

Research Article

Effectiveness of Adolescent Empowerment Programme on Knowledge Regarding Reproductive Health Among Adolescent Girls

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Received: July 03, 2023

Accepted: July 18, 2023

Published: July 28, 2023

Abstract: Background: Adolescent girls are more marginalized and face many problems in society. Owing to a lack of knowledge on reproductive health, they succumb to various health problems. Thus, in order to lead healthy lives and protect themselves from reproductive health problems, young people need sound information about the physical, psychological and social changes that take place through childhood and adolescence. **Objectives:** The objective of the study was to evaluate the effectiveness of Adolescent Empowerment Programme on knowledge regarding reproductive health among adolescent girls. **Methodology:** An evaluative study was conducted among 30 Adolescent girls (16 to 19 years) studying in P.C. Jabin's PU College of Science, Hubballi. The research design used for the study was pre-experimental; one group pre-test, post-test design. Samples were selected by using Simple random sampling technique. Structured knowledge questionnaire was used for obtaining the level of knowledge. **Results:** The study results revealed that most of the subjects were in the age group of 17-18 years, majority of the subjects in the pre-test 16(53.33%) had average knowledge, 9(30%) had good knowledge and 5(16.66%) had poor knowledge. Whereas, in post-test after adolescent empowerment programme, 15(50%) had good knowledge and 13(43.33%) had average knowledge and 2(6.66%) had poor knowledge regarding reproductive health. With regard to statistical association, there was a statistical association between pre-test knowledge scores and subject's father's and mother's education, occupation and source of information. The calculated paired 't' value ($t_{cal} = 8.16^*$) was greater than the tabulated value ($t_{tab} = 2.009$). This indicates that the gain in knowledge score was statistically significant at 0.05 level of significance. Therefore, the Adolescent empowerment programme was effective in improving the knowledge of subjects regarding reproductive health. **Conclusion:** The study concludes that intervention using Adolescent Empowerment Programme regarding reproductive health was effective in enhancing the knowledge of adolescent girls. The improved knowledge regarding reproductive health will enable them to make informed choices and empower them in decision making and adopting a healthy reproductive lifestyle, which will, in turn, help the adolescents to improve the quality of life. **Keywords:** Adolescent girls, Adolescent Empowerment Programme, knowledge, reproductive health.

Introduction

Good health is a fundamental human right and a necessary precondition for individual and societal development. Adolescence is a time of general good health, with low mortality rates. Nevertheless, many lifestyle choices made during this period have negative consequences later in life.¹ Adolescents comprise 20% of the world's total population. Out of 1.2 billion adolescents worldwide, about 85%

live in developing countries. In India, there are 190 million adolescents comprising 21% of India's total population. Adolescent pregnancies constitute 10-15% of total pregnancies in India. This is largely attributed to early marriage, a culture widely prevalent in the whole of the Indian subcontinent, besides Africa.²

Adolescent girls are more marginalized and face many problems in society. Owing to a lack of knowledge on reproductive health, they succumb to various situations such as unhealthy menstrual hygiene practices, unwanted sex, teenage pregnancy, unsafe abortions, reproductive tract infections (RTIs), and sexually transmitted diseases (STDs) such as HIV/AIDS. These have adverse effects on their mental health also.³

Adolescence reproductive and sexual health has been identified as key strategies within the reproductive and child health programme under the national rural health mission. Adolescence could also be a period of increased risk taking and thus susceptibility to behavioral problems at the time of puberty and new concerns about the reproductive health. Majority of the adolescents still do not have access to information and education on sexuality, reproduction, sexual and reproductive health, nor do they need access to preventive and therefore the curative services.⁴

Adolescent sexual and reproductive health can affect mental health and other health factors, having long-term implications on educational attainment, employment potential, economic wellbeing and a person's overall ability to reach their full potential. Addressing adolescent sexual and reproductive health can bring societal benefits as well as individual health benefits. These factors are usually accomplished by investing in youth education and other key areas. Investing in adolescent can bring benefits during adolescence, throughout their life course and into the next generation.⁵ Thus, in order to lead healthy, responsible and fulfilling lives, and protect themselves from reproductive health problems, young people need to be knowledgeable about themselves and the people they relate to, and need sound information about the physical, psychological and social changes that take place through childhood and adolescence.²

The lack of Reproductive health knowledge makes adolescent girls to adopt various risk-taking behaviors, affecting their mental as well as physical health. They are not trained at the secondary school level in coping with various critical life situations; as a result, they don't have the skill of prompt response to these situations. Hence, a comprehensive adolescent empowerment programme is necessary, which will empower them in decision making and adopting a healthy reproductive lifestyle.³

Empowerment is a process of awareness and capacity building that leads to greater participation, decision-making power, and transformative action. Through empowerment, adolescents are equipped with knowledge which enable them to make informed choices and take control of decisions that affect many aspects of their daily lives, including sexual and reproductive health. Thus, efforts that empower adolescents are crucial in reducing adverse sexual and reproductive outcomes such as adolescent pregnancies.⁶

Considering the above facts researcher intends to conduct Adolescent Empowerment Programme on knowledge regarding reproductive health to enable an adolescent girl to enhance knowledge, wellbeing and ability to deal with varied aspects of adolescence.

