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STAFF NURSE' KNOWLEDGE REGARDING HIV/AIDS AT A TERTIARY CARE HOSPITAL, NAWABSHAH.

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ABSTRACT

BACKGROUND: HIV/AIDS prevalence is rising in Pakistan. To care for infected patients, nurses must possess the necessary skills. The domain in which nurses provide care is influenced by their knowledge and attitudes. Assessing nurses' knowledge, attitudes, and practices is therefore crucial. **OBJECTIVES:** To assess staff nurses' HIV/AIDS-related knowledge, attitudes, and practices **METHODS:** 200 staff nurses were picked using a convenience sample technique in a cross-sectional, quantitative study design. The data was gathered via a 20-item questionnaire. Items 06, 07, and 07 about knowledge, attitudes, and practice were included in this KAP survey. IBM SPSS. 23 was utilized for data analysis. **RESULTS:** 194 97%, people answered this questionnaire. 101 52.07% of the 194 responders were female. The knowledge of the 55 28.9% and 66 35.1% participants was good to excellent. 125 participants 64% felt that nurses have a fundamental right to be aware of the status of patients with HIV/AIDS, and 97 participants 50% strongly agreed that they are afraid of becoming infected when caring for an infected patient. Although they were terrified when executing invasive interventions, nurses were also at ease with non-invasive care techniques. **CONCLUSION:** Although nurses today know more about HIV/AIDS, there has always been concern about patient-to-nurse virus transmission. To lower the risk of illness transmission, nurses must participate in an appropriate infection control training program.

Keyword: HIV/AIDS, Nursing, knowledge and skills

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INTRODUCTION

The prevalence of HIV/AIDS is increasing among people who reside in developing nations. In this aspect, nurses' expertise in care, administration, and prevention takes center stage. For effective case management, nurses must increase their knack in the aforementioned field ¹. According to a qualitative cross-sectional study carried out in Kumasi, Ghana, 129 59.2% nurses lacked formal training in HIV/AIDS management. Although, the majority of them 162, 71.1% $p = <0.0001$ were aware that antivirals are a safe treatment to prevent drug resistance. In addition, it was observed that patients with HIV can be asymptomatic yet nonetheless contagious 173, 83.2% $p = <0.0001$ ². Nurses in a tertiary care hospital, in Lahore, Pakistan, had a mediocre level of knowledge, but they were compassionate toward the sick, showing a caring attitude toward helping people deal with their issues. In addition to this, nurses feared contracting the virus from the patient. Because they viewed infected people as immoral and subject to punishment from Allah a supreme authority, nurses' perceptions about HIV/AIDS infection revealed their lack of awareness ¹. It was established that nurses must dispel their preconceptions and beliefs to improve their knowledge about HIV/AIDS ².

For nurses to safely and effectively care for individuals living with HIV/AIDS, they need clinical experience and high-quality care delivery abilities. It will help nurses change their perspectives on the care environment during their clinical experiences. The first obstacle in this area is the negative opinions nurses have before offering care. These unfavorable attitudes include stigma, prejudice, and fear of contracting an infection. Additionally, nurses believe that HIV/AIDS cannot be cured. When nurses learned of the patient's illness, they got terrified and avoided them ³. Four main themes—care with dread, caring ethics, protective precautions, and duality of feelings—were used to validate

nurses' perceptions of HIV/AIDS in another qualitative study carried out in hospitals connected to Kermanshah University of Medical Sciences in West Iran. The risk of infection and needless anguish is found to be higher when nurses provide care while experiencing dread because their personal lives are at risk. Nurses thought they could become infected when taking patient specimens and giving intravenous medication or fluids. Consequently, it puts them in danger, which is terrifying ⁴.

Nurses must understand that people with HIV/AIDS do not have to take self-blame for their infection. Furthermore, because patients have an equal right to receive the same level of care as others, nurses should be required to overcome their fear of getting infected when caring for infected patients by following preventive steps ². Standardized preventative procedures are the best way to mediate emotional and psychological issues and provide safe care. A thorough understanding of the diseases and how they spread is the first step in this direction. This will allow nurses to accurately and mindfully deliver safe care ⁴.

The equal right for treatment principles mobilizes nurses to show their willingness for HIV/AIDS patient care. This willingness for care may be based on knowing nurses' perceptions and planning extensive education and training to get desired results. If nurses experience or encounter any form of distress, they need to be provided with psychological and emotional assistance. This must be followed by setting positive examples, increasing awareness about the infection, and enhancing professional relationships ⁵. The purpose of this study was to find out how much staff nurses at a tertiary care hospital in Nawabshah knew about HIV/AIDS. The topic has been the subject of numerous investigations in the past. One study examined nurses' attitudes and level of knowledge regarding HIV/AIDS patients in Lahore ¹. Another study that examined nurses' attitudes and beliefs

around infection was conducted at the Mayo & Services Hospital in Lahore. According to this study, nurses' opinions encouraged prejudice and stigmatization. The knowledge and attitudes of staff nurses regarding HIV/AIDS were the main focus of this study⁶. This study set out to find out what the staff nurses at a tertiary care hospital in Nawabshah knew and thought about HIV/AIDS infection. This study assisted us in developing the required intervention to update staff nurses' knowledge and change their attitudes for better patient care. This study set out to evaluate nurses' attitudes, knowledge, and practices about HIV infection.

