

Original Research Article

Factors influencing the utilization of antenatal and postnatal care services by women of reproductive age group: a cross-sectional study in rural community of Maharashtra

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Received: 12 January 2022

Accepted: 10 February 2022

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ABSTRACT

Background: Antenatal care (ANC) and postnatal care (PNC) care services intended to secure and improve maternal health are utilized only to a limited extent. Therefore, this study was conducted to assess various barriers and association of various sociodemographic factors like age, education, economic status and religion with the utilization of services. This revealed the reasons which avert the ladies from utilising the services adequately.

Methods: 150 women residents of Uruli Kanchan, a village in Pune district of Maharashtra, having at least 1 child below the age of five years were selected by simple random sampling technique. The data was collected by house-to-house survey and interview technique.

Results: In the present study, better utilization of ANC services was observed (99.234%) as compared to PNC services (65.33%). Education, good socioeconomic conditions and religion were the factors which greatly influenced the utilization of PNC services. Lack of desire and awareness of PNC visits (in 55% women) was an important factor for underutilization of PNC services. Lack of trust towards government services (by 34.02%) women was observed. 70% of women showed satisfaction towards the maternal and child health care (MCH) services provided by the government.

Conclusions: Women showed high level of utilization of ANC services as compared to PNC services which still need a lot of attention and awareness. Women show lack of trust in the government facility.

Keywords: ANC, Postnatal care, Utilization

INTRODUCTION

'Make every mother and child count' was the theme of world health day 2005, which had rightly emphasized the importance of maternal and child health.¹ For the sustainable development of the society and nation, and attainment of healthy productive population, women's role holds utmost priority.^{2,3} Hence, antenatal and postnatal care services should be more focussed to reduce maternal and infant morbidity as well as mortality.

According to WHO, in India there are approximately 67,000 maternal deaths and a million neonatal deaths per

year.⁴ WHO also stated that, during the process of reproduction, more than half a million women lose their lives worldwide every year, and these deaths comprise 99% women from developing countries.⁵ Despite various programmes upheld by the union and state governments, thousands of women succumb to avoidable and manageable pregnancy related complications, such as, 38% maternal deaths occur due to postpartum haemorrhage, 11% due to sepsis, 8% due to unsafe abortion, 5% because of hypertensive disorders, 5% because of obstructed labour and 34% due to various other indirect causes.⁶ These untoward consequences and deaths are preventable, and can even be completely

avoided, if women during and after pregnancy gain proper access to all health related facilities.

All the ANC and PNC Services are provided free of cost in the rural areas through the (primary health centre) PHCs/community health centres, etc., still the utilization rate by rural women is not up to the mark. Various obstacles like lack of awareness among rural women regarding healthy and safe pregnancy and equally safe postnatal period, sociocultural practices and infrastructure of health centres affect the utilization of services.

To improve the utilization of ANC and PNC services, need of the hour is assessment of barriers. There are few studies to assess the barriers, however, many of them are based on the statistics collected from the health care centres.^{7,8} Present study is a ground level community-based study, where we have tried to obtain the reasons for lacunae between need and utilization of services directly from home-to-home survey. This study intends to identify the magnitude of coverage of ANC and PNC services and the various sociodemographic as well as other factors responsible for underutilization. It aims to bridge target of implementation and actual ground utilization of the ANC and PNC services and understand reason for deficit.

METHODS

Study design

A community based, observational study was carried out to estimate the factors influencing the utilization of ANC and PNC services by women.

Study setting

The study was carried out in the community of the village Uruli Kanchan, in Pune district of Maharashtra.

Study participants

List of under five children was obtained from the PHC of village of Uruli Kanchan. There were 5445 under five children. Out of 5445 children, mothers of 150 under five children, who were residents of the village were selected.

Sample size and sampling technique

The 150 women residents of Uruli Kanchan village having at least 1 child below the age of five years were selected by simple random sampling technique (lottery method).

Inclusion criteria

Married women having at least one child below the age of five years. Women who were permanent resident of the village. Women who were willing to participate in the study were included in the study.

Data collection

House-to-house survey was done in a community of selected study setting and necessary information was collected from the study participants (mothers of children under five years of age) with the help of a pre-designed questionnaire.

