



Original Research Article

Community Physiotherapy and Rehabilitation Outcomes in Nigeria: Knowledge, Attitude and Practice of Physiotherapists in Enugu State

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Received: 20/05/2013

Revised: 11/07/2013

Accepted: 13/07/2013

ABSTRACT

Background: Most people with physical disabilities require physiotherapy and rehabilitation. Professionals who provide these services should have the responsibility of providing information to enable people with disabilities to make informed decisions regarding their healthcare. Community Based Rehabilitation (CBR) is a multidisciplinary concern involving various professionals. Enugu state, like many places in Nigeria, lack a well-defined Community Physiotherapy (CP) and CBR services and thus do not benefit from the input of rehabilitation specialists.

Objective: To determine the knowledge, attitude and practice of physiotherapists in Enugu State, South Eastern Nigeria, towards CP and CBR.

Methods: A cross-sectional survey of respondents (physiotherapists) in Enugu state to determine their knowledge, attitude and practice of CP and CBR.

Results: The knowledge (22.7%), attitude (0.9%) and practice (31.8%) of the respondents in relation to CP and CBR were poor. Knowledge was not influenced by gender, job designation/rank, place of work and years of practice ($P>0.05$). However, attitude and practice were influenced by these variables ($P<0.05$). Factors such as younger age, male gender and less than one year of practice were found to be associated with increased unwillingness to practice CP in rural areas.

Conclusion: Increased emphasis on Primary Health Care (PHC) and CBR in physiotherapy training curricular in Nigeria is imperative. CP should also be integrated into the existing National PHC programmes in line with the WHO recommendations.

Keywords: Community Physiotherapy, Community Based Rehabilitation, Enugu State- Nigeria.

INTRODUCTION

The World Health Organization (WHO) in 2005 estimated that 600 million

people worldwide have some degree of impairment or disability. [1] Majority of these individuals live in developing

countries. Of these, less than 5% have access to rehabilitation services while a significant number will require medical and rehabilitation services. [1]

Access to physiotherapy and rehabilitation for individuals with disability in Nigeria is inadequate particularly in rural communities, with attendant socio-economic implications if the situation remains. [2, 3] Therefore disability continues to be a global concern, leading to many international initiatives from organizations such as the United Nation's Educational, Scientific and Cultural Organization (UNESCO), International Labour Organization (ILO) and the World Health Organization (WHO). [3] Although data is sparse in statistics on disability in Nigeria, the WHO estimates that individuals with disability make up approximately 20% of Nigeria's population. [4,5]

Successive Nigerian governments have endorsed the United Nation (UN) standard rules on the equalization of opportunities for people with disability. There was also a decree promulgated in 1993, enhancing the social and societal position of people with disability. [3] However, Nigerians living with disability are no better off when compared to their counterparts living in developed parts of the world, in terms of the challenges they face particularly poverty, marginalization and social exclusion. Despite the declaration of full participation in the disability agenda of the UN by successive Nigerian governments, Nigerians with disabilities are still faced with these challenges. A recent review of disability issues in Nigeria identified many factors why the disability agenda continues to suffer. Notable amongst them included the absence of disability discrimination laws, lack of social protection, poor understanding of disability issues by the public and poor access to rehabilitation services. [2-5]

According to the WHO in 2004, CBR is a strategy within general community development for the rehabilitation, equalization of opportunities and social inclusion of all people with disabilities. CBR is implemented through the combined efforts of people with disabilities themselves, their families, organizations, communities, and relevant government and non-governmental agencies. [6]

The major objectives of CBR include ensuring that people with disabilities are able to maximize their physical and mental abilities, have access to regular services and opportunities, and become active contributors to the community and society at large. It also aims to activate communities to promote and protect the rights of people with disabilities through changes within the community, by removing barriers to participation. Rehabilitation services therefore should no longer be imposed without the consent and participation of people who are using the services. [6] CBR is multidisciplinary and involves physicians, nurses, physiotherapists, audiologists, occupational therapist, social workers as well as orthopedic and reconstructive surgeons. [6]

