

KNOWLEDGE, ATTITUDE AND WILLINGNESS OF PHYSIOTHERAPISTS TO CARE FOR PEOPLE LIVING WITH HIV/AIDS

CUNOȘTINȚELE, ATITUDINEA ȘI DORINȚA KINETOTERAPEUTULUI DE A ACORDA SERVICII DE SĂNĂTATE PERSOANELOR CU HIV/AIDS

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Key words: knowledge, attitude, practice, HIV/AIDS, Physiotherapists

Cuvinte cheie: cunoaștere, atitudine, practică, HIV/AIDS, kinetoterapeți

Abstract

Background. There is evidence for increasing need for physiotherapy for Persons Living with HIV/AIDS (PLWH). However, studies on effective traits and willingness of physiotherapists to provide care for PLWH is sparse. This study assessed the knowledge, attitude and willingness of Nigerian physiotherapists to provide care for PLWH.

Methods. A cross-sectional survey of physiotherapists in South-West Nigeria was conducted using a self-administered questionnaire modified from previous studies. 135 physiotherapists from seven selected public hospitals in South-West Nigeria were consecutively recruited. However, only 126 physiotherapists completed the survey questionnaire yielding a response rate of 93%. Data was analyzed using both descriptive and inferential statistics at 0.05 alpha level.

Results. Most of the respondents demonstrated adequate knowledge on mode of transmission and prevention of HIV/AIDS. 53.2% of the respondents had above average knowledge score, 51.6% respondents demonstrated positive attitude towards PLWH while 54.8% showed willingness to treat PLWH. There was a significant association between years of experience and each of knowledge about HIV/AIDS, attitude and willingness to care for PLWH ($p = 0.001$).

Conclusions. A reasonable level of knowledge about HIV/AIDS and a moderately positive attitude and willingness to care for PLWH was observed among Nigeria physiotherapists. Years of professional experience significantly influence knowledge, attitude and willingness to provide care for PLWH.

Rezumat

Introducere. Există evidențe conform cărora crește necesitatea kinetoterapiei pentru persoanele cu HIV. Cu toate acestea, sunt puține studii privind dorința kinetoterapeutului de a oferi îngrijire pentru pacienți cu HIV. Acest studiu evaluează cunoștințele, atitudinea și dorința kinetoterapeuților nigerieni de a oferi servicii de sănătate persoanelor cu HIV.

Metode. Un studiu transversal asupra kinetoterapeuților din Nigeria de Sud-Vest s-a realizat cu ajutorul unui chestionar autoadministrat, modificat față de studiile anterioare. Au participat 135 de kinetoterapeuți din șapte spitale publice selectate din Nigeria de Sud-Vest, recrutate consecutiv. Doar 126 de kinetoterapeuți au completat chestionarul, cu o rată a răspunsului de 93%. Datele au fost analizate folosind atât statistica descriptivă, cât și cea inferențială la un nivel alfa de 0,05.

Rezultate. Majoritatea respondenților au demonstrat cunoștințe adecvate privind modul de transmitere și de prevenție a HIV/AIDS. 53.2% dintre respondenți au avut un scor peste medie privind cunoștințele, 51,6% au demonstrat o atitudine pozitivă vis-à-vis de pacienții cu HIV, pe când 54.8% au manifestat dorința de a trata acești pacienți. Există o asociere semnificativă între anii de experiență și cunoștințele legate de HIV/AIDS, atitudine și dorința de a oferi servicii de sănătate persoanelor cu HIV ($p = 0.001$).

Concluzii. Un nivel rezonabil de cunoștințe despre HIV/AIDS și o atitudine și dorință moderat pozitivă de a oferi servicii de sănătate pacienților cu HIV, s-a observat în rândul kinetoterapeuților nigerieni. Anii de experiență profesională influențează pozitiv cunoștințele, atitudinea și dorința kinetoterapeuților de a oferi servicii de sănătate persoanelor cu HIV.

