

Full Length Research Paper

Attitudes and Barriers towards Continuing Professional Development among Physiotherapists in South-Eastern Nigeria

Anwara SU., Nmecha CE., Moses EA., Okarekpe E., *Mgbeojedo UG., Ekechukwu END., Ezeukwu AO.

Department of Medical Rehabilitation, Faculty of Health Sciences and Technology, College of Medicine, University of Nigeria, Enugu Campus, Enugu, Nigeria

Continuing professional development (CPD) programmes are important components of professional training to maintain competence. There is insufficient information regarding physiotherapists' participation in CPD activities in South-Eastern Nigeria. This study aimed to determine the attitude and barriers towards CPD among Physiotherapists in South-Eastern Nigeria. A cross-sectional survey involving 104 clinical Physiotherapists. A self-developed, content validated (CVI = 4.21) and reliable questionnaire (Split Half = 0.83) with 5 domains and 46 items that assessed the types of CPD activities, attitudes, barriers and benefits of physiotherapists towards continuing professional development (CPD) was used. Ethical approval was sought and obtained from the Health and Research Review Board of the University of Nigeria Teaching Hospital (UNTH), Enugu. Data was analyzed using descriptive statistics and Chi-square at $\alpha = 0.05$. A total 104 Physiotherapist, mostly male (53.8%), and aged ≤ 40 years (81.7%) participated in this study. They were most likely to attend seminars, congress or scientific meetings/conferences (92.3%), and take part in a research work/ journal publication (76.0%) as CPDs. Majority of them disagreed that topics/subjects of specialization (72.1%) and professional burnout (66.3%) were the barriers to CPDs. Primary place of work was significantly associated with each of CPD activities ($X^2 = 17.77$, $p < 0.001$), CPD benefits ($X^2 = 7.48$, $p = 0.024$), and CPD barriers ($X^2 = 8.23$, $p = 0.016$). There was also a significant association between gender and CPD benefits ($X^2 = 6.34$, $p = 0.042$), and CPD barriers ($X^2 = 7.43$, $p = 0.006$). Physiotherapists in the Southeastern region of Nigeria have a good attitude towards CPDs. Primary place of work and gender are significantly associated with some measures of CPD activities, benefits of CPD and barriers to CPDs.

Key words: Continuing Professional Development, Attitudes, Barriers, Benefits, Southeastern Nigeria.

INTRODUCTION

The delivery of health care including physiotherapy is concerned with quality and accountability (Supper et al, 2015; Ekechukwu et al, 2019). There is a demand on healthcare professionals to critically review their skills

and Knowledge and continuously keep up to date with changes in practice. Continuing Professional Development (CPD) is central to this process (Elshami et al, 2016). Continuing Professional Development

*Corresponding author. E-mail: ukamaka.mgbeojedo@unn.edu.ng.

Author(s) agree that this article remain permanently open access under the terms of the [Creative Commons Attribution License 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

includes areas of personal and professional development that usually starts with undergraduate training (Grant and Zilling, 2017). It incorporates clinical proficiency as well as non-clinical activities such as information technology, management, leadership and communication skills. It is dependent on the ability to critically evaluate through clinical reasoning and reflection (Bengtsson and Carlson, 2015).

Conversely, continuing education can be viewed as a means of updating knowledge through passive learning and didactic teaching models; this marginalizes the significant learning and development that occurs in daily practice (Grant, 1994; Jarvis, 2013). Consequently, a shift has occurred from continuing education to continuing professional development, where passive learning has been replaced by active and experiential learning. Continuing professional development requires individuals to take personal responsibility for identifying their learning needs and evaluating if those needs have been met (Alsop, 2013). This includes an awareness of learning needs and self-directed learning based on experience and perceived responsibility (Kitto et al, 2018) and has been embraced internationally by numerous physiotherapy professional bodies.

Nigerian Physiotherapists are encouraged to attend continuing professional development programme. It is in fact, a prerequisite for the annual renewing of professional license from the Medical Rehabilitation Therapist Board of Nigeria (MRTBN). However, there appear to be a dearth of empirical literature concerning the attitudes of Physiotherapists in Nigeria concerning continuing professional development programmes as well as the possible barriers that militates against their participation in these programme. This study therefore assessed the attitudes and barriers to continuing professional development among Physiotherapists in the Southeastern region of Nigeria.

