

## Satisfaction on Antenatal Care among Pregnant Women in a Primary Health Care Centre

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### ABSTRACT

**Introduction:** Antenatal care service (ANC) is most important to reduce complication during pregnancy. However, satisfaction is needed during ANCs visits for the continuation of the health services and improvement in the quality of the health care in the Primary Health Care Centre (PHCC). The objective of this study was to assess pregnant women in PHCC.

**Methods:** A cross sectional study was done in PHCC of Nawalparasi through face to face interview technique with structured interview schedule to collect the data. Total of 101 pregnant mothers were selected for the study. Consecutive sampling technique was used for sampling. The collected data was entered in Epidata and analysed in SPSS version 16.

**Results:** Finding of the study indicated most 99 percent of the respondents were satisfied with antenatal care among the age group of 15- 49 years. Most 99 percent of the respondents were satisfied with service expectation and only 87.1 percent were satisfied with availability of health services.

**Conclusion:** The study concluded that satisfaction among pregnant women on ANC is very high in PHCC. Still there is need for the conduction of different maternal health programs to enhance maternal and child health as well as provide free maternal health services to remove financial barriers.

**Keywords:** *Antenatal care, Satisfaction, Pregnant women*

### INTRODUCTION

Antenatal care (ANC) is very necessary for each pregnant women in order to decrease pregnancy related complication. Nevertheless, pregnant women satisfaction plays main role for the continuation of ANC services for improvement of quality of care and to provide uniformity in services.<sup>1</sup>

The number of contacts of pregnant women with health care providers throughout her pregnancy from 4 to 8 visits may reduce the risk of stillbirth because increased visit helps to detect and manage complications.<sup>2</sup> Utilization of ANCs increased the pregnant women satisfaction but low utilization of ANC could lead to many maternal and prenatal death in women. Worldwide, about 70 percent of pregnant women received antenatal care, whereas in industrialized countries, more than 95 percent ANC was received by pregnant women.<sup>3</sup>

Globally, the maternal mortality rate was 210 death /100,000 live birth among women aged 15-49 years which showing low quality of antenatal care services.<sup>4</sup> Only (64 percent) of women receive antenatal care four or more times throughout their pregnancy. Eight or more contacts for antenatal care can reduce perinatal deaths by up to

8 per 1000 birth as compared to 4 visits and improve in quality of care.<sup>5</sup>

Satisfaction from antenatal care helped in improving health outcomes of pregnant women, continuity of care, adherence to treatment and the relationship with the health care provider whereas, poor satisfaction may result hazardous in the health of women and fetus.<sup>6,7</sup> Maternal age, educational level and poverty also plays major role in determining satisfaction on ANCs.<sup>8-11</sup> In Pakistan, utilization of ANCs at first trimester was higher in comparison to other trimester which showed that continuation and satisfaction depends on accessibility of health service, available of community health worker and female health care provider.<sup>12</sup> Availability and accessibility of health services lead to high utilization of the services.<sup>13</sup> Women's participation in making decision during pregnancy, women's control of sense, internal and external factor, relationships between respondents and care

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providers, respectful care and the physical environment of ANCs are important factors which are linked with women's satisfaction and continuation of the service in the future.<sup>14</sup> By 2030, Sustainable Development Goal's targets to reduce the globally maternal mortality ratio to less than 70 per 1,00,000 live births.<sup>15</sup> In Nepal, like in many developing countries, maternal deaths occurs due to delays in this three activities; seeking care, reaching care and receiving care by the women's. The increased use of maternal health services and the increased attendance at the recommended four antenatal care visits contribute to reduce the Maternal Mortality Rate.<sup>16</sup> Thus, in the context, the main objective of this study was to assess pregnant women in PHCC.

## METHODS

A cross sectional study design was used to assess the level of satisfaction on ANCs received by pregnant women's in PHCC. Consecutive sampling technique was used for collecting data from 10<sup>th</sup> to 20<sup>th</sup> July, 2019. The data was collected from pregnant women who came for ANC check up in PHCs Dumkouli, Nawalparasi of age group of 15 to 40 years and the gestation period from 12<sup>th</sup> to 40<sup>th</sup> weeks were included in the study. Those pregnant women who had developed major complication during pregnancy such as eclampsia, preterm labor, stillbirth etc. were excluded from the study. Total 101 pregnant mothers were selected for the study.