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Introduction

Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS) are prominent health challenges that transcend both the developed and developing countries [1,2] as no cure or vaccine has been found to prevent the disease and curb the resultant morbidity and mortality [3]. The Sub-Saharan Africa is reported to be the hardest hit region by HIV/AIDS with Nigeria having the highest population of PLWH because of its high dense population in the region [4, 5]. An estimated five million people are infected with HIV in Nigeria [6]. Adebayo [7] reported that the pandemic in Nigeria has reached the point where it has been estimated that one person dies of AIDS every two minutes (i.e. 800 Nigerians per day). Consequently, HIV/AIDS prevalence rate in Nigeria would represent a significant share of global HIV/AIDS burden [8].

HIV/AIDS leads to a wide spectrum of physical, psychological, social, emotional, and economical toll on Person Living With HIV/AIDS (PLWH) and it expresses as anxiety, denial, sadness, guilt, suicide, fear of stigma, rejection, illness and death [9, 10]. The burden of HIV/AIDS on the PLWH, their families, career, health care providers, policy makers and charitable organizations among others is momentous [11-13]. The care of PLWH represents a significant challenge to the health care sectors [13-15]. As the prevalence of HIV/AIDS infection rises, health care professionals worldwide can expect greater clinical exposure to infected patients [13]. Consequently, PLWH may also face discrimination and stigmatization from their health-care providers and those employed in the health-care sector [16, 17]. Several factors including ignorance and lack of knowledge about HIV transmission [18], fear of contracting HIV at work [19, 20] and occupational infection [21] have been reported to be sources of discrimination of PLWH by health workers. This discrimination has been shown to be a major barrier to effective responses to the HIV/AIDS epidemic [9, 22]. Discriminatory or unethical behavior by health-care professionals against PLWH may create an atmosphere that interferes with effective prevention and treatment by discouraging individuals from being tested or seeking information on how to protect themselves and others from HIV/AIDS [9, 17, 18]. However, Ocheke et al [23] showed that these fears may not be irrational, as the continued high prevalence rate over the years is believed to constitute a high risk of healthcare workers acquiring the infection.

Physiotherapy is an essential component in the multidisciplinary care for PLWH [24, 25]. The deconditioning process following HIV/AIDS such as muscle wastage, contractures, bedsores, stiff joints [25] clearly establishes a need for physiotherapy. Part of the benefit of physiotherapy for patients admitted with HIV/AIDS includes prevention of complications and promotion of speedy recovery with consequent early discharge of the individuals [24-26]. Despite all the aforementioned, research on the physiotherapy for individuals with HIV/AIDS are still sparse. Previous research have explored the knowledge, attitude and willingness to take care of PLWH among physicians [19, 27, 28], nurses [29, 30] and dental care workers [31-34] compared with physiotherapists [35, 36]. Physiotherapists have been reported to show unsatisfactory acknowledgement about AIDS [35, 37], harbored negative attitude towards PLWH, which may result in stress [38] and some were unwilling to provide care for PLWH [35]. Therefore, this study sought to assess knowledge, attitude and willingness of Nigerian physiotherapists to provide care for PLWH.

Methods

One hundred and thirty five registered physiotherapists from seven selected public hospitals in South-West, Nigeria were consecutively recruited in this cross-sectional study. However, only 126 physiotherapists completed the survey questionnaire yielding a response rate 93%. The selected hospitals were Obafemi Awolowo University Teaching Hospitals complex (OAUTHC), Ile-Ife, University College Hospital, Ibadan, Lagos University Teaching Hospital, Lagos, National Orthopaedic Hospital, Igbobi, Lagos, Ladoke Akintola University of Technology Hospital, Osogbo, Osun State Hospital Asubiaro, Osogbo, Adeoyo State Hospital,

Ibadan and Lagos State University Teaching Hospital, Lagos. Ethical approval for the study was obtained from the Ethical and Research Committee of the OAUTHC. Authorization to conduct research was also obtained from the management of each of the selected hospitals. All respondents gave signed informed consent before participation.

