A Study to Assess the Effectiveness of Self-Instructional Module on Knowledge regarding HIV/AIDS among Barbers in Selected Saloons of Haridwar

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Abstract— *The objectives of the study are:*

1. *To assess the pre-test knowledge score regarding HIV/AIDS among Barbers at selected Saloons of Haridwar.*
2. *To assess the post test knowledge score regarding HIV/AIDS among Barbers at selected Saloons of Haridwar.*
3. *To compare pre-test and post-test score regarding knowledge about HIV/AIDS among Barbers after administering SIM at selected Saloons of Haridwar.*
4. *To find out the effectiveness of SIM on knowledge regarding HIV/AIDS among Barbers at selected Saloons of Haridwar.*
5. *To determine the association between selected demographic variables and pre-test knowledge score of Barbers regarding HIV/AIDS among Barbers at selected Saloons of Haridwar.*

Keywords— HIV/AIDS among barbers, HIV/AIDS in Haridwar saloon.

I. INTRODUCTION

1.1 Background of the study:

Health was defined as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity". Human immunodeficiency virus (HIV) is a lentivirus (a member of the retrovirus family) that causes acquired immunodeficiency syndrome (AIDS), a condition in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections. Infection with HIV occurs by the transfer of blood, semen, vaginal fluid, pre-ejaculate, or breast milk. Within these bodily fluids, HIV is present as both free virus particles and virus within infects immune cells. The four major routes of transmission are unsafe sex, contaminated needles, breast milk, and transmission from an infected mother to her baby at birth (perinatal transmission). Screening of blood products for HIV has largely eliminated transmission through blood transfusions or infected blood products in the developed world.

Human immunodeficiency virus (HIV) the agent responsible for causing AIDS is known to be transmitted from one person to another through the use of non-sterile needles, syringes and other skin piercing equipment such as blades and scissors. Proper sterilization of all such instruments is therefore important in order to prevent HIV transmission. Fortunately, HIV is very sensitive to standard methods of sterilization. However, barber's shop is a place where there is frequent use of the same blade, trimmers and scissors, often without proper sterilization or disinfection. The use of these sharp instruments may represent an HIV hazard to the general population due to skin piercing injuries. In India, two types of barber shops are available; one is the road side barber where there is no proper infrastructure and other is an enclosed shop. Hence the present study was carried out to assess the awareness and reported practices of barbers with respect to HIV and also to see if there were any differences based on the type of shop.

1.2 Need for the study:

National AIDS Control Policy (1999e2004) of India has recognized AIDS as not "merely a public health challenge," but also a political and social development issue.1 By doing so, National AIDS Control Organization (NACO) has officially recognized that the epidemic has moved from vulnerable or 'high risk' groups to the general population. This has occurred through the various modes of transmission, one of which may be through the cuts and abrasions at the much neglected barbers shop. One goal of the policy has therefore been to ensure the safe use of sharp equipments. The barbers shop is a place for the regular visit by people from all the sections of the society including those from high-risk behavior group for HIV like laborers, rickshaw-pullers, truck-driver, migrants and slum dwellers. It therefore serves as a conglomeration place for the transmission of various infections.6 Though many studies related to knowledge, attitude and practices and their effect on HIV transmission have being conducted among various sectors of society, little attention has been paid to the profession of hair cutting and the use of sharp equipments in the profession of barbering.

There were approximately 37.6 million people across the globe with HIV in 2020. Of these, 35.9 million were adults and 1.7 million were children (<15 years old). An estimated 1.5 million individuals worldwide acquired HIV in 2020, marking a 30% decline in new HIV infections since 2010. (New HIV infections, or "HIV incidence," refers to the estimated number of people who newly acquired the HIV virus during given period such as a year, which is different from the number of people *diagnosed* with HIV during a year. (Some people may have HIV but not know it.

II. METHODOLOGY

2.1 Research Approach

Research approach is an important element of the research design which governs the research study. A research approach tells the researcher what data to collect and how to analyse it. It also suggests possible conclusions to be drawn from the data. Evaluative research is an applied form of research that involves finding out how well a programme, practice or policy is working. Its goal is to assess or evaluate the success of the programme. In view of the nature of the problem, to accomplish the objectives and to test hypotheses, an evaluative research approach was used for this study. The main goal is to evaluate the effectiveness of self instructional module on knowledge regarding HIV/AIDS among barbers.

2.2 Research Design

Research design is the framework or guide used for the planning, implementation and analysis of a study. Research design basically provides an outline of how the research will be carried out and the methods that will be used.

