Attitudes and Barriers Towards Engaging in Continuing Professional Development Among Clinical Physiotherapists in Ghana

Ajediran I. Bello, PT, Ph.D
Ivy G. Lawson, PT, B.Sc

1. Lecturer, Department of Physiotherapy, School of Allied Health Sciences, College of Health Sciences, University of Ghana, Korle-Bu Campus, Greater Accra Region
2. Clinical Physiotherapist, Physiotherapy Department, Korle-Bu Teaching Hospital, Korle-Bu, Greater Accra Region


ABSTRACT

PURPOSE: 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 Ghana. This study aimed to provide insight into the engagement, attitude, and barriers towards CPD activities among Ghanaian physiotherapists.

METHODS: A cross-sectional survey study involved 50 clinical physiotherapists who were registered with the Ghana Association of Physiotherapists. A validated questionnaire that contained 34 open and closed-ended items was adapted from an existing tool to gather information from the participants. The questionnaire sought information on biodata, clinical practice issues, engagement, attitudes, and barriers regarding CPD. Data were analysed using frequency distributions, means, percentages, and one sample proportion (z score) test. Significance level was set a priori at p< 0.05.

RESULTS: The reported clinical experience of the participants showed that the majority (n=33: 67.34%) had worked less than six years whilst 11(22.45%) had worked for more than 10 years. Most respondents 27(56%) spend 1 to 3 hours per week reading their professional literature. A significant proportion (p≤0.05) of physiotherapists showed good attitude towards CPD. Lack of leadership direction (22%) and non-availability of relevant courses (18%) were identified as the main barriers by the respondents at health practice facilities. At the national level, lack of sponsorship (33%) and information (23%) were cited as their barriers. CONCLUSION: Physiotherapists demonstrated a positive attitude towards CPD. Lack of sponsorship and leadership direction were identified as main barriers at the national level and practice facility respectively, thus stressing the need to motivate healthcare personnel in their quest to improve skills.

BACKGROUND

The changes in service delivery within the healthcare professions and the need for clinical effectiveness, audit of practice, and evidence-based practice have increased physiotherapists' autonomy and professional decision-making in Europe and other developed nations. This development is in line with rapid changes in medical sciences which has continued to challenge other allied healthcare professionals to keep abreast of new changes in healthcare services. An integral aspect of being a modern healthcare professional is the obligation to maintain competence through career-long developmental activities. Continuing Professional Development (CPD) as a core component for this pursuit is well recognized globally. However, successful implementation and participation of CPD among healthcare professionals are determined by various factors that need to be identified in geographical context.

Continuing professional development is defined as a range of activities engaged in by professionals to improve their practice through enhancement in the skills and safe practice within their evolving scope of service delivery. Modern definitions of CPD...
encompass more than just engagement in profession-based education but also include the abilities for problem solving, critical reflection, communication, and teamwork. Overall, participation in CPD has been reported to improve confidence and competence among healthcare professionals thereby enabling them to establish rewarding relationships among themselves and their clients. However, little evidence has been reported regarding the impact of CPD on patient care, with the majority of studies suggesting non-specific improvements based on generalized assessments.

In spite of the documented relevance of CPD on professional development, it remains unclear as to level of engagement, or the attitudes of physiotherapists in Ghana towards CPD. An equally important area deserving research attention are the barriers preventing physiotherapists from engaging in CPD programmes. Several factors that have been identified as constraints among physiotherapists include sponsorship and staff shortages. According to the findings of earlier studies, lack of time and work pressure were also highlighted as barriers among physiotherapists in the United Kingdom and New Zealand. Even though these factors have been identified as barriers in developed countries, it was not presumed to be the same with physiotherapists in Ghana. Thus, this study sought to provide insight into physiotherapists’ attitudes and barriers with regard to engagement in CPD activities in Ghana.

MATERIALS AND METHODS
Participants
This study targeted all clinical physiotherapists registered with the Ghana Association of Physiotherapists (N=70) who consented to participate in this cross-sectional survey. They included those practising in Teaching, Regional, District, and Private Hospitals across the ten regions of Ghana. Physiotherapists in the academic field were excluded to ensure uniform participants.

