

PARTICIPATION LEVEL OF NIGERIAN PHYSIOTHERAPISTS IN CLINICAL RESEARCH

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ABSTRACT

Research is a systematic process of investigation with the purpose of contribution to the body of knowledge that helps to shape and guide an academic and/or clinical discipline. This study investigated the participation level of selected Nigerian physiotherapists in clinical research.

Clinic physiotherapists from one orthopaedic, 4 teaching and 2 general hospitals in south western Nigeria participated in this study. A 21-item, structured, close-ended questionnaire was used to obtain information such as: research training and publication history; beliefs and attitudes of respondents to research. Factors hindering or facilitating their participation in research were also investigated. Data were analysed using mean and frequency percentage.

Seventy-two (72%) duly completed questionnaires were returned. Sixty-nine (95.8%) of the respondents had research training and submitted dissertations at their undergraduate training level; 31 (43%) had never done any post-basic research work, while only 14 (19.4%) had had one or more publications in professional journals. Lack of research funds (83.7%), poor library facilities (65.3%), lack of necessary equipment (62.2%), time constraints (55.1%), and lack of prerequisite training to carry out research work (16.3%) were some of the factors that hindered their participation

in research.

The study concluded that Nigerian physiotherapists appreciate the relevance of research to their clinical practice, in spite of the rather low level of participation. It was recommended that clinicians should be encouraged to undergo postgraduate training, and attend seminars and workshops to sharpen their research skills. It is also important that they are well educated about the possibilities of simple non equipment-based clinical studies.

Key words: clinical research, postgraduate training, academic physiotherapy teacher, physiotherapy clinicians

INTRODUCTION

Research has been described as a systematic process of investigation, with the aim of contributing to the body of knowledge that shapes and guides academic and or clinical disciplines.¹ Clinical research, according to Esho,² is a systematic search for facts or the scientific investigation of a matter directly related to the overall care of patients.

Physiotherapy is the clinical profession concerned with the evaluation and treatment of surgical, medical and paediatric conditions using physical methods and agents, as opposed to surgery or the use of oral and injectable drug preparations.

As a clinical professional, the physiotherapist does not only need to acquire skills and knowledge, but also to update his knowledge and continually seek ways of improving his treatment modalities. This is ensured by carrying out scientific enquiries into the rationale behind the use of his skills and modalities. It is therefore important that physiotherapists carry out research regularly.

Health professionals, physiotherapists inclusive, are expected to integrate research findings and change practice accordingly.³ The benefits from clinical research can only be maximized when research findings are published in scholarly journals. Although techniques developed by individual professionals, especially through research and clinical trials, may be properly transmitted hand-to-hand, publication allows critical review and prevents disreputable ad-hoc use.⁴

In Nigeria, one of the principles and code of conduct of professional physiotherapy requires the physiotherapist, where possible, to carry out research from time to time on the method and value of modalities used in the practice of his profession.⁵ A casual observation of publications by Nigerian physiotherapists showed that most of such publications on clinical research are by academic physiotherapy teachers, which may lead to drawing the inference that clinical physiotherapists do not carry out research. Such an inference would, however, be based largely on conjecture and reasoning as there is no information on any objective study on the participation of Nigerian clinical physiotherapists in research. The aims of this cross-sectional survey study were, therefore, to (a) assess the level of participation of clinical physiotherapists working in selected hospitals in Western Nigeria in clinical research; (b) study their beliefs in clinical research; and (c) identify factors that facilitate or hinder their participation in research activities.

MATERIALS AND METHOD

Selection of Subjects

A purposive sampling technique was used to select the four first-generation teaching hospitals in south western Nigeria, namely: University College Hospital (UCH) Ibadan, Lagos University Teaching Hospital (LUTH), Obafemi Awolowo University Teaching Hospital (OAUTH) Ile-Ife, and University of Benin Teaching Hospital (UBTH) Benin City. The only national orthopaedic hospital in the region, i.e. the National Orthopaedic Hospital (NOH) Igbobi,

Lagos was also purposively sampled. Two general hospitals with physiotherapy clinics in the region were selected using a simple random sampling technique. These are Ring Road State Hospital, Ibadan and General Hospital, Ikeja.

A total of one hundred questionnaires were distributed by hand. We used the information about the population of clinicians in the participating hospitals, as obtained from the respective heads of physiotherapy, to determine the number of questionnaires to distribute in each hospital. Physiotherapy interns were excluded from the sampled subjects.

Instrument for Data Collection

The instrument used for data collection was a 21-item structured close-ended questionnaire. The questionnaire was divided into two sections. Section A sought demographic information about the respondents as well as information about their research and publications history. Section B comprised eleven close-ended statements aimed at obtaining information on the beliefs and attitudes of the respondents to research, and factors facilitating or hindering their participation in clinical research activities. Respondents were asked to indicate their agreement or otherwise with each of the eleven statements by checking 'Agree' or 'Disagree' as appropriate.

Data presentation

Data are presented using descriptive statistics of mean and frequency percentage.

RESULTS

A total of 91 respondents returned the questionnaire but only 72 duly completed the questionnaires. The results presented in this paper are with respect to the 72 respondents only. The years of qualification of the clinicians ranged between 3 and 24 years (mean = 6.76 years). Ten (12.2%) of the respondents had either obtained a Master's degree or were currently enrolled in a Master's degree programme, 7 (8.5%) had obtained a postgraduate certificate, and none had a doctorate degree either in physiotherapy or a related field.

