

Knowledge and Practices of Nurses towards Patients with Human Immunodeficiency Virus (HIV) Working in district Lahore

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Abstract

Background:

Caring is one of the four most characteristics of nurses so they are required to have more knowledge and practices towards the patients with HIV and address patient's physical, mental and social necessities as the patient get no opportunity to recover. **Objective:** To evaluate the knowledge and practices of nurses towards patients with HIV, working in tertiary care hospitals of Lahore. **Method:** Cross-sectional descriptive design dependent on structured questionnaire was utilized in this study. The charge nurses serving in six tertiary care hospitals of Lahore, were chosen as population through non probability sampling strategy. The sample size was 190. **Results:** The outcomes revealed that 48% of the nurses had average knowledge and 37% had excellent information and remaining were with the poor information about the HIV. Practice of nurses towards HIV was discovered to be to a great extent compassionate and mindful. Just 12% of nurses were reluctant to touch a HIV positive patient and larger part of the respondents showed the acceptable degree of practices. The general outcomes showed that nurses have average knowledge about the sickness. **Conclusion:** On the bases of study discoveries, it is inferred that despite the fact that the nurses working in chosen tertiary consideration emergency clinics of Lahore, Punjab region have average degree of information yet their training towards the patients with HIV contamination is thoughtful and they readily give care to the patients. The practices can be additionally improved through schooling and training for nurses. The consequences of the study looks

for the consideration of hospital administration, nursing pioneers and public strategy creators to make a fundamental move for the preparation of medical care experts particularly attendants to keep them all around educated regarding exceptional information

Key words: Human immune deficiency virus, Assess, Knowledge, Practice, Nurses, Pakistan

INTRODUCTION

Human immunodeficiency virus (HIV), first discovered in 1981, has spread in every country of the world and its progression towards last stage AIDS is on high. Globally, 36.9 million people were living with HIV in 2017. In Africa, prevalence of HIV among adults aged 15 to 49 was 4.1(%) by the end of 2018. Focusing especially on Asia, the major strength of the HIV has been in South and South-east Asia, predominantly in India and Thailand. In South-East Asia, Prevalence of HIV among adults aged 15 to 49 is 0.3 %. (<https://www.who.int/hiv/data/en/>, 2017). (WHO, 2018). HIV infection/AIDS is caused by a human immunodeficiency virus (HIV). Virus attacks on the T-Cells in human immunity and destroy the white blood cells (CD4) and render the victim unable to fight against infection.(Henry, 2009)[10]. After two to six weeks of HIV exposure 50%-70% people get transient infection called seroconversion illness. The illness appears with malaise, myalgia, fever, rash, oral or genital ulcers and pharyngitis. Usually signs and symptoms last for 1-2 weeks.

Pakistan surrounded by high risk countries i.e. India, China, Thailand and Afghanistan, is at the brink of a devastating outbreak. The factors responsible for the transmission of the HIV in Pakistan like more use of injectable than oral medication, frequent blood transfusion, more number of paid blood donors and engaging in extra marital affairs has already been well illustrated and documented.

Treatment of HIV infected patients is believed to be the part of health care workers duty. The medical staff has intimate relationship with syringes, blood and blood products. In particular nurses are directly in contact with the body fluids of patients, thus are at an increased risk of HIV/AIDS.4 Nurses also have to collect various body fluid samples of patient for investigation, giving medication as per instructions to patients, taking care of patients, and giving injections. For taking care of HIV/AIDS patients, Special nursing knowledge and skills are required.

It is evident that HIV patients encounter social stigma and taboos with physical and psycho-spiritual problems. Being a member of health care team, nurses are ethically responsible to lower patients' physical, mental and social stresses by handling their needs. So, the nurses must be knowledge-able and skilled. Several studies have documented that nurses are not adequately prepared to care HIV patients. A knowledge gap exists between management issues and nurses perception about HIV. So, there was a great need to explore the knowledge and practices among nurses caring for HIV patients to improve patients' outcomes and consequently enhance quality of provided nursing care

The objective of this study was to assess knowledge and Practices of nurse towards HIV infection.

MATERIAL AND METHODS

Design of Study

A quantitative, descriptive study design with convenient sampling technique was used.

