"KNOWLEDGE, ATTITUDE TOWARDS PREMARITAL SCREENING AMONG YOUNG ADULTS."

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Abstract: Premarital screening aims to diagnose and treat unrecognized disorders and reduce the transmission of diseases to couples and children, it is considered as the primary preventive approach for couples who planned for conception. This study has been undertaken to understand knowledge and perception of pre-marital screening among conveniently selected unmarried 400 students from the selected colleges of Uttar Pradesh India. Along with the basic demographic questions, the self-administered tool on knowledge and attitude of premarital screening was administered after obtaining informed consent from the research participants. After careful data collection, scrutinizing and analyzing, the result showed that the level of knowledge among the study participants, it revealed that about 21.5% were having adequate knowledge, 58.25% were having moderately adequate knowledge and 20.25% were having inadequate knowledge and the level of attitude among the study participants, it revealed that about 45.25% had a good attitude, 48.5% had a average attitude and 6.25% had a poor attitude. On associating the demographic variables with the knowledge of the premarital screening, there was a significant association with the demographic variables like age, family income and the residential area. The research concluded that the importance of understanding and applying the knowledge of pre-marital screening still being a taboo or a question of self-respect in a culturally bounded country like India, the going-to-be society is too crumbled in the same societal foundations. Awareness and education on the topic of premarital screening is the need of the hour for the developing countries like India.

Keyword: pre-marital screening, Knowledge, Attitude, young adults.
INTRODUCTION

Premarital screening is a worldwide activity that aims to diagnose and treat unrecognized disorders and reduce the transmission of diseases to couples and children, it is considered as the primary preventive approach for couples who planned for conception\(^1\). Premarital counseling is offered to young couples on their way to marriage in order to guide, educate and prepare them for the establishment of a healthy family. Promotion and protection of adolescent females from reproductive health hazards are very essential because they are the future couples. Premarital screening is defined as conducting examination before marriage in order to identify if there is any genetic blood disease such as sickle cell anemia and thalassemia and some infectious disease such as hepatitis B, C and HIV “AIDS”. This is in order to provide medical consultation to the future couples and to give option and alternatives before soon to be married with the aim of helping them to plan for a healthy family. Premarital screening decreases the burden of having newly affected children. It raises the awareness and knowledge of the community regarding the genetic disorder, pattern of an inheritance, and appropriate methods for selection of the equitable services. It helps families to avoid psychosocial problem that would result from the presence of the affected child in the family. It disseminates awareness regarding the concept of comprehensive and healthy marriage. Premarital screening is one of the most important strategies for preventive of genetic disorder, congenital abnormalities and several medical psychosocial marital problems. It provides an opportunity to intervene according to the identified risk. WHO reported that approximately 240 million people are heterozygous for inherited disease However, the importance of premarital screening among Arabic countries is to reduce the genetic disorders and multifunctional health problems such as diabetes and obesity and their impact on the social, emotional psychological and cost dimension that occurring in consanguinity marriage.

In general, premarital screening program kingdom of Saudi Arabia was provided as a national, social awareness and preventative programme with the following objective prevent the spreading of certain genetic disease and some contagious diseases (Hepatitis B, C and AIDS) reduce financial burdens resulting from treatment costs on families and society and therefore reduce pressure on health setting and blood bank. As well as raise awareness of healthy marriage concept. There are about 26 countries which are conducting premarital screening test for HIV for their citizens. Increasing worldwide prevalence and mortality among the young couples are the main reasons for this initiative. In the year of 2010, there are about 250,000 deaths are reported in the countries across the Asia with men being the highest risk in transmitting via sexual intercourse. According to a report by World Health Organization (WHO), about 34 million people are affected by HIV, whereby 10% of them are children less than 15 years old.
METHODOLOGY:

The researcher conducted a cross sectional study to understand knowledge and perception of pre-marital screening. The study was conducted among unmarried students of selected colleges in Uttar Pradesh. On calculating sample size with one sample study method (dichotomous) with a known population of 2000 and margin error of 4.35% and confidence interval of 95% the sample size was calculated to 392 samples. Considering 5% attrition rate 392±20, 400 students were conveniently selected for the study after getting an informed consent from the study participants. After the study got approved from the institutional ethical committee (Ethical Approval letter no. API/ACN/Misc/2022-2023/381). After an extensive literature review survey questions were formulated and organized in sections of knowledge and attitude. Before administering the questionnaire to the study population, the face validity of the questionnaire was ensured by a committee of experts in research methodology, obstetrics and gynecology, Community and Psychology. A pilot study was conducted on 50 pilot participants for ensuring the clarity and reliability of the questionnaire. Cronbach’s alpha was used to evaluate the reliability which was found to be > 0.70 the researchers randomly approached the subjects in each department and distributed the questionnaires. Complete anonymity was maintained to protect participants’ identity and to ensure confidentiality of data.

Along with the basic demographic questions, the self-administered tool consisted of 2 important sections i.e., section –I consisted of 38 questions related to the knowledge on pre-marital screening. If the score is more than 75% then it was considered adequate knowledge, if the score is between 50-74% then it is considered moderately adequate knowledge and if it is less than 50% then it is considered inadequate knowledge.