The sample size determined by the following formula:

$$n = z^2pq / d^2$$

Where,

n = estimated sample size

z = level of statistical significance that set up level 0.05, i.e. 1.96

p = proportion of satisfaction of overall antenatal care service is 60.4 percent = 0.604 in South West Ethiopia.<sup>1</sup>

q = proportion of patients who were not satisfied with the service, 1 - 0.604 = 0.396

d = degree of accuracy required i.e., allowable error = 10 percent = 0.1

$$n = z^2pq / d^2$$

$$= (1.96)^2 \times (0.604) \times (0.396) / (0.1)^2$$

$$= 91.88$$

10percent nonresponse rate

10 percent of 91.88

$$= 9.188$$

Therefore,

$$n = 91.88 + 9.188$$

$$= 101.068$$

Face to face interview with structured interview schedule was done after reviewing of related literature. The

questions were translated into Nepali language. The self developed questionnaire was divided into two main parts, which were Socio- demographic characteristic of the respondents & Satisfaction of the respondents in antenatal care service. Satisfaction was measured by 5 point likert scale, that was very dissatisfied, dissatisfied, neutral, satisfied and very satisfied. Then, very satisfied and satisfied were merged as "satisfied" and neutral, dissatisfied and very dissatisfied were merged as "unsatisfied" for the sake of regression analysis.<sup>17</sup> Neutral responses were included in "unsatisfied" considering that they may indicate a fearful way of representing dissatisfaction as the interview was taken in the health facilities where the mothers may feel hesitated to express their genuine feelings regarding the service they received.

The reliability of the likert scale was examined for internal consistency by using Cronbach's alpha coefficient which was 0.73. Necessary modification of the tool was done after pretesting on 10 study sample in Bharatpur hospital setting. Before data collection, research approval was taken from the authorities of NPI-Narayani Samudayik Hospital, College of Nursing. Permission was taken from the concerned authority of PHCC, Dumkouli and written consent was taken from each respondent before the data collection. Data collection was performed in the separate room successively, researcher herself collected the data. The respondents' dignity was maintained by giving right to reject or discontinue from the research study at any time. The confidentiality of the respondents was maintained by giving code number instead of respondents' name while entering data in the computer and not revealing their individual identity in report findings. Information was used only for study purpose. Data was collected on PHCC, Dumkouli thrice a week during the waiting time of pregnant mother for antenatal check up. The collected data was checked, reviewed, organized for accuracy and completeness. Then was entered in Epidata, analyzed on statistical package for social science (SPSS) version 16.0 by using descriptive statistics.

## RESULTS

Table 1: Socio Demographic and Background Information of the Respondents

	n = 101	
Variable	Frequency	Percent
<b>Age Group</b>		
15-19	18	17.8
20-24	48	47.5
25-29	26	25.7

30-34	6	5.9	<b>Gravida</b>		
35-39	3	3.0	Primigravida	58	57.4
<b>Mean <math>\pm</math>SD : 23.4 <math>\pm</math> 4.8</b>			Multigravida	43	42.6
Janajati	46	45.5	<b>Week of Gestation</b>		
Brahmin/ Chhetri	33	32.6	11-20	29	28.7
Dalit	19	18.8	21-30	34	33.7
Others	3	3	31-40	38	37.6
<b>Occupation</b>			<b>ANCs visit</b>		
Housewife	62	61.4	1 <sup>st</sup> visit	22	21.8
Agriculture	20	19.8	2 <sup>nd</sup> visit	33	32.7
Others	19	18.8	3 <sup>rd</sup> visit	25	24.8
<b>Educational status</b>			4 <sup>th</sup> visit and more visits	21	20.7
Informal Education	4	3.9	Out of 101 respondents taken for the study, approximately half percent were age of 20-24 years. Regarding ethnicity, 45.4 percent were Janajati. Concerning occupation, 61.4 percent were housewife. Only 52.5 percent respondents had secondary level. Accordingly, half of the respondents were Primigravida. Nearly one third, 37.6 percent of respondents were in 31-40 week of gestation. Nearly one third of respondent had completed 2nd visits (Table 1).		
Fundamental level (Grade 1 to 8)	34	33.7			
Secondary level (Grade 9 to12)	53	52.5			
Graduate level	8	7.9			
Post Graduate level	2	2.0			