INSTRUMENTS
A structured questionnaire (Appendix A) was designed and tailored from a similar questionnaire used in a study on evidence-based practice. The questionnaire was tested for test / re-test reliability by administering it to six clinical physiotherapists, on two occasions at one week intervals who were not part of the final study. The Cronbach’s Alpha value was r=0.76. The questionnaire comprised three sections. Section A captured information relating to socio-demographic and clinical profiles such as gender, age, professional qualifications, cadre, and number of years in physiotherapy practice. Section B contained questions relating to clinical practice, while section C contained questions about attitudes, engagement, and barriers towards CPD. Items in this section included open-ended questions on barriers preventing the subjects from participating in CPD both at their places of work and at national levels. The closed-ended questions to test attitudes towards CPD were based on a five-point Likert-scale, which included: (1) “strongly disagree”; (2) “disagree”; (3) “somewhat agree”; (4) “agree” and (5) “strongly agree”. Scoring of responses on this scale depended on the direction of the questions. The “strongly agree” responses were scored 5 for direct (positive) questions and strongly disagree responses were given a score of 1. Conversely, indirect (negative) questions received maximum scores of 5 for “strongly disagree” responses and a score of 1 was recorded for “strongly agree” responses.

Procedure for Data Collection
Ethical approval for this study was obtained from the Ethics Committee of the School of Allied Health Sciences, University of Ghana (Ref. SAHS/022006015). Permission was sought from Executive Members of GAP and the heads of the Physiotherapy Departments where the selected physiotherapists were practising. Written informed consent was obtained from all participants after full explanation of the objectives and protocols of the study through an information sheet.

The questionnaires were distributed in three ways. First, it was administered to the physiotherapists during the 2010 GAP general meeting. The second method involved posting of the questionnaires with self-addressed return envelopes to those who could not attend the meeting; they were requested to return the completed questionnaires within two weeks. The third method involved a personal visit to various physiotherapy departments in the Greater Accra region of Ghana.

Data Analysis
Data collected were entered into the Statistical Package for Social Sciences (SPSS) version 16.0 software. Descriptive statistics such as frequency distribution, percentages, means, and standard deviations were used to summarize the responses of the participants from the questionnaire. One sample proportion (Z score) test was used to examine the level of strong agreement to statements provided on CPD attitude domain of the questionnaire. Significance level was set a priori at p< 0.05 for every statistical test.

RESULTS
Clinical Practice and Demographic Profiles of the Physiotherapists
The number of registered physiotherapists, as ascertained from the directory of Ghana Association of Physiotherapists (GAP)
was seventy (70). A total of 60 questionnaires were distributed in this study due to the exclusion of the physiotherapists in academics, including those that participated in the pilot study. Only 50 of the questionnaires were completed and returned representing a response rate of 83%. Thirty-eight (79.2%) of the respondents were basic physiotherapists; i.e. those who were fresh graduates whilst 2 (4.2%) were chief physiotherapists i.e. those at the highest cadre in physiotherapy service scheme in Ghana (Table 1). Clinical experience of the participants showed that the majority of respondents 33 (67.34%) had worked less than six years whilst 11 (22.45%) had worked for more than 10 years. Twenty of the respondents (40%) reported working hours of more than 40 hours per week as against 3 (6%) who reported their weekly working hours to be less than 20 hours. Thirty-seven of the physiotherapists attended to more than 10 patients daily with the majority of them 27 (54%) reported having less than 5 physiotherapists in their facilities (see Table 1).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length of practice as a physiotherapists</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1 yrs</td>
<td>3</td>
<td>6.12</td>
</tr>
<tr>
<td>1-5 yrs</td>
<td>30</td>
<td>61.22</td>
</tr>
<tr>
<td>6-10 yrs</td>
<td>5</td>
<td>10.20</td>
</tr>
<tr>
<td>11-15 yrs</td>
<td>4</td>
<td>8.16</td>
</tr>
<tr>
<td>&gt; 15 yrs</td>
<td>7</td>
<td>14.29</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Hours spent working</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 20 hrs</td>
<td>3</td>
<td>6.00</td>
</tr>
<tr>
<td>20-30 hrs</td>
<td>5</td>
<td>10.00</td>
</tr>
<tr>
<td>31-40 hrs</td>
<td>22</td>
<td>44.00</td>
</tr>
<tr>
<td>&gt; 40 hrs</td>
<td>20</td>
<td>40.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Patients attended to (daily)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>5</td>
<td>10.00</td>
</tr>
<tr>
<td>5-10</td>
<td>8</td>
<td>16.00</td>
</tr>
<tr>
<td>11-15</td>
<td>12</td>
<td>24.00</td>
</tr>
<tr>
<td>&gt;15</td>
<td>25</td>
<td>50.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Number of physiotherapists per facility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>27</td>
<td>54.00</td>
</tr>
<tr>
<td>5-10</td>
<td>14</td>
<td>28.00</td>
</tr>
<tr>
<td>11-15</td>
<td>8</td>
<td>16.00</td>
</tr>
<tr>
<td>&gt;15</td>
<td>1</td>
<td>2.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Engagement in CPD-Related Activities**