Open ended and closed ended questions were used to assess socio-demographic factors and cultural factors which influenced utilization of services. Availability, accessibility and quality of health services were also assessed.

Statistical analysis

The data was properly tabulated, compiled and analysed using appropriate statistical methods like chi-square test and Z-test.

RESULTS

From Figures (1-4), it is evident that majority participants belonged to the age group of 21-25 (43.99%). More than half of the participants were literate (71.26%). The middle class comprised the major portion of the participants (38.62%). The socioeconomic categorization was done based on modified B.G. Prasad socioeconomic classification. Hindus comprised the major portion among the population of the respondents. (57.27%).

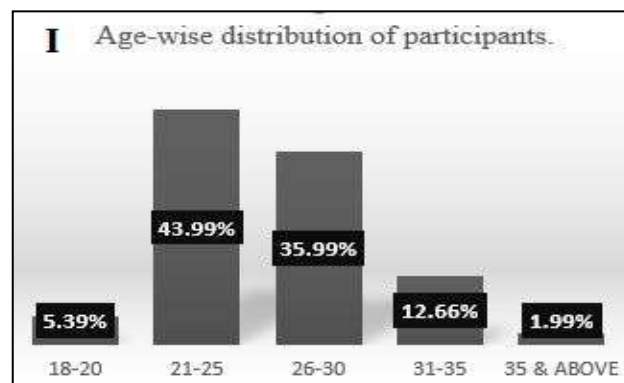


Figure 1: Age-wise distribution of study participants.

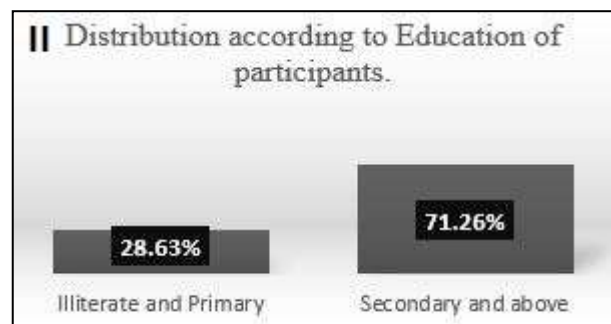


Figure 2: Distribution of study participants according to education.

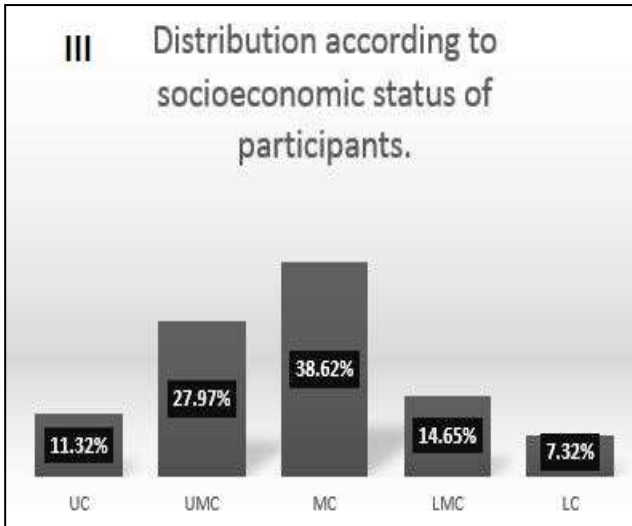


Figure 3: Distribution of study participants according to socioeconomic status.

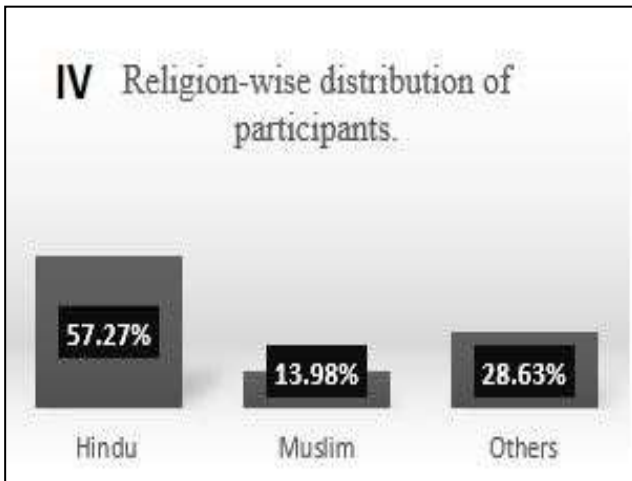


Figure 4: Religion-wise distribution of study participants.

