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Knowledge and Attitude of Nursing Students Towards the Care of Patients Living With Hiv/aids: a Case Study

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ABSTRACT

The Human Immune-deficiency Virus (HIV) and Acquired Immune Deficiency Virus (AIDS) is one of the most significant Public Health problems confronting the human race. This study explored the knowledge and attitude of nursing students in a tertiary health institution towards the care of patients who are living with HIV/AIDS by employing a quantitative & descriptive design. Purposive sampling technique was used to select 165 students who have had contact hours of lectures on the subject matter as well as been exposed to care of patients in the clinical areas. Results were analyzed using descriptive and inferential statistics at a df of 0.05. Findings revealed that 147 (89.1%) of the respondents have good knowledge of HIV/AIDS and are aware of the universal safety precautions; 116 (70.3%) feel protected using the universal safety precautions. However, 107 (64.8%) respondents strongly agree that being exposed to HIV infection is a major source of concern, while 85 (51.5%) of the respondents strongly support the idea that patients living with HIV/AIDS should not be admitted into the same ward with patients suffering from other disease conditions. The study recommends that all patients should be regarded as potential HIV carriers until proven otherwise due to the multifarious nature of the disease. Health workers are also reminded to adhere strictly to the universal precaution and the AIDS policy guidelines in the management of HIV/AIDS patients at all times.

Key words: Knowledge, Attitude, Nursing Students, Health Institutions, HIV/AIDS

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Introduction

The Human Immune deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) remain a complex and incurable disease which continues to devastate lives of millions of people in communities and nations worldwide. HIV is regarded as one of the greatest threats to human development⁽¹⁾. According to Van Dyk, no one is exempted because HIV/AIDS affects all either directly or otherwise especially people who live in Sub-Saharan Africa⁽²⁾. Being HIV positive exerts a tremendous impact on the psychological, social, spiritual, and economic lives of HIV/AIDS infected and affected persons⁽³⁾. It was estimated that 33.3 million people were living with HIV/ AIDS globally of which 68% was in sub-Saharan Africa by the end of 2009⁽³⁾. Ethiopia, South Africa, Zambia, Nigeria and Zimbabwe were leading in the HIV/AIDS epidemic between 2001 and 2009⁽⁴⁾. Worldwide, Nigeria has the second highest number of new infections reported each year, and an estimated 3.7% of the population is living with HIV⁽⁵⁾.

Studies have found that occupational risk associated with exposure to infected body fluids is high in countries with poor

resources like Kenya, Nigeria and South Africa⁽⁶⁻⁸⁾. Health care providers especially nurses are concerned about being infected with HIV during the provision of care to HIV/AIDS patients, Hepatitis B and C because they are closest to the patients when carrying out their duty of care. Due to fear of contagion, nurses sometimes became reluctant or refuse to care for HIV-infected patients⁽⁹⁾. It has also been highlighted that health care workers did experience anxiety when they were accidentally exposed to blood and cited fear as the driving force towards negative attitudes⁽¹⁰⁻¹¹⁾. Universal precautions (UP) are keys to preventing HIV transmission to the health care workers. Some literatures asserted that nursing students have confidence in these universal precautions⁽¹²⁾. Taking care of patients infected with HIV or AIDS requires special nursing knowledge and skills. Nurses are the largest paramedical professional group caring for patients with AIDS⁽⁶⁾. Studies that investigated their knowledge, attitudes and practices towards patients with HIV/AIDS have been mainly in developed countries, with some results indicating negative and discriminatory

