

Perception of physical therapy students regarding effectiveness of clinical teaching in physical therapy education at Karachi

Abstract

Objective: To know the perception of Physical therapy students in effectiveness of clinical training at Karachi.

Methods: This was a cross-Sectional study with non-probability convenience sampling. The duration of the study was July to December 2011. Third and 4th year students of Bachelor of Science in Physical Therapy, students of 5th semester and onward from Doctor of Physical Therapy and students from Post Professional Doctor of Physical therapy were included in the study. A self-administered questionnaire was used to collect the data. SPSS version 20.0 was used to analyze the data.

Results: There were total 131 participants. The percentage of male was 34.4% (45) and female was 65.5% (86) (Figure 1). According to data the average age of participants was 22+13 years. When asked about "to establish a good learning environment (approachable, non-threatening, enthusiastic)" 70% responded positively and 30% showed disagreement. "Stimulates me to learn independently" 60% agreed upon it that they were stimulated to learn independently 40% hesitant about it.

Conclusion: This study provides the area of learning on which student are satisfied. This study indicated the more efficient use of new research and modern techniques of management in clinical teaching enhance the learning process. Student appreciated when teachers asked questions during clinical training session about procedures.

Keywords: perception, clinical teaching, physical therapy, experience, behavior

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Khalid Aziz,¹ Muhammad Asif,² Abida Arif,¹ Ghousia Shahid,¹ Muhammad Faisal Fahim¹

¹Bahria University Medical & Dental College, Pakistan

²Isra institute of Rehabilitation sciences, Isra University, Pakistan

Correspondence: Muhammad Faisal Fahim, MSc (Statistics), Researcher, Department of Biostatistics & Research, Bahria University Medical & Dental College, Karachi, Pakistan, Email faisalfahim88@hotmail.com

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Introduction

Clinical education is a principal component of undergraduate/entry-level physical therapy program and it is perceived essential to develop the clinical skills and attitudes in physical therapy graduates. It is widely recognized that professional skills are crystallized through an integration of theory and practice at clinic.¹ Clinical education is a provision of guidance and feedback for professional and educational development in trainee's experience to provide appropriate patient care.² The purpose of clinical education is to provide clinical exposure to the students to attain competencies at the level of a beginning practitioner by integrating their knowledge and skills. The students gain higher levels of performance in physical therapy treatment progressively and be able to fulfill responsibility under the guidance of qualified practitioners (The University of Sydney 2005).³

The Clinical training is solely based on the abilities, skills and knowledge of clinical instructor. The inefficiency and lack of skills in clinical training amongst the instructors produce bad effect which eventually lead to the lack of interest clinical training. The Clinical instructors are generally selected on their competencies in patient care rather than they have skills in teaching, training and student evaluation. Clinical instructor should have a basic understanding about physical therapy academic program and able to demonstrate effective teaching skills in clinical setting. The lacking in this area is due to the fact that physical therapy clinical instructor do not have formal training in order

to prepare themselves as a clinical instructors. It is important that they must be prepared to serve as a clinical instructor and play a central role in the professional development of students.⁴ Clinical mentors are backbone for student's clinical education and students gain high level of clinical skills by instructor's demonstration, teaching, professional skills and behaviors to develop their learning.⁵ The Clinical education is more valuable to the student when the experience is designed to maximize student learning. Therefore, physical therapy academic programs rely heavily on clinical instructors to design, implement, and assess student-learning experiences. In order to fulfill this role, clinical instructors should be competent practitioner in their area of expertise as well as be able to effectively teach their students.

In physical therapy there is a need to delineate formal clinical education and acquired new strategies to promote the learning of core competencies and skills.⁶ It needs further research and debate that what clinical teacher needs to know to be a skilled clinical teacher. The importance of clinical teaching and excellence in it requires knowledge of subjects, patient's history and method of evaluation and diagnosis The general principles of teaching and case based teaching scripts allows student to learn and gain maximum knowledge.^{7,8} The main aim of physical therapy training programs is that the graduate attain the maximum level of standard and to produce skillful health care provider in the field of Physical therapy. This study is intended to know the perception of Physical therapy students in effectiveness of clinical training at Karachi.

