



## RESEARCH ARTICLE

### A STUDY TO ASSESS THE “EFFECTIVENESS OF COMPUTER ASSISTED FOCUSED LEARNING REGARDING KNOWLEDGE ON INTEGRATED APPROACHES IN MANAGEMENT OF PLHIV AMONG UG STUDENTS OF SUMANDEEP NURSING COLLEGE, VADODARA

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#### ABSTRACT

**Background:** People living with HIV (PLHIV) in resource limited settings should have access to essential interventions to prevent illness and HIV transmission. Under Universal access, agreed to by the G8, efforts to scale up all prevention interventions, to promote provider-initiated HIV testing and counseling services and to integrate these into the care and treatment of PLHIV are underway. **Aims & Objectives :** The aim of this study is to assess the effectiveness computer assisted focused learning regarding knowledge on integrated approaches in management of PLHIV among UG students of Sumandeep Nursing College, Vadodara. **Materials & Methods:** The research approach was the evaluative approach. The study was conducted using pre-experimental design with one group pre-test post-test design. The study was conducted on 90 B.Sc. nursing students of Sumandeep Nursing college. The purposive sampling technique was used. **Results:** The investigator found that in the pre-test knowledge score overall mean score is 6.60 and standard deviation 1.71 in the different aspect of knowledge on integrated approaches in management of PLHIV, In the post-test, the overall mean score 12.57 and standard deviation 1.76 in the different aspect of on integrated approaches in management of PLHIV. The association between the post-test level of knowledge and demographical variable. The chi-square value shows that there is a significance association between year of study and post test knowledge score, there is no significant association between knowledge of UG students with selected demographic variables such as age, gender, family monthly income, and types of family.

## INTRODUCTION

People living with HIV (PLHIV) in resource limited settings should have access to essential interventions to prevent illness and HIV transmission. Under Universal access, agreed to by the G8, efforts to scale up all prevention interventions, to promote provider-initiated HIV testing and counselling services and to integrate these into the care and treatment of PLHIV are underway. Expansion of HIV testing and counselling will greatly increase the number of PLHIV who are aware of their HIV status and can benefit from comprehensive HIV-related prevention, care, and treatment services. All PLHIV for whom ART is clinically indicated should have access to it. But people with HIV for whom ART is not clinically indicated should also benefit from basic HIV prevention and care, including a core set of effective interventions that are simple, relatively inexpensive, can improve the quality of life, prevent further transmission of HIV, and for some interventions, delay progression of HIV

disease and prevent mortality. Defining, implementing, and promoting access to a set of effective HIV prevention and care interventions, in addition to ART, through health facilities, and at the community level through outreach, are critical to achieving universal access. This document is the result of an effort to review the evidence and develop recommendations for interventions to reduce illness associated with HIV infection and prevent HIV transmission. It follows on an expert panel convened in June 2006. This review meeting used a standardized rating system and a structured guidance development process. Recommendations were formulated covering thirteen areas of intervention seen as low cost and of particular importance for people living with HIV. These areas are:

- Psychosocial counselling and support
- Disclosure, partner notification and testing and counselling;

- Co-trimoxazole prophylaxis;
- Tuberculosis (TB);
- Preventing fungal infections;
- Sexually transmitted and other reproductive tract infections;
- Preventing malaria;
- Selected vaccine preventable diseases (hepatitis-B, Pneumococcal, influenza vaccine, and yellow fever vaccines);
- Nutrition;
- Family planning;
- Preventing mother-to-child transmission of HIV;
- Needle-syringe programmes and opioid substitution therapy; and water sanitation and hygiene (Fernando et al., 2016; Thanavanh et al., 2013).

## NEED FOR THE STUDY

The same subject was also highlighted by patients' relatives: "In addition to his disease, he [i.e. the patient] has psychological problem. So, somebody should take care of him. With a lot of effort, I found a nurse for him. Who is supposed to cover these costs?" PLHIV need psychological supports, such as group therapy and family therapy: "We don't have a counsellor who is able to provide group therapy and family therapy for HIV+ people. These are the things that we need." Some of the recommended solutions for having better services are providing services through peer groups as well as developing and supporting positive clubs: 'For instance, welfare organization has devoted budgets to 20 positive clubs. It means that these clubs have been recognized to receive pure support.' According to most of the participants, social and psychological support is one of the most important needs, part of which should be provided by the family and spouse. Most of the patients believed that they are not able to have good relations with their family: "they [i.e. the family members] do not understand us. They think that we should behave like healthy mothers. I need to talk with a person who has the same problem and can sympathize with me (Moradi et al., 2014). The findings of the needs assessment indicated that psychosocial issues are prominent among this population. Priority areas were identified as the following: (1) Managing the emotional impact of HIV (2) Disclosing HIV status to family and friends (3) Maintaining social connectedness (4) Managing HIV within intimate relationships (5) Disclosure of HIV status to intimate partners. Findings from this needs assessment will be reported elsewhere (Cooper, 1998).