In the present study, pre-experimental (One group pre- test and post-test research design) was selected to assess the effectiveness of self instructional module on knowledge regarding HIV/AIDS among barbers in selected saloons at Haridwar".

2.3 Population

The population is referred to as the entire set of individuals having the common characteristics. In this study accessible population are all the Barbers residing in Haridwar.

2.4 Sample Size

Sample size was 60 Barbers living in Bhadrabad, Haridwar.

2.5 Sampling technique

The investigator planned deliberately to select Barbers in selected rural area, Haridwar, who were available during the time of data collection and who fulfill the inclusion criteria. Sample in this study were selected by using Purposive Non-Probability sampling technique.

2.6 Sampling Criteria

2.6.1 Inclusion criteria:

The study includes the

- Barbers residing in rural areas of Haridwar.
- Barbers who are available at the time of study.
- Barbers who are willing to participate in the study.
- Barbers who can read and write.

2.6.2 Exclusion criteria:

The study excludes the

- Barbers who are not willing to participate.
- Barbers who are not available at the time of study

2.7 Spearman Brown's prophecy formula:

$$r_{1/2} = N\frac{N\sum XY-(\sum X)(\sum Y)}{\sqrt{[(N\sum X^2-(\sum X)^2][N\sum Y^2-(\sum Y)^2]}}$$

The reliability co-efficient of the scale was found to be 0.87 revealing the tool is feasible for administration for the main study. Since the level of knowledge co-efficient for the scale r>0.70, the tool was found to be reliable and feasible for conducting the study.

2.8 Development of Self Instructional Module:

The following steps were adopted to prepare the self instructional module:

- Development of content blue print.
- Preparation of final draft of self instructional module.
- Content validity of draft of self instructional module.
- Description of self instructional module.

III. RESULTS

This chapter deals with the analysis and interpretation of data collected from 60 samples of Barbers at selected Saloon area of Haridwar to assess the effectiveness of Self instructional module on knowledge regarding HIV/AIDS and to determine the association between their knowledge with their selected demographic variables. The data was computed for analysis. Entire data transferred to master data sheet, tabulated and analyzed. Manual, MS Excel and Graph Prism package were used to analyze the data. The data was analyzed according to the stated objectives and hypothesis of study by using descriptive and inferential statistics.

3.1 Hypothesis

3.1.1 P- value will be tested at the level of significance .05

H1:- There is significant difference between the pre and post-test knowledge score among Barbers regarding vaginal candidiasis.

H2:- There is significant association between the pre-test knowledge score with their selected demographic variable.

3.1.2 Description of the Socio demographic variables of the subjects.

It deals with demographic data which consists of 08 items to collect the sample characteristics, which comprises Age in years, Duration of marriage, Education status of Barbers, Religion of Barbers, Category of work, family income, years of service, source of information (HIV/AIDS and its prevention).

TABLE 1
DISTRIBUTION OF BARBERS ACCORDING TO AGE (N=60)

Age in years	Frequency	Percentage (%)
18-24 yrs	11	18.3 %
25-31 yrs	23	38.3 %
32-38 yrs	20	33.3 %
39-40 yrs	06	10.0%
Total	**60**	**100%**

Table-1 shows the distribution of Barbers according to age. The data revealed that 23 (38.3%) were in the age group of 25-31 years followed by 20 (33.3%) were in the age group of 32-38 years, 11 (18.3%) were in the age group of 18-24 years and 06(10%) were in the age group of 39-40 years.

