



Patients' Attitude towards Involvement of Clinical Physiotherapy Students in their Management in Selected Teaching Hospitals in Nigeria

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Abstract

Clinical physiotherapy education is a vital component of physiotherapy students' training. However, patients can refuse students' involvement in their management, thus negatively affecting clinical physiotherapy education. This study was conducted to investigate patients' attitude towards involving physiotherapy students in their care and the factors that can influence it in Nigeria. A cross-sectional survey involving 213 consecutively sampled patients from three randomly selected teaching hospitals in Nigeria was undertaken. Data on respondents' demographics and their attitude towards clinical physiotherapy students' involvement in their care were collected using a 12-item survey questionnaire, respectively. The data obtained were summarised using frequency counts, percentages, mean, standard deviation and analysed using Kruskal-Wallis and Mann-Whitney U tests with level of significance set at 0.05. Respondents' mean attitude score (36.26±8.15) was 50.54% of the total scoring range, and significantly varied with their education ($p = 0.02$) and occupation ($p = 0.04$) categories. Students' compartment, informed consent, respondents' privacy and confidentiality are other factors that could influence their willingness to participate in clinical education involving clinical physiotherapy students. In conclusion, respondents' attitude towards involving clinical physiotherapy students in their management was relatively poor in the Nigerian environment. There was a need for interventions geared towards improving patients' willingness to participate in physiotherapy clinical education involving clinical students, to enhance students' learning.

Keywords: *Patient's attitude; Clinical education; Physiotherapy students*

Introduction

Clinical physiotherapy education is a vital and compulsory part of the overall training of physiotherapy students. It involves the supervision and instruction of the students by practising physiotherapists in a clinical setting where the students have direct interaction with patients and are involved in their management (Abdulghani, Al-Rukban & Ahmad, 2008). The importance of hands-on learning with patients has been repeatedly emphasised in the literature (Howe & Anderson, 2003; Spencer, 2003; British Medical Association, 2008; Ezra, Salam, Sullivan & Okhravi, 2009). Patients' cooperation and willingness to involve physiotherapy students in their care is, thus, a key element of physiotherapy education (Abdulghani *et al.*, 2008). However, based on a range of factors (Hartz & Beal, 2000; Grasby & Quinlivan, 2001; Howe & Anderson,

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2003), patients may refuse the involvement of physiotherapy or medical students in their care; this can adversely affect students' learning and skill acquisition, and the quality of patient management in the future.

According to previous reports (Adams, Adams & Anderson, 1999; Salisbury, Farmer & Vnuk, 2004; Chipp, Stoneley & Cooper, 2004; Choudhury, Moosa, Cushing & Bestwick, 2006; Passaperuma, Higgins, Power & Taylor, 2008; Haffling & Hakansson, 2008), patients' willingness in involving students in their care can be influenced by the student's gender, nature of the patients' problem, previous experiences with students, and their understanding of the roles and responsibilities of students. Patients' willingness to involve physiotherapy students in their care can be positively influenced by their desire to contribute to medical education, longer consultation time, a more thorough physical examination, better patient education, the potential for patients to gain fresh insight into their medical problem through the student's contributions and the perception that they (the patients) learn more when their care providers are teaching students (Hartz & Beal, 2000; Grasby, 2001; Salisbury *et al.*, 2004; Chipp *et al.*, 2004; Choudhury *et al.*, 2006; Haffling & Hakansson, 2008; Price, Spencer & Walker, 2008). On the other hand, Magrane Gannon and Miller (1994) reported that privacy and confidentiality needs can make a patient refuse the involvement of students in their care.

Howe and Anderson (2003) posited that one can no longer assume that patients will agree to participate in clinical education especially now that the drive towards informed consent and a more equal partnership in shared decision making in clinical practice implies a need for different approaches to involving patients. Therefore, this necessitates the investigation of patients' attitude towards clinical physiotherapy students' involvement in their management and the possible factors that can influence it. The knowledge of this may help in improving patients' satisfaction with physiotherapy care, and in minimising the ethical problems that may accompany physiotherapy care delivery. There seems to be a dearth of research on the attitude of patients in involving physiotherapy students in their care, and the factors that can influence it, especially with increased awareness of the role of physiotherapy among the populace and the increased number of physiotherapy training institutions in Nigeria. This study was, therefore, aimed at investigating the attitude of patients towards clinical physiotherapy students' involvement in their management and to identify the possible factors influencing it in Nigeria. Such information can be used to improve students' learning, patients' satisfaction with physiotherapy care, as well as minimising the ethical problems that may accompany physiotherapy care delivery.

