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A Study to Assess the Knowledge and Attitude Regarding Preconception among Women in Selected Garment Industries at Bengaluru with a View to Develop Informational Booklet

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ABSTRACT

Preconception care is the provision of biomedical, behavioral and social health interventions to women and couples before conception. Objective is to ensure that a woman enters pregnancy with an optimal state of health which would be safe both for herself and the fetus. It will also minimize behavioral, individual and environmental factors that contribute to poor maternal and child health outcomes. In 2010, globally 287000 women died suffering with the long term disability due to the cause related to pregnancy & childbirth. During same year, globally 3.1 million newborn babies were expired in first month of life, while premature babies were 14.5 million & 2.7 million were stillborn. Preconception care (PCC) is care provided before pregnancy to improve maternal and infant health outcomes.

Method: A descriptive study was conducted among 100 women who were selected by non-probability convenient sampling technique. The study was conducted in selected garment industries, Bengaluru. Data was collected through demographic proforma, and structured knowledge questionnaire and attitude scale. The data collected was analysed and interpreted based on descriptive and inferential statistics.

Result: The study found that the majority (50%) of the women had a moderate level of knowledge regarding preconception care, while 33% had an inadequate level of knowledge and only 17% had an adequate level of knowledge. The mean knowledge score was 11.54, with a standard deviation of ±4.64, and the mean percentage score was 46.16%. With regard to attitude, the study found that the majority (53%) of the women had a moderately favourable attitude, 40% had an unfavourable attitude, and only 7% had a favourable attitude toward preconception care. The mean attitude score was 26.82, with a standard deviation of ±7.19, and the mean percentage score was 55.87%.

Conclusion: The study revealed that the women had moderate level of knowledge and moderate favourable attitude towards preconception care.

Key words: Knowledge, Attitude, Preconception Care, Women, Informational Booklet.

INTRODUCTION

Preconception care is the provision of biomedical, behavioral and social health interventions to women and couples before conception. Objective is to ensure that a woman enters pregnancy with an optimal state of health which would be safe both for herself and the fetus. It will also minimize behavioral, individual and environmental factors that contribute to poor maternal and child health outcomes. Preconception care is the integral part of antenatal care as it helps to reduce potential risk, maternal & child mortality, birth defect in infant like neural tube defect, low birth weight baby, preterm and post-term baby, as well as promote healthy pregnancy and fetal outcome and improve readiness for pregnancy.

Need for the study

In 2010, globally 287000 women died suffering with the long term disability due to the cause related to pregnancy & childbirth. During same year, globally 3.1 million newborn babies were expired in first month of life, while premature babies were 14.5 million & 2.7 million were stillborn. Globally more than 20 million infant are born with lo w birth weight. The maternal death in the world is 5, 36000. 960 in a developed region, 533, 0001 in a developing region. The maternal mortality ratio is 281/100000 live birth and neonatal mortality rate is 33/1000. Important interventions targeted towards preconception care include adolescent reproductive health and family planning, nutrition interventions, counseling and birth preparedness. Despite the interventions in place, step up in the progress in maternal and child health out-comes are still the need of the hour. Rate of unintended pregnancy estimated for India is also found to be very high (70·1 pregnancies per 1000 women aged 15–49 years remains unintended).

Research statement:

A study to assess the knowledge and attitude regarding preconception care among women in selected garment industries at Bengaluru with a view to develop informational booklet.

Objectives

1. assess the knowledge and attitude of women regarding preconception care.
2. find the association between knowledge and attitude scores regarding preconception care and the selected demographic variables.
3. find the correlation between knowledge and attitude regarding preconception care among women.

Hypothesis

To achieve the stated objectives, the following hypothesis was formulated at 0.05 level of significance.

H_1: There will be significant association between the knowledge scores regarding preconception care and the selected demographic variables.

H_2: There will be significant association between the attitude scores regarding preconception care and the selected demographic variables.

