Knowledge and attitude of postnatal mothers related to family planning in selected hospitals of Kolkata, West Bengal

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Abstract
A descriptive survey to assess knowledge and attitude of postnatal mothers, related to family planning was conducted among 100 samples. Mothers were interviewed with valid and reliable tools which were demographic Performa, Structured knowledge questionnaire on family planning and Attitude scale to assess attitude towards family planning. Findings of the study revealed that out of 100 postnatal mothers' majority (65%) had average knowledge level and 23% of them had below average knowledge level and very few of them (12%) had above average knowledge level. 49% had attitude score range from 51-60 (partially favorable), 32% scored the range of 61-70 (favorable) and only 13% score ranged 41-50 (unfavorable). The variables like educational qualification, number of children and information on contraceptives had significant association with the knowledge level. There was no significant association found between attitude with selected variables. Findings also revealed that there was a positive relation between the knowledge and attitude on family planning among postnatal mothers. Considering the need for awareness and acceptance of family planning in India, the study has its implications in the fields of nursing practice, nursing administration, nursing education, community health nursing and nursing research.
Keywords: *Assessment, Family planning, Knowledge, Attitude, Postnatal mothers.*

Introduction
The capacity to enjoy and control sexual and reproductive behavior is a key element of sexual health (WHO 1992). Yet this is not an experience of many women .Un intended pregnancies can have long lasting effect on the quality of life of parents and children and prevention could save the national budget in a year.[1] Becoming a mother is every woman's fulfillment of life. This gives her a feeling of caring, loving and compassion. In ancient India every woman was held at high esteem as we can know about from our histories. The act of child bearing has its own importance. Now a day's couple can make decisions about the timing and number of children they want actually. This helps everyone to plan for the parenthood as well as to welcome the new life in an ever-memorable manner. Yet all pregnancies are not welcomed by the couple, there arise the need of family planning measures, for to avoid unwanted pregnancies and to bring about wanted pregnancies (Park K.). Birth control, also known

as contraception and fertility control, are methods or devices used to prevent pregnancy.("Definition of Birth control",2012). Planning, provision and use of birth control is called family planning. Birth control methods have been used since ancient times, but effective and safe methods only became available in the 20th century (*Oxford English Dictionary*). In some cultures limit or discourage access to birth control because they consider it to be morally or politically undesirable (Hanson, S.J.; Burke, Anne E.)

India's current demographic phase is characterized by high fertility and moderate mortality rates. As a result the country's population is growing rapidly with about 28 million people being added to it annually to give a 2.1% increase per annum. Apart from human cost in terms of mortality, morbidity and suffering unwanted pregnancy can place a burden on health resources of developing countries and severe cause on women's health. Family planning is therefore, important means of insuring the survival of all children in a family. (Demographics of India 2015).

The India scenario typically reflects the need to address the issues of family planning more and related attitude as evident from the findings of the study conducted by (Ghosh S, Samanta A, Mukherjee S) in 2015 (Mody SK, Nair S, Dasgupta A, Raj A, Donta B, Saggurti N, Naik DD, Silverman JG) in 2014 , Choudhary D, Pal R, Goel N. 2015)

Objectives
1. To assess knowledge regarding family planning among postnatal mothers.
2. To assess the attitude of postnatal mothers towards family planning
3. To find association between level of knowledge with selected variables.
4. To find association between attitude with selected variables
5. To identify the relation between knowledge and attitude of postnatal mothers on family planning

Methodology

Research approach: Survey approach

Research design: Non-experimental Descriptive Survey Research design

Research setting: Rama Krishna Sarada Mission, Matri Bhavan Hospital, 7A Shree Mohan Lane, Kolkata

Sample: Postnatal mothers who are admitted in postnatal ward.

Sample size: A sample size of 100 postnatal mothers who are admitted in selected hospital and fulfill the inclusion and exclusion criteria were selected for the study.

Inclusion Criteria
➢ Postnatal mothers who can read and write Bengali and English .
➢ Postnatal mothers who are available during data collection.

