Original Research Article

DOI: https://dx.doi.org/10.18203/issn.2454-2156.IntJSciRep20231803

Awareness and utilization of physiotherapy services in management of people living with HIV among health care workers

Eleje Chiedozie Uchenna*

Department of Medical Rehabilitation, University of Nigeria, Enugu Campus, Enugu State, Nigeria

Received: 26 March 2023 Revised: 15 May 2023 Accepted: 16 May 2023

*Correspondence:

Dr. Eleje Chiedozie Uchenna, E-mail: chiedozie.eleje@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Physiotherapy is one of multidisciplinary teams that has demonstrated efficacy in HIV care/management. Irrespective of the evidence established on the efficacy of physiotherapy intervention on HIV management, there seem to be poor utilization of physiotherapy services by PLWHA. The aim of this study is to assess the healthcare providers' awareness on the role of physiotherapy in HIV management and the possible factors affecting the utilization of services by the healthcare providers.

Methods: The study is a cross-sectional descriptive study. Ethical approval was obtained from the University of Nigeria Teaching Hospital Health Research Ethics Committee Ituku-Ozalla (UNTH). A self-structured 20-item questionnaire was distributed to 75 healthcare providers (56 females and 19 males) working within Enugu metropolis. Data were summarized with descriptive statistics of frequency and percentages.

Results: Majority perceived physiotherapist not knowledgeable in the management of HIV 49(65%) and PLWHA uninformed on the role of Physiotherapy in their management 68(91%). Also, majority of the respondent perceived been ignorant of the type of physiotherapy services available in HIV management role affected its utilization 55(75%) and attributed poor awareness creation by physiotherapists 57(76%) as a limiting factor.

Conclusions: Poor awareness creation by physiotherapist for PLWHA among Healthcare providers, poor knowledge of the healthcare providers regarding the physiotherapy care available in HIV management are major barriers to utilization of physiotherapy services in HIV management.

Keywords: Awareness, Physiotherapist, HIV, AID

INTRODUCTION

More than three decades after the discovery of human immunodeficiency virus (HIV), it has been a health burden to the globe. Approximately 37.7 million people are living with HIV globally, of which more than two thirds (25.4 million) are in the WHO African Region. Nigeria has then second largest HIV epidemic in the world with approximately 1.9 million people living with HIV and AIDS (PLWHA) with reports of 53,000 HIV-related death in 2019.

With the invention of highly active antiretroviral treatment (HAART) in the 1990s, HIV drastically changed from deadly to a chronic manageable disease.⁴ PLWHA live comparatively near normal life with HIV sero-negative individuals, but battle with the burden of HIV related complications associated with the disease and its drug management.⁵ Clinical benefits of HAART stem from its effectiveness in decreasing disease progression in PLWHA by sustained suppression of viral replication, boosting the immune function, and reducing the threat of AIDS-defining opportunistic illnesses.⁶ Despite these benefits, its adverse effects which bear

resemblances with the HIV complications have been documented. HIV-associated neurological disorders (HAND), cardiovascular complications and musculoskeletal impairments are the major challenges associated with HIV treatment. Consequently, the side effects of HAART and consequences of HIV/AIDS itself have resulted to disability, sedentary behaviors, chronic pain, and decreased quality of life among PLWHA. Therefore, to ameliorate the health complications of HAART and HIV, there is call for holistic and multidisciplinary approach of management.

Physiotherapy is one of multidisciplinary teams that has demonstrated efficacy in HIV care/management. Physiotherapy interventions like resistance/aerobic exercises have been shown to be efficacious in alleviating some of the health complications of HAART/HIV and improve quality of life. Systematic reviews on physical exercise among PLWHA indicate that, engaging in regular moderate physical exercise training is safe and of good benefit for PLWHA. Apparently, physiotherapy plays significant role in HIV management and its importance cannot be overemphasized.

