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Assessment of knowledge and practice regarding pre-conceptional care among married couples in a selected rural community, Paschim Medinipur, West Bengal

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Abstract

A cross-sectional descriptive survey was undertaken to assess the knowledge and practice regarding pre-conceptional care among 95 married couples in selected rural community, Paschim Medinipur with the objectives to assess knowledge and practice, relationship them and association of knowledge and practice with selected variables. Non-probability convenience sampling technique was used. Conceptual framework was based on Von Wagner's The Health literacy skills framework. The tools were used semi-structured Interview Schedule, and structured Interview Schedule. Content validity and reliability of the tools were established. A pilot study was conducted to find out the feasibility of the study. Descriptive and inferential statistics were used to analyse the data. The study findings revealed that 74.54% of couples had average knowledge and 24.93% had average practices regarding pre-conceptional care. The mean knowledge and practice scores were $10.06 \pm 3.80\%$ and $4.95 \pm 3.48\%$. There was strong positive correlation ($r = 0.80$). Statistically, a significant association was found with the knowledge and practice of couples with selected demographic variables. Majority of respondents were informed regarding pre-conceptional care. The study can be concluded by saying that couples are not fully aware pre-conception health issues that affect fetal health. Couples have average knowledge regarding pre-conceptional care but they have poor pre-conception practice. The findings have several implications in nursing. A comparative study can be conducted between women of rural and urban community.

Keywords: Pre-conceptional care, knowledge, practice, married couples

Introduction

Conception is a vital period for every woman. Preconception care is intended to optimize a woman's health for pregnancy, ideally commencing before conception with a preconception visit.

Organogenesis is completed by the first trimester. It is often too late to advise women when a woman is seen first in the antenatal clinic because all the effects of adverse factors have already begun to influence. Unfortunately, only a small percentage of women take the advantage of pre-conceptual care. The important reasons are lack of public awareness, many pregnancies are unplanned ^[1]. A study in Karnataka showed that majority of women (55%) had poor knowledge ^[2].

Different study result showed that different strategies of preconception care decreases the number of congenital disorders ^[3]. Among 522 women, the knowledge score of women was 51.1% in Jinka town ^[4]. In Ethiopia among 669 participants only 26.8% had good knowledge and 14.5% of women utilized preconception care ^[5]. The results of this meta-analysis indicated, as one of the best approaches to improve birth outcomes is the utilization of preconception care ^[6]. Utilization of the preconception care was 16.2%. The findings showed that maternal, health facility, and community factors hinder preconception care utilization ^[7].

According to WHO Meeting report preconception care to reduce maternal and childhood mortality and morbidity and pregnancies are unplanned 4 out of 10 women. Preconception care has a positive impact on maternal and child health outcomes according to a new WHO report ^[8].

The main focus of this study was the role to assess the knowledge and practice of married couples regarding preconception care and take the necessary action as they are the future mothers of the society. Investigator felt the following needs for the research study to be carried out as very few Indian studies are based on this topic and preconception care is very important for a healthy birth.

Problem statement

Assessment of knowledge and practice regarding pre-conceptual care among married couples in selected rural community, Paschim Medinipur, West Bengal.

Objectives

1. To assess knowledge regarding pre-conceptual care among married couples.
2. To identify practice regarding pre-conceptual care
3. To find out relationship between knowledge and practice regarding pre-conceptual care
4. To determine association between knowledge and practice regarding pre-conceptual care with selected demographic variables.

Materials and Methods

A descriptive survey was conducted by using quantitative research approach among 95 married couples in selected

rural community, Paschim Medinipur and they were selected through Non-probability convenience sampling. The tools were used semi-structured Interview Schedule which was contained (10) items to find out age, educational status, occupation, monthly family income, marital status, suffering from any disease, addiction of smoking, addiction of alcohol and type of family. Knowledge was assessed by using structured Interview Schedule that contains (20) items of multiple-choice questions with reliability-0.94 by Split – Half method and self-reported practice were assessed by structured Interview Schedule that contains (16) items with reliability-0.79 by Cronbach's Alpha. Ethical committee, BSMC&H Bankura. and administrative approval was obtained from The Director of Health Services, Government of West Bengal, Officer on Special Duty (Nursing), CMOH and BMOH of Paschim Medinipur. Data were collected from participants using separate code number home visiting. Interview scheduled was used where self-introduction was given and purpose, nature of the study was explained to all participants. Rapport was established and maintained. Informed consent was taken from each participant, confidentiality and anonymity were assured. All information was recorded separately.