On the engagement domain (see Table 2), 31 (64.58%) of the participants spent less than four hours per week reading professional literature to update their clinical practice while 26 of 49 (53%) reported making use of research evidence often to improve their clinical decision-making process. Thirty-four (70%) of 48 physiotherapists reviewed their skills continuously and about 21 of 47 (44%) respondents have not undertaken any additional formal postgraduate education. The study further revealed that 32 (66%) of 48 participants regularly participated in CPD courses whilst 21 (44%) have never attended any seminars, professional courses, workshops, or conferences in the last three months.
Table 2. Participants’ Engagement in the CPD Activities.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Percentage (%)</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research evidence application</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very often</td>
<td>7</td>
<td>14.29</td>
</tr>
<tr>
<td>Often</td>
<td>26</td>
<td>53.06</td>
</tr>
<tr>
<td>Not often</td>
<td>14</td>
<td>28.57</td>
</tr>
<tr>
<td>Not at all</td>
<td>2</td>
<td>4.08</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Frequency of skills review</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>4</td>
<td>8.33</td>
</tr>
<tr>
<td>Annually</td>
<td>8</td>
<td>16.67</td>
</tr>
<tr>
<td>Every six months</td>
<td>2</td>
<td>4.17</td>
</tr>
<tr>
<td>Continuously</td>
<td>34</td>
<td>70.83</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Additional formal education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>26</td>
<td>55.32</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>44.68</td>
</tr>
<tr>
<td>Total</td>
<td>47</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Participation in CPD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>32</td>
<td>66.67</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>33.33</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Seminar attendance (&lt; 3 months)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>27</td>
<td>56.25</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>43.75</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Attitude**

Participants’ responses to the statements provided on CPD attitude domain of the questionnaire are presented in Table 3. A significant proportion (p<0.05) of the respondents strongly agreed that CPD is another perspective of clinical effectiveness (100%; p=0.003) and that it incorporates proficiency into clinical practice (100%; p=0.003). All participants strongly agreed that CPD programmes are integral aspects of modern healthcare professions (100%; p=0.003) in which professionals should be motivated to participate (98%; p=0.009) and they also strongly agreed to the need for the introduction of CPD policy by Ghana Association of Physiotherapists (93.8%; p=0.012). However, the proportions of the participants that agreed with the following statements were not significant (p>.05): that CPD is an imposing demand on already overloaded clinicians (35.6%; p=1.000); CPD is a day-to-day occurrence on the job (76.9%; p=0.182); CPD is only useful to physiotherapist in academics (4%; p=1.000).

Table 3. One Sample Proportion (Z score) Test on Participants’ Strong Agreement Responses with Statements Provided on Attitude Domain of the Questionnaire.