Table 2: Respondent's Satisfaction regarding Accessibility of Health Service

n = 101

Statement	Satisfied no.(Percent)	Neutral no.(Percent)	Dissatisfied no.(Percent)
Are you satisfied with information about this health services	83 (82.1)	4 (4.0)	14 (13.9)
Accessible of this health centre from your home	58 (57.5)	7 (6.9)	36 (35.6)
Accessible of transportation facilities	89 (88.2)	4 (4.0)	8 (7.9)
Accessible of low cost of transportation fees	74 (73.3)	8 (7.9)	19 (18.8)
Accessible of health providers in time	90 (89.1)	8 (7.9)	3 (3.0)
Accessible facilities of laboratory and ultrasound	94 (93.0)	5 (5.0)	2 (2.0)
Accessible of providing antenatal card freely	95 (94)	3 (3.0)	3 (3.0)

In accordance to satisfaction regarding accessibility of health service, about 95 percent of the respondents were satisfied with accessible of providing antenatal card freely and very few about 57.5 percent of the respondents were satisfied with accessible of this health centre from your home (Table 2).

Table 3: Respondent's Satisfaction regarding Availability of Health Service

n = 101

Statement	Satisfied no.(Percent)	Neutral no.(Percent)	Dissatisfied no.(Percent)
Available of good ventilation in the health service	90(89.1)	10(9.9)	1(1.0)
Available of appropriate waiting room and space	82(81.2)	8(7.9)	11(10.9)
Facilities of drinking water and toilet	72(71.3)	21(20.8)	8(7.9)
Are you satisfied with maintained privacy during checkup	75(74.2)	18(17.8)	8(7.9)
Are you satisfied with maintained confidentiality of information	74(73.3)	20(19.8)	7(6.9)
Listen the problem carefully by the health providers	75(74.2)	22(21.8)	4(4.0)

Availability of full information during pregnancy (breast feeding, family planning and birth preparedness etc.)	32 (31.7)	27(26.7)	42(41.6)
Availability of giving full information of condition of mother and fetus	53(52.5)	18(17.8)	30(29.7)
Accessible of explanation of laboratory test, ultrasound and it's cost.	76(75.2)	14(13.9)	11(10.9)

Regarding availability of the health service, 89.1 percent were satisfied on available of good ventilation in the health service and few about 31.7 percent of the respondents were satisfied with availability of full information during pregnancy (breast feeding, family planning and birth preparedness etc) (Table 3).

Table 4: Respondent's Satisfaction regarding Service Expectation of Health Service

Statements	n = 101		
	Satisfied no.(Percent)	Neutral no.(Percent)	Dissatisfied no.(Percent)
Expectation of providing support by the service provider.	87(86.2)	11(10.9)	3(3.0)
Expect for check up by doctor	80(79.2)	20(19.8)	1(1.0)
Expectation of ANC check up by the female health workers or nurse or midwife	87(86.1)	12(11.9)	2(2.0)
Expect for low waiting time	44(43.6)	13(12.9)	44(43.5)
Expect for health providers friendly	83(82.2)	15(14.9)	3(3.0)
Expect for enough time given by the health worker between the check up	83(82.2)	14(13.9)	4(4.0)
Expectation of getting information of dangers sign of pregnancy	63(62.4)	11(10.9)	27(26.8)
Expectation of free health service	88(87.1)	8(7.9)	5(5.0)
Expectation of free supply of medicine	92(91.1)	5(5.0)	4(4.0)
Expectation of give clarification about dosage of medicine	91(90.0)	5(5.0)	5(5.0)
Expectation of maintains of cleanliness of health service	76(75.3)	18(17.8)	7(6.9)

Regarding satisfaction of the health service, most of the respondents, 91.1 percent were satisfied on expectation of free supply of medicine and only 43.6 percent were satisfied with expect for low waiting time (Table 4).

Table 5: Level of Pregnant Women in Primary Health Centre

Level	n = 101	
	Frequency	Percent
Dissatisfied (1,2,3)	1	1.0
Satisfied (4,5)	100	99.0

Hence, most (99 percent) of the respondents were satisfied and only 1 percent were dissatisfied in overall health care service in Primary Health Care Centre at Dumkouli (Table 5).