Tool of Research

The self-administered questioner was used to conduct the information from nurses in Mayo and Services Hospital Lahore. Questioner was adapted from article that published in Journal of Advanced Nursing (AJN). Reliability and validity of items was checked by the researcher and Cronbach's alpha value of knowledge was 0.77 and the original knowledge items were developed by the Eckstein in 1987.(Delobelle et al., 2009)[5].

Inclusion Criteria

- Registered nurses working in medical emergency, medical ICU and medical units of public tertiary care hospitals.

- Nurses with working experience minimum 1 year.

Study was conducted from February 2017 to May 2017.

Exclusion Criteria

Nursing Superintendents, Nursing Instructors, Head Nurses.

- Having specialization in Infectious disease.
- Having foreign Qualification or working experience in foreign institute.

Size of Sample

The sample size was 190 participants. It was calculated by using the "Slovin's formula". (Ellen, 2012)[9]. Confidence interval is 95%.

Data Analyze Plan

The data for this study was collected from nurses working in six public tertiary care hospitals of Lahore providing care to the HIV infected patients. A structured questionnaire was administered personally and distributed among the nurses with written informed consent from the participation that was entirely voluntarily. The participants gave good response to this survey and a total of 190 completed questionnaires were received from the six hospitals. Completed responses were compiled and loaded into (SPSS) version IBM 21.0 file to carry out analysis.

Ethical Consideration

The study was accepted by the ethical review committee of UHS, Lahore and ethical consideration were followed according to the ethical review board of UHS, Lahore. All information was being kept confidential.

RESULTS

190 participants completed the questionnaire during the study period. The mean age of the participants was 29.4 ± 5 . Minimum age was 21 years and Maximum age was 49 years. Out of 190 participants 187(98.42%) were females and 3(1.58%) were males. In terms of academic qualification, 79(41.6%) were GNM, 70(36.8%) were BSc Nursing and 41(21.6%) were post RN nurses. It was found that 6.3 ± 3.6 years was the mean working experience of the nurses. Minimum working experience was 1 year and Maximum working experience was 20 years. Out of 190 participants 173(91.1%) received information about HIV, 17(8.9%) answered that they didn't get information about HIV. out of 190 participants, 83(43.7%) received information from Informational Media and 31(16.3%) received information from Colleagues

Table 1: Demographic profile

Demographic data		
Age	Mean: 29.4 years SD: ± 5 years	
Gender	Frequency	Percentage
Female	187	98.5
Male	03	1.5
Qualification		
GNM	79	41.6
BSN	70	36.8
Post RN	41	21.6
Experience		
1-10 years	165	86.8
11-20 years	25	13.2
Received information on HIV		
Yes	173	91.1
No	17	8.9
Source of information		
Course content	46	24.2
Informational Media	83	43.7
HIV work shop/seminar	30	15.8

Colleagues	31	16.3
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Table 2 shows the Knowledge category results that Poor knowledge was 27(14.2%) ,Average knowledge 91 (47.9%) and Excellent knowledge 72(37.9%).The mean score calculated 21.5 ± 7.2 (60%)

Table 2. Knowledge of Nurses towards HIV

Knowledge category	Frequency	Percentage (%)	Mean score (Mean %)
Poor knowledge	27	14.2	21.5 ± 7.2 (60%)
Average knowledge	91	47.9	
Excellent knowledge	72	37.9	
Total	190	100.0	

Practice of nurses towards towards HIV was found to be largely empathic and caring. Only 12% of nurses were reluctant to touch a HIV positive patient. There was no practice problem associated with taking blood samples, administrating i.v drugs taking vital signs and changing the patients linen. More than 90% of nurses were comfortable to practice these tasks routinely (Table 3).

Table 3: Practices towards HIV

Sr. No	Practice towards HIV	Yes	No
1.	Do you touch a patient who is suspected of having HIV?	167 87.9%	23 12.1%
2.	Do you take blood sample from HIV patient?	163 85.8%	27 14.2%
3.	Do you take vital signs of HIV patient?	174 91.6%	16 8.4%
4.	Do you change the bed sheets of a patient who has HIV?	167 87.9%	23 12.1%
5.	Do you give intravenous medication to HIV patient?	179 94.2%	11 5.8%
6.	Do you change the dressing of HIV patient?	156 82.1%	34 17.9%
7.	Do you provide N.G feed to the HIV patient?	167 87.9%	23 12.1%
8.	Do you give bed bath to HIV patient?	149 78.4%	41 21.6%

9.	Do you usually recap the needle?	144 75.8%	46 24.2%
10.	Total	85.5%	14.5

DISCUSSIONS

HIV is one of the major challenges in providing optimal patient-care across the world including Pakistan. Up-to-date knowledge and evidence based practices of nurses can play a significant role in preventing these infections. The purpose of this chapter is to provide detailed discussion of results in the context of current relative literature however scarce literature available regarding HIV infection control programs in Pakistan. Strengths and limitations of the study will be identified. Then, implications for nursing practice, education and administration, will be discussed. In this chapter we will also discuss the findings of our study, in comparison with other studies, concluding remarks, recommendation for future and gaps in the study about the Knowledge and practices of nurses to patients with HIV.

