



Assessment of Knowledge and Attitude Regarding Pre-Conceptional Care among Newly Married Women Residing At Urban Areas of Vadodara City, Gujarat, India

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ABSTRACT

Introduction: Preconception health refers to the health before pregnancy. Maternal lifestyle in the period prior to conception as well as during pregnancy is an important determinant of healthy pregnancy and normal foetal development. By the time most women have realised that they are pregnant and have taken the first contact with antenatal care, the foetal organ already been developed. Preconception care has a positive impact on maternal and child health outcomes.

Objectives: To assess the knowledge & attitude regarding pre-conceptional care of newly married women of selected urban area of Vadodara city.

Method: A cross sectional study was carried out among 100 newly married women residing at urban area of Vadodara city. The women were interviewed by using structured questionnaire. Data analysis was done using Microsoft Excel.

Result: Out of 100 interviewed women 12% had poor, 82% had average and 6% of women had good knowledge. 52% of women had negative attitude and 48% of women had positive attitude. Correlation between knowledge and attitude was 0.815 at 5% level of significance which suggest moderately positive correlation.

Conclusion: Average knowledge, Negative attitude & moderately positive correlation regarding pre-conceptional care were noticed among newly married women.

Key words: Pre-conception care, newly married women, Knowledge and Attitude

INTRODUCTION

Preconception care is the provision of biomedical, behavioural 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 foetus. It will also minimise behavioural, individual and environmental factors that contribute to poor maternal and child health outcomes.¹ Organogenesis is completed by the first trimester. By the time the woman is seen first in the antenatal clinic, it is often too late to advice be-

cause all the adverse factors have already begun to exert their effects. Virtually Pre-conceptional counselling (PCC) is a part of preventive medicine. For the future baby it will be primary prevention at the same time it will be a secondary prevention for prospective mothers.²

Actual continuum of care for neonatal survival begins from preconception and continues up to post-partum care. The Ministry of Health and Family Welfare in September 2014 launched India New-born Action Plan, and Pre-conception and antenatal care is one of the six pillars of intervention

packages in the plan.³ Important interventions targeted towards preconception care include adolescent reproductive health and family planning, nutrition interventions, counselling and birth preparedness. Despite the interventions in place, step up in the progress in maternal and child health outcomes 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).⁴ Lack of proper Pre-conception care in India is clearly evident from above findings.

Limited Research is there regarding knowledge and attitude towards Pre-conceptual care among newly married females. Present study was planned to assess the knowledge & attitude regarding pre-conceptual care among newly married females of Vadodara City of Gujarat.

METHODS

A cross-sectional study between April 2018 and November 2018 was conducted among 100 newly married women of selected urban areas of Vadodara city. Vadodara city has 19 Urban Primary Health centers. Out of which 5 Urban Primary Health Centers were selected randomly for the study. From each 5 centres, list of urban areas were obtained. House to house visits were conducted for data collection till the desired sample size of 20 is derived from urban areas of each ‘five urban health centers’. Newly married women who are having active married life of one year or less were included in the study. Those who were pregnant or having child were excluded from the study. Ethical committee approval was taken to carry out study. A written consent was taken from the participating women.

A structured, pretested, predesigned questionnaire was used to collect information on socio-demographic data, knowledge and attitude regarding pre-conceptual counselling. Total 20 questions were asked for assessing the Knowledge. The content area was divided in to eight sub areas of the content-related to Introduction of Preconceptional counseling (15%), Healthy lifestyle and basal health level (20%), High risk factor (5%), Folic acid supplementation and fear of incoming pregnancy (15%), Smoking (5%), Sexually transmitted disease (5%), Investigation (20%), Rubella infection and contraception (15%). A score of “1” was provided for correct answers, and incorrect and not sure responses were scored “0”. Score of 0-6 was considered as poor, 7-12 as average and 13-20 was considered as good knowledge. A 5-point Likert scale was used to assess the attitude on Preconceptional counselling. Scores of “1”, “2”,

“3”, “4”, and “5” were used for strongly disagree, disagree, neutral, agree, and strongly agree, respectively. Categorical responses (Positive / Negative) were then generated for the attitude domain. Score of 20-64 was considered as negative and score 65-100 was considered as positive. Data were entered and analysed using Micro Soft Excel.

Statistics: Chi-square test was used to find out the association between different variables where as Spearman correlation was applied for finding out the correlation between knowledge and attitude score.

RESULTS

Demographic data of sample in the presence study revealed that samples between Age group 18-20 years were 32%, 21-25 years were 58%, 26-30 years were 10%. Women having education of graduates or above were 10%. 82% of women were housewives. Majority of women were having active married life 7-12 months. (72%) (Table 1)

Table 1: Frequency and percentage wise distribution of demographic data of the samples [N=100]

Demographic Data	Women (%)
Age	
a) 18-20 years	32
b) 21-25years	58
c) 26-30 years	10
Religion	
a) Hindu	82
b) Muslim	18
Education	
a) Primary	42
b) Secondary	48
c) Graduation and above	10
Occupation	
a) Working	18
b) Housewife	82
Active Married life	
a) 1-3 Month	12
b) 4-6 Month	16
c) 7-9 Month	32
d) 10-12 Month	40