METHODS

Subject Description

The participants were Physiotherapists from the five South East states in Nigeria. Only Physiotherapists who have been actively involved with patient treatment / management not more than two months ago as at the time of this study were included in this study.

Study Design

This study utilized a cross-sectional descriptive survey design. This design was chosen as it intends to gain immediate knowledge and information on the attitudes and barriers towards continuing professional development (CPD) among physiotherapist in South-Eastern Nigeria. The design was useful in that it allowed collection of information on the attitudes and barriers towards continuing professional development (CPD) among physiotherapist in South-Eastern Nigeria from a relatively large number of subjects to allow for generalization.

Ethical Issues

Ethical approval was sought and obtained from the Health and Research Review Board of the University of Nigeria Teaching Hospital (UNTH), Ituku-Ozalla, Enugu, Nigeria. Informed consent was also sought and obtained from the participants. The study also adhered strictly to the Helsinki's declaration (Adeniyi et al, 2014; Odetola et al, 2020).

Instrument

A self developed questionnaire with 5 domains (Socio-demographics, Job/Occupational characteristics, CPD Attendance, Attitude/Benefits of CPDs, and Barriers to CPDs) and 46 items. Adjectival scales and Likert scales were used for rating the participant's responses. A two stage content validation was done using 8 experts and a content validity index (CVI) of 4.21 was obtained. The reliability of the instrument was done using the responses of 20 pilot-test participants who were eligible to participate in the main study. Internal consistency of items for the domains varied between a Cronbach's Alpha of 0.72 – 0.89. The total reliability (split half) for the whole instrument was 0.83.

Data Analysis

The data obtained was analyzed using statistical package for social sciences, version 20.0(SPSS Inc. Chicago, IL, USA). Descriptive statistics of frequency, percentage, mean, standard deviation were used to describe the participants. Inferential statistics of chi-square test was used to determine the association variables. Level of significance was set at 0.05.

RESULTS

Socio-Demographic Characteristics

A total 104 Physiotherapist who met the inclusion criteria participated in this study. Most of the participants were male (53.8%), aged ≤ 40 years (81.7%) and had only a first degree (70.2%) mostly from the University of Nigeria (75.0%). Majority of the participants were primarily Clinicians (89.4%) and had neither masters (71.2%) nor a doctoral (91.2) postgraduate training as shown in Table 1.

Job/Occupational Characteristics

Most of the participants were either Intern Physiotherapists (28.8%) or Senior Physiotherapists (33.7%). Majority of the participants specialized in Orthopaedics/Sports Physiotherapy (29.8%) but only few had a postgraduate degree in their areas of specialization (21.2%). Also, Majority of the participants had ≤ 10 years clinical experience as shown in Table 2.

Continuing Professional Developments Attended

The participants reported that they were most likely to

Table 1: Socio-Demographic Characteristics of Participants (N = 104)

Variables	Categories	Frequency	Percentage
Age(years)	<30	42	40.4
	31-40	43	41.3
	41-50	15	14.4
	>50	4	3.8
Gender	Male	56	53.8
	Female	48	46.2
highest level of education attained	First degree	73	70.2
	Honorary doctorate	2	1.9
	Master's degree	24	23.1
	Professional doctorate	3	2.9
Institution of training for First degree	Academic doctorate degree	2	1.9
	University of Nigeria	78	75.0
	University of Ibadan	4	3.8
	Obafemi Awolowo University	4	3.8
	Nnamdi Azikiwe University	15	14.4
	Universities Outside Nigeria	3	2.9
	University of Nigeria	14	13.5
	Nnamdi Azikiwe University	1	1.0
Institution of training for Masters	University of Lagos	1	1.0
	Obafemi Awolowo University	2	1.9
	University of Ibadan	3	2.9
	Other Universities	5	4.8
	Universities Outside Nigeria	4	3.8
Institution of training for Doctorate	None	74	71.2
	University of Nigeria	1	1.0
	Nnamdi Azikiwe University	1	1.0
	University of Benin	1	1.0
	Universities Outside Nigeria	2	1.9
Primary place of work	None	99	95.2
	Academic based	11	10.6
	Clinical based	93	89.4

attend seminars, congress or scientific meetings / conferences (92.3%), attend workshops (72.1%), participate in self-directed learning (72.1%), and take part in a research work/ journal publication (76.0%) than to attend journal clubs, self-study or organized groups (55.8%) as well as make presentations at credited meetings/conference (59.6%) as shown in Table 3.

