International Journal of Community Medicine and Public Health
Rai N et al. Int J Community Med Public Health. 2022 Nov;9(11):4098-4103
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20222902

Original Research Article

A descriptive study to assess the knowledge and expressed practices of primigravida mother's regarding antenatal care and antenatal check-ups at selected government hospitals, Jodhpur, Rajasthan, India

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Received: 17 August 2022
Revised: 06 October 2022
Accepted: 17 October 2022

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ABSTRACT

Background: Pregnancy associated death remain high in developing countries. According to WHO, giving quality antenatal care will reduce pregnancy related diseases and deaths and thus protecting both antenatal mother and the baby. The world health organization reported that in 2015 around 830 women died every day from problems in pregnancy and childbirth. Only 5 lived in high-income countries. The rest lived in low-income countries. The WHO recommends that pregnant women should all receive four antenatal visits to spot and treat problems and give immunizations. Although antenatal care is important to improve the health of mother and baby, many women do not receive four visits.
Methods: A quantitative approach, descriptive research design was used among 200 primigravida mothers coming to selected government hospitals, Jodhpur, Rajasthan, India by non-probability technique. Structured Questionnaire tools used to assess knowledge and expressed practices to assess antenatal care and antenatal check-ups. Data analysis was performed using Statistical Package for the Social Sciences version 20.
Results: The study findings revealed that knowledge level of the primigravida mothers regarding antenatal care and antenatal check-ups out of 25 maximum score the mean knowledge score is 16.23. The expressed practices of the primigravida mothers regarding antenatal care and antenatal check-ups out of 17 maximum score the mean expressed practice score is 10.97. The study findings also revealed that significant association is present between sample characteristics and knowledge level. There is positive correlation (0.8121) found between knowledge and expressed practices.
Conclusions: Knowledge and expressed practice regarding antenatal care and antenatal check-ups was average among primigravida mothers Umaid and MDM hospital, Jodhpur, Rajasthan.

Keywords: Knowledge, Expressed practices, Primigravida, Antenatal care, Antenatal checkups

INTRODUCTION

Pregnancy and childbirth are special events in a woman's life. But during this period they are more vulnerable to disease and death. Antenatal care is an umbrella term used to describe the medical procedures and care that are carried out during pregnancy. In promoting antenatal care, it is essential that the effectiveness of this service leaves no room for doubt. Antenatal care is named as one of the four pillars of the safe motherhood initiatives. The overall aim of antenatal care is to produce a healthy mother and baby at the end of pregnancy.[1] Antenatal care is defining as systemic supervision (examination and advice) of a woman during pregnancy is called antenatal

(prenatal) care.[2] Prenatal check-ups are very important and every woman should take it in a great consideration. Antenatal check-ups are defined as antenatal testing includes any diagnostic procedures performed before the birth of the baby.[3] The World Health Organization (WHO) reported that in 2015 around 830 women died every day from problems in pregnancy and childbirth. Only 5 lived in high-income countries. The rest lived in low-income countries.[6] The WHO recommends that pregnant women should all receive four antenatal visits to spot and treat problems and give immunizations. Although antenatal care is important to improve the health of mother and baby, many women do not receive four visits.[7] As per WHO reported that a developing country woman dying from the pregnancy related death is 33 times higher during her lifetime than those who are in developed countries. Though the death is declining, to accelerate the decline, a new target has been set under Sustainable Development Goal which is to reduce the maternal mortality ratio globally to less than 70 per 1 lakh live births. One of the major challenges to the public health system is the maternal healthcare. One of the main ways to reduce is by getting proper antenatal care and check-ups.[5]

