

A STUDY ON THE KNOWLEDGE OF REPRODUCTIVE HEALTH AMONG ADOLESCENTS - AN INTERVENTION PROGRAMME

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ABSTRACT

Adolescents are a heterogeneous group with different and evolving needs, depending on their personal development stages and life circumstance as they transition from childhood, through adolescence into adulthood, all individuals must be prepared with the knowledge and skills they need to make use of the opportunities and to face the challenges they will encounter in the adult world. These efforts should contribute to building their sense of self-worth and to strengthen their links with the individuals and institutions in their communities. However, in many places they feel unprepared and unable to address the sensitive matters around puberty, sexuality and reproduction. The aim of the present study is to measure the effectiveness of the reproductive intervention programme among adolescent girls and to evaluate the knowledge of reproductive health before and after the intervention programme with reference to stream of education. The sample for the present study was selected by random sampling method and quasi-experimental pre-test, post-test research design was conducted. A total of 120 subjects were chosen, consisting of 60 adolescent girls from arts and 60 adolescent girls from science stream. The tool administered were questionnaires formulated by the investigator. Intervention was delivered using lectures, discussions, and demonstration by posters, videos, printed material, over-head projectors, black board and discussions. The collected data was statistically analyzed by Mean, Standard Deviation, t- test. The conclusion drawn from the present study revealed that, adolescent girls of science stream had more knowledge about reproductive health before intervention compared to the adolescent girls of arts stream. After intervention, adolescent girls of science stream showed more knowledge about reproductive health in comparison to adolescent girls of arts stream. Thus informative and educable interventions seem to have a positive effect on awareness levels which would eventually encourage expansion of knowledge about reproductive health and positive health habits.

KEY WORDS: Adolescents, Reproductive health, Knowledge, Arts and Science stream.

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INTRODUCTION

Adolescence is a term which is derived from a Latin word “adolescere” which means “growing into maturity.” It is a fascinating period of life that makes the transition from being a dependent child to becoming an independently functioning adult. World Health organization (2004) considers “adolescence” as the phase of life between childhood and adulthood, which is a unique stage of human development and an important time for laying the foundations of good health as they experience rapid physical, cognitive and psychosocial growth. Today, 1.2 billion adolescents stand at the crossroads between childhood and the adult world. Around 243 million of them live in India. (UNICEF 2011). United Nations Population Fund (2014) has defined reproductive health as a state of complete physical, mental and social well-being in all matters relating to the reproductive system. The reproductive health needs of adolescents have long been neglected, but in the last 10 years, the importance of information on reproduction and sexuality is being increasingly emphasized. To grow and develop in good health, adolescents need information, including age- appropriate comprehensive sexuality education, opportunities to develop life skills, health services that are acceptable, equitable, appropriate, effective; safe and also need opportunities to meaningfully participate in the design and delivery of interventions to improve and maintain their health. Expanding such opportunities is a key to responding to adolescent’s specific needs and rights.

United Nations Children’s Emergency Fund (UNICEF) enumerated menstruation as a natural fact of life and a monthly occurrence for the 1.8 billion girls, women, transgender men and non-binary persons of reproductive age. Yet millions of menstruators five across the world are denied the right to manage their monthly menstrual cycle in a dignified, healthy way. The onset of menstruation coincides with new opportunities and vulnerabilities that arise during adolescence. Menstrual health and hygiene interventions can be an entry point for other gender- transformative programs during this period like sexual and reproductive health education and life skills development. World Health Organization (2018) indicated that Menstrual Health Hygiene (MHH) is important for the fulfillment of girls and women’s rights, a key objective of the Sustainable Development Goals (SDGs). SDG acknowledges the

right to menstrual health and hygiene, with the explicit aim to, “By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations”.

Shah et al. (2019) emphasized genital hygiene as the major factor for protection of reproductive health. The problems related to genital hygiene is inadequately known and has not acknowledged proper attention during the phase of adolescence which distresses the health of the girls and there is an increased susceptibility to reproductive tract infections and pelvic inflammatory diseases and other complications. Every year, approximately 100 million women worldwide are exposed to genital infections which can result in vaginitis, cervicitis, and urethritis, and trichomoniasis associated with adverse pregnancy outcome. In a country like India, the topics of genital health and reproductive health are not freely discussed in the society. People feel uncomfortable talking about this in public due to taboos and social belief, parents hesitate to discuss this with their adolescent daughters. As a result, adolescent girls are not well aware and they have a limited understanding and practices regarding their genital health, which leads to poor hygiene. This increases susceptibility to urinary, vaginal, and pelvic infections.

