

CLINICAL RESEARCH

Awareness and Knowledge about the Roles of Physiotherapy in Healthcare among Clinical and Non-Clinical Staff

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ABSTRACT

OBJECTIVES

To investigate level of awareness and knowledge about the roles of physiotherapy in healthcare among clinical and non-clinical staff of a tertiary health institution in Nigeria.

METHODOLOGY

221 clinical and non-clinical staff of Federal Medical Centre, Owo, and Ondo State, Nigeria participated in this study. A self-administered questionnaire on awareness and knowledge about the roles of physiotherapy in healthcare was used for data collection. Data were summarized using a descriptive statistics and inferential statistics of Mann Whitney U test and one way ANOVA. Alpha level was set at 0.005.

RESULTS

132 clinical staff and 89 non-clinical staff participated in this study. 100% of the clinical staff (26 nurses, 39 doctors, 34 lab scientists, 18 pharmacists, and 15 radiographers) and 94.4% of the non-clinical staff were aware of Physiotherapy. 39.4% of the clinical staff had good knowledge about the roles of physiotherapy, 59.1% fair knowledge while 1.5% had poor knowledge. 9.0% of non-clinical staff had good knowledge, 55.1% fair knowledge and 36.0% had poor knowledge. There was a significant difference in the level of knowledge about the roles of physiotherapy between clinical and non-clinical staff ($p = 0.000$), and a significant difference between doctors and nurses ($p = 0.002$); and between doctors and medical laboratory scientists ($p = 0.046$).

CONCLUSION

There is inadequate knowledge about the roles of physiotherapy in health care among most of the clinical and non-clinical staff. Doctors were however, more knowledgeable about the roles of physiotherapy in healthcare than other members of the healthcare team.

KEYWORDS

Physiotherapy; Awareness; Knowledge; Roles; Healthcare

1. INTRODUCTION

Health care is a team effort, involving interaction between the patient, family, and various health care professionals. According to Robbins and Garman [1], exceptional health care is facilitated by a collaborative approach including many different professionals and their clients. Healthcare professionals play a vital role in the delivery of modern health care services. According to the World Health Organization [2], healthcare practitioners (HCPs) provide essential services that promote health, prevent diseases and deliver healthcare services in individuals, families and communities. Healthcare professionals include physiotherapists, physicians, dentists, nurses, psychologists, pharmacists, chiropractors [3]. Modern health care service delivery requires health care professionals to work together for the patient or service users in a collaborative way to deliver the desired outcome [4]. There is a clear requirement for collaboration among health workers from different professional backgrounds as no one person is able to deliver care to meet the complete needs of the patient. This is achieved by respecting, recognizing and understanding the skills and abilities of other team members who can provide patient care [5].

Physiotherapy has been defined as a dynamic healthcare profession with established theoretical and widespread clinical applications in the preservation, development and restoration of optimal physical functions [6]. The World confederation of physical therapy defined physiotherapy as a profession concerned with identifying and maximizing movement potential in the spheres of promotion, prevention, treatment/intervention, habilitation and rehabilitation [7]. This encompasses physical, psychological, emotional and social wellbeing. Physiotherapy has emerged not only as an important medical and rehabilitative complement in health care delivery but also as a health profession with a vital therapeutic tool that employs defined scientifically-based protocols, and is an integral part of the treatment of most patients [8]. It is widely used in health institutions, private practices, schools, sports and work place settings [9].

Physiotherapists assess, plan and implement rehabilitative programs that improve or restore human motor functions, maximize movement ability, relieve pain syndromes, and treat or prevent physical challenges associated with injuries, diseases and other impairments. They apply a broad range of physical therapies and techniques such as movement, ultrasound, heating, laser and other techniques [10]. Physiotherapy as a profession has evolved over the years from general forms of physical therapies to specialized physiotherapy services in healthcare settings [11]. These areas of specialization include neurology, paediatrics, orthopaedics, cardiopulmonary, geriatrics, women's health and sports to mention a few [12]. However, despite having a wide role, the extent of awareness about physiotherapy among the public as a crucial healthcare partner is still doubtful, probably due to lack of awareness among population and other healthcare team members on the scope of this profession [13]. There are negative perception about the profession that it deals with mostly exercise and massage only [14].

