

Effect of Planned Teaching Programme on Knowledge of Adolescent Girls on Prevention of HIV/AIDS

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Abstract

A pre-experimental one group pre-test post-test design was undertaken to assess the effectiveness of planned teaching programme on knowledge of adolescent girls regarding prevention of HIV/AIDS. The conceptual framework adopted was based on the Von Ludwig Bertalanfy General System theory. Convenient sampling was used to select 100 adolescent girls who met the sampling criteria. Structured knowledge questionnaire and Likert's Attitude Scale was used for data collection. Pre-test was administered on day 1 followed by conduct of teaching programme for the same students studying at KISS school and post-test was administered on day 8. Descriptive and inferential statistics were used to analyse the data in this study. The findings revealed that mean post-test knowledge scores were significantly higher than the mean pre-test knowledge scores. The planned teaching programme was effective in enhancing the knowledge of adolescent girls regarding prevention of HIV/AIDS.

The acquired immuno-deficiency syndrome (AIDS) sometimes called "slim disease" is a chronic disease caused by a retrovirus known as the human immuno-deficiency virus (HIV) which breaks down the body's immune system, leaving the victim vulnerable to a life-threatening opportunistic infections, neurological disorders, or unusual malignancies. Among the special features of HIV infection are that once infected, it is probable that a person will be infected for life. Strictly speaking, the term AIDS refers only to the last stage of the HIV infection. AIDS is a major health problem throughout the world, particularly in the developing countries.

Objectives

The objectives of the study were:

1. To assess the knowledge of the adolescent girls before and after teaching regarding prevention of HIV/AIDS.
2. To determine the effectiveness of teaching programme on knowledge of adolescent girls.

Hypotheses

H₁: The mean post-test knowledge score of adolescent girls is significantly higher than mean pre-test knowledge scores regarding HIV/AIDS as evident from structured knowledge questionnaire.

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Delimitations: This study is limited to the adolescent girls (16-19 years) studying in school of KISS, Bhubaneswar for a period of 4 to 6 weeks and it was restricted to 100 subjects.

Review of Literature

Related to prevalence of HIV/AIDS : According to WHO and UNAIDS, at the end of 2008, 33.4 million people were living with HIV in the world. That same year, some 2.7 million people became newly infected, and 2.0 million died of AIDS, including 2,80,000 children. Approximately 5.2 million people in low- and middle-income countries were receiving HIV antiretroviral therapy at the end of 2009.

A 2005 study conducted to determine the extent of HIV in India by National AIDS Control Organisation (NACO) showed that 5.21 million adults are living with HIV in India. Adolescent age group is an important segment of population and potential resource for prevention of HIV/AIDS transmission. Today, around 25 percent of the world's AIDS cases are in their twenties and it is assumed that these people might have been infected with HIV/AIDS during their adolescent period.

Related risk factors of HIV/AIDS: In a study on "Factors that Contribute to HIV Prevalence in Nsanje District in Malawi" in 2012, data was collected using qualitative research methods, namely: Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs). Semi-structured questions were used to con-

duct FGDs and KIIs. The authors found that the key practices that have been sustained include abstinence during pregnancy and after birth; cleansing for breech, abortion, and a new initiate; marriage; divorce; polygamy; death cleansing and widow inheritance. Key processes involved in these practices are sexual rituals and traditional healing. It is the sexual rituals which are mostly associated with HIV risk. Secondly there are modifications involving the main cultural practices with direct HIV risk. It is a challenge for the community to totally stop these practices despite the AIDS crisis because they have embedded duo functionality. The duo functionality of these practices is that of protecting life and ensuring economic survival. Lastly, the cultural practices are characterised by: multiple and intense sex; increased hired sex using hired men for sexual cleansing; and prostitution for widows and their children. Gender catalyses these risk factors. These findings in Nsanje demonstrate an interaction of cultural practices, AIDS and economic crises which invigorate the community to come up with strategies for preventing HIV and AIDS, and reducing poverty.

Related to complication of HIV/AIDS: In a cross-sectional descriptive study on "The Prevalence of Psychological Distress and Associated Factors among People Living with AIDS Attending Antiretroviral Therapy Clinics In Mzuzu, Malawi", Charles Masulani Mwale (2013) found that young age, being female, low education, joblessness, and poor social economical status were associated with psychological distress; also, 14.4 percent of this sub-sample was psychologically distressed while 4.5 percent had suicidal feelings. On the clinical part, shorter duration on ARVs, non-availability of psychological support were some of the factors significantly associated with psychological distress. Outcome of logistic regression did not give any statistically significant interaction or confounding brought by age, sex and social-economic status in the significant relationships. The associated factor for the suicidality was sex with females being more likely to report this symptom than men ($p=0.05$).

Related to knowledge of adolescents: Halkitis et al (2013) conducted a study to identify a comprehensive overview of the situation regarding HIV/AIDS among youth in Delhi, and explore strategies that could be effective in combating the spread of this disease. An increasing number of infections being reported among youth, who comprise a quarter of the population but account for almost one-third of the HIV/AIDS burden. Although the majority of youth are aware of the disease, myths and misconceptions still prevail. A higher percentage of young males report

engaging in pre-marital sexual activity compared with females. Indian youth appear to hold negative attitudes towards HIV testing and people living with HIV/AIDS. Several preventive and control programmes and policies exist, these need further strengthening and evaluation.

Content validity of the tool

According to Polit & Hungler, content validity is the degree to which the items in an instrument adequately represent the universe of the content. The prepared tool along with a request letter, validation certificate and answer keys were submitted to seven experts. The experts were from different specialties who were related to present study. Their recommendation and suggestions were considered and the tool was reframed accordingly.