Jain (2016) considered sexually transmitted diseases (STD) among adolescents as an important problem. Adolescent age group is an important segment of population and main resource for prevention of HIV/AIDS transmission. At present, around 25 percent of the worlds all AIDS cases are in their twenties age and it is assumed that these cases might have been got infected with HIV/AIDS during their adolescent period. Adolescents are stage of experimentation trying out different things. During this period, a boy or a girl wants to be independent, very often starts experimenting with-intravenous drugs or sex, both making them to get infected with HIV/AIDS, before it is too late to understand. HIV/ AIDS is the infection that is transmitted as results of a specific behavior pattern, which currently exists in adolescent population. The information gap on STD/HIV/AIDS among the adolescents and population of reproductive age are high in our country. Most of the male adults and female adults are ignorant of prevention need for HIV/AIDS. Knowledge of prevention to all is the only weapon to fight this pandemic.

Rao et al (2008) conducted a study to determine the effectiveness of an educational intervention program on knowledge of reproductive health among adolescent girls. This educational intervention study was carried out over a period of one year. A total of 791 rural girls in the age group 16-19 years were randomly selected from coastal villages in Udupi District, Karnataka. Adolescent girls were educated regarding reproductive health and their awareness levels were evaluated immediately following intervention. Findings were described in terms of proportions and percentages. Chi square test was used to test the effect of the intervention. As a result there was a significant increase in overall knowledge after the intervention was observed regarding contraception. Knowledge regarding ovulation, first sign of pregnancy and fertilization improved by 37.2%. Knowledge regarding the importance of diet during pregnancy improved from 66 to 95% following the intervention. This study clearly showed that an educational intervention program can bring about a desirable change in knowledge among adolescent girls regarding reproductive health.

Komal (2012) conducted an interventional study in a slum of Vijayawada, AP. In this study around 450 adolescent girls were interviewed with the help of a pretested questionnaire. The mothers were given health education regarding various aspects of reproductive health including HIV/AIDS & followed up after three months to assess their knowledge & practice. Only 48.89% of the study subjects were aware of Reproductive Health which significantly increased after health education. The awareness was more among the girls whose mothers were more educated. Significant number of girls were practicing menstrual hygiene and were aware of contraceptives including emergency contraceptives, minimum legal of marriage, sexually transmitted diseases. HIV/AIDS including modes of transmission and prevention after giving health education. Most of the adolescent girls were not aware regarding reproductive health which significantly increased in the follow up visit after health education.

The sexual and reproductive health needs of adolescents in India are currently overlooked or are not understood by the Indian healthcare system. This could be owing to the lack of knowledge of scientific evidence along with the gross unpreparedness of the public health system. Often comprehensive sexual histories are not taken, and sexual health is not openly discussed due to cultural and traditional norms in society. Incorrect information has the potential to create misunderstanding in the youth making them less likely to adopt healthy practices and attitudes towards sex enabling them to maintain lifelong sexual health. Public discussion of topics of a sexual nature are widely considered as taboo in the Indian society, therefore acting as a barrier to delivery of adequate and effective sexual education to Indian adolescents. With India being one of the signatories to the 1994 United Nations International Conference on Population and Development (ICPD), it is obliged to provide free and compulsory comprehensive sexuality education for adolescents and young people as part of commitments made under the ICPD agenda.

OBJECTIVES OF THE STUDY

1. To measure the effectiveness of an educational intervention programme in improving the knowledge of reproductive health among adolescent girls of age 18-22.
2. To determine the effect of stream of education on the knowledge of reproductive health among adolescent girls before and after the intervention programme.

MATERIALS AND METHODS

The present quasi-experimental pre-test, post-test research design was conducted to measure the effectiveness of the reproductive intervention programme among adolescent girls and to evaluate the knowledge of reproductive health before and after the intervention programme with reference to stream of education. The samples for arts and science stream were collected from Justice Basheer Ahmed Sayeed College for Women (Autonomous) Teynampet, Chennai- 600018. The sampling design used for the study was random sampling method. A total of 120 subjects were chosen, consisting of 60 adolescent girls from arts and 60 adolescent girls from science stream. The tool administered were questionnaires formulated by the investigator. The questionnaire was administered to the adolescent girls individually by the investigator. The collected data was statistically analyzed by Mean, Standard Deviation, t- test. Willingness to participate in the study was obtained by a verbal consent from the students after explaining the objectives of the study. To ensure confidentiality, students were asked not to furnish their names.