In developed countries of the world like UK and Australia, physiotherapists' first contact with the patient is now widely practiced [15,16]. However, in healthcare system of developing countries, the physiotherapy profession is still in the budding stage compared to other healthcare professions [17]. The practice of physiotherapy as a first contact profession is not common in Nigeria. Physiotherapists often mainly depend on

referrals from physicians from the different fields of practice of medicine [18]. A review of literature however, indicated that medical professionals may not have an adequate knowledge of all Physiotherapy services and how Physiotherapy can help their patients' disorders [19,20]. In a study by Shimpi et al, [21] it was discerned that the awareness of physiotherapy among various general practitioners still hovers as a question to be solved. Balogun [22], observed that the greatest challenge facing physiotherapists in Nigeria is educating the masses and other healthcare providers on the role of physiotherapy in healthcare delivery. According to Jackson [23], lack of or poor knowledge about a profession may lead to misconceptions about the profession and inter-professional conflicts. Thus, good awareness of the role of physiotherapy in healthcare delivery may influence its use [23].

There are several studies in different countries of the world about the awareness and knowledge of the roles of physiotherapy among various populations. Studies have been carried out among medical interns, general practitioners and medical residents in India [5,11,24]. There have also been studies about Awareness, perceptions and beliefs about Physiotherapy among physicians working in Saudi Arabia [25]. In a study conducted by Doshi et al. [26] in India about physiotherapy awareness in medical and non-medical population, the authors concluded that there is a dire need to take measures to improve awareness of the field and its specialties.

A study in southern Nigeria by Igwesi-Chidobe [27], revealed that the obstacles to obtaining optimal physiotherapy services in this community includes but not limited to poor knowledge of health workers and the community dwellers of the roles and scope of physiotherapy. Other studies in Nigeria about physiotherapy awareness have been carried out mostly among medical students [28,29]. Therefore, In Nigeria, there appears to be paucity of published literature on the awareness and knowledge of other healthcare practitioners and non-clinical staff about the roles of physiotherapy in health care. Hence, this study was designed to investigate the level of awareness and knowledge of the roles of physiotherapy in healthcare among clinical and non-clinical staff of a tertiary health institution in Nigeria.

2. MATERIALS AND METHOD

The cross-sectional study recruited 221 participants among the clinical staff and non-clinical staff of Federal Medical Centre, Owo, and Ondo State in South-western Nigeria. The study protocol was approved by the Health Research Ethics Committee of Federal Medical Centre, Owo (FMC/OW/380/LXXVI/14). Participants informed consent was sought and obtained before the recruitment of participants. The survey instrument for the study was a self-administered questionnaire on awareness and knowledge about the roles of physiotherapy in healthcare adapted from previous similar studies [5,24,30]. The questionnaire is a 34 items open and closed ended questionnaire which was divided into three sections. Section A sought information on socio-demographic data, section B consisted of 3 items which sought information on participant's awareness about physiotherapy. Section C sought information on knowledge about the roles of physiotherapy and was divided into 2 parts: Section C (1) contained three general questions on knowledge such as participants' knowledge of the roles of physiotherapy in healthcare, settings in which physiotherapy roles in healthcare could be offered, and knowledge on physiotherapy specialties while section C (2) contained 20 core items on knowledge. Each item have a Yes,

No or Not Sure response options. Correct responses was given a score of 1 while incorrect answers was given a score of 0 (including the not sure response). The maximum score obtainable was 39. The scores was categorized as follows: scores ≤ 13 was regarded as poor knowledge, scores ranging from 14-26 regarded as fair knowledge, while those from 17-39 was regarded as good knowledge. Responses was summarized in percentages.

Data analysis was done using Statistical Package for Social Science (SPSS) version 20.0 software. Data were summarized using a descriptive statistics of mean, standard deviation and percentage. Inferential statistics of Mann Whitney U was used to test level of significance difference in the knowledge about the roles of physiotherapy in healthcare between clinical and non-clinical staff while a one way ANOVA was used to test for level of significant difference in the knowledge about the roles of physiotherapy in healthcare among the various clinical professionals. Alpha level was set at 0.005.

3. RESULTS

A total of 221 participants (132 clinical staff and 89 non-clinical staff) participated in this study. The clinical staff included 26 nurses, 39 doctors, 34 lab scientists, 18 pharmacists, and 15 radiographers. Majority of the participants were between 26 years - 30 years (Table 1).

Table 1: Socio-demographic characteristics of participants.

