Physiotherapists as supplementary prescribers: Opinion of Nigerian doctors

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Abstract: In Nigeria, doctors have the sole primary responsibility of prescribing medications for patients, contrarily, in the United Kingdom (UK), physiotherapists have advanced from being supplementary prescribers in 2005 to independent prescribers in 2012; and this was aimed at improving patient’s accessibility to medications. The primary aim of this study was to investigate the opinion of Nigerian medical doctors on physiotherapists assuming the roles of supplementary prescribers. A self-administered questionnaire was used to seek opinion of 372 medical doctors in purposively selected hospitals. Descriptive statistics of frequency, percentages, mean, standard deviation and chi-square were used to analyze the data. Two hundred and twenty-two doctors (59.7%) were unaware that physiotherapists are supplementary prescribers in UK. The number of respondents (55.1%) who objected to physiotherapists becoming supplementary prescribers was significantly higher than those who supported it (X² -3.88, p = 0.05). Amongst to that supported supplementary (44.9%) prescription for physiotherapists, 98.2%, 72.5% and 58.7% opined that physiotherapists should be allowed prescribe analgesics, NSAIDs and muscle relaxants respectively. Only 4 doctors (1.1%) supported the prescription of anti-hypertensive drugs. We concluded that most medical doctors are unaware that physiotherapists as supplementary prescribers in UK and majority of them objected to Nigerian physiotherapists being recognized as supplementary prescribers.

Keywords: Supplementary Prescribers, Physiotherapists, Doctors, Nigeria, Medications

1. Introduction

The first major step of improving effective health care services is an inter-professional understanding of other member’s unique role and contributions with patients’ interest upper most. Each provider should be aware and knowledgeable of the skills of the other members [1]. Physiotherapy is a dynamic profession and the scope of practice is expanding, especially in United Kingdom. The Crown report in United Kingdom (UK) recommended that specialist physiotherapists be extended prescribing rights [2]. Hence, physiotherapists in the UK were legislated to be supplementary prescribers in 2003 and in 2013 they were elevated to independent prescription status [3]. This is currently posing challenges to the dominance of medical doctors who have the primary authority to prescribe medicines in Britain [4], [5]. Although, the primary responsibilities of doctors to assess and diagnose clinical conditions; decide clinical management plans and prescribe as appropriate is still intact.

The supplementary prescriber will be responsible for the continuing care of patients who have been clinically assessed by an independent prescriber and this is after a clinical management plan has been developed in conjunction with the patient [6]. Supplementary prescribing has given doctors in UK opportunity to concentrate on critically ill patients who
2. Materials and Method

2.1. Study Settings

The doctors were drawn from 4 University Teaching Hospitals, 1 Federal Medical Centres, 2 state hospitals and 1 private hospital.

2.2. Sample

The sample comprised 372 practicing doctors in purposively selected hospitals. The major inclusive criteria are that the doctors must be licensed to practice in Nigeria and must have at least one year experience. Those that were not willing to answer the questionnaire immediately were excluded from the study.

2.3. Sampling Technique

The doctors were sample of convenience.

2.4. Research Design

This study was a quantitative cross sectional survey.

2.5. Instrument

The instrument used in obtaining information for this study was a modification of a self-administered questionnaire used by Onigbinde et al [12]. This questionnaire took into account the demographic details of the subjects, opinion and attitude towards prescription of relevant medications by physiotherapists. The questions were made simple and unambiguous for easy understanding. A draft of the questionnaire was pilot tested among five doctors who were exempted from the main study. They were implored to review and assess the content of the questionnaire for accuracy, precision and to determine the appropriateness of the questions for the objectives of the study. Changes were made based on their corrections and advice. The revised version of the questionnaire was used for data collection.

2.6. Procedure

Ethical approval was granted by the Research and Ethics Committee of the Institute of Public Health, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria (IPH/OAU/12/154). Also, permission was granted by the Heads of departments of the study settings. The copies of questionnaire were administered to the subjects and in order to maintain anonymity, subjects’ name and address were not requested for in the questionnaire. Section A of the questionnaire requested for the demographic and academic related data, section B was used to determine the current awareness of medical doctors on supplementary prescription. Section C was used to determine the perception of medical doctors on which sources would improve the pharmacological knowledge of physiotherapists while section D was used to assess the opinion of medical doctors on reasons for changing prescription status of physiotherapists. There was no time limit for the completion of the questionnaire.

2.7. Data Analysis

The copies of questionnaire were collated and entered into Statistical Package for Social Sciences (SPSS) software version 17 of a password protected computer, which only member of the research team had access to. A descriptive statistics (frequency, percentages, mean and standard deviation) were used to analyze the data.

The non-parametric statistics (chi-square test of Association) was used to determine association between years of experience and frequency of respondents who supported enlistment of physiotherapists as supplementary prescribers. Also, chi-square was used to compare the number of respondents who chose options of yes and no to each opinion.

