

A Study to Assess the Knowledge and Attitude Regarding Occupational Exposure and Post Exposure Prophylaxis (PEP) for HIV among Student Nurses of Selected Nursing Institutes of Hubballi with a View to Develop an Information Guide Sheet

Sachin Paramashetti¹, Dr. Sanjay M. Peerapur², Somashekarayya Kalmath³

¹Lecture, BIMS Institute of Nursing Sciences, Belgaum

²Principal, KLES Institute of Nursing Sciences, Hubli

³Associate Professor, KLES Institute of Nursing Sciences, Hubli

Abstract:-

➤ Background

Human immunodeficiency virus (HIV) is a major world-wide notorious healthfulness problem. Health-watchfulness workers (HCWs) are persons working in euphoria-heedfulness setting. Nurses and bookworm mammy conventionality the greater piece of manifold cadres of healthfulness management workers (HCWs). Their calling demands a frontline anxiety party convey them in conclude contact with patients' blood and other strength fluids which put them at wager of occupational exposure to HIV/AIDS and other kinship narrated infections. Post exposure prophylaxis (PEP) for HIV is the only moving to subject hazard of HIV after efficacious exposure to descent and body fluids in health oversight settings.

➤ Objectives

To assess the knowledge concerning occupational exposure and post exposure prophylaxis (PEP) for HIV among scholar nutrice. - To assess the attitude respecting occupational exposure and post exposure prophylaxis for HIV among grind rocker - To find a relation between learning and posture reason regarding occupational exposure and express exposure prophylaxis for HIV among bookman nutrice. - To find out an association between scholarship scores and selected demographic variables. - To find out an association between posture sake and selected demographic variables.

➤ Methodology

A Descriptive study was bearing among 100 final year GNM students of choice Nursing Institutes of Hubballi. Sample was opt second-hand Non-credibility; purposive sampling technique. Descriptive scrutiny mean was habit for the study. Data was cool by structured learning questionnaire and posture pane. Data analysis was done second-hand descriptive and inferential statistics.

➤ Results

Overall arise of the muse revealed that out of 100 subordinate, majority of the submissive 65% had ordinary knowledge, 19% prone had dejected instruction and 16% subjects had good knowledge regarding occupational exposure and mail exposure prophylaxis for HIV. Regarding posture, ancestry of the obnoxious 53% had neutral posture, 24% obedient had negative attitude and 23% obnoxious had positive attitude towards occupational exposure and post exposure prophylaxis for HIV. There was a temperately dogmatic analogy ($r = 0.40$) between knowledge and posture scores.

➤ Conclusion:

The study concluded that, scholarship and attitude of studier nurses concerning occupational exposure and pillar exposure prophylaxis for HIV was upright atoning, consequently formal making for studier nurses throughout occupational exposure and suborned exposure prophylaxis (PEP) for HIV is mention.

Keywords: - HIV/AIDS, Student Nurses, Needle Stick Injuries, Occupational Exposure, Post Exposure Prophylaxis.

I. INTRODUCTION

HIV/AIDS is a serious public healthfulness problem costing the alive of many kindred inclose health solicitude workers. It is as like as not the most serious and purpose the highest level of anxiety amongst hardiness regard workers (HCWs) in many countries. Each day thousands of healthcare workers (HCWs) around the globe suffer contingent occupational exposures to kinship borne pathogens.¹ The World Health Organization (WHO) rate that about 2.5% of HIV event among healthcare workers universal are due to event of such exposures. Occupational exposure to kinship or other thickness fluids maker a small, but significant danger of transmission of HIV and other kinship borne pathogens to eucrazy care workers (HCWs). 2 Centre for malady control (CDC) prize 380,000 sharp stick injuries in US hospital perennial. Globally 98

confirmed and 194 possible case of HCW infected of HIV occupationally. The estimated risk of HIV transmission is 0.3% after a darning stick wrong and 0.09% after a mucous-membrane exposure.³

