KNOWLEDGE, ATTITUDE AND PRACTICE OF COMMUNITY PHYSIOTHERAPY AMONG PHYSIOTHERAPISTS IN SOUTHEASTERN NIGERIA: A CROSS-SECTIONAL STUDY

Ihegihu Ebere Yvonne [1], Iwuno Onyebuchi Emmanuel [1], Okoye Emmanuel Chiebuka [1], Okonkwo Uchenna Prosper [1], Chukwuka Benjamin Uzodinma [2], Amaechi Ifeoma Adaigwe [1], Akobundu Uzoamaka Nwakego [1]

[1]Department of Medical Rehabilitation, Nnamdi Azikiwe University, Nnewi Campus, Anambra State, Nigeria

[2]Department of Pharmacology, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Agulu.

Corresponding author:

Name: Ebere Yvonne Ihegihu

Abstract

Background: Community-dwellers are often in need of physiotherapy and rehabilitation for non-communicable disease conditions particularly chronic low back pain and cerebrovascular accidents. However, the access to physiotherapy and rehabilitation in rural areas is grossly inadequate.

Aim of the study: This study aimed to ascertain the level of knowledge, attitude and practice of community physiotherapy amongst physiotherapists in southeastern Nigeria.

Materials and Methods: In this cross-sectional study, a total of 81 physiotherapists possessing at least 2 years of clinical experience were consecutively sampled from 10 conveniently selected hospitals in the 5 southeastern states. We assessed participants using a validated self-administered Knowledge, Attitude and Practice (KAP) questionnaire. We summarized data using the statistics of percentage, mean and standard deviation. Mann-Whitney and Kruskal-Wallis tests were used to test the influence of selected socio-demographic characteristics on knowledge, attitude and practice of Community Physiotherapy. Spearman rank-order correlation was used to test for the relationship among knowledge, attitude and practice of community physiotherapy.

Results: The mean age of participants (females = 57, males =43) was 36.3±6.5 years. Good knowledge (84.30±6.79%) and attitude (84.35±5.85%) and fair practice (74.76±9.33%) of community physiotherapy were observed among the study participants. There were significant correlations among knowledge, attitude and practice of community physiotherapy among physiotherapists ($p<0.05$). Factors constituting a hindrance to the assimilation of community physiotherapy were poor remuneration and lack of basic social infrastructure.

Conclusions: There is good knowledge and a good attitude and fair practice of community physiotherapy among physiotherapists in our

settings. Efforts should be made to address the hindrances to community physiotherapy.

Keywords: Physiotherapy, community, knowledge, attitude, practice

Introduction

Community physiotherapy tackles acute and chronic illnesses in the adult population in settings such as the community and the patient's home after discharge from the hospital as part of the community-based rehabilitation program.[1] In rural areas, 52% of Nigeria's population lives in poverty, with the majority of the population being elderly and disabled.[2,3] Thus, the greatest need for physiotherapy and rehabilitation treatments is among the community residents. However, access to physiotherapy and rehabilitation in rural areas is extremely limited.[1, 4] According to the Australian Physiotherapy Association, physiotherapist employers in remote areas have trouble hiring and retaining physiotherapists.[5] Some residents of the community turn to quacks and other out-of-date medical procedures when their health deteriorates.[6] Disability, hence, remains a global challenge.[7] Only a few Nigerians have access to physiotherapy services, which are increasingly available in major cities. [6]

Many individuals cannot afford to relocate to larger cities, so instead of receiving quality physiotherapy, they turn to quacks and traditional medical services, which simply worsen or complicate the condition that could have been avoided with early physiotherapy care.[6] The majority of Nigerians reside in rural areas, where living conditions are poor, with the majority being the aged population suffering from disabilities.[8] Many elderly people and people with disabilities in rural areas are vulnerable to communicable and non-communicable diseases, necessitating regular healthcare, but there are no set plans to ensure their independence in Nigeria.[6] Rural residents' experiences of disability, according to reports of expanding global demand for physiotherapy services, is a significant factor that may contribute to greater usage of health care services, including physiotherapy.[9] Many individuals living with disabilities in rural Nigeria lack access to physiotherapy and rehabilitation, which has serious socioeconomic implications if the situation does not improve.[10]

The presence of a disability is a source of concern for many international organizations, including the United Nations Educational, Scientific, and Cultural Organization, the International Labor Organization, and the World Health Organization, leading to many international initiatives from these organizations.[7] Physiotherapists are crucial to the success of community-based rehabilitation. Physiotherapists who want to work in rural areas need a unique set of skills that can only be acquired through hands-on experience in the rural setting.[5] Many physiotherapists are not willing to work in rural health institutions, while others have never worked as community physiotherapists in remote areas.[11] The Chartered Society of Physiotherapy advocates community physiotherapy owing to the growing demand for care outside of hospitals and in communities.[12] This demand is becoming more difficult to meet as the population ages and the number of people with numerous long-term conditions rises.[13] The practice of community physiotherapy is almost non-existent in Nigeria's rural communities as well as in Enugu, Nigeria.[1]

