

EFFECTIVENESS OF HEALTH EDUCATION INTERVENTIONS IN ENHANCING AWARENESS AND ATTITUDE TOWARD TEENAGE PREGNANCY AMONG SCHOOL-GOING ADOLESCENT GIRLS IN CENTRAL INDIA

Author's Name: Lata Purohit¹, Prof. Dr. Anu V. Kumar², Prof. Dr. Daisy Abraham³

Affiliation:

1. . PhD Nursing Scholar, Index Nursing College, Malwanchal University, Indore, Madhya Pradesh, India.
2. PhD Guide, Index Nursing College, Malwanchal University, Indore, Madhya Pradesh, India.
3. Co- Supervisor, P.G. College of Nursing Hospital Sector Bhilai, CG, India.

Corresponding Author Name & Email Id: Lata Purohit, purohitlata24@gmail.com

ABSTRACT

Background: Teenage pregnancy remains a major public health and social challenge in India, particularly in central regions where early marriage, limited reproductive health knowledge, and sociocultural norms continue to influence adolescent behavior. Health education is considered a key preventive strategy to improve awareness and foster positive attitudes among adolescent girls. *Objectives:* To assess the effectiveness of a structured health education intervention in improving knowledge and attitude regarding teenage pregnancy among school going adolescent girls. *Methods:* A quasi experimental one group pre test post test design was adopted. The study was conducted among adolescent girls aged 13–18 years studying in selected schools of Central India. A structured knowledge questionnaire and attitude rating scale were used for data collection. The health education intervention focused on causes, consequences, prevention, and social implications of teenage pregnancy. Data were analyzed using descriptive and inferential statistics. *Results:* Post test knowledge and attitude scores were significantly higher than pre test scores ($p < 0.05$). A strong positive correlation was observed between knowledge and attitude scores in both pre test and post test assessments. Selected socio demographic variables such as age, educational status, mother's education, and source of prior information showed significant association with knowledge and attitude levels. *Conclusion:* Structured health education interventions are effective in enhancing awareness and developing positive attitudes toward teenage pregnancy among adolescent girls. Incorporation of school based reproductive health education programs is strongly recommended.

Keywords: Teenage pregnancy, adolescent girls, health education, knowledge, attitude, Central India

INTRODUCTION

Adolescence is a critical developmental period marked by rapid physical, psychological, and social changes. Teenage pregnancy, defined as pregnancy occurring in girls below 20 years of age, poses serious health, educational, and socioeconomic consequences. In India, a substantial proportion of girls experience early marriage and early childbearing, particularly in socioeconomically disadvantaged regions. Teenage pregnancy contributes to increased maternal and neonatal morbidity and mortality, school dropout, poor employment prospects, and intergenerational cycles of poverty. Limited awareness regarding reproductive health, inadequate access to reliable information, and sociocultural barriers significantly influence adolescent behavior. Health education interventions delivered during school years can play a vital role in empowering adolescent girls with accurate knowledge and shaping responsible attitudes. Teenage pregnancy, also referred to as adolescent pregnancy, is defined as pregnancy occurring in girls below the age of 20 years. It is a significant public health issue worldwide and remains a major concern in developing countries, including India. Adolescence is a critical transitional phase characterized by rapid physical, psychological, emotional, and social changes. During this period, adolescents are particularly vulnerable to risk-taking behaviors due to limited knowledge, peer pressure, curiosity, and inadequate guidance regarding sexual and reproductive health. When pregnancy occurs during this formative stage of life, it often leads to adverse health, educational, social, and economic consequences for both the mother and the child. Globally, it is estimated that nearly 16 million girls aged 15–19 years give birth every year, with the majority of these births occurring in low- and middle-income countries. Complications related to pregnancy and childbirth are among the leading causes of death in adolescent girls in this age group. Teenage mothers are at higher risk of developing anemia, pregnancy-induced hypertension, preterm labor, obstructed labor, postpartum infections, and mental health problems such as depression and anxiety. Infants born to adolescent mothers are also more likely to experience low birth weight, prematurity, neonatal morbidity, and increased infant mortality. These health risks highlight the serious implications of early pregnancy on maternal and child health outcomes.