Benefits Continuing Professional Developments

Majority of the participants agreed that CPDs improve their performance in their current roles (75.0%), enhance the status of Physiotherapy with respect to other Health Professions (67.3%). Contrarily, few agreed that CPDs enhance their career prospects (56.7%) as well as enhance the status of profession with the public (48.1%). However, majority of the participants disagreed that there was no benefit from CPDs (90.4%) as shown in Table 4.

Attitude towards Continuing Professional Developments

Most of the participants agreed that CPD is an integral

aspect of being a modern day healthcare provider (61.5%) as well as those practitioners should be motivated to engage in CPDs (63.6%). Comparatively, fewer participants agreed that CPD is another perspective of clinical effectiveness (50.0%) as well as that it incorporates clinical proficiency into clinical practice (55.8%). Conversely, majority of the participants disagreed that CPD is useful to only the Physiotherapists in academics (87.5%) while relatively fewer participants also disagreed that CPD improves demands on Overloaded clinicians (53.8%) as well as implies a day-to day experience at work (51.0%) as shown in Table 5

Barriers to Continuing Professional Developments

Majority of the participants disagreed that topics/subjects of specialization (72.1%), professional burnout (66.3%) access to internet (62.5%) were the barriers to CPD. Relatively fewer participants also disagreed that family Constraint (55.8%), lack relevant learning opportunities(55.8%) low personal priority in relation to their activities (54.8%) lack time (51.9%) and

Table 2: Job/occupational characteristics of participants (n=104)

Variables	Categories	Frequency	Percentage
Job rank	Intern PT	30	28.8
	Youth Corper	4	3.8
	Senior PT	35	33.7
	Principal PT	16	15.4
	Assistant Chief PT	7	6.7
	Chief PT	2	1.9
	Assistant Director	1	1.0
	Director	4	3.8
	G/A – Lecturer I	4	3.8
	Senior Lecturer	1	1.0
Area of specialty	Orthopaedics / Sports	31	29.8
	Musculoskeletal	15	14.4
	Nuerology	13	13.5
	Women's Health	9	8.7
	Cardiopulmonary	5	4.8
Degree in area of specialty	None	31	29.8
	Yes	24	21.2
Types of Postgraduate Degree	No	80	76.9
	M.Sc.	22	21.2
	Ph.D.	1	1.0
Year of clinical experience	None	81	77.9
	1-5	46	44.2
	6-10	29	27.9
	11-15	16	15.4
	16-20	5	4.8
	21-25	6	5.8
	26-30	1	1.0
	Over 30	1	1.0

PT = Physiotherapist, G/A = Graduate Assistant

understanding of subjects/topics (51.1%) were the barriers to CPDs.

On the contrary, most of the participants were indifferent, regarding job constraints (56.7%) and accessibility in terms to location/distance (54.8%) as barriers to CDPs as shown in Table 6.

Association between CPD Activities and each of Age, Gender and Primary Place of Work

There was a significant association between primary place of work and the choice of seminars, congress, scientific meetings/ conferences as CPD activities ($X^2 = 17.77$, $p < 0.001$). Conversely, there was no significant association between the other possible CPD activities and each of age, gender and primary place of work ($p > 0.05$) as shown in Table 7.

Association between Benefits of CPD and Age, Gender, Primary Place of Work

There was a significant association between improved performance as a benefit of CPD and each of gender ($X^2 = 6.34$, $p = 0.042$), and primary place of work ($X^2 = 7.48$, $p = 0.024$) but not with age ($X^2 = 3.43$, $p = 0.753$). However, there was no significant association between the other possible benefits of CPD and each of age,

gender and primary place of work ($p > 0.05$) as shown in Table 8.

Association between Attitudes towards CPD and Age, Gender, Primary Place of Work

There was no significant association between all the descriptors of attitude towards CPD and each of age, gender and primary place of work ($p > 0.05$) as shown in Table 9.