Investigating existing models of care can be vital in

service improvement. However, we can only practice and become proficient at what we have the right attitude towards, and attitude is often driven by knowledge of such a variable. Few studies have looked into community physiotherapy knowledge, attitudes, and practice in Southwest and Northwest Nigeria.[14,25] The present study focused on the whole states in southeast Nigeria unlike that of Igwesi-Chidobe and Okafor[16] which was restricted to only Enugu State. Our study examined the knowledge, attitudes, and practice of community physiotherapy amongst physiotherapists in the South-East region.

Methodology

This study was a cross-sectional survey conducted in 10 hospitals in the 5 states of South East, Nigeria. Two tertiary hospitals were conveniently selected from each of the states. Consecutive sampling was used to recruit 81 physiotherapists from the selected hospitals. We excluded physiotherapists who possessed less than 2 years of clinical experience, those engaged in the National Youth Service Corps, and intern physiotherapists were excluded. Ethical approval was sought and obtained from the ethical review committee of the Faculty of Health Sciences and Technology, Nnamdi Azikiwe University. Informed consent was equally obtained from all the participants after explaining the aim and nature of the study. Socio-demographic data of the study participants were taken. We assessed participants' knowledge, attitude and practice.

A self-administered, Knowledge, Attitude and Practice (KAP) model questionnaire was adapted from the study community physiotherapy and rehabilitation outcomes in Nigeria: Knowledge, attitude and practice of Physiotherapists in Enugu State developed by Igwesi-Chidobe and Okafor[16] was used. The KAP model questionnaire, comprised of 8 knowledge questions, 8 attitude questions, and 9 questions on the participant's practice of community physiotherapy. The items used a 5-point Likert scale with the following response options: “strongly agree”, “agree”, “neutral”, “disagree” and “strongly disagree” with scores of 5, 4,3,2,1 respectively. The total scores for each of knowledge, attitude and practice were converted to percentages. Descriptive statistics of percentage, frequency count, mean and standard deviation were used to summarize participant characteristics. Mann-Whitney U and Kruskal-Wallis tests were used to test the influence of socio-demographic variables of the participants on their knowledge, attitude, and practice of Community Physiotherapy. Spearman rank-order correlation was used to test for the correlation between the knowledge, attitude, and practice of community physiotherapy among the participants. SPSS version 10.0 was used and the Alpha level was set at 0.05.

Results

The mean age of participants was 36.25±6.54 years. Forty-six (57%) and 43% were females males respectively, 67 (83%) were married, and 62 (77%) had MSc and about half (51%) possessed 6-10 years of practice experience (Table 1).

Participants had good knowledge (84.3±6.8%) and attitude (84.5±5.9%) of community physiotherapy while having a fair practice (74.76±9.33%) of community physiotherapy (Table 2). There was no significant difference in knowledge of community physiotherapy based on gender ($U = 718.50$; $p = 0.404$), educational qualification ($U = 0.350$; $p = 0.839$) and years of experience ($U=1.672$; $p = 0.643$). There was no significant difference in attitude based on gender ($U = 675.0$; $p = 0.211$), educational qualification ($U = 5.569$; $p = 0.062$) and

years of experience (U=5.842; p = 0.05). Similarly there was no significant difference in practice based on gender (U = 345.0; p = 0.119), educational qualification (U = 3.023; p = 0.221) and years of experience (U = 6.692; p = 0.082) (Table 3).

There were significant correlations between age and each of knowledge and attitude (r = 0.51; p = 0.650) and practice of community physiotherapy (r = -0.045; p = 0.634) among physiotherapists. There were significant correlations between knowledge and each of attitude (r = 0.247; p = 0.026) and practice (r = 0.277; p = 0.012) of community physiotherapy. There were significant correlation between attitude and practice (r = -0.120; p = 0.284) (Table 4).