Table 2 shows the history of research training, practice and publications of the respondents. As shown in this table, only a small percentage (4.2%) of the respondents did not write and submit a dissertation in partial fulfillment of the requirements

for their degree. This percentage is constituted by those who obtained the training for their basic physiotherapy qualification abroad. However, out of the 43.0% who had ever been involved in research work, only 19.4% of the respondents had ever published in professional journals. The opinions of the respondents about factors facilitating or hindering their participation in research, as well as their attitudes about clinical physiotherapists carrying out research studies are shown in table 3.

Table 1. Working Status and Clinical Settings of the Respondents

	Number	%
Clinical Setting		
Teaching	32	44.4
General	26	36.0
Specialist	14	19.4
TOTAL	72	100.0
Working Status		
Physiotherapist	46	63.8
Senior Physiotherapist	12	16.7
Principal Physiotherapist	7	9.7
Assistant Chief Physiotherapist	5	6.9
Chief Physiotherapist	2	2.7
TOTAL	72	100.0

Table 2. History of Research Training, Research Practice and Publication of the Respondents

	YES		NO	
	n	%	n	%
Research Training and Dissertation at Undergraduate training level	69	95.8	3	4.2
Post basis physiotherapy research work	31	43.0	41	56.9
Any publication in profession journals	14	19.4	58	80.6
Regular Subscription in professional journals	38	52.7	34	47.2
Any benefits from reading professional journals	57	79.2	15	21.0

Table 3. The Respondents' Beliefs about Participation in Research

	Agree		Disagree	
	n	%	n	%
Clinicians need special research training	32	44.4	40	55.6
Clinicians should carry out research	68	94.4	4	5.6
Research would enhance clinical practice	6	94.4	4	5.6
Research is responsibility of APTs only	6	8.3	66	91.7
Clinicians should carry out research with APTs	9	12.5	63	87.5
Research reports use language different from routine clinical language	8	11.1	64	88.9

Key: APT = Academic Physiotherapy Teacher
Clinicians = Physiotherapy Clinicians

The factors the respondents claimed hindered their participation in research in descending order were: lack of research funds (83.7%) poor library facilities (65.3%), lack of equipment (62.2%) time constraints (55.1%) and lack of prerequisite training to carry out research work (16.3%).

DISCUSSION

In this study, approximately one-sixth of the questionnaires distributed were not returned. This gave a return rate of approximately 87%. The respondents and non-respondents were spread across all hospitals involved in the survey.

Nearly all the respondents indicated that they wrote and submitted a dissertation in partial fulfillment of the requirements for the award of their basic physiotherapy degree, an indication that they were trained in the act of research and research reporting. Yet nearly half of them (44.4%) believed that clinicians need special training to be able to carry out research. This observed trend could imply that the respondents merely submitted dissertations for the sole purpose of obtaining an academic degree, without absorbing the lessons and imbibing the culture of research as a tool to further develop their profession. It had earlier been submitted that

undergraduate research work does not necessarily translate to a post-basic qualification research habit.⁶

Our results also showed that only a small percentage of the clinicians have obtained post basic academic qualifications. This may be an indication of the opportunities available to the surveyed physiotherapists for further academic training and also a reflection of how well they take advantage of the postgraduate facilities available to them. The non possession of higher qualifications may also be due to the fact that the acquisition of a higher degree in physiotherapy in Nigeria does not necessarily translate to better conditions of service, such as promotion, as contained in the Physiotherapy Scheme of Service in Nigeria.

Whereas almost all the respondents believed that clinicians should carry out research work and also indicated that such endeavours would enhance their clinical practice, less than half of them had undertaken any clinical research since graduation. Among these, only a few have ever been published in learned journals. The advancement of a profession is said to be dependent on the body of knowledge, theory and research-based practice at its disposal.⁷ It has also been observed that for the findings of any research study to be legitimately considered as research, they must become public knowledge through publication.⁴

A substantial number of the clinicians claimed that reading physiotherapy publications have enhanced their clinical practice, yet only about one-third subscribed regularly to physiotherapy, rehabilitation or medical related journals. This could also be an indication that they lack the motivation to carry out research work. The remaining two-thirds probably obtained journals to read from their colleagues, departmental libraries or the teaching universities to which their hospitals are affiliated (in the cases of physiotherapy clinicians working in teaching hospitals).

Time constraint, poor library facilities and lack of equipment were cited as some of the factors that have hindered participation in research. Lack of research funds was, however, the highest on the list. It may thus be argued that the provision of research funds might improve participation in research, especially as the respondents indicated that they had the prerequisite training to carry out research. The fact that time constraint was cited as a discouraging factor could be an indication of the heavy clinical workload of the respondents, probably due to

manpower shortage, or poor time management among the surveyed clinicians. Lack of research training and poor access to library facilities have been documented in past studies involving nursing^{8,9} and physiotherapy⁶ as constituting hindrances to research endeavours. It is also possible that some physiotherapy clinicians are still of the opinion that research is synonymous with heavy machinery, equipment and laboratory experiments. Only a small proportion of the respondents (8.3%) were of the opinion that research is the responsibility of academic physiotherapy teachers only.

The fact that the study was limited to only one region of the country may preclude the generalization of our findings to the entire country. It is, however, likely that the characteristics of the participants would not be different from those of the physiotherapists in other regions of the country.

CONCLUSION AND RECOMMENDATIONS

Based on the findings of this survey, we concluded that Nigerian clinical physiotherapists, in spite of their rather low level of participation in clinical research, appreciate its relevance to clinical practice. It was also observed that clinicians are not undergoing postgraduate training, an activity that could enhance the research habit.

We therefore recommend that clinicians should be encouraged to undergo postgraduate training and attend seminars, workshops and certificate courses in research methodology to sharpen their research skills. Adequate provision should also be made to obtain journals, equipment and funds to encourage research participation. In addition, collaborative arrangements should be made between academic physiotherapy teachers and clinical physiotherapists to promote the research activities of the latter.

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