Pre-test

A total of 120 students participated in the pre-test assessment, consisting of 60 adolescent girls from arts stream and 60 adolescent girls from science stream. A pre-tested questionnaire was administered which included baseline characteristics of the study population, with questions related to knowledge on menstruation, menstrual hygiene, genital health, breast care, pregnancy, antenatal care and contraception and STDs.

Interventions

The comprehensive health education program was designed for two days. Each intervention was designed for 90 minutes. In which the lecture was of 1 hour and discussion was for 30 min. The topics included were menstruation, menstrual hygiene, genital health, breast care, pregnancy, antenatal care, methods of contraception and STDs. Audio visual aids, chalk and blackboard, charts, posters and video films were also used. The education was followed by an interactive session with the students to clarify doubts.

Post-test

Fifteen days after the intervention, there was a post test in which the students were given the same knowledge test and feedback forms.

RESULT AND DISCUSSION

Table 1 - Knowledge of Reproductive Health among Adolescents before Intervention

Variable	Stream of education	Mean	Standard deviation	t- value	Level of significance
Knowledge of Reproductive health	Arts	12.5	5.13	7.12	0.01
	Science	18	2.96		

An observation of table-1 reveals the mean score, standard deviation and 't'- value of knowledge of reproductive health among adolescent girls of arts and science stream of education before intervention. The mean score for knowledge of reproductive health was found to be 12.5 for adolescent girls of arts stream and 18 for adolescent girls of science stream. The calculated 't'- value for knowledge of reproductive health among adolescent girls was 7.12 which is greater than the standard t-value (2.58) at 1% level of significance. The results revealed that there was difference in knowledge of reproductive health among adolescent girls of arts and science stream of education before intervention. The finding is graphically represented in figure-

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Table 2 - Knowledge of Reproductive Health among Adolescents after Intervention

Variable	Stream of education	Mean	Standard deviation	t- value	Level of significance
Knowledge of Reproductive health	Arts	20.5	1.95	4.92	0.01
	Science	22	1.22		

Table-2 represents the mean score, standard deviation and 't'- value of knowledge of reproductive health among adolescent girls of arts and science stream of education after intervention. The mean score for knowledge of reproductive health was found to be 20.5 for adolescent girls of arts stream and 22 for adolescent girls of science stream. The calculated 't'- value for knowledge of reproductive health among adolescent girls was 4.92 which is greater than the standard t-value (2.58) at 1% level of significance. The results revealed that there was difference in knowledge of reproductive health among adolescent girls of arts and science stream of education after intervention. The finding is graphically represented in figure 2.

Table 3- Knowledge of Reproductive Health among Arts students before and after Intervention

Variable	Stream of education (Arts)	Mean	Standard deviation	t- value	Level of significance
Knowledge of Reproductive health	Pre-test	12.5	5.13	11.69	0.01
	Post-test	20.5	1.95		

The perusal of Table-3 reveals the mean score, standard deviation and 't'- value of knowledge of reproductive health education among adolescent girls of arts stream before and after intervention. The mean score for knowledge of reproductive health education among arts students before intervention was found to be 12.5 and after intervention the mean score was found to be 20.5. The calculated 't'- value for knowledge of reproductive health among arts students was 11.69 which is greater than the standard t- value (2.58) at 1% level of significance. The results revealed that the change in knowledge after the intervention is highly significant. The finding is graphically represented in figure 3.

Table 4- Knowledge of Reproductive Health among Science students before and after Intervention

Variable	Stream of education (Science)	Mean	Standard deviation	t- value	Level of significance
Knowledge of Reproductive health	Pre-test	18	2.96	9.29	0.01
	Post-test	22	1.22		

Table-4 depicts the mean score, standard deviation and 't'- value of knowledge of reproductive health among adolescent girls of science stream before and after intervention. The mean score for knowledge of reproductive health among science students before intervention was found

to be 18 and after intervention the mean score was found to be 22. The calculated 't'- value for knowledge of reproductive health among science students was 9.29 which is greater than the standard t-value (2.58) at 1% level of significance. The results revealed that the change in knowledge after the intervention is highly significant. The finding is graphically represented in figure 4.