3. Results

There are 279 (75%) male and 93 (25%) female doctors. The demographic data, qualifications, study settings and years of clinical experience are presented in Table 1. The majority, 222 (59.7%) of medical doctors are unaware that physiotherapists are supplementary prescribers in UK. Also, 205 (55.1%) objected to changing the prescription status of physiotherapists in Nigeria to that of supplementary...
prescribers. The number of respondents who objected was significantly higher than those who supported it ($X^2 = 3.88, P = 0.05$). However, there was no significant association between years of experience and the frequency of respondents who supported enlistment of physiotherapists as supplementary prescribers (Table 2).

Among 167 that supported change in prescription status, 164 (98.2%), 98 (58.7%) and 121 (72.5%) doctors opined that physiotherapists could prescribe analgesics, muscle relaxants and NSAIDs respectively. Responses on other classes of drugs are represented in figure 1. The majority of doctors [$272 (73.1\%)$] and $188 (50.5\%)$ opined that reviewing current school curricular and continuing professional development programmes respectively might improve the pharmacological knowledge of physiotherapists. Responses on other sources of acquiring improvements are in Table 3. Furthermore, 137 (36.8%) doctors opined that patients would benefit from a combination of medications and physiotherapy and 121 (32.5%) opined that physiotherapists would be relevant as supplementary prescribers for certain chronic conditions. Very few respondents [42 (11.3%)] reported that it would be cost effective while only 22 (5.9%) opined that drug alone would be effective. Responses on other reasons why prescription status should change are in Table 4.

![Bar chart showing the percentage of doctors who supported the change in the prescription status of physiotherapists.](chart.png)

**Figure 1. Opinion on the classes of drugs physiotherapists should prescribe (Multiple Choice Questions)**

### 4. Discussion

Supplementary prescription is a policy that had been reported to meet the desired goal of achieving modern day health care services [4]. In the UK, it is a positive development in modern day health care but it requires educational training for allied health professionals because some were perceived to lack adequate pharmacology knowledge, counseling and clinical diagnostic skills while the doctors retain the responsibilities of ensuring patient’s safety under the supplementary prescription policy [3].

A significant proportion of the doctors objected to changing the prescription status of physiotherapists to supplementary prescribing. In the UK, Crown report recommended that specialist physiotherapists should be extended prescription rights [13]. Our current finding showed that more than half of respondents were unaware that specialist physiotherapists are supplementary prescribers in UK; suggesting that there might be opposition from doctors towards enlisting physiotherapists as SPs in Nigeria. This objection might be attributed to their lack of awareness about the roles and effectiveness of physiotherapists in supplementary prescribing outside Nigeria. In health care services, learning about other professions is the first step towards achieving the desired goals but many professionals are remarkably unaware of developments and scope of practice of others [1].

<table>
<thead>
<tr>
<th>Table 1. Respondents' Demographics and Academics Related Data</th>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td>Male</td>
<td>279</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>93</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>MBBS</td>
<td>151</td>
<td>40.6</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>10</td>
<td>2.7</td>
</tr>
<tr>
<td>Qualifications:</td>
<td>PhD</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>Resident doctor</td>
<td>191</td>
<td>51.3</td>
</tr>
<tr>
<td></td>
<td>Fellow</td>
<td>19</td>
<td>5.1</td>
</tr>
<tr>
<td></td>
<td>Teaching Hospital</td>
<td>294</td>
<td>79.0</td>
</tr>
<tr>
<td></td>
<td>State Hospital</td>
<td>38</td>
<td>10.2</td>
</tr>
<tr>
<td>Work Settings:</td>
<td>Private Hospital</td>
<td>3</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Academics</td>
<td>4</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>33</td>
<td>8.9</td>
</tr>
</tbody>
</table>

| Table 2. Awareness and change of prescription status to supplementary prescribing |
|---|---|---|---|
| Awareness | Yes | 149 | 40.1 |
| | No | 222 | 59.7 |
| Change status: | Yes | 167 | 44.9 |
| | No | 205 | 55.1 |

| Table 3. Opinion on sources that can improve physiotherapists' pharmacological knowledge (Multiple Choice questions) |
|---|---|---|
| Variables | Frequency | Percentage (%) |
| Current School Training | 157 | 42.2 |
| Reviewing School Curricular | 272 | 73.1 |
| DPT | 77 | 20.7 |
| Seminar & Workshop | 151 | 40.6 |
| Transitional DPT | 43 | 11.6 |
| Professional development | 188 | 50.5 |

In UK, Bissell et al had earlier reported that doctors and patients were perceived to lack awareness of supplementary prescribing [3]. A similar trend was observed among members of Australian medical association in 2012 when Australian physicians rejected the growing trend of granting prescribing rights to non-medical health professionals [11]. Amongst doctors that supported supplementary prescription roles for Nigerian physiotherapists, almost all respondents opined that physiotherapists should be allowed...
to prescribe analgesics and NSAIDs while more than half of
them supported prescription of muscle relaxants. Moore et al
and Grimmer et al reported that the most recommended
medications for musculoskeletal dysfunctions by
physiotherapists in Australia are NSAIDS [14,15]. The
support for prescribing muscle relaxant may be attributed to
the recognized role physiotherapists play in management of
spasticity experienced by stroke survivors and spinal cord
injured patients.

