

A Prospective Study to Assess the Knowledge Regarding Maternal and Child Health Services available among Antenatal Women Visiting Antenatal OPD, Government Medical College and Hospital in Chandigarh.

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Abstract

The objective of the study was to assess the knowledge regarding maternal & child health services available to antenatal mothers and to find out association between knowledge score and selected socio demographic variables. A prospective, observational research design was used. Convenient sampling technique was used to select 120 subjects visiting antenatal OPD, Government Medical College & Hospital (GMCH), Chandigarh. Data was obtained from study subjects by proformas developed by the researchers consisting of Part A- having socio-demographic data and Part B- covering knowledge regarding maternal & child health services available. Approval was taken from research and ethical committee of the institution as well as from incharge of academics GMCH. Data analysis was done by calculating mean, standard deviation, percentage and correlation coefficient by using descriptive and inferential statistics; p-value below 0.05 was considered statistically significance. Majority of the antenatal women had average knowledge regarding maternal & child health services available. There was no association between knowledge score and demographic variables. The findings show that out of total subjects 24.2 percent had good knowledge, 62.5 percent had average knowledge and 13.3 percent had poor knowledge regarding maternal & child health services.

Keywords: Maternal & Child Health Services, Ante-natal women

Maternal and child Health services (MCH) includes the promotive, preventive, curative, rehabilitative health care directed to mother and children in the form of service programmes (Park, 2015). In India women in reproductive age (18-45 years) and children below 5 years of age comprise 60 percent of the total population. Women and children constitute a vulnerable section of the population. As pregnancy is the vital event for the women so it needs special attention from the time of the conception to the post-natal stage. Mother's health status during pregnancy and after delivery determines the health status of the child (Basavanthappa, 2013).

Maternal & Child Health service was first initiated in 1900's in India. Maternal & child health service was the voluntary work in the ambit of maternal and child welfare bureau under Indian Red Cross Society. WHO and UNICEF support contributed to the expansion of maternal & child health services. In 1974 the fifth five-year plan first integrated family planning with maternal & child health services. Community volunteers were envisaged to spread awareness and knowledge of family planning and

maternal & child health services (Singh, 1997).

An estimated more than one lakh women in India die every year from pregnancy and child birth-related causes due to inadequate knowledge of maternal & child health services, illiteracy, poverty, population density etc. The overall efforts of maternal & child health professionals involve practicing maternal & child health services to provide health care service based on most recent scientific research to assess and identify maternal and child health services problems and plan interventions (Dutta, 2010).

Considering the high maternal deaths in developing countries, WHO in 1987 initiated Safe Motherhood Initiative at conference in Nairobi, Kenya. Safe Motherhood initiative aims to reduce maternal mortality and morbidity. Maternal & child health promotion is one of the key commitments of the WHO.

Historically it reflects the cultural and institutional structures that have emerged from empirical and scientific knowledge, the development of technologies and the changing economic, social and political circumstances. They affect the lives, health and well-being of women, children and family (Gulani, 2005).

With its disparate origin, maternal & child health

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services has become a family-centred, life cycle and developmental approach to meet the health need of the women and children. Health of the mother and children is very important for acceptance and practices of small family norms to stabilise population. Hence in public health greater emphasis is given to maternal & child health services. Maternal & child health care services are essential and specialised services. Moreover, children are asset for the family, community and nation, whereas mothers have an important role in their growth and development (Sinha, 1997).

Understanding of knowledge regarding maternal & child health services was required for better implementation of various programmes and also for better utilisation of maternal & child health services by community.

Need for the study: Women have played an important role in the world. It has been said that if you teach a female, you build up a nation. Women have always carried the burden of being a wife, mother, sister etc. Hence the study was conducted on assessing the knowledge of antenatal women regarding current MCH services.

Antenatal care (ANC) is the care given to the pregnant women so that they have safe pregnancy and healthy babies. It is one of the most effective health interventions for preventing maternal morbidity and mortality, particularly in place where general health status of women is poor. The WHO recommends a minimum of four antenatal visits, comprising intervention such as TT vaccination, screening, treatment for infections and identification of warning signs during pregnancy.

