

Satisfaction level among rural and urban physical therapy students regarding their knowledge and clinical practice: a cross-sectional study

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ABSTRACT

Background: Physical therapy (PT) is an emerging field in Pakistan. Numerous studies have been conducted to evaluate the level of satisfaction and attitude of medical students and nurses towards their clinical practice environment, but there are few studies on physical therapy students.

Objective: To assess student satisfaction levels among rural and urban physical therapy students regarding their knowledge and clinical practice.

Methods: A cross sectional study was conducted with a sample size of 250 PT students of different medical colleges in Punjab through convenient sampling technique. Physical Therapy Student Attitudes Questionnaire (PSAQ) was used. After taking consent, data was collected and analyzed by SPSS version 26.

Results: The study comprised of 250 participants, where the rural were 148 and urban were 102 with a mean age of 23.40 ± 3.60 years. Results showed that there was neither a significant association (p -value=0.78) between gender and rural and urban students' satisfaction levels nor a significant association (p -value=0.43) between age and rural and urban students' satisfaction. The total mean score of rural and urban students was 87.91 and 89.83 respectively with a p -value = 0.39.

Conclusion: There was no significant difference between the overall satisfaction level of urban and rural students regarding their knowledge and clinical practice. Both genders and ages had no effect on students' satisfaction levels who belong to different residential areas nor did academic years of study and socioeconomic status affected the satisfaction level of students belonging to urban and rural areas.

Keywords: Clinical practice, Knowledge, Physical therapy, Satisfaction, Students.

DOI: <http://doi.org/10.33897/fujrs.v3i2.320>

Introduction:

Students enrolled in physiotherapy programs must have both theoretical knowledge and practical training through closely monitored clinical rotations in order to advance their careers and seek professional growth.(1) Physical therapy (PT) is a practice-based profession, and a key component of PT education is clinical

practice.(2) Medical students' clinical rotations in healthcare institutions and learning are essential parts of their curriculum because of the practical orientation of the medical field.(3) Since the quality of clinical learning typically reflects the quality of the curriculum framework, acquiring high-quality clinical experience within a supportive and pedagogically appropriate clinical learning setting is seen as a significant priority for educational institutions.

In modern physical therapy education, there is a lot of discussion about how to evaluate clinical settings as learning environments. The satisfaction of the PT students is regarded as a significant criterion of such assessment, contributing to any prospective changes to maximize the learning activities and accomplishments in clinical settings.(4) According to a study, nursing students are satisfied with their clinical practice settings related to their learning environment, supervisory relationship, and the nurse teacher's responsibilities.(5)

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Received: January 10th, 2023; **Revision 1:** March 15th, 2023;

Revision 2: May 18th, 2023

Acceptance: May 29th, 2023

How to Cite: Arshad S, Waseem I, Mahmood T, Tariq K. Satisfaction level among rural and urban physical therapy students regarding their knowledge and clinical practice: a cross-sectional study. Foundation University Journal of Rehabilitation Sciences. 2023 July;3(2):66-71.

Placements in clinical learning environments give students the chance to hone their abilities, get to know the profession, and overcome the knowledge gap between the curriculum and the workplace. Students agreed that the ward manager's leadership style was the most important and influenced their opinions, based on results. The nursing teacher's responsibility, however, earned the lowest mean score, indicating a need for improvement and clarification as well as a need for improved communication and collaboration between nursing schools and the clinical training hospital.(6)

In general, PT student's satisfaction with the academic and clinical training processes was low in Ethiopia. The recommendation was made to concentrate on measures to increase physiotherapy student satisfaction by promoting the pre-college physiotherapy education program and upgrading classroom amenities.(7) Evaluations of academic experience indicate the excellence of services offered in the areas of education, interpersonal communication, and infrastructure.(8)

Therefore, numerous studies have been conducted to evaluate the level of satisfaction and attitude of medical students and nurses towards their clinical practice environment, but there are few studies on PT students. Additionally, there was a gap in the literature because no study has been conducted to categorize the satisfaction of students from different residential areas, so in present study day scholar students were included. The study's aim was to determine how satisfied PT students were with their knowledge and clinical experience so that effort can be made on developing ways to achieve clinical practice excellence by enhancing the educational process.

Methods:

This was a cross-sectional study which was conducted using convenience sampling technique was used. Data was collected from first to final year PT undergraduate students. Approval was taken from ethical review committee of University of Lahore, Lahore campus (REC-UOL-/24-08/2022). Data was collected from physiotherapy students of different rehabilitation colleges in Punjab including Agile Institute of Rehabilitation Sciences Bahawalpur, Imran Idrees Institute of Rehabilitation Sciences Sialkot and

the University of Lahore as well having attached hospitals to these mentioned institutes were included. Each student was informed that their confidentiality will be maintained and this study will not be harmful to anyone. Students who belonged to villages (rural areas) and city or town (urban areas) and were studying Doctor of Physical therapy in different medical colleges in Punjab were included. Students taking online classes were excluded from the study. The study's duration was from March to June 2022. The sample size was calculated by using mean value of samples sizes of previous literature. The total number of participants in one previous study was N=300 (9) and in other study was N=173 (10) with average value of N=237. So, after adding 5% attrition rate, total sample size was N= 250.