METHODS

A quantitative approach, descriptive research design was used among 200 primigravida mothers coming to selected government hospitals, Jodhpur, Rajasthan, India by non-probability technique. Structured Questionnaire tools used to assess knowledge and expressed practices to assess antenatal care and antenatal check-ups. Inclusion criteria were: Primigravida mother, in ANC department of selected Govt. hospitals of Jodhpur, who are available at the time of data collection, who available and willing to participate in the study, who understand Hindi language. The tools were divided into 3 parts, i.e., socio-economic data, structured questionnaire to assess knowledge and expressed practices. Knowledge level was categorized as poor (score 0-12), average (score 13-18) and good (score 19-25). The level of expressed practices was categorized as poor (score 0-8), average (score 9-12) and good (score-13-17). Informed consent was obtained from research participants and participation information sheet was provided and confidentiality of subjects was ensured. Approximately 15 to 30 minutes were taken to complete the structured questionnaire. Ethical approval was taken from the institutional committee (reference number from Umaid Hospital was 1275 and reference from MDM Hospital was 1285). The tool was translated in Hindi. Knowledge MCQ's content validity was 0.90 and expressed practice's content validity was 0.86 was determined by scale content validity index. Internal consistency of tools was determined by Kuder Richardson 20. Reliability of knowledge MCQ's was 0.7530 and expressed practices MCQ's was 0.7316. The pilot study was conducted among 30 primigravida mothers who coming for antenatal care and checkups at selected government hospitals of Jodhpur, Rajasthan. India. During pilot study no as such major problem was encounter. Average 15 minutes was taken to collect data from each primigravida mother. These primigravida mothers were excluded during the main data collection of the study.

RESULTS

Analysis and interpretation of data were done based on the objectives and assumptions of the study. Data were categorized and analysed using a statistical package of social sciences version 20.

Table 1: Frequency and percentage distribution of patients as per socio-demographic variables (n=200).

Socio-demographic variables	N	%
Age (years)		
≤20	25	12.50
>20 to <25	75	37.50
>25 to <35	65	32.50
≥35	35	17.50
Educational status		
Illiterate	35	17.50
High School	70	35.00
Under graduate	65	32.50
Post graduate	30	15.00
Occupational status		
Housemaker	65	32.50
Private job	55	27.50
Government job	37	18.50
Others/self-employment	43	21.50
Family income (per month)		
≤5000 Rs	25	12.50
5001-10000 Rs	42	21.00
10001-15000 Rs	58	29.00
≥15001 Rs	75	37.50
Residential area		
Urban	110	55
Rural	90	45
Types of family		
Joint family	78	39.00
Nuclear family	52	26.00
Extended family	35	17.50
Others	35	17.50

Quantitative data analysis included descriptive statistics, that is, mean, frequency, percentage and standard deviation. In inferential statistics, that is, non-parametric test like chi-square test used to assess the association of primigravida mother's knowledge and expressed practices with selected socio-demographic variables. Data presented in (Table 1) depicted the socio-demographic details of the primigravida mothers under study. About 37.50% of the primigravida mothers aged >20 years to <25 years. Nearly one third (35%) of primigravida mothers were educated upto primary school and 32.50% were homemaker. Family income wise 37.50% of

primigravida mothers having more than 15000/ month. Nearly half (55%) of the primigravida mothers belong to urban area and 39% of primigravida mothers belong to joint family (Table 1).

Table 2: Area wise mean, standard deviation, and mean percentage knowledge regarding antenatal care and antenatal check-ups.

Area of knowledge	Knowledge score			
	Maximum score	Mean	Mean (%)	SD
Antenatal care and antenatal check-ups	6	4.20	70.00	0.31
Immunization	4	2.35	58.75	0.16
Investigations and Iron supplement	5	3.06	61.20	0.22
Antenatal diet, rest and sleep, exercises	6	4.10	68.33	0.31
Complications	4	2.52	63.00	0.15
Total	25	16.23	64.92	1.15

Table 3: Area wise mean, standard deviation, and mean percentage expressed practice regarding antenatal care and antenatal check-ups.

Area of knowledge	Expressed practice score			
	Maximum score	Mean	Mean (%)	SD
Antenatal care and antenatal check-ups	7	4.51	64.42	0.37
Immunization, antenatal diet, rest and sleep	6	3.80	63.33	0.35
Wrong practices	4	2.66	66.50	0.18
Total	17	10.97	64.53	0.90

Table 4: Association of level of knowledge among primigravida mothers with selected socio-demographic variables (n=200).