Association between Barriers to CPD and each of Age, Gender and Primary Place of Work

There was a significant association between each of accessibility in terms of location/ distance ($X^2 = 6.69$, $p = 0.035$) and access to bibliographic databases ($X^2 = 8.23$, $p = 0.016$) as barriers to CPD and primary place of work. There was also a significant association between cost of transportation and each of gender ($X^2 = 6.02$, $p = 0.049$), and primary place of work ($X^2 = 6.87$, $p = 0.032$). Similarly, there was a significant association between each of the information hoarding ($X^2 = 7.43$, $p = 0.006$) and low standard programme ($X^2 = 5.89$, $p = 0.015$) as barriers to CPD and gender as shown in Table 10.

Table 3: Types of CPD activities attended by participants (n=104)

Variables	Frequency (Percentage)		
	Likely	Neutral	Unlikely
Seminars/ congress/ scientific meetings/ conferences	96(92.3)	6(5.8)	2(1.9)
Courses/ hands-on practical courses/ in-house training	63(65.4)	26(25.0)	9.6(9.6)
Workshops	76(73.1)	21(20.2)	7(6.7)
Discussion with other healthcare providers.	63(60.6)	29(27.9)	12(11.5)
Postgraduate programme	75(72.1)	23(22.1)	6(5.8)
Self-directed learning eg, reading journal articles, distance learning	75(72)	18(17.3)	10.6(10.6)
Journal clubs/ self-study group/ organized group discussion under accredited coordinator	58(55.8)	31(29.8)	15(14.4)
Presenter at credited meeting or conference	62(59.6)	32(30.89)	10(9.6)
Participating in research work/ publication journal articles report on book chapters.	79(76.0)	14(13.5)	11(10.6)

Table 4: Benefits of CPD (N=104)

Variables	Agree	Indifferent	Disagree
Improves my performance in current role	78(75.0)	22(21.2)	4(3.8)
Enhances status of physiotherapy with other health profession	70(67.3)	25(24.0)	9(8.7)
Enhances my career prospect	59(56.7)	32(30.8)	13(12.5)
Enhances status of profession with the public	50(48.1)	37(35.6)	17(16.3)
I see no benefits from CPD	6(5.8)	4(3.8)	94(90.4)

Table 5: Attitude of Participants towards CPD. (N=104)

Variables	Agree	Indifferent	Disagree
CPD is another perspective of clinical effectiveness	52(50.0)	38(36.5)	14(13.5)
CPD is an integral aspect of being a modern day health care professional	64(61.5)	34(32.7)	6(5.8)
Practitioners should be motivated to engage in CPD	60(63.6)	30(28.8)	11(6.2)
CPD incorporates clinical proficiency into clinical practice	58(55.8)	33(31.7)	13(12.5)
CPD improves demand on overloaded clinicians	19(18.3)	29(27.9)	56(53.8)
CPD implies a day to day experience at work place	19(18.3)	32(30.8)	53(51.0)
CPD is useful to only physiotherapist in academics	6(5.8)	7(6.7)	91(87.5)

Table 6: Barriers to CPD among Participants (N = 104)

variables	Agree	Indifferent	Disagree
Accessibility (location/distance)	27(26.0)	57(54.8)	20(19.29)
Job constraints	22(21.2)	59(56.7)	23(22.1)
Access to bibliographic database (e.g. PEDro, Medline, Physiobase)	22(21.2)	34(32.79)	48(46.2)
Access to internet	9(8.7)	30(28.8)	65(62.5)
Lack of time	12(11.5)	38(36.5)	54(51.9)
Cost of participation	39(37.5)	46(44.2)	19(18.3)
Lack of relevant learning opportunities	15(14.4)	31(29.8)	58(55.8)
Lack of quality learning activities	13(12.5)	41(39.4)	50(48.1)
Uninteresting subjects/ topics	10(9.6)	40(38.5)	54(51.1)
Lack of learning opportunities that match learning style	5(4.8)	34(32.7)	65(62.5)
Family constraints	15(14.4)	31(29.8)	58(55.8)
Professional burnout	7(6.7)	28(26.9)	69(66.3)
Topics/Subjects to specialize	9(8.7)	20(19.2)	75(72.1)
Low personal priority of learning in relation to other activities.	16(15.4)	31(29.8)	57(54.8)

Table 7: Association between CPD Activities and each of Age, Gender and Primary Place of Work (N = 104)

