

Preconception Care Among Women Workers: Effectiveness of Selected Interventions

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Abstract: This paper presents an overview on preconception care among women workers.

Keywords: preconception, women workers

1. Introduction

Preconception care envisage a continuum of healthy women, healthy mothers and healthy children; and promotes reproductive health for couples. Every women of reproductive age who is capable of becoming pregnant is a candidate for preconception care, regardless of whether she is planning to conceive. It is to identify and modify biomedical, behavioral and social risks through preventive and management interventions.

Majority of women who become pregnant do not seek prenatal care and advice until the middle of the first trimester. By that time, organogenesis is well advanced and it may have been affected by the client's life style, both healthy and unhealthy. Knowledge of preconception care has the potential for changing behaviour, modifying risks and improving the health status of potential parents. The target for preconception advice should be all individuals of reproductive age, particularly who are contemplating in the near future and young school children.

The prevention should be started before the occurrence. Knowledge regarding preconception care should be given to the young instead of married women so that they can have plenty of time to prepare their body and mind for the conception. Effective preconception care involves a broad variety of partners, including men, health care providers, youth leaders and community volunteers; and delivery sites such as schools, primary health care facilities, industries and community centres. Outreach and awareness must begin in women if it is to truly improve the health of women and newborns and reduces the rate of mortality. If tackled, however, with vigorous and evidence based interventions, preconception care offers the earliest opportunity to reduce risk, allowing women to enter pregnancy in the best possible health and to have the greatest chance of giving birth to a healthy baby.

The investigator during her clinical experience found that women in rural areas were much less likely to receive preconception care than women in urban areas. Most women who did not receive health care before pregnancy thought that it was unnecessary. The universal access to knowledge on

preconception care among women remains limited. This created an uncontrollable urge within the researcher to provide compassionate health care information for women in rural areas on preconception care. And this study is an effort towards creating awareness among women which they require to act proactively to prevent themselves from future complications.

2. Methodology

The research design used for this study was quasi experimental non-equivalent control group design. The study was conducted at selected two small scale industries in Pathanamthitta, Kerala. Employees belongs to the age group of 19-21 years, which was considered as control group. 60 women (30 from each setting) were selected as study samples using non probability purposive sampling technique. Tools used are a structured knowledge questionnaire was developed to assess the knowledge and a modified 4-point Likert scale to assess attitude regarding preconception care among women.

Data collected was analysed by using both descriptive and inferential statistics Frequency and percentage distribution were used to analyse demographic variables of women. Mean and standard deviation was used to assess the pre and post-test level of knowledge and attitude among women in experimental and control group. Paired and Unpaired t-test was used to assess the comparison of pre and post test level of knowledge and attitude regarding preconception care among women within and between experimental and control group. Correlation coefficient was used to correlate the post-test level of knowledge with attitude regarding preconception care among women. ANOVA was used to find out the association of selected demographic variables with the mean differed knowledge score and attitude score among women.

3. Results and discussion

Description of the demographic variables of women in experimental and control group With regard to age (45%) were 21 years, (57%) were educated up to primary education in both experimental and control group, (77%) in experimental group and (78%) in control group belongs to Hindu religion, (61%) belongs to nuclear family in both experimental and control group, (85%) in experimental group and (100%) in control group were from rural area, (98%) did not have any bad habits, (63%) did not receive information regarding preconception care

in both experimental and control group. The first objective was to assess and compare the pre and posttest level of knowledge and attitude regarding preconception care among women.

Analysis of the pre-test level of knowledge regarding preconception care among women in the experimental and control group. It revealed that (68%) had inadequate level of knowledge and (32%) had moderately adequate level of knowledge regarding preconception care in the experimental group and in the control group (62%) had inadequate level of knowledge, (18%) had moderately adequate level of knowledge, (20%) had adequate level of knowledge regarding preconception care.

Post-test level of knowledge regarding preconception care among women in the experimental and control group. It revealed that (87%) had adequate level of knowledge and (13%) had moderately adequate level of knowledge in the experimental group and in the control group (75%) had inadequate level of knowledge, (10%) had moderately adequate level of knowledge, (15%) had adequate level of knowledge regarding preconception care

Pre-test level of attitude regarding preconception care among women in the experimental group and control group (67%) had moderately favourable attitude in experimental group, whereas in control group, (66%) had moderately favourable attitude.