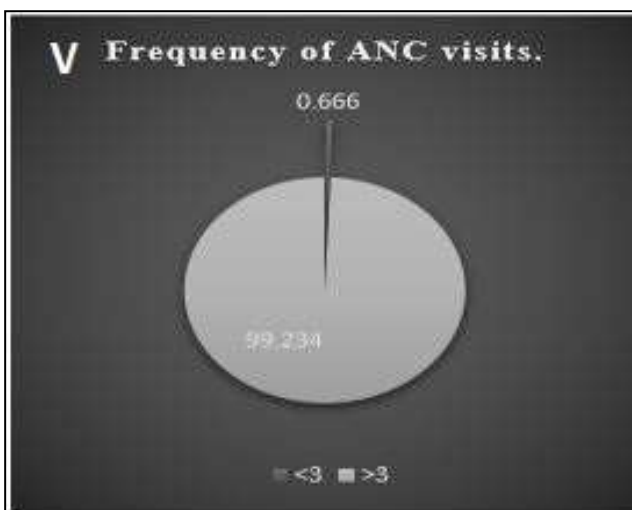


Figure 5: Frequency of ANC visits.

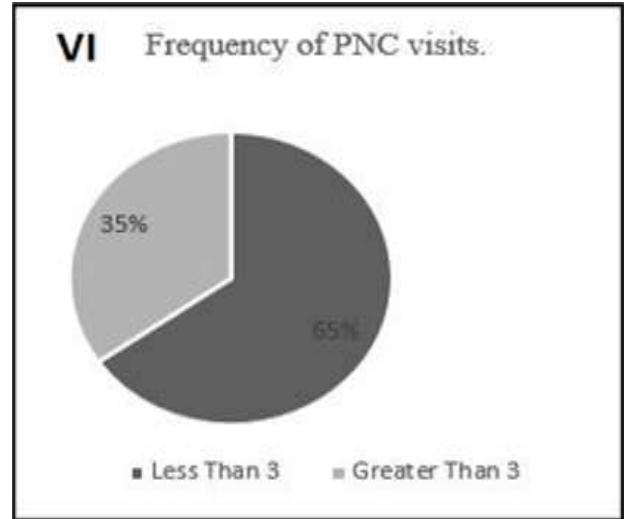


Figure 6: Frequency of PNC visits.

The Figures (5 and 6) depict that utilization of ANC services was satisfactory as 99.234% women visited ANC services >3 times. But the utilization of PNC services was only 34.66%.

The $z=13.395$, i.e., >2 . This proves that utilization of ANC services was significantly more as compared to PNC services.

In the present study, we observed that utilization of ANC services is almost up to the mark (99.234%). Age, education, economic status and religion did not influence the utilization of ANC services.

From Table 1 it can be understood that age does not affect the utilization of PNC services. Women with secondary and above education, attended PNC services more than 3 times (59.81%) as compared to less educated and illiterate women (20.93%). Women belonging to higher socioeconomic classes showed adequate utilization of PNC services (78%), as compared to women with low economic classes (22%). The study participants stated multiple reasons for inadequate utilization of PNC services. Lack of desire and awareness about PNC visits was an important factor observed in about 55% ladies.

Utilization of private services (64.13%) was seen to be greater than government services (34.02%). The women stated multiple reasons because of which they did not approach government facilities for ANC and PNC care. The reasons found were lack of emergency support system, lack of adequate facilities and cleanliness. Lack of trust was the major reason (stated by 60% ladies) which averted women from the utilization of government services.

Irrespective of the above factors, 70% of people showed satisfaction towards government services.

Table 1: Association between utilization of PNC services and sociodemographic factors.