Irrespective of the evidence established on the efficacy of physiotherapy intervention on HIV management, there seem to be poor utilization of physiotherapy services by PLWHA.¹³ This stems the need to ascertain the cause of poor utilization of physiotherapy services by PLWHA. In Nigeria, majority of HIV based studies focused on the effects of physiotherapy intervention in ameliorating HIV/HAART complications with paucity of studies investigating factors limiting the awareness and utilization of physiotherapy intervention among PLWHA. 14,15 Moreover, studies have reported deficits in physician's awareness on the role of physiotherapy in HIV management. 16 In Nigeria, the physicians refer while healthcare providers can recommend patient for physiotherapy services, but referral of patients for physiotherapy depends on the perceptions and the awareness of the referring or recommending personnel/parties on the role of physiotherapy in the patient's management. Considering that poor awareness of physiotherapy could lead to underutilization of its interventions, while adequate awareness enhances its recommendation, referral and utilization.¹⁷ Therefore, the aim of this study is to assess the healthcare providers' awareness on the role of physiotherapy in HIV management and the possible factors affecting the utilization of physiotherapy services by the healthcare providers.

METHODS

A purposive sample of 75 healthcare providers (56 females and 19 males) working within Enugu metropolis participated in this cross-sectional descriptive study. Ethical approval was obtained from the University of Nigeria Teaching Hospital Health Research Ethics Committee Ituku-Ozalla (UNTH).

A self-structured 20-item questionnaire consisting of 3 sections; A, B and C was used to collect data for this study. Section A sought information on respondents' socio-demographic characteristics and duration of practice while B investigated the awareness and utilization of physiotherapy intervention by the respondent while Section C assessed possible barriers to physiotherapy utilization. Three experts reviewed the questionnaire to ascertain its face and content-validity. Test-retest reliability of the questionnaire among ten healthcare providers yielded a correlation coefficient of r=0.906 (p=0.001).

The participants were informed on the purpose of and procedures of the study and informed consent obtained from interested individuals. Subsequently, the questionnaire was administered to eligible respondents on a face-to-face basis with clarifications offered where necessary. The filled-out questionnaires were collected immediately after completion.

RESULTS

Frequency distributions of the respondents' age, gender, marital status, educational qualification, profession and duration of practice are presented in Table 1. The mean age of the respondents was 30±0.84 years. Majorities were within the age range of 19-34 years with nurses forming the major professionals involved in this survey. Majorities of professional involved in this survey had 1-3 years duration of practice (35%).

Table 1: Respondents' socio-demographic characteristic.

Free

Variables	Frequency	Percentage (%)
Gender		
Female	56	70
Male	19	30
Age(years)		
20-29	26	32.5
30-39	34	42.5
40-49	11	13.8
≥50	4	5

Continued.

Variables	Frequency	Percentage (%)
Educational qualification		
Post graduate	38	51
Diploma	14	19
Bachelor	23	30
Profession	•	
Nurses	32	43
Medical Lab scientist	10	13
Medical doctors	9	12
Pharmacist	5	7
Technicians	2	3
Social workers	3	4
Others	14	18
Duration of practice (years)		
1-3	28	38
4-6	24	32
7-9	13	17
≥10	10	13

Table 2: Respondents' awareness level on the role of physiotherapy in HIV management.

Variable	Frequency	Percentage
Physiotherapy plays role in HIV management		
Yes	31	41
No	7	9
Unsure	37	50
Source of knowledge (31)		
Medical doctors	10	32
Media	3	10
Physiotherapist	4	13
Others	14	45
Respondents' awareness rating on the role of physiotherapy in HIV mgt		
High	7	9
Moderate	28	37
Poor	40	54

Mgt= management

Table 3: Level of utilization of physiotherapy services in HIV management.

Variables	Frequency	Percentage (%)
Involvement in HIV management		•
Yes	12	16
No	63	84
Recommendation of physiotherapy services for PLWHA		
Yes	14	19
No	61	81
Discussed with a PT regarding care for PLWHA		
Yes	8	11
No	67	89
Discussed with colleague for the need for physiotherapy services for PLWHA		
Yes	11	15
No	64	85

HIV= human immunodeficiency virus, PLWHA= people living with HIV and AIDS, PT= Physiotherapist.

Table 4: Barriers limiting the utilization of physiotherapy services in HIV management.