Post-test level of attitude regarding preconception care among women in the experimental group and control group, (88%) had moderately favourable attitude in experimental group, whereas in control group, (67%) had moderately favourable attitude.

Comparison of pre and post-test level of knowledge regarding preconception care among women in the experimental and control group. In experimental group the pre-test mean was 9.12 with the standard deviation of 3.11, the post-test mean was 13.22 with the standard deviation of 2.43. The calculated 't' value was 20.13 which was greater than the table value and this indicated that there was statistically high significant difference at $p < 0.001$ level.

In the control group, pre-test mean was 8.87 with the standard deviation of 3.41, the post-test mean was 8.11 with the standard deviation of 4.29. The calculated 't' value was 1.33 which was lesser than the table value and this indicated that there was statistically no significant difference between the pre and post-test level knowledge in control group.

Comparison of pre and post-test level of attitude regarding preconception care among women in the experimental and control group. In experimental group the pre-test mean was 22.15 with the standard deviation of 3.31 the post-test mean was 33.36 with the standard deviation of 5.12. The calculated 't' value was 8.99 which was greater than the table value and this indicated that there was statistically high significant difference at $p < 0.001$ level.

In the control group, pre-test mean was 23.11 and the standard deviation was 4.84, the post-test mean was 23.99 and the standard deviation was 4.91. The calculated 't' value was

which was lesser than the table value and this indicated that there was statistically no significant difference at $p < 0.001$ level.

These findings were consistent with the study conducted by Coonrod et. al., (2009) among 305 reproductive age women in USA with the aim to determine knowledge and attitude regarding preconception care. The study findings revealed that eighty-nine percent agreed that improving preconception health benefits pregnancy. Seventy-seven percent expressed some interest in preconception health care. The average knowledge of preconception care score was 76% and concluded that there was interest in preconception education and agreement that preconception health has a positive effect on pregnancy.

The study concluded that the multimedia educational package had been very effective in improving the knowledge and creating favourable attitude regarding

preconception care among women. The findings were consistent with the study conducted by Trupti (2011) to assess the effectiveness of nurse intervention module on knowledge regarding preconception care among 186 women at Belgaum. Non probability purposive sampling technique was used. The study findings revealed that 87% had inadequate knowledge and concluded that the module shows a significant improvement in knowledge on preconception care.

Correlation of post test mean knowledge score with attitude score regarding preconception care among women in experimental group, the mean value was 11.87 with S.D 3.56 for knowledge and for attitude the mean value was 8.11 with S.D 6.61. The calculated 'r' value was 0.48 which revealed that there was fair positive correlation of knowledge with attitude at the level of $p < 0.01$

Correlation of post test mean knowledge with attitude regarding preconception care among women in control group, the mean value was 2.11 with S.D 1.09 for knowledge and for attitude the mean value was 0.99 with S.D 1.74 for attitude. The calculated 'r' value was -0.022 which shows a negative correlation of knowledge with attitude which was not statistically significant. Hence the null hypothesis H_0 stated earlier that "there is no significant relationship between the pre and post-test level of knowledge with attitude regarding preconception care among women between experimental and control group at the level of $p < 0.05$ " was rejected in experimental group and accepted in control group.

Association of demographic variables with the mean differed knowledge score among women showed that there was low statistically significant association with the source of information at $p < 0.05$ and the association of demographic variables with attitude showed that there was low statistically significant association with the religion at $p < 0.05$ in experimental group.

There was no statistically significant association of selected demographic variables with the mean differed knowledge score and attitude score among women in the control group. Hence the null hypothesis (H_0) stated earlier that "there is no significant association of selected demographic variables with

the mean differed level of knowledge and attitude regarding preconception care among women in experimental and control group at the level of $p < 0.05$ was accepted for the demographic variable namely religion and source of information and was rejected for other demographic variables in experimental group and rejected for all demographic variables in control group

4. Conclusion

The present study assessed the effectiveness of Multimedia Educational Package on knowledge and attitude regarding preconception care among women. The study findings concluded that there was a significant difference in the level of knowledge and attitude of women between experimental and control group after administration of Multimedia Educational Package regarding preconception care among women and this proved to be an effective method to improve the knowledge and attitude regarding preconception care among women.

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