



**EFFECTIVENESS OF INFORMATION, EDUCATION & COMMUNICATION (IEC) PACKAGE REGARDING HIV / AIDS ON KNOWLEDGE AND ATTITUDE AMONG WOMEN**

<sup>1</sup>R. Suganthi and <sup>2\*</sup>Dr. B. Jayabharathi

<sup>1</sup>Quality Control and Quality Assurance Co Ordinator, YRG Centre for AIDS Research and Education, VHS Hospital, Taramani.

<sup>2</sup>Associate Professor, SRM College of Nursing, SRM University Kattankulathur, Kancheepuram District – 603203, Tamil Nadu, India.

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**\*Corresponding Author**

**Dr. B. Jayabharathi**

Associate Professor, SRM College of Nursing, SRM University Kattankulathur, Kancheepuram District – 603203, Tamil Nadu, India.

**ABSTRACT**

**Background:** AIDS is a syndrome caused by a virus called HIV (Human Immunodeficiency Virus). The illness alters the immune system, making people much more vulnerable to infections and diseases. **Aim:** The present study aimed to assess the effectiveness of IEC package on knowledge and attitude regarding HIV / AIDS among women residing in tribal areas at chengalpattu. **Methods:** The present study was conducted in selected tribal areas such as Senneri and

Kothimangalam at Chengalpattu, Kancheepuram District. True experimental -Pre test & post test only design was adopted for the study. The study sample comprised of 80 tribal women, out of which 40 were allotted to study group and 40 to control group. Simple random sampling technique was used for the selection of tribal women for the study. The inclusion criteria for sample selection includes a) Women in the age group between 21 – 45 years, b) Women who are willing to participate in the study and c) Women who can speak and understand Tamil. The exclusion criterias include a) Women with sexually transmitted infections like chlamydia, gonorrhea, genital herpes and b) Women those who are diagnosed with HIV/AIDS. Structured questionnaire was used to assess the knowledge and Likert scale was used to assess the attitude of tribal women regarding HIV/AIDS. **Results:** The current study results show that, after IEC package, majority of women 22(55%) had adequate

knowledge and majority 30(75%) women had favorable attitude towards HIV/ AIDS in study group. The Comparison of post test level of knowledge and attitude on HIV/ AIDS among women between study and control group showed that, there was highly significant difference found at  $p=0.001$  level. **Conclusion:** The present study concludes that, the IEC package on HIV/AIDS was effective in improving the knowledge and attitude of women in the study group.

**KEYWORDS:** IEC package, Knowledge, Attitude, HIV/AIDS.

## INTRODUCTION

AIDS (Acquired immune deficiency syndrome or acquired immunodeficiency syndrome) is a syndrome caused by a virus called HIV (Human Immunodeficiency Virus). The illness alters the immune system, making people much more vulnerable to infections and diseases. This susceptibility worsens as the syndrome progresses. HIV is found in the body fluids of an infected person (semen and vaginal fluids, blood and breast milk). The virus is passed from one person to another through blood-to-blood and sexual contact. In addition, infected pregnant women can pass HIV to their babies during pregnancy, delivering the baby during childbirth, and through breast feeding. HIV can be transmitted in many ways, such as vaginal, oral sex, anal sex, blood transfusion, and contaminated hypodermic needles. Both the virus and the syndrome are often referred to together as HIV/AIDS. The development of numerous opportunistic infections in an AIDS patient can ultimately lead to death. According to research, the origins of HIV date back to the late nineteenth or early twentieth century in west-central Africa. AIDS and its cause, HIV, were first identified and recognized in the early 1980s.<sup>[1]</sup>

No effective cure currently exists for HIV. But with proper medical care, HIV can be controlled. Treatment for HIV is called antiretroviral therapy or ART. If taken the right way, every day, ART can dramatically prolong the lives of many people infected with HIV, keep them healthy, and greatly lower their chance of infecting others. Before the introduction of ART in the mid-1990s, people with HIV could progress to AIDS (the last stage of HIV infection) in a few years. Today, someone diagnosed with HIV and treated before the disease is far advanced can live nearly as long as someone who does not have HIV.<sup>[2]</sup>

HIV continues to be a major global public health issue. Since 2000, 38.1 million people have become infected with HIV and 25.3 million people have died of AIDS-related illnesses. In

2014, an estimated 36.9 million people were living with HIV (including 2.6 million children) – a global HIV prevalence of 0.8%.<sup>2</sup> The vast majority of this number live in low- and middle- income countries. In the same year, 1.2 million people died of AIDS-related illnesses. 25.8 million people living with HIV are in sub-Saharan Africa, accounting for 70% of the global total.<sup>4</sup> Only 54% of all people living with HIV know that they have the virus. In 2014, there were roughly 2 million new HIV infections, 220,000 of which were among children. Most of these children live in sub-Saharan Africa and were infected via their HIV-positive mothers during pregnancy, childbirth or breastfeeding.

