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Abstract

Background: The profession of Physiotherapy has been defined by the "World Confederation for Physical Therapy" (WCPT) as the services provided to individuals and populations to develop, maintain or restore an optimal functioning throughout the life. The "Order of Physiotherapists in Lebanon" (OPTL) is called to provide a high quality of service by focusing on standards.

Aims: The aim of this study was to assess the feasibility and applicability of a standard for the quality assessment of physiotherapy centres, and assess the current status of a sample of centres in Lebanon.

Methods: A questionnaire was developed by an expert panel based on review of international and national requirements in physiotherapy centres. A set of 14 items were generated covering three different categories: Qualifications of team, Facility and environmental status, and Data collection and analysis. A pilot study was then conducted from December 2013 to February 2014 in six Lebanese physiotherapy centres. Descriptive statistics were reported.

Results: The highest median score and compliance for the six centres were reported in the ‘Facility and Environmental Status’ category (median = 8.0) and the lowest were reported in the ‘Data Collection and Analysis’ category (median = 5.0).
Conclusions: Further studies are needed to validate the ‘Quality Assessment in Physiotherapy Centers’ questionnaire and to implement it as a primary tool for assessing the quality standards and for accreditation of physiotherapy centres.

Keywords: quality assurance; physiotherapy; Lebanon; questionnaire, physical activity

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Introduction

Physiotherapists operate as independent practitioners as well as members of healthcare service provider teams, and are subject to the ethical principles of the World Confederation for Physical Therapy (WCPT) and the codes of ethics of the country in which they practice. The WCPT encourages its member organizations to support and work toward unified education and practice guidelines (1). Physiotherapists should implement quality monitoring tools such as clinical indicators (2) that would enable individual practitioners to evaluate their performance against that of their peers. While international bodies have common programmes or policies, such as the European, American and Australian regions of the WCPT, Lebanon still lacks a unified platform upon which different private physiotherapy practitioners can base and apply their knowledge and practice.

Evaluation of healthcare is being scrutinized by both the government and consumers, and more precisely the patients (3). Consequently, plans to tackle health quality have gained a momentum over the last few years, and the need for accreditation has become more prominent to measure up to high standards of performance and to avoid inconsistencies between different private centres. Hence, accreditation of physiotherapy centres would promote collaboration, boost consistency for more homogenized practice, and enhance quality of services.
As per the Order of Physiotherapists in Lebanon (OPTL), Lebanon includes more than 100 private physiotherapy centres, but unlike academic institutions (i.e., hospitals or medical centres), they are not under the control of any international or local assessment bodies. Consequently, a collaboration was initiated between the OPTL and the Quality Systems International (QSI) in order to prepare a standardized platform for “Quality in Physiotherapy”.

Quality Systems International (QSI) is a quality consultancy company working on the development and improvement of the quality infrastructure of healthcare companies, institutions and organizations. It was assigned by the OPTL to work with the research and quality committee of the Order named Research Center for Quality in Physiotherapy (RCQPT). The committee included five expert physiotherapists, and members of the OPTL, who have extensive experience in physiotherapy centres quality or postgraduate degrees in quality management.

The rationale behind this standardized platform was to build a quality management system, part of an accreditation plan, for the private Lebanese physiotherapy centres based on the primary requirements promulgated by the OPTL experts and the Lebanese Ministry of Public Health (MOPH) upon inspection, as well as on available international guidelines. This programme would enable the private centres to upgrade their systems and secure safe and professional treatment to patients/clients. In this setting, a tool for the quality assessment of physiotherapy centres was developed.

The aim of this study was to pilot and test the assessment tool in a sample of six private physiotherapy centres in order to evaluate its feasibility and applicability in the quality of services audit setting. The study also aimed at assessing the current situation of physiotherapy centres in Lebanon.

**Methods**

**Development of the Quality Assessment in Physiotherapy Centers questionnaire**

A set of 47 items were originally generated by QSI based on the requirements of MOPH and the Order of Physical Therapy in Lebanon. The items covered categories of “Qualifications of the team” (15 items), “Facility and environmental status” (19 items) and “Data collection and analysis” (13 items). The 47 items were answered on a 3-point Likert scale based on criteria fulfillment (0 – no/not fulfilled, 1– partially/partially fulfilled, and 2 – yes/completely fulfilled). The questionnaire was translated and adapted into Arabic by three independent professional translators. Backward translation was applied to all items of the scale. Translation inconsistencies were resolved by consensus in collaboration with QSI. Content validity of the resulting version was assessed by the RCQPT members who were not involved in the initial
items development. Experts were asked to rate the relevance of each item on a 4-point Likert scale from 1 “not relevant” to 4 “very relevant”. Content validity index (CVI) for each item was calculated as the proportion of experts rating either three or four (quite relevant and very relevant, respectively), divided by the total number of experts. All items with a CVI of 0.8 or above were retained (4). Consequently, 33 items were discarded and the final questionnaire used for the assessment of the physiotherapy centers consisted of 14 items (Annex1).