According to the CBR guidelines developed by the WHO in 2010 and a joint position paper by the International Labour Organization (ILO), UNESCO and the WHO in 2004; CBR was first initiated following the International Conference on Primary Health Care in 1978. CBR was thus a strategy to improve access to rehabilitation services for people with disabilities in developing countries and often linked to the PHC system of these nations. [6,7]

CP is part of the CBR programme which provides assessment, treatment and management of acute and chronic conditions in the adult population and delivered in a variety of settings including the community and the patients' home following discharge

from hospital. Physiotherapists working within the service provide expert self-management, support and information, enabling patients to reduce the impact of their condition on function and quality of life. [6,9]

Enugu State, like many areas in Nigeria with rural setting lacks CP and rehabilitation services. [2, 3, 9] To improve this situation, the input of physiotherapists who practice in the state is of utmost importance. The objective of this study therefore was to determine the knowledge, attitudes and practice of physiotherapists in Enugu State in relation to CP and CBR.

MATERIALS AND METHODS

Seventy (70) physiotherapists practicing in Enugu State who gave their consent participated in the study. A total of 66 questionnaires were returned giving a response rate of 94%.

Materials:

The only instrument used in this study was a 21-item questionnaire. It comprised both closed and open-ended questions and divided into two sections. Section A comprised questions about respondents' demographic and professional data, while section B comprised questions that investigated the knowledge, attitude and practice of physiotherapists towards CP and CBR in Enugu state. Three copies of the questionnaire which was designed to address the study objectives were sent to three experts in questionnaire design to determine its content validity. Corrections based on their input were effected before the final version was produced. Before administration, the questionnaire, which was written in English, was pre-tested by a few physiotherapists in order to eliminate ambiguities and ensure comprehension by all respondents.

Statistical Methods:

Data were analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics of frequencies and percentages were utilized and Chi-square was used to detect associations between the variables at 95% confidence interval.

Ethical consideration: Ethical approval for the study was obtained from the Research Ethics Committee of the University of Nigeria Teaching Hospital, Enugu, Nigeria. Permission to carry out the study was also obtained from the heads of departments of the participating Physiotherapists while informed consent was given by every participant.

RESULTS

The socio-demographic data of the respondents showed that majority (42.4%) were between 30-39 years old, 37.8% were senior physiotherapists, 81.8% worked in tertiary health facilities while 34.9% had less than one year of experience as physiotherapists. Gender ratio for male to female was 1:1.

Assessment of knowledge of CP and CBR by physiotherapists revealed that the majority (78.8%) had knowledge of CP, while 53.0% were able to distinguish between CP and CBR respectively. Further analysis showed 22.7% were able to correctly define CP while 68.2% differentiated between CP and CBR. Although the majority (75.8%) appeared to have knowledge of Primary Health Care (PHC), however only 4.5% correctly defined it (Table 1).

Assessment of the attitude of respondents to CP and CBR found that majority (89.4%) agreed that both CP and CBR were required in Enugu state. Many (34.9%) among the participants stated that the availability of CP and CBR would lead to increased accessibility to physiotherapy for residents in the rural areas of the state

who need these most. Although 89.4% stated that physiotherapists were qualified to establish and manage these services, only 47% agreed on the feasibility of establishing CBR services in the state. A majority (63.6%) opined that CBR services should be linked to the existing PHC facilities in the state. However, 30.3% of the respondents noted that a major constraint to establishing CP and CBR in the state was a lack of awareness on the need for physiotherapy

services among the general populace, while 98.5% agreed that these services are needed most in these rural areas (Table 2).

In terms of actual practice, 99% of respondents stated they were unwilling to work in rural areas. The reason given by 41% of the respondents was poor remuneration and lack of social infrastructure in the rural areas. Most (68.2%) have never practiced physiotherapy in any rural area (Table 3).

Table 1: Knowledge of Community Physiotherapy/Rehabilitation by Physiotherapists.