Despite these challenges, new global efforts have meant that the number of people receiving HIV treatment has increased dramatically in recent years, particularly in resource-poor countries. As of March 2015, 15 million people living with HIV were receiving antiretroviral treatment (including 823,000 children) - representing 41% of those in need. 13.5 million of these people were in low- and middle- income countries.<sup>[3]</sup>

A Nyamathi et al conducted a study on knowledge, perceptions, and risky behaviors of impoverished women. Survey instruments were administered to 1173 impoverished women of color residing in homeless shelters and drug recovery programs. Differences based on ethnicity and level of acculturation were found in AIDS-related knowledge, perceived risk of acquiring AIDS, and risky behaviors. Low-accultured Latinas reported low perceived risk and were least likely to engage in illegal drug use and sexual activity with multiple partners. Intravenous drug use was most prevalent among high-accultured Latinas, whereas non intravenous drug use and high-risk sexual activity was most prevalent among African-American women. The data indicate the need for culturally sensitive AIDS prevention programs for women that deal with general issues of drug use and unprotected sex, and that include separate sessions for women of different ethnic backgrounds and acculturation levels to address specialized areas of concern.<sup>[4]</sup>

India has the second largest concentration of tribal population in the World. Indian tribes constitute around 8.2 percent of nation's total population, constituting nearly 84.3 million according to Census 2001. The tribal population in the country has poor health generally due to their poverty and social vulnerability. Tribal people are known to have sexual practices that differ from those of mainstream cultures, and a high prevalence of sexually transmitted infections. Less or nothing is known about the prevalence of STI/HIV/AIDS among tribal people in India, except perhaps in some of the tribal states of the North-East of India as

these have high prevalence of drug use. The tribal population in the country is high and their sheer number makes it imperative for the Government to bring them in the fold of the national programme. To be able to do so, it is essential to understand the behaviours, practices that drive the vulnerability and risk among the tribal people. the awareness and knowledge regarding Sexually Transmitted Infections (STIs) and HIV/AIDS was low among tribal people.<sup>[5]</sup>

The aim of the present study is to assess the effectiveness of IEC package on knowledge and attitude regarding HIV / AIDS among women residing in tribal areas at chengalpattu.

## METHODOLOGY

The present study was conducted in selected tribal areas such as Senneri and Kothimangalam at Chengalpattu, Kancheepuram District. True experimental -Pre test & post test only design was adopted for the study. The study sample comprised of 80 tribal women, out of which 40 were allotted to study group and 40 to control group. Simple random sampling technique<sup>[6,7]</sup> was used for the selection of tribal women for the study. The inclusion criteria for sample selection includes a) Women in the age group between 21 – 45 years, b) Women who are willing to participate in the study and c) Women who can speak and understand Tamil. The exclusion criterias include a) Women with sexually transmitted infections like chlamydia, gonorrhoea, genital herpes and b) Women those who are diagnosed with HIV/AIDS.

The tool for data collection consists of three parts. Section A consists of Structured questionnaire to assess the demographic variables of tribal women. Section B pertains to assess the knowledge of tribal women on HIV/AIDS by Structured questionnaire. Section C consists of Likert scale to assess the attitude of tribal women regarding HIV/AIDS.

### Description of The Intervention

The investigator had prepared a Information, Education and Communication (IEC package) on HIV / AIDS after extensive review of literatures from various sources like, books, journals and electronic data bases such as CINHALL, PubMed, etc. The IEC package was given to tribal women in study group which consists of.

**Information:** It refers to giving information about prevention of HIV/AIDS with the help of flash cards.

**Education:** It refers to systematically planned and organized teaching activity with specific objectives to impart preferred knowledge regarding prevention of HIV/AIDS.

**Communication:** It is a two way process between the investigator and subject in clarifying the doubts of prevention of HIV/AIDS by using local language.

### **Ethical Consideration**

Formal approval was obtained from the Institutional review board and Institutional ethical committee. Both written and verbal information about the study were given in local language to women who participated in the present study. Women were asked to participate voluntarily in the study. The objectives, practices, goodness, problems and time period involved in practice were explained in the consent form.