MATERIAL AND METHODS

A cross-sectional, quantitative study approach was employed. Convenient sampling was the method of choice. All of the staff nurses employed by a public tertiary care hospital in Nawabshah made up the study's population. An estimated 400 nurses were working there, rotating between departments in three distinct shifts. The study's target group consisted of nurses employed in emergency rooms, medical, surgical, cardiac, orthopedic, and cardiac intensive care units. The following inclusion requirements had to be fulfilled by staff nurses who had worked for more than two years at specific tertiary care hospitals and who had treated at least five HIV/AIDS patients. Head nurses, nurses with an infectious specialty, and those with foreign qualifications or work experience in foreign institutions were excluded.

To find the sample size, "Slovin's formula calculator" was utilized⁷. $n = N / 1 + Ne^2$ is the "Slovin formula," where n is the sample size, N is the population, and e is the error margin. There were 200 participants in the sample, and the error margin was 0.5 percent⁸. A 20-item self-administered knowledge, attitudes, and practice KAP questionnaire created by Eckstein in 1987 was used to gather the data. Participants' personal information, including name optional, age, sex, marital status, qualifications, years of staff nursing

experience, and the number of HIV/AIDS patients seen, was asked in the first section of the questionnaire. The second part of the questionnaire included seven, seven, and six questions about nurses' knowledge, attitudes, and practices on HIV/AIDS in this KAP questionnaire, respectively. Fourteen items knowledge & attitudes were scored on five points on the Likert scale: strongly agree, agree, disagree, neutral, and strongly disagree. The remaining 06 items practices required the answer 'yes' or 'no'. Each participant received a personal copy of the questionnaire. This questionnaire included an informed consent form.

Before data analysis, participant forms were gathered, appropriately compiled, and loaded into IBM SPSS version 21.0. Frequency, percentage, mean, and standard deviation SD were used to examine the participants' KAP and demographic replies. The ethical review committee ERC of Peoples University of Medical and Health Sciences Nawabshah provided its approval. Sensibly, every ethical guideline about research methodology and manuscript development was adhered to. All participant identity information was kept private and secure.

RESULTS

According to the results, 194 individuals 97% response rate returned completed forms. Of the participants, just six or 0.3% chose not to return the questionnaire. The participant demographics are displayed in Table #1. The age ranged between 28-53 years with mean age & SD, of 35 years ± 15 . The knowledge about HIV/AIDS infection is shown in pie graph #01.

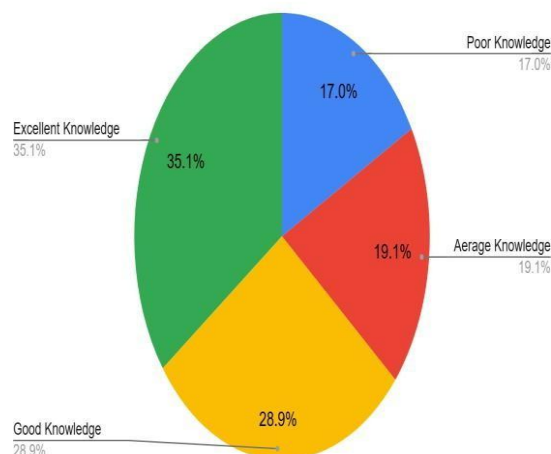
Table # 01:- Demographic statistics of participants

GENDER	Frequency	Percentage
Male	93	47.93%
Female	101	52.07%
MARITAL STATUS		

Married	155	80%
Single	39	20%
QUALIFICATION		
General Nursing	76	39.18%
& Midwifery		
Post RN BSN	72	37.11%
BSN Generic	44	22.69%
Masters	02	01.02%
EXPERIENCE		
02-10 years	73	37.63%
11-15 years	55	28.35%
16-20 years	47	24.22%
More than 20 years	19	09.80%
No. of HIV/AIDS patients attended		
05- 10	102	53%
11-15	66	34%
16- 20	36	13%

Pie graph #01 displays the knowledge level of participants regarding HIV/AIDS infection.

Pie Chart # 01: - Staff nurses' knowledge level regarding HIV/AIDS



Participants' answers about staff nurses' perceptions of HIV/AIDS patients are shown in Table #02.