	Frequency	%
Perceived Knowledge of Community Physiotherapy		
Yes	52	78.8
No	14	21.2
Definition of Community Physiotherapy		
Correct definition	15	22.7
Incorrect definition	36	54.6
No idea	15	22.7
Perceived Knowledge of Primary Health Care		
Yes	50	75.8
No	16	24.2
Definition of PHC		
Correct definition	3	4.5
Incorrect definition	51	77.3
No idea	12	18.2
Perceived Ability to differentiate between CP and CBR		
Yes	35	53.0
No	31	47.0
Ability to differentiate between CP and CBR		
Correct differentiation	45	68.2
Incorrect differentiation	11	16.7
No idea	10	15.2
Total	66	100.0

Key: PTs = Physiotherapists, PHC= Primary Health Care, CP= Community Physiotherapy, CBR= Community Based Rehabilitation.

Chi-square analysis showed that although physiotherapists' knowledge was not influenced by demographic variables including age, sex, designation/rank, and years of practice ($P>0.05$), their attitudes and practice were influenced by age, sex, designation and years of practice ($p<0.05$).

Furthermore, factors such as a younger age, male gender, internship status and less than one year of practice experience were associated with poorer attitudes towards the practice of community physiotherapy in rural settings (Table 4).

Table 2: Attitude towards Community Physiotherapy and Community Based Rehabilitation.

	Frequency	%
Need for establishment of CP/CBR in Enugu state		
Yes	59	89.4
No	7	10.6
Reasons for its need		
To increase accessibility to PT/Rehabilitative services to those in rural areas who are most in need	23	34.9
To increase awareness of PT services	16	24.2
To increase affordability to PT/Rehabilitative services	11	16.7
Decongest tertiary and secondary health facilities	9	13.6
Not needed	7	10.6
PTs in Enugu State are qualified to establish, manage and run CP services		
Yes	59	89.4
No	7	10.6
Need & Feasibility of establishing CP or CBR		
Community physiotherapy more feasible and beneficial	20	30.3
Community Rehabilitation more feasible and beneficial	31	47.0
Do not know	15	22.7
Best Model of operation		
Community Physiotherapy/Rehabilitation should be linked to the existing primary health care system	42	63.6
Community Physiotherapy/Rehabilitation should function independently or autonomously	13	19.7
Do not know	11	16.7
Constraints to establishing CP/CBR in Enugu State		
Inadequate human, financial, and Social resources	15	22.7
Lack of interest/commitment by all tiers of government	16	24.2
Unhealthy rivalry among health professionals	7	10.6
Lack of awareness of the need for physiotherapy	20	30.3
Lack of interest by Physiotherapists	4	6.1
Do not know	4	6.1
Where CP/CBR are needed most in Enugu State		
Urban Communities	1	1.5
Rural Communities	65	98.5
Total	66	100.0

Key: PTs = Physiotherapists, PHC= Primary Health Care, CP= Community Physiotherapy, CBR= Community Based Rehabilitation

Table 3: Practice of Community Physiotherapy/Community Based Rehabilitation.

	Frequency	%
Willingness to work in a rural based CP/CBR outfit		
Yes	27	40.9
No	39	99.1
Reasons for lacking willingness		
Poor remuneration	19	28.8
Lack of social infrastructure	20	30.3
Combination of the two	27	40.9
Ever practiced community physiotherapy in a rural area?		
Yes	13	19.7
No	45	68.2
No response	8	12.1
Total	66	100.0

Table 4: Association between Socio-demographic characteristics and Knowledge, Attitude & Practice of Physiotherapists towards CP and CBR.