H_3: There will be significant correlation between the knowledge and attitude regarding preconception care among women.

REVIEW OF LITERATURE

A cross sectional study was carried out to determine knowledge and attitude of women in reproductive age about preconception health in the context of free and universal access to preconception health care. The findings revealed that over two third (68.8%) of women had adequate knowledge about preconception care. Sixty nine percent had positive attitude towards preconception care. Education and age were significantly associated with knowledge and attitude. The study concluded that despite the relatively high level of knowledge, nearly half of the women perceived preconception health optimization as difficult that may lead to not engaging in preconception health behaviors. The younger women and those with fewer years of education should be focus of preconception health program.[1]

A cross sectional study conducted to determine the level of knowledge, attitudes and practices regarding preconception care among women attending antenatal care appointments. The results of the study shown that the mean (SD) knowledge, attitude and practice scores were 11.37 (3.94), 15.39 (2.12) and 10.13 (2.30), respectively. In total, 98.5% of the respondents had good attitudes, 45.2% had good practices, and 51.9% had good knowledge of preconception care. The study concluded that women in Bachok have fair knowledge of and good attitude towards preconception care. However, they have poor preconception care practices.[2]

A descriptive research study was conducted to assess the knowledge on preconception care among reproductive age women. Most of the respondents 99 (43.61%) were in between the age group of 21-25 years. Majority of respondents 218(96.03%) belonged to Hindu religion. Most of the respondents 152(66.96%) belonged to nuclear family. Only 65(28.63%) had information regarding preconception care. Majority of respondents 192(84.58%) had average level of knowledge. Highest knowledge score was in the area of reproductive health risk factors, and lowest in the area of health promotion. The overall mean percentage was 57.39. There was significant association of Reproductive age women had average level of knowledge on preconception care. Highest knowledge was in the area of reproductive health risk factors where lowest was in the area of health promotion. The study concluded that awareness program is required to improve the different aspects of knowledge regarding preconception care.[3]

A descriptive cross sectional survey was conducted to determine the level of awareness and knowledge of preconception care, to describe the practice of preconception care among women and to identify factors responsible for not seeking preconception care. The findings from the study showed that the mean age of respondents was 31.1±7.36 with the age range of 19-49. Most (63.5%; n=238) of the respondents were aware of preconception care and the main source of awareness was the antenatal clinic. Lack of awareness and knowledge of benefits of preconception care were major factors identified. The study concluded that the need for massive awareness and education on preconception care is highly important for people to utilize it more effectively. [4]

A cross sectional study was taken to assess awareness and perception of preconception care among women. The findings of the study shown that the ages ranged between 16 years to 46 years and 32.8% (43/131) were within 26-30 years with a mean of 28.10 ± 6.064. Only 20.61% of them were aware of preconception care. There was significant association between awareness and the patient's tribe as well as employment status at P value 0.004 and 0.017 respectively. Among those who were unaware, 88.46% will accept if offered while, about 45.75% of those who declined believed it was not necessary. The study concluded that there was poor awareness but good perception and acceptability of preconception care. Therefore, there is a need to create awareness and incorporate it into routine maternal healthcare services to achieve better feto-maternal outcome.[5]

METHODOLOGY

The study aimed to assess the knowledge and attitude regarding preconception care among women in selected garment industries at Bengaluru with a view to develop informational booklet. Using a descriptive research design, data was collected from 100 women through a non-probability convenient sampling technique in selected garment industries. A structured knowledge questionnaire and attitude scale was employed for data collection. The study was framed by Becker, Drachman, and Kiracht JP Health Belief Model (1974). Data analysis involved descriptive statistics (frequency, percentage, range, mean, median, standard deviation, and mean percentage) and inferential statistics (chi-square test and Karl Pearson correlation coefficient to address) to address the study's objectives and hypotheses.