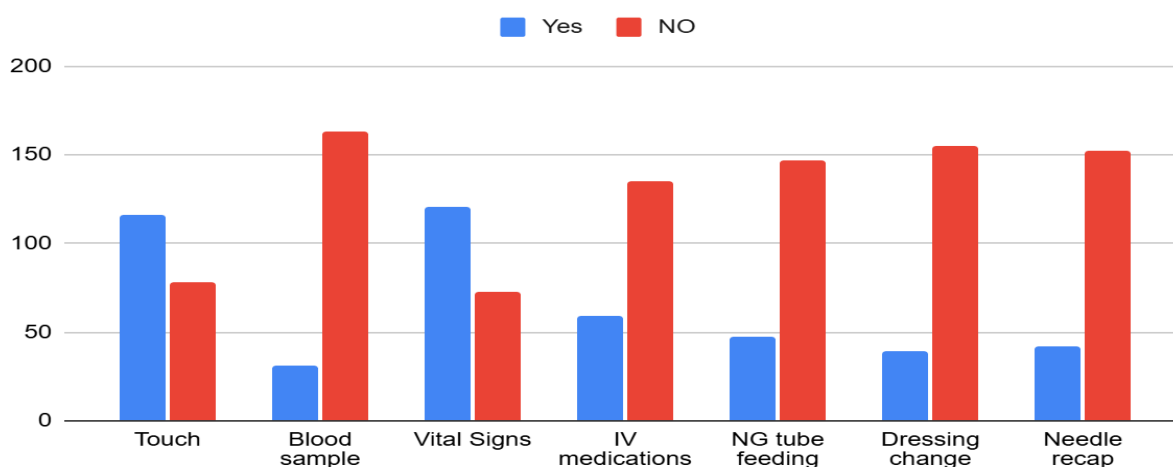
Table # 02:- Staff Nurse's attitudes towards HIV/AIDS-infected patients

S#	Statements regarding staff nurses' attitude towards HIV-infected patients	Strongly Agree	agree	Neutral	disagree	Strongly Disagree
01	I am afraid of catching HIV through clinical practice.	97 50%	55 28.4%	05 2.6%	19 10%	18 9%
02	I believe that HIV is the punishment for immoral behavior.	10 5.1%	29 15%	11 5.6%	66 34%	78 40%
03	There is no point in treating a person with HIV as they die anyway.	31 16%	25 13%	55 28.3%	37 19%	46 23.7%
04	Nurses should not refuse to care for a patient just because they are HIV positive.	11 560%	45 23.2%	03 1.5%	17 8.8%	14 7.2%
05	All healthcare workers have the right to know a patient's HIV status for their safety.	12 564%	55 28.4%	00	09 4.6%	05 2.6%
06	I would care for an HIV-positive relative in my home.	24 12.3%	33 17%	71 37%	27 14%	39 20%
07	I would visit the house of a friend even if they have a family member who has HIV.	25 13%	34 17%	69 36%	31 16%	35 18%

The attitudes of the staff nurses regarding HIV/AIDS patients are depicted in bar graph #1. Nurses were required to respond with Yes/No choices to statements and questions about touching HIV/AIDS patients, taking vital signs and blood

samples, giving IV drugs, feeding through NG tubes, changing dressings, and recapping needles after medication administration, nurses had to select Yes or No.

Bar graph # 01:- Staff nurses' attitudes towards HIV/AIDS



DISCUSSION

Improvements in clinical practice for nurses rely on uninterrupted assessment of their knowledge and skills. The nurses' clinical practice improvement depends on the ongoing evaluation of their expertise. Regarding staff nurses' understanding of HIV/AIDS, the study's findings showed a mixed response. The figures showed that 55 28.9% and 66 35.1% participants had good and excellent expertise. The findings are corroborated by a cross-sectional survey of 218 Barbados nurses, which found that nurses' average knowledge of HIV/AIDS was 3.25 out of 05 09. According to a prospective cross-sectional research of 784 medical workers in Chile, 91% of nurses knew about and felt positive about infected patients 10. However, research in Lahore found that nurses' average knowledge of the condition was 91/47.9%, while their good knowledge was 72 37.9% 1.

The nurse's knowledge is the basis for attitudes and practice. There were differences in the knowledge, attitudes, and practices of trained nurses about

HIV/AIDS patients, according to a systematic review. Despite significant advancements in understanding, there were still knowledge gaps. Stigmatization is still widespread in society and has affected nurses' practices, even though opinions have improved due to increased access to information sources ¹¹. In this study, respondents were asked seven closed-ended questions about their desire or unwillingness to care, treatment futility, fear of catching HIV, and nurses' right to know a patient's status. As per the findings of the study, 97 people 50% and 28.4% highly agreed and agreed, whereas 78 people 40% and 66 people 34% strongly disagreed and disagreed, saying that they fear contracting the virus and believe it is a punishment for immoral actions. 222 92.5% nurses had good knowledge of the definition, pathophysiology, and signs and symptoms of HIV/AIDS, according to a descriptive survey design carried out in southeast Nigeria. However, 116 48.3% nurses agreed that they felt uneasy while carrying the patient because they detested

the wards where HIV/AIDS patients were admitted¹².

