ORIGINAL ARTICLE

Evaluate the effectiveness of Structured Teaching Programme on transmission and prevention of HIV/AIDS among adolescent girls

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ABSTRACT

BACKGROUND: Age is honourable and youth is noble. Most young people become sexually active during adolescence and are more likely to have multi-partner and unprotected sex with high risk behaviour groups. Adolescent girls are sexually mature and active at younger age. They are biologically more vulnerable to HIV infection than young boys at twice the rate. Objective: To evaluate the effectiveness of Structured Teaching Programme on transmission and prevention of HIV/AIDS among adolescent girls. **MATERIAL AND METHODS**: An evaluative research approach was used with pre-experimental, one group pre-test and post-test research design to evaluate the effectiveness of the Structured Teaching Programme. The study was conducted in selected Lowry Memorial High School, Bangalore. The sample composed of 50 adolescent girls, using non-probability purposive sampling technique. The tool used for the data collection was self administered structured questionnaire. **RESULTS**: The statistical paired't' test implies that the mean percentage difference in the pre-test and post-test knowledge score found statistically significant at 5% level ($t=51.20^*$, $P<0.05$). The overall mean post-test knowledge score of adolescent girls on transmission and prevention of HIV/AIDS is 88.83%. It is apparently higher than that of pre-test knowledge score of 67.67% with enhancement of 21.16%. **CONCLUSION**: The study revealed that Structured Teaching Programme enhanced the knowledge of the adolescent girls on transmission and prevention of HIV/AIDS.

Key Words: Knowledge, Structured Teaching Programme, Transmission and Prevention of HIV/AIDS, Adolescent girls.

INTRODUCTION

Adolescent has been defined by the WHO which is a period of life between 10 -19 years.[1] Adolescence is a transitional stage of physical and mental human development, which encompasses puberty, the period where secondary sexual characteristics begin to develop.[2]

Approximately 1/5th of the world's population comprises adolescents. In India, there are 200 million adolescents comprising over 1/4th of the entire population, out of which, girls below 19 years of age constitute 22% of the female population. Adolescent girls face poverty, child or forced marriage, pregnancy at a young age, risk of HIV infection, and violence, often without the benefit of an Education. Adolescent girls are at high risk for sexual and reproductive health problems, in India.[3]

HIV/AIDS is undoubtedly the most important public health problem faced by the world today, due to pandemicity and lack of treatment or vaccine. HIV infection is indeed a unique disease; Fears of transmission to others, its multisystem affection, non availability of curative drugs and also preventive vaccines create hindrance in every sphere of life.[4]

Karnataka, a diverse state of southwest of India, has a population of around 53 million out of that 2.53 lakh people are HIV positive. Its capital city Bangalore, formely famous as the garden city, has around 23,877 HIV positive people out of 96,189 total populations. The HIV prevalence rate in Bangalore for adult general population is 0.29%, for men is 0.36% as well as for women is 0.22%; as per the provisional HIV Sentinel Surveillance - 2010 by Karnataka State AIDS Prevention Society.[5]

According to statistics estimated in 2008, 84.60% of HIV cases are transmitted by

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sexual method alone other causes were include 7.20% perinatal, 0.7% blood and blood products, 0.4% injection drug users and 7.1% of cases with unavailable history.[6]

Adolescent girls are sexually mature and active at younger age. In some of the poor countries in world, girls are infected at twice the rate. The disproportionate impact is related to wide spread sexual abuse and gender discrimination against girls making it extremely difficult for them to protect themselves. The increased vulnerability to HIV in adolescent girls is sexual risk, STD including pregnancy, behavioural risk, biological risk, and social and economical risk.[20] In the wake of HIV epidemic a well informed younger generation is crucial in restricting the spread of HIV infection.[7]

Objectives of the Study:

- To evaluate the level of knowledge on transmission and prevention of HIV/AIDS among adolescent girls.
- To evaluate the effectiveness of Structured Teaching Programme on transmission and prevention of HIV/AIDS among adolescent girls.
- To find out association between pre-test and post-test knowledge score with selected demographic variables.

MATERIAL AND METHODS

Research approach: An evaluative research approach

Type of study: Pre-experimental, One group pretest posttest design.

Period of study: 07-12-2011 to 07-01-2012.

Study site: Lowry Memorial High School, Doorvaninagar,Bangalore-16.

Sample size: 50 adolescent girls studying in Lowry Memorial High School, who can read and write English. Informed consent was obtained from all the subjects who participated in the study.

Tool: A Self administered structured questionnaire. The questionnaire contained questions on demographic details, General information of HIV/AIDS, Risk factors and pathophysiology, Signs and symptoms, Mode of HIV transmission, Diagnostic measures and Preventive measures. The content validity of the tool was established by 11 experts and the tool was found to be reliable and feasible. The reliability of the tool was established by Spearman's Brown Prophecy formula where r = 0.9726.