Variables	Category	N	%
Gender	Male	116	52.5
	Female	105	47.5
Age	20-25	30	13.6
	26-30	55	24.9
	31-35	28	14.9
	36-40	33	12.7
	41-45	29	13.1
	46-50	18	8.1
	51-55	19	8.6
	56-60	9	4.1
	Marital Status	Married	125
Single		89	40.3
Divorced		6	2.7
Widowed		1	0.5
Designation	Doctors	39	17.6
	Nurses	26	11.8
	Radiographers	15	6.8
	Laboratory Scientist	34	15.4
	Pharmacists	18	8.1
	Non-clinical Staff	89	40.3

The results of level of awareness is presented in table 2. The result showed that, all the clinical staff reported that they were aware of Physiotherapy, while 84 (94.4%) of the non-clinical staff similarly reported that they were aware of Physiotherapy. Most of the clinical staff 65 (49.2%) reported educational training as their source of information about physiotherapy, while hospital lectures was the most reported source among non-clinical staff 40 (47.6%). Majority 149 (67.4%) of the participants knew the correct subject combination for admission into B.Sc Physiotherapy Degree program, furthermore, more than half 114 (51.6%) of the participants were not aware of various specializations in physiotherapy.

Table 2: Participants' awareness about physiotherapy.

Participants	Awareness about Physiotherapy										
	Yes n (%)		No n (%)								
Clinical Staff	132	(100%)	0 (0%)								
Non Clinical Staff	84	(94.4%)	5 (5.6%)								
Source of Information about Physiotherapy	Educational Training n %		Contact with Physiotherapist n %		Hospital Lectures n %		Media n %		Experience as a Patient n %		
Clinical Staff	65	49.2	20	15.2	39	29.5	6	4.5	2	1.5	
Non-Clinical Staff	9	10.7	27	32.1	40	47.6	6	7.1	2	2.4	
	Level of Awareness of Modalities			Aware of Various Specialization Areas		Aware of Subject Combination					
	Good n (%)	Fair n (%)	Poor n (%)	Yes n (%)	No n (%)	Adequate n (%)		Inadequate n (%)			
Clinical Staff	40 (30.3%)	44 (33.3%)	48 (36.4%)	75 (56.8%)	57 (43.2%)	107 (81.1%)		25 (18.9%)			
Non-Clinical Staff	63 (70.8%)	21 (23.6%)	5 (5.6%)	32 (36%)	57 (64%)	42 (47.2%)		47 (52.8%)			

Table 3 showed the result of knowledge about the role of physiotherapy. 107 (81.1%) of the clinical staff reported that they were familiar with the roles of physiotherapy in healthcare, while 50 (56.2%) of the non-clinical staff reported that they were familiar with the roles of physiotherapy in healthcare. Hospitals was the most reported setting 202 (91.4%) in which physiotherapy can offer their healthcare services while Senior citizen centres was the least reported setting 84 (38%). Orthopaedics speciality was the majorly reported specialty for physiotherapy 192 (86.9%), while Oncology was the least reported specialty for physiotherapy.

Table 3: Participants' knowledge of the roles of physiotherapy in healthcare.

Participants	Familiarity with the Roles of Physiotherapy in Healthcare				
	Yes n (%)		No n (%)		
Clinical Staff	107	(81.1%)	25	(18.9%)	
Non Clinical Staff	39	(43.8%)	50	(56.2%)	
Work Setting for Physiotherapist	Yes n (%)		No n (%)		Not Sure n (%)
Nursing Homes	177	(80.1)	8	(3.6)	31 (14)
Centers for the Disabled	172	(77.8)	9	(4.1)	35 (15.8)
Rehabilitation Centers	172	(77.8)	8	(3.6)	36 (16.3)
Senior Citizen Centers	84	(38)	84	(38)	89 (40.3)
Industries	103	(46.6)	8	(3.6)	6 (2.7)
Hospitals	202	(91.4)	8	(3.6)	6 (2.7)
Armed forces	137	(62)	21	(9.5)	58 (26.2)
Sports centers	177	(80.1)	13	(5.9)	26 (11.8)
Areas of Specialization in Physiotherapy	Yes n (%)		No n (%)		Not Sure n (%)
Cardiovascular	127	(57.5)	21	(9.5)	68 (30.8)
Women's Health(O&G)	123	(55.7)	37	(16.7)	56 (25.3)
Neurology	178	(80.5)	14	(6.3)	24 (10.9)
Oncology	75	(33.9)	56	(25.3)	85 (38.5)
Geriatrics	140	(63.3)	17	(7.7)	59 (26.7)
Orthopedics	192	(86.9)	6	(2.7)	18 (8.1)
Sports	180	(81.4)	11	(5.0)	25 (11.3)
Pediatrics	170	(76.9)	6	(2.7)	40 (18.1)