Results and Discussion

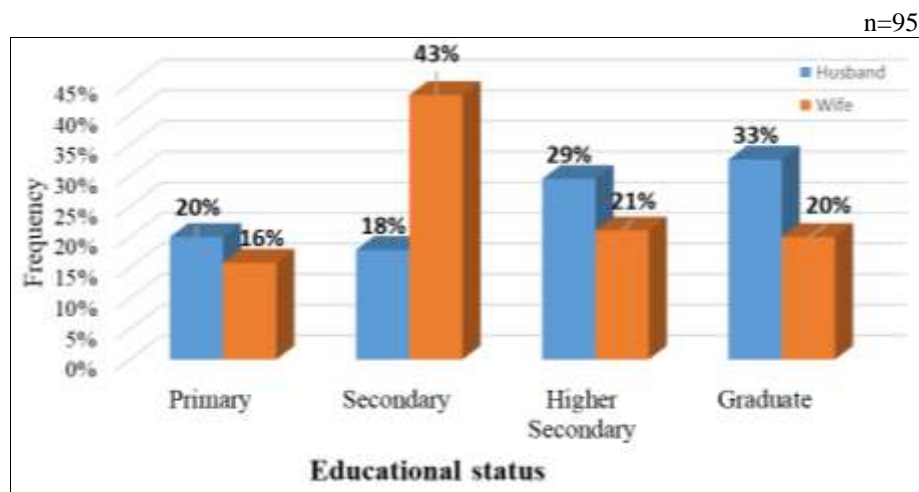


Fig 1: Distribution of married couples according to their educational level

Data depicted in the figure 1 showed that maximum (43%) of married women had secondary level of education and only 16% married women had primary level of education and maximum (33%) of married men had the graduate level of education and only 18% married men had primary level of education.

Table 1: Distribution of married couples according to their knowledge score n=95

Knowledge score	Frequency	Percentage (%)
Very Good (≥ 16)	10	06.69
Good (12-15)	13	09.43
Average (8-11)	58	74.54
Poor (< 8)	14	09.34

Maximum possible score is 20.

Minimum possible score is 0

Data depicted in table 1 showed that the majority (74.54%) of couples had average knowledge regarding pre-

conceptional care and only 9.34% of couples had poor knowledge.

Table 2: Distribution of married couples according to their practice score regarding pre-conceptional care n=95

Practice score	Frequency	Percentage (%)
Very Good (≥ 13)	02	01.45
Good (10-12)	11	05.57
Average (6-9)	22	24.93
Poor (< 6)	60	68.05

Maximum possible score is 16.

Minimum possible score is 0

Data depicted in table 2 showed that majority of 68.05% married couples had poor practices regarding pre-conceptional care and only 5.57% of married couples had good practices.

Table 3: Co-relation co-efficient between knowledge score and practice score of pre- conceptional care n=95

Variables	Mean	Median	r	p value	Df
Knowledge	10.06	10	0.80	0.0001	93
Practice	4.95	4			

Data presented in table 3 showed that there was strongly positive correlation ($r = 0.80$) between knowledge and practice score regarding pre-conceptional care.

Findings showing association between knowledge with selected demographic variables

There was significant statistical association between knowledge and their education ($\chi^2 = 33.57^*$ df = 1), occupation ($\chi^2 = 06.28^*$ df = 1), socioeconomic class ($\chi^2 = 14.39^*$ df = 1), information received ($\chi^2 = 25.88^*$ df = 1), chronic disease of wife ($\chi^2 = 6.14^*$ df = 1) and addiction of husband in smoking ($\chi^2 = 5.48^*$ df = 1) at 0.01 level.

There was no significant association between knowledge with the couple's age, duration of the marriage, addiction in alcohol, and type of family.