### **Statistical Package**

Independent 't' test was used for comparison of values of the study and control groups. P value less than 0.05 was considered statistically significant.

## **RESULTS**

Regarding the demographic variables women in study group, majority of them, 14(35%) belonged to the age group of 26-30years, all of them 40(100%) belonged to Hindu religion, 95 % of them were married, majority 37(92.5%) had no formal education. Most of them 33(82.5%) were working as daily wages. In control group, majority of them 22(55%) belonged to the age group of 21-25years, all of them 40(100%) belonged to Hindu religion, 95 % of them were married, majority 27(67.5%) had no formal education. Most of them were working as daily wages.

**Table 1: Frequency and percentage distribution of pretest level of knowledge on HIV/ AIDS among women in study and control group. N=80.**

Pre test level of knowledge	Study group (n=40)		Control group (n=40)	
	no	%	no	%
Inadequate knowledge	30	75	34	85
Moderately adequate	8	20	5	12.5
Adequate knowledge	2	5	1	2.5

The above table reveals that, majority 30(75%) women had inadequate knowledge on HIV/ AIDS and only 2(5%) had adequate knowledge in study group. In control group, most

of them 34 (85%) had inadequate knowledge, and only 1(2.5%) had adequate knowledge on HIV/ AIDS.

**Table 2: Frequency and percentage distribution of pretest level of attitude on HIV/ AIDS among women in study and control group. N=80.**

Pre test level of attitude	Study group (n=40)		Control group (n=40)	
	no	%	no	%
Unfavorable attitude	5	12.5	28	70
Moderately favorable attitude	22	55	11	27.5
Favorable attitude	13	32.5	1	2.5

Table 2 depicted that, majority 22(55%) women had moderately favorable attitude, and only 5(12.5%) had unfavorable attitude towards HIV/ AIDS in study group. In control group , 28(70%) women had unfavorable attitude, 11(27.5%) had moderately favorable attitude and 1(2.5%) had favorable attitude towards HIV/ AIDS.

**Table 3: Comparison of pretest level of knowledge on HIV/ AIDS among women between study and control group. N=80.**

Pretest level	Study group (n=40)		Control group (n=40)		Independent t-test
	Mean	SD	Mean	SD	
Pretest knowledge	5.53	3.59	4.10	2.90	t=1.931 p=0.061
Pretest attitude	31.30	12.63	31.52	9.47	t=1.926 p=0.053

The results showed that, there was no significant difference found in the pretest level of knowledge and attitude on HIV/ AIDS among women between study and control group.

**Table 4: Frequency and percentage distribution of post test level of knowledge on HIV/ AIDS among women in study and control group. N=80.**

Post test level of knowledge	Study group (n=40)		Control group (n=40)	
	no	%	no	%
Inadequate knowledge	2	5	34	82.5
Moderately adequate	16	40	5	15
Adequate knowledge	22	55	1	2.5

The Assessment of post test level of knowledge on HIV/AIDS in study group revealed that, majority of women 22(55%) had adequate knowledge and only 2(5%) women had inadequate

knowledge where as , in control group 34(82.5%) women had inadequate knowledge and only 1(2.5%) had adequate knowledge on HIV/AIDS.

**Table 5: Frequency and percentage distribution of post test level of attitude on HIV/AIDS in study and control group. N=80.**

Level of attitude	Study group (n=40)		Control group (n=40)	
	no	%	no	%
Unfavorable attitude	-	-	28	70
Moderately favorable	10	25	11	27.5
Favorable	30	75	1	2.5

Regarding the post test level of attitude on HIV/ AIDS among women in study group depicted that, majority 30(75%) women had favorable attitude and 10(25%) had moderately favorable attitude towards HIV/ AIDS where as in control group , 28(70%) women had unfavorable attitude and only 1 (2.5%) had favorable attitude towards HIV/ AIDS.

**Table 6: Comparison of post test level of knowledge and attitude on HIV/ AIDS among women between study and control group N=80.**

Post test level	Study group (n=40)		Control group (n=40)		Unpaired t-test
	Mean	SD	Mean	SD	
Post test knowledge	15.28	3.46	4.58	3.15	t=4.06 p=0.001
Post test attitude	48.00	9.05	31.58	10.38	t=3.68 p=0.001

The results showed that, there was highly significant difference found in the post test level of knowledge and attitude at p=0.001 level on HIV/ AIDS among women between study and control group.

