# Effectiveness of a Structured Teaching Program on the Knowledge of Self-care Behavior among HIV Infected Women Attending a Selected Voluntary Organization

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#### Abstract

*Objectives:* To assess the knowledge of self-care behavior, identify high-risk behavior among HIV infected women and evaluate the effectiveness of structured teaching program on the knowledge of HIV infected women regarding self-care behavior.

*Methods*: The research approach for the study was that of an evaluative one with one group pretest post-test design. The sample size considered for the study was 40 HIV infected women. The sampling technique used for the study was purposive sampling which is a type of nonprobability sampling. The tool used for gathering relevant data was a structured questionnaire on knowledge of self care behavior among HIV infected women.

*Results:* Analysis of data was done on the basis of objectives and hypotheses. Data analysis of level of knowledge revealed that during the pretest minimum 5(12.5%) of the HIV infected women had good knowledge of self-care behavior, 28(70%) had average knowledge, while 7(17.5%) had poor knowledge. It was worth noting that only a minimum of 2(5%) women had poor level of positive thinking towards self-care while majority of 21(52.5%) had good level of positive thinking. While assessing the effectiveness of the structured teaching program on self care behavior, the pretest and post-test data analysis revealed the mean post-test score ( $57 \pm 4.7$ ) was higher than the mean pretest score ( $39 \pm 7.7$ ). Analysis of variance showed no homogeneity in the scores of subjects in the different areas of knowledge of self-care behavior and indicated more scope for knowledge gain in the area of health promoting behavior.

*Conclusion:* Based on the analyses, the following inference was drawn. There was evident increase in the knowledge scores in all the areas included in the study after administration of structured teaching program. Thus it was inferred that the structured teaching program was effective and while the gain in knowledge score is commendable, there is still room for improvement.

Keywords: HIV infected women, voluntary organization, structured teaching program, self care behavior.

### INTRODUCTION

There are over 17.5 million women living with HIV/AIDS infection in the world today.<sup>1</sup> They are twice as vulnerable as men and majority of these women are living in poverty and more especially they are of young age group.<sup>2</sup> India has the second highest number of people living with HIV/AIDS in the world. After South Africa, India accounts for almost 10% of the 40 million people living with HIV/AIDS globally and over 60% of the 7.4 million people living with HIV/AIDS in the Asia and pacific region. In India 85% women with HIV are infected through heterosexual contact and over 90% report a single lifetime partner, generally their spouse. Common clinical manifestation in HIV infected women include vaginal and oral candidiasis, pulmonary tuberculosis, skin lesions, genital ulcers, weight loss and diarrhea. Adopting strategies and programs aimed towards

wider awareness building and education empowerment of women would contribute towards curbing the spread of this killer disease.

The investigator has come across HIV infected orphan children on death bed due to lack of care and nuturing by the foster family. The investigator was moved to contribute to the self-care of HIV infected women by providing information, education and counseling so that they would be helped to survive longer, fulfill their maternal role and enjoy family life having found a way to live healthy, thus giving a meaning to their own life, the life of these young ones, and the family.

### METHODS

The data was collected from 23.08.2007 to 30.08.2007. The pretest was conducted on 23.08.2007 followed by the administration of structured teaching program on self-care behavior for HIV infected women. The post-test was conducted after 7 days.

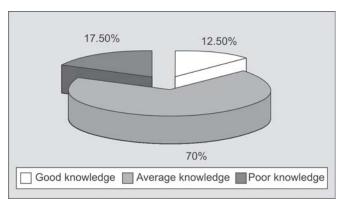
## RESULT

The findings of the study showed that out of 40 HIV infected women, majority 26(65%) belonged to the age group 27-36 years. Most of the women 14(35%) knew about their HIV positive status from a period range of 1 month to 2.5 years. Maximum women 36(90%) were not exposed to information about HIV prior to diagnosis. Maximum 39(97.5%) women reported of receiving social support from immediate family, i.e. husband, parents or in-laws. Majority of the women 33(84.6%) had husbands who were HIV positive while 21(60%) reported their children to be HIV negative. Majority of the women 26(65%) reported that they had acquired the HIV infection from their husband. Majority of the HIV infected women 39(97.5%) did not practice abstinence from sex while majority of the married women 25(64.1%) had partners who did not use condom during sexual intercourse. Most of the women 19(47.5%) were treated for anal burning or itching, 18(45%) were treated for foul smelling, thick vaginal discharge while minimum 8(20%) were treated for a genital sore. Majority of these women 21(53.8%) had given birth to a child after being diagnosed as HIV positive. During the pretest minimum 5(12.5%) of the HIV infected women had good knowledge of self-care behavior, 28(70%) had average knowledge, while 7(17.5%) had poor knowledge (Graph 1). Paired 't' test results showed significant gain in knowledge (p < 0.01) (Table 1). In the post-test maximum women 39(97.5%) had good knowledge while only 1(2.5%) had average knowledge of selfcare behavior (Graph 2). Analysis of variance showed no homogeneity in the scores of subjects in the different areas of knowledge of self-care behavior and indicated more scope for knowledge gain in the area of health promoting behavior.

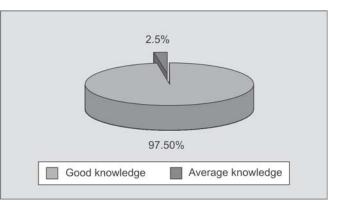
The data presented in Table 1 indicates that there was significant increase in the post-test scores. The calculated value of 't' is higher than the tabulated value thus research hypothesis  $H_1$  is accepted. This reveals that the structured teaching program was very effective.