Findings showing association between practice with selected demographic variables

There was significant statistical association between practice and their education ($\chi^2 = 27.14^*$, df = 1), occupation ($\chi^2 = 22.14^*$ df = 1), socioeconomic class ($\chi^2 = 10.19^*$ df = 1), information received ($\chi^2 = 23.37^*$ df = 1) and chronic disease of wife ($\chi^2 = 12.63^*$ df = 1) at 0.01 level.

There was no significant association between practice with the couple's age, duration of the marriage and type of family.

Discussion related to Demographic profile in relation to other studies

The present study is supported by Study that was conducted by Pritesh G Patel, Tejas A Shah in urban areas of Vadodara City Gujrat found that 48% women had secondary level of education and 82% women was housewife [9]. The present study findings showed that 43% women had secondary level of education and most of them were home maker 81.05%.

Another study conducted by James J.A, George L. S, Fernandes S, (2019) on knowledge regarding preconception care in Karnataka, India found that 40% couples belongs to nuclear family and 60% belongs to joint family [12]. A similar type of study conducted by Krishma Giri and Goutam S. in Nepal also showed that the 44.5% respondents belonged to the nuclear family and 55.5% of married couples belonged to the joint family [10].

This study is supported by cross-sectional study conducted by Tesema K.F *et al.* (2021) on Knowledge of Preconception Healthcare in Jinka Town, Southern Region, Ethiopia where it was evident that 49.5% women taken information from health care provider [4]. In the present study findings showed that 61.05% taken information regarding pre-conceptional care from health personnel.

Discussion related to Knowledge and practice

This study result supported by Study was conducted by Pritesh G Patel, Tejas A Shah in urban areas of Vadodara City Gujrat found that 6% samples had good knowledge, 82% had average knowledge and 12% of women had poor

knowledge [9]. Kassa A and Yohannes Z. conducted a study at public health institution showed that 20% women had good level of knowledge [11].

A similar type of study conducted by Krishma Giri and Goutam S. in Nepal also showed that the majority of the respondents (64.5%) had an average level of knowledge, 15.5% of samples had good knowledge and 20.0% of women had poor knowledge regarding and preconception care and significant association between knowledge with education and source of information [10].

Present study is also supported by other Study conducted by Ahmed H.M, Piro T. J in Hawler City and Kasnazan, Erbil City (2016) found that 76.7% sample had average knowledge.

The present study showed that 9.43% of samples had good knowledge, 74.54% had average knowledge and 9.34% of women had poor knowledge and 24.93% of sample had average level of practice and also significant association between knowledge and practice with education, occupation and source of information at 0.05 level of significance.

This study is supported by other cross-sectional studies conducted by Kasim R. Draman N, Kadir A. Abdul, and Muhamad R (2016) found that the mean knowledge score was 11.37 ± 3.94 and the mean practice score was 10.13 ± 2.30 . Maximum respondents (29.6%) consumed folic acid before pregnancy [12].

The present study findings showed that the mean knowledge score was 10.06 ± 3.80 and the mean practice score 4.95 ± 3.48 . Among them maximum respondents 24.2% consumed folic acid before pregnancy.

The present study findings supported by a cross-sectional descriptive study conducted by Nepali G, Sapkota D.S Bharatpur, Chitwan, Nepal (2017) found that 25% had an average level of practice and 49% had poor practice. Correlation between knowledge and practice was positively correlated with each other by $r = 0.74$ [29].

The present study findings that 24.93% couples had an average level of practice and 68.05% had poor practice. The current study findings showed that the correlation between knowledge and practice was positively correlated with each other ($r = 0.80$).

Conclusion

Pregnancy is a period at which women's health is placed at risk. So knowledge and practice regarding pre-conception care are very essential. The result showed that significant association between knowledge and practice with education, occupation, socioeconomic class, information received, chronic disease and addiction in smoking at 0.05 level of significance. During the data, collection period researcher felt that married couples have average knowledge regarding pre-conceptional care but they have poor pre-conception practice. Couples are not fully aware of lifestyle factors and pre-conception health issues that affect fetal health. Couples who learned higher education have better knowledge on pre-conception care than couples who had lower educational levels.

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Conflict of Interest

Not available

Financial Support

Not available

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