<table>
<thead>
<tr>
<th>Statement</th>
<th>N</th>
<th>Percentage (%)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPD is another perspective of clinical effectiveness</td>
<td>48</td>
<td>100</td>
<td>0.003*</td>
</tr>
<tr>
<td>CPD is an integral aspect of being a modern day healthcare professional</td>
<td>47</td>
<td>100</td>
<td>0.003*</td>
</tr>
<tr>
<td>Practitioners should be motivated to engage in CPD</td>
<td>48</td>
<td>98</td>
<td>0.009*</td>
</tr>
<tr>
<td>CPD incorporates clinical proficiency into clinical practice</td>
<td>48</td>
<td>100</td>
<td>0.003*</td>
</tr>
<tr>
<td>There is need for GAP to have CPD as policy</td>
<td>49</td>
<td>93.8</td>
<td>0.012*</td>
</tr>
<tr>
<td>CPD imposes demand on overloaded clinicians</td>
<td>47</td>
<td>35.6</td>
<td>1.000</td>
</tr>
<tr>
<td>CPD implies a day-to-day experience at work places</td>
<td>49</td>
<td>76.9</td>
<td>0.756</td>
</tr>
<tr>
<td>CPD is useful to only physiotherapists in academics</td>
<td>47</td>
<td>4</td>
<td>1.000</td>
</tr>
</tbody>
</table>

*=Significant at the 0.05 level
Barriers
Twenty-five participants (50%) did not have access to libraries at their work facilities whilst 23 (46%) spent less than 15 minutes accessing the medical or healthcare library location. Twenty-five (50%) of the respondents had no access to online databases such as PEDRO, PHYSIOBASE, MEDLINE, or CINAHL while 39 (78%) had access to a general Internet connection (Table 4). Participants reported lack of leadership direction (22%) and non-availability of relevant courses (18%) as the main barriers towards participation in CPD programmes at various healthcare facilities (Figure 1). They also cited lack of sponsorship (33%) and relevant information about CPD programmes (23%) as barriers on a national level.

Table 4. Barriers Against CPD Participation by Physiotherapists

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location of libraries to working facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;15 minute-drive</td>
<td>23</td>
<td>46.00</td>
</tr>
<tr>
<td>30-45 minute-drive</td>
<td>1</td>
<td>2.00</td>
</tr>
<tr>
<td>12 hour-drive</td>
<td>1</td>
<td>2.00</td>
</tr>
<tr>
<td>No response</td>
<td>25</td>
<td>50.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Access to the internet</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>39</td>
<td>78.00</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>22.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Access to bibliographic databases</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>25</td>
<td>50.00</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>50.00</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Figure 1. Percentage Distribution of Factors Identified by Participants as Barriers at Health Working Facilities


**DISCUSSION**

The quest for improving the standard of practice among healthcare professionals in developing countries is seen as an attempt to attain the progress achieved in healthcare outcomes in developed countries. 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 Africa as a continent and Ghana in particular. This study aimed to determine the attitudes of the Ghanaian physiotherapists towards engaging in CPD and to identify barriers preventing them from participation.

**Clinical Profile of the Participants**

The majority of physiotherapists sampled for this study had worked clinically less than six years and they ranged in age from 20 to 29 years. This finding attests to the relatively young generation of physiotherapists in this study. Although physiotherapy practice has spanned over five decades in Ghana, the first group of locally trained physiotherapists did not emerge until 2005. This by extension also explains the seemingly tight weekly work schedule, with half of study participants attending to more than 15 patients daily. This finding is not unexpected as most facilities were acutely understaffed with 54% of the participants reporting less than 5 physiotherapists at their various work facilities. This cumbersome working condition could potentially predispose physiotherapists to undue workload and may present serious implications for CPD participation. The observations in this study clearly supported the reports of Twible and Henley, in which the physiotherapist-patient ratio in developing countries of Africa was estimated to be 1:550,000 as compared to an estimated 1:1400 ratio in developed countries.\(^\text{12}\)