RESULTS

Table 1: Frequency and percentage distribution of women according to the demographic characteristics

N=100

Demographic variables		No. of women (n)	Percentage (%)
Age in years	19-20 years	39	39%
	21-22 years	50	50%
	23-25 years	11	11%
Religion	Hindu	56	56%
	Muslim	29	29%
	Christian	15	15%
Education	Primary school	10	10%
	Secondary school	17	17%
	High school	45	45%
	PUC and above	28	28%
Type of family	Nuclear	60	60%
	Joint	40	40%
Residential area	Urban	54	54%
	Rural	46	46%
Source of information	Mass media	27	27%
	Family/friends	11	11%
	Health professional	13	13%
	Not aware	49	49%

The above table describes that the majority 50% of the women were in the age group of 21-22 years**,** most 56% of the women were Hindus**,** majority 45% of the women were been to high school**,** majority 60% of the women were from nuclear family**,** 54% of the women were from urban area**,** majority 49% of the women were not aware of the preconception care.

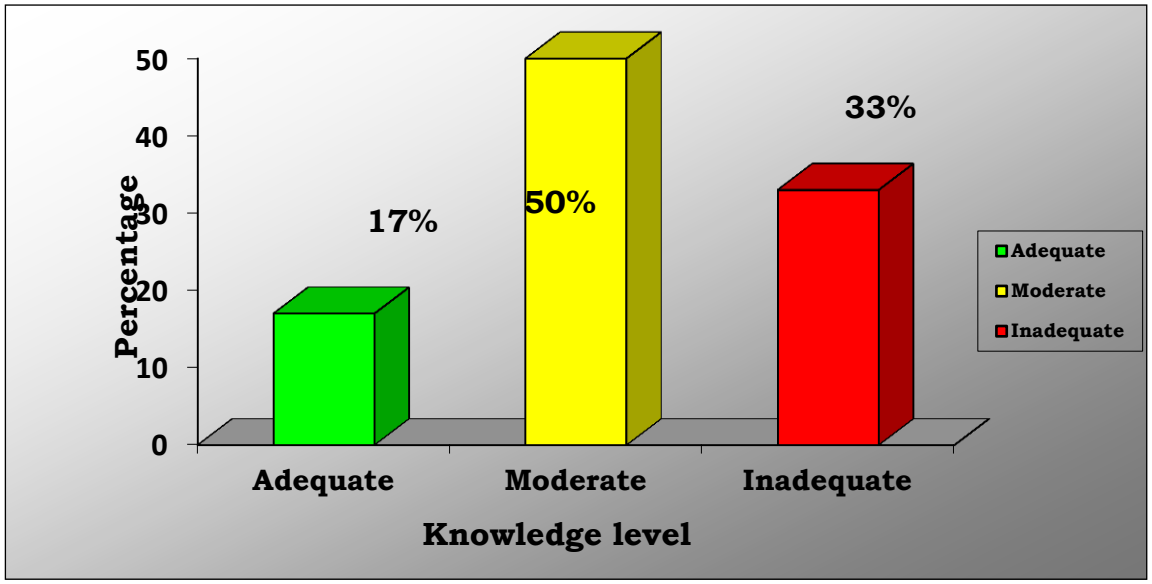

Fig 1: Column diagram depicting knowledge level of women

The data presented in Figure 1 reveal that majority 50% of the women had moderate level of knowledge, 33% of the women had inadequate level of knowledge and only 17% of the women had adequate level of knowledge regarding preconception care.

Table 2: Knowledge scores of women

N=100

	Range of	Maximum	Mean	Standard	Mean %
knowledge scores	5-22	25	11.54	4.64	46.16%

Data in Table 2 show that the knowledge scores ranged from 5 to 22. The mean knowledge score was 11.54 ± 4.64. The mean percentage of the knowledge score was 46.16%.

