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Decision Making Status regarding Antenatal Care among Women in a Tertiary Level Hospital, Kathmandu

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ABSTRACT

Introduction

Women's decision making is one of the important indicators of maternal health which directly influence their utilization of antenatal care services resulting on reduction maternal morbidity and mortality. The aim of this study was to find out the decision making status regarding antenatal care among women.

Methods

A cross-sectional study was conducted among 180 antenatal women of third trimester from Gynae/Obs OPD of Tribhuvan University Teaching Hospital. Non-probability purposive sampling technique was adopted. Data was collected by using semi-structure interview questionnaire. Data were analyzed using descriptive statistic and inferential statistics using chi square and fisher's exact test.

Results

Findings of this study clearly explain medium level of decision making in large number of respondents. More than two-thirds research participant (123, 68.3%) had medium level of decision making on antenatal care, whereas few respondents (30, 16.7%) had high level of decision making. The study revealed that there was statistical association of level of decision making with women's age (p=0.009), type of family (p=0.01), duration of marriage (p=0.002), economic status (p=0.009), education (p=0.007) and number of children (< p=0.001).

Conclusion

Few of the antenatal women have high level of decision-making status regarding their antenatal care. Furthermore, the lowest level of decision making was observed concerning on autonomy in financial matter. Thus the importance of advocacy for promoting women's decision-making status in our context is necessary.

Keywords
Antenatal care; decision making status

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INTRODUCTION

The unacceptably high level of maternal mortality is a common subject in global health and development discussions and remains one of most important public health problems in developing countries[1]. Every day, approximately 830 women die worldwide from preventable causes related to pregnancy and childbirth[2]. A study highlights maternal death of 303,000 worldwide[3]. Developing regions alone account for approximately 99 % of global maternal deaths, with Sub-Saharan Africa alone 66 %, followed by South Asia 22 % [3]. Women's decision-making power plays vital role, as it corresponds to indicators of maternal health[4]. It refers women's ability to formulate strategic choices, control resources, and exercise autonomy[5]. Researchers have identified some of direct measures of women's decision making like access to and control over household purchases, ability to make decisions about own health care, participation in economic decisions, and mobility or visit to health centers and family members[6].

Empowering women with education, decisional status, awareness and strengthening health facilities are important lay out to ensure safe pregnancies[7].In Nepal, women have more disadvantages compared to men in terms of access to assets[8]. A study showed that decision of women's health care were made without their participation in majority of Nepal (72.7%) and approximately half of Bangladesh (54.3%) and Indian (48.5%) households[9].

Antenatal Care is key maternal service for improving wide range of health outcomes for women by improving maternal nutrition, encourage skilled attendance at birth and use of facilities for emergency obstetric care[10]. Birth delivered in health facilities is important for reducing deaths arising from complications during pregnancy. Studies show that use of maternal health care services is influenced by women's roles in decision-making[11,12,6]. Studies have also shown that higher status for women correlates positively with their health.[13] A positive association between women's empowerment and lower fertility; longer birth interval and lower rates of unintended pregnancy have also been observed[14]. Since the social status and level of autonomy of Nepalese women are poor, their status at household level needs to further explore in terms of health services utilization, which has direct impact on maternal morbidity and mortality

METHODS

A cross-sectional research design was adopted to find out the level of decision making status regarding antenatal care among women and measure the association of level of decision making with selected variables. Non-probability purposive sampling technique was used to collect data among 180 respondents of third trimester attending Gynae/Obs OPD of Tribhuvan University Teaching Hospital (TUTH) after obtaining ethical approval (Ref.120/(6-11)E^2/076/077)from Institutional Review Committee of Institute of Medicine, Tribhuvan University. After taking administrative written permission from TUTH, written consent was obtained from each respondent prior to data collection. Voluntary participation and withdrawal from the study at any time without giving reason was considered. Anonymity was maintained during data collection by giving code numbers, Confidentiality was maintained by keeping the information for study purpose only and privacy was maintained by collecting data in a separate area for each respondent.

Data was collected using a semi-structured interview questionnaire by the researchers from 2nd to 28th September 2019. Data was collected through face to face interview average time for 25 to 30 minutes. Instrument was developed by the researchers based on research objective, reviewing the related literature, consultation, and validation of instrument with research expert. The instrument consisted of two parts: Part I: Questionnaire related to socio demographic and reproductive characteristics and Part II: Questionnaire related the information on decision making status of women regarding antenatal care on three aspects i.e. Autonomy in health care, autonomy in domestic purchases, and autonomy in mobility (visiting to friends and families) based on decision making indexes of NDHS, 2016. Scores were measured in four scale; Single decision by herself, jointly with spouse, husband alone, and husband and other family members. Score for single decision made by respondent was given 1, joint decision score 0.5 and remaining two scale got zero score. Finally, it was measured in three level; high, medium and low level based on study Meitei 2001. Score above 75% was high, between 50 to 75% was medium and below 50% was considered low level of decision-making status.

