



A Study on Satisfaction of Pregnant Mothers with Antenatal Care Services and Associated Socio-Demographic Determinants in a Tertiary Care Hospital, Kolkata, West Bengal

Nabanita Chakraborty¹, Gautam Kumar Joardar²

Financial Support: None declared

Conflict of Interest: None declared

Copy Right: The Journal retains the copyrights of this article. However, reproduction is permissible with due acknowledgement of the source.

How to cite this article:

Chakraborty N, Joardar GK. A Study on Satisfaction of Pregnant Mothers with Antenatal Care Services and Associated Socio-Demographic Determinants in a Tertiary Care Hospital, Kolkata, West Bengal. Natl J Community Med 2020;11(1):41-44

Author's Affiliation:

¹Assistant Professor; ²Professor and Head, Dept. of Community Medicine, KPC Medical College and Hospital, Kolkata

Correspondence

Dr. Nabanita Chakraborty
nabanitachak@gmail.com

Date of Submission: 17-12-19

Date of Acceptance: 21-01-20

Date of Publication: 31-01-20

ABSTRACT

Introduction: Antenatal period is the most vulnerable period in a women's life as complications during pregnancy will lead to increased morbidity and mortality in the new born child. Satisfaction of the pregnant women with the antenatal care services indirectly influences antenatal care utilization and helps in improving quality of care.

Methods: A descriptive, observational, cross-sectional study was done in the Gynaecology and Obstetrics OPD of KPC Medical College and Hospital during June-July 2019 among the antenatal mothers attending the OPD. A pre-designed and pre-tested schedule was used for data collection.

Results: 89.9% of the study subjects were satisfied and 10.1% were unsatisfied with the services. Significant association was found between level of satisfaction and age, education level, socio-economic status and type of family ($p < .005$). 92.5% patients were satisfied with accessibility, 89.9% with availability, 99.3% with attitude of doctors, 87.1% with timing of the clinic, 95.9% with future course of disease as explained by doctors, 80.4% and 70.9% with waiting time and waiting area respectively and 89.2% with the pharmacy services.

Conclusion: Thus assessing patient satisfaction from the perception of the beneficiaries will help to improve the antenatal care services and thus will reduce mortality and morbidity due to pregnancy and child birth.

Keywords: Patient satisfaction, antenatal care, pregnancy, OPD

INTRODUCTION

Antenatal period is one of the most critical period in a women's life where she is vulnerable to certain risks affecting the well-being of both the mother and her unborn child which can even lead to life-threatening events¹. Globally around 295000 maternal deaths have occurred in 2017. It has been found that 95% of these deaths occur in low income countries which can be prevented. Throughout the last few decades, the global maternal mortality rate has been found to decrease by 38% that is from 342 deaths to 211 deaths per 100000 live births². According to WHO reports, the maternal mortality

ratio (MMR) in India has dropped by 77%, from 556 per 100 000 live births in 1990 to 130 per 100 000 live births in 2016. The current MMR in India is below the target set by Millennium Development Goal (MDG) which will ultimately lead the way for achieving the target of an MMR below 70 by 2030 which is the Sustainable Development Goal (SDG) target³. Provision of quality antenatal care can only help to achieve these targets which is an important component of Maternal and Child Health (MCH) services under National Rural Health Mission (NRHM)⁴.

However any initiative is successful if it succeeds in achieving satisfaction of the beneficiaries. Health care authorities and agencies seek measurement of patient satisfaction, the results of which can be used as evaluation criteria⁵. Thus quality of care provided to antenatal mothers can be measured by assessment of satisfaction of pregnant women. This indicator will ultimately help in provision of uniform health care services to pregnant women^{6,7}. According to NFHS 4, around 50% of women have four antenatal visits whereas in West Bengal, it is found that only 78.1% of mothers had four antenatal visits in urban area while it is only 75.8% in rural areas⁸. Satisfaction of pregnant women with antenatal care services is an important determinant of service utilization and antenatal care coverage. Thus the following study has been undertaken to assess the patient's satisfaction with the antenatal services provided in the out-patient department(OPD) of a tertiary care hospital in Kolkata, West Bengal.

MATERIAL AND METHODS

A descriptive, observational, cross-sectional study was conducted in the Out Patient Department (OPD) of KPC Medical College and Hospital, Kolkata, West Bengal. The study population consisted of all the antenatal mothers attending the OPD during the study period that is June-July 2019. Those mothers visiting the OPD more than once during the study period were excluded from the study. Sampling was done by total enumeration. 154 antenatal mothers visited the OPD during the study period. 2 of them did not give consent, another 4 mothers visited the OPD more than one time during the study period. So, the sample size came as 148.