Methods

This study was a cross-sectional survey involving consecutively sampled patients receiving physiotherapy treatment in three randomly selected teaching hospitals currently offering clinical physiotherapy and directly affiliated to universities offering education programme in Nigeria (one each from the following geo-political zones of the Federation: North-Eastern; South-Eastern and South-Western). The selected teaching hospitals were University of Maiduguri Teaching Hospital, Maiduguri, Borno State (North-East), University College Hospital, Ibadan, Oyo State (South-West), and University of Nigeria Teaching Hospital, Enugu, Enugu State (South-East). Prior to the commencement of the study, ethical approval was sought and obtained from the

Research Ethics Review Committee of the Nnamdi Azikiwe University Teaching Hospital (NAUTH) in Anambra State, South-Eastern Nigeria. Consecutive non-probability sampling technique was used in recruiting the volunteering patients who met the inclusion criteria (aged ≥ 16 years), and who gave their informed consent after the procedure of the study was thoroughly explained to them. The socio-demographic data (gender, marital status, education and occupation) of the patients were recorded. The attitude of the patients towards clinical physiotherapy students' involvement in their care was assessed using a 12-item survey questionnaire previously used by Udoh and Quartey (2010). Each of the questions had scores ranging from 1 to 5, with total maximum and minimum possible scores of 60 and 12 respectively. Higher scores indicate good attitude (i.e. the more the respondents were positively disposed to allowing clinical physiotherapy students to participate in their management), and vice-versa. The questionnaire was administered to the respondents by the principal investigators. The data obtained were summarised and presented using descriptive statistics of frequency counts, percentages, mean and standard deviation, as well as inferential statistics of Kruskal-Wallis and Mann-Whitney U tests. The level of significance was set at 0.05.

Results

Two hundred and thirteen (213) patients (mean age = 40.46 ± 15.64 years, age range = 17 to 77 years) were involved in the study. The gender of the respondents was almost equally distributed with female individuals constituting almost 51% (Table 1). All the respondents indicated that clinical physiotherapy students had been involved in their management with 81.7% currently having clinical physiotherapy students as part of the team of physiotherapists managing them. Respondents' mean attitude score was 36.26 ± 8.15 (range 17 to 57) with 51.2% of them indicating that they would like to be treated by physiotherapists and clinical physiotherapy students. 28.6% of them reported a preference for treatment by physiotherapists only, while 20.2% indicated that they had no preference as to who would treat them. Respondents who desired clinical physiotherapy students to be active participants in their care constituted 39.4% while 33.3% desired that clinical physiotherapy students act as physiotherapists' *helpers* in their management. 5.6% desired that students should be in charge of their treatment with 21.6% indicating no preference

Table 1: Respondents' socio-demographic characteristics

Variables		n	%
Sex	Male	105	49.3
	Female	108	50.7
Marital Status	Single	76	35.7
	Married	125	58.7
	Divorced	3	1.40
	Widowed	9	4.20
Education	Primary	22	10.3
	Secondary	75	35.2
	Tertiary	116	54.5
Place	Out-patient	159	74.6
	Ward	54	25.4
Occupation	Unskilled	101	47.4
	Skilled	104	48.8
	Professional	8	3.80

Table 2 presents responses related to the factors influencing participants' attitude towards students' participation in their management. There were significant differences in attitude among different occupational and educational categories of the respondents (Table 3).

Table 2: Responses related to factors influencing participants' attitude towards student's participation in their management

Factors	Response (%)				
	SA	A	NAD	D	SD
Students' dressing	19.2	18.3	15.5	28.2	18.8
Students' way of talking to patient	27.7	22.5	6.6	27.7	15.7
Students' way of giving treatment to patients	27.2	21.1	14.1	24.9	12.7
Students' presence during physical examination bothers you	28.6	31.0	14.1	18.3	18.0
Students should not ask questions during history-taking	12.7	12.7	13.6	4.13	19.7
Students should not examine patients during assessment	10.8	14.1	14.6	37.6	23.0
Patients to be informed in advance before students perform an assessment	19.7	28.6	20.2	23.9	7.5
Patients should be treated or examined by students of the same sex with patients	21.6	23.5	20.0	20.2	14.1
Uncomfortable exposing body parts in students' presence	16.4	18.8	16.9	30.0	17.8
Uncomfortable giving personal information during history-taking in students' presence	6.6	18.8	16.9	37.6	20.2
Patients' cooperation with students cannot be the same with physiotherapists	22.5	22.5	16.4	23.5	15.0
Patients' mood affects their cooperation with students	8.5	24.4	16.0	36.6	14.6

Abbreviations: SA = Strongly Agree; A = Agree; NAD = Neither Agree nor Disagree; D = Disagree; SD = Strongly Disagree.

Table 3: Differences in respondents' attitude as it relates to their socio-demographics

Variables		Mean Rank	H/U	<i>p</i>
Sex	Male	111.86	5160	0.26
	Female	102.28		
Marital status	Single	101.80	1.54	0.67
	Married	111.18		
	Divorced	88.33		
	Widowed	99.11		
Level of education	Primary	130.75	8.07	0.02*
	Secondary	115.91		
	Tertiary	96.73		
Place	Out-patient	106.35	4190	0.79
	Ward	108.91		
Occupation	Unskilled	117.84	6.29	0.04*
	Skilled	98.04		
	Professional	82.83		

*Significant at $p < 0.05$

p values are for the nonparametric Kruskal-Wallis H or Mann-Whitney U tests.