**Attitude Regarding CPD Programmes Among Physiotherapists**

The results of this study indicated that a significant proportion of physiotherapists demonstrated good attitudes on the issues pertaining to CPD. It implies that physiotherapists in this study were aware of the concepts and relevance of CPD as a way to improve their practice. More so, as they are mostly young graduates from the university, the desire to engage in further training might be paramount to them. It pre-supposes therefore that their participation was being hindered by determinants other than attitude. Exploration of the attitudes of Radiographers towards CPD by Henwood and Flinton, showed an apparent focus on formal attendance-based activities by the participants with less understanding that CPD also includes on-the-job activities. There is a need for further study to verify this finding.\(^\text{14}\)

**Participant Engagement in CPD**

The study further indicated that half (53%) of the respondents often applied research evidence as a means of improving their clinical decision-making and practices. In much the same way, it has been previously reported that 56% of physiotherapists in Nigeria used professional literature as a means of improving clinical decision-making and practices.\(^\text{13}\) Indeed, the level of research utilization in clinical practice still raises concern across professions. In a related study, it was found that in spite of numerous initiatives to promote evidence-based practice, the assimilation and utilization of research literature among clinical radiographers in the United Kingdom and New Zealand were marred by various factors including intrinsic motivation and low level of understanding of what is perceived to constitute CPD in both countries.\(^\text{14}\) Although the participants in the previous study were radiographers, the same seems to be applicable for physiotherapists in the Sub-Saharan Africa where the gap between research and clinical practice remains very wide.

The majority of the participants also reported regular participation in seminars and workshops to gain more knowledge and skills. This outcome corroborated the previous related finding that 57.5% of the sampled physiotherapists regularly attended workshops, seminars, and conferences in order to implement evidence-based practice.\(^\text{10}\) It can be inferred from the outcomes of the present and previous studies that participation in CPD was recognised by clinical physiotherapists as the only way by which they can improve their professional skills and status in their careers.\(^\text{14}\)

**Barriers Encountered by Physiotherapists Towards CPD Participation**

The common complaints by the physiotherapists as obtained in this study included the non-availability or limited access to libraries and online databases to access literature at their work facilities. Akinbo et al. also found that 28% of physiotherapists in Nigeria reported performing less than two database searches per month.\(^\text{13}\) Although the majority of the physiotherapists had access to general internet connection, lack of online databases in which to obtain up-to-date professional information remains a serious challenge.

In another related view, lack of sponsorship and leadership direction were identified as main barriers at the national level and work facility respectively by physiotherapists in the present study. This outcome is in agreement with the previous study that identified poor staffing level and lack of employer support as the primary barriers to CPD participation in radiography practice.\(^\text{14}\) Others researchers have also cited insufficient time and lack of encouragement from policy makers and managers as the primary...
barriers to CPD participation.\textsuperscript{13,15,16} Meanwhile, it is worth noting that a regulatory council for physiotherapy is yet to be instituted in Ghana. This governmental body would oversee issues related to professional development among physiotherapists. As such, the issues regarding participation in CPD among physiotherapists in Ghana may not be aptly comparable to what occurs in another geographical locations.

**LIMITATIONS**

This study is limited by insufficient literature on the engagement and attitudes of physiotherapists regarding CPD and the barriers to implementation of CPD, particularly in Sub-Saharan Africa. This factor necessitates the need to replicate the present study in other developing African countries in order to establish its external validity. In addition, the instrument adopted in this study was adapted from a related study on evidence-based practice. Although the instrument was tested for test / re-test reliability, the authors could not account for any affects that may have been caused by the slight variations in the questionnaire on the outcomes of this study. It was also difficult to identify and co-opt other private practising physiotherapists who were not registered with the Ghana Association of physiotherapists during the study period. The professional council for allied health professionals, including physiotherapists, is still at the formative stage in Ghana thus, it is likely that few physiotherapists will attach much importance to attending meetings organised by Ghana Association of Physiotherapists.

**CONCLUSION**

Within the limitations of this study, it can be concluded that the majority of the physiotherapists in this study demonstrated good attitudes and moderately active engagement towards CPD. They identified lack of leadership direction and non-availability of relevant CPD courses in their areas of practice as local barriers within their work environment, as well as sponsorship problems and lack of information as constraints on national level. The outcomes of this study could thus serve as useful information to health policy makers regarding the need to embark on health sector reforms with the aim to improve the quality of health services in Ghana.