After being approved by Institution Ethics Committee, informed consent was taken from the patients. Data collection was done using a pre-designed and pre-tested schedule. Data were collected regarding socio-demographic characteristic viz, age, religion, socio-economic status (BG Prasad)⁹, education, occupation and also regarding satisfaction of patients with the doctors, nurses and other services in the hospital. The responses of the patients were recorded as satisfied and unsatisfied.

The data collected were analysed using statistical software SPSS. Proportions and Chi-square tests were used for analysis.+

RESULTS

Out of 148 study subjects majority were in the age group of 30-39 years (60.1%), whereas 29.1% belonged to the age group 20-29 years, 9.5% were be-

low 20 years and only 1.4% of the study subjects were more than 40 years of age. 79.1% of the study subjects were Hindus while 20.9% belonged to Muslim religion. Majority of the study subjects had completed secondary level of education (39.2%), whereas 30.4% had completed Higher Secondary level or above, 29.7% had completed middle school education and .7% had only completed their primary education. 39.9% of the study subjects belonged to Class 3 socio-economic class, 30.4% belonged to Class 4, 19.6% belonged to Class 2, 9.5% belonged to Class 5 and only .7% belonged to Class 1 socio-economic status.

Table 1: Association between socio-demographic characteristic and level of satisfaction

Sociodemographic Characteristic	Unsatisfied	Satisfied	P value
Age in years			
<20	0(0.0)	14(9.5)	<0.001
20-29	15(10.1)	28(18.9)	
30-39	0(0.0)	89(60.1)	
≥40	0(0.0)	2(1.4)	
Total	15(10.1)	133(89.9)	
Religion			
Hindu	15(10.1)	102(68.9)	0.014
Muslim	0(0.0)	31(20.9)	
Total	15(10.1)	133(89.9)	
Education			
Primary	0(0.0)	1(.7)	<0.001
Middle	15(10.1)	29(19.6)	
Secondary	0(0.0)	58(39.2)	
Higher Secondary and above	0(0.0)	45(30.4)	
Total	15(10.1)	133(89.9)	
Socio-economic Status			
Class 1	0(0.0)	1(.7)	<0.001
Class 2	15(10.1)	14(9.5)	
Class 3	0(0.0)	59(39.8)	
Class 4	0(0.0)	45(30.4)	
Class 5	0(0.0)	14(9.5)	
Total	15(10.1)	133(89.9)	
Type of family			
Joint	15(10.1)	16(10.8)	<0.001
Nuclear	0(0.0)	117(79.0)	
Total	15(10.1)	133(89.9)	

Table 2: Distribution of study subjects according to the level of satisfaction with the services provided

	Unsatisfied (%)	Satisfied (%)
Accessibility	10(7.5)	137(92.5)
Availability of doctors	15(10.1)	133(89.9)
Attitude of Doctors	1(.7)	147(99.3)
Timing of clinic	19(12.9)	129(87.1)
Future course of disease explained by doctor	5(4.1)	142(95.9)
Waiting time	29(19.6)	119(80.4)
Waiting area	43(29.1)	105(70.9)
Pharmacy services	16(10.8)	132(89.2)
Laboratory services	17(11.5)	131(88.5)

Overall satisfaction with the services revealed 89.9% of the study subjects were satisfied, and the rest (10.1%) were unsatisfied with the services.

Satisfaction level was higher in higher age groups and maximum in the age group of 30-39 years.

68.9% of the Hindus and 20.9% of the Muslims were satisfied with the services. Again satisfaction level was higher in women who have completed secondary and higher secondary level of education. Satisfaction level was higher in Class 3 and Class 4 socio-economic class. Satisfaction level was higher in patients belonging to nuclear family compared to joint family.

Among the socio-demographic determinants of level of satisfaction, significant association was found with age, education level, socio-economic status and type of family ($p < .005$) (Table 1)

Regarding accessibility of this health care facility 92.5% of the study subjects were satisfied while 7.5% of study subjects were unsatisfied. 89.9% of the study subjects were satisfied with the availability of doctors, 10.1% study subjects were unsatisfied. Coming to attitude of doctors, 99.3% were satisfied and 7% were unsatisfied. 87.1% of the study subjects were satisfied for timing of the clinic and 12.9% were unsatisfied. Again, 95.9% of the study subjects were highly satisfied with the doctor's explanation regarding future course of the disease, whereas 4.91% unsatisfied with the same. 80.4% and 70.9% of the study subjects were satisfied, whereas 19.6% and 29.1% study subjects were unsatisfied with the waiting time and waiting area respectively. 89.2% study subjects were satisfied with the pharmacy services and 10.8% were unsatisfied with the pharmacy services. (Table 2)

DISCUSSION

Antenatal care is one of the key factors which not only help to improve the reproductive health status of women but also improve the overall health and well-being of the family. If the desired level of satisfaction regarding antenatal care is not achieved it will result in various physical and mental ill-health of the mother and also incidence of complications of pregnancy will be more. Thus quality of antenatal care plays an important role in giving birth to healthy baby without any maternal complications¹⁰.