Methodology

Ethical approval was taken from the Institutional review committee of ISRA institute of rehabilitation sciences, ISRA University. This was a cross-Sectional study with non-probability convenience sampling. The duration of the study was July to December 2011. A written consent was obtained from all participants after explaining them the purpose of study. Third and 4th year students of Bachelor of Science in Physical Therapy, students of 5th semester and onward from Doctor of Physical Therapy and students from Post Professional Doctor of Physical therapy were included in the study. Exclusion criteria were students who have attendance in clinical rotations below 50% and those who did not give consent.

Sample size was estimated using the method of sample size for "single proportion method" on www.openepi.com. Margin of error 5% and 95% confidence interval was used for calculation of sample size. The required sample size was found to be 131. A self-administered questionnaire was used to collect the data. The questionnaire was comprised on two parts. Part one focused on demographic information of the respondents, while parts two focused on the teaching opportunities and effectiveness offered during clinical education. Regarding the validity and reliability of the tool for the measurement of student perceptions, a well valid and reliable instrument was used to collect data. This tool was thoroughly evaluated and analyzed by researcher. The researcher discussed the questionnaire with experts. The questions in questionnaire were found satisfactory to cover the aim and objective of the study in local environment. Dr. Copeland and Dr. Hewson developed this instrument. This instrument was first presented by American education research association conference held at Montreal, Quebec Canada in April 1999. The instruments tested for reliability, validity and usability. The instrument has both content as well as and criterion related validity and the Cleveland Clinic's Clinical Teaching Effectiveness Instrument is reliable and valid, as well as usable. It can be used as an evaluation tool for a wide range of clinical teaching settings. The impact factor of instrument is high and cited 50 times.⁹

Data analysis

The data from the questionnaire was recorded and analyzed in SPSS software Version 17. Qualitative variables were shown in frequency and percentages. Bar and Pie chart was also shown for graphical presentation.

Results

The response of the participants was excellent; it showed their interest in study. Participant responded to every question. There were total 131 participants. The percentage of male was 34.4% (45) and female was 65.5% (86) (Figure 1). According to data the average age of participants was 22 +13 years.

When asked about "to establish a good learning environment (approachable, non-threatening, enthusiastic)" 70% responded positively and 30% showed disagreement. "Stimulates me to learn independently" 60% agreed upon it that they were stimulated to learn independently 40% hesitant about it.

"Allows me autonomy appropriate to my level /experience/

competence". The response was 50% on both side.

When asked about "organizes time to allow me for both teaching and care giving" 65% agreed to this and rest 35% disagreed.

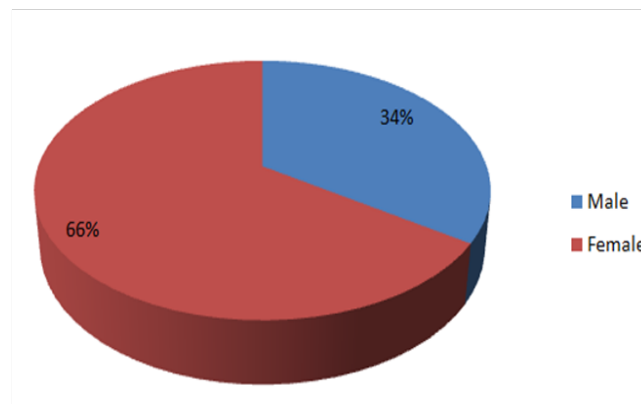


Figure 1 Gender Distribution.

Regarding feedback "Offers Regular Feedback (Both Positive and Negative)" 50% were satisfied about it and 35% were in opinion that further comprehensive feedback needed. 15% were neutral.

"Clearly specifies what I am expected to know and do during this training period" 60% were positive on this aspect and 40% gave negative response.

"Adjusts teaching to my needs (experience, competence, interest and etc)" on this important aspect. 50% participant were fully agreed and satisfied but 50% disagreed on it and they were on opinion that teacher come on student level when teach them.

When asks about "promote learning (clarification, probes reflected questions etc)" maximum number of students showed agreement that is 85% only 15% disagreed to it.

