# International Journal of Health Sciences and Research

ISSN: 2249-9571 www.ijhsr.org

Original Research Article

## **Knowledge and Attitude about ANC Check-Up of the Mothers-In-Law: A** Community Based Survey Conducted in Kathmandu District of Nepal

Nilu Thapa<sup>1</sup>, Gyanu Tamang<sup>2</sup>

<sup>1</sup>Associate Professor, BPH Third Year Coordinator, Head of the Department of Public Health, Nepal Institute of Health Sciences (NIHS) affiliated to Purbanchal University (PU), Gokarneshwor Municipality-12, Jorpati, Kathmandu, Nepal

<sup>2</sup>Bachelor of Public Health, Nepal Institute of Health Sciences (NIHS) affiliated to PU, Gokarneshwor Municipality-12, Jorpati, Kathmandu, Nepal

Corresponding Author: Nilu Thapa

Revised: 22/09/2015 Accepted: 29/09/2015 Received: 01/09/2015

#### **ABSTRACT**

Background: Nepalese society is a patriarchal society where senior women occupy top position in their families exercising authority and power over their daughters-in-law. The pregnancy and child birth related decisions are usually taken by mothers-in-law. That's why the knowledge and attitude of mothers-in-law regarding ANC checkup is important for increasing the ANC service utilization at the community level of

**Objective:** To assess the level of knowledge and attitude about ANC checkups among mothers-in-law of mothers having under five children and also to assess the association of level of knowledge of ANC with selected variables of interest.

Study design: Descriptive cross-sectional study. Setting: Community based, Nanglebhare VDC of Kathmandu district *Participants:* 96 mothers-in-law were interviewed using structured questionnaire. Data analysis: The analysis was done by using simple descriptive statistics like percentage, frequency, mean and standard deviations. The Chi-Square test was applied for establishing the association.

Results: Thirty one percent respondents had adequate knowledge, 21.9% had inadequate knowledge and remaining 46.9% had no knowledge at all. Almost all of the respondents showed their willingness to help and encourage other pregnant women for ANC checkups and to participate in any program related to it. While 88.4% respondents showed their willingness to share information about ANC checkups with others. The literacy status, time taken to reach the nearest government health institutions and age of the mothers-in-law were found to be statistically significant factors (p-value = 0.047, 0.015 and 0.040 respectively) for adequate level of knowledge among mothers-in-law.

Conclusion: Almost half of the respondents were completely unaware about the concept of ANC checkups. Therefore, awareness program regarding ANC checkups should be designed and conducted for mothers-in-law.

Key words: Antenatal Care check-up, Attitude, Kathmandu, Knowledge, Mothers-in-law

### INTRODUCTION

Improvement of maternal health is fifth of eight Millennium Development

Goals (MDG) which aims to reduce the Maternal Mortality Ratio (MMR) by three quarters between 1990 and 2015.

Throughout the world, approximately 800 women per day die from preventable causes related to pregnancy and childbirth over 99% of which occur in developing country. <sup>[2]</sup> The MMR of Nepal is 170 per 100,000 live births which rank at 60<sup>th</sup> in the world. <sup>[3]</sup>

Many preventable factors contribute to this scenario among them one of the important factors is Antenatal Care (ANC). It is the care that a woman receives from health care professionals during pregnancy. <sup>[4]</sup> It can offer health related information and services that can significantly improve the health of women and their infants. <sup>[5]</sup> So if quality ANC services are provided and utilized by the expectant mothers, maternal mortality may go down. However in Nepal, only 50% of women make four or more ANC visits during their pregnancy. <sup>[6]</sup>

Also Nepalese society patriarchal society where senior women occupy top position in their families exercising authority and power over their daughters-in-law. The pregnancy and child birth related decisions are usually taken by mothers-in-law. [7] Research done in Nepal shows that mostly mothers-in-law made decision to go for ANC [8] and are perceived as an influential person in the uptake of ANC. [9] That's why the knowledge and attitude of mothers-in-law regarding ANC checkup is important for increasing the ANC service utilization at the community level. Hence, this study was conducted to assess the level of knowledge and attitude about ANC checkups among mothers-in-law of mothers having under five children and also to assess the association of level of knowledge of ANC with selected variables of interest.