Table 2: Frequency and percentage distribution of samples based on knowledge and Attitude score N=100]

Scoring	Classification of score	Women (%)
Level of Knowledge		
Poor	0-6	12
Average	7-12	82
Good	13-20	6
Level of Attitude		
Negative	20-64	52
Positive	65-100	48

Table 3: Association between various socio-demographic variables with knowledge and Attitude score

Variables	Knowledge				Attitude			Total
	Good	Average	Poor	P value	Positive	Negative	P value	
Active Married Life								
1-3months	0 (0)	12 (100)	0 (0)	0.853	6 (50)	6 (50)	0.936	12
4-6months	0 (0)	14 (87.5)	2 (12.5)		6 (37.5)	10 (62.5)		16
7-9months	2 (6.2)	26 (81.2)	4 (12.5)		16 (50)	16 (50)		32
10-12months	4 (10)	30 (75)	6 (15)		20 (50)	20 (50)		40
Education								
Primary	0 (0)	34 (81)	8 (19)	0.302	14 (33.3)	28 (66.7)	0.21	42
secondary	4 (8.3)	40 (83.3)	4 (8.3)		28 (58.3)	20 (41.7)		48
Graduation & above	2 (20)	8 (80)	0 (0)		6 (60)	4 (40)		10
Occupation								
Housewife	4 (4.9)	66 (80.5)	12 (14.6)	0.395	36 (43.9)	46 (56.1)	0.216	82
working	2 (11.1)	16 (88.9)	0 (0)		12 (66.7)	6 (33.3)		18

(Row wise percentages are calculated)

Chi-square test (with Yate's correction where ever needed) was applied for finding association between various demographic profile versus knowledge as well as attitude all of them were shown to be not significant.(Table 3) Spearman rank correlation was also applied between knowledge and attitude score which was shown to be significant statistically ($r=0.815$, $p<0.0005$)

Table 2 shows knowledge and attitude levels of samples on Preconceptional care. Out of 100 samples 12% women had poor knowledge whereas 82% samples had average knowledge and only 6% samples had good knowledge on Preconceptional care. For attitude score, 48% participants scored between 0-49 (negative attitude) and 52% had positive attitude who scored between 50 and 100.

DISCUSSION

Present study was conducted among newly married women having active married life of 12 months or less residing in the urban areas of Vadodara city. Knowledge and attitude regarding pre-conceptional care of newly married women was assessed. In this survey, total 100 women have participated. Majority (58%) of women were from 21-25 year age group.

In present study, 12% of women had poor knowledge, 82% had average knowledge level and only 6% samples had good knowledge regarding pre conceptional care. Finding related to attitude revealed that 52% participants had negative attitude and 48% samples had positive attitude towards Preconception care. Minimal research of similar kind was carried out among Indian context. Most of the similar studies were found to be conducted in the countries other than India.

In the study carried out at Malaysia by Kasim et al⁵, 98.5% of the respondents had good attitudes, 45.2% had good practices, and 51.9% had good knowledge of preconception care. Overall knowledge of preconception care was 27.5% in one of the studies carried out by Yitayal Ayalew at North West Ethiopia.⁶ In a study conducted by Khan NN et al, majority of women felt that precon-

ception was an important time to ensure good health, with regular engagement in physical activity being regarded as one of the most important priorities.⁷ Similar type of study was done at Mexican American population by Coonrod et al to determine knowledge and attitudes regarding preconception care in a low-income Mexican American population. Their finding was quite similar to present study. They found that average knowledge of preconception care score was 76%.⁸ In study carried out by Boukje van der Zee, did the qualitative study on preconception counselling among women who expressed a positive attitude towards preconception care in general but were hesitant about seeking preconception care themselves.⁹ One of the studies carried out by Tuomainen et al in ethnically diverse community mentioned that women had modest or poor awareness of preconception health issues.¹⁰ In a study conducted by Kassa A reveals that only 20% of post natal women at public health institution had a good level of knowledge on preconception care.¹¹ N. A. Al-Akour conducted a study among Jordanian women and men mentioned that they were moderately aware of preconception care.¹² Similar kind of study conducted in Nepal by Krishma Giri also stated that majority of the respondents had average level of knowledge regarding preconception care.¹³

Present study noted that there was moderately positive correlation between knowledge and attitude on Preconception care. ($r=0.815$) In a study carried out by Paulsen, Ashley, respondents' knowledge scores were statistically correlated with their preconception health behaviors ($r=.176$, $p=.000$).¹⁴ In a study by Nepali and Sapkota, significant correlation between level of knowledge and practice regarding preconception care was ob-

served.¹⁵ Majority of studies reveal the need of generating awareness about preconception care in order to improve better maternal and foetal outcome.¹³⁻¹⁷

CONCLUSION

Knowledge regarding Pre-conceptual care was found to be average among majority (82%) of newly married women. Almost half of them (52%) had negative attitude regarding Pre-conceptual care. There was moderately positive correlation between knowledge and attitude on preconception counselling. Findings of the study reveal that there is a need to generate awareness about Pre-conception care among the females of reproductive age in order to make progress towards betterment of maternal and child health.

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