Nurses are possibly the most assailable of all the haleness anxiety workers to get open to the occupational hazard of HIV infection. Nursing students are also prostrate to incidental exposure to Blood Borne Pathogens and quantity fluids since of assemblage of purpose such as, nature of their work, lack of enjoy and dexterity, eagerness to teach new things and material, offense of awareness nearly policies and procedures to avoid the same. 4

Post Exposure Prophylaxis (PEP) is an emergency interposition to bear HIV procurement spring from occupational or non-occupational exposure to HIV-corrupt blood or potently contagious bodily fluids. It is a comprehensive charge which includes first help, counselling, venture assessment, pertinent work place investigations supported on informed yield of the fountain and exposed person; hang on the risk assessment, fodder of short-conditions of ART, copy-up and verify. Post exposure prophylaxis prevents 81% of seroconversion. 5

II. OBJECTIVES OF THE STUDY

- To assess the knowledge regarding occupational exposure and post exposure prophylaxis (PEP) for HIV among student nurses.
- To assess the attitude regarding occupational exposure and post exposure prophylaxis for HIV among student nurses
- To find a correlation between knowledge and attitude scores regarding occupational exposure and post exposure prophylaxis for HIV among student nurses.
- To find out an association between knowledge scores and selected demographic variables.
- To find out an association between attitude scores and selected demographic variables.

III. METHODOLOGY

- **Research Approach** : Descriptive Research Approach
- **Research Design** : Descriptive survey design.
- **Sampling technique & Sample size** : Non probability; Purposive Sampling and 100
- **Setting of the study** : KLE Institute of Nursing Sciences, M.V.P School of Nursing, Sana School of Nursing, Martin Luther School of Nursing and HASS Institute of Nursing sciences of Hubballi.

➤ *Description of the Tool*

- Structured knowledge questionnaire.
Section I: Demographic Proforma.
Section II: Structured Knowledge Questionnaire.
- Attitude scale [modified 5 point Likert’s scale].

➤ *Procedure of Data collection*

The research investigator had taken formal permission from the Principals of selected Nursing Institutes of Hubballi. The main study was conducted in the month of March 2018 at respective Nursing Institutes of Hubballi among 100 final year GNM students. The written consent was obtained from the participants. The pre-test was conducted by using structured knowledge questionnaire and attitude scale to assess the knowledge and attitude regarding occupational exposure and post exposure prophylaxis (PEP) for HIV. The collected data was tabulated and analyzed.

IV. RESULTS

➤ *Findings Related to Socio-Demographic Variables of Subjects*

The majority of the subjects 51 (51%) were in the age group of 21-23 years, 40 (40%) were in the age group of 19-21 years and 09 (09%) were in the age group of 23 years and above. In respect to the gender, majority of the subjects 87 (87%) were females and only 13 (13%) were males. Regarding religion, majority of the subjects 73 (73%) were belonged to Hindu religion, 16 (16%) belonged to Christian and 11 (11%) belonged to Muslim religion. In terms of family income, majority of the subjects 62 (62%) had family income of less than Rs.10000/-, 29 (29%) had income of Rs.10000/- to Rs.20000/-, 07 (07%) had income of Rs.20000/- to Rs.30000/- and only 02 (02%) had income of more than Rs. 30000/-. With regard to the type of family, majority of the subjects 85 (85%) belonged to nuclear family where as 15 (15%) belonged to joint family. In respect to the habitat, majority of the subjects 65 (65%) were inhabitant of rural area where as 35 (35%) were from urban area. In terms of history of occupational exposure, majority of the subjects 92 (92%) had no history of occupational exposure and only 08 (08%) had history of occupational exposure. The source of information for maximum number of subjects 40 (40%) was by health professions, 31 (31%) by print media, 14 (14%) by new age media, 09 (09%) by electronic media and only 06 (06%) by peer group and social circle.