Overall level of knowledge among clinical staff and non-clinical staff is presented in Figure 1 and Figure 2 respectively. 52 (39.4%) of the clinical staff had good knowledge about the roles of physiotherapy in healthcare, 78 (59.1%) had fair knowledge while only 2 (1.5%) had poor knowledge. However, for the non-clinical staff, 8 (9%) had good knowledge, 49 (55.1%) had fair knowledge while 32 (36%) had poor knowledge.

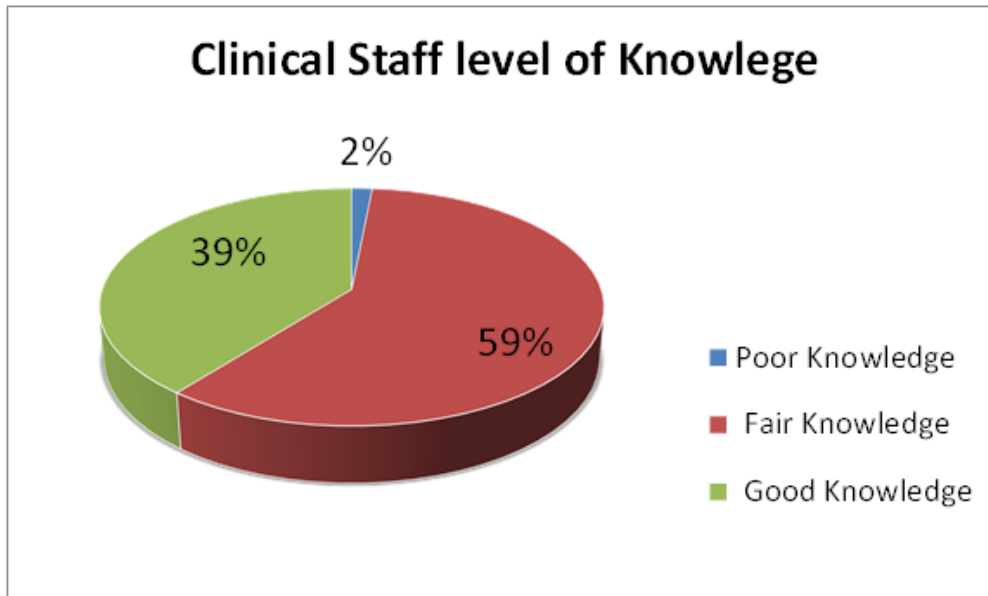


Figure 1: Overall level of knowledge about physiotherapy among clinical staff.

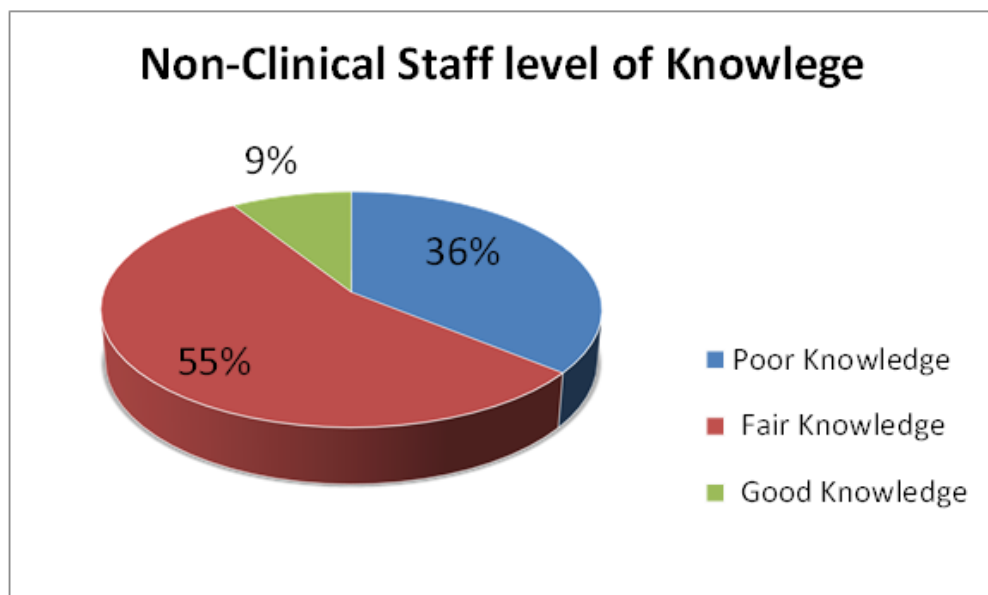


Figure 2: Overall level of knowledge about physiotherapy among non-clinical staff.

