

The Effect of a Multimedia Training Package on the Attitudes and Knowledge of Preconception Care Among Working Women: A Quasi-Experimental Study

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Introduction

The fundamental objective of preconception care is to improve the expectant mother's health as well as the health of the child that will grow from her body. Preconception care is something that all women of reproductive age who have the biological ability to have a child should seek out, regardless of whether or not they plan to start a family in the foreseeable future. The effective identification and mitigation of dangers in the biological, behavioural, and social domains requires the use of a wide variety of preventive and management measures. After the first three months of pregnancy have passed, most women who are expecting will give some thought to receiving prenatal care as well as counseling. During this phase of organogenesis, the client's lifestyle choices, both those that are healthy and those that are not, have the potential to have an influence. When people are educated about the significance of preconception care, they are more likely to take precautions to lessen the risk of harm to themselves and their unborn children. All women of reproductive age should have access to preconception counselling, with a particular focus on young women in elementary and middle schools, as well as older women in secondary schools and colleges who may get pregnant in the near future. In order to guarantee that nobody will be hurt at an event, preventative measures have to be implemented in advance. Education on preconception care would be most beneficial to young, unmarried women since they have a higher risk of having an unwanted pregnancy than older, married women do. Preconception health care is a team effort that includes a large number of individuals and organisations, such as males, healthcare providers, youth leaders, and community volunteers; primary care clinics, businesses, and community centres as delivery sites; and males, healthcare providers, and community volunteers. It is essential to educate women and make an effort to connect with them in order to take the first step toward ensuring the health and safety of new mothers and their children. If preconception care is started as early as possible, there is a better chance that both the mother and the unborn child will have a successful pregnancy and delivery. According to the findings of the study, women who lived in rural regions were much less likely to seek preconception care than those who lived in urban areas. The majority of pregnant women who did not seek prenatal care did so because they considered it unnecessary for them. This belief was held by the majority of these women. In spite of the recent progress that has been made, there are not nearly enough services available to help women plan their pregnancies. The author of the research felt obligated to provide women in underprivileged communities with assistance about preconception planning in order to fulfil her ethical obligations. Because there are not enough resources available in their region, these women may not have easy access to information on reproductive health care. As a result of this, the study is focused on the participation of women so that it can better inform them about preventative measures.

Methodology

This study used a quasi-experimental design; nonetheless, there were no control participants involved in the investigation. The research was carried out in the metropolitan area of Lucknow, which is located in the state of Madhya Pradesh in India. The purpose of the research led to the selection of a control group that included personnel ranging in age from 19 to 21 years old. One hundred different women were asked to take part in the study, with 50 of them coming from each region. These ladies were selected by a process that was neither entirely nor totally random. We evaluated the women's perspectives on preconception care by having them complete a knowledge questionnaire and then using a modified version of the Likert scale to rate their responses. Both descriptive and inferential methods of statistical analysis were used in the examination of the data. When conducting research on the characteristics of the female population, we used frequency and percentage distribution as our primary methods of analysis. We used the mean and standard deviation to conduct an analysis of the differences in knowledge and perspectives that existed between the two groups of women. The pre-test and post-test responses of women in the experimental group and the control group were analysed using paired and unpaired t-tests, respectively, to determine whether or not there were any differences in the women's responses to questions regarding preconception care. The purpose of this study was to determine whether or not the women's responses varied in any way. Following the administration of a post-test, the women's prior knowledge of preconception care and their attitudes about it were analysed using the correlation coefficient. Comparing the knowledge and attitude assessments of the women was done via the lens of an analysis of variance in order to have a better understanding of which factors were to blame for the differences that were found. Comparing the characteristics of the female populations that were exposed to the experimental settings and those that were not. There were several points in common between the participants in the control group and those in the experimental group.

Results

. In spite of the fact that more than half of the participants only had a high school diploma or less years of schooling, 78% of the people considered themselves to be Hindu, and 65% of the people had been raised in a nuclear home, 96% of the people completed the job, and nobody made any mistakes. The purpose of the experiment was to determine whether or not there was a shift in women's preconception health literacy as well as attitudes during the duration of the investigation. Before beginning the study, all of the women in both the experimental and control groups took a pretest to determine how much they previously understood about the importance of preconception health. When looking at the proportion of persons who had appropriate knowledge about preconception care in both the experimental group and the control group, the number of individuals who lacked such information was significantly higher in the experimental group (67% vs. 38% vs. 30%). Following the post-test, the findings revealed that the two groups of women had quite varied levels of knowledge about preconception care. In comparison, the control group scored an insufficient 74% on the knowledge scale, a reasonably acceptable 26% on the understanding scale, and a suitable 15% on the comprehension scale. The experimental group scored an adequate 88% on the knowledge scale and a relatively appropriate 12% on the information scale. 66% of the women in the experimental group and