Improving the maternal health is one of the eight millennium development goals (MDGs). To improve maternal health, services must be identified and addressed at all levels of health system. Health knowledge is an important element to enable women to be aware of their health status and importance of appropriate antenatal care and maternal and child health care. The maternal health status differs tremendously. Globally, women that die each year due to pregnancy and childbirth are Africans (53%) while the rest are Asians (42%) and to a lesser extent Latin Americans (4%). Less than 1 percent of maternal death occur in developed countries. It is estimated that 99 percent of maternal deaths occur in the developing countries each year. According to WHO India contributes 25 percent of 52900 global maternal deaths. Most pregnant women in the developing countries, receive insufficient or no pre-natal care. More than seven million newborn deaths are believed to result from maternal health problem. These estimations not only show importance of MCH care but also highlight the role and necessity of

MCH services in welfare of family, community and country.

So, the investigators sought to assess knowledge of antenatal women regarding current MCH services available.

Review of Literature

In a cross-sectional study, it was found that majority of pregnant mothers (90%) had inadequate knowledge and 10 percent had average knowledge regarding maternal & child health services; 67.5 percent had knowledge regarding registration of pregnancy at 1st trimester, 60 percent had knowledge about iron and folic acid, 57.5 percent had about TT immunisation and 50 percent had knowledge about test during pregnancy (Radhika et al, 2015).

Another study (Gupta et al, 2015) showed that maternal literacy remains a key factor in the better utilisation of antenatal services. This study was conducted on 211 pregnant women out of which 189 respondents registered for antenatal check-ups. The results revealed that 79.1 percent of the deliveries were institutional. The age, literacy, socio-economic status and type of family had significant association with the antenatal care services.

Yadav (2015) found that knowledge regarding antenatal care for the pregnant mothers is less than those who are primi gravida. Low socio-economic status, low educational level were other factors. It was also found that 41 percent had inadequate knowledge, 35 percent had moderate and 24 percent had adequate knowledge.

Patel et al (2016) carried out a cross-sectional study among 384 pregnant women. The data was collected by interview method. It was revealed that about 58 percent women had adequate knowledge regarding antenatal check-up. It was also found in this study that almost all the variables such as age, education, occupation, parity, type of the family and socio-economic status had a significant association with awareness about antenatal check-ups.

A study conducted in Nigeria by Baboloa & Bhat (2009) revealed that 60.3 percent of the mothers used antenatal services, 43.5 percent had gone for hospital delivery and 41.2 percent received post-natal care. The three indicators of MCH services are being utilised inadequately. The study concluded that use of MCH services and knowledge is suboptimal among the women of Nigeria.

Materia et al (2000) conducted a household health interview survey in Ethiopia. The results revealed that women who lived 10 kilometers of health centre in district capital were more likely to use pre-natal services than those who lived in

a greater distance. The researchers concluded that integration of MCH services including outreach activities may increase access and coverage of MCH services.

A study conducted in Ghana by Brown et al (2000) indicated that over 70 percent of women attended antenatal clinic at least in their last pregnancy. Over 80 percent had their last delivery in health facility and 80 percent knew about at least one modern family planning method. The authors concluded that some women were not using services, these would have to be reached through improving quality of health care facilities and community awareness.

Objectives

The study was set out with following objectives.

1. To assess the knowledge regarding maternal and child health services available among antenatal mothers.
2. To find out association between knowledge score and selected socio demographic variables.

Hypothesis

1. H0 (Null Hypothesis) - There is statistically no association of knowledge score with selected socio demographic variables at $p < 0.05$.
2. H1 (Research Hypothesis) - There is statistical association of knowledge score with selected socio demographic variables at $p < 0.05$.

Methodology

The research approach was quantitative research type; a prospective study design was used. The study setting was, antenatal OPD at Government Medical College & Hospital, Sector-32, Chandigarh.

The target population was all antenatal women visiting the antenatal OPD at GMCH Chandigarh consisted of 120 study subjects (antenatal women). Purposive sampling technique was used in the study.

a) Inclusion Criteria

- Antenatal women who fulfilled the criteria.
- Above 18 years of age.
- Understood English, Hindi or Punjabi.

b) Exclusion Criteria

- Mentally unhealthy women.