Table 4 showed the level of knowledge among various categories of clinical staff. The result revealed that doctors had more staff with good knowledge (61.5%) about the roles of physiotherapy in healthcare, while nurses had the least percentage of staff with good knowledge (19.2%). The result also showed that, only nurses had staff with poor knowledge about the roles of physiotherapy in healthcare (7.7%).

Table 4: Level of knowledge among various designations of clinical staff.

Designation	Category of Knowledge		
	Poor Knowledge N (%)	Fair Knowledge N (%)	Good Knowledge N (%)
Doctors	0 (0.0%)	15 (38.5%)	24 (61.5%)
Nurses	2 (7.7%)	19 (73.1%)	5 (19.2%)
Lab Scientists	0 (0.0%)	23 (67.6%)	11 (32.4%)
Pharmacists	0 (0.0%)	11 (61.1%)	7 (38.9%)
Radiologists	0 (0.0%)	10 (66.7%)	5 (33.3%)
Total	2 (1.5%)	78 (59.1%)	52 (39.4%)

The result of Mann Whitney U test of significance showed a statistically significant difference in the level of knowledge about the roles of physiotherapy in healthcare between clinical and non-clinical staff ($p = 0.000$), while a one way ANOVA showed a statistically significant difference in the level of knowledge about the roles of physiotherapy in healthcare among the various professionals that make up the clinical staff ($p = 0.003$). The result is as presented in table 5.

Table 5: Differences in knowledge about the roles of physiotherapy in healthcare between clinical and non-clinical staff.

Variables	Mean Rank	Mann-Whitney U	p-value
Clinical Staff	133.20	2943.000	0.000
Non Clinical Staff	78.07		
Clinical Staff Categories	Mean \pm SD	P-value	
Nurses	23.42 \pm 5.53	0.003	
Doctors	28.44 \pm 6.22		
Lab Scientists	24.97 \pm 4.98		
Pharmacists	26.11 \pm 4.34		
Radiographers	24.27 \pm 3.45		

Table 6 showed a Tukey post hoc analysis of significant difference in the level of knowledge about the roles of physiotherapy in healthcare among the various the clinical professionals. The result showed that, there was statistically significant difference in the level of knowledge about the roles of physiotherapy in healthcare between doctors and nurses ($p = 0.002$); and between doctors and medical laboratory scientists ($p = 0.046$).

Table 6: Tukey post Hoc analysis of significant differences in knowledge about the roles of physiotherapy in healthcare between clinical staff categories.

Category	Mean Difference	Standard Error	P-value
Doctors - Nurses	5.01	1.34	0.002
Doctors - Lab Scientists	3.47	1.24	0.046
Doctors - Pharmacists	2.32	1.50	0.535
Doctors - Radiographers	4.17	1.60	0.077
Nurses - Lab Scientists	1.55	1.38	0.793
Nurses - Pharmacists	2.69	1.62	0.462
Nurses - Radiographers	0.84	1.71	0.988
Lab Scientists - Pharmacists	1.14	1.54	0.946
Lab Scientists - Radiographers	0.70	1.64	0.993
Pharmacists - Radiographers	1.84	1.85	0.855

4. DISCUSSION

This study investigated the level of awareness and knowledge about the roles of physiotherapy in healthcare among clinical and non-clinical staff of a tertiary health institution in Nigeria. The result showed that, there is a good level of awareness about physiotherapy among both clinical and non-clinical staff. This findings may be due to the fact that, there is a Physiotherapy department domiciled within the hospital. This high level of awareness is in tandem with the result of a study conducted by Doshi et al. [26] in India among medical and non-medical professionals on their awareness about physiotherapy. The authors reported that more than 90% (n = 103) of medical professionals and 78% (n = 153) of non-medical professionals knew about physiotherapy. Agni and Battin [24] has also reported 100% awareness about physiotherapy among general practitioners.