behaviors' and others showing more empathic and positive attitudes^(8,13). Health professionals' attitude has a tremendous impact on the physical and emotional welfare of People Living with HIV (PLWH) as well as the vulnerable ones such as children, pregnant women and the adolescent. Health workers nursing students inclusive could grant or deny access to life-saving treatments. These negative behaviors' can affect the view of health consumers and many could be discouraged from accessing medical care which may otherwise prolong their lives⁽¹⁴⁾. The need for care and treatment of HIV-related illnesses is rising rapidly. Caring for people dying of AIDS involves many notions of care, not only the physical but also the emotional and spiritual needs of the individual. For many of them, the fear is that of dying coupled with discrimination and pain⁽¹⁵⁾. In recent years, more emphasis has been placed upon the student nurses developing the ability to provide nursing care to persons living with HIV/AIDS in the various health facilities⁽¹⁶⁾. Their training takes them from the traditional classroom setting to the hospitals and the various clinical sites. The PLWA are expected to receive quality care however, they are supposed to be submissive to the health care providers and cooperate with all the treatment given to them. The student nurse on the other hand is expected to make the PLWA feel like as 'important' with emotional preferences which must be respected. The attitude of student nurses in providing care was said to be connected with their views of being at risk because of the level of anxiety about contracting HIV/AIDS⁽¹⁷⁾. HIV/AIDS infection has been reported to be high among health workers dealing with patients. These can be the contributory factors for negative attitudes towards patients with a diagnosis of HIV/AIDS⁽¹⁴⁾. Similarly, studies have reported that nursing students who have not been provided with adequate information, knowledge and exposure, often understand HIV care and treatment as 'end of life care' as they may not have gained sufficient experience to understand that patients living with HIV/AIDS may require holistic support and care long before the onset of the visible signs of AIDS⁽¹⁸⁾. Data on newly diagnosed HIV infections are now being used to track the HIV epidemic in Europe and provide more

relevant information on the current HIV situation since the widespread use of highly active antiretroviral. Africa, with just over 10% of the world's population, carries well above 75% of the burden of this epidemic⁽¹⁹⁾. From all indications, HIV has continued to spread largely through unprotected sexual relationships between men and women and through mother-to-child transmission. With the traditional support systems in these countries already under severe pressure, many extended families are may soon will be overwhelmed with the disease and in great need of external support and protective safety nets⁽²⁰⁾. The National Agency for the Control of AIDS (NACA) in 2012 estimated that there are about 2.95 million people living with HIV (PLHIV) in Nigeria, ranking the country third among countries with the highest burden of HIV infection in the world, next only to India and South Africa⁽²¹⁾.

Studies show that students have confidence in universal precautions and are less anxious caring for HIV/AIDS patients once they implement universal precautions^(12, 22) While some authors reported excessive precautions by students, Snowden (1997) found that

17% did not know the term, 24% were unsure about universal precautions, and a mere 35% felt confident enough to implement precautions with fewer than 25% always following precautions⁽²³⁾. One would hope that nursing students' attitudes would improve with increased knowledge about HIV/AIDS over the course of a nursing program.

Although there is no consensus about nursing students' knowledge and general attitudes about HIV/AIDS, a number of studies agree that knowledge is positively correlated with attitude⁽²⁴⁾. This study sought to explore the knowledge and attitude of nursing students in University of Benin are toward patients living with HIV/AIDS.

Research Objectives

- To assess HIV/AIDS related *knowledge and attitude* among nursing students in University of Benin.
- To determine the *knowledge* of Universal safety precaution in the care of HIV/AIDS patients by nursing students in University of Benin.

Hypothesis

Ho: researchers was to accurately assess the study population through this sample.

There is no significant relationship between the knowledge and attitude of nursing students in University of Benin and their care of patients living with HIV/AIDS.

Methodology

The study Population, Sample and Sampling Technique

The population comprised all 218 students that cut across all the levels of nursing in the University of Benin, i.e. 100 to 500 Levels in the Department of Nursing Science in 2015. However, only 165 of them who have been exposed to the clinical areas and have experience in the care of patients living with HIV/AIDS participated in this study. An all inclusive purposive sampling technique was adopted to obtain data as the main goal was to focus on peculiar characteristics of the population of interest which will best enable the researcher answer the research questions as the population size was small.

Research Design

The study used a quantitative descriptive survey design as the aim of the

Validity and Reliability: The tool was established by the use of pretested questionnaires which was constructed based on extensive literature search on the objective of the study. Modifications were made on the basis of recommendations and suggestions from experts in nursing education, a statistician and a physician (Oncologist). In order to improve the tool, a pre-test of the instrument was carried out among ten nursing students of the school of nursing, University of Benin Teaching Hospital who were not part of the study by applying the split-half method. Analysis by the Cronbach alpha formula yielded a score 0.72, 0.8 and 0.75 respectively which is regarded as high before the final version of the questionnaire was developed.