The questionnaire for the study was developed from previous studies and experts review. self-administered questionnaires were distributed by hand delivery to the respondents at their respective hospitals. The two-section questionnaire was adapted from a study by Gurun and Sangchart [39] on nurses' knowledge, attitude and willingness to take care of HIV/AIDS patients and another study by Kermodé et al [40] on HIV-related knowledge, attitudes and risk perception among healthcare workers. Section A contains questions on the demographics while section B contains 31 closed ended questions on knowledge, attitude and willingness of physiotherapists to take care of PLWH. 19 of the items on the questionnaire assessed knowledge about HIV/AIDS (questions 1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 14, 15, 16, 17, 19, 26, 28, 29, 30), 8 items assessed attitude (questions 9, 10, 11, 18, 20, 22, 24, 25), and 3 items assessed willingness (questions 21, 23, 27). Responses were rated on a 5- point scale ranging from strongly agree (1) to strongly disagree (5) (Appendix 1).

Data Analysis

Data were summarized using descriptive statistics of mean and standard deviation and percentages. Inferential statistics of Chi square test was used to analyze the association between respondents' demographic variables and the questionnaire scores on knowledge, attitude, and willingness of physiotherapists. The level of significance was set at $p < 0.05$. Data analysis was carried out using Statistical Package for Social Sciences software (version 16.0).

Computation

The questionnaire's 5-point likert scale of 'strongly agree', 'agree', 'indifferent', 'disagree' and 'strongly disagree' respectively were collapsed during the analysis to 3 groups as 'agreed (i.e strongly agree and agree)', 'indifferent' and 'disagreed' (i.e. strongly disagreed and disagreed).

Mean scores were computed for knowledge by multiplying the 19 by 5 to obtain the maximum score. 19 represented the no of items on questionnaire for knowledge that was rated from 1 to 5. Mean scores were computed for attitude by multiplying the 8 by 5 to obtain the maximum score. 8 represented the no of items on questionnaire for attitude that was rated from 1 to 5. Mean scores were computed for willingness by multiplying the 3 by 5 to obtain the maximum score. 3 represented the no of items on questionnaire for willingness that was rated from 1 to 5.

Results

The general characteristics of the respondents are presented in Table 1.

Table 2 shows the knowledge of the respondents about HIV/AIDS. Most of the respondents agreed that sexual intercourse can spread HIV/AIDS (99.2%), AIDS is caused by HIV (96.8%), HIV can be transmitted from an infected blood (96.1%), and that the use of condoms can prevent HIV infections (86.5%). Table 3 shows the attitude and willingness of the respondents to care for PLWH. 88.9% of the respondents felt that it was necessary to take extra infection control precaution when dealing with PLWH, 90.5% felt that PLWH should be treated with the same respect as other patients while 96% of the respondents opined that PLWH have the right to the same quality of care as other patients. 85.8% of the respondents disagreed that physiotherapists, doctors and other health care workers should be allowed to refuse to care for PLWH while 86.5% of the respondents were willing to assist in the care of PLWH.

The mean knowledge score of the respondents was 82.5 (The range score was 19.0 to 95.0). The mean attitude score of the respondents was 28.5 (The range score was 40.0 to 80.0). The mean willingness score of the respondents was 12.5 (The range score was 15.0 to 30.0).

Based on the mean knowledge score, 38.9, 7.9, 53.2% of the respondents had below average, average and above average knowledge score respectively. 51.6% respondents had positive attitude while 48.4% had negative attitude towards PLWH based on mean attitude score. 54.8% respondents had above mean willingness score while 45.2% had below the mean willingness score.

Table 4 shows the Chi- square test of association between knowledge level of HIV/AIDS and each of age, gender, marital status, highest qualification, years of experience and work place. From the result, there was no significant relationship between knowledge about HIV/AIDS and each of the variables ($p > 0.05$). However, there was a significant association between knowledge about HIV/AIDS and years of experience ($p = 0.001$). Chi- square test of association between the respondents' demographics and each of attitude and willingness to care for PLWH is presented in table 5. The results show that there was no significant association between attitude towards PLWH and each of the demographic variables ($p > 0.05$) except years of experience ($p = 0.001$). Similarly, that there was no significant association between willingness to provide care for PLWH and each of the demographic variables ($p > 0.05$) except years of experience ($p = 0.001$).