Exclusion Criteria
➢ Postnatal mothers who have undergone sterilization
➢ Postnatal mothers who are uncooperative

Sampling technique

Non - probability convenience sampling technique.

Development and description of the tools

Tool 1: Structured interview schedule on demographic Performa:

It comprises of 10 questions such as age, type of family, educational qualification, occupation, religion, total number of child, years of marriage, information on contraceptives, decision maker regarding family planning.

Tool 2: Structured questionnaire on knowledge of family planning:

It comprises of total 26 items with a scoring of 1 for each correct answer and score 0 for wrong answer.

Tool 3: Attitude scale to assess attitude towards family planning: A 4-point likert scale consisting of 20 items to assess the attitude regarding family planning.

Data collection procedure

Plan for data collection involved 100 post-natal mothers using non-probability convenient

sampling technique. An informed consent was obtained from each participant. Research was conducted for 5 days and each day Tool I, II, III were administered to 20 participants. Data were collected interviewing the participants one after another.

Ethical Implications

Ethical permission obtained from:

- Principal , B M Birla College of Nursing
- Ethics committee , B M Birla College of Nursing
- Secretary Mataji , Ram Krishna Sarada Mission Matri Bhavan
- Nursing Superintendent , Ram Krishna Sarada Mission Matri Bhavan
- Informed written consent from participants

Plan for Data Analysis

Plan for data analysis was done as per the study, purpose, variables and objectives and using descriptive and inferential statistics. Plan for data analysis was done using descriptive statistics (frequency distribution and percentage) for analyzing the background information and knowledge score, Chi-square test to find the association of the knowledge and attitude with selected variables.

Results and Discussion

Section I- Description of sample characteristics

- Majority of the postnatal mothers ,48% were age (26-33yrs), 43% (18-25 yrs) and 9% (34-40 yrs)

- Majority i.e. 52% belonged to joint family
- Majority (56%) of the mothers had educational status of higher secondary and above
- Majority of the sample i.e. 84% were homemakers
- Most of the postnatal mothers (88%) belonged to Hindu religion
- Majority (66%)of the mothers had one child
- 46% of the mothers came in category of (1-5years) of marriage, 35% (>11 years) of marriage
- 57% had received information on contraceptive and 43% have not received information as expressed by the participants
- In majority i.e., 81% decision making for family planning was done by both husband and wife
- Majority (68%) of the sample expressed having no history using contraceptive

Section- II   Distribution of sample based on knowledge score on family planning

The section describes the frequency and percentage of knowledge score, range, mean, median, standard deviation of knowledge score and area wise distribution of knowledge level of total 100 samples on family planning.

Table – 1

Distribution of sample based on knowledge score on family planning

n=100

Score range	Frequency (f)	Percentage (%)
21-27	5	5
14-20	62	62
7-13	30	30
0-6	3	3

Maximum possible score 26
Minimum possible score 0

Data presented in the table- 1 shows the distribution of knowledge scores of 100 mothers on family planning. In the knowledge score, maximum possible score was 26 and minimum score was 0. The tabulated data indicated that mothers' knowledge score was distributed from 0 – 26 and it also revealed that knowledge score increases gradually. It was also observed that out of 100 postnatal mothers, 62% scored in the range 14-20, 30% in the range 7-13, 5% in range 21-27 and 3% between 0-6 range.

Table – 2 Range, mean, median and standard deviation of knowledge score

n = 100

Variable	Range	Mean	Median	Standard deviation
Knowledge score	27 - 6	14.8	16.4	4.2

The data presented in table – 2 shows postnatal mothers' knowledge score range, mean, median and standard deviation was 27 - 6, 14.8, 16.4 and 4.2 respectively. The mean and median was very close to each other. The obtained standard deviation indicates that knowledge score was highly dispersed.
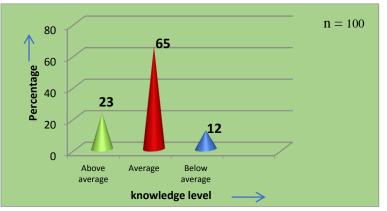