Table 1: Socio-Demographic variables of participants

Variable	Frequency	Percentage (%)	
Gender			-
Male	35	43	
Female	46	57	
Marital status			-
Single	14	17	
Married	67	83	
Qualification			-
BSc.	11	14	
MSc.	62	77	
PhD.	8	10	
Years of experience			-
2-5 years	31	38	
6-10 years	41	51	
11-15 years	2	3	
>15 years	7	9	

Table 2: Level of knowledge, attitude and practice of community physiotherapy

Variables	Mean±SD (%)	Range (%)
Knowledge	84.30±6.79	5.63-96.88
Attitude	84.35±5.85	70.00-97.50
Practice	74.76±9.33	62.22-100.00

Table 3. Influence of socio -demographic variables on knowledge, attitude, and practice of community physiotherapy among physiotherapists

Variables	Knowledge			Attitude			Practice		
	MR	U	p	MR	U	p	MR	U	p
Gender									
Male	38.53	718.50	0.404	44.71	675.0	0.211	37.91	345.0	0.119
Female	42.88			38.17			43.35		
Marital status									
Single	33.00	357.0	0.157	36.86	411.0	0.465	32.14	697	0.300
Married	42.67			41.87			42.85		
Years of experience									
2-5 years	37.89	1.672	0.643	43.35	5.842	0.05	34.95	6.692	0.082
6-10 years	37.44			37.44			47.54		
11-15 years	22.00			22.00			28.00		
>15 years	50.07			56.86			33.21		
Education									
BSc	38.18	0.350	0.839	26.23	5.569	0.062	33.95	3.023	0.221
MSc	41.04			42.65			43.48		
PhD	44.56			48.56			31.50		

MR; mean rank; U: Man-Whitney U test

Table 4: Inter -variable correlation among age of participants, knowledge, attitude and practice of community physiotherapy

Variables	Knowledge	Attitude	Practice
Age	r = 0.80	r = 0.51	r = -0.045*
	p = 0.48	p = 0.65	p = 0.634
Knowledge	r = 1.000	r = 0.247*	r = 0.277
	p = -	p = 0.026	p = 0.012*
Attitude	r = 0.247*	r = 1.000	r = -0.120
	p = 0.026	p = -	p = 0.284

*=significant at $p < 0$.

Discussion

The physiotherapists in this study possessed good knowledge and attitude towards community physiotherapy. This contradicts the findings of Igwesi-Chidobe & Okafor[16], which reported poor knowledge, attitude, and practice of community physiotherapy. Our study was conducted eight years later than Igwesi-Chidobe and Okafor[16], hence the advocacy for community physiotherapy seems to yield some benefits. In this present study, only 12.3% of the participants indicated that they needed a training course on how to practice community physiotherapy in clinical work. This could mean that they had prior training or exposure to the concept of community physiotherapy. This implies there is an increasing level of awareness of community physiotherapy among physiotherapists of the southeastern Nigeria extraction, and the tertiary institutions in southeastern Nigeria may be embracing the idea of community physiotherapy thus incorporating community rehabilitation into the curriculum. We found that knowledge correlated with attitude, hence we can say that the level of knowledge seen in this study influenced the level of attitude towards community-based physiotherapy. No previous study explored the relationship of knowledge, attitude, and practice of community physiotherapy. However, our finding is consistent with Bhatt et al.[17] who reported a positive association of knowledge and attitude towards evidence-based physiotherapy among physiotherapists.

Despite having a good knowledge and attitude towards community physiotherapy among physiotherapists in southeastern Nigeria, we observed a fair level of practice of community physiotherapy. Although the level of practice of community physiotherapy achieved in our study was higher than the value obtained by Igwesi-Chidobe and Okafor[16] who reported poor practice of community physiotherapy, physiotherapy services were mostly available in tertiary institutions and

less accessible to the communities, due to travel costs and lack of resources/facilities for physiotherapy[15]. Notwithstanding, the increasing knowledge, attitude, and practice of community physiotherapy among physiotherapists in our studies signify an important milestone regarding the effort to incorporate physiotherapy into primary healthcare services in Nigeria. This is further strengthened by the increasing utilization of community physiotherapy in communities[15] that we may consider less developed than ours. Interestingly, most all of the physiotherapists, our study identified the need for physiotherapy services in rural communities. Unfortunately, more than half of the physiotherapists in our study indicated unwillingness to work in a rural-based physiotherapy centres. However, this implies a fairer degree of acceptance of community physiotherapy amongst our study participants compared to Igwesi-Chidobe & Okafor[16] who reported that almost all of the physiotherapists in their study were unwilling to work in rural-based physiotherapy outfits. It is important to state that reasons for the unwillingness of physiotherapists to engage in community physiotherapy borders on poor remuneration and lack of social infrastructure in these areas. Hence, care models targeting promotion and implementation of community physiotherapy must consider factors of improved remuneration and basic social amenities. Our study revealed a positive correlation between knowledge and practice of community physiotherapy suggesting that the more educated a physiotherapist is about community physiotherapy, the better attitude and hence the practice. This is consistent with Boakye et al.[18] which revealed a positive correlation between knowledge of health promotion and practice among physiotherapists in Ghana. Overall. stakeholders may leverage on the high rate of employment in the country to stimulate younger physiotherapists' interest in community physiotherapy. However, a persuasive care model which targets improved community physiotherapy education, remuneration, and provision of basic social amenity is warranted.