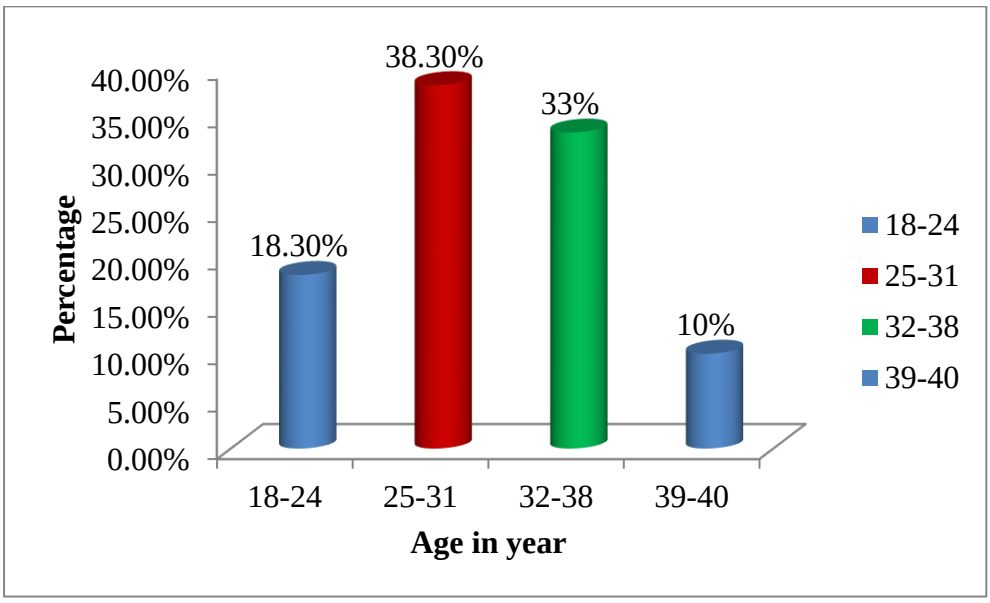

FIGURE 1: Distribution of Barbers by age

TABLE 2
DISTRIBUTION OF BARBERS ACCORDING TO DURATION OF MARRIAGE (N=60)

Duration of marriage	Frequency	Percentage (%)
1-4 years	28	46.7%
5-8 years	20	33.3%
8-11 years	07	11.7%
Above 11 years	05	8.3%
Total	**60**	**100%**

3.2 Findings related to level of pre-test and post-test knowledge regarding HIV/AIDS among Barbers

TABLE 09

FINDING RELATED TO KNOWLEDGE LEVEL (N=60)

Sl. No	Area wise	Score	Pre-test		Post-test	
			F	%	F	%
1.	Inadequate knowledge	0-17	41	68.33%	0	0%
2.	Moderate knowledge	18-26	19	31.67%	14	23.33%
3.	Adequate knowledge	19-35	00	00%	46	76.67%
Total			**60**	**100%**	**60**	**100**

Table 09 depicts that majority 41 (68.33%) of the Barbers had inadequate knowledge, 19 (31.67%) had moderate knowledge and none of them had adequate knowledge towards HIV/AIDS in pre-test knowledge. Majority 46 (76.67%) of the Barbers had adequate knowledge, 14 (23.33%) had moderate knowledge towards HIV/AIDS in post-test knowledge.

3.3 Findings related to compare the pre test and post test level of knowledge regarding HIV/AIDS among Barbers

TABLE 10

COMPARISON OF OVERALL KNOWLEDGE SCORE (N=60)

Area of Knowledge	Pre-test		Post test		Mean % Enhancement
	Mean score	Mean %	Mean score	Mean %	
Over all	7.97	31.88%	19.32	77.28%	45.4%

Table 10 shows the comparison between pre-test and post-test knowledge score of Barbers regarding HIV/AIDS. It was observed that pretest mean percentage score was 31.88 and post test mean percentage score was 77.28 which shows that the overall enhancement was 45.4%, Hence, the research hypothesis H_1 stated that there is significant difference between the pre and post-test knowledge score among Barbers regarding HIV/AIDSis accepted and null hypothesis is rejected.

3.4 Findings shows the effectiveness of Self instructional module on knowledge of HIV/AIDS among Barbers.

TABLE 11

EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE ON KNOWLEDGE OF BARBERS REGARDING HIV/AIDS (N=60)

Component	Group	Mean	Mean difference	Standard deviation	't 'value
Overall	**Pre-test**	**7.97**	11.35	**1.583**	**38.753 Df=59**
	Post-test	**19.32**		**2.013**	

- Significant at 0.05 level

Table 11 represents the aspect wise knowledge mean of Barbers regarding HIV/AIDS. The results showed the enhancement of knowledge with an overall enhancement of mean score i.e 11.35.

The 't' test value was observed and showed a significant in all the aspect of knowledge area. The combined't' test value was significant i.e 38.753 at $P<0.05$ level. Which indicate Self-instructional module was effective in improving knowledge of the Barbers regarding the HIV/AIDS.

3.5 Deals with association between selected demographic variables with pre test knowledge of HIV/AIDS among Barbers.

TABLE 12

ASSOCIATION BETWEEN SELECTED DEMOGRAPHIC VARIABLES WITH PRE TEST KNOWLEDGE LEVEL (N=60)