Fig 1: Cone showing sample distribution of knowledge level on family planning

Data presented in Figure 1 represents knowledge level of postnatal mothers on family planning. Out of 100 samples majority (65%) had average knowledge level and 23% of them had below average knowledge level and very few of them (12%) had above average knowledge.
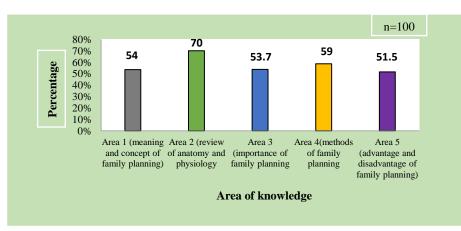

Fig 2: Bar diagram showing area-wise mean percentage of knowledge score

Figure-2 represents area wise mean percentage distribution of knowledge score of 100 postnatal mothers. The figure-2 indicated that the mean percentage of knowledge scores was more than 50% in all the areas with the highest mean score in area 2 (70%).

Section–III   Sample distribution based on attitude towards family planning

This section presents the analysis and interpretation of data on attitude score, attitude level with frequency and percentage distribution of the samples. It also shows the range, mean, median, standard deviation of attitude score of samples on family planning.

Table – 3 Frequency and percentage distribution of attitude score on family planning

n = 100

Score range	Frequency (f)	Percentage (%)
41 - 50	13	13
51 – 60	49	49
61-70	32	32
71-80	6	6

Maximum score = 80
Minimum score = 20

Data presented in the table- 3 shows the distribution of attitude score of 100postnatal mothers on family planning. In the attitude score minimum possible score was 20 and maximum possible score was 80. The tabulated data indicated that postnatal mothers attitude score was distributed from 41 – 80. It was also observed that out of 100 postnatal mothers 49%, 32% and 13% scored in the range 51-60, 61-70 and 41-50, 6% scored between 71-80.

Table – 4 Range, mean, median and standard deviation of attitude score

n = 100

Variable	Range	Mean	Median	Standard deviation
Attitude score	80 - 41	58.6	69	7.7

The data presented in table – 4 shows that postnatal mothers had attitude score range, mean, median and standard deviation was 80 - 41, 58.6, 69 and 7.7 respectively. Data indicated that mean and median was very close and attitude score was highly dispersed.

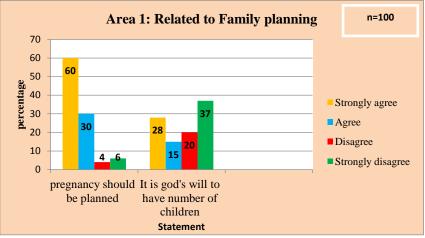**Area wise response of samples on attitude scale**

Fig 3: Bar showing response of samples on area 1 of attitude scale

The data presented in Fig:3 shows that majority of the samples strongly agree that pregnancy should be planned. 37% strongly disagree that it is God's will to have child while 28% strongly agree.
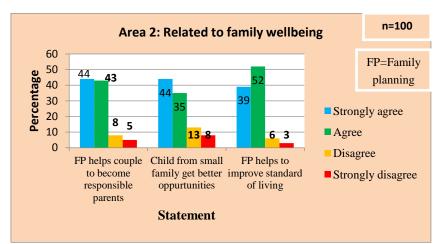

Fig 4: Bar showing response of samples on Area 2 of attitude scale

The data presented in Fig 4 shows that most of the samples agree that family planning maintains the wellbeing of a family.
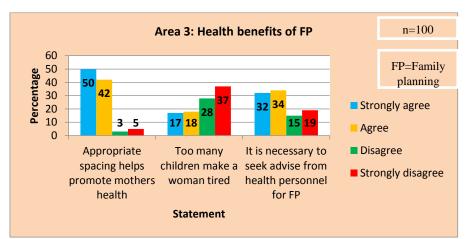

Fig 5: Bar diagram showing response of attitude on health benefits of family planning

The data presented in Fig 5 shows that majority (50%) strongly agree that family planning promotes mother's health, whereas the response are equally dispersed in the other two statements.
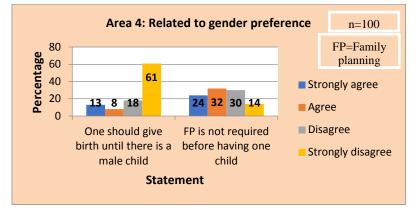
Fig 6: Bar diagram showing response of attitude on gender preference

Data presented in Fig 6 shows that majority (61%) strongly disagree to the statement related to gender preference.