Reliability: Reliability coefficient of knowledge and attitude questionnaire was established using Spearman Brown's Split Half Method and found to be 0.96 and 0.94. Thus the tool was found reliable. Items were analysed in terms of items difficulty and discrimination index.

The Research Methodology used was evaluative research type and one group pre-test post-test design. The study was conducted among 100 adolescent girls at a school of KISS, Bhubaneswar. Convenient sampling technique was adopted for this study.

Variables: The independent variable was planned teaching programme; the dependent variable was knowledge of adolescent girls on HIV/AIDS.

Sample selection criteria: Adolescents who were willing to participate and those studying at school of KISS, Bhubaneswar were included in the sample.

Description of tool: The tool consisted of two sections. Section-I consisted of age, educational qualification of the participant, qualification of the parents, religion. Section-II had 20 items for assessment of knowledge of adolescent girls regarding prevention of HIV/AIDS through multiple choices structured questionnaire and it focussed on such areas as concept, cause, risk factor, mode of transmission, sign and symptoms, diagnosis and prevention.

Data collection and analysis: Data collection was done from the students on prevention of HIV/AIDS to assess the knowledge and attitude through questionnaire after permission from the school authority; 100 adolescent girls were selected by convenient sampling technique from school of KISS, Bhubaneswar. Teaching programme was conducted to the students. All the students were explained the nature of the study. Confidentiality was ensured, code number was given to each student. After pre-test the teaching

Table 1: Mean and standard deviation of Pre-test and post-test knowledge score of adolescent girls on prevention of HIV/AIDS pre-test.

Criteria	Total Score	Mean	Standard Deviation
Pre-test	838	8.38	2.134
Post-test	1223	12.2	2

Table 2: Mean, mean difference and 'z' value of pre-test and post-test knowledge score of adolescent girls

Criteria	Pre-test mean	Post-test mean	Mean difference	SEmd	'z' value	p value
Knowledge score	8.38	12.2	3.82	0.2924	13.04	0.05

$Z_{0.05} = 1.96$; $p = 0.05$

programme was conducted on day 1 and post-test on day 8. The collected data were analysed by using descriptive statistics and inferential statistics.

Ethical consideration: The study was accepted by the research committee of KIMS under ICMR and prior permission was obtained from the school authority of KISS to conduct final study. The purpose of the study was explained to the adolescent girls. Anonymity of the subjects was maintained by assigning code numbers to all subjects under the study. The subjects were assured that confidentiality of the information will be maintained and information will be used only for the purpose of the study. They had the freedom to withdraw from the study at any time without giving any reason.

Results & Discussion

- ❑ Most of the adolescent (80%) were between 15-16 years of age; 17 percent were 17-18 years of age and 20 percent were 19 and above years of age.
- ❑ All the adolescent girls (100%) were studying +2 Arts in first year.
- ❑ Most of the parents of adolescent girls (54%) had passed secondary education and 45 percent had primary education and only 1 percent were illiterate.
- ❑ Most of adolescent girls (70%) were Hindu, 15 percent were Christian, 14 percent Muslim and 1 percent were others.

Table 1 shows that the pre-test mean knowledge score of adolescent girls was 8.38 and standard deviation was 2.134. The mean post-test knowledge score was 12.2 and standard deviation was 2. Standard deviation of post-test is less than pre-test which indicates that the group was more homogenous in post-test. It is inferred from Table 1 that there is marked gain in knowledge in the post-test than in

pre-test. Table 2 shows that the mean of pre- and post-test knowledge scores were 8.38 and 12.2 respectively. The value of mean difference was 3.82. The calculated 'Z' value was 13.04. To compare the calculated value with the table value by using two-tailed probability at the level of significance ($p=0.05$) the table value was 1.96, whereas the calculated value was 13.04 which is more than table value.

Recommendations

On the basis of findings and experience gained during the study, it is recommended that the study (a) can be replicated on a large number of samples for wider generalisation of findings; (b) can be conducted by using other strategies like information booklets and video-assisted teaching; (c) can also be carried out in large scale comparing with other socio-economic variable, urban and rural areas and literate and illiterate groups. An experimental study can be conducted with a controlled group; and a similar study can be conducted on the graduate students.

Conclusion

The following conclusions were drawn from the findings of the study.

- ♦ There was a significant gain in knowledge of adolescent girls on prevention of HIV/AIDS after conducting the planned teaching programme.
- ♦ The planned teaching programme arranged by the researcher was found effective in enhancing knowledge of adolescent on prevention of HIV/AIDS.

References

1. Achar ST. Achar's Testbook of Paediatrics. 4th edn. Hyderabad: Universities Press; 2009; pp 123-26
2. Basavanthappa BT. Community Health Nursing. 2nd edn. New Delhi; Jaypee Brother, 2012; pp 663-65
3. Clement I. Basic concept of Community Health Nursing. 2nd edn. New Delhi: Jaypee Brother, 2009; pp 99-102
4. Ghai OP. Essentials of Pediatrics. 10th edn. New Delhi: Menta publishers. 2008; pp 807-809
5. Aghanwa HS. HIV AIDS and Indian youth (1980-2008). *Journal of Social Aspects of HIV AIDS* 2009; Mar; 6(1)
6. Anand, Pandav, Nath. Study on impact of AIDS on economy of India. *National Medical Journal of India* 1999; 31: 377-81
7. Braganza Deepa. HIV in India. *Nursing Journal of India* 2005; 1(3):16-18
8. Cemba Ana. Knowledge and attitude and practice linked to HIV prevention in young children and adolescents in Luanda. UNICEF, Apr 2003