### MATERIALS AND METHODS

A community based, descriptive cross-sectional study was carried out over a period of three weeks. The study area was Nangle Bhare Village Development

Committee (VDC) of Kathmandu, Nepal which was selected purposively. Total 96 mothers-in-law were included in the study. Mothers-in-law of the mothers having under five children who were temporary residents in the VDC, were severely ill, cannot speak and unwilling to participate were excluded from the study. The participants were interviewed only after obtaining consent from mothers-in-law (in verbal form) and the VDC (in written form) by using a structured questionnaire. The participants were oriented about the purpose and objectives of the study. In addition to that they were also assured about the privacy and confidentiality of the information obtained from them.

But prior to start up of data collection process, ethical clearance was obtained from Research Review Committee of Nepal Institute of Health Sciences (NIHS).

The collected data was checked and organized for its completeness consistency. The coding of the independent as well as dependent variables was done and data was entered into SPSS version 16. The analysis was done by using simple descriptive statistics like percentage, frequency, mean and standard deviations. The Chi-Square test was applied for establishing the association. The p-value less than 0.05 (5% level of significance) was considered to be statistically significant. The analyzed data was presented in tables and narrative forms.

## **RESULTS**

## **Knowledge about ANC checkups**

Out of 96 respondents, 22 respondents (23.0%) were of age groups between 45 to 49 years. The mean age of the respondents was 57.2 with SD of 9.621 years. Majority of the respondents, 73 (76.0%) were illiterate and 23 (24.0%) were literate.

More than half of the respondents (53.1%) have heard about the ANC checkups. Regarding concept of ANC checkups, 47 respondents (92.2%) replied that it is going for check up during pregnancy. Likewise, 19 respondents (37.2%) responded correctly about the minimum ANC checkup during pregnancy. About 71 % of the respondents viewed that ANC services are provided from the government health institutions like health post; sub-health posts (Table no 1a). As far as the information on ANC service providers were concerned, 36 responses (70.5%) were of doctors and 24 responses (47.0%) were of MCHW, ANM and nurses. Majority of the respondents (31.3%) were not aware about the services provided under ANC checkups. In addition to that, regarding benefits of ANC checkups, majority (94.1%) believed that it is helpful for both mother and fetus growth. About 26 responses i.e. 50.9% of the respondents got information related to ANC checkups from health personnel followed by neighbors (37.2%), media (19.6%), family members (17.6%) and friends (11.7%) respectively (Table no 1 b). Out of total respondents, 30 respondents (31.3%) had adequate knowledge, 21 (21.9%) had inadequate knowledge and remaining 45 (46.9%) had no knowledge at all.

Table no 1a: Ante-natal care related knowledge

Descriptions	Frequency	Percent
Heard about ANC checkups		
(n=96)		
Yes	51	53.1
No	45	46.9
Concept of ANC checkups (n=51)		
Going for check up before pregnancy	2	3.9
Going for check up during pregnancy	47	92.2
Going for check up after delivery	2	3.9
Minimum ANC checkups (n=51)		
Have no idea about it	8	15.7
One time	1	2.0
Two times	7	13.7
Three times	16	31.4
Four times	10	19.6
More than four times	9	17.6
Places from where the ANC services		
is provided (n=51)		
Government health institutions	36	70.6
Hospitals	15	29.4

Table no 1b: Ante-natal care related knowledge

Table no 1b: Ante-natal care relate	a knowleage	
Descriptions	Responses	Percent of cases
-	Frequency	
ANC service providers (n=51)		
Have no idea about it	1	1.9
Doctor	36	70.5
MCHW, ANM and Nurses	24	47.0
Services under ANC Checkup (n=51)		
Have no idea about it	16	31.3
Examination of mother and fetus	13	25.4
Counseling	13	25.4
Supplementation (Vit A, Iron tablets, deworming tablets)	12	23.5
TT immunization	10	19.6
Nutrition education	4	7.6
Services to predict danger signs	2	3.9
Benefits of ANC Checkup (n=51)		
Have no idea about it	6	11.7
Helpful for mother and fetus growth	48	94.1
Helpful in prediction of danger signs	2	3.9
Help in reduction of IMR and MMR	2	3.9
Sources of information (n=51)		
Health personnel	26	50.9
Neighbors	19	37.2
Medias	10	19.6
Family members	9	17.6
Friends	6	11.7

## **Attitude towards ANC checkups**

Out of 51 respondents, 98.0% agreed that they are willing to help and encourage

other pregnant women for ANC checkups. Similarly, 98.0% also agreed to show willingness to participate in any program related to ANC checkups. About 88.4% of the respondents are willingness to share information about ANC checkups with others while 5.8% replied they are not willing to share information about ANC checkups with others (Table no 2).