### DISCUSSION

In the present study among the HIV infected women (n=40), most 26(65%) women belonged to the age group of 27-36 years. Similar findings were noted in the study conducted to assess the quality of life of HIV infected women by Phaladze et al.



Graph 1: Pretest knowledge scores



Graph 2: Post-test knowledge scores of HIV infected women

where 61.2% women belonged to the age group between 27-36 years. Maximum women 39(97.5%) were ever married.<sup>1</sup> In a study conducted in Ethiopia on the knowledge of MTCT of HIV, the sample comprised of maximum (91.1%) ever married women. Majority 26(65%) of the HIV infected women possessed secondary education. In a study conducted by Galvao on 'HIV transmission protection' among HIV infected women, most (60.3%) women possessed secondary education. Majority 21(52.5%) of the women were housewives. Similar data was found in a study, conducted by Jebessa, in Ethiopia, where in 70.1% women were housewives. Most of the women 27(67.5%) belonged to income group less than Rs 2000.<sup>2</sup> A study conducted on correlates of perceived health had HIV infected women who were predominantly poor. Majority 24(60%) of the women resided in urban area.<sup>4</sup> Similar finding was noted in the

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Table 1: Data showing difference between pretest and post-test mean and 't' value of knowledge scores

							n=40
S. No.		Mean	SD	df	't' value calculated	't' value tabulated	Inference
1	Pretest	39	± 7.7	39	17.1	1.96	S
2	Post-test	57	± 4.7				
*( $p<0.01$ ) S = Significant							

study conducted by Kenneth where 60.4% HIV infected women resided in urban area. Maximum 39(97.5%) women reported of receiving social support from immediate family, i.e. husband, parents or in-laws.<sup>5</sup> Similar findings were found in a study among HIV positive African-American women where heterosexual HIV infected women received 71.4% support from immediate family as compared to 28.6% from significant others.<sup>6</sup> In contradiction, the study undertaken to explore HIV/AIDS as a multifaceted issue in India found that, the HIV infected women experienced markedly less family support after contracting the disease. Majority 33(84.6%) of the women had a HIV infected spouse. A study among HIV infected people on contraceptive measures found that only 54.9% women had a HIV infected spouse. Majority of the women 26(65%) reported that they had acquired the HIV infection from their husband. Gangakhedkar conducted a survey in India whose findings suggested that 85% women with HIV are infected through heterosexual contact, generally their spouse. The findings suggested that maximum women 39(97.5%) did not practice abstinence.<sup>6</sup> Similar findings were seen in a study conducted in Brazil where most of the women continued to have regular sexual partners.<sup>7</sup> Contradictory to these findings, Galvao found that sexual abstinence was reported by 21(28.8%) HIV infected women. Majority 25(69.1%) of the women had partners who did not use condom consistently.<sup>3</sup> A similar finding was observed in a study done in India, among monogamous women, where 41.5% women reported irregular use of condom by their partner.<sup>10</sup> In contradiction to this study Galvao found 86.3% couples used condoms to protect against HIV transmission and reinfection. Minimum 8(20%) women had a history of a genital sore while most 18(45%) and 19(47.5%) had history of foul smelling vaginal discharge and anal burning or itching respectively. A study conducted in Tanzania on the silent HIV epidemic among pregnant women showed that HIV infection was associated with history of genital sores or foul smelling discharge (p < 0.05).<sup>8</sup> Most 17(43.3%) women had sexual partners with a history of genital sore or anal burning or anal itching. This findings is similar to that of Morgan who found greater prevalence of genital ulceration among men.<sup>8</sup> Majority of the ever-married women 21(53.8%) had given birth to a child after being diagnosed as HIV infected. In contradiction to the above findings Galvao found (86.3%) women adopted consistent use of condoms to avoid pregnancy.<sup>3</sup> Eight (20.5%) of the evermarried women practiced anal sex while 7(17.9%) practiced oral sex.9 In a study on trends in unprotected anal, vaginal and oral sex, 23% of HIV infected participants reported practice of anal and oral sex. In the area wise distribution of knowledge it was noted that though most 17(42.5%) of the HIV infected women had good knowledge about HIV/AIDS yet among all the 40 women 17(42.5%) responded that AIDS was caused due to God's punishment for wrong doings, 13(32.5%) responded that HIV transmission was caused by touching, 12(36%) responded kissing caused HIV infection. Fourteen (35%) women responded mosquito or any other blood sucking insects can cause HIV transmission, while 11(27.5%) women believed that sharing

eating utensils and food caused HIV infection. Fifteen (37.5%) women did not know that HIV is caused by receiving blood from an HIV infected donor and 9(22.5%) women did not know that child born to a HIV infected mother can be HIV positive.<sup>10</sup> A study conducted in Pondicherry on awareness of HIV/AIDS revealed similar findings where 37.5% women responded with 'Yes' to insect bites as the cause. Approximately one fourth of them responded that touch, staying together, using the same vessels can spread AIDS while 14.5% responded that infected mother may not infect the child. Fourty-four percent responded to using HIV tested blood for transfusion.<sup>12</sup> Contradictory findings were observed in the study of Shrotri et al among pregnant women in Pune, India, where over 74% displayed knowledge of primary transmission route and 70% displayed knowledge of mother to child transmission. The paired 't' test results showed highly significant gain in knowledge (p < 0.01).<sup>11</sup> In a study the impartation of self-care education among women (n = 120) showed a significant increase in self-care behavior in the experiment group.

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