Regarding "Gives clear explanation/ reasons for opinion, advice, actions, etc" majority of the students looked satisfied on this area i.e. 75% only 25% were against on it.

"Adjusts teaching to diverse setting (bedside, view box, examination room, clinics)" 50% agreed and 50% disagreed.

When asked about "Coaches me on my clinical/technical skills (interview, diagnostic, examination, procedural, lab, etc)" 55% responded in favor and 45% against it.

Regarding "Incorporates research data and /or practice guidelines into teaching" 50% student thought that this is an important area and teacher must incorporate new research and techniques.

Regarding "Teaches diagnostic skills (clinical reasoning, selection/ interpretation of test, etc)" the responses were 50% in favor and 50% against it.

"Teaches effective patient and/ or family communication skills" 70% showed their satisfaction and 30% had reservation.

"Teaches principal of costs appropriate care (resource utilization, etc)" 65% were satisfied and 35% were not satisfied (Table 1) (Figure 2).

Table 1 Questions regarding Perception of Clinical Teaching

	Don't know	Not applicable	Never	Seldom	Good	Very good	Excellent
Allows me autonomy appropriate to my level /experience/competence	1	0	15	39	50	14	12
Organizes time to allow me for both teaching and care giving	3	4	14	38	54	14	4
Adjusts teaching to my needs(experience, competence, interest and etc)	2	0	26	36	47	11	9
Asks questions that promote learning(clarification, probes reflected questions etc)	1	0	7	13	51	32	27
Adjusts teaching to diverse setting (bedside, view box, examination room, clinics)	2	1	27	38	38	20	5
Coaches me on my clinical/technical skills (interview, diagnostic, examination, procedural, lab, etc)	2	1	23	38	43	14	10
Teaches diagnostic skills (clinical reasoning, selection/interpretation of test, etc)	3	1	7	40	46	19	15
Teaches principal of costs appropriate care (resource utilization, etc)	0	1	12	22	59	19	18