Variable	Inadequate	Moderate	Adequate	Chi-square value Df	P value	Inference
Age in year						
18-24	8	3	0	1.109 Df=3	0.775	NS
25-31	14	9	0			
32-38	15	5	0			
39-40	4	2	0			
Total	**41**	**19**	**0**			
Duration of marriage						
1-4 years	16	12	0	4.016 Df=3	0.26	NS
5-8 years	16	4	0			
8-11 years	6	1	0			
Above 11 years	3	2	0			
Total	**41**	**19**	**0**			
Educational status of Barbers						
Higher secondary education	1	1	0	2.352 Df=3	0.503	NS
Secondary education	12	4	0			
Primary education	25	14	0			
Illeterate	3	0	0			
Total	**41**	**19**	**0**			
Religion						
Hindu	19	5	0	3.89 Df=3	0.274	NS
Muslim	13	8	0			
Christian	2	0	0			
Others	7	6	0			
Total	**41**	**19**	**0**			
Category of work						
Attender	18	12	0	4.39 Df=2	0.111	NS
Skilled	20	4	0			
Unskilled	3	3	0			
Others	0	0	0			
Total	**41**	**19**	**0**			
Family income						
<5000	1	1	0	7.409 Df=3	0.06	NS
5000-10000	0	2	0			
11000-15000	6	0	0			
>15000	34	16	0			
Total	**41**	**19**	**0**			

Years of Service						
1-3 years	38	18	0	3.554 Df=2	0.169	NS
4-6 years	0	0	0			
7- 9 years	3	0	0			
Above 10 years	0	1	0			
Total	**41**	**19**	**0**			
Sources of information						
No source of information	26	9	0	2.559 Df=4	0.407	NS
Television	2	0	0			
Peer Group	7	4	0			
Internet	5	4	0			
Others	1	2	0			
Total	**41**	**19**	**0**			

Significant at 0.05 level.** **S = Significant, NS = Not – Significant

Table No. 12 depicts that the obtained chi – square value for Age ($\chi^2 = 1.109$, p>0.05), Duration of marriage($\chi^2 = 4.016$, p>0.05), Educational status of Barbers($\chi^2 = 2.352$, p>0.05), Religion of Barbers($\chi^2 = 3.890$, p>0.05), Category of work($\chi^2 = 4.390$, p>0.05), family income($\chi^2 = 7.409$, p>0.05), Years of service ($\chi^2 = 3.554$, p>0.05), and Source of information($\chi^2 = 2.559$, p>0.05) shows no significant association between Knowledge of Barbers regarding HIV/AIDS. Hence, the research hypothesis H_2 stated that there is significant association between the pre-test knowledge score with their selected demographic variable is rejected and null hypothesis is accepted.

IV. DISCUSSION

A report of findings is never sufficient to convey their significance. The meaning that researchers give to results plays a rightful and important role in the report. The discussion section is devoted to a thoughtful and insightful analysis of the finding, leading to a discussion of their clinical and theoretical utility.

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 self instructional module on knowledge of HIV/AIDS among Barbers in selected saloons, Haridwar.

V. CONCLUSION

Majority 41 (68.33%) of the Barbers had inadequate knowledge, 19 (31.67%) had moderate knowledge and none of them had adequate knowledge towards HIV/AIDS in pre-test knowledge. Majority 46 (76.67%) of the Barbers had adequate knowledge, 14 (23.33%) had moderate knowledge towards HIV/AIDS in post-test knowledge.

The results showed the enhancement of knowledge with an overall enhancement of mean score i.e 11.35.

The ‘t’ test value was observed and showed a significant in all the aspect of knowledge area. The combined’t’ test value was significant i.e 38.753 at P<0.05 level. Which indicate Self-instructional module was effective in improving knowledge of the Barbers regarding the HIV/AIDS.

The comparison between pre-test and post-test knowledge score of Barbers regarding HIV/AIDS. It was observed that pretest mean percentage score was 31.88 and post test mean percentage score was 77.28 which shows that the overall enhancement was 45.4%.

Hence, the research hypothesis H_1 stated that there is significant difference between the pre and post-test knowledge score among Barbers regarding HIV/AIDSis accepted and null hypothesis is rejected.

The results of chi square analysis presented the obtained chi – square value for Age ($\chi^2 = 1.109$, p>0.05), Duration of marriage($\chi^2 = 4.016$, p>0.05), Educational status of Barbers($\chi^2 = 2.352$, p>0.05), Religion of Barbers($\chi^2 = 3.890$, p>0.05), Category of work($\chi^2 = 4.390$, p>0.05), family income($\chi^2 = 7.409$, p>0.05), Years of service ($\chi^2 = 3.554$, p>0.05), and Source of information($\chi^2 = 2.559$, p>0.05) shows no significant association between Knowledge of Barbers regarding HIV/AIDS.

Hence, the research hypothesis H_2 stated that there is significant association between the pre-test knowledge score with their selected demographic variable is rejected and null hypothesis is accepted.

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