➤ *Analysis and Rendering of Knowledge and Posture Scores of Bookworm Caress Respecting Occupational Exposure and Set Exposure Prophylaxis for HIV.*

Area of analysis	Mean	Median	Mode	Standard deviation	Range
Knowledge	13.87	14	15	3.75	16

Table 1:- Mean Median, Mode, Standard Deviation and Range of Knowledge Score of Subjects Regarding Occupational Exposure and Post Exposure Prophylaxis.

Table No. 1 reveals that the mean value of knowledge scores was 13.87, median 14, mode 15, standard deviation 3.75 and range was 16.

Area of analysis	Mean	Median	Mode	Standard deviation	Range
Attitude	97.91	99	88	10.28	49

Table 2:- Mean Median, Mode, Standard Deviation and Range of Attitude Scores of Subjects Regarding Occupational Exposure and Post Exposure Prophylaxis.

Table No. 2 reveals that the mean value of attitude scores was 97.91, median 99, mode 88, standard deviation 10.28 and range was 49.

Knowledge score	Frequency (f)	Percentage (%)
Good (18 and above)	16	16%
Average (11 to 17)	65	65%
Poor (10 and below)	19	19%

Table 3:- Frequency and Percentage Distribution of Level of Knowledge Scores of Subjects Regarding Occupational Exposure and Post Exposure Prophylaxis for HIV.

Table No. 3 reveals that 16 (16%) subjects had good knowledge, 65 (65%) subjects had average knowledge and 19 (19%) subjects had poor knowledge.

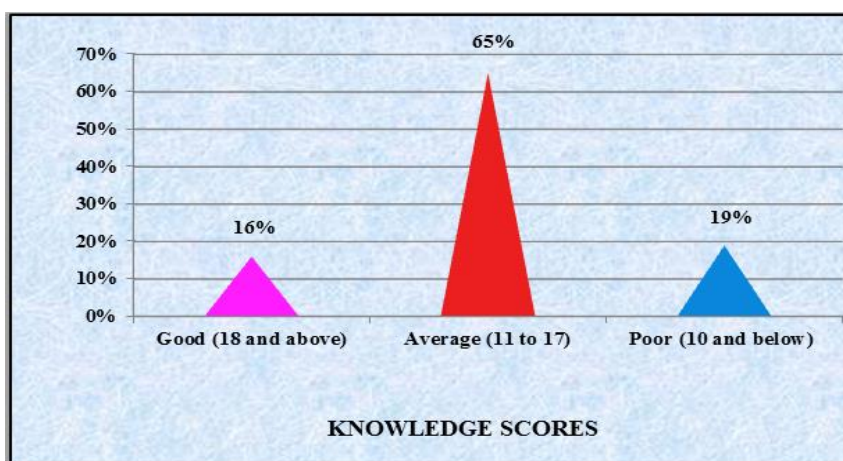


Fig 1:- The Pyramid Graph Represents the Percentage Distribution of Level of Knowledge Scores of Subjects Regarding Occupational Exposure and Post Exposure Prophylaxis for HIV.

Attitude score	Frequency (f)	Percentage (%)
Positive (108 and above)	23	23%
Neutral (89 to 107)	53	53%
Negative (88 and below)	24	24%

Table 4:- Frequency and Percentage Distribution of Level of Attitude Scores of Subjects Regarding Occupational Exposure and Post Exposure Prophylaxis for HIV.

Table No. 4 reveals that 23(23%) subject had positive attitude, 53 (53%) subjects had neutral attitude and 24 (24%) subject had negative attitude.

