects.

In this study regarding health checkup during recent pregnancy, almost all (98.7%) of respondents had attended antenatal visits. This finding is higher than the finding of study conducted in Gorkha, Nepal where 76% of respondent had attended antenatal visits.²⁰ And this finding is higher than the finding of study done in hilly area of Tamang community of Nepal where 79% had attended ANC visits.²¹ In this study almost all (94.0%) of respondents had four or more ANC visits during their recent pregnancy. This finding is higher than the finding of study done in Kapilvastu of Nepal where 68.9% of respondents had attended four or more visits.¹² These findings are also consistent with the finding of a study done in Teaching hospital of Kathmandu where 83% of women had four antenatal visits.²² These findings are also consistent with the finding of study done North Ethiopia shows that 84.8% have four or more antenatal visits.²³ In this study, 73.8% of respondents had received the first antenatal visit within four months of pregnancy. This finding is higher than the study done in Kapilvastu, Nepal where 47.6% of respondents did the first ANC visit within four months of pregnancy.¹²

This study revealed that 93.1% respondent had received two TD injections during their pregnancy and only 4% respondents had not received TD injection. This finding is nearly consistent with the findings of the study done PHC in Jhapa, Nepal where 74% respondents received two doses TD injection and 6% respondents did not receive the TD injection.²⁴

This study revealed a significant association between antenatal services utilization and women's autonomy (p-value = 0.041). This finding is similar to findings of the study done in Bangladesh which also revealed a significant association between women autonomy and ANC (p-value < 0.001).¹³ The Study done in Nigeria showed that overall autonomy was significantly associated with ANC utilization (p-value < 0.000).²⁵ This study revealed that the status of education (p-value = 0.009) and status of husband education (p-value = 0.013) were associated with utilization of the ANC services. This study result also illustrated that time required to reach health facilities for antenatal services by walking (p-value = 0.005) and transportation facilities (p-value = 0.039) were associated with utilization of the ANC services.

The present study revealed that status of education of respondents and respondent's husband were associated with ANC utilization (p-value 0.009 of respondents) and (p-value 0.013 of respondent's husband). These findings are similar to findings of the study done in Mahottari district of Nepal which revealed a significant association between ANC with education of respondents and their husbands.²⁶ Another study findings were also similar to findings of the study done in Amagie, West Ghana revealed that education level also had significant association with ANC (p-value = 0.005).²⁷

The findings of this study might be helpful to plan and provide health education to husband and family members for raising autonomy of women for women's health through proper and timely use of ANC. It would be useful to health workers for planning effective intervention for the increment of utilization of antenatal services.

CONCLUSIONS

Based on the results of the study, it is concluded that the WRAG tend to have low autonomy. Maximum autonomy is seen in decision making followed by mobility, while there is least autonomy in financial related issues. Women tend to utilize antenatal services properly and women's autonomy, women's education, their husband's education, walking distance of health facilities and availability of private vehicles tends to influence the antenatal services utilization among the WRAG.

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