Majority 107 (81.1%) of the clinical staff in the present study reported that they were familiar with the roles of physiotherapy in healthcare, while just over half 50 (56.2%) of the non-clinical staff reported that they were familiar with the roles of physiotherapy in healthcare. Igwesi-Chidobe [27] in a study conducted in a rural community in southern Nigeria has also reported poor knowledge of community dwellers 341 (85.2%) of the roles and scope of physiotherapy.

Hospitals was the most reported setting 202 (91.4%) in which physiotherapy can offer their healthcare services while Senior citizen centers was the least reported setting 84 (38%). Studies by Odebiyi et al. [28]; Pucrkree et

al. [31]; Olawale and Adjabeng [32] have also reported hospitals as major places where physiotherapy services can be offered.

Orthopaedics speciality and sport was the majorly reported specialty for physiotherapy 192(86.9%), while Oncology was the least reported specialty for physiotherapy. This is corroborated by several studies [11,24], which have also reported orthopaedics, and sport as major areas of specialty identified by participants. Shemjaz et al. [5] reported that when participants were asked to specify the different types of specialization in physiotherapy, 76.0% of them chose orthopaedics, followed by sports physical therapy (54.0%), neurology (54.0%) and cardio respiratory (50.0%).

Although 39.0% of the clinical staff had good knowledge of the roles of physiotherapy in healthcare, more than half of them had fair knowledge. The level of knowledge among non-clinical staff was lesser, as only 9.0% had good knowledge with the rest having fair knowledge (55.1%) and poor knowledge (32%,36%). This finding highlights the need for physiotherapists to intensify their efforts in educating other healthcare professionals and the general public about the roles of physiotherapy in healthcare. Kacie and Yvonne [14], in their study on public awareness on access to physiotherapists, knowledge about scope of physiotherapy and perceived level of physiotherapists' education, reported that the general public do not have comprehensive awareness about the scope of physiotherapy. Karthikeyan and Jones [33], concluded in their study on perception of physiotherapy amongst health care professionals in Papua New Guinea (PNG) that health care professionals' in PNG require more information regarding physiotherapy services. The authors suggested inclusion of physiotherapists in ward rounds, introduction to physiotherapy in inter-professional undergraduate training or during clinical opportunities as practical steps to increase health professionals' knowledge about the role of physiotherapy in healthcare delivery.

Among clinical staff, there was a statistically significant difference in the level of knowledge about the roles of physiotherapy in healthcare, with doctors having higher level of knowledge compared to other clinical professionals, especially nurses and lab scientists. This high level of knowledge among doctors might be due to the fact that doctors are currently the ones that refer patients for physiotherapy in Nigeria hence are expected to have adequate knowledge of physiotherapy in order to be able to refer appropriately.

5. CONCLUSION

The study revealed that, there is inadequate knowledge about the roles of physiotherapy in health care among most of the clinical and non-clinical staff in the health facility. Doctors were however found to be more knowledgeable about the roles of physiotherapy in healthcare when compared to other members of the healthcare team which included nurses, pharmacists, lab scientists and radiographers. There is need to increase the knowledge of both clinical and non-clinical staff about the roles of physiotherapy in healthcare through routinely conducted lectures and seminars on existing and emerging roles of physiotherapy in healthcare.