## DISCUSSION

AIDS (acquired immunodeficiency syndrome) is a complex condition caused by HIV, which kills or impairs cells of the immune system and progressively destroys the body's ability to fight infection and disease. People with damaged immune systems are vulnerable to diseases that do not threaten people with healthy immune systems. The term AIDS applies to the most advanced stages of HIV infection. Medical treatment is available to delay the onset of AIDS.<sup>[8]</sup>



The current study results show that, after IEC package, majority of women 22(55%) had adequate knowledge and majority 30(75%) women had favorable attitude towards HIV/AIDS in study group. The Comparison of post test level of knowledge and attitude on HIV/AIDS among women between study and control group showed that, there was highly significant difference found at  $p=0.001$  level.

María C Cabezas, et al conducted a study on knowledge about HIV transmission and prevention measures in company workers in Ecuador. A validated instrument developed by Family Health International was used to evaluate HIV prevention knowledge and common local misconceptions about HIV transmission. Incorrect knowledge about HIV/AIDS transmission were found in 49.1% (95% CI: 46.6–51.6) of subjects. Incorrect knowledge was higher among males, subjects with lower education, manual labor workers and subjects without previous exposure to HIV intervention programs. Incorrect knowledge about preventive measures was found among 32.9% (95%CI: 30.6–35.2) of respondents. This proportion was higher among subjects with lower education, married subjects, manual labor workers, and subjects not previously exposed to HIV intervention programs. HIV intervention programs targeting company workers are urgently needed to improve knowledge and reduce HIV transmission in Ecuador.<sup>[9]</sup>

Alok Ranjan ET AL conducted a study on the knowledge, attitude and risk perception related to HIV/AIDS among the wives of migrant workers in India. A total of 132 wives of migrant workers who reported prior awareness about HIV/AIDS, were interviewed. Only 16% wives of migrant workers had ever heard of HIV of whom 72% had correct knowledge such as condoms provide protection from HIV (80%), sharing needle/syringe (91%), single sex-partner (75%) and blood test before transfusion (70%). The overall reliability coefficient (Cronbach's  $\alpha=0.78$ ) of 18-items related to knowledge regarding transmission and prevention of HIV showed a high level of consistency of response. Nearly 85% of the wives perceived themselves and their husbands at very low level of risk of HIV infection. Intervention strategies in India should target wives of migrant workers, as well as their husbands for increasing HIV knowledge and awareness. Specifically, the wives of migrant workers need to be empowered appropriately perceiving the risk of infection and use of condoms.<sup>[10]</sup>



## CONCLUSION

The current study results showed that , there was statistically significant difference found in the post test level of knowledge and attitude HIV/AIDS among women between study and control group at  $p=0.001$  level. The results of the study concludes that, the IEC package on HIV/AIDS was effective in improving the knowledge and attitude of women in the study group.

## REFERENCES

1. [www.medicalnewstoday.com/articles/17131.php](http://www.medicalnewstoday.com/articles/17131.php)D
2. [www.cdc.gov/hiv/basics/whatishiv.html](http://www.cdc.gov/hiv/basics/whatishiv.html)
3. 2014 global HIV statistics, [www.avert.org/global-hiv-and-aids-statistics](http://www.avert.org/global-hiv-and-aids-statistics)
4. Nyamathi A, Bennett C, Leake B, Lewis C, and Flaskerud J. AIDS-related knowledge, perceptions, and behaviors among impoverished minority women. *American Journal of Public Health.*, January 1993; 839(1): 65-71.
5. Researching Evidences on Prevalence of HIV/AIDS among Tribal People in India epc 2008. [princeton.edu/papers/80579](http://princeton.edu/papers/80579)
6. Denise F Polit and Bernadette P Hungler. *Nursing Research - Principles and methods.* 6<sup>th</sup> edition. Lippincott: Philadelphia., 1999.
7. Suresh. K.Sharma. *Nursing research and Statistics.* Elsevier; 2011.
8. HIV/AIDS for Washington Healthcare Professionals, [www.nursingceu.com/courses/446/index\\_nceu.html](http://www.nursingceu.com/courses/446/index_nceu.html)
9. María C Cabezas, Marco Fornasini, Nadia Dardenne, Teresa Borja and Adelin Albert, A cross-sectional study to assess knowledge about HIV/AIDS transmission and prevention measures in company workers in Ecuador, *BMC Public Health BMC series open, inclusive and trusted.*, 2013; 13: 139, DOI: 10.1186/1471-2458-13-139
10. Alok Ranjan, Giridhara R Babu and Roger Detels, knowledge, Attitude and Perception about HIV/AIDS among the Wives of Migrant Workers of Muzaffarpur District in Bihar, *journal of Community Medicine & Health Education*, August 17, 2015.