Discussion

This study assessed the knowledge, attitude and willingness of Nigerian physiotherapists to provide care PLWH. Knowledge has been defined as the capacity to acquire, retain and use information [41]. This study revealed that most of Nigerian physiotherapists (61.1%) had moderate knowledge about HIV/AIDS. This knowledge rating is greater than 48% moderate knowledge reported by Pilyugina et al [42] among a sample of 321 Ukrainian health care workers. The outcome of this present study showed an improvement over a previous study among Nigerian physiotherapists by Oyeyemi et al [35] who reported inadequate knowledge about HIV/AIDS. However, this study's result on knowledge about HIV/AIDS is at variance with earlier studies that reported unsatisfactory knowledge among nurses from Nigeria [43, 44] and Northern Ireland [45] physiotherapy students from Nigeria [46] and the United States [47] and Vietnamese physicians [48] respectively.

Majority of the physiotherapists in this study demonstrated adequate knowledge on mode of transmission and prevention of HIV/AIDS. These findings are comparable with other studies that assessed knowledge about HIV/AIDS among nurses [29, 30] and physicians [19, 27, 28]. The improvement in knowledge about HIV/AIDS observed in the present study compared with earlier study among Nigerian physiotherapists by Oyeyemi et al [35] can be attributed to increase in HIV/AIDS awareness from sources such as schools, mass media, religious societies and charitable and non- charitable organizations.

Attitude is an individual's evaluative positive or negative way of responding to people, views and situations [49]. From this study, 51.6% of the respondents demonstrated positive attitudes towards PLWH. This percentage is comparable with those that had negative attitude towards PLWH. Earlier studies among Nigerian physiotherapists [35] and physiotherapy students [46] reported negative attitude towards PLWH. The present study showed a slight improvement in Nigerian physiotherapists' view of PLWH. However, most of the physiotherapists (90.5%) in this study agreed that patients with AIDS should be treated with the same respect as any other patient. The rate of reported agreement observed in this study is higher than the one reported by Gurung and Sangchart [39] among Bhutan nurses (73.6%). 50% of the physiotherapists in this study agreed that most people with HIV/AIDS should blame themselves for getting the infection, while 43.7% were indifferent about contacting HIV/AIDS through mother to child transmission or through intravenous injection.

From this study, 45.2% of the physiotherapists were unwilling to provide care for PLWH. Unwillingness to care for PLWH has been observed among health workers [50, 51]. Unwillingness to care for PLWH was associated with higher perceived vulnerability to becoming infected with HIV, lack of experience of working with PLWHA, lack of confidence in providing AIDS-related services, lack of knowledge about HIV transmission and the management of

AIDS. From this study, potential for discrimination against HIV- positive patients was suggested by the fact that 4.8% of physiotherapists believed that health care workers should be allowed to refuse care for HIV-positive patients. This was slightly less than the 25% found among Delhi nursing student who agreed that health personnel should be allowed to refuse care for PLWH [52]. However, 54.8% of the physiotherapists in this study demonstrated willingness to care for PLWH. Similar findings have been reported from some other studies [53, 54]. Specifically, a survey of Botswanian physiotherapists by Kambole [55] reported willingness to care for PLWHA among the respondents.

From this study, no significant associations were observed between age, gender, religion, marital status, qualification and work place and each of knowledge, attitude and willingness to provide care for PLWH among the physiotherapists. This suggests that these variables did not influence the knowledge, attitude and willingness to provide care for PLWH. However, years of professional experience significantly influenced knowledge, attitude and willingness to provide care for PLWH. Adequate knowledge, positive attitude of health care providers about a disease and willingness to provide services are believed to be crucial to the quality of intervention given [35]. On the other hand, inadequate knowledge and poor attitude could debar applications of the principles of logic and scientific method to the practice of physiotherapy and could result in fragmented care with potentially negative impact on treatment optimization [35].

Conclusion

A reasonable level of knowledge about HIV/AIDS and a moderately positive attitude and willingness toward PLWH was observed among Nigeria physiotherapists. Years of professional experience significantly influence knowledge, attitude and willingness to provide care for PLWH. Improved knowledge about HIV/AIDS may contribute to positive attitude of physiotherapists to treat PLWH.