Data Collection and Analysis

A structured questionnaire was used to collect data. It included both normative and Likert scale responses which provided the respondents with a possibility to answer freely. Questionnaire was given to the students

during their break time, some were returned same day while the class representative helped to collect the outstanding ones. It was divided into four sections with section A: requiring demographic data of the respondents, section B: knowledge about HIV/AIDS, section C: knowledge about the awareness and the use of universal safety precautions, section D: attitude of the respondents toward patients living with HIV/AIDS. All data were cleaned and analyzed in descriptive and inferential statistics at a level 0.05 of significance using Statistical Package for Social Sciences (SPSS) version 21.

Ethics statement

Approval for the study was obtained from the School of Basic Medical Sciences Ethics Committee while the HOD of the nursing department gave her consent. The researchers explained the details of the objectives of the research to the participants in order to gain their cooperation and participation. After they had been duly educated and assured of anonymity and confidentiality and the right to decline without any adverse consequence, they gave their written consent.

Results

A total of 218 questionnaires were distributed to nursing students in all levels namely: 200 to 500 level, but only 165 were retrieved giving a response rate of 75.7%. Majority of the students 53 (32.1%) were in their final year while the least was 25 (15%) in 300level.

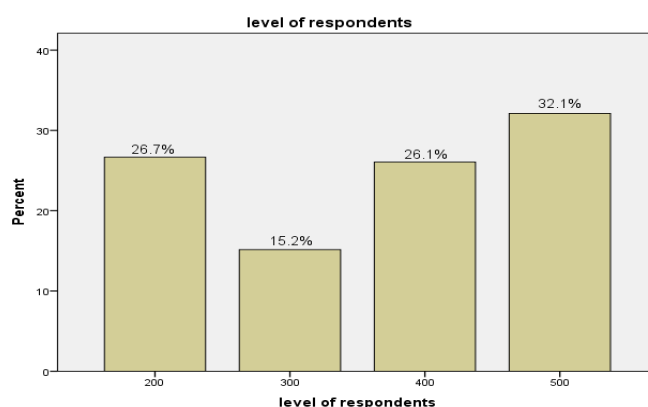


Fig 1.0: Graphic Percentage Distribution According to Level of Study of Respondents

Figure 1.0 show that 44 (26.7%) students from 200 Level participated in the study, 25 (15.2%) from 300 Level, 43(26.1%) from 400 Level and 53 (32.1%) students from 500 Level.

Table 1.0: Knowledge of HIV/AIDS (n=165)

Variable	Response	(f)	(%)
HIV/AIDS is human immune deficiency virus	Yes	165	100.00
	No	-	-

Do you think HIV/AIDS is one of the most dangerous sexually transmitted disease?	Yes	165	100.0
	No	-	-
Do you know the signs and symptoms of HIV/AIDS	Yes	162	98.2
	No	3	1.8
Have you ever cared for HIV/AIDS patients?	Yes	140	84.8
	No	25	15.2

Table 1 show that all nursing students 165 (100%) have knowledge of what HIV is and they all also know that HIV/AIDS is one of the most dangerous sexually transmitted disease. One hundred and sixty-three (98.2%) of the respondents have the knowledge of the signs and symptoms of HIV/AIDS while 140 (84.8%) of them have cared for HIV/AIDS patients; only 25 (15.2%) have not.