The nurses' majority 55, or 28.3% had no opinion on the subject of treatment futility. In our investigation, this was a startling discovery. The findings of the 12 study, on the other hand, indicated that HIV/AIDS patients should not be allowed to die and that their treatment should not be optional. Of the nurses who responded to the question about not refusing care, 115 60% and 45 23.2% strongly agreed. This was seen as a positive indication of the study's findings.

The majority of nurses 55 28.3% had no opinion on the subject of treatment futility. This was a shocking revelation in our study. In contrast, the results of 12 study suggested that HIV/AIDS patients deserve not to die and their treatment should not be optional. One hundred and fifteen nurses 60% and 45 nurses 23.2% strongly agreed and agreed with the statement that they should not refuse care. This was reflected as a promising sign of study results. The findings were confirmed by a cross-sectional study carried out in Nigeria¹³. This study showed that nurses had a moderate level of knowledge, with a mean score of 51.4%. Nurses were compelled to keep their distance from patients due to a scarcity of supplies gloves, goggles, sharp boxes, etc. and a fear of infection transmission from patient to nurse. If not, they were prepared to treat the afflicted people¹³.

They have a fundamental right to know the status of patients who are infected with HIV/AIDS, according to 125 64% and 55 28.0% of the respondents. According to a scoping study, all nurses should be aware of the status of patients with HIV/AIDS. Because nurses must safeguard themselves against nosocomial infections, this is essential. This is a crucial component of communication and engagement between nurses and patients. However, when nurses are aware of a patient's condition, they must use caution when stigmatizing them¹⁴.

¹⁴. The majority of nurses 7137% were

undecided about visiting or caring for an HIV/AIDS patient at home. The safety of the patient is a dynamic and significant problem. Without any barriers, patients should get care at approved facilities or homes. One of the nurses' primary responsibilities is to create a safe culture for patients' safety and recuperation. As a result, nurses shouldn't avoid helping HIV/AIDS patients at home. Extra care must be taken in this regard¹⁵.

The treatment of HIV/AIDS patients by staff nurses is depicted in bar graph #1. This study focuses on seven procedures, including handling the infected patient, collecting vital signs and blood samples, giving I/V drugs and liquids via NG tube, changing dressings, and recapping needles. When asked if they thought HIV patients were tough, 116 101.5% said that they did. The findings are consistent with a qualitative investigation carried out in South Africa¹⁶. When nurses saw a patient with HIV/AIDS, they felt fatigued and powerless. Because treatment problems were ineffective, nurses shunned patients¹⁶. Regarding "Do you collect blood samples, administer IV medications, change dressing, or recap needles following IV/IM injection?" 163 84%, 135

70%, 155 80% and 152 78% said "no." When taking blood samples or giving intravenous medication, nurses were found to be terrified about nosocomial infections. It might be because nurses believe that doing those intrusive treatments puts them at danger¹⁵. "Do you take vitals and feed through an NG tube?" is the inquiry. 121 62% & 147 76%, answered "yes", respectively. The findings showed that nurses were not afraid of non-invasive procedures like checking vital signs and feeding through an NG tube.

CONCLUSION

The different perspectives of staff nurses on HIV/AIDS knowledge, attitudes, and practices were clarified by our study. The staff nurses now know a lot more about HIV and AIDS. Given that improved caregiving is based on information, this is

a highly hopeful discovery. By following stringent and common preventive measures, nurses can stay safe from nosocomial/occupational infection hazards while providing high-quality care to patients with HIV/AIDS. The study's other significant conclusion highlights nurses' concern about contracting an infection while patient care. This demonstrates the critical requirement for nurses to get adequate training on universal protection measures ¹⁷. Our study's final key conclusion is that nurses are at ease with non-invasive operations like collecting vital signs and touching patients, but they still get scared when invasive procedures like IV medicine, blood collection, dressing, or NG tube feeding begin. Special attention is needed for this. In India, a two-day "nurse-led" training trainer program was successfully introduced for senior nurses to improve the care of patients with HIV/AIDS ¹⁸.

ETHICS APPROVAL: The ERC gave ethical review approval.

CONSENT TO PARTICIPATE: written and verbal consent was taken from subjects and next of kin.

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AUTHORS' CONTRIBUTIONS:

All persons who meet authorship criteria are listed as authors, and all authors certify that they have participated in the work to take public responsibility of this manuscript. All authors read and approved the final manuscript.

CONFLICT OF INTEREST: No competing interest declared

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