Variables	X ² (p-value)		
	Age	Gender	Primary place of work
Seminars, congress, scientific meeting and conferences	3.22 (0.0781)	2.73 (0.255)	17.77 (<0.001)*
Courses; hands-on practical courses; in-house training	10.14 (0.119)	3.30 (0.191)	1.19 (0.553)
Workshops	11.79 (0.067)	0.93 (0.627)	0.13 (0.939)
Discussion with other healthcare providers.	3.96 (0.683)	3.46 (0.178)	3.11 (0.212)
Postgraduate programme	1.89 (0.930)	0.51 (0.774)	0.51 (0.777)
Self-directed learning eg, reading journal articles, distance learning	2.86 (0.826)	1.50 (0.473)	1.15 (0.562)
Journal clubs, self-study group; organized group discussion under accredited coordinator	4.86 (0.562)	1.37 (0.505)	4.96 (0.084)
Presenter at credited meeting or conference	4.11 (0.661)	0.17 (0.919)	2.92 (0.233)
Participating in research work, publication journal articles report on book chapters.	1.95 (0.924)	4.26 (0.119)	2.38 (0.304)

Key: * = significant

Table 8: Association between Benefits of CPD and each of Age, Gender, Primary Place of Work (N = 104)

Variables	X ² (p-value)		
	Age	Gender	Primary place of work
Improves my performance	3.43 (0.753)	6.34 (0.042)*	7.48 (0.024)*
Enhances status	3.38 (0.760)	0.97 (0.616)	3.98 (0.137)
Enhances my career	4.94 (0.552)	1.46 (0.482)	0.38 (0.828)
Enhances status of profession	3.97 (0.680)	1.83 (0.401)	1.25 (0.535)
I see no benefits	6.63 (0.357)	1.74 (0.418)	0.71 (0.702)

Key: * = significant

Table 9: Association between Attitudes towards CPD and each of Age, Gender, Primary Place of Work (N = 104)

Variables	X ² (p-value)		
	Age	Gender	Primary place of work
CPD is another perspective of clinical effectiveness	9.22 (0.161)	1.01 (0.603)	0.54 (0.762)
CPD is an integral aspect of being a modern day health practitioner	6.84 (0.336)	2.10 (0.351)	0.36 (0.838)
Practitioners should be motivated	3.48 (0.747)	0.76 (0.685)	5.44 (0.066)
CPD incorporates clinical proficiency into clinical practice	5.96 (0.428)	0.39 (0.825)	2.46 (0.292)
CPD improves demand on overloaded clinicians	4.71 (0.582)	0.18 (0.914)	3.76 (0.152)
CPD implies a day to day experience at work place	12.04 (0.061)	3.29 (0.193)	1.21 (0.546)
CPD is useful to only physiotherapists in academics	1.50 (0.959)	0.07 (0.967)	1.08 (0.583)

DISCUSSION

The quest for improving the standard of practice among healthcare professionals in developing countries is often seen as an attempt to attain the progress achieved in healthcare outcomes in developed countries (Umar et al, 2019; Ekechukwu et al, 2020). The commonly adopted pragmatic measure by most health professionals is the participation in Continuing Professional Development (CPD) training programmes. There is insufficient literature, however, relating to the factors enhancing or militating against the level of participation in CPD among physiotherapists in southeastern Nigeria. This study attempted to determine the attitudes of the southeastern physiotherapists towards engaging in CPD and to also identify the possible barriers preventing them from participation.

The results revealed that more than half of the participants strongly agreed that CPD is another perspective of clinical effectiveness and that CPD is an integral aspect of being a modern day health care professional. This may be because CPD activities improves their performance and enhances their status with other health care professions. It may also imply that physiotherapists in this study were aware of the concepts and relevance of CPD as a way to improve their practice. This is in agreement with the results of the study conducted by Bello and Lawson (2013) which indicated that a significant proportion of physiotherapists in Ghana demonstrated good attitudes on the issues pertaining to CPD. However, it was reported that age, gender, primary place of work were not significantly associated with the attitudes towards CPD. This may imply that the

Table 10: Association between Barriers to CPD and each of Age, Gender and Primary Place of Work (N = 104)