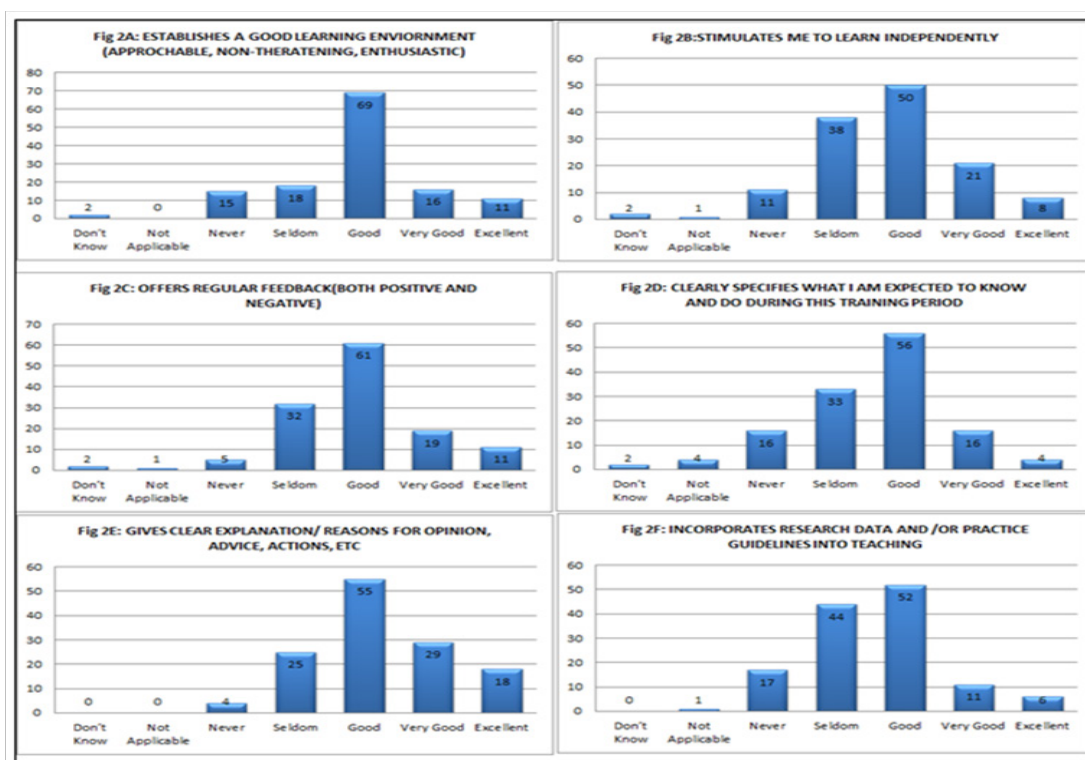


Figure 2 Responses of Questions about Clinical Teaching.

Discussion

This study provides us very important information on student's perception regarding opportunities and effectiveness of clinical training. The student reported that environment of clinical teaching played an important role in learning. Students learn more in environment which is approachable, and allowed them to work freely, independently according to their needs. Secondly student highlighted that independent management of patient, proper feedback from teacher, the discussion on patient's management and student assessments are the key factors in learning. Number of authors all

over the world investigated the importance of clinical education in medicine. Kill minister et al.¹⁰ did a literature review for efficacy and importance of clinical education across the discipline in medicine. He highlighted many factors to improve clinical education. In this study student also highlighted the same.¹⁰ Hassan et al.¹¹ also stated that clinical instructors did not disagree with importance of the ability of the clinical instructor to maintain a level of respect among the students and other medical professionals. Similar finding would be in nursing education where instructors expressed their appreciation positivity, professionalism and offering proper support to the students as important.¹¹

In the present study teacher feedback is found to be the most important in terms of students learning. Burgess et al.¹² stated also that proper feedback from the teacher to the student in clinical learning is the most important key factor which enhance the student learning.¹² The structure of the learning process that has been implemented also goes some way towards addressing student readiness to engage with feedback (highlighted as an issue by Handley et al.¹³ Essentially those students lacking in capacity for self-driven engagement were encouraged to engage by the requirements of the assessed reflections. This learning process is likely to support the mind-set of students and advocated and the students to be active rather than passive receivers of feedback.¹⁴ Holboe et al.¹⁵ reported that clinical placements operate on the assumption that clinical and academic staff members possess sufficient levels of knowledge, skills, and attitudes in competencies required for teaching and assessment. In the current study the discussion on the procedure of patient's management enhance the student knowledge and skills. The participants identified this aspect very strongly. Student highlighted that management of patient by student themselves enhance their knowledge and skills instead of management performed by teachers and student just observe. Nouri et al.¹⁶ support the importance and value of teacher role model during patient management.¹⁵ The learning sequence therefore included the key elements identified by Boud et al.¹⁷ and Carless et al.¹⁸ and Nicol et al.¹⁹ for effective engagement with assessment and feedback and the utility of feedback is enhanced because it is provided in a timely fashion Evans et al.²⁰ Through combined self/peer-assessment and active reflection, students had a proactive role in generating their own feedback and integrating it with feedback from peers and tutors as part of a social dialogue. Through iteration, students had an opportunity for repeated engagement with feedback and the feedback process, and to apply new learning within a social constructive framework.

In the present study student reported that they learnt more when they got autonomy to perform procedure especially the student of private institution pointed out this issue and highlighted it. Student also highlighted other area which they thought important for their learning. These area comprise on teaching at the level of student knowledge and different teaching technique at clinics and in wards. Self-assessment and reflection are also very important factors in learning specially the peer assessment. During peer assessment student make judgment on each other work. Scott et al.²¹ mentioned this factor in his study that self-assessment increases the student confidence and improves weakness. Self-management and reflective self-assessment would improve student learning and academic outcomes. Self-assessment made me look at the group essay from a different perspective, and this allowed me to recognize our strengths and weaknesses and where we could have done better.²¹

Conclusion

This study provides the area of learning on which student are satisfied. This study indicated the more efficient use of new research and modern techniques of management in clinical teaching enhance the learning process. Student appreciated when teachers asked questions during clinical training session about procedures.

Acknowledgement

None.

Conflict of interest

The author declared that there is no conflict between authors.

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