The literacy status, time taken to reach the nearest government health institutions and age of the mothers-in-law were found to be statistically significant factors (p-value = 0.047, 0.015 and 0.040 respectively) for adequate level of knowledge among mothers-in-law (Table no 3).

Table no 2: Attitude towards ANC check ups

Statements	Agree	Neutral	Disagree	Total
(n=51)				
Willingness to help and encourage other pregnant women for ANC checkups	98 %	2%	0%	100%
Willingness to participate in any program related to ANC checkup	98%	0%	2%	100%
Willingness to share information about ANC checkups with others	88.4%	5.8%	5.8%	100%

Table no 3: Association between literacy status and age of mothers in law with the level of knowledge

Variables	Level of Knowledge		Chi- square value at	p- value
	Adequate (n=30)	Inadequate (n=21)	degree of freedom 1	
Literacy status				
Literate	17 (73.9%)	6 (26.1%)	3.938	0.047*
Illiterate	13 (46.4%)	15 (53.6%)		
Time taken to reach the nearest government health institutions				
Less than one hour	19(76.0%)	(24.0%)	5.973	0.015*
More than one hour	11(42.3%)	15(57.7%)		
Age of mothers in law				
(40-57) years	26(66.6%)	13(33.4%)	4.210	0.040*
58 years and Above	4(33.3%)	8(66.7%)		

## **DISCUSSION**

This study showed that the mean age of the respondents was 57.2 with SD of 9.621 years. Majority (76.0%) of the respondents were illiterate, according to Central Bureau of Statistics (CBS) 2011 the overall female illiteracy is 42.6% elderly female illiteracy is 60.6.% Our study showed that more than half (53.1%) of the respondents have heard about the ANC checkups. More than nine out of ten respondents said that ANC checkup is going for check up during pregnancy which is comparable with the findings of 94.2% women knowing that pregnant women should go for ANC checkups. [10] In this study, approximately 37 % responded correctly about the minimum ANC checkup

during pregnancy which is much lower than the findings of 55.2% knowing correctly about it. [11] Majority of the respondents (31.3%) were not aware about the services provided under ANC checkups. Perhaps this might be due to lower level of awareness among women regarding health matters. Regarding benefits of ANC checkups, majority (94.1%) believed that it is helpful for both mother and fetus growth. As per this study, 31.3% had adequate knowledge about ANC checkups while Shirin, 2011 showed only 6.2% of senior women have good knowledge about it. This study showed that almost all were willing to help and encourage other pregnant women for ANC checkups. More than nine out of ten respondents showed a Positive attitude

towards ANC <sup>[12]</sup> which is positive thing for increasing ANC checkups of pregnant women. As mothers-in-law play significant role on the uptake of ANC in Nepal. <sup>[9]</sup>

This study showed that literacy status and age of mothers-in-law played as significant factors in determining the knowledge of ANC which is consistent with other finding. [10,12]

### **CONCLUSION**

It can be concluded that almost half of the respondents were completely unaware about the concept of ANC checkups. Among respondents having knowledge about the concept of ANC checkups, two-thirds had adequate knowledge and remaining onethird had inadequate knowledge. Almost all of the respondents showed their willingness to help and encourage other pregnant women for ANC checkups and to participate in any program related to ANC checkups. While nine out of ten respondents showed their willingness to share information about ANC checkups with others. The literacy status, time taken to reach the nearest government health institutions and age of the mothers-in-law were found as important factors for adequate level of knowledge mothers-in-law. Therefore, among regarding awareness program ANC checkups should be designed and conducted for mothers-in-law so that ANC service utilization can be increased in the community.

### **ACKNOWLEDGEMENT**

Firstly we would like to thank all mother-in-laws residing in Nanglebhare V.D.C, who participated in this study. Without their information this study would not have been complete. We would like to express our heartfelt thanks to research review committee of NIHS for providing ethical clearance to conduct our study.

**Conflict of Interest:** The authors declare no conflict of interests.

Sources of Funding: None

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How to cite this article: Thapa N, Tamang G. Knowledge and Attitude about ANC Check-up of the mothers-in-law: a community based survey conducted in Kathmandu district of Nepal. Int J Health Sci Res. 2015; 5(10):211-216.

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