Tool for data collection: Socio-demographic data sheet and proforma to assess knowledge.

Validity: The content validity of tool was established in consultations with experts in the field of nursing and their suggestions were incorporated in the final draft of the tool.

Reliability: Cronbach's alpha method was used to find out the reliability of tool. The tool was administered on 10 percent of subjects i.e. on 12 subjects. Findings of results were compared and calculated by using formula of Cronbach's alpha. The value obtained was 0.813, which was reliable.

Pilot study: The data collection procedure was tried out on 12 subjects and was found to be feasible. No modification was done after pilot study.

Written permission was obtained from research and ethical committee prior to data collection. Approval was taken from research and ethical committee of the institution. Informed written consent was obtained from all subjects. The patient was given the right to refuse from participation in the study or to withdraw consent to participate at any time of the study without reprisal. Confidentiality of information was maintained. The participants were adequately informed of the purpose of the study. There was no risk involved as it is questionnaire-based study. The proforma to assess knowledge regarding maternal and child health services was distributed which was in English.

Analysis and Interpretation of Data

Analysis and interpretation was done according to objectives. Data analysis was done by calculating mean, mode, median, standard deviation, percentage and ANOVA.

Results and Discussion

Table 1 depicts that 64.2 percent and 33.3 percent gave correct answer regarding MCH services and JSSK respectively; 95.8 percent gave the correct answer that registration of pregnancy is free; 87.5 percent of the subjects gave the appropriate response regarding free drugs during pregnancy and post-natal period; 94.2 percent gave the correct answer that TT (tetanus toxoid) vaccination during pregnancy is free; 76.6 percent knew regarding free diagnostic tests; 63.3 percent of subjects gave the appropriate response regarding free diet during antenatal period at anganwadi; 60 percent subjects knew that transport from home to health institution at the time of delivery is free; 61.7 percent of subjects gave the correct answer that diet during hospital stay is free.

Further, 65.8 percent of subjects knew regarding free hospitalisation for women for 48 hours after NVD (normal vaginal delivery) and 7 days after caesarean section; 58.3 percent gave the correct answer that drop back from institution to home after 48 hours stay is free; 41.7 percent of the subjects gave the appropriate response that Rs 700 is given to SC/ST mothers after each delivery in rural area under JSY scheme; 65.0 percent gave the negative response that Rs 600 is given to SC/ST/BPL moth-

Table 1: Percentage distribution of knowledge regarding maternal and child health services among antenatal women (N=120)

Services	Correct statement n (%)	Incorrect statement n (%)
1. What is MCH services?	77 (64.2)	43 (35.8)
2. What is JSSK?	40 (33.3)	80 (66.7)
For Mothers		
3. Free registration of pregnancy	115 (95.8)	5 (4.2)
4. Free drugs during pregnancy & post-natal period	105 (87.5)	15 (12.5)
5. Free TT (tetanus toxoid) vaccination during pregnancies	113 (94.2)	7 (5.8)
6. Free diagnostic tests	92 (76.7)	28 (23.3)
7. Free diet during antenatal period at Anganwadi	76 (63.3)	44 (36.7)
8. Free transport from home to health institution 72 (60%) at the time of delivery		48 (40.0)
9. Free diet during hospital stay	74 (61.7)	46 (38.3)
10. Free institutional delivery	96 (80.0)	24 (20.0)
11. Free provision of blood products, if required	55 (45.8)	65 (54.2)
12. Free hospitalisation for women for 48 hours after NVD (normal vaginal delivery) and 7 days after caesarean section	79 (65.8)	41 (34.2)
13. Free drop back from institution to home after 48 hours stay	70 (58.3)	50 (41.7)
14. Rupees 700 to SC/ST mothers after each delivery in rural area under JSY scheme	50 (41.7)	70 (58.3)
15. Rupees 600 to SC/ST/BPL mothers after each delivery in urban area under JSY scheme	42 (35.0)	78 (65.0)
16. Rupees 300 for Cu-T insertion	23 (19.2)	97 (80.8)
17. Incentive for girl child	48 (40.0)	72 (60.0)
18. Special incentive in case of Intra uterine death	30 (25.0)	90 (75.0)
19. Free MTP services	47 (39.2)	73 (60.8)
20. Facilities for Family planning (pills, condoms etc.)	84 (70.0)	36 (30.0)
21. Rupees 1100 to men undergoing vasectomy	29 (24.2)	91 (75.8)
22. Rupees 250 to women undergoing tubectomy	30 (25.0)	90 (75.0)
23. Free treatment after delivery for mothers up to 1 year	40 (33.3)	80 (66.7)
24. Free drugs and consumables for infants	99 (82.5)	21 (17.5)
25. Free tests for infants	98 (81.7)	22 (18.3)
26. Free provision of blood products, if required	77 (64.2)	43 (35.8)
27. Free treatment for sick infants up to 30 days	71 (59.2)	49 (40.8)
28. Free transport of infants from home to hospital	74 (61.7)	46 (38.3)
29. Free transport from institute to institute	76 (63.3)	44 (36.7)
30. Free transport from healthy facility to home of referral	68 (56.7)	58 (43.3)
31. Free vaccination for children under National Immunisation Schedule	99 (82.5)	21 (17.5)
32. Free diet for children in Anganwadi	88 (73.3)	32 (26.7)