REFERENCES

1. Robbins J, Garman AN, Song PH et al (2012) How high-performance work systems drive health care value: An examination of leading process improvement strategies. *Quality Management in Healthcare* 21(3): 188-202.
2. World Confederation for Physical Therapy (2016) Policy statement: Description of physical therapy: What is physical therapy?
3. Liverpool (2009) Health care system.
4. Bachchu Kailash Kaini (2017) Interprofessional team collaboration in health care. *Global Journal of Medical Research* (17)2.
5. Shemjaz AM, Thakral A, Saddam MH (2016) Awareness and knowledge of physical therapy among medical interns - a pilot study. *International Journal of Physiotherapy* 3(2): 170-176.
6. Wallace AS (2003) Physiotherapy: Its roles, rules and ethics. *Australian Physiotherapy Association* 24(1): 71.
7. World Health Organization (2016) Health workforce: Health professions networks.
8. American Physical Therapy Association (1997) Guide to physical therapy practice. *Physical Therapy* 77 (11): IX.
9. Hogue RE (2005) Physical therapy education: The present. *Physical Therapy* 10(2): 300-355.
10. World Health Organization (2014) ISCO (International standard classification of occupations) Code 2264.
11. Abichandani D and Radia V (2015) Awareness of various aspects of physiotherapy among medical residents. *Journal of International Medical Research* 4(10): 1460-1465.
12. American Physical Therapy Association (2017) American board of physical therapy specialties.
13. American Physical Therapy Association (2011) Today's physical therapist: A comprehensive review of a 21st century health care profession.
14. Rognlie K and Searls Y (2011) Public perception of physical therapist scope of practice. *Journal of Student Physical Therapy Research* 4(1): 2.
15. Anaf S and Sheppard LA (2010) Lost in translation? How patients perceive the extended scope of physiotherapy in the emergency department. *Physiotherapy* 96(2): 160-168.
16. Leemrijse CJ, Swinkels IC, Veenhof C (2008) Direct access to physical therapy in the Netherlands: Results from the first year in community-based physical therapy. *Physical Therapy* 88(8): 936-946.
17. Paul A and Mullerpatan R (2015) Review of physiotherapy awareness across the globe. *International Journal of Health Sciences and Research* 5(10): 294-301.
18. Odebiyi DI, Amazu AR, Akindele MO et al (2010) Evaluation of the mode of referral of patients for physiotherapy by physicians. *African Journal of Physiotherapy and Rehabilitation Sciences* 2(1): 14-20.
19. Harris MF (1992) Management of chronic musculoskeletal conditions in general practice: Self-care and use of community resources - A report of a qualitative process. *General practice evaluation and program work in progress report*. Canberra: Australian Government Printing Service 3-5.
20. Summers M (1993) General practitioners and information on local services. *Health Issues* 35: 32-34.
21. Shimpi A, Writer H, Shyam A et al (2014) Role of physiotherapy in India-A cross-sectional survey to study the awareness and perspective among referring doctors. *Journal of Medical Thesis* 2(2): 18-22.
22. Balogun JA (1998) Physiotherapy: Past, present and future. *Physiotherapy Bud* 1(1): 6-7.

23. Jackson DA (2004) Where is the physiotherapy profession going. *Physiotherapy* 22(2): 400-455.
24. Agni P and Battin S (2017) Awareness of physiotherapy among general practitioners: A pilot study. *International Journal of Physiotherapy* 4(4): 253-261.
25. Al-Eisa ES, Al-Hoqail H, Al-Rushud AS et al (2016) Awareness, perceptions and beliefs about physiotherapy held by physicians working in Saudi Arabia: A cross-sectional study. *Journal of Physical Therapy Science* 28(12): 3435-3439.
26. Doshi D, Jiandani M, Gadgil R et al (2017) Physiotherapy awareness in medical and non-medical population: A social media survey. *International Journal of Physiotherapy and Research* 5(2): 1971-1975.
27. Igwesi-Chidobe C (2012) Obstacles to obtaining optimal physiotherapy services in a rural community in South Eastern Nigeria. *Rehabilitation Research and Practice* 1-8: 909675.
28. Odebiyi DO, Omotunde AO, Aiyejusunle CB et al (2008) Knowledge and perception of physiotherapy by final year medical students of a Nigerian university. *Nigerian Quarterly Journal of Hospital Medicine* 18(3): 156-161.
29. Vincent-Onabajo GO, Mustapha A, Oyeyemi AY (2014) Medical students' awareness of the role of physiotherapists in multidisciplinary healthcare. *Physiotherapy Theory and Practice* 30(5): 338-344.
30. Adesola Odole C, Chinwendu Nwadibia, Nse Odunaya (2018) Knowledge and perception of clinical students of the University of Ibadan towards the role of physiotherapy in healthcare (Unpublished undergraduate dissertation), Ibadan.
31. Puckree T, Harinarain R, Ramdath P et al (2011) Knowledge, perceptions and attitudes of final year medical, occupational therapy and sport science students regarding physiotherapy, in KwaZulu Natal. *South African Journal of Physiotherapy* 67(3): 19-26.
32. Olawale OA and Adjabeng MT (2014) Awareness and knowledge of physiotherapy among the general public in an African market in Accra Metropolis, Ghana. *Indian Journal of Physical Therapy* 2: 32-36.
33. Karthikeyan P and Jones A (2015) Knowledge of physiotherapy services among hospital-based health care professionals in Papua New Guinea. *Papua New Guinea Medical Journal* 58(1/4): 55-60.