**REFERENCES**


**KEY TERMS**
Continuous Professional Development, Barriers, Attitude, Engagement
APPENDIX A
Continuing Professional Development Research Questionnaire

Attitudes and barriers towards engaging in continuing professional development among clinical physiotherapists in Ghana

SECTION A: DEMOGRAPHY

Kindly provide the following informations about yourself, professional qualifications, position or rank and number of years in physiotherapy practice.

1. Age……….
2. Sex: ………
3. Qualification(s): …………………………………………………………………………..
4. Position or Rank………………………………………………………………………….
5. Please indicate your current facility in which you practice:
   a. Teaching hospital
   b. Regional hospital
   c. Designated district hospital
   d. Private hospital
6. How long have you been practicing physiotherapy?
   a. <1 year
   b. 1-5 years
   c. 6-10 years
   d. 11-15 years
   e. >20 year

SECTION B: CLINICAL PRACTICE ISSUES

7. Please indicate your primary area of practice:
   a. Orthopaedics ( )
   b. Paediatrics ( )
   c. Burns ( )
   d. Neurological unit ( )
   e. Medical ( )
   f. Sports ( )
   g. Other (s) specify…………………………….
8. How many hours per week do you work?
   a. <20 hours
   b. 20-30 hours
   c. 31-40 hours
   d. >40 hours
9. How many patients do you attend to daily?
   a. <5
   b. 5-10
   c. 11-15
   d. >15
10. How many physiotherapists are there in the facility where you work?
   a. <5
   b. 5-10
   c. 11-15
   d. >15

SECTION C: ENGAGEMENT, ATTITUDES AND BARRIERS
Engagement in CPD-related activities

Please tick (✓) the box that best suits your answer.

11. On the average, how many hours per week do you spend reading your professional literature?
   a. None
   b. Between 1-3 hours
   c. Between 4-6 hours
   d. Between 7-9 hours
   e. 10 hours and above

12. How often do you make use of research evidence from such literature to improve your clinical decision-making and practices?
   a. Very often
   b. Often
   c. Not often
   d. Not at all

13. How often do you review your skills?
   a. Never, I leave it to my employer
   b. Annually, when I am appraised
   c. Every six months
   d. Continuously

14. Since leaving school, have you undertaken any additional formal education? Yes/ No

15. Do you regularly participate in CPD courses? Yes/ No

16. Have you attended any seminar, course, work-shop or conference in the last 3 months? Yes/ No

Attitude towards CPD

Please underline any of the following options to indicate your response:

17. Continuous Professional Development is another perspective of clinical effectiveness:
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree

18. Continuous Professional Development is an integral aspect of being a modern healthcare professional:
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree
19. Practitioners should be motivated to engage in CPD:
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree

20. CPD incorporates clinical proficiency as well as non-clinical activities such as information technology, management, leadership and communication skills:
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree

21. There is a need for the Ghana Association of Physiotherapists (GAP) to have a policy on CPD for Physiotherapists?
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree

22. The adoption of CPD, though worthwhile as an idea, imposes another demand on already overloaded clinicians:
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree

23. CPD occurs on the job through day-to-day experience, performance reviews, journal clubs, peer discussion, in-service training, critical reading and personal reflection:
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree

24. CPD is only useful to physiotherapists in Academics.
   a. Strongly Disagree
   b. Disagree
   c. Agree
   d. Strongly Agree

**Barriers towards participating in CPD**
Please provide answers to the following questions as found appropriate.

25. How long does it take you to get into the staffed medical/healthcare library?
   a. Less than 15 minutes
   b. Between 30 and 45 minutes
   c. About one hour
   d. Half-a day walking distance
   e. Not applicable

26. Do you have access to the internet? Yes/No

27. Do you have access to any bibliographic databases (e.g. Pedro, Medline, Physiobase, etc)? Yes/No

28. What do you think are the major barriers towards Continuous Professional Development at your area of practice?
   ..............................................................