Fig 7 (A): Bar diagram showing responses related to marital relation

Data presented in Fig 7(A) shows that the responses of samples are equally distributed in area related to use of family planning in marital relation
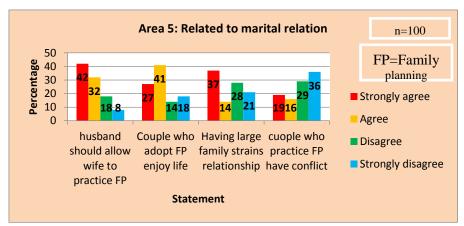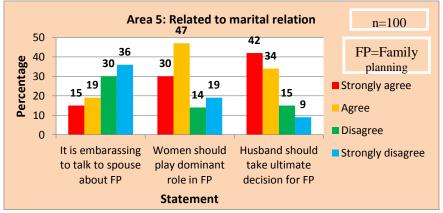

Fig 7(B): Bar diagram showing responses related to marital relation

Data presented in Fig 7 (B) shows that the responses of samples are equally distributed between strongly agree and agree among the samples in the area related to marital relation.
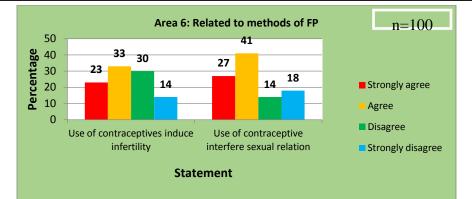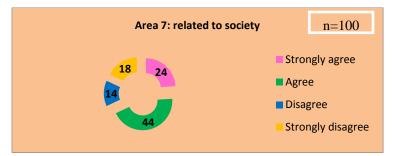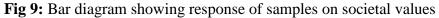
Fig 8: Bar diagram showing response of samples on methods of Family planning

Data presented in Fig 8 indicates that misconception related to methods of contraception existed among the postnatal mothers.

Fig 9: Bar diagram showing response of samples on societal values

Data presented in Fig 9 shows that 44% of postnatal mothers agree that family planning is beneficial for the society.

Section-IV Association of knowledge level with selected variables

Table – 5 Association of knowledge level with selected demographic variables

n = 100

Sl no	Variables	Above Median (<14.8)	Below median (>14.8)	χ^2	Table	df value	Significance
1.	**Age(yrs)**						
	18-25	11	32	3.1	5.99	2	NS
	26-33	15	33				
	34-40	5	4				
2.	**Type of family**						
	Nuclear	16	28	1.02	5.99	2	NS
	Joint	14	38				
	Extended	1	3				
3.	**Educational Qualification**						
	Primary	1	15	9.52	7.82	3	S*
	Upper primary	2	9				
	Middle school	4	13				
	HS and above	24	32				
4.	**Occupation**						
	Homemaker	24	60	3.33	5.99	2	NS
	Service	6	5				
	Business	1	4				
	Labourer	-	-				
5.	**Religion**						
	Muslim	0	7	3.67	5.99	2	NS
	Hindu	30	58				
	Christian	-	-				
	Others	1	4				

6.	**Total children**					
	One	18	48	8.26	5.99	2	S[*]
	Two	13	13				
	Three/more	0	8				
7.	**Years of marriage**					
	1-5 years	10	36	3.45	5.99	2	NS
	6-10	7	12				
	<11	14	21				
8.	**Information on Contraceptives**					
	Yes	23	34	5.4	3.84	1	S[*]
	No	8	35				
9.	**Decision maker Regarding family Planning**					
	Husband and wife	28	53	4.35	5.99	2	NS
	Husband only	1	13				
	Wife only	-	-				
	Mother-in law	2	3				
10.	**Use of contraceptive Before**					
	Yes	12	20	0.91	3.84	1	NS
	No	19	49				

P<0.05

Data presented in Table-5 shows the result of Chi square on the association of knowledge level with selected demographic variables. The obtained Chi value is greater than the table value for the variable- educational qualification, number of children and information on contraceptives and are significant at 0.05 level of significance.