Personal variables	Knowledge level			Df	χ^2	P value	Table value
	Poor	Average	Good				
Age (years)							
≤20	6	13	6	6	1.572	0.954	12.59
>20 to ≤ 25	12	45	18				
>25to ≤ 35	9	39	17				
>35	5	21	9				
Education level of mother							
Illiterate	9	21	6	6	2.264	0.890	12.59
High school	15	42	13				
Under graduate	12	39	14				
Post graduate	4	18	8				
Occupation of mother							
House maker	8	40	17	6	15.107	0.019	12.59
Private job	7	24	24				
Govt. job	2	28	7				
Others	9	26	8				
Family income (per month in Rs.)							
≤5000	3	16	6	6	14.732	0.022	12.59
50001-10000	4	19	19				
10001-15000	6	39	37				
≥15001	8	52	15				
Residential area							
Urban	22	66	22	2	0.988	0.613	5.99
Rural	14	54	22				
Types of family							
Joint	9	46	24	6	1.641	0.949	12.59
Nuclear	8	31	13				
Extended	6	21	8				
Others	5	22	8				

Table 5: Association of level of expressed practices among primigravida mothers with selected socio-demographic variables (n=200).

Personal variables	Expressed practice level			Df	χ^2	P value	Table value
	Poor	Average	Good				
Age (years)							
≤20	11	11	3	6	9.123	0.167	12.59
>20 to ≤ 25	21	38	16				
>25to ≤ 35	14	29	22				
>35	10	13	12				
Education level of mother							
Illiterate	14	15	6	6	13.042	0.042	12.59
High school	12	38	20				
Under graduate	10	30	25				
Post graduate	9	11	10				
Occupation of mother							
House maker	20	36	9	6	3.395	0.758	12.59
Private job	14	29	12				
Govt. job	8	19	10				
Others	13	21	9				
Family income (per month in Rs.)							
≤5000	8	11	6	6	4.595	0.596	12.59
50001-10000	9	28	5				
10001-15000	74	32	12				
≥15001	23	39	13				
Residential area							
Urban	23	55	32	2	7.754	0.020	5.99
Rural	33	42	15				
Types of family							
Joint	9	47	22	6	8.987	0.174	12.59
Nuclear	10	21	21				
Extended	5	16	14				
Others	8	20	7				

Table 6: Correlation between knowledge and expressed practices of primigravida mothers.

Correlation	Mean Score	SD	Mean %	P value
Knowledge score	16.23	1.15	64.92	0.8121
Expressed Practice score	10.97	0.90	64.53	

The knowledge level of the primigravida mothers regarding antenatal care and antenatal checkups out of 25 maximum score the mean knowledge score is 16.23 is depicted in (Table 2). Area wise distribution of mean and SD of the knowledge score of primigravida mothers regarding antenatal care and antenatal check-ups mean is 4.20 & SD is 0.31 (Table 2). The expressed practices of the primigravida mothers regarding antenatal care and antenatal checkups out of 17 maximum score the mean expressed practice score is 10.97 (Table 3). Area wise distribution of mean and SD of the expressed practices score of primigravida mothers regarding antenatal care and antenatal check-ups mean is 4.51 & SD is 0.37 (Table 3).

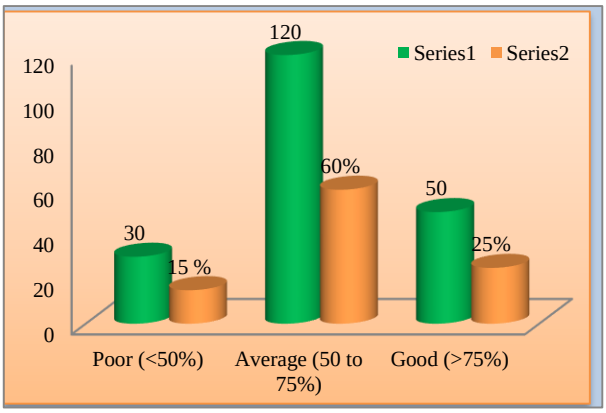

Figure 1: Cylindrical chart representing level of knowledge of the primigravida mothers.

The calculated value of Chi square (χ^2) for the sample characteristics such as Age (1.572), Educational level (2.264), Occupational level (15.10), Family income (per month) (14.73), Residential area (0.988), Type of family (1.641) is depicted in (Table 4). Respectively the $p<0.05$ level of significance hence we found significant

association is present between sample characteristics and knowledge level (Table 4).