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Table 1: Socio-demographic characteristics of the respondents

Variable	Frequency	Percentage
Gender		
Male	73	57.9
Female	53	42.1
Religion		
Christianity	108	85.7
Islam	18	14.3
Marital Status		
Single	52	41.3
Married	74	58.7
Age		
22-27	36	28.6
28-33	29	23.0
34-39	33	26.2
40 and above	28	22.2
Qualification		
B.SC/BMR/BPT	88	69.8
M.SC	37	29.4
PHD	1	0.79
Years of experience		
< 2years	29	23.0
2 -5 years	27	21.4
6 -10 years	34	27.0
- 20 years	23	18.3
> 20 years	13	10.3
Place of work		
State hospital	8	6.34
Teaching hospital	97	77.0
Specialist hospital	21	15.7

Table 2: Knowledge of the respondents about HIV/AIDS

Item no.	Question	Agree %	Indifferent %	Disagree %
1.	Use of condoms can prevent HIV Infections	86.5	2.4	11.1
2.	HIV/AIDS can be transmitted by hand Shaking	0	2.4	97.6
3.	Sharing plates, cups, and spoons can spread HIV/AIDS	1.6	3.2	95.3
4.	AIDS is caused by HIV	96.8	0	3.2
5.	HIV can be transmitted from an infected blood	96.1	0.8	3.2
6.	The greatest risk of exposure to HIV is caring for an incontinent patient with HIV/AIDS	6.4	15.1	78.6
7.	HIV/AIDS is very difficult to kill with disinfectant in the environment	64.3	13.5	22.2
8.	The risk of infection of HIV virus after an accidental needle stick is high	89.7	2.4	8.0
9.	Sexual intercourse can spread HIV/AIDS	99.2	0	0.8
10.	HIV can be spread from an infected woman to her child during pregnancy, birth/ breastfeeding	94.5	3.2	2.4
11.	Contact with urine can spread HIV/AIDS	6.4	27.8	65.9
12.	Mosquitoes can spread HIV/AIDS	4.8	5.6	89.7
13.	Tattooing can spread HIV/AIDS	87.3	7.9	4.8
14.	With the introduction of drugs for HIV/AIDS, people with HIV/AIDS can live up to 24 years on average	79.3	16.7	4.0
15.	Coughing and sneezing can spread HIV/AIDS	4.8	6.4	88.9
16.	Physiotherapists, doctors and other health care workers have a high risk of catching blood-borne viruses	75.4	10.3	14.2

(such as hepatitis B) when caring for people with HIV/AIDS			
17. Blood transfusion can spread HIV/AIDS	87.3	0	12.7
18. HIV/AIDS can be spread when needles are shared by intravenous drug use	92.1	0	7.9
19. Contact with saliva can spread HIV/AIDS	17.5	15.9	66.7

Table 3: Attitude and willingness of respondents to care for PLWH

Item no.	Question	Agree %	Indifferent %	Disagree %
<u>Attitude towards PLWH</u>				
1.	I think patients with AIDS have the right to the same quality of care as any other patient	96	0.8	3.2
2.	Patients with AIDS should be treated with the same respect as any other patient	90.5	4.8	4.8
3.	I feel more sympathetic towards children who got HIV infection from their mother than those got it from intravenous injection	43.7	36.5	19.8
4.	Most people with HIV/AIDS can blame themselves for getting the infection	50.0	34.1	15.8
5.	I feel worried about caring for people with HIV/AIDS	46.8	23.8	29.3
6.	It is necessary to take extra infection control precaution for people with HIV/AIDS	88.9	6.3	4.8
7.	Patients with HIV/AIDS need to be cared for separately from other patients	33.4	16.6	50.0
8.	I worry about contacting HIV at work	63.4	11.9	24.6
<u>Willing to Care for PLWH</u>				
1.	Physiotherapists, doctors and other health care workers should be allowed to refuse to care for people with HIV/AIDS	4.8	9.5	85.8
2.	I would prefer not to care for people with HIV/AIDS	11.1	14.3	74.6
3.	I am willing to assist in the care of people with HIV/AIDS	86.5	10.3	3.2

Table 4: Chi square test of association between respondents' level knowledge about HIV/AIDS and socio-demographics