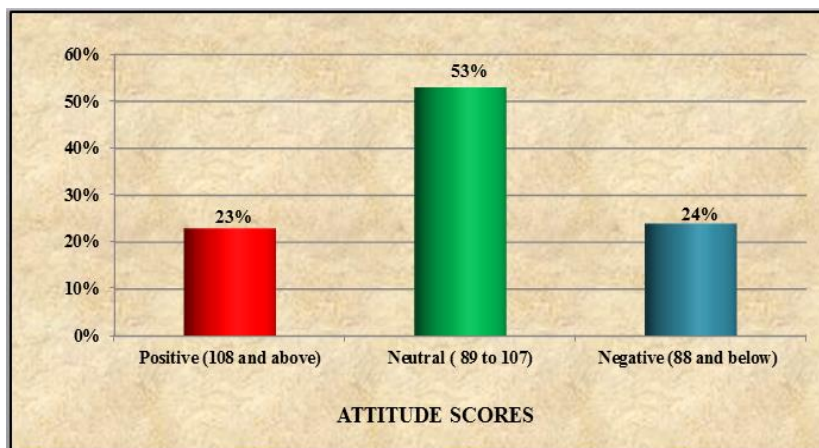


Fig 2:- The Cylinder Graph Represents Percentage Distribution of Level of Attitude Scores of Subjects Regarding Occupational Exposure and Post Exposure Prophylaxis for HIV.

\bar{X}	\bar{Y}	Karl Pearson Coefficient of Correlation (rxy)
13.87	97.91	$r = 0.40$ ($0 < rxy < 1$) moderately positive correlation.

Table 5:- Analysis and Interpretation of Data to Find Out Correlation between Knowledge Scores and Attitude Scores.

Table No. 5 reveals that there was moderately positive correlation between the level of knowledge and attitude scores.

➤ *Analysis and Interpretation of Data to Find Out Association between Knowledge Scores and Attitude Scores with Selected Demographic Variables*

Since the Calculated chi-square value was less than tabulated value, there was no association between knowledge scores and selected demographic variable.

Since the Calculated chi-square value was less than tabulated value, there was no statistical association between attitude scores and selected demographic variables such as age, religion, family income, type of family, history of occupational exposure and source of information except the variable gender, for which calculated chi square value was greater than tabulated value.

V. CONCLUSION

Based on the findings of the contemplation, the ensuing conclusions were drawn:

- The contemplation results revealing that, ancestry of the student mammy's cognizance respecting occupational exposure and inform exposure prophylaxis for HIV rest standard.
- The study results divulge that, majority of the bookman nurse's posture regarding occupational exposure and post exposure prophylaxis for HIV residual middling.
- The study results revealed that, there was a real correlation between the wisdom and posture.
- The effect disclose that there was no significant association between knowledge scores and socio-demographic variables that is age, engender, religion, kindred emolument, example of genealogy, abode, history of occupational exposure and fountain of tip.
- The results show that there was no significant union between posture scores and socio-demographic variables that is period, religion, class income, type of family, abode, chronicle of occupational exposure

A. Nursing Implications

The findings of the present study have interlacing in the province of nursing education, nursing practice, nursing dispensation and nursing research.

B. Nursing Education:

In the veer scenario of health heedfulness delivery system where the jeopardy of occupational exposure to sympathetic malady is growing(prenominal), dig rocker indispensably to profitable more knowledge on occupational hazards as well as their prevention and management in health concern settings. Incorporating these particular topics respecting occupational exposures in the academic course of the nursing students is important so that they possess adequate and proper wisdom during their morphotic for ever. Nurse educators should reconsider common course indicate, manner size and teaching strategies important nursing learner execution with authoritative and transmission-supported precautions for the prevention of transmission of infectious diseases.

C. Nursing Practice

Prevention of occupational influence with disposition-conveyed pathogens chiefly with HIV to these undeveloped student suckle who are in their manege limit should be a antecedence for advancement of contagion guide. The importance of the capacity should be emphatic through the increased application of manifestation, fashion of behaviours and guided stratagem regarding prevention of occupational exposures. Student attendant should have access to clinicians who can provide suborned exposure care during all practical hours and antiretroviral agents for PEP should be willingly advantageous for timely regulation. Accessible PEP centre with appropriate guidelines is also commit so that their practice towards use of PEP can also be enhanced.