Socio-demographic characteristics	Knowledge n(%)			Attitude n(%)			Practice n(%)		
	Good n(%)	None n(%)	X ² (P-value)	Positive n(%)	Negative n(%)	X ² (P-value)	Good n(%)	Poor n(%)	X ² (P-value)
Age									
20-29	4 (6.1)	20 (30.3)	17.324 (0.239)	18(27.3)	8 (12.1)	117.605(0.000)	7(10.6)	15(22.7)	93.263(0.000)
30-39	11 (16.7)	17 (25.7)		27(40.9)	-		13(19.7)	14(21.2)	
40-49	6 (9.1)	5 (7.6)		10(15.2)	-		6(9.2)	5(7.6)	
50-59	-	2 (3.0)		2(3.0)	-		2(3.0)	2(3.0)	
60+	-	1 (1.5)		1(1.5)	-		2(3.0)	-	
Sex									
Male	11 (16.7)	22 (33.3)	2.664 (0.616)	28(42.4)	4(6.1)	95.016(0.000)	17(25.8)	16(24.2)	82.844(0.000)
Female	10 (15.2)	23 (34.8)		30(45.5)	4(6.1)		13(19.7)	20(30.3)	
Designation									
Academic staff	4 (6.1)	1 (1.5)	14.448 (0.273)	5(7.6)	-	129.995(0.00)	4(6.1)	3(4.5)	97.590(0.000)
Intern PT	3 (4.6)	17 (25.7)		15(22.7)	8 (12.1)		5(7.7)	14(21.2)	
Senior/basic PT	9 (13.7)	17 (25.7)		24(36.4)	-		13(19.7)	11(16.8)	
Principal PT	1 (1.5)	4 (6.2)		5(7.6)	-		3(4.5)	2(3.0)	
Chief PT	2 (3.0)	3 (4.5)		4(6.1)	-		2(3.0)	3(4.5)	
D of PT	2 (3.0)	3 (4.5)	5(7.6)	-	3(4.5)	3(4.5)			
Years of Practice									
Less than 1	2 (3.0)	20 (30.3)	18.392 (0.104)	17(25.8)	8 (12.1)	98.321(0.000)	6(9.2)	16(24.2)	98.321(0.000)
1-5	6 (9.1)	9 (13.6)		14 (21.2)	-		8 (12.1)	8 (12.2)	
6-10	7 (10.7)	9 (13.6)		15 (22.7)	-		9 (13.6)	7(10.6)	
11-15	4 (6.1)	2 (3.0)		6 (9.1)	-		4 (6.1)	2(3.0)	
16-20	2 (3.0)	3 (4.5)		4 (6.1)	-		2 (3.0)	2(3.0)	
21-25	-	1 (1.5)		1 (1.5)	-		-	1(1.5)	
26-30	-	-		1 (1.5)	-		1 (1.5)	-	
31-35	-	1 (1.5)		-	-		-	-	
Above 35	-	-		-	-		-	-	

Key: PT =Physiotherapist/Physiotherapy, D = Directorate of Physiotherapy

DISCUSSION

This study aimed to determine the knowledge, attitude and practice of physiotherapists in Enugu State, South-East, Nigeria towards CP and CBR. The results show that physiotherapists had poor knowledge of CP and CBR. This finding can be attributed to the fact that the practice of these fields is almost non-existent in Enugu State and indeed most rural communities in

Nigeria, in agreement with previous studies suggesting that the practice of CBR is sub-optimal especially in developing nations. [2-6, 9, 10] Nualnetr in a study in 2009 had recommended that physiotherapists need to have an improved knowledge of CP in the context of CBR, if community based rehabilitation services is to be a reality in many nations. [10] Similarly, many studies have demonstrated that CP within the

context of CBR is more effective and efficient than institution-based strategies. [11-17]

Physiotherapists are important members of the community based rehabilitation team and CP is very essential to the success of CBR. However, this study presents evidence of a poor attitude towards and a lack of practice of community rehabilitation by many physiotherapists, as some respondents felt they were not qualified to establish and manage CP/CBR services. While many were unwilling to work in rural health facilities, others had never practiced community physiotherapy in rural areas. Unfortunately, these areas are the most in need of physiotherapy and rehabilitation in Nigeria. [2-4, 9, 18, 19]

CONCLUSION

The findings from this study have shown poor knowledge, attitude and practice by physiotherapists in Enugu state towards CP and CBR. This observation can be extrapolated to the Nigerian health care system in general. There is therefore an urgent need to assess and improve this through increased emphasis on CP and CBR in both undergraduate and post graduate curricular, as well as by ensuring that CP services are integrated within the existing National PHC system. This will simulate the concept of CBR in Nigeria. With improved knowledge, attitude and practice towards PHC, CP and CBR, physiotherapists should occupy eminent positions in the practice of community based rehabilitation.

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How to cite this article: 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(7):37-44.