Sampling technique: Non probability-Purposive sampling technique.

Data collection procedure: The pre-test was conducted by using self administered structured questionnaire followed by Structured Teaching Programme. After 8 days, the post-test was conducted by using the same self administered structured questionnaire to evaluate the effectiveness of STP on the knowledge regarding transmission and prevention of HIV/AIDS.

RESULTS

Findings of the present study related to age reveal that among 50 respondents majority of them belong to the age group of 15-16 (30%) and 17-18 (30%) years. Majority 46% of respondents were Christians. Majority 54% were members of joint family and majority 38% of respondents were in second ordinal position in the family. Majority 60% of the respondents had qualified higher secondary school education and 56% of them had both male and female friends. Majority 36% of the respondents had obtained information regarding transmission and prevention of HIV/AIDS through mass media.

Figure 1: Overall Pre–test, Post–test and Enhancement Mean knowledge scores on Transmission and Prevention of HIV/AIDS

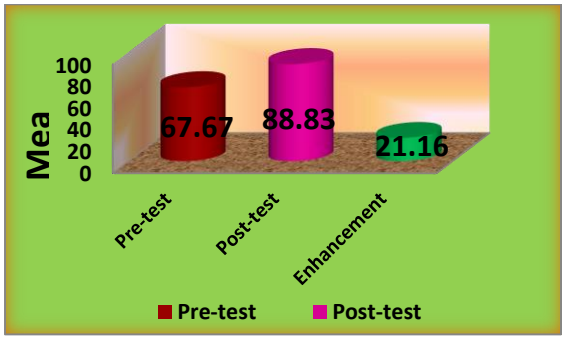

Table 1: Paired 't' test values between pre-test and post-test on transmission and prevention of HIV/AIDS among respondents n=50

Aspects	Max. score	Range	Mean score	Knowledge score		Paired't' test value
				Mean (%)	SD	
Pre-test	45	18-25	21.06	67.67%	2.31	51.20 p<0.05
Post-test	45	37-43	40.02	88.83%	1.88	
Enhancement			18.96	21.16%	0.42	

Table 2: Classification of respondents by knowledge level on Transmission and prevention of HIV/AIDS. n=50

Knowledge level	Classification of respondents			
	Pre-test		Post-test	
	No.of respondents (N)	%	No.of respondents (N)	%
Inadequate (<50%)	23	46%	0	0%
Moderate (51-75%)	27	54%	6	12%
Adequate (>75%)	0	0%	44	88%
Total	50	100%	50	100%

There was no significant association between the mean percentage knowledge scores with selected demographic variables in the aspects of religion, ordinal position in the family, and source of information about HIV/AIDS but there was a significant association between the mean percentage knowledge scores with selected demographic variables in the aspects of age, type of family in the pre-test and age, educational level, friendship in the post-test.

DISCUSSION

Adolescents, as a group, are at risk for contracting HIV/AIDS and other sexually transmitted diseases because of their developmental level which often leads to impulsiveness and desire for experimentation.[8] It appears that the adolescents know very little about the HIV/AIDS and school did not include much to its curriculum to educate the students regarding sexually transmitted infections including HIV infection.[9] As health education is an important nursing activity, nurses can prove their role in preventing spread of HIV infection by taking active part in educating selected target population in all settings.[10] The present study confirms that the overall mean knowledge score in pre-test is 67.67%, which is less. The present study confirmed that there was a considerable improvement of knowledge after the Structured Teaching Programme and is statistically established as significant. The overall mean percentage knowledge score in the pre-test was 67.67% and 88.83% in the post-test with 21.16% mean percentage knowledge enhancement. The mean knowledge score during pre-test is 21.06 and 40.02 in the post-test with 18.96 mean knowledge score enhancement.

The present study is supported by a cross-sectional correlation study conducted on knowledge of adolescents in Kathmandu, Nepal. Majority of the adolescents had a moderate level of overall HIV/AIDS knowledge, but lack of knowledge in the areas of mode of transmission and prevention of HIV/AIDS.[11]

CONCLUSION

Following conclusions can be drawn from the study:

- Majority of the adolescent girls belong to the age group of 15-16 (30%) and 17-18 (30%) years, 46% were Christians, 54% were members of joint family, 38% of them were in the second ordinal position in the family, 60% had qualified higher secondary education, 56% had both male and female friends, and 36% had obtained information about HIV/AIDS through mass media.
- Knowledge of adolescent girls regarding transmission and prevention of HIV/AIDS was inadequate before the administration of STP.
- The STP was effective in increasing the knowledge of adolescent girls, i.e., overall and in all aspects in the post-test.
- There was a significant association between the mean percentage knowledge scores with selected demographic variables in the aspects of age, type of family in the pre-test and age, educational level, friendship in the post-test. There was no significant association found between religion, ordinal position in the family, and source of information about HIV/AIDS with knowledge score.

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