HIV is the global problem which is spreading world-wide and keeps on increasing health issues. 36.9 million People are living with HIV in the world so far. In 2017, 940 000 people died from HIV-and its related infections universally. HIV is not a curable disease. However, antiretroviral (ART) drugs are used to control the virus multiplication so that patient can live in stable conditions. (WHO, 2018).

Nurses have vital role in the care of the patients suffering from HIV. (Juan et al., 2004) World widely, knowledge and practices of nurses towards patients with HIV are the major concern in the treatment and control of HIV. There are stigmas among the health care professionals while treating the patients with HIV(Brown et al., 2003) .

This cross sectional descriptive study was conducted on 190 nurses to assess the knowledge and practices of nurses about HIV .The mean age of nurses was 29.3+5 which is in accordance to a study done by Kermode in which the average age of respondents was 30.5 years(Kermode, 2019) however findings of Walausimbi were contrary to our study finding who reported that most of therespondents were within the range of age 31-40 years (Walusimbi and Okonsky, 2004).This difference in age groups may be due to different hiring criteria in different regions of the world.

Most of the nurses who participated in the study were females. A study conducted among nurses of three countries was consisted of 99% of females. (Suominen et al., 2010) .In another study 64% nurses were females (sarah, 2015). This is because all over the world nursing profession is being considered as female profession. Concerning with education, majority of the nurses were holding the diploma in nursing and midwifery 42 and remaining were with baccalaureate in nursing (BSN) and post RN. It was also revealed by study in which most of the nurses (37%) were with diploma in Nursing

(Walusimbi and Okonsky, 2004). This finding was also affirmed through another KAP study of rural nurses on HIV conducted in South Africa” by Peter Delobelle reported that most of the nurses (44%) were having diploma in nursing. This could be attributed to the fact that degree nursing programs are in evolution and awareness is being promoted to establish new nursing institutes to increase group of degree nurses. This factor reveals presence of good number of diploma nurses in our health care settings. Most of the nurses (91%) were aware of HIV and source of information was informational media and course content. A similar study conducted in Uganda in which source of information was media like radio (64%) and the 2nd most common source of information was workshops and seminar’s (Walusimbi and Okonsky, 2004). In another study with same objective also had the same sources of information which were informational media and course content /health talks/seminars.(Umeh et al., 2008). Now a day people use informational media particularly electronic is very popular and most of time information is disseminated and reached people through media.

Comprehensive knowledge regarding HIV infection plays a fundamental role in preventing infections among patients in health care settings. In this study the knowledge of nurses was assessed through questionnaire. The questions about the knowledge of HIV were further divided into sections. The findings revealed that 50% of the nurses were aware of causative agent of HIV. A supportive study reports that most of the nurses were having knowledge about the causative agent of HIV (Walusimbi and Okonsky, 2004). Another study is in line conducted in India to assess the knowledge of nurses about HIV, which stated that most of the nurses knew about the causative agent of HIV. (Kermode, 2019)

While making a comprehensive care plan for patients for patients with HIV infection, it is very essential for nurses to know about the disease pathology because nurses work closely for welfare of the patients to improve quality of life. Nurses are those health workers who have direct contact with the infectious and non-infectious patients and are exposed to the possible risk of spreading the disease from patients to patients and to their own self also. Therefore, it is very important for health care workers that they must be aware of the possible route of transmission of disease. Our study reveals that nurses having average knowledge related to route of transmission as blood born, vertical transmission and sexual transmission of the disease.