34% of the women in the control group had favourable pre-study attitudes towards preconception care (66 percent in the latter). After completing the post-test, women in the treatment group were substantially more likely to indicate a favourable attitude toward preconception care (68% vs. 11%) than those in the control group (36% versus 9%). This difference was statistically significant. To determine the level of preconception care knowledge possessed by the women in both groups, tests were administered both before and after they got pregnant. The previous value was 9.14, but after all of the tests were completed, the mean increased to 13.10, while the standard deviation decreased to 2.16. When the table value was higher than the "t" calculation value, it was found that there was a statistically significant difference ($p < 0.001$) between the two groups. This was confirmed by looking at the data. The experimental group had an average score of 8.15 out of 13, with a standard deviation of 4.18, while the control group had an average score of 8.11 out of 12, with a standard deviation of 3.43. The fact that the control group's pre-instruction test scores were only 1.45 indicates that there was no noticeable change in those scores after receiving training. This t-value is lower than the one that was shown in the table, which confirms what was said in the preceding claim. Before and after the trial started, questionnaires were given to the women in both groups to find out how they felt about receiving preconception care. The experimental group's pre- and post-test means and standard deviations were, respectively, 22.15 and 34.12, while the pre- and post-test means and standard deviations for the control group were, respectively, 22.47 and 5.14. A p-value of 0.001 indicates that there is a statistically significant difference between the two groups. The t-value of 8.12 that was obtained was greater than the number that was used in the table. Ahead of the test, the average score for the control group was 21.13 (with a standard deviation of 4.14). The results of the test showed that their mean score was 23.64 (a standard deviation of 4.66). According to the results of the approximate t-test, statistically speaking, there was not a significant difference between the two groups ($p\text{-value} = 0.001$). According to what Raja claimed, research was conducted in the United States on women of reproductive age to determine their acquaintance with preconception care as well as their attitudes on the topic. In order to get more insight into the year 2021, these ladies were questioned. Ninety-two percent of individuals believe that improving women's health before they get pregnant would be advantageous for pregnant women. According to the findings, 75 percent of respondents expressed a desire to expand their knowledge of preventive medical treatment prior to becoming pregnant. A huge 76% of those who participated in the survey are in agreement that it is essential to have a fundamental understanding of preconception health, and the same amount of people believe that solid preconception health provides the basis for a productive pregnancy. The researchers discovered that after participating in the multimedia training program, women's preconception health knowledge and attitudes shifted significantly in a positive direction. Specifically . According to Raju, after their participation in a nurse intervention experiment, 100 women in Belgaum, India, had a deeper comprehension of the value of preconception care. This was revealed by the researcher (2016). In this investigation, a more targeted technique was used than one that included the selection of participants at random. After finishing the class, the students had a much better understanding of the factors that contribute to the significance of preconception care. On the post-test, which evaluated the participants' knowledge of preconception care as well as their attitudes toward it, the members of the experimental group scored an average of 11.56 and 8.66 points, with a standard deviation of 3.45. It has been shown that there is a reasonably strong link between knowledge and attitude

($r = 0.55$). The correlation between post-test mean knowledge and attitude toward preconception care varied from 2.57 to 1.05 and from 0.24 to 1.79, respectively, in the group that served as the control. In spite of the fact that there was some correlation between the two variables ($r = 0.45$), it was not significant enough to be deemed a causal link. The lack of a significant difference between the groups' pre- and post-test scores on measures of knowledge and attitude toward preconception care among women led to the rejection of null hypothesis H01 in the experimental group and the acceptance of null hypothesis H02 in the control group. This was due to the fact that there was no significant difference between the groups' pre- and post-test scores on the measures. The experimental group was selected since there was no visible difference between the control group and the group that would be participating in the study. There were statistically significant demographic relationships among the female research participants. There was also a little link between the dependability of the information's source and the score. On the other hand, there was no relationship between religious identification and the mean differential knowledge score. There was no correlation between any of the identified demographic characteristics and the mean difference scores that women achieved on knowledge and attitude tests. Therefore, in the control group, N03 was found to be unacceptable for all demographic variables with the exception of information source and religion. However, religion and information sources were found to be acceptable.

Conclusion

This study was chosen to be carried out because we wanted to get a deeper understanding of how the impact of a multimedia training package changes women's attitudes and knowledge about preconception care. After taking part in a multimedia training session, there was found to be a statistically significant difference between the experimental group and the control group in terms of the knowledge and attitudes that women had towards their preconception health. Reference

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