ers after each delivery in urban area under JSY scheme; 60.0 percent of subjects gave the negative response that there is no provision of incentive for girl child; 75.0 percent gave the negative response regarding provision of special incentive in case of Intra uterine death.

Over a third (39.2%) of subjects gave the correct answer that for it is free; 70 percent gave the ap-

propriate response regarding facilities for family planning (pills, condoms etc.); 24.2 percent of the subjects knew regarding rupees 1100 is given to men undergoing vasectomy; 25 percent gave the correct answer that Rupees 250 is given to women undergoing tubectomy.

Regarding drugs and consumables for infants 82.5 percent of the subjects knew that it is free; 81.7 percent gave the correct response that tests for infants are free; 82.5 percent gave the appropriate answer that vaccination for children under National Immunisation Schedule is free of cost; 73.3 percent knew that diet for children in anganwadi is free.

Figure 1 depicts that subjects who had done graduation (30%), intermediate or diploma (30%), high school (17.5%), middle school (2.5%), primary school (2.5%) and illiterate (1.6%) scored between 12-21 out of 32 revealing that they have average knowledge regarding maternal and child health services. Hence it can be concluded that the knowledge score was significantly associated with graduates or post graduates and intermediate or diploma holders.

Antenatal women had average knowledge regarding maternal and child health services available for them. Overall mean knowledge score of antenatal women was (1.716±0.55) that is out of total subjects 24.2 percent of total subjects had good

knowledge, 62.5 percent had average knowledge and 13.3 percent had poor knowledge regarding maternal and child health services.

Earlier, Yadav (2015) had revealed that knowledge regarding antenatal care to the pregnant mothers is less in primi-gravida, low socioeconomic status and low educational level. Same study also