Material and Methods

Research approach: Evaluative Research Approach.

Research design: Pre-experimental; one group pre-test, post-test design.

Research setting: PC Jabin Pre-University College of Science, Hubballi

Population

Target Population: Adolescent Girls.

Accessible Population: Adolescent Girls aged between 16 to 19 years studying in PC Jabin's PU College of Science, Hubballi.

Sample and sampling technique

Sample: Adolescent Girls aged between 16 to 19 years studying in PC Jabin's PU College of Science, Hubballi.

Sampling technique: Simple random sampling technique

Sample size: 30

Criteria for selection of the sample

Inclusion criteria

Adolescent Girls who are:

- ✓ Present during the time of data collection.
- ✓ Willing to participate in the study.
- ✓ Aged 16 to 19 years studying in selected PU College, Hubballi.
- ✓ Understanding English.

Exclusion criteria

Adolescent Girls who are,

- ✓ Sick during the time of data collection.
- ✓ Aged below 16 years.

Description of the data collection tool

In this study the data collection tools were consisted of 2 parts covering the following areas.

Part I: Items on Socio-demographic variables.

Part II: Items on Structured knowledge questionnaire.

This section consists of 25 structured knowledge questionnaires regarding reproductive health. A score value of one (1) was allotted for each correct response and zero (0) for each incorrect response. Total maximum score limit was 25. Questions were focused on different aspects such as reproductive health, components of reproductive health and programs of reproductive health. The questions were of multiple response and multiple-choice type.

Results

Findings related to socio-demographic variables of subjects

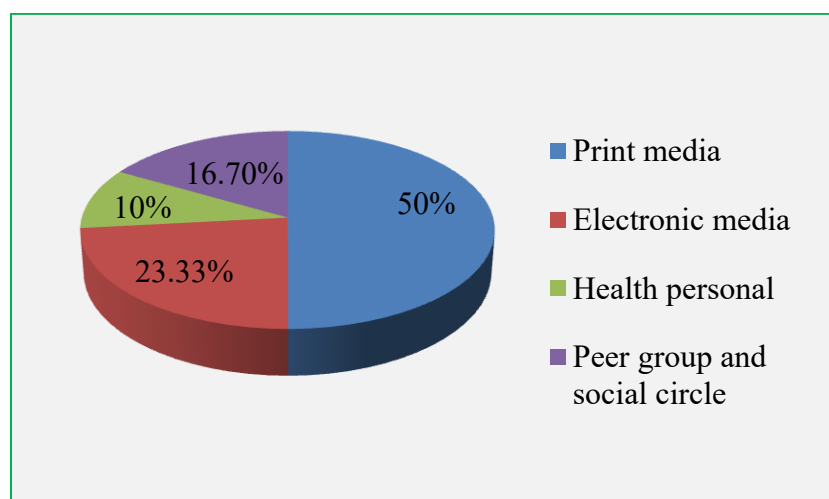


Figure 1. Percentage distribution of subjects according to Source of information regarding reproductive health

In regard to the age, majority of the subjects, 11(36.7%) were in the age group of 17-18 years. Regarding religion, majority of the subjects 21(70%) were belongs to Hindu religion. Regarding course of study, 15(50%) subjects were studying I year PUC and 15(50%) subjects were studying II-year PUC. With regards to the type of family, majority of the subjects 18(60%) were belongs to nuclear family. With regard to area of residency, majority of the subjects 9(30%) resides in rural area and 21(70%) of the samples resides in urban area.

Regarding education of the father and mother, majority of the subjects 15(50%) were non formal education. With regards to the source of information regarding reproductive health 15(50%) had received information from print medias, 7(23.33%) had received information from electronic source, 5(16.66%) had received information from peer group and social circle and 3(10%) received information from health professionals.

Analysis and interpretation of knowledge scores of adolescent girls regarding reproductive health

Table 1. Mean, Median, Mode, Standard Deviation and Range of knowledge scores of subjects regarding reproductive health

Area of analysis	Mean	Median	Mode	Standard deviation	Range
Pre-test	10.26	11	11	2.24	10
Post-test	21.73	22	23	1.63	05
Difference	11.47	11	12	0.61	05

Table 1 reveals that, the pre-test mean knowledge score was 10.26, median 11, mode 11, standard deviation 2.24, and range 10. Whereas the post-test, mean knowledge score was 21.73, median 22, mode 23, standard deviation 1.63 and range 05. The overall difference in mean knowledge score was 11.47, median 11, mode 12, standard deviation 0.61 and range 05.

Table 2. Frequency and percentage distribution of knowledge scores of subjects regarding reproductive health

Level of knowledge	Pre-test		Post-test	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Good	9	30	15	50
Average	16	53.33	13	43.33
Poor	5	16.66	2	6.66

Table 2 reveals that, the distribution of level of knowledge of adolescent girls regarding reproductive health during pre-test and post-test. Most of the subjects in the pre-test 16 (53.33%) had average knowledge, 9 (30%) had good knowledge and 5 (16.66%) had poor knowledge. Whereas, in post-test after adolescent empowerment programme, 15 (50%) had good knowledge and 13 (43.33%) had average knowledge and 2 (6.66%) had poor knowledge.