Table 2: Knowledge about and Use of Universal Precautions (n=165)

Variables	Response	(f)	(%)
Are you aware of the universal safety precautions as recommended by WHO in the care of PLWH?	Yes	147	89.1
	No	18	10.9
Do you apply the	Yes	136	82.4

knowledge of these known precautions at all times?	No	29	17.6
Do you feel protected using applying this knowledge in the care of PLWH?	Yes	116	70.3
	No	49	29.7
Are you encouraged to use these universal safety precautions in the care of HIV/AIDS patients?	Yes	131	79.4
	No	34	20.6
Do you think these universal safety precautions decrease the risk of infection?	Yes	134	81.2
	No	31	18.8

Table 2 shows respondents' knowledge of the universal safety precaution. One hundred and forty seven (89.1%) are aware of universal safety precautions while 136 (82.4%) respondents apply these safety precautions; 29 (17.6%) respondents do not. The respondents who feel protected using the universal precautions in the care of HIV/AIDS patients are 116 (70.3%), 49(29.7%) respondents do not feel protected. Those encouraged to make use of the universal safety precautions are 131(79.4%) while 34(20.6%) respondents are not encouraged.

However, 134 (81.2%) respondents think the risk of infection while 31 (31%) universal safety precautions decrease respondents do not share this opinion.

Table 3: Attitude towards Patients with HIV/AIDS (n-165)

Variables	n (%)	Strongly Agree	Agree	Disagree	Strongly Disagree
Being exposed to HIV infection is a major source of concern for me	n	107	58	-	-
	%	64.8	35.2	-	-
My care of HIV/AIDS patients will likely expose my family and friends to HIV infection	n	60	87	17	1
	%	36.4	52.7	10.3	0.6
There is possibility of acquiring AIDS from patients during my clinical practice	n	78	79	5	3
	%	47.3	47.9	3.0	1.8
HIV/AIDS patients need compassion, understanding and moral support from people	n	104	61	-	-
	%	61	37.0	-	-
Patients living with HIV/AIDS should not be admitted into the hospital bed, but rather they should be sent home and cared for by their relations.	n	14	13	61	77
	%	8.5	7.9	37.0	46.7
Patients living with HIV/AIDS should not be admitted into the same ward with other patients suffering from other disease conditions.	n	85	54	16	10
	%	51.5	32.7	9.7	6.1
All patients should be tested for HIV upon admission to any health care agency.	n	100	62	3	-
	%	60.6	37.6	1.8	-
HIV/AIDS patients should be treated irrespective of their status	n	89	73	3	-
	%	53.9	44.2	1.8	-

Table 3 shows that 107(64.8%) HIV/AIDS patients will likely expose their respondents across strongly agree that families and friends to HIV infection, but, being exposed to HIV infection is a 17 (10.3%) disagreed. Seventy-eight major source of concern. Sixty (36.4%) (47.3%) respondents strongly agree that respondents strongly agree that care of there is possibility of acquiring AIDS

from patients during clinical practice. only 10 (6.1%) respondents strongly
Also 85 (51.5%) of the respondents disagreed to this. However, more than
strongly agreed that patients living with half of the respondents 100 (60.6%)
HIV/AIDS should not be admitted into strongly agreed that all patients should
the same ward with other patients be tested for HIV upon admission to any
suffering from other disease conditions; health care agency.

Table 4: Test of the Relationship between the Knowledge of Nursing Students on HIV/AIDS and their Attitude towards the Care of Patients Living with HIV/AIDS

Variables		Sum of Squares	df	Mean Square	F	Sig.
My care of HIV/AIDS patients will likely expose my family and friends to HIV infection	Between Groups	.189	1	.189	.435	.510
	Within Groups	70.623	163	.433		
	Total	70.812	164			
Being exposed to HIV infection is a major source of concern for me	Between Groups	.378	1	.378	1.653	.200
	Within Groups	37.235	163	.228		
	Total	37.612	164			
HIV/AIDS patients need compassion, understanding and moral support from people.	Between Groups	.418	1	.418	1.790	.183
	Within Groups	38.031	163	.233		
	Total	38.448	164			

Table 4 show the analysis of variance to test the relationship between the knowledge of nursing students on HIV/AIDS and their attitude towards the care of patients living with HIV/AIDS at 0.05 level of significance. Results highlight that respondents care of HIV/AIDS patients will likely expose family and friends to HIV infection, (Fig = 0.435 and Sig.= 0.510). Being exposed to HIV infection was a major source of concern to the respondents (Fig = 1.653 and Sig. = 0.200); HIV/AIDS patients need compassion, understanding and moral support from people Fig = 1.790 and Sig. = 0.183. The table shows that all the figures are greater than the p-value of 0.05.