	BAK n(%)	AVK n(%)	AAK n(%)	χ^2	p-value
Age					
20-27 years	12(24.5)	7(70.0)	17(25.4)	10.580	0.102
28-33 years	11(22.4)	0(0.0)	18(26.9)		
34-39years	14 (28.6)	1(10.0)	18(26.9)		
>40 years	12(24.5)	2(20.0)	14(20.9)		
Gender				0.517	0.772
Male	30(61.2)	5(50.0)	38(56.7)		
Female	19(38.8)	5(50.0)	29(43.3)		
Religion				0.172	0.917
Christianity	42(85.7)	9(90.0)	57(85.1)		
Islam	7(14.3)	1(10.0)	10(14.9)		
Marital Status				4.277	0.118
Single	21(42.9)	7(70.0)	24(35.8)		
Married	28(57.1)	3(30.0)	43(64.2)		
Highest qualification					

B.sc	31(63.3)	9(90.0)	48(71.6)	4.123	0.390
M.sc	18(36.7)	1(10.0)	18(26.9)		
PhD	0(0.00)	0(0.00)	1(1.49)		
Experience					
<2 years	32(65.3)	0(0.0)	0(0.0)	0.415	0.001
2 – 5 years	17(34.7)	7(70.0)	0(0.0)		
6 – 10 years	0(0.00)	3(30.0)	31(46.3)		
11 – 20 years	0(0.00)	0(0.00)	23(34.3)		
>20 years	0(0.00)	0(0.00)	13(19.4)		
Workplace					
State Hospital	2(4.08)	0(0.0)	6(9.0)	4.579	0.333
Teaching Hospital	37(75.5)	10(100.0)	50(74.6)		
Specialist Hospital	10(20.4)	0(0.0)	11(16.4)		

Key: BAK means Below Average Knowledge, AVK means Average knowledge and AAK means Above Average Knowledge

Table 5: Chi square test of association between respondents' attitude towards PLWH and socio-demographics

	ATTITUDE		χ^2	p-value
	Negative n(%)	Positive n(%)		
Age				
20-27 years	21(32.3)	15(24.6)	1.215	0.749
28-33 years	13(20.0)	16(26.2)		
34-39 years	17(26.1)	16(26.2)		
>40 years	14(21.5)	14(23.0)		
Gender				
Male	40(61.5)	33(54.1)	0.715	0.398
Female	25(38.5)	28(45.9)		
Religion				
Christianity	57(87.7)	51(83.6)	0.429	0.512
Islam	8(12.3)	10(1.64)		
Marital Status				
Single	31(47.7)	21(34.4)	2.285	0.131
Married	34(52.3)	40(65.6)		
Highest qualification				
B.sc	45(69.2)	43(70.5)	1.163	0.559
M.sc	20(30.8)	17(27.9)		
Phd	0(0.0)	1(1.64)		
Experience				
<2 years	32(49.2)	0(0.0)	99.503	0.001
2 – 5 years	24(36.9)	0(0.0)		
6 – 10 years	9(13.8)	25(41.0)		
11-20 years	0(0.0)	23(37.7)		
>20 years	0(0.0)	13(21.3)		
Workplace				
State Hospital	2(3.1)	6(9.8)	2.758	0.252
Teaching Hospital	53(81.5)	44(72.1)		
Specialist Hospital	10(15.4)	11(18.0)		

Table 6: Chi square test of association between respondents' willingness to care for PLWH and socio-demographics