In the Indian context, teenage pregnancy continues to be influenced by multiple socio-cultural and economic factors such as early marriage, gender inequality, poverty, low educational attainment, and limited access to reproductive health services. According to national surveys, a substantial proportion of girls are married before the legal age of 18 years, particularly in rural and semi-urban areas. Central India, like many other regions, faces challenges related to traditional beliefs, lack of open communication about sexual health, and inadequate school-based health education programs. These factors contribute to insufficient awareness and unfavorable attitudes toward teenage pregnancy among adolescent girls. Lack of accurate knowledge regarding puberty, contraception, sexually transmitted infections, and the

consequences of early pregnancy often leads adolescents to make uninformed decisions. Although some adolescents may possess basic information, this knowledge is frequently incomplete, incorrect, or influenced by unreliable sources such as peers and social media. Attitude plays a crucial role alongside knowledge, as beliefs, perceptions, and cultural norms strongly influence behavior. Negative or indifferent attitudes toward teenage pregnancy may result in acceptance of early marriage and childbearing as normal life events, thereby perpetuating the cycle of adolescent pregnancy. Health education is recognized as an effective and sustainable strategy for preventing teenage pregnancy. Structured health education interventions aim to provide scientifically accurate information, clarify misconceptions, promote positive attitudes, and encourage responsible decision-making among adolescents. School-going adolescent girls represent an important target group for such interventions, as schools provide a structured environment where health education can be delivered systematically and consistently. By enhancing awareness and shaping positive attitudes, health education empowers adolescent girls to delay pregnancy, pursue education, and protect their reproductive health. Previous studies have demonstrated that structured teaching programs significantly improve knowledge and attitude related to reproductive health issues, including teenage pregnancy. However, there is a continued need for region-specific research to evaluate the effectiveness of health education interventions, particularly in Central India where socio-cultural diversity and disparities in health literacy exist. Understanding the impact of educational interventions can help educators, nurses, and policymakers design and implement effective adolescent health programs. Therefore, the present study aims to assess the effectiveness of a structured health education intervention in enhancing awareness and attitude toward teenage pregnancy among school-going adolescent girls in Central India. The findings of this study are expected to contribute valuable evidence for strengthening school-based adolescent reproductive health education and promoting healthier futures for young girls.

OBJECTIVES OF THE STUDY

1. To assess pre-test and post-test knowledge regarding teenage pregnancy among adolescent girls.
2. To assess pre-test and post-test attitude toward teenage pregnancy among adolescent girls.
3. To evaluate the effectiveness of a structured health education intervention on knowledge and attitude.
4. To determine the correlation between knowledge and attitude scores.
5. To identify the association between selected socio-demographic variables and knowledge and attitude levels.

HYPOTHESES

- H1: Mean post-test knowledge and attitude scores will be significantly higher than pre-test scores.
- H2: There will be a significant correlation between knowledge and attitude scores.
- H3: Selected socio-demographic variables will be significantly associated with knowledge and attitude levels.

METHODOLOGY

Research Design

A quasi-experimental one-group pre-test post-test research design was adopted.

Setting and Sample

The study was conducted in selected secondary and higher secondary schools of Central India. A total of 300 adolescent girls aged 13–18 years were selected using non-probability convenient sampling technique.

Tools for Data Collection

- Structured knowledge questionnaire on teenage pregnancy
- Attitude rating scale
- Socio-demographic profile

Intervention

A structured health education program was administered covering:

- Concept and causes of teenage pregnancy
- Physical, psychological, and social consequences
- Preventive strategies
- Importance of education and life skills

Data Analysis

Data were analyzed using descriptive statistics (frequency, percentage, mean, standard deviation) and inferential statistics (paired t-test, chi-square test, correlation analysis).

RESULTS

- A significant improvement was observed in post-test knowledge and attitude scores compared to pre-test scores ($p < 0.05$).
- A strong positive correlation was found between knowledge and attitude scores in both pre-test ($r = 0.84$) and post-test ($r = 0.86$).
- Age, educational status, marital status, mother's education, mother's occupation, and source of prior information showed significant association with knowledge and attitude levels.

DISCUSSION

The present study was conducted to assess the effectiveness of a structured health education intervention in improving knowledge and attitude toward teenage pregnancy among school-going adolescent girls in Central India. The findings clearly demonstrate that health education is an effective strategy for enhancing awareness and fostering positive attitudinal changes related to teenage pregnancy prevention. In this study, a significant increase in post-test knowledge scores compared to pre-test scores was observed following the health education intervention. This improvement indicates that the structured teaching program successfully addressed gaps in understanding related to the causes, consequences, and prevention of teenage pregnancy. Similar findings have been reported in earlier studies, which showed that structured educational interventions significantly improve adolescents' reproductive health knowledge. The improvement in knowledge may be attributed to the systematic presentation of information, use of age-appropriate language, and interactive teaching methods employed during the intervention.