The physical therapy student attitudes questionnaire (PSAQ) constructed by Tedla JS. comprising of 25 statements and each statement has a 5-point Likert scale grading response was used to collect the data having reliability of 0.86.(10) Questionnaire had four subdivisions named A, B, C and D. Subdivision named A was constructed to find out attitudes and perceptions of PT students about their own profession, subdivision B was related to anticipation or predictions of a good future for students, subdivision C was about patient exposure to students and subdivision D was related to assessing the satisfaction level of student's learning.(11) The questionnaire was distributed to PT students online and physical. Written consent was taken from each student before participating in the study. Each student was informed about confidentiality of their information and right to withdraw from this study at any time.

The data was analyzed by SPSS version 26. Independent t-test was applied to compare the mean satisfaction scores of urban and rural students at level of significance (P value) with value of <0.05 must be accepted with a confidence interval = 95% and power = 80.

Results:

Total students n=250 (rural=148 and urban=102) with total 80 males and 170 females were included. The age ranges from 19 years to 27 years, mean age of participants was 23.40+ 3.60 years. Table 1 shows the demographics of participants.

Mean score of all four subdivisions of rural and urban students is 87.91 and 89.83 respectively and p value for the overall sum is >0.05 using Independent t-

test indicating there is no significant difference between the satisfaction level of urban and rural students. Table 2 shows the mean PSAQ scores.

Table 1: Demographic data of the participants

		Frequencies according to Residence		Total n (%)
		Rural n (%)	Urban n (%)	
Gender	Male	46 (18.4%)	34 (13.6%)	80 (32%)
	Female	102 (40.8%)	68 (27.2%)	170 (68%)
	Total	148 (59.2%)	102 (40.8%)	250 (100%)
Age in Years	18-23	3 (1.2%)	1 (0.4%)	4 (1.6%)
	24-30	145 (58%)	101 (40.4%)	146 (58.4%)
	Total	148 (59.2%)	102 (40.8%)	250 (100%)
Professional Years of Study	1 st Year	23 (9.2%)	22 (8.8%)	45 (18%)
	2 nd Year	53 (21.2%)	33 (13.2%)	86 (34.4%)
	3 rd Year	32 (12.8%)	23 (9.2%)	55 (22%)
	4 th Year	24 (9.6%)	14 (5.6%)	38 (15.2%)
	5 th Year	14 (5.6%)	8 (3.2%)	22 (8.8%)
Socio-economic Status	Upper class	12 (4.8%)	6 (2.4%)	18 (7.2%)
	Middle class	131 (52.4%)	90 (36%)	221 (88.4%)
	Lower class	4 (1.6%)	6 (2.4%)	10 (4%)
	Total	147 (58.8%)	102 (40.8%)	250 (100%)

Table 2: Mean PSAQ scores of the participants

PSAQ items subdivision	Variables	N	Mean	Std. Deviation	Std. Error Mean	p-value
A Section perception of Profession	Rural	148	21.64	3.93	.32	0.32
	Urban	102	22.11	3.44	.34	
B Good Future	Rural	148	17.10	5.13	.42	0.35
	Urban	102	17.71	5.12	.50	
C Patient Exposure at Clinical hours	Rural	148	24.54	5.46	.44	0.60
	Urban	102	24.90	5.46	.54	
D Satisfaction level	Rural	148	24.63	5.82	.47	0.52
	Urban	102	25.09	5.53	.54	
All Sum	Rural	148	87.91	17.90	1.47	0.39
	Urban	102	89.83	16.82	1.66	

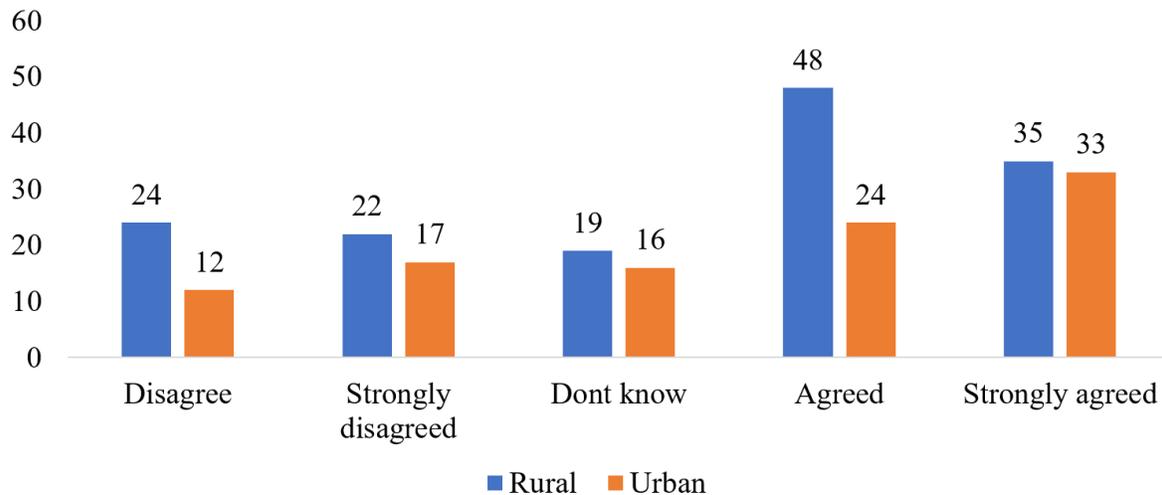


Figure 1: Satisfaction level with education and ready to work as a physical therapist