Conclusions

There is good knowledge and attitude towards community physiotherapy among physiotherapists in our settings. The practice of community physiotherapy among physiotherapists in our settings was fair. It is recommended that the hindrances to community physiotherapy be addressed by the relevant stakeholders. This will help kindle interest in this area.

References

1. Igwesi-Chidobe C. Obstacles to obtaining Optimal Physiotherapy Services in a Rural Community in Southeastern Nigeria. Rehabil Res Pract. 2012;2012:909675. doi: 10.1155/2012/909675
2. World Health Organization. Country health systems fact sheet - Nigeria. Brazzaville: WHO; 2006. Available from: https://www.ecoi.net/en/file/local/1257563/1158_1. [cited 29/12/2021].
3. Gureje O, Ogunniyi A, Kola L, Afolabi E. Functional disability in elderly Nigerians: results from the Ibadan study of aging. J Am Geriatr Soc. 2006;54(11):1784-9. doi: 10.1111/j.1532-5415.2006.00944.x.
4. Awofeso N. Improving health workforce recruitment and retention in rural and remote regions of Nigeria. Rural Remote Health. 2010;10(1):1319. doi: 10.22605/RRH1319.
5. Australian Physiotherapy Association (APA).

The factors affecting the supply of health services and medical professionals in rural areas; 2017. Available from: http://www.aph.gov.au/DocumentStore.ashx?id=cfbdd81e-4b73-4f8c-9dd5-859b83ce2191. [Cited 29/12/2021].

6. Sokunbi GO. Opportunity of physiotherapist in PHC in Nigeria. Niger J Med Rehabil. 2017; 19:1-4.
7. Amusat N. Disability care in Nigeria. The need for professional advocacy: AJPARS. 2009; 1(1):30-6.
8. WHO. National human resources for health strategic plan 2008-2012. p. 309-14; 2012 [cited Apr 20 2020]. Available from: http://www.who.int/workforcealliance/countries/Nigeria.
9. Landry MD, Hack LM, Coulson E, Freburger J, Johnson MP, Katz R, Kerwin J et al. Workforce projections 2010-2020: Annual Supply and Demand Forecasting Models for Physical Therapists Across the United States. Phys Ther. 2016;96(1):71-80. doi: 10.2522/ptj.20150010.
10. Abdulraheem IS, Oladipo AR, Amodu MO. Prevalence and Correlates of Physical Disability and Functional Limitation among Elderly Rural Population in Nigeria. J Aging Res. 2011;2011:369894. doi: 10.4061/2011/369894.
11. Akinpelu A, Odole C, Odejide S. Prevalence and pattern of musculoskeletal pain in a rural community in Southwestern Nigeria. Internet J Epidemiol. 2010;8(2):309-14.
12. Harte H, Conroy S. The importance of leadership in community physiotherapy. Physiotherapy. 2020;107(Suppl 1): 187. doi: 10.1016/j.physio.2020.03.292.
13. Society of Physiotherapy. History of the Chartered Society of Physiotherapy. Chartered Society of Physiotherapy; 2008. Available at https://www.csp.org.uk/about-csp/who-we-are/csp-history#:~:text=Founded%20by%20four%20nurses%20in,membership%20organisation%20in%20the%20UK.
14. Sokunbi GO, Okafor A, Maduagwu S, Saleh A, Okafor CU. Knowledge attitude and practice of primary health care among Nigerian. Prim Health Care. 2021;11(1):360.
15. Mbada C, Olawuyi A, Oyewole OO, Odole AC, Ogundele AO, Fatoye F. Characteristics and determinants of community physiotherapy utilization and supply. BMC Health Serv Res. 2019;19(1):168. doi: 10.1186/s12913-019-3994-4.
16. Igwesi-Chidobe CN, Okafor UAC. Community Physiotherapy and Rehabilitation Outcomes in Nigeria: Knowledge, Attitude and Practice of Physiotherapists in Enugu State. Int J Health Sci Res. 2013; 3:37-44.
17. Bhatt CJ, Sheth MS. Knowledge, attitude and practice towards evidence based practice in post graduate physiotherapy students. Int J Health Sci Res. 2021;11(8):17-26. doi: 10.52403/ijhsr.20210804.
18. Boakye H, Quartey J, Baidoo NAB, Ahenkorah J. Knowledge, attitude and practice of physiotherapists towards health promotion in Ghana. S Afr J Physiother. 2018;74(1):443. doi: 10.4102/sajp.v74i1.443.