Table 3. Pre-test, post-test percentage of knowledge scores of subjects regarding reproductive health

Items	Mean % of knowledge scores of subjects		
	Pre-test	Post-test	Gain in knowledge
Structured knowledge questionnaire	46.26	88.26	42

Table 3 reveals that, there was 42% of gain in knowledge after administration of Adolescent Empowerment Programme.

Testing of hypothesis

The calculated paired 't' value ($t_{cal} = 8.16^*$) was greater than the tabulated value ($t_{tab} = 2.009$). Hence, H_1 was accepted. This indicates that the gain in knowledge scores was statistically significant at 0.05 level of significance. Therefore, the Adolescent empowerment programme was effective in improving the knowledge of adolescent girls regarding reproductive health.

Analysis and interpretation of data to find out an association between pre-test knowledge scores of subjects with their selected socio-demographic variables

With regard to statistical association, there was a statistical association between pre-test knowledge scores and subject's father's and mother's education and occupation, source of information. And there was no association between the pretest knowledge scores and other socio-demographic variables such as course of study, religion, type of family, habitat, and family income.

Discussion

The findings of the study were supported through a study conducted by Chen et al. where the researcher found majority of the subjects, 45 (56.3%) were less than 15 years and 35 (43.8) subjects were more than 15 years.⁷ With regards to course of study, findings were supported by Bhatakhande and Peerapur, where the researcher found that 13 (43.33%) were in PU I year and 17 (56.66%) were in PU II year.⁸ Netali et al. found majority of subjects 30 (60%) had received information from print media, 6 (12%) had received information from electronic media, 5 (10%) had received information from health personnel and 1 (1%) had received from peer group and social circles.⁹ With regards to knowledge scores, findings were supported by a study conducted by Rao et al. who observed that the mean pretest knowledge score of subjects towards reproductive health was 33.83 and mean pretest knowledge score was 37.64. The results showed that there are positive effects on knowledge ($p < 0.05$) of students after receiving the intervention. The difference between the two scores (56% v/s 79.40%) showed a significant association ($p \text{ value} \leq 0.001$).² A study conducted by Bama Kanmani showed that in pre-test 35% having inadequate, 62.5% having moderate and 2.5% having adequate knowledge and after attending student empowerment on healthy life style practices among adolescent girls in post-test 64% having adequate, 36% having moderate and no one was having inadequate knowledge regarding reproductive health. Researchers also assumed that creating awareness by using student empowerment on healthy life style practice programme can increase the level of adolescent knowledge about the reproductive health.¹⁰ Jose et al. found that there was a significant association of knowledge with gender, marital status and education level regarding reproductive health.¹¹

Conclusion

On the basis of the findings, the investigator concluded that the intervention using Adolescent Empowerment Programme regarding reproductive health was effective in enhancing the knowledge of adolescent girls. The improved knowledge regarding reproductive health will enable them to make informed choices and empower them in decision making and adopting a healthy reproductive lifestyle, which will, in turn, help the adolescents to improve the quality of life.

Implications of the Study

The findings of the study have implications for Nursing, Practice, Research and administration. Based on the study results, the nurses can organize awareness campaign through different media to increase the awareness regarding reproductive health at the community level. Nursing professionals can make significant contribution to health promotion among adolescents and their families. Necessary administrative encouragement can be made to conduct social awareness Programmes on reproductive health.

Declarations

Acknowledgments: We would like to express our heartfelt thanks and deep sense of respect to Honorable Vice Chancellor, Registrar and Director, Advanced Research Wing of RGUHS,

Bangalore for encouraging us by sanctioning UG Research Grants to conduct this project (UG22NUR324). It is our pleasure and privilege to express our sincere thanks to Dr. Sanjay. M. Peerapur, M.Sc.(N), Ph.D., Principal and HOD of Medical Surgical Nursing, KLE'S Institute of Nursing Sciences, Hubballi for his motivational assistance, valuable suggestions and expert guidance in completing this study successful in spite of his busy schedule.

Conflict of Interest: There are no conflicts of interest.

Ethical Approval: The proposal for the study was approved by the Institutional Review Board of the KLE'S Institute of Nursing Sciences, Hubballi.

Informed Consent: The researcher approached all adolescent girls at PC Jabin Pre-University College of Science, Hubballi and explained the nature of the study to adolescent girls. They were informed that participation in the study was voluntary and they could withdraw from it at any time. Anonymity and confidentiality of the collected data were also assured. Opportunities for asking questions about the study were provided. Adolescent girls were asked to sign the consent form. All data collected were kept strictly confidential.

Author Contributions: The authors confirm sole responsibility for the following: study conception and design, data collection, analysis and interpretation of results, and manuscript preparation.

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Citation: Razia Bareman Chapparband and Sunil, M.B. 2023. Effectiveness of Adolescent Empowerment Programme on Knowledge Regarding Reproductive Health among Adolescent Girls. *International Journal of Recent Innovations in Academic Research*, 7(7): 39-45.

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