Pre-testing was done in 10% of the respondents attending Gynae OPD of Manamohan Memorial Medical College and Teaching Hospital. Necessary modification was done based on the feedback of pretest. Data was edited, coded, and entered in SPSS version 16 where simple descriptive (as frequency, percentage, mean and standard deviation) and inferential statistics (chi-square test, fisher's exact test) were used for analysis.

RESULTS

Table no 1 shows, majority (76.1%) were between age group of 20-30 years with mean age 26.41±3.902 years. Most of them (96.1%) were urban dwellers. More than half (52.2%) were belonged to Brahmin/Chhetry. Similarly, more than half (53.3%) were

Table 1. Socio-demographic information of respondents (n=180)

Characteristics		Number (%)
Age (in completed years)	<20	1 (0.6)
	20 - 30	137 (76.1)
	30 - 40	42 (23.3)
Mean Age± S.D	26.41±3.90	
Residence	Urban	173 (96.1)
	Rural	7 (3.9)
Ethnicity	Brahmin/Chhetry	94 (52.2)
	Janjati	82 (45.5)
	Others (Dalit, Madhesi, Muslim, Janjati)	4 (2.3)
Type of Family	Nuclear	96 (53.3)
	Joint	84 (46.7)
Duration of Marriage (years)	≤2	71 (39.4)
	2 to 5	38 (21.2)
	>5	71 (39.4)
Education Level	Informal	5 (2.8)
	Basic (Upto class 8)	25 (13.9)
	Secondary (class 9 to 12)	81 (45)
	University (Above 12	69 (38.3)
Occupation	House Maker	115 (63.8)
	Business	37 (20.6)
	Service	28 (15.6)

Table 2. Respondents' decision making status regarding autonomy in antenatal health care, domestic purchases, and mobility (n=180)

Decisions	Decision Makers n (%)			
	Self	Jointly With Spouse	Husband Only	Husband & Other Family Members
Autonomy in Antenatal Health Care				
• Management in case of Minor Illness	98 (54.4)	48 (26.7)	19 (10.6)	15 (8.3)
• Management in case of Major Illness	23 (12.8)	111 (61.7)	25 (13.9)	21 (11.7)
• Antenatal Visits	58 (32.2)	93 (51.7)	6 (3.3)	23 (12.8)
• Antenatal investigation	81 (45)	79 (43.9)	11 (6.1)	9 (5)
• Taking additional nutritional foods	136 (75.6)	21 (11.6)	4 (2.2)	19 (10.6)
• Buying Iron & Calcium	161 (89.4)	8 (4.4)	3 (1.7)	8 (4.4)
• Taking TT Vaccine	173 (96.1)	5 (2.8)	1 (0.6)	1 (0.6)
• Alcohol abstinence, Smoking restriction, Second hand smoking avoidance	176 (97.7)	2 (1.1)	1 (0.6)	1 (0.6)
• Saving money for birth preparedness	25 (13.9)	88 (48.9)	53 (29.4)	14 (7.8)
• Arrange Vehicle for Transportation for Delivery	26 (14.4)	65 (36.1)	67 (37.2)	22 (12.2)
• Arrange Blood for Delivery if needed	8 (4.4)	49 (27.2)	91 (50.6)	32 (17.8)
• Seeking Health Care if Danger Sign Occur	82 (45.6)	60 (33.3)	14 (7.8)	24 (13.3)
• About Place/Health Facility for Delivery	67 (37.2)	76 (42.2)	17 (9.4)	20 (11.1)
Autonomy in Domestic purchase				
• Buying Nutritious Food during Pregnancy	80 (44.4)	47 (26.1)	29 (16.1)	24 (13.3)
• Using Husband's Income	11 (6.1)	132 (73.3)	25 (13.9)	12 (6.7)
Mobility				
• Visit your Relatives/Friends	125 (69.4)	30 (16.7)	8 (4.4)	17 (9.4)
• Travelling for Long Distance	6 (3.3)	114 (63.3)	29 (16.1)	31 (17.2)

Table 3. Respondents' level of decision making (n=180)

Level of decision making	Number (%)
High (>75%)	30 (16.7)
Medium (50-75%)	123 (68.3)
Low (<50%)	27 (15.0)

living in nuclear family. Concerning of marriage, more than one third (39.4%) had married from 2 years and same percentage had duration of more than 5 years. Education level seems that nearly half of them (45%) had completed their secondary level. Regarding occupation, nearly two third (63.8%) were home makers.

Table 2 shows, more than half (54.4%) took decision by themselves on health checkup during minor illness whereas, almost two thirds (61.7%) took decision consulting with their husband in major illness. Concerning of antenatal visit, around half (51.7%) took decision jointly with husband. Concerning taking decision for taking additional food during pregnancy, majority (75.6%) used to take decision by themselves. Regarding taking TT vaccine, again almost all (96.1%) took decision by themselves. Concerning towards alcohol abstinence, & smoking restriction, almost all (97.7%) exercised self-decision. Nearly half (48.9%) took decision jointly with husband for saving money for birth preparedness. One third of husband of respondents (37.2%) took decision alone regarding arranging vehicle for transportation for delivery. Similarly, husband of half of the respondents (50.6%) provoked their decision upon their wife for arranging blood and choosing mode of delivery. Table also shows that nearly half of respondents (45.6%) took decision by themselves regarding seeking healthcare if danger sign occur. Regarding buying nutritious food during pregnancy, nearly half (44.4%) took decision by themselves. Majority (73.3%) took decision jointly with husband while sharing husband income. Regarding visiting to friends and relatives, majority (69.4%) exercised self-decision and for distance travelling, nearly two third (63.3%) took decision only after consulting with husband.