Pilot testing of the assessment tool

A pilot study was conducted from December 2013 to February 2014 to assess the feasibility and applicability of the 14 item-questionnaire for the audit of physiotherapy centres quality of services. Out of the 100 physiotherapy centres, QSI agreed with the OPTL to select six centres from the different Lebanese districts based on the following varying criteria: an average number of employees ranging from one employee (owner of the centre) to 10, and the center’s experience in terms of practicing period ranging from a few months to more than two years. The centres were selected from four districts in Lebanon: two from Beirut, two from South, one from the north and one from Bekaa. Two independent trained investigators from QSI audited the six centres and filled out the prepared questionnaire.

Statistical analysis

Statistical analyses were descriptive in nature and generated by IBM SPSS Statistics, Version 22.0. (Armonk, NY: IBM Corp). Median score was calculated for each item, for each category, and for the total score. The category score was calculated by summing all individual items scores in the category, while the total score was calculated by summing all three category scores.

Results

On average, the questionnaire was completed within approximately two hours including inspection of the premises. The investigators did not report any difficulties or ambiguity in responding to the items as they were grouped into distinct categories. Data was complete for all six centres.

The median score of the "Qualifications of the Team" category for the six audited physiotherapy centres was 4.0. The majority of the physiotherapy centres were not compliant with the “availability of an Orientation Manual/ Checklist for new staff” standard (median score = 0.0) and the highest score was for the “management of the physiotherapy centre by a qualified individual” standard (median score = 2.0). Regarding the “Facility and environmental status” category, the median score was 8.0 and the physiotherapy centres were compliant with most of the requirements of this category, with a median score ranging between 1 and 2 on the different
Concerning the “Data collection and analysis” category, the median score was 5 among the six centres. The median score on each of the different items ranged between 0 and 1 reflecting average compliance. The majority of the physiotherapy centres were not compliant with the “The data collected been used for research purposes” standard (median = 0.0) (Table 1, Table 2, and Table 3).

Discussion

Accreditation is a system through which an institution is evaluated based on a set of pre-determined standards (5). It aims at advocating quality progress and it is usually authorized by either independent specialized agencies or by governmental bodies. It is increasingly being used as an assessment tool by the Government to regulate the quality of healthcare services. Accreditation programmes appear to enhance the patients’ care and improve their clinical outcome. Unfortunately, a study performed by the World health Organization in 2000 highlighted the lack of accreditation in the Middle East (6).

The pilot study verified the feasibility of the quality assessment questionnaire based on the ease of its completion and the relevance of the included items in assessing the centers’ conformity with quality standards. The ease of completion was not dependent on the region or area where the centre was located; thus, the applicability of the tool on a national level. In addition, the questionnaire was based on national and international requirements, which has ensured the exhaustiveness of the functional areas it covers.

Compliance was highest in the second category “Facility and environmental status” with a median score of 8.0. However, we identified a lower score on the “Availability of a schedule for equipment validation and checking” standard, which reflects the lack of maintenance and calibration of the equipment and machines in most of the included centres.

Regarding the “Qualification of the team” category, a relatively low compliance was observed, mainly driven by the low score on the “Availability of an Orientation Manual/ Checklist” standard in the majority of the centres.

The “Data collection and analysis” category scored the lowest among all the studied categories.
Centres were only partly engaged in using the collected data for research purposes. Moreover, there was a lack of information on patient satisfaction that could help the centres to improve their performance by enhancing the patients’ experience.

In this setting, clinical physiotherapy research would play an important role for the sake of ensuring continuing growth of the profession. Indeed, numerous authors have advocated the need to base the physiotherapy practice on scientific evidence (7). Physiotherapists are expected to evaluate published studies, to assess data related to new and established techniques and technology, relate the results to patient or consumer care, and engage in scholar activities.

One of the limitations of this study was associated with the scoring method due to the presence of dichotomous items (i.e., the “Availability of a patient / client satisfaction survey” standard can only be scored with 0 or 2). In addition, the results reported above cannot be generalized to all Lebanese physiotherapy centres because the study included a small sample size of only six centres. Further studies should be conducted in order to validate the quality assessment tool and to involve a broader number of physiotherapy centres throughout Lebanon. Moreover, emphasis should be made on the recognition by the MOPH and the OPTL of the quality assessment tool as a compelling instrument for accreditation purposes and work permit authorization.

**Conclusion**

The study showed that the quality assessment questionnaire is easy to use and relevant in terms of the functional areas it covers when assessing the quality of services in physiotherapy centres in Lebanon. Further studies are needed to validate the tool and to get a better insight into the current situation of physiotherapy centres in Lebanon in order to tailor plans for improving the quality of services.

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Conflicts of Interest: None declared.

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