Section-II consists of 10 statements to assess the attitude with 5-point Likert scale. If the score is between 38-50 then it is considered good attitude, if the score is between 24-37 then it is considered moderate attitude and if the score is between 10-23 then it is considered poor attitude.

Before the collection of data, permission was obtained from the principals of selected colleges at Uttar Pradesh. The researcher then introduced themselves, took required oral and written consent from the study samples and gave instructions regarding tool. Each sample was given 20- 30 minutes to complete the questionnaire. Data analysis – The data was summarized, organized, tabulated & analyze according to the objectives of the study by using descriptive (frequency and percentage) and an inferential statistic (chi-square).

RESULT AND DISCUSSION:

After careful data collection, scrutinizing and analyzing, the result showed that out of the 400 samples 50.25% were in the age group of 19-21 years, 51.75% were females, 93.25% were Hindus, 60.75% fathers were self-employed, 37.5% of them had a family income of Rs.80,000-1,00,000 per annum, 58.25% were residing in a rural area, 76.5% had no history of hereditary disease, 76.5% had no history of genetic problems, 96.25% of the parents were non-consanguineous and 43.75% of the information on pre-marital screening was received from the internet.
### Table: 1 Distribution of the Demographic Variable

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic variable</th>
<th>Option</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
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</thead>
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<td>135</td>
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<td></td>
<td></td>
<td>19-21yrs</td>
<td>201</td>
<td>50.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22-24yrs</td>
<td>53</td>
<td>13.25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24-27yrs</td>
<td>11</td>
<td>2.75</td>
</tr>
<tr>
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<td>48.25</td>
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<td>Female</td>
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<td>Hindu</td>
<td>373</td>
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<td>Muslim</td>
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<td>3.75</td>
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<tr>
<td></td>
<td></td>
<td>Christian</td>
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<td>1.25</td>
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<tr>
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<td></td>
<td>Others</td>
<td>373</td>
<td>93.25</td>
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<td>1 lakh – 3 lakhs</td>
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<td>3 lakh – 5 lakhs</td>
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<td>Personal history of hereditary disease</td>
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<td>94</td>
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<td></td>
<td>No</td>
<td>306</td>
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<td>8</td>
<td>Family history of genetic problems</td>
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<td>94</td>
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<td></td>
<td>No</td>
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On analyzing the level of knowledge among the study participants, it revealed that about 21.5% were having adequate knowledge, 58.25% were having moderately adequate knowledge and 20.25% were having inadequate knowledge. In our research most of the participants was having moderately adequate knowledge on premarital screening. Omar A Al-Farsi (2014) conducted a study on A study on knowledge, attitude, and practice towards premarital carrier screening among adults attending primary healthcare centers in a region in Oman. The results suggest that the majority of the participants (84.5%) believed that pre-marital clinical screening (PMCS) was necessary, and about half of them (49.5%) supported the view of making PMCS compulsory.
On analyzing the level of attitude among the study participants, it revealed that about 45.25% had a good attitude, 48.5% had an average attitude and 6.25% had a poor attitude. In our research most of the participants had an average attitude on premarital screening. Rahma M. Al-Kindi (2019) conducted a study on awareness and Attitude Towards the Premarital Screening Programme Among High School Students in Muscat, Oman and the results suggested that Over half of the students (55.3%) agreed that PMS should be mandatory before marriage and approximately one-third (38.3%) were in favor of having laws and regulations to prevent consanguineous marriages.

On associating the demographic variables with the knowledge of the premarital screening, there was a significant association with the demographic variables like age, family income and the residential area. Rahma M. Al-Kindi (2019) conducted a study on awareness and Attitude Towards the Premarital Screening Programme Among High School Students in Muscat, Oman Females were significantly more in favor of making PMS mandatory (P = 0.002) and enforcing PMS laws (P = 0.010) compared to males.
Table 2: Association of demographic variables with the knowledge of pre-marital screening

<table>
<thead>
<tr>
<th>S. No</th>
<th>Demographic variable</th>
<th>Option</th>
<th>Adequate knowledge</th>
<th>Moderate knowledge</th>
<th>Inadequate knowledge</th>
<th>χ² value</th>
<th>P value</th>
<th>Significance (p&lt;0.05)</th>
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<td>16-18yrs</td>
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<td>48</td>
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CONCLUSION

The importance of understanding and applying the knowledge of pre-marital screening still being a taboo or a question of self-respect in a culturally bounded country like India, the going-to-be society is too crumbled in the same societal foundations. Awareness and education on the topic of premarital screening is the need of the hour for the developing countries like India.

ACKNOWLEDGEMENT

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REFERENCE


7. Moussa Safia, et al Knowledge and attitude towards premarital screening and genetic counseling program among female university students, Hail region, Saudi Arabia www.medicalsciencejournal.com Volume 4; Issue 1; January 2018; Page No. 01-06


10. Luka Gaji. Awareness and acceptance of premarital genotype screening among youths in a Nigerian community article September 2015 with 2,748 Reads


16. Levite Valeria, et al Viral hepatitis and *Treponema pallidum* prevalence in persons who underwent premarital blood tests in Argentina Published: 03 July 2019 volume 9, Article number: 9611 (2019)


20. Alhosain Ammar, Premarital Screening Programs in the Middle East, from a Human Right’s Perspective Submitted: February 12, 2018; Accepted: March 14, 2018; Published: March 21, 2018