Figure 1: Knowledge of Reproductive health among adolescents before intervention

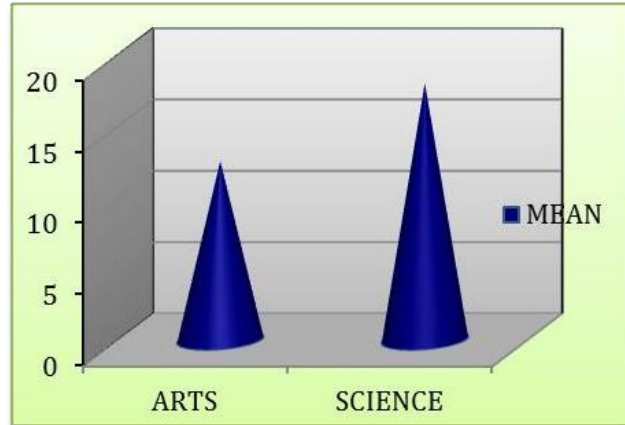


Figure 2: Knowledge of Reproductive health among adolescents after intervention

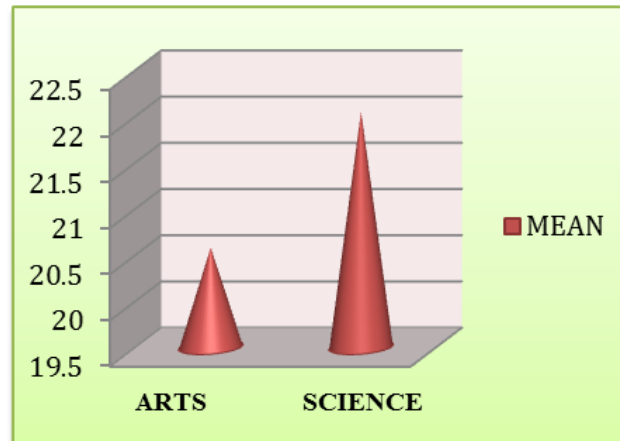


Figure 3: Knowledge of Reproductive health among Arts students before and after intervention

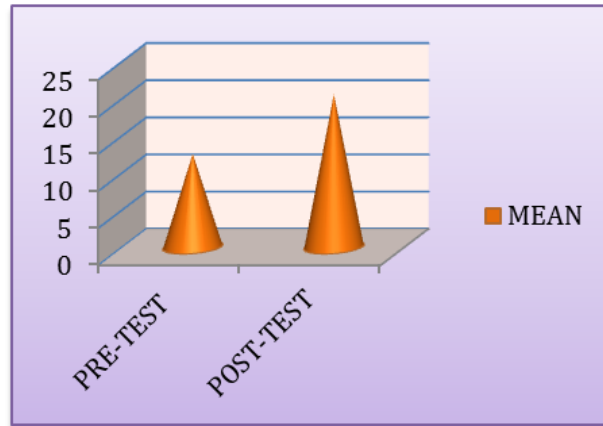
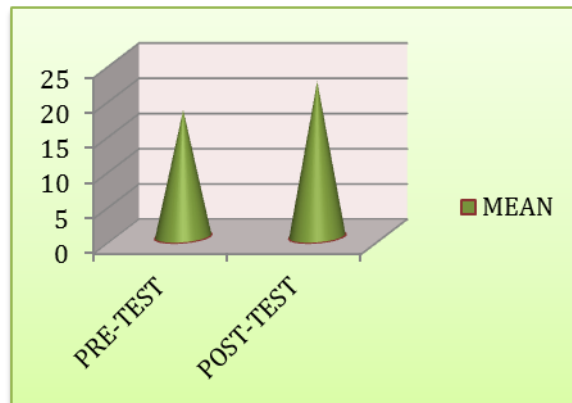


Figure 4: Knowledge of Reproductive health among Science students before and after intervention



CONCLUSION

The conclusion drawn from the present study revealed that, adolescent girls of science stream had more knowledge about reproductive health before intervention programme compared to the adolescent girls of arts stream. Adolescent girls of science stream showed more knowledge about reproductive health in comparison to adolescent girls of arts stream after intervention, Intervention programme had an effect in increasing the knowledge of reproductive health among adolescent girls of science and arts stream after intervention.

SUGGESTIONS FOR FURTHER STUDY

The findings of the present studies are tentative and should be viewed as preliminary because of the limited sample size, therefore it seemed desirable to conduct a similar study on a larger population.

1. A longitudinal study can be conducted to assess the knowledge of reproductive health.
2. The study can be extended further to compare the knowledge reproductive health among heterogeneous group.
3. A comparative study among adolescents between rural and urban regarding reproductive health can be conducted.

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