The figure 1 shows that 48 (19.2%) rural and 24 (9.6%) urban students agreed to work as physical therapists in future while 35 (14%) rural students strongly agreed with this statement.

Discussion:

In present study, a total of students $n=250$ (rural=148 and urban=102) with 80 males and 170 females were included. Mean scores of PASQ questionnaire for rural 87.91 and urban 89.83 students show that both students were satisfied but the p value >0.05 shows that there is no significant difference between the satisfaction level of urban and rural students.

Another study done by Anne Friman et al. in 2017 on attitudes and perceptions from nursing and medical students in relation to wound care results showed high scores on the attitude scale (mean 53.2, possible maximum = 60) that indicated positive attitudes (12), supporting current results of PT students' positive attitudes and perceptions about their profession.

Results of subdivision A showed that the mean score of rural PT students was 21.64 and urban students was 22.11 and P -value = 0.32 (more than 0.05 and was considered as not significant) showed students did not differ in attitude and perceptions, and it was not affected by the residential area of students. The results of current study were also supported by another study conducted by Mari Kannan Maharajan et al. in 2017 on healthcare professional students' attitudes and readiness towards inter-professional learning and overall response rate

was 83%. Considering other fields dentistry mean score = 76.85, medicine mean score = 75.08, pharmacy mean score = 77.44 and health science mean score = 76.88 showed positive responses.(13)

Subdivision B of the current study was related to anticipation or predictions of a good future for students. Results of subdivision B showed that the mean scores of rural PT students and urban PT students were 17.10 and 17.71 respectively with a p -value = 0.35. These scores predicted that anticipations of students about their professional life are comparatively low as compared to other subdivisions' mean scores but an important factor is that their anticipation and predictions were positive and were not affected by students' residence or background. The results of a cross-sectional survey and qualitative analysis of UK medical students conducted in 2018 by Zohair Jamil Gazzaz et al. with the aim to find out the student's attitudes towards their future career and general practice, favor the current study results. The response rate was 89% (280/315) and 40% of participants said that general practice was an attractive or very attractive career option.(14)

The current study subdivision C results showed that the mean score of rural PT students was 24.54 and urban students' mean score was 24.90 and the P -value score was 0.60. These values explain that both types of students had great exposure to patients in attached hospitals to their pedagogical institutes without any discrimination. These results are supported by a study, completed by Jenna M. Khan et al. in 2019, there was significant improvement of overall knowledge about the

field of radiation oncology from pre elective to post elective ($P < .001$). Feedback of students included enjoying direct exposure to contouring, tele-health, and time with residents.(15)

There are positive correlations between gain and students' satisfaction with various aspects of teaching, particularly with communication between teachers and students. This suggested that good communication between teachers and students also contributes to enhancing the students' satisfaction. The results of this study support current study results in which the mean scores of rural PT students and urban PT students were 24.63 and 25.09 respectively and their level of significance value was (P -value = 0.52). These values reveal that all students were much more satisfied with their clinical learning whether they belong to rural or urban areas.(16)

Another survey lacked the satisfaction level of students who were involved in clinical rotations done by Shshidhar Venkatesh et al. in 2020. Comparing current study the results showed that maximum students were satisfied.(17) This residential area as a barrier on student's satisfaction was addressed in current study. Hence, student's residence does not affect their satisfaction of learning but facilities like internet can effect learning. In current study, more students were satisfied in contrast to a study that was done in 2021 in Ethiopia by Melaku Hailu Temesgun to assess the satisfaction of PT students with the teaching and learning process but overall student's satisfaction was low as only 33.1% of overall students were satisfied for all categories.(7)

In current study, some of the online data, student response can vary. Further this study has not focused on the contributing factors that can affect the satisfaction. These kind of surveys must be conducted in future to make the students more satisfied by making more policies and by eliminating the deficiencies of clinical learning and barriers among students. There were was lack of such studies, so it was difficult to compare it with other studies.

Conclusion:

There is no significant difference between the overall satisfaction level of urban and rural students regarding their knowledge and clinical practice.

Disclaimer: None to declare.

Conflict of interest: None to declare

Source of Funding: None to declare.

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Authors contribution:

Arshad S: Conception and design, statistical expertise, drafting of the article.

Waseem I: Collection and assembly of data, analysis and interpretation of the data.

Mahmood T: Analysis and interpretation of the data, critical revision of the article for important intellectual content.

Tariq K: Literature search and assembly of data.

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