Variables	Frequency	Percentage %
Ever worked with a physiotherapist for HIV management		
Yes	12	16
No	63	84
Perceived efficacy of physiotherapy services in HIV mgt (12)		
High	12	100
Low	0	0
Indifferent	0	0
PoorKnowledge of PT in HIV management		
Yes	49	65
No	26	35
Ignorant of physiotherapy mgt available in HIV management		
Yes	55	73
No	20	27
PLWHA are not informed of physiotherapy role in HIV care		
Yes	68	91
No	7	9
Affordability of physiotherapy services		
Yes	13	17
No	20	27
Unsure	42	56
Poor accessibility to physiotherapy services		
Yes	16	21
No	38	51
Unsure	21	28
Poor awareness creation of PTs		
Yes	57	76
No	18	24

HIV= human immunodeficiency virus, mgt= management, PLWHA= people living with HIV and AIDS, PTs=physiotherapists

Table 5: Proportion representation of professionals with limited knowledge on physiotherapy services available in HIV care.

Professionals with limited knowledge on the roleof physiotherapy in HIV mgt	Frequency	Proportion (%)
Nurses	23	42
Medical doctors	7	13
Medical laboratory scientists	9	16
Social worker	3	5
Others	10	19
Total	55	100

Table 2 shows respondents' awareness on the role of physiotherapy in HIV management. Less than half of the respondents 31(41%) were aware that physiotherapy plays a role in HIV management and reported medical doctors 10 (32%) and other 14 (45%) sources as the major source of this knowledge. Also, majority 40(54%) indicated to have low awareness level on the role of physiotherapy in HIV management.

Table 3 shows respondents' utilization level of physiotherapy services in HIV management. Majority of the respondent 63 (84%) reported not have been involved

in HIV management while few 12 (16) reported to have participated in HIV care. More so, only 14 (19%) have recommended physiotherapy services for PLWHA while 61 (81%) have not and 8(11%) found need to discuss with a Physiotherapist regarding care for PLWHA.

Table 4 shows respondents' perceptions on the possible barriers to the utilization of physiotherapy services in HIV management. Only 12 (16%) of the respondents accepted to have worked with a Physiotherapist in HIV management, which they all perceived physiotherapy interventions to be highly efficacious 12 (100%). Majority perceived physiotherapist not knowledgeable in

the management of HIV 49 (65%) and PLWHA uninformed on the role of physiotherapy in their management 68 (91%). Also, majority of the respondent perceived been ignorant of the type of physiotherapy services available in HIV management role affected its utilization 55 (75%) and attributed poor awareness creation by physiotherapists 57 (76%) as a limiting factor.

Table 5 shows the proportion representation of professions with limited knowledge on physiotherapy services available in HIV care. Majority of the professions with limited knowledge were nurses 23 (42%) and other medical professions 10 (19%) not captured in this survey. Doctors and medical laboratory scientist represent 7 (13%) and 9 (16%) of this population respectively.

DISCUSSION

The aim of this survey was to ascertain the level of awareness and utilization of physiotherapy services in HIV management among healthcare providers and to assess their perceptions on barriers to utilization of physiotherapy services.

The findings of this study showed that there is poor awareness and utilization of physiotherapy services in HIV management among the healthcare providers involved in this survey. Also, greater proportions of the respondents think physiotherapy has no role or are not certain on the role physiotherapy play in HIV management. This is in agreement with the findings of so many studies regarding the perception of healthcare providers on role of physiotherapy in HIV condition and management. 12,15 Also, the remaining few who were aware of possible roles of physiotherapy obtained this information mainly from doctors and other sources not necessarily physiotherapist (Table 2). This implies that physiotherapist may not have created awareness on their specific role in HIV management or there is poor interdisciplinary team work in HIV management. Apparently, poor communication with Physiotherapist regarding care for PLWHA and poor physiotherapy services recommendation/referral for PLWHA by HCP as identified in this study is a pointer that there may be lack of interdisciplinary team work in HIV management in Nigeria. Similarly, there was a poor report of physiotherapy referral practices of physician in Saudi Arabia.¹⁸ Contrary to the finding of this study, moderate awareness of physicians on the role of physiotherapy in health was stated not to be necessary in the context of HIV management.¹⁸ This finding could have resulted because difference in content of discussion may align with our finding. While the above study surveyed only physicians; this study involved other healthcare providers; more so, majority of the respondents had never worked with a physiotherapist for HIV management which may negatively affect awareness level.

The following factors were perceived as the major barriers to utilization of physiotherapy services in HIV management; poor awareness creation by physiotherapist for PLWHA and healthcare providers, poor knowledge of the healthcare providers regarding the physiotherapy care available in HIV management, physiotherapist are not knowledgeable in HIV management.