Interestingly there is some percentage of nurses who have inadequate knowledge and report that HIV can be transmitted through casual contacts such as through shaking hands, touching, coughing, sneezing, and using the same toilet / bath room / towel, mosquito/insect bites. So nurses have average knowledge about the route of transmission of disease according to our study. Findings of Sarah and Doba were consistent with our study conducted in Pakistan and in India respectively in which most of nurses reported inadequate knowledge about transmission of HIV. (sarah, 2015)(Doda et al., 2018). In contrary to our findings (Walusimbi and Okonsky, 2004) reported that 90 % of nurses knew the route of

transmission. In another Indian study the findings were also contradictory to our results which revealed that 95% of the nurses knew that how HIV can be transmitted.(Kermode, 2019).

The quality of nursing care depends upon extent of knowledge regarding the disease. The average level of knowledge about the transmission of disease is that the most of nurses in our study were diploma nurses who are with low level of education and with more field interaction. Study revealed that they have fear of getting disease so they also believe in social stigmas and taboos about the transmission of disease. Hence there should be clinical classes or in-service education programmes to update their knowledge.

Good level of knowledge of health care workers about the disease is most important factor in controlling the spread of disease and prevention considering the non-availability of treatment once the person is infected. (Doda et al., 2018).In our study when nurses were asked questions regarding the prevention of the disease, average nurses had awareness regarding this. This finding is consistent with the study (Hussain et al. (2011) which was conducted in Karachi, Pakistan to evaluate the knowledge and practice of health care workers. According to this study nurses were aware of prevention of HIV and believed that HIV is a preventable disease. It is inferred that the HIV control programs are working efficiently in providing information regarding prevention of the disease in community and in health care setting.

People now days are engage in many activities which can affect the health like use of drugs for addiction, easy access to prostitutes, fashion of extra marital affairs. These practices can make them to fall in high risk category to develop diseases. Knowledge about these high risk groups can help the nurses to educate society about the prevailing disease. In our study when nurses were asked about the high risk groups of HIV our results showed that 63 % of the nurses were aware of the common high risk groups for developing HIV. Studies consistent to our results showed that nurses were agree that I/V abusers and homosexual group are high risk groups for developing HIV (Uwakwe, 2000, Copeland et al., 2012) .The knowledge of the nurses is increasing day by day as nurses are involved in continue education programs during their practice and health facilities are advancing as every patient is screened at the time of admission. It helps the nurses to be aware about the high risk groups who can contract this disease.

By virtue of their profession nurses have the very sensitive task of attending all types of patients but attending patients with HIV warrants high level of motivation and commitment from nurses as this disease carries a great level of stigma and taboos with it. The results of our study show that nurses from the tertiary care hospitals were found positively willing to provide care, though having some fear of getting infected by the patients. They revealed that they experienced stress, fear and frustration as they knew; patients would not cure at the end, in-spite of this distress and anxiety they felt sympathy and empathy for patients with HIV.

Nurse's knowledge and practice towards patients with HIV have also been scrutinized all over the world as it is important part of the management and treatment of the patient, those who have no hope for life. Results also reflect that 60% of the nurses were agreed that all health care workers have the right to know a patients HIV status for their own safety as they want to maintain precaution practices not to get infected while providing care.

In another study the results were different at different place in china and Iran regarding "if they were asked to provide care for patients with HIV" nurses from Iran were reluctant to provide care as compared to nurses from china

(Askarian et al., 2006)

Health care professionals are sympathetic towards the patients as it is part of ethics to provide care to every patient that need our help. Ethics are the important part of the curriculum of health care professionals during their training. High degree of sympathetic behaviour towards patients with HIV, exemplified that patients should be treated with the same respect as any other patient.

CONCLUSION

Pakistan is one of the developing countries in South Asia, with all the unavoidable difficulties currently being faced by the region. Inadequate public health care facilities, poorly regulated private health sectors, limited material and monetary resources, lack of qualified health personals have resulted in neglecting health care system. This scarcity of resources has major impact on the health of people with life threatening illness like HIV which is 11th leading health burden world widely. In Pakistan like other resource poor countries, the incidences of HIV are increasing and burden of disease is upswings. A large number of HIV positive cases have been diagnosed with no further treatment available till now. Despite this fact, nurses have been trying to manage HIV patients but they have average knowledge, and adequate practices of task.. And they also have believe on social stigmas and taboos about the disease. According to researcher's point of view education and training is required for nurses in this area to deal with HIV positive patients. Our study demands the attention of hospital administration, nursing leaders and national health policy makers to take necessary action for the training of health care professionals especially nurses to keep them abreast of latest knowledge in the area of HIV control program.

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