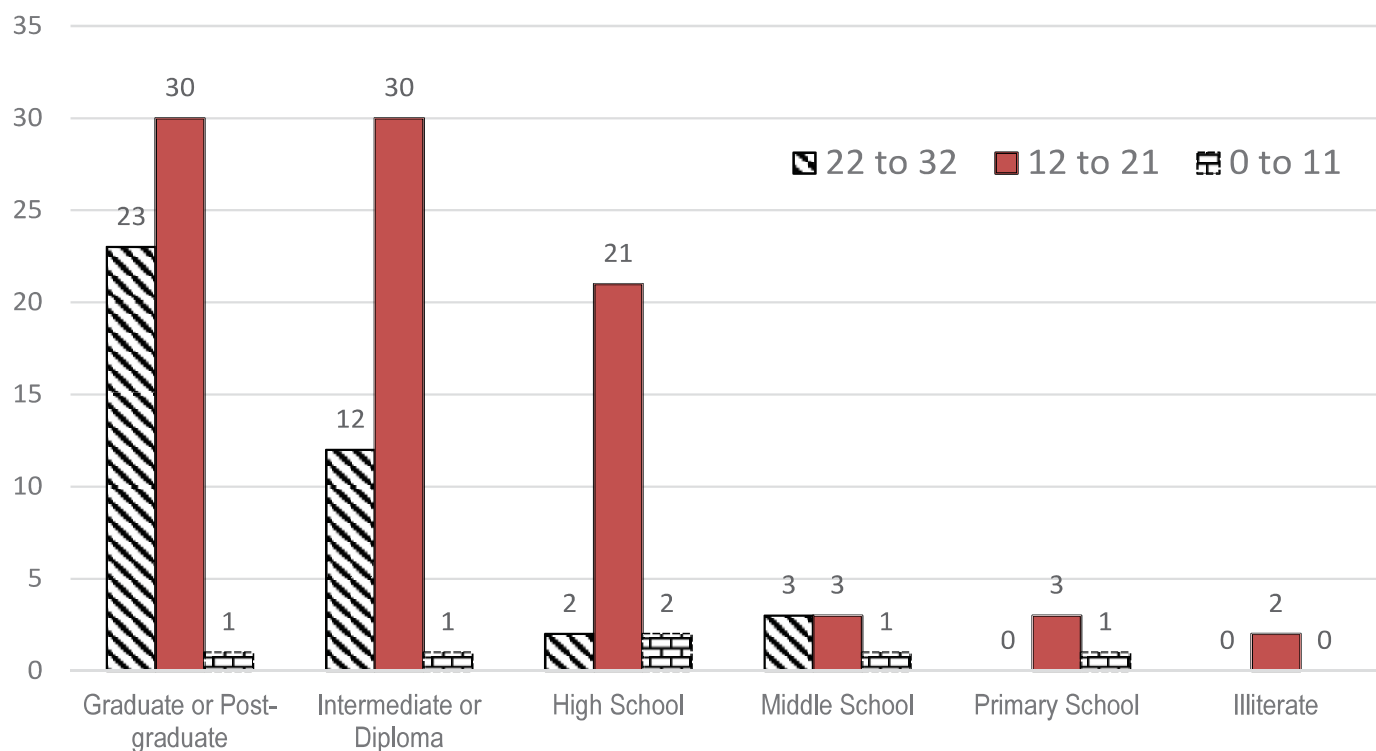


Fig 1: Education-wise scoring of subjects

reported that 41 percent had inadequate knowledge, 35 percent had moderate and 24 percent had adequate knowledge.

In a cross-sectional study Radhika et al (2015) found that majority of pregnant mothers (90%) had inadequate knowledge and 10 percent had average knowledge regarding maternal and child health services while 67.5 percent had knowledge regarding registration of pregnancy at first trimester, 60 percent had knowledge about iron and folic acid, 57.5 percent had about TT immunisation and 50 percent had knowledge about test during pregnancy.

Limitations

The study was limited to antenatal women visiting antenatal OPD at GMCH, Chandigarh and only antenatal women were covered.

Nursing Implications

The findings of the study have implication for nursing practice, nursing education, nursing administration and nursing research.

Nursing Practice

Findings of the study will help the nursing staff to enhance the knowledge and make awareness towards the provision of maternal and child health services to antenatal women.

Nursing Education

Study findings can be utilised for emphasising the

need to include the topic of knowledge regarding maternal and child health services among antenatal women in subjects like Child Health Nursing and Obstetrical Nursing for better patient care.

Nursing Administration

The nursing personnel should organise the special educational health programmes to enhance the knowledge among antenatal women about the maternal and child health services.

Nursing Research

The current study act as a catalyst to carry out more extensive research on a large population sample in different hospitals and in different areas.

Recommendations

- The study can be repeated on a large sample and thereby can be generalised for a large population.
- A comparative study may be done among primigravida and multigravida.

Conclusion

The present study was conducted on 120 antenatal women visiting antenatal OPD at GMCH Sector-32, Chandigarh, to assess knowledge regarding maternal and child health services available among antenatal women. The study revealed that out of total subjects, 24.2 percent had good knowledge, 62.5 percent had average knowledge and 13.3 percent

had poor knowledge regarding maternal and child health services.

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