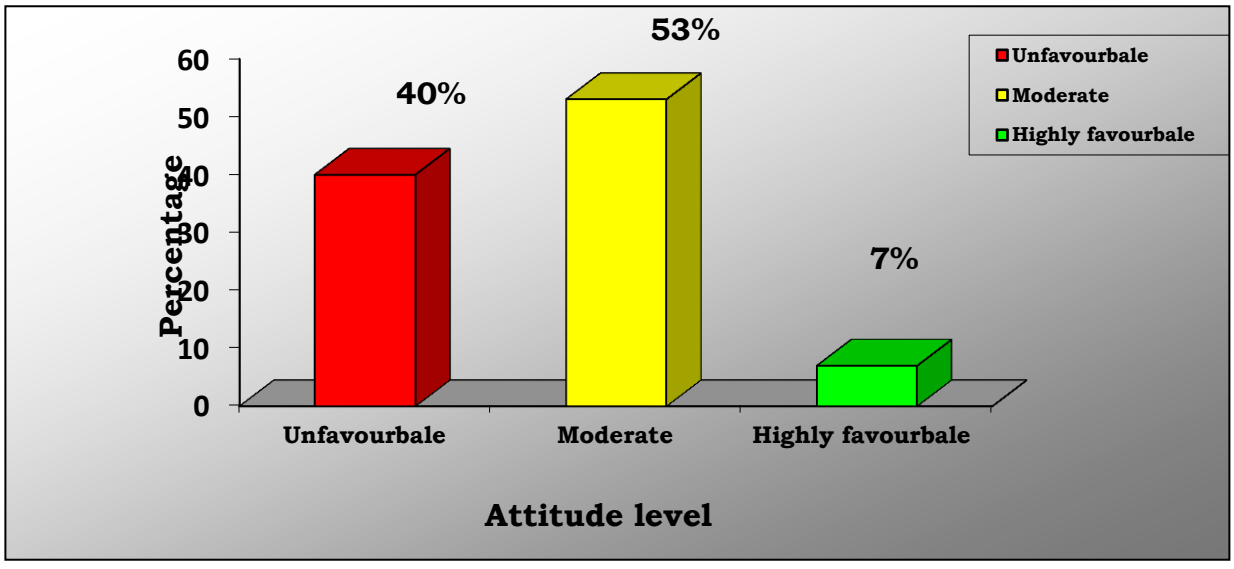

Fig 2: Column diagram depicting attitude level of women

The data presented in Figure 2 reveal that majority 53% of the women had moderate favourable attitude, 40% of the women had unfavourable attitude, and only 7% of the women had favourable attitude.

Table 3: Attitude scores of women

N=100

	Range of	Maximum	Mean	Standard	Mean %
Attitude scores	12-44	48	26.82	7.19	55.87%

Data in Table 3 show that the attitude scores ranged from 12 to 44. The mean knowledge score was 26.82 ± 7.19. The mean percentage of the attitude score was 55.87%.

Table 4: Association between knowledge scores with selected demographic variables

N=100

Demographic variables		< M	>M	Chi-square value (X^2)	p value	Remarks
Age in years	19-20 years	20	19	**0.07**	**0.96**	**Not Significant**
	21-22 years	25	25			
	23-25 years	6	5			
Religion	Hindu	31	25	**0.10**	**0.94**	**Not Significant**
	Muslim	15	14			
	Christian	8	7			
Education	Primary school	5	5	**0.21**	**0.97**	**Not Significant**
	Secondary school	10	7			
	High school	25	20			
	PUC and above	16	12			
Type of family	Nuclear	34	26	**1.30**	**0.25**	**Not Significant**
	Joint	18	22			
Residential area	Urban	28	26	**0.03**	**0.85**	**Not Significant**
	Rural	23	23			
Source of information	Mass media	17	10	**1.53**	**0.67**	**Not Significant**
	Family/friends	5	6			
	Health professional	6	7			
	Not aware	26	23			

The data presented in Table 4 show that there was no association between the knowledge scores of women regarding preconception care and their selected demographic variables. Therefore, the research hypothesis is rejected, and the null hypothesis is accepted.