Table 3 reveals, more than two thirds (68.3%) had medium level of decision making status while only few (16.7%) had high level status whereas nearly same proportion (15.0%) had low level of decision making status in overall

Table 4 shows significant statistical association between level of decision making and age, type of family, duration of marriage, family socio-economic status, education level of respondents and number of children with p value (0.009), (0.01), (0.002), (0.009), (0.007) and (<0.001) respectively.

Table 4. Respondents' decision making status regarding autonomy in antenatal health care, domestic purchases, and mobility (n=180)

Characteristics	Level of decision making - n (%)			χ2 Value	p value
	High	Medium	Low		
Age (in completed years)					
Upto ≤25	5 (7.9)	43 (68.25)	15 (23.8)	9.44	0.009 *
≥25	25 (21.36)	80 (68.37)	12 (10.25)		
Type of Family					
Nuclear	22 (23.15)	64 (67.36)	9 (9.47)	9.21	0.01*
Joint	8 (9.52)	58 (69.04)	18 (21.42)		
Duration of Marriage					
Less than equal to 2years	5 (7.04)	49 (69.01)	17 (23.94)	12.77	0.002*
More than 2 years	25 (22.93)	74 (67.88)	10 (9.17)		
Family Socio economic Status					
Enough for 12 Months	8 (10.25)	52 (66.66)	18 (23.07)	9.436	0.009*
Enough for 12 months and surplus	22 (21.56)	71 (69.60)	9 (8.82)		
Education Level of Respondents					
Upto Secondary	17 (15.3)	70 (63.06)	24 (21.62)	9.958	0.007*
Above Secondary	13 (18.84)	53 (76.81)	3 (4.34)		
Number of Children					
Not Having	9 (7.96)	82 (72.56)	22 (19.46)	18.632	<0.001*
One or More	21 (31.34)	41 (61.19)	5 (7.47)		

** Significance* *Chi-square test & Fisher's exact test*

DISCUSSION

This study found nearly two thirds (61.7%) took decision by jointly on major health problems which is supported by findings of NDHS (2016) which showed 58% respondents decided jointly with husband regarding their own health care. This finding is further supported by study of Acharya which showed that almost half (47.1%) of ever married women took decision jointly with spouse[15].

Similarly, regarding items of taking nutritional food during pregnancy, buying iron and calcium during pregnancy, need of physical exercise, additional rest during pregnancy, taking tetanus toxoid vaccine, alcohol abstinence and smoking avoidance, majority (75.6%) took decision by themselves. This findings is consistent with the finding of a study done by Patel[16].

Regarding birth preparedness and complication readiness; only 13.9% respondents saved money themselves. This finding is inconsistent with a study of Ethiopia which revealed 51.35% saved money for birth[14]. Likewise, this study showed only 14.4% and 4.4% of respondents took decision by themselves for arranging vehicle for transportation during delivery and arrange blood for delivery which is equivalent with a finding of Ethiopia which revealed 20.59% arranged transportation and 8.18% identified blood donor by themselves[14].

Regarding travelling, study revealed that 63.3% took participation in decision making, and for financial matter 73.3% took participation. This finding nearly consistent with the study result of NDHS, (2016) which showed 56% participate in visiting to family or relatives whereas the finding of finance is contradicted to NDHS (2016) which said only 53% participate in financial matter.

Regarding the level of decision making, more than two thirds (68.3%) had medium level of decision making status. This finding is consistent with the study done by Meetei which reported that majority (70%) were coming under medium empowerment[17].

Similarly, this study showed almost two thirds (65.6%) had medium level of decision-making status regarding antenatal care, while nearly half of (45.0%) had low level concerning to financial matter whereas more than two fifth (42.8%) had medium level of decision-making status talking about mobility which is consistent with study of K.C. that reported 60% of women had autonomy in deciding health care, 53% were involved in decision making regarding mobility and less than 50% had involved in financial matter[18]. Likewise, another study of Nepal also revealed that 57% were involved in decision making of their own health care and 49% involved in mobility and less than half were involved in financial matter [6].

CONCLUSION

Study concluded that there is still only few women have high level of decision making regarding their antenatal care. Similarly, lowest level of decision making observed concerning their decision making on financial matter. Significant statistical association observed between level of decision making and selected variables such as age, education, type of family, family socioeconomic status, duration of marriage, and number of children. Thus the study suggests that more effective planning and implementation of various women empowerment programs are essential for strengthening their decision making role in order to improve antenatal care and subsequent maternal health outcomes.

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CONFLICT OF INTEREST

The author(s) declare that they do not have any conflicts of interest with respect to the research, authorship, and/or publication of this article.

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