The study revealed that healthcare providers (HCP) perceived physiotherapist unknowledgeable in HIV condition and management, this is in agreement with a study done in Sub-Sahara Africa which reported that Physiotherapists lacked adequate awareness of falls risk and bone demineralization among PLWHA.¹⁹ Another study that was done in northern Nigeria reported that a substantial number of physiotherapists in northern Nigeria have good knowledge on the effects of exercise in HIV condition.¹⁴ The findings of this present study may be the major barriers to utilization of physiotherapy services because if physiotherapists had good knowledge in HIV condition and management as reported in other studies, then they would have been prompted to engage in sensitization programs and awareness creation among the HCP and PLWHA which would subsequently boost utilization levels.15 By so doing, barriers like poor physiotherapist-HCP communication with regards to HIV management, poor recommendation/ referral physiotherapy services by HCP, poor awareness creation by physiotherapists as identified in this study, would have been counteracted/neutralized. Although, a study identified poor perception of physicians in Tanzania on the role of physiotherapy in HIV associated sensory neuropathy as a barrier to utilization of physiotherapy. 16 Nevertheless, the assertions that physiotherapist are not knowledgeable in HIV condition and management as perceived by respondents in this study as barriers to utilization of physiotherapy services maybe so valid as majority of the respondents had never worked with a physiotherapist in HIV management, thus may not be the best population to give true representation of this construct. Moreover, all the respondents who had worked with physiotherapist in HIV management perceived physiotherapy interventions to be highly efficacious which is in agreement with so many studies. ^{20,21}

According to this survey, more than half of the respondents reported poor knowledge ability of physiotherapist in HIV management. This may be as result that HIV/AIDS management is not part of the curriculum that is obtainable in our federation. Some physiotherapists throughout their course of training in the medical school don't come across cases of PLWHA. A study reported insufficient knowledge on specific aspects amongst physiotherapists.²² The HIV/AIDS recommendation was that it is of paramount importance that physiotherapists should be up to date in their knowledge of HIV/AIDS as it has been noted that there was already an increase in the number of disabilities associated with HIV/AIDS. This poor knowledge ability of physiotherapist in HIV management is evidently

shown by the high poor awareness creation of the role of physiotherapist. It's obvious that one cannot give what he/she does not have and this will hamper on the utilization of physiotherapist due to the poor knowledge of the role of physiotherapist among other health care workers. These findings are contrary to the work which reported on the knowledge, awareness and attitude towards HIV/AIDS among nursing and physiotherapy students.²³ They reported that the students possess basic knowledge of the role of physiotherapists in HIV/AIDS management. Their reason was that these students were exposed to early learning and clinical practice of cases of HIV/AIDS.

Limitation

Most of the health care providers were on duty during the time of issuing the questionnaires and hence, were in a hurry in answering the questionnaires which may affect the quality of the work.

CONCLUSION

There is generally poor awareness among HCP of the roles physiotherapy play in management of PLWHA. This can be attributed to the poor awareness creation by the physiotherapists and also on the fact that most physiotherapists are not knowledgeable in HIV management. This study concludes that poor awareness creation by physiotherapist for PLWHA and Healthcare providers, poor knowledge of the healthcare providers regarding the physiotherapy care available in HIV management, and physiotherapist are not knowledgeable in HIV.

ACKNOWLEDGEMENTS

Authors would like to thank all those who participated in the study.

Funding: No funding sources Conflict of interest: None declared

Ethical approval: The study was approved by the

Institutional Ethics Committee

REFERENCES

- 1. Djomand G, Quaye S, Sullivan PS. HIV epidemic among key populations in west Africa. Current Opinion HIV AIDS. 2014;9(5):506-13.
- Hughes Y, Sawleshwarkar S. Global Epidemiology of Selected Sexually Transmitted Infections: An Overview. Sexually Transmissible Oral Dis. 2023;25.
- Durosinmi-Etti O. Funding of HIV Treatment Services in Nigeria: How Can Sustainability Be Improved? (Doctoral dissertation, The University of North Carolina at Chapel Hill). 2021.