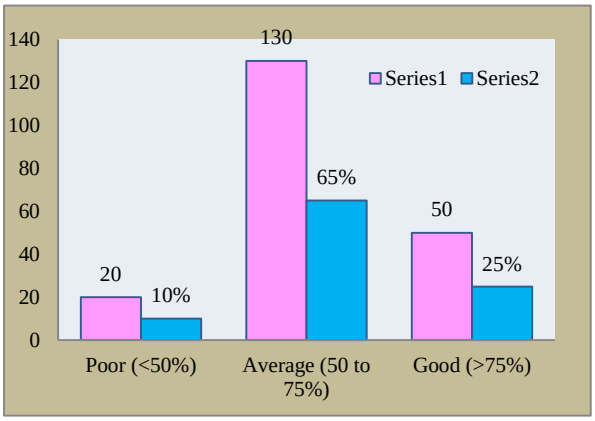

Figure 2: Frequency and distribution of the expressed practice of primigravida mothers regarding antenatal care and antenatal check-ups by structured questionnaire.

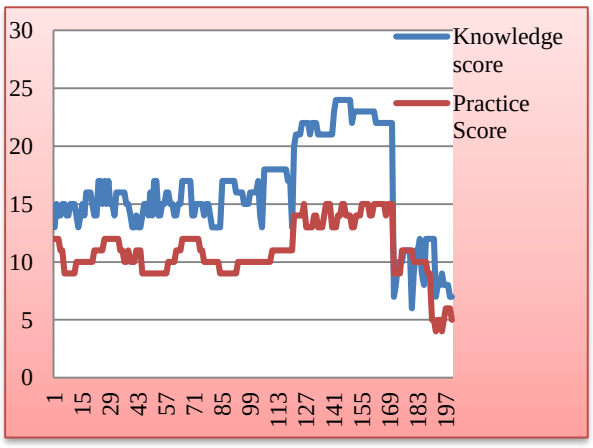

Figure 3: Line graph representing correlation between the knowledge score and expressed practices score of the primigravida mothers.

The calculated value of Chi square (x^2) for the sample characteristics such as Age (9.123), Educational level (13.042), Occupational level (3.395), Family income/per month (4.595), Residential area (7.754), Type of family (8.987) is depicted in (Table 5). Respectively the $p<0.05$ level of significance hence we found significant association is present between sample characteristics and expressed practice level (Table 5). The result shows positive correlation between knowledge and expressed practices at r=0.8121 (Table 6). Cylindrical chart representing level of knowledge of the primigravida mothers (Figure 1). Frequency and Distribution of the Expressed practice of primigravida mothers regarding antenatal care and antenatal check-ups by structured questionnaire (Figure 2). Line graph representing correlation between the knowledge score and expressed practices score of the primigravida mothers (Figure 3).

DISCUSSION

The findings represent that majority (60%) of the sample had average knowledge followed by (25%) of the sample had good knowledge, and (15%) had poor knowledge regarding antenatal care and antenatal check-ups. The findings represent that majority (65%) of the sample had average expressed practice followed by (25%) of the sample had good expressed practice, and (10%) had expressed practice regarding antenatal care and antenatal check-ups. It depicts that there is significance association between occupational status and family income (per month) with level of knowledge of primigravida mothers. It depicts that there is significance association of educational status and residential area with expressed practice of primigravida mothers. The result show positive correlation between knowledge and expressed practices at r=0.8121.

CONCLUSION

Knowledge and expressed practice regarding antenatal care and antenatal check-ups was average among primigravida mothers Umaid and MDM hospital, Jodhpur, Rajasthan.

ACKNOWLEDGEMENTS

Authors would like to express my deep and sincere gratitude to my parents, guide and co-guides for their continuous guidance and valuable suggestions throughout the completion of the study.

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: Rai N, Rathore J. A descriptive study to assess the knowledge and expressed practices of primigravida mother's regarding antenatal care and antenatal check-ups at selected government hospitals, Jodhpur, Rajasthan, India. Int J Community Med Public Health 2022;9:4098-103.