## MATERIAL AND METHODS

**Research design:** The research design used was pre experimental one group pre-test post-test design.

**Research Setting:** Nursing Students from a selected Nursing College, Vadodara

**Sample:** 90 Nursing students

### Inclusion criteria

- UG students of Sumandeep Nursing College
- Students who are present during the time of data collection

## Description of tools

### Section 1: Socio-demographic variable data

- Section A consists of selected demographic variable such as Age, Sex, Year of the study, monthly income and type of the family.

### Section 2: Self Structured knowledge questionnaire on integrated approaches in management of PLHIV

- Section B consists of self-structured knowledge questionnaire to assess the knowledge on integrated approaches in management of PLHIV.

### Scoring Interpretation

- The knowledge level is arbitrarily divided into 3 categories based on knowledge questionnaires and accordingly the scores were allotted.
- Poor knowledge- 0-05
- Average knowledge – 6-10
- Good knowledge – 11-15

**Reliability:** The reliability of tool established by using split half method Spearman Brown Prophecy formula ( $r=0.75$ ) reliability test.

**Data collection procedure:** Data collection process is the gathering of information to address a research problem. To conduct research study in Sumandeep Nursing College, a formal written permission letter is prepared and sign of the principal is taken on the permission letter for research study. The data gathering process begin on 16/05/2018 to 23/05/2018.

The purpose of study was explained and confidentiality of their response was assured. Written informed consent from all the sample was taken and given a necessary instruction before administering the tool. Keeping in mind the criteria of the study the sample were selected. Data were collected from 90 samples who met the inclusion criteria. On the first day pre-test is conducted, tool or questionnaire regarding intranatal nursing care were given to sample before administering structured teaching programme. On the same day administer structured teaching programme regarding integrated approaches in management of PLHIV. On the seventh day post-test is conducted, same questionnaire is given to same final year nursing students to evaluate the effectiveness of computer assisted learning programme regarding integrated approaches in management of PLHIV.

**Statistical design:** Data were verified prior to computerized entry. The Statistical Package for Social Sciences (SPSS version 20.0) was used. Descriptive statistics were applied (e.g. ,mean, standard deviation, frequency and percentages). Test of significance (chi square and paired t test) was applied to test the study hypothesis.

## RESULTS

**Section 1:** Frequency and percentage of sample according to selected demographic variables

**Section 2:** Effectiveness of computer assisted focused learning regarding knowledge on integrated approaches in management of PLHIV among UG students of Sumandeep Nursing College, Vadodara.

N=90			
Demographic Variable		Frequency	Percentage
Age	17-19	54	60%
	20-22	36	40%
	22-24	0	0%
	>24	0	0%
Gender	Male	8	8.89%
	Female	82	91.11%
Year of Study	1 <sup>st</sup> year	30	33.33%
	2 <sup>nd</sup> year	30	33.33%
	3 <sup>rd</sup> year	30	33.33%
Family monthly income	< 10000	11	12.22%
	10001-25000	24	26.67%
	25000-40000	20	22.22%
	>40000	35	38.89%
Types of family	Nuclear	26	28.89%
	Joint	56	62.22%
	Single Parent	8	8.89%

N=90				
Variables	Mean	Mean difference	SD	t-value
Pre-Test practice	6.6000	5.9667	1.71	23.046
Post-Test practice	12.5667		1.76	

#### Association between pre test knowledge scores of students with demographic variables

Demographic Variable	PRE TEST KNOWLEDGE			Chi-Square value	df	Inference
	POOR	AVERAGE	GOOD			
Age	17-19	14	39	1.172	2	NS
	20-22	12	24			
	22-24	0	0			
	>24	0	0			
Gender	Male	5	3	4.856	2	NS
	Female	21	60			
Year of Study	1 <sup>st</sup> year	13	16	13.414	4	S
	2 <sup>nd</sup> year	2	28			
	3 <sup>rd</sup> year	11	19			
Family monthly income	< 10000	4	8	6.109	6	NS
	10001-25000	4	20			
	25000-40000	9	11			
	>40000	9	24			
Types of family	Nuclear	7	18	2.786	4	NS
	Joint	16	40			
	Single Parent	3	5			