- Dudgeon WD. Counteracting muscle wasting in HIV infected individuals. HIV Med. 2006;7(5):299-310
- 4. Hillier SL, Louw Q, Morris L, Uwimana J and Statham S. Massage therapy for people with HIV/AIDS (Review). Cochrane Database Syst Rev. 2010;2010(1):CD007502.
- 5. Highlyman L. Inflammation, immune activation, and HIV. BETA. 2010;22(2):12-26.
- 6. Ciccolo JT, Esbelle M, John B, Bartholomew JB. The benefits of exercise training for quality of life in HIV/AIDS in the post-HARRT era. Sports Med. 2004;34:487-99.
- 7. Cotter AG, Mallon PW. The effects of untreated and treated HIV infection on bone disease. Current Opinion HIV a AIDS. 2014;9(1):17-26.
- 8. WCPT CONFERENCE; Physical therapy leadership in disability and HIV: sharing international perspectives. 2016.
- 9. Basavari KH, Navya MA, Rashmi R. Quality of life in HIV/AIDS. Indian J Sex Transm Dis. 2010;31(2):75-8.
- Galantino ML, Shepard K, Krafft L, Laperriere A, Ducette J, Sorbello A, et al. The effect of group aerobic exercise and t'ai chi on functional outcomes and quality of life for persons living with acquired immunodeficiency syndrome. J Alter Compl Med Res Paradigm Pract Policy. 2005;11(6):1085-92.
- 11. Jaggers JR, Hand GA. Health Benefits of Exercise for People Living With HIV: A Review of the Literature. Am J Lifestyle Med. 2014;10(3):184-92.
- Worthington C, O'Brien K, Myers T, Nixon S, Cockerill R. Expanding the lensof HIV services provision in Canada: results of a national survey of HIV health professionals. AIDS Care. 2009;21:1371-80.
- 13. Maduagwu SM, Gunde A, Umeonwuka CI, Gambo HB, Shitu A. Physiotherapists' Knowledge on Effect of Exercise on HIVInfected Persons. J Nov Physiotherpy. 2017;7:324.
- 14. Maharaj SS. Does a rehabilitation program of aerobic and progressive resisted exercises influence HIV-induced distal neuropathic pain? Am J Physical Med Rehabi. 2017;97(5):364-9.
- Steyl, T, Shayo, F.T (2015). The role of physiotherapy in the treatment of HIV-related sensory neuropathy: The perceptions and referral practices of physicians. S Afr J Physiother.; 71(1):286. Published 2015 Nov 27. doi:10.4102/sajp.v71i1.286
- Maruf FA, Ekediegwu E, Akinpelu A, Nwankwo J. Awareness, Belief, Attitude and Utilization of Physiotherapy Services in a Nigerian Population. J Nigeria Society Physiotherap. 2012;20:26-34.
- 17. Al-Eisa ES, Al-Hoqail H, Al-Rushud AS, Al-Harthi A, Al-Mass B, Al-Harbi BM, et al. Awareness, perceptions and beliefs about physiotherapy held by physicians working in Saudi Arabia: a cross-sectional study. J Phys Ther Sci. 2016;28(12):3435-9.

- 18. Charumbira MY, Berner K, Louw Q. Physiotherapists' awareness of risk of bone demineralisation and falls in people living with HIV: a qualitative study. BMC Health Serv Res. 2021;21:333.
- Pullen SD, Chigbo NN, Nwigwe EC, Chukwuka CJ, Amah CC, Idu SC. Physiotherapy intervention as a complementary treatment for people living with HIV/AIDS. HIV/AIDS (Auckland, N.Z.), 2014;6:99-107.
- 20. O'Brien KK, Tynan AM, Nixon SA. Effectiveness of aerobic exercise for adults living with HIV: systematic review and meta-analysis using the Cochrane Collaboration protocol. BMC Infect Dis. 2016;16:182.
- 21. Salati FC. The knowledge and attitutes of physiotherapists towards patients with HIV/AIDS in the Lusaka Province, Zambia (Doctoral dissertation, University of the Western Cape). 2004.
- 22. Chugh, P, Sharma, R, Dahiya, J, Rai, R, & Chopra, C. Knowledge and beliefs about HIV/AIDS among physiotherapy students. Int J Community Med Public Health. 2017;4(4):1148.

Cite this article as: Uchenna EC. Awareness and utilization of physiotherapy services in management of people living with HIV among health care workers. Int J Sci Rep 2023;9(7):213-9.