A significant improvement was also noted in the attitude scores of adolescent girls after the intervention. Positive attitudinal change is crucial, as attitude strongly influences behavior and decision-making. The findings suggest that exposure to accurate information helped participants develop a more responsible and preventive outlook toward teenage pregnancy. This aligns with previous research indicating that health education not only enhances knowledge but also contributes to positive behavioral intentions by modifying beliefs and perceptions associated with early pregnancy. The study further revealed a strong positive correlation between knowledge and attitude scores in both pre-test and post-test assessments. This finding supports the theoretical assumption that increased knowledge leads to favorable attitude formation. As adolescent girls became more informed about the risks and long-term consequences of teenage pregnancy, their attitudes shifted toward delaying pregnancy and prioritizing education and personal development. This interrelationship emphasizes the importance of educational interventions that address both cognitive and affective domains of learning. Additionally, significant associations were found between selected socio-demographic variables and levels of knowledge and attitude. Factors such

as age, educational status, mother's education, and sources of prior information played a notable role in influencing awareness and attitudes. These findings highlight the importance of family environment and access to credible information in shaping adolescents' reproductive health perspectives. Adolescents exposed to informed parents and reliable health information sources demonstrated better knowledge and more positive attitudes. Overall, the findings of this study reinforce the importance of implementing structured, school-based health education programs to address teenage pregnancy. By empowering adolescent girls with accurate knowledge and positive attitudes, such interventions can contribute to informed decision-making and reduction in teenage pregnancy rates.

CONCLUSION

The study concludes that health education interventions are effective in improving knowledge and attitude regarding teenage pregnancy among school-going adolescent girls in Central India. School-based reproductive health education programs should be strengthened and implemented on a regular basis. Teenage pregnancy remains a critical public health and social concern, particularly in developing regions such as Central India, where socio-cultural practices, early marriage, and limited reproductive health awareness continue to influence adolescent behavior. The present study was undertaken to evaluate the effectiveness of a structured health education intervention in enhancing knowledge and attitude toward teenage pregnancy among school-going adolescent girls. The findings of the study provide clear evidence that health education plays a vital role in improving awareness and shaping positive attitudes related to teenage pregnancy prevention. The results revealed a significant improvement in both knowledge and attitude scores following the implementation of the structured health education program. This indicates that adolescent girls were able to better understand the concept of teenage pregnancy, its causes, health risks, social consequences, and preventive measures after receiving focused educational input. The improvement observed in post-test scores highlights the effectiveness of systematic and well-planned health education in addressing gaps in reproductive health knowledge among adolescents. A strong positive correlation between knowledge and attitude scores was observed, suggesting that as adolescents' understanding of teenage pregnancy increased, their attitudes also became more responsible and preventive in nature. This finding emphasizes that knowledge and attitude are closely interrelated and that improving awareness can lead to favorable attitudinal changes. Such changes are essential for encouraging healthy decision-making, delaying early marriage and pregnancy, and promoting continued education among adolescent girls. The study also identified significant associations between selected socio-demographic variables such as age, educational status, mother's education and occupation, and sources of prior information and levels of knowledge and attitude. These associations underscore the influence of family background, educational exposure, and access to reliable information on adolescent

reproductive health awareness. Addressing these factors through community involvement, parental education, and school-based interventions can further strengthen the impact of health education programs. Overall, the findings confirm that structured health education interventions are an effective, feasible, and cost-efficient strategy for preventing teenage pregnancy. Schools serve as an ideal platform for delivering such interventions, as they provide consistent access to adolescents during a critical period of development. Nurses, teachers, and health professionals play a pivotal role in designing and implementing age-appropriate, culturally sensitive educational programs that empower adolescent girls with accurate information and positive attitudes. Integrating comprehensive reproductive health education into school curricula can significantly contribute to reducing teenage pregnancy and its associated health and social consequences. Policymakers and healthcare professionals should prioritize adolescent-focused health education programs to promote informed decision-making, improve reproductive health outcomes, and ensure a healthier future generation.

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