WILLINGNESS TO CARE
Yes No

	n(%)	n(%)	χ^2	p-value
Age				
20-27 years	19(33.3)	17(24.6)	1.573	0.666
28-33 years	11(19.3)	18(26.1)		
34-39 years	14(24.6)	19(27.5)		
>40 years	13(23.2)	15(21.7)		
Gender				
Male	33(57.9)	40(58.0)	0.000	0.993
Female	24(42.1)	29(42.0)		
Religion				
Islam	8(14.0)	10(14.5)	0.005	0.942
Christianity	49(86.0)	59(85.5)		
Marital Status				
Single	28(49.1)	24(34.8)	2.648	0.104
Married	29(50.9)	45(65.2)		
Highest qualification				
B.sc	39(68.4)	49(71.0)	1.030	0.598
M.sc	18(31.6)	19(27.5)		
PhD	0(0.0)	1(1.4)		
Experience				
<2 years	32(56.1)	0(0.0)	1.242	0.001
2 – 5 years	24(42.1)	0(0.0)		
6 – 10 years	1(1.8)	33(47.8)		
11 – 20 years	0(0.0)	23(33.3)		
>20 years	0(0.0)	13(18.8)		
Workplace				
State Hospital	2(3.5)	6(8.7)	1.423	0.491
Teaching Hospital	45(78.9)	52(75.4)		
Specialist Hospital	10(1.8)	11(15.9)		

APPENDIX QUESTIONNAIRE

SECTION A

(Please tick the appropriate response)

1. Gender: Male () Female ()
2. Religion: Islam () Christianity () others (please specify)
3. Marital status: Single () Married () Divorced () others (please specify)
4. Age: 22-27 () 28-33() 34-39() 40 and above ()
5. Highest qualification attained
 - Degree in physiotherapy ()
 - Masters in physiotherapy ()
 - Doctorate in physiotherapy ()
6. Number of years of experience in physiotherapy _____
7. Present place of work.
 - State hospitals () Teaching hospitals () Academics () others (please specify)
8. Where are you currently spending most of your practice time?
 - Hospital in-patients () Hospital out-patients () community settings () Academia () others (please specify)
9. When did you last update your knowledge on HIV/AIDS?
 - Never () recently () <1year ago () 1-5 years ago () 5-10 years ago () >10 years ago

SECTION B

The following item assesses your knowledge, attitude and willingness to take care of people living with HIV/AIDS. Please tick the most appropriate response.

Strongly agree (1), Agree = (2), Indifferent = (3), Disagree= (4), Strongly Disagree= (5)

No	Questions	1	2	3	4	5
1.	Use of condoms can prevent HIV Infections.					
2.	HIV/AIDS can be transmitted by hand Shaking.					
3.	Sharing plates, cups, and spoons can spread HIV/AIDS.					
4.	AIDS is caused by HIV.					
5.	HIV can be transmitted from an infected blood.					
6.	The greatest risk of exposure to HIV is caring for an incontinent patient with HIV/AIDS.					
7.	HIV/AIDS is very difficult to kill with disinfectant in the environment.					
8.	The risk of infection of HIV virus after an accidental needle stick is high.					
9.	I think patient with AIDS have the right to the same quality of care as any other patient.					
10.	Patient with AIDS should be treated with the same respect as any other patient.					
11.	I feel more sympathetic towards children who got HIV infection from their mother than those who got it from intravenous drug abuse					
12.	Sexual intercourse can spread HIV/AIDS					
13.	HIV can be spread from an infected woman to her child during pregnancy, birth/ breastfeeding.					
14.	Contact with urine can spread HIV/AIDS					
15.	Mosquitoes can spread HIV/AIDS					
16.	Tattooing can spread HIV/AIDS					
17.	With the introduction of drugs for HIV/AIDS, people with HIV/AIDS can live up to 24 years on average					
18.	Most people with HIV/AIDS can blame themselves for getting the infection					
19.	Coughing and sneezing can spread HIV/AIDS					
20.	I feel worried about caring for people with HIV/AIDS					
21.	Physiotherapists, doctors and other health care workers should be allowed to refuse to care for people with HIV/AIDS					
22.	It is necessary to take extra infection control precaution for people with HIV/AIDS					
23.	I would prefer not to care for people with HIV/AIDS					
24.	Patients with HIV/AIDS need to be cared for separately from other patients					
25.	I worry about contacting HIV at work					
26.	Physiotherapists, doctors and other health care workers have a high risk of catching blood-borne viruses (such as hepatitis B)when caring for people with HIV/AIDS					
27.	I am willing to assist in the care of people with HIV/AIDS					
28.	Blood transfusion can spread HIV/AIDS					
29.	HIV/AIDS can be spread when needles are shared by intravenous drug use					
30.	Contact with saliva can spread HIV/AIDS					

Thank you for assisting with this questionnaire.