Factors	<3 (%)	>3 (%)	Total (%)	Significance
Age (Years)				
18-20	5 (62.5)	3 (37.5)	8 (5.3328)	X ² =1.366, df=4. p>0.05. No significant association
21-25	48 (72.72)	18 (27.27)	66 (43.9956)	
26-30	32 (59.25)	22 (40.74)	54 (35.9964)	
31-35	12 (63.1578)	7 (36.841)	19 (12.6654)	
36 and above	1 (33.33)	2 (66.666)	3 (1.9998)	
Total	98 (65.33)	52 (34.66)	150 (100)	
Education				
Illiterate and primary	34 (79.06)	9 (20.93)	43 (28.66)	X ² =5, df=1, p<0.05. Significant association
Secondary and above	64 (59.81)	43 (40.18)	107 (71.33)	
Total	98 (65.33)	52 (34.66)	150 (100)	
Economic status				
UC	7 (41.17)	10 (58.82)	17 (11.322)	X ² =17.59, df=4 p<0.05. Highly significant association
UMC	20 (47.61)	22 (52.38)	42 (27.972)	
MC	48 (82.75)	10 (17.24)	58 (38.628)	
LMC	14 (63.63)	8 (36.36)	22 (14.652)	
LC	9 (81.81)	2 (18.18)	11 (7.326)	
Total	98 (65.33)	52 (34.66)	150 (100)	
Religion				
Hindu	52 (60.46)	34 (39.53)	86 (57.276)	X ² =9.38 df=2 p<0.05. Highly significant association
Muslim	19 (90.47)	2 (9.52)	21 (13.986)	
Others	27 (48.83)	16 (37.20)	43	
Total	98 (65.33)	52 (34.66)	150 (100)	

DISCUSSION

Antenatal and postnatal care practices are greatly influenced by the education, economic status, religious background, social background and other sociodemographic factors. In this study too, there was significant association found between the education, economic status and religion of the study participants and antenatal and postnatal care service utilization. Similar findings were observed in studies carried out by Mahapatro in which she highlighted the association of women's autonomy with the utilization of MCH services, in which too, it was found that the proportion of utilization of MCH services was found to be higher among educated women and women belonging to higher economic group.²

In the present study, it was found that, almost all ladies (99.234%) regularly visited ANC services more than three times and adequately followed the ANC advise, viz. Tetanus immunization, IFA tablets, etc. These results show resemblance with the DLHS-3 in which Kerala had almost universal coverage in the use of maternal health services, including ANC (99.8%) and usage of skilled attendance at delivery (99.4%).⁹ The states of Tamil Nadu and Andhra Pradesh also viewed same results.

The ANC services were significantly utilized (99.234%) as compared to the PNC services (34.66%). Studies conducted by Neeta et al, in Ballari, Karnataka and

Paudel M et al in Nepal also showed unacceptably low utilization of PNC services.^{10,11}

The 55% ladies showed lack of desire to visit PNC related services. Studies conducted by Abebo et al in Southern Ethiopia also showed direct association between awareness and desire regarding PNC services and its utilization.¹²

Women with higher education and belonging to upper classes preferred to use the private facilities for ANC and PNC care, unlike the illiterate women and women belonging to low socioeconomic classes. The reason was lack of trust for government facilities. These findings however contrast the results obtained by a study carried out in Bhubaneshwar by Roy et al which revealed high level of utilization and satisfaction from government run health systems.⁵

CONCLUSIONS

In the present study, utilization of ANC services was satisfactory, adequate utilization of PNC services was only 65%. Education, socioeconomic status however and religion were the factors which greatly influenced the utilization of PNC services. Lack of desire and awareness about importance of PNC visits in 55% women) was an important factor for underutilization of PNC services. Lack of trust was the major reason which caused underutilization of government services which was (34.02%) as compared to the private services (64.13%).

ACKNOWLEDGEMENTS

The authors thank to the participants for their participation, the PHC of Uruli Kanchan village, and the DVVPPF's medical college and hospital for their help and support.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Bhansali PS, Avachat SS, Deshmukh GV. Factors influencing the utilization of antenatal and postnatal care services by women of reproductive age group: a cross-sectional study in rural community of Maharashtra. *Int J Community Med Public Health* 2022;9:1430-4.