Variables	χ^2 (p-value)		
	Age	Gender	Primary Place of Work
Accessibility (location/distance)	5.70 (0.457)	0.66 (0.717)	6.69 (0.035)*
Job constraints	4.03 (0.672)	0.52 (0.770)	0.31 (0.855)
Access to bibliographic database (e.g. PEDro, Medline, Physiobase)	4.49 (0.611)	1.93 (0.382)	8.23 (0.016)*
Access to internet	6.71 (0.348)	0.20 (0.919)	2.28 (0.319)
Lack of time	3.88 (0.693)	4.48 (0.106)	4.47 (0.107)
Cost of participation	4.19 (0.651)	6.02 (0.049)*	6.87 (0.032)*
Lack of relevant learning opportunities	3.76 (0.710)	1.94 (0.379)	2.44(0.296)
Lack of quality learning activities	2.74 (0.840)	0.15 (0.927)	1.76 (0.415)
Uninteresting subjects or topics	10.16 (0.118)	0.45 (0.797)	2.34 (0.310)
Lack of learning opportunities to match learning style	6.66 (0.354)	1.49 (0.474)	1.33 (0.515)
Family constraints	4.76 (0.574)	5.48 (0.065)	5.88 (0.053)
Professional burnout	8.16 (0.226)	0.38 (0.826)	1.25 (0.536)
Topics. Subjects to specialize	7.96 (0.241)	5.43 (0.066)	1.48 (0.477)
Low personal priority of learning in relation to other activities	2.93 (0.818)	0.08 (0.959)	1.69 (0.430)
Cost	4.23 (0.237)	0.33 (0.565)	0.15 (0.699)
Time	6.33 (0.097)	0.08 (0.772)	1.18 (0.278)
Distance	7.64 (0.054)	2.41 (0.120)	0.01 (0.916)
Information hoarding	4.77 (0.190)	7.43 (0.006)*	0.25 (0.617)
Cocky attitudes	2.32 (0.508)	0.35 (0.554)	0.01 (0.957)
Low standard programme	3.46 (0.326)	5.89 (0.015)*	0.69 (0.405)

Key: * = significant

engagement in CPD is not a function of an individual's age, gender or place of work.

The findings from this study also showed that, the most common complaints regarding the barriers towards continuing professional development from the physiotherapists who participated in this work were the cost of participation, accessibility, job constraints and access to bibliographic database. It was also reported that barriers such as accessibility, access to bibliography and cost of participation were significantly associated

with the participant's primary place of work, while the cost of participation was also significantly associated with gender. This is in agreement with the study done by Aziz et al. (2012) where the majority of respondents indicated that their job constraints, cost, and time were barriers to their participation in CPDs. Similarly, Bello and Lawson (2013) reported that the common complaints by physiotherapists included the non-availability or limited access to libraries and online databases to access literature at their work facilities. Conversely, this report is

in disagreement with Ahuja (2011) that opined that lack of motivation, learning culture and aims of the organization were major barriers towards continuing professional development among physiotherapists. Also, in this study, information hoarding and low standard programme were found to be significantly associated with gender. These may therefore imply that primary place of work and gender could be important determinants of the barriers to Physiotherapists participating in CPDs. It is therefore recommended that further study should be focused in delineating the mechanisms by which these factors obstruct CPD participation with a view to enhancing CPDs among Physiotherapists.

The most practiced types of CPD as reported in this study were seminars, congress, scientific meeting/conferences; workshops; Postgraduate programme; Self-directed learning eg, reading journal articles, and participating in research work/ publication journal articles. This is in agreement with Black and Cooney (2000) as well as French (2006). They reported that CPD was more than attending courses and undertaking postgraduate studies but also involved activities such as seminars, workshops and research. It also occurs on the job through day-to-day experiences, performance reviews, journal clubs, peer discussion, in-service training, critical reading and personal reflection. Clinical supervision, lecturing, clinical teaching, writing reports, significant incident analysis and research are also identified as CPD activities. From this study, the most likely CPD practiced by physiotherapists are seminar; congress; scientific; meeting; conferences and the most unlikely practiced CPD activities are journal club, self-study group, organized group discussion under accredited coordinators. The survey result of Stevenson et al (2004) appears to differ somewhat with the above result. They reported that courses, in-service training, clinical training and clinical supervision were perceived to be the likely and most important physiotherapy CPD activities, whilst student supervision, clinical interest group membership, management training reading journals, conferences and literature searching were deemed to be least important. Differences in study environment and design could have been responsible for this identified difference.