In this study, the overall satisfaction was 89.9% which was much higher than the study by Das et al¹¹ and Khanam et al¹² where the overall satisfaction were 42.12% and 51.49% respectively. The hospital being a tertiary care health facility as well as its urban location may account for such high overall satisfaction rate.

Satisfaction level was higher in higher age groups and maximum in the age group of 30-39 years. Probably level of education and birth-preparedness at this age group have accounted for this finding.

68.9% of the Hindus and 20.9% of the Muslims were satisfied with the services. The study by Das et al¹¹ showed equal level of satisfaction among both Hindus and Muslims. The difference may be due to higher number of Hindus among the study population. Again satisfaction level was higher in women who have completed secondary and higher secondary level of education. Similar study in urban area found higher level of satisfaction with higher education level¹³. Satisfaction level was higher in Class 3 and Class 4 socio-economic class. This may also be due to higher education in higher classes. Satisfaction level was higher in patients belonging to nuclear family compared to joint family. However, majority of our study population belong to nuclear family, which may be a cause of this finding. 92.5% of the study subjects were satisfied with accessibility of the health care centre, 89.9% were satisfied with availability of doctors and 99.3% were satisfied with the attitude of doctors, 87.1% were satisfied with the timing of the clinic, 95.9% were satisfied with future course of the disease explained by the doctor. The health care facility being a tertiary care teaching hospital, with specialists available may have accounted for such high satisfaction level. Also high level of satisfaction with waiting area, waiting time, pharmacy services and laboratory services are also probably due to round the clock facilities available in a tertiary care hospital.

CONCLUSION

In this study the quality of antenatal care was assessed from the patient's perspectives by determining the patient's satisfaction regarding the services provided in the OPD and also regarding the health personnel providing the services. Also the degree of patient satisfaction was more in educated patients, higher socio-economic class. Thus generating awareness, and educating the mothers about the importance of antenatal care and also suggestions from the patients regarding improvement of services will help to enhance the satisfaction level and quality of care which ultimately will reduce the complications of pregnancy and child birth.

REFERENCES

1. Koppad S, Walvekar R, Mallapur D. Utilization of Antenatal Care by Pregnant Women Reading in Kakati Sub Center. Indian Journal of Public Health Research & Development. 2014; 5(3):160

2. Trends in maternal mortality: 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division. Geneva: World Health Organization; 2019.
3. Ground breaking success reducing maternal mortality rate <http://www.searo.who.int> (accessed 24th Nov 2019)
4. Banerjee B.A qualitative analysis of maternal and child health services of an urban health centre, by assessing patient perception in terms of awareness,satisfaction and service utilization. *Indian Journal of Community Medicine* .2003;18(4);.
5. Tengilimoglu D, Kisa A, Dziegielewski SF. Patient Satisfaction in Turkey: Differences between Public and Private Hospitals. *Journal of Community Health* 1999;24;73-91
6. Emelumadu OF, Onyeonoro UU, Ukegbu AU, Ezeama NN, IfeadikeCO, Okezie OK. Perception of quality of maternal healthcare services among women utilising antenatal services in selected primary health facilities in Anambra State,Southeast Nigeria. *Nigerian Medical Journal*.2014;55(2): 148-155
7. Soliman FES. Satisfaction of rural pregnant women as quality indicator of provided antenatal care. *International Journal of Scientific Research Publications*.2015;5(3): 1-9.
8. The India Fact sheet. NFHS-4. Available at:rchiips.org/nfhs/factsheet_NFHS-4.shtml.accessed on SepNovember 25th 2019
9. Pandey VK, Aggarwal P, Kakkar R.Modified B.G.Prasad Socio-economic Classification-2018:The need of an update in the present scenario.*Indian Journal of Public Health*.2018;30(1):82-84
10. Maternal Health. 2016. United nations population fund agency, international conference on population development. <http://www.unfpa.org/maternal-health#> (access date: Nov24, 2019).
11. Das P, Basu M,Tikadar T.Patient satisfaction on maternal and child health services in rural Bengal. *Indian Journal of Community Medicine*.2010; 35(4): 478-481
12. Khanam N, Syed ZQ, Wagh V. Patient Satisfaction on Maternal and Child Health Services. *Indian Medical Gazette* ,February 2012.
13. Banerjee B. A study on MCH services done in an area covered by Urban Health Centre in Kolkata Municipal Corporation. *Indian Journal of Community Medicine* 2003;38:153-6.