## DISCUSSION

The government of Nepal aims to increase the percentage of pregnant women attending four antenatal visits to 80 percent by 2017. WHO recommended Antenatal care (ANC) checkup is also low in Nepal. According to geographical mapping, ANC checkup is 8 percent in Western mountains

to 33 percent in the Central Hill which is not only below with the target of the Government of Nepal but also below the average of developing countries. In this study half 57.5 Percent of the respondents were satisfied with the accessible of this health centre from home. In contradiction to this finding, the study conducted by Fseha<sup>18</sup> revealed that 96 percent were satisfied with distance of health facilities from home. This result showed that, long distance of the health facilities from home reduced the satisfaction among respondents.

This study showed that, 81.2 percent were satisfied with the availability of waiting room and space. This finding is consistent with the study conducted by Poudel et al.<sup>14</sup> and Panta et al.<sup>19</sup> which showed that, more than 80 percent were satisfied with waiting room and space. This result showed that waiting room

and space facilities in the health service is very good. This study showed that, 73.3 percent were satisfied with maintained confidentiality of their information which is given by Hasan<sup>8</sup> where, approximately half 42.3 percent of the respondent were satisfied with the confidentiality of their information by female health care provider. This signifies that health provider should have to keep confidentiality of the information of the respondents for their satisfaction.

Approximately half 43.6 percent of the respondents in the study were satisfied with expectation of waiting time in the health facilities. Similar to this finding, study supported by Chemir et al.<sup>1</sup> showed that only 32.6 percent of the women were satisfied with low waiting time. This showed that, increase waiting time reduce the satisfaction level of respondents which may affect on utilization of health services. This study shows that most 99 percent of the respondents were satisfied and least 1 percent of respondents were dissatisfied regarding satisfaction among pregnant women on antenatal care in PHCs at Dumkouli which is supported by the given by Lamadah et al.<sup>20</sup> which revealed that more than half 62 percent of the respondents were very satisfied and 33.3 percent were satisfied. This study is inconsistent with the result found by the study of Ismail et al.<sup>21</sup> which revealed that more than one quarter 26.9 percent of the respondents were moderately satisfied and only 14.2 percent were highly satisfied in the health care services as a whole. This showed that, respondents were more satisfied than dissatisfied in overall health care services.

## CONCLUSION

It is concluded that pregnant women in primary health care centre was high. Highest percentage of satisfaction was found for service expectation and lowest percentage was found for availability of health facilities. Hence, different maternal health programs need to be conducted in order to enhance maternal and child health as well as provide free maternal health services to remove financial barriers.

## REFERENCES

1. Chemir F, Alemseged F, Workneh D. Satisfaction with Focused Antenatal Care Service and Associated Factors among Pregnant Women Attending Focused Antenatal Care at Health Centers in Jimma Town,

Jimma Zone, South West Ethiopia; a facility based cross-sectional study triangulated with qualitative study: BMC research notes. 2014;7(1):p1-8. Retrieved from <https://bmcrsnotes.biomedcentral.com/articles/10.1186/1756-0500-7-164>