References

- Ahuja, D., 2011. Continuing professional development within physiotherapy-A special perspective. *Journal of Physical Therapy*, 3(1), pp.4-8.
- Alsop, A., 2013. *Continuing professional development in health and social care: Strategies for lifelong learning*. John Wiley & Sons.
- Aziza, Z., Jeta, C.N. and Abdul Rahman, S.S., 2013. Continuing professional development: views and barriers toward participation among Malaysian pharmacists. *The European Journal of Social & Behavioural Sciences*, 4(6).
- Bello, A.I. and Lawson, I.G., 2013. Attitudes and barriers towards engaging in continuing professional development among clinical physiotherapists in Ghana. *Internet Journal of Allied Health Sciences and Practice*, 11(1), p.7.
- Bengtsson, M. and Carlson, E., 2015. Knowledge and skills needed to improve as preceptor: development of a continuous professional development course—a qualitative study part I. *BMC nursing*, 14(1), pp.1-7.
- Ekechukwu, E.N., Oluka, C.D., Obidike, E. and Ezeukwu, A.O., 2019. Influence of Demographic and Academic Variables on Physical Fitness Level of Undergraduates in a Nigerian University. *African Journal of Health Sciences and Technology*, 1(1), pp.27-34.
- Ekechukwu, E.N.D., Aguwa, E.N., Okeke, T.A., Iroezindu, I.C., Onyia, S.U., Abaraogu, D.O., Ekwo, A.C., Ohiagu, C., Ekechukwu, N., Mgbeojedo, U.G. and Ekediegwu, E.C., 2020. Prevalence, correlates and risk factors of musculoskeletal disorders among Nigerian physiotherapy and architecture undergraduates. *Journal of the Nigeria Society of Physiotherapy*, 19(1), pp.8-18.
- Elshami, W., Elamrdi, A., Alyafie, S. and Abuzaid, M., 2016. Continuing professional development in radiography: practice, attitude and barriers. *International Journal of Medical Research & Health Sciences*, 5(1), pp.68-73.
- French, H.P. and Dowds, J., 2008. An overview of continuing professional development in physiotherapy. *Physiotherapy*, 94(3), pp.190-197.
- French, H.P., 2006. Continuing professional development: a survey of Irish staff grade physiotherapists. *International Journal of Therapy and Rehabilitation*, 13(10), pp.470-476.
- Grant, J. and Zilling, T., 2017. *The good CPD guide: A practical guide to managed continuing professional development in medicine*. CRC Press.
- Grant, R., 1994. Continuing education—does it make for a more competent practitioner?. *Australian Journal of Physiotherapy*, 40, pp.33-37.
- Jarvis, P., 2013. *Learning in later life: An introduction for educators and carers*. Routledge.
- Kitto, S., Price, D., Jeong, D., Campbell, C. and Reeves, S., 2018. Continuing professional development. *Understanding medical education: Evidence, theory, and practice*, pp.263-274.
- Odetola, S., Omoniyi, O.J.O., Akinola, O., Nwadiibia, C., Oloyede, M., Okunade, O. and Ekechukwu, E.N.D., 2020. Reach and effect of a virtual campaign for promoting physical activity during the covid19-era. *Journal of the Nigeria Society of Physiotherapy*, 19(1), pp.1-7.
- Scurlock-Evans, L., Upton, P. and Upton, D., 2014. Evidence-based practice in physiotherapy: a systematic review of barriers, enablers and interventions. *Physiotherapy*, 100(3), pp.208-219.
- Shayan, S.J., Kiwanuka, F. and Nakaye, Z., 2019. Barriers associated with evidence-based practice among nurses in low-and middle-income countries: A systematic review. *Worldviews on Evidence-Based Nursing*, 16(1), pp.12-20.
- Stevenson, K., Lewis, M. and Hay, E., 2004. Do physiotherapists' attitudes towards evidence-based practice change as a result of an evidence-based educational programme?. *Journal of evaluation in clinical practice*, 10(2), pp.207-217.
- Supper, I., Catala, O., Lustman, M., Chemla, C., Bourgueil, Y. and Letriliart, L., 2015. Interprofessional collaboration in primary health care: a review of facilitators and barriers perceived by involved actors. *Journal of public health*, 37(4), pp.716-727.
- Umar L., Abdullahi, B.B. and Ekechukwu E.N.D., 2019. Physiotherapy Identity: Confusion surrounding the title "Gashi" in Northern Nigeria. *Archives of Physiotherapy & Global Researches*, 23(1).