Almost all respondents did not support prescription of anti-
hypertensive, anti-diabetics and OTC drugs. We felt the
doctors in this study were biased. They still objected to
prescription of common OTC drugs which non-health
professionals can purchase without prescription. Lansbury
and Sullivan observed that physiotherapists frequently advise
and prescribe over the counter (OTC) medications to their
patients [16]. In Nigeria, during home rehabilitation, most
patients rely on physiotherapists to give advice or prescribe
medications especially anti-hypertensive, muscle relaxant
and OTC (Over-The-Counter) drugs as they may be without
timely access to review of medications by doctors. Chartered
Society of Physiotherapists reported that restriction in
prescription by physiotherapists would not be desirable for
effective rehabilitation programme [7].

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Percentage (%)</th>
<th>Valid percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits: Improvement in patient’s care</td>
<td>108</td>
<td>29.0</td>
<td>64.7</td>
</tr>
<tr>
<td>Benefits from combined therapy</td>
<td>137</td>
<td>36.8</td>
<td>82.0</td>
</tr>
<tr>
<td>Reduced doctor’s Load</td>
<td>79</td>
<td>21.2</td>
<td>47.3</td>
</tr>
<tr>
<td>Management more accessible</td>
<td>82</td>
<td>22.0</td>
<td>49.1</td>
</tr>
<tr>
<td>Doctors concentrate on critical illness</td>
<td>54</td>
<td>14.5</td>
<td>32.3</td>
</tr>
<tr>
<td>Cost effectiveness</td>
<td>42</td>
<td>11.3</td>
<td>25.2</td>
</tr>
<tr>
<td>Physiotherapy alone is inadequate</td>
<td>80</td>
<td>21.5</td>
<td>47.9</td>
</tr>
<tr>
<td>Drug alone is effective</td>
<td>22</td>
<td>5.9</td>
<td>13.1</td>
</tr>
<tr>
<td>Reduces patient’s Waiting time</td>
<td>81</td>
<td>21.8</td>
<td>48.5</td>
</tr>
<tr>
<td>Increase confidence in physiotherapy</td>
<td>54</td>
<td>14.5</td>
<td>32.3</td>
</tr>
<tr>
<td>Relevance: Chronic conditions</td>
<td>121</td>
<td>32.5</td>
<td>72.5</td>
</tr>
<tr>
<td>Acute conditions</td>
<td>53</td>
<td>14.2</td>
<td>31.7</td>
</tr>
</tbody>
</table>

*% based on the frequency of those that supported change in prescription status

A large number of doctors among those that supported
prescribing role for physiotherapist opined that
physiotherapists would be relevant in chronic conditions and
that there would be improvement in patient’s care and
effective clinical practice if physiotherapists are SPs. However, almost all the doctors supported multi-disciplinary
approach and also recognized the different goals of
individual team members as they opined that medications
alone would not be effective for patients.

Reviewing current school curricular was the major source
identified by the doctors as a means of improving
physiotherapists’ pharmacological knowledge and this was
similar to the opinion shared by physiotherapists [12]. The
Nigeria society of physiotherapy will have to provide
opportunity for the training of specialists with interest in
pharmacophysiotherapy and who will be willing to be
supplementary subscribers. The current pharmacology
undergraduate physiotherapy training in Nigeria may not be
sufficient to assume the position of SP [12].

The major reasons given by CSP in UK and also previous
reports were that supplementary prescription would reduce
waiting time of patients, burden on doctors, be cost effective
and would give opportunity for doctors to concentrate on
critically ill patients [3,4,12,17]. However very few doctors
(11.3% - 22.0%) in this study shared similar opinion. We
considered these opinions to be deficient for Nigeria to meet
the required modern day health care policy. The doctor-
patient ratio in Nigeria was 1:6400 as against the World
Health Organization (WHO) standard of 1:600 and this
remains a huge challenge despite graduating between 2,500
and 4,000 new doctors annually [10]. Most Nigerian doctors
are working in the United States, Britain, South Africa, and
other neighbouring African countries because of poor
working conditions. In 2013 there are only 25, 000 doctors in
the country out of 65, 000 registered by Nigerian Medical
Council [10]. These showed that Nigerian doctors are being
overworked and there may be difficulties for patients to have
accessibility to them for prompt and adequate medical
interventions

We concluded that most medical doctors were unaware of
the prescription status of physiotherapists as supplementary
prescribers in UK. Also, Nigerian doctors objected to
granting supplementary prescription rights to
physiotherapists, although, majority opined that if current
school curricular were reviewed, it would improve
pharmacological knowledge of physiotherapists.

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