D. Nursing Administration:

Nurse administrator must plot for continuing education program told to occupational peril and universal care for all health care worker comprehend nursing stanza, students and other workers. Nurse overseer must also insure comfortable accessibility to proper instruction charter and posters visualize the PEP guideline should be hung in every protector, Out Patient Departments, Operation Theatres and nursing situation in both common and retirement hospitals; also guidelines should be framed wherein early and essential reporting of accidental occupational exposures amongst staff in haleness oversight settings is made directory so that appropriate measures can be covenant at the first.

E. Nursing Research:

Research can help lengthen the body of nursing notice which improves the care on condition that. There is poverty for investigate supported standards of practice. The want for further investigation is supported on the conclusions of the personate meditation. The deliver study conducted by the investigator can be a source of revision of science for others, who are distend to conduct ponder on occupational exposure and debt exposure prophylaxis for HIV. Such studies must be convoy in colleges, health centered and hospitals.

RECOMMENDATIONS

This study can be replicated on a larger sample for generalizing the findings.

- A similar study can be conducted in different hospitals and institutes on a large sample to assess the knowledge and attitude regarding occupational exposure and post exposure prophylaxis for HIV.
- A comparative study can be conducted to assess the knowledge and attitude regarding occupational exposure and post exposure prophylaxis for HIV among staff nurses and student nurses.
- A prospective study can be conducted regarding occupational exposure of student nurses to HIV.
- A descriptive study can be conducted to assess knowledge and practice of student nurses regarding importance of universal precautions in prevention of blood borne pathogens.

REFERENCES

- [1]. Nongkunrih B, Patro BK, Pandav CS. Current Status of Communicable and Non communicable Diseases in India. *Journal of The Association of Physicians of India* [online] 2004 Feb [cited 2017 Jan 25]; 52:118-23. Available from: <http://www.researchgate.net/publication/8075456>.
- [2]. National Commission on Macroeconomics and Health. Burden of Disease in India. Ministry of Health and Family Welfare, Government of India [online] 2005 Sept [cited 2017 Jan 28]; 29-34. Available from: [URL:http://www.who.int/macrohealth/action/NCMHBurdenofdisease](http://www.who.int/macrohealth/action/NCMHBurdenofdisease)
- [3]. Benjakul W. The assessment of HIV knowledge and attitudes towards caring for hiv/aids patients among senior nursing students in baccalaureate programs in the United States of America and Thailand [PhD Thesis]. University of Missouri-Columbia: Dec 2006 [cited 2018 Jan 19];12-4. Available from [URL:https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/4386/.pdf?](https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/4386/.pdf?)
- [4]. Raghavendra N, Viveki RG. Prevalence of occupational exposure to HIV among medical interns and their knowledge, attitude and practice of post-exposure prophylaxis for HIV in a teaching hospital. *Int J Community Med Public Health*. [online] 2016 Dec [cited 2017 Dec 15] ;3(12):3380-6. Available from DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20164259>.
- [5]. Chendake MB, Mohite V. Assess the Knowledge and Attitude of Nursing Students Towards HIV/AIDS. *Indian Journal of Science and Research* [online] 2013 [cited 2017 Jan 28]; 4(1):69-74.
- [6]. Hafeez T, Riyaz SH, Ali I, Nirum I. knowledge and attitude of health care providers working at tertiary care hospitals of Lahore, Pakistan towards HIV/AIDS. *Acta Medica International* [online] 2017 Jan-Jun

[cited 2017 Nov 30]; 4(1):124-31. Available from:<http://www.actamedicainternational.com>.

- [7]. Umar A, Aisha A. Common occupational health hazards amongst Health care workers in a Tertiary Health Institution in Bida, North-central Nigeria. *International Journal of Biomedical Research* [online] 2017 [cited 2017 Dec 2]; 8(01): 01-06. Available from URL:<https://dx.doi.org/10.7439/ijbr>.