Discussion

The respondents in this study had all indicated that clinical physiotherapy students had been involved in their management, with about 82% of the participants having clinical physiotherapy students as part of the team of physiotherapists managing them. The high level of involvement of clinical physiotherapy students in the management of the respondents was not surprising, as the hospitals involved in this study were teaching (tertiary) hospitals with undergraduate physiotherapy programmes. Since clinical physiotherapy education is a compulsory part of undergraduate physiotherapy training (Abdulghani *et al.*, 2008), there is a very high probability of clinical physiotherapy students being part of the physiotherapy team that manages patients in any teaching hospital with an undergraduate physiotherapy training programme.

The respondents' mean attitude score was 50.54% of the total attitude range (from 12 to 60), indicating moderate attitude. Also, 45% of the respondents categorically stated that their cooperation with students was not the same with practising physiotherapists. The attitude of the respondents can thus be considered as being somewhat negative. This result is contrary to some previous reports (Salisbury *et al.*, 2004; Chipp *et al.*, 2004; Choudhury *et al.*, 2006; Haffling & Hakansson, 2008; Hudson, Weston, Farmer, Ivers & Pearson 2010), which all concluded that patients felt positive about participating in medical education (assessment or treatment) involving clinical students. Nevertheless, these previous studies were all carried out in developed countries where some other factors might have influenced the findings of the studies.

The result of this study showed that participants' attitude did not significantly vary with their age, gender, marital status and their point of contact (ward or outpatient). In a similar work by Ryder, Ivens and Sabin (2005), patients' attitude towards the involvement of medical students in their care significantly varied with their gender but

not with their age. In the present study, participants with higher educational attainment and those in more skilled and professional occupation categories had a significantly poorer attitude score towards allowing clinical physiotherapy students to participate in their care. Thus, individuals with higher educational qualification may be more aware of the possible dangers of poor practice, which they may think will be more frequent and more severe with clinical physiotherapy students than with practising physiotherapists. They may, thus, be less disposed to allowing clinical physiotherapy students to treat them than their less-educated counterparts. The fact that more educated persons usually occupy the most aristocratic jobs may explain why patients in more skilled or professional occupations had significantly poorer attitude than their unskilled counterparts towards allowing clinical physiotherapy students participate in their care.

About 38% and 50% of the respondents indicated that the clinical physiotherapy students' manner of dressing and address respectively influenced them to cooperate with the involvement of the students in their care. This is in agreement with the findings of Abdulgani *et al.* (2008) who revealed that most of the participants felt that the general appearance of the medical students influenced their co-operation with them. By professional ethics, physiotherapy students are expected to dress formally and address persons they are treating or attending to politely and respectfully. However, our study has discovered that certain measures need to be taken to improve the situation. Clinical physiotherapy students must be made to appreciate the important role that proper dressing and polite address have in building trust and confidence in the patients when the former partake in assessment or clinical examination and treatment of the latter.

Significant proportions of the participants involved in this study were of the opinion that clinical physiotherapy students should not have anything to do with their assessment in terms of asking questions during history taking (25.4%); being physically present during their physical examination (59.6%), and examining them during assessment (24.9%). In as much as this is in line with the findings of Ryder *et al.* (2005) that the presence of medical students during patients' treatment affected patients' willingness to continue with treatment, it is contrary to the reports of some previous authors (Salisbury *et al.*, 2004; Chipp *et al.*, 2004; Choudhury *et al.*, 2006; Haffling & Hakansson, 2008; Hudson *et al.*, 2010). It is, however, important to note that these previous studies were conducted in developed countries where people are supposedly more enlightened and may consequently appreciate the importance of clinical education involving students. Thus, there is a need for initial education and counselling of patients that are currently admitted in Nigerian teaching hospitals on the need to cooperate on the question of involving students in the course of their management. This need for initial patient education and counselling is further buttressed by a proportion of participants (48.3%) who indicated that they would prefer being informed in advance before involving students in their management. Also, whenever possible, only students of the same sex with a patient may be asked to participate in the patient's management, as this has been reported to enhance patients' willingness to cooperate and participate in physiotherapy education especially among female patients (Bentham *et al.*, 1999; Chipp *et al.*, 2004). This was affirmed by 45.1% of the participants in this study who indicated that patients should be treated or examined by a clinical physiotherapy student of the same gender. The negative attitude of some of the participants towards participating in

clinical education borders on privacy and confidentiality, as 35.2% and 25.4% of the participants indicated that they felt uncomfortable exposing their body and giving personal information during history taking in the presence of students. This corroborated the findings of earlier studies (Ryder *et al.*, 2005; Passaperuma *et al.*, 2008; Haffling & Hakansson, 2008; Braend, Gran, Frich & Lindbaek, 2010) where discussing emotional or sexual matters in the presence of students was often considered problematic, as is performing an intimate examination.

Conclusion

We concluded that patients' attitude towards involvement of clinical physiotherapy students in their management was, generally, poor. This may adversely affect students' learning and skill acquisition, as well as future patient management. Therefore, there is a need for prior education and counselling of patients on admission at Nigerian teaching hospitals on the significance of involving students in the course of their management to positively improve their attitude, especially participants with a high level of educational attainment and those in skilled and professional job categories. Finally, efforts should also be made to educate students on proper dressing and conversational skills.

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