Discussion

The study explored the knowledge of nursing students concerning HIV/AIDS infection. Findings show that the nursing students had a good knowledge concerning the disease as all the respondents were aware that HIV/AIDS is one of the dangerous sexually transmitted disease. However, this did not erase the fear of contracting the disease which can affect their friends or family. This results were similar to the previous studies concerning the knowledge of nursing students in Turkey and America by Jemmott *et al* (1992) and Beklas (2007) on the Predicting AIDS patient care intentions among nursing students⁽²⁵⁻²⁶⁾ and that of Lohrmann *et al* (2003) in Germany who investigated nursing students' knowledge of and attitudes to HIV and AIDS⁽²⁷⁾. The study results indicated that the nursing students had a rather high knowledge level concerning AIDS but had gaps in knowledge regarding AIDS immune-pathology or the symptoms of the disease.

Similarly, this study found that a good number of nursing students have cared for HIV/AIDS patients while some of them have not had any professional

interaction with these types patients at all. This calls for the need for early exposure and monitoring of the students when they go for their clinical postings. On knowledge about universal safety precaution, majority of the respondents are aware of it and report that they apply it. This contradicts the findings by Van der Berg and Daniels, in South Africa who established that there was indeed a lack of knowledge regarding the universal precaution among nursing students and that the students' self-reported practice of the universal precaution was poor⁽²⁵⁾; but agrees with the study by Cornelius in Virginia in USA which revealed that nursing students who cared for HIV patients felt ostracized by their peers, and a lack of knowledge hindered the nursing students' deliverance of compassionate nursing care⁽²⁸⁾.

The attitude and general feelings of the respondents towards HIV/AIDS patients were positive. This is a major finding in this study as it shows that there is a significant relationship between the students' knowledge and how they deal with the patients; this is a component of attitude formation. This is in line with the study by Lohrmann *et al* (2003) in

Germany and Stewart (1999) which found that nursing students had positive attitudes about caring for HIV/AIDS patients although they reported a significantly greater prejudice towards AIDS ⁽²⁸⁾. Majority of respondents strongly agreed that HIV/AIDS patients need compassion, understanding and moral support from people while 37.0% merely agreed to this. This is similar to the study by Hurley and McGrif ⁽²⁹⁾ which concluded that many students have genuine compassion for HIV/AIDS patients, majority of the students believed that their preparation to care for AIDS patients was excellent or good.

Recommendations

1. The hospital authorities should encourage training programmes on HIV/AIDS for health workers including nursing personnel and all category of student.
- 2 The preceptors and clinical instructors at the various nursing departments should intensify their supervision during the students' clinical posting as this will go a step further to help the students develop positive attitudes towards

patients as seen displayed by their instructors and ward managers.

- 3 In view of the multifarious nature of HIV infection it is deemed wise to assume that most patients are potential HIV carriers. Therefore, clinicians, student nurses and other health care workers must strictly implement the AIDS policy guidelines on the management of HIV/AIDS patients.
- 4 The Heads of Nursing Department of each University should ensure that adequate clinical experiences are planned and followed through for the students to enable them acquire the competences in providing quality care to patients.
5. Nurse Managers should ensure that proper supervision is done in their units and wards by the application of the correct standards and procedure. All health workers, irrespective of their status and job schedule should strictly implement the policy guidelines on the management of HIV/AIDS patients. This will in no small measure

reduce the discrimination the sufferers currently experience.

Conclusion

The need for care and treatment of HIV-related illnesses is rising rapidly. In recent years, more emphasis has been placed upon the student nurses developing the ability to provide nursing care to persons living with HIV/AIDS in the various health facilities⁽⁴⁰⁾. Without these knowledge and preparation nurses often rely on their religious and socialization background as referents for dealing with the HIV patient and this may not be adequate since it can hinder their attitude and perceptions of People Living with HIV. It is the duty of those in charge of training these nurses to ensure that they are given the right platform to develop positive attitude to their patients' plights, as this is the hallmark of the nursing profession.

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