Section-V Association of attitude with selected variables

Table – 6 Association of attitude with selected demographic variables

n = 100

Sl no	Variables	Above Median (<14.8)	Below median (>14.8)	χ^2	Table value	df	Significance
1.	**Age(yrs)**						
	18-25	2	41	0.53	5.99	2	NS
	26-33	3	45				
	34-40	1	8				
2.	**Type of family**						
	Nuclear	3	41	2.98	5.99	2	NS
	Joint	2	50				
	Extended	1	3				
3.	**Educational Qualification**						
	Primary	1	15	2.87	7.82	3	NS
	Upper primary	0	11				
	Middle school	0	17				
	HS and above	5	51				
4.	**Occupation**						
	Homemaker	5	79	2.42	5.99	2	NS
	Service	0	11				
	Business	1	4				
	Labourer	0	0				
5.	**Religion**						
	Muslim	0	7	0.82	5.99	2	NS
	Hindu	6	82				
	Christian	0	0				
	Others	0	5				
6.	**Total children**						
	One	2	64	3.01	5.99	2	NS
	Two	3	23				
	Three/more	1	7				

7.	Years of marriage						
	1-5 years	2	44	0.61	5.99	2	NS
	6-10	1	18				
	<11	3	32				
8.	**Information on Contraceptives**						
	Yes	5	52	1.78	3.84	1	NS
	No	1	42				
9.	**Decision maker Regarding family Planning**						
	Husband and wife	5	76	2.61	5.99	2	NS
	Husband only	0	14				
	Wife only	0	0				
	Mother-in law	1	4				
10.	**Use of contraceptive Before**						
	Yes	2	30	0.001	3.84	1	NS
	No	4	64				

P<0.05

Data presented in Table-6 shows the result of Chi square to find the association of attitude with selected demographic variables. The obtained chi values are lesser than the table value for the selected variables and are not significant at 0.05 level of significance. Hence, the researcher fails to reject the null hypothesis and concludes that there is no significant association of attitude with selected demographic variables. The result shows that postnatal mothers attitude on family planning is independent of selected variables.

Section-VI Relationship between knowledge and attitude of postnatal mothers on family planning

Table – 7 Relationship between knowledge and attitude of postnatal mothers on family planning

n = 100

Variables	Maximum possible score	Range	Mean	Median	SD	r- value
Knowledge score	26	6-26	14.8	16.4	4.2	
						0.27
Attitude score	80	41-80	58.6	69	7.7	

Data presented in Table – 7 shows correlation coefficient was found r= 0.27. Therefore the null hypothesis is rejected and research hypothesis is accepted.   Hence, there is positive correlation, between knowledge and attitude of postnatal mothers.

Conclusion

The following conclusion can be drawn based on the study that-

Out of 100 postnatal mothers more than half of them (65%) had average knowledge level. The present study shows that there is significant association of knowledge level with three demographic variables i.e educational qualification, number of children and information on contraceptives.. The present study identified ten demographic variables have no association with the attitude level of postnatal mothers. There was a positive relationship between knowledge and attitude of postnatal mothers on family planning.

Limitations

- Sample size was small which limits generalization to larger population with samples with similar characteristics.
- Extraneous variables were beyond the investigators control.

Recommendations

On the basis of findings, the following recommendations are offered for future research:

- A similar study can be done in community settings.
- Comparative study can be conducted in urban and rural areas.
- A similar study can be conducted among eligible couples so that role of men in family planning may also be known
- A similar study can be repeated by using a larger sample for generalization.
- A self-instructional module can be prepared related to contraceptive methods and find out its effectiveness
- Experimental study can be done to find the effectiveness of Planned Teaching Programme on family planning.
- A study can be conducted to know the existing role of the nursing personnel regarding family planning

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