Table 5: Association between attitude scores with selected demographic variables

N=100

Demographic variables		< M	>M	Chi-square value (X^2)	p value	Remarks
Age in years	19-20 years	18	21	**1.21**	**0.54**	**Not Significant**
	21-22 years	27	23			
	23-25 years	7	4			
Religion	Hindu	30	26	**0.30**	**0.85**	**Not Significant**
	Muslim	16	13			
	Christian	7	8			
Education	Primary school	6	4	**0.46**	**0.92**	**Not Significant**
	Secondary school	8	9			

	High school	23	22			
	PUC and above	15	13			
Type of family	Nuclear	31	29	**0.16**	**0.68**	**Not Significant**
	Joint	19	21			
Residential area	Urban	30	24	**1.44**	**0.22**	**Not Significant**
	Rural	20	26			
Source of information	Mass media	16	11	**0.13**	**0.98**	**Not Significant**
	Family/friends	6	5			
	Health professional	7	6			
	Not aware	28	21			

The data presented in Table 5 show that there was no association between the attitude scores of women regarding preconception care and their selected demographic variables. Therefore, the research hypothesis is rejected, and the null hypothesis is accepted.

Table 6: Correlation between the knowledge and attitude of women

N=100

Domain	Mean	SD	Mean%	r Value
Knowledge	11.54	4.64	46.16%	**0.66****
Attitude	26.82	7.19	55.87%	

The study findings show that, there is positive correlation between the knowledge and attitude r value was 0.66. Hence the research hypothesis H_3 is accepted.

IMPLICATION OF THE STUDY

Based on the study findings, measures can be taken at various level to improve the knowledge of the women. The findings of the present study has implications for nursing education, nursing administration, nursing practice and nursing research.

Nursing education

Seminars, workshops, and conferences should be conducted regularly to provide nursing students with updated knowledge regarding recent advancements in preconception care. Nursing students should also be encouraged to utilize research-based practices effectively in clinical and community settings. Nursing schools, colleges, and other educational institutions should adequately prepare students to conduct mass health education programmes aimed at improving the knowledge and attitude of the public regarding preconception care.

Nursing practice

Midwives play a vital role in improving women's knowledge, understanding, and informed decision-making regarding preconception care. Public health nurses, auxiliary nurses, midwives, and other rural health workers should provide education and information to promote a positive attitude toward preconception care among women. Midwives should fulfill their professional responsibility through teaching, counseling, and clinical roles by conducting regular health education sessions, implementing mass educational programmes using informational booklets, and encouraging women to participate in health promotion activities and regular health check-ups to prevent complications.

Nursing administration

Nurse administrators should collaborate with governing bodies and nongovernmental organizations to create policies, mobilize resources, and promote awareness regarding preconception care among women. They should organize in-service and continuing education programmes on the utilization of health care services and their impact on women's health. Nurse administrators should also take initiative in developing policies, plans, and standing protocols for providing education on preconception care before pregnancy. In addition, nursing personnel should be prepared to take leadership roles in educating nurses, community health workers, and other health personnel to effectively deliver health education regarding preconception care to women.

Nursing research

As nurse researchers, nurses should disseminate research findings through conferences, seminars, and publications in nursing journals to improve awareness and knowledge regarding preconception care. They should also utilize evidence-

based research findings in planning, implementing, and evaluating the care provided to women in order to promote effective and quality health care practices.

CONCLUSION

Preconception care plays an important role in improving the health of women and ensuring better pregnancy outcomes. Adequate knowledge and positive attitude regarding preconception care are essential for the prevention of complications and promotion of maternal and child health. Health education programmes and the active involvement of nurses and midwives can effectively enhance awareness among women. Therefore, continuous education, research, and community-based interventions are necessary to promote the practice of preconception care.

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