It reveals that the overall pre test knowledge mean score was 6.6 with SD 1.71 and post test mean knowledge score of 12.57 with SD 1.76. Obtained "t" value (23.04) with df 89 at 0.05 level of significance was less the table value hence there is a significant increase in post test post test scores of students as compared to pre test knowledge scores regarding integrated approaches in management of PLHIV among UG students of Sumandeep Nursing College, Vadodara. Therefore  $H_1$  is accepted.

**Section 3:** Association of pre test knowledge scores with selected demographic variables. The data in the above cited table no. 9 shows that the  $X^2$  value computed between pre test knowledge of students and selected demographical variables. Variables of year of study ( $\chi^2 = 13.41$ ) was found to be significant at 0.05 level hence  $H_2$  is accepted with respect to the above variables.

Variables such as age ( $\chi^2 = 1.17$ ), gender ( $\chi^2 = 4.856$ ), monthly income ( $\chi^2 = 6.109$ ), type of family ( $\chi^2 = 2.786$ ), were not significant at 0.05 level. Thus it can be interpreted that there is a significant association between pre-test knowledge scores of students with selected socio-demographic variable such as year of study.

## DISCUSSION

This chapter deals with the discussions in accordance with the objectives of the study and hypothesis. The statement of the problem was "A study to assess the "Effectiveness of computer assisted focused learning regarding knowledge on integrated approaches in management of PLHIV among UG students of Sumandeep Nursing College, Vadodara."

### Recommendation

#### Based on the findings of the present study recommendation offered for the future study:

The study can be done in knowledge regarding integrated approaches in management of PLHIV.

- A comparative study between GNM and B.Sc. Nursing students regarding knowledge, attitude and practice on integrated approaches in management of PLHIV s can be done.
- Evidence based nursing practice must take higher profile order to increase awareness among UG students.

## Conclusion

The present study assessed the knowledge among UG students on integrated approaches in management of PLHIV and found that the UG students had inadequate and moderated knowledge level related on integrated approaches in management of PLHIV. After the implementation of computer assisted focused learning there was significant improvement on knowledge level of the UG students.

## Conflicts of interest

- The authors declare that there is no conflict of interest statement.

## Source of Funding

- Researchers used their own fund for their research.

## Ethical Clearance

- Ethical clearance for this UG research project was obtained from the ethical committee SVIEC of Sumandeep Vidyapeeth deemed to be University.

## REFERENCES

Aantjes CJ., Ramerman L., Bunders JF. 2014. A systematic review of the literature on self-management interventions and discussion of their potential relevance for people living with HIV in sub-Saharan Africa. Patient education and counseling.

Adamas J., Almond M., Ringo E., Shangali W., Sikkema K., 2012a. Feasibility of nurse-led antidepressant medication management of depression in HIV clinic in Tanzania, international journal of psychiatry in medicine.

Cooper, H.M. 1998. has define the Review Of Literature of Reaseach.

Fernando, S., McNeil, R., Closson, K., Samji, H., Kirkland, S., Strike, C. and Parashar, S. 2016. An integrated approach to care attracts people living with HIV who use illicit drugs in an urban centre with a concentrated HIV epidemic. Harm Reduction Journal, 13, 31.

Hyshka E., Strathdee S., Wood E., Kerr T. 2012. Needle exchange and the HIV epidemic in Vancouver: lessons learned from 15 years of research. *Int J Drug Policy*. 2012;23:261–270. doi: 10.1016/j.drugpo.2012.03.006.

Moradi, G., Mohraz, M., Gouya, M. M., Dejman, M., Seyedalinaghi, S., Khoshravesh, S., & Malekafzali Ardakani, H. 2014. Health Needs Of People Living With Hiv/Aids: From The Perspective Of Policy Makers, Physicians And Consultants, And People Living With Hiv/Aids. *Iranian Journal Of Public Health*, 43(10), 1424–1435.

Thanavanh, B., Harun-Or-Rashid, M., Kasuya, H., & Sakamoto, J. 2013. Knowledge, attitudes and practices regarding HIV/AIDS among male high school students in Lao People's Democratic Republic. *Journal of the International AIDS Society*, 16(1), 17387. <http://doi.org/10.7448/IAS.16.1.17387>

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