2. WHO|New guidelines on Antenatal Care for a Positive Pregnancy experience.2016; Retrieved May 29, 2019, from WHO website: <http://www.who.int/reproductivehealth/news/antenatal-care/en/>
3. WHO, Provision of effective antenatal care, integrated management of pregnancy and childbirth (IMPAC). Make pregnancy safer; World Health Organization, 2006.
4. WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Trends in maternal mortality: 1990 to 2015. Retrieve.on:1 February 2016. Geneva: WHO. Available at URL: <http://www.who.int/mediacentre/factsheets/fs348/en/>.
5. WHO| Maternal mortality. 2016; Retrieved September 20, 2017. Available from <http://www.who.int/mediacentre/factsheets/fs348/en/>
6. Matejic B, Milicevic SM, Vasic V, Djikanovic B. Maternal satisfaction with organized perinatal care in Serbian public hospitals. BMC pregnancy and childbirth. 2014; 14(1).p1-9. <https://www.biomedcentral.com/1471-2393/14/147>.
7. Jallow IK, Chou YJ, Liu TL, Huang N. Women's perception of antenatal care services in public and private clinics in the Gambia: International Journal for Quality in Health Care. 2012; 24(6): p595-600.<https://doi.org/10.1093/intqhc/mzs033>
8. Hasan A. Patient satisfaction with maternal and child health services among mothers attending the maternal and child health training institute in Dhaka, Bangladesh. Thailand: PhD thesis. Mahidol University. 2007; 5(3):p23-33.Retrieved from <http://mulinet11.li.mahidol.ac.th/ethesis/4937987.pdf>
9. Zein A, Mirkuzie W, Shimeles O. Factors influencing antenatal care service utilization in Hadiya Zone. Ethiop J Health Science. 2010; 20(2): p75-82. <https://www.scirp.org>
10. Yohannes B, Tarekegn M, Paulos W. Mother Utilization of antenatal care and their satisfaction with delivery services in selected public health facilities of Wolaita zone, Southern Ethiopia. International Journal of Scientific and Technology. 2013; 2(2):p74-85. Retrieved on 23rd January 2014,from <http://www.who.ijstr.org>
11. Guideline on Reproductive Health. United Nations Population Information Network (POPIN). UN Population Division, Department of Economic and Social Affairs, with support from the UN Population Fund(UNFPA).(n.d.). Retrieved from

- <http://www.un.org/popin/unfpa/taskforce/guide/iatfrehp.gdl.html>
12. Alam YA, Qureshi AA, Adil MM, Ali H. Factors affecting utilization of antenatal care among women in urban slum areas of Islamabad. *RMJ*. (2004), [cited March 29, 2020]; 29(2):p71-75. <https://www.semanticscholar.org>
  13. Rehman, M., Khan, N., & Abbas, M. Availability and Utilization of Primary Health Care Services in the rural areas of district Poshawar-A case study. *Sarhad Journal of Agriculture*. 2007;23(4):p1217-1223. <https://www.aup.edu.pk>
  14. Poudel YR, Mehata S, Poudel, Dariang M, Aryal KK, Poudel P,.....Barnett S. Women's satisfaction of maternity care in Nepal and Its correlation with intended future utilization. *International Journal of Reproductive Medicine*, e783050, Article ID783050.2015.p1-9. <https://doi.org/10.1155/2015/783050>.
  15. National Planning Commission, 2015: Sustainable Development Goals, 2016-2030, National (Preliminary) Report. Government of Nepal, National Planning Commission, Kathmandu, Nepal.
  16. Ministry of Health, Nepal, New ERA, ICF. Nepal Demographic and Health Survey 2016. Kathmandu, Nepal: Ministry Of Health, Nepal; 2017. 59 Available form: <https://dhsprogram.com/pubs/pdf/FR336/FR336.pdf>
  17. Mekonnen ME, Yalew WA and Anteneh ZA. Women's satisfaction with childbirth care in Felege Hiwot Referral Hospital, Bahir Dar City, Northwest Ethiopia, 2014: cross sectional study women's health. *BMC Res Notes* 2015; 8(1):1-7. <https://www.researchgate.net>
  18. Fseha B. Assessment of Mothers Level of Satisfaction with Antenatal Care Services Provided at Alganesh Health Center Shire, North West Tigray, Ethiopia. *Biomedical Journal of Scientific & Technical Research*. March 2019;16(1):p11798-11802. <https://biomedres.us>
  19. Panta G, Neupane S, Koirala M. Pregnant Women's Satisfaction on Antenatal Service Received in the selected Primary Health Care Centers on Kathmandu. *Journal of NNC*.2017;11:p42-48. <https://nnc.org.np>
  20. Lamadah S, Elsaba HAHF. Women's satisfaction with the quality of antenatal care at the Primary Health Care Centers in Al -Madinah Al - Menawarh, KSA. *Life Science Journal*. December 2012; 9(4):p4291-4299. <http://www.researchgate.net>
  21. Ismail N, Ismail AA, Essa RM. Pregnant women's satisfaction with the quality of antenatal care at maternal and child health centers in El-Beheira governorate. *IOSR Journal of Nursing and Health Science (IOSR-JNHS)* e-ISSN:2320- 1956.p-ISSN:2320-1940. 2017;6(2): p46-30. Retrieved from: <http://www.iosrjournals.org/iosr-jnhs/papers/vol6-issue2/Version-9/E0602093646.pdf>