

Empathy among Undergraduates and Post Graduates Clinical Dental Students of Lahore Medical and Dental College



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OBJECTIVE: To assess the gender differences and to measure the empathy scores in undergraduates (3rd, 4th year, Interns) and post graduates clinical dental students of Lahore Medical and Dental College.

METHODOLOGY:

STUDY DESIGN: Quantitative, Cross-Sectional Descriptive Study. **TARGET POPULATION:** 3rd & 4th year BDS students, House officers and Dental Post graduates at Lahore Medical and Dental College, who fulfill the inclusion criteria.

SAMPLE SIZE: 180 students responded out of 230. **DATA COLLECTION INSTRUMENT:** Self-reported questionnaire: Jefferson Empathy Scale of Health Care Provider- Student's Version.

RESULTS: Results indicated that the female empathy score was significantly higher as compared to male students (p -value = 0.041). The postgraduates shows highest mean empathy level (88.1 ± 11.9) and 4th year students (86.1 ± 10.2) followed by 3rd year students. Post hoc Tukey test revealed that that the mean empathy score of house officers (80.7 ± 9.0) was significantly lower as compared to 4th year students (86.1 ± 10.2) (p -value = 0.025).

The skills of interpersonal caring and empathy can low the dental fear, increase the adherence and outcomes of the treatment, and there will be more patient satisfaction.

CONCLUSION: Empathy-related teaching exercises ('taught' by peer assisted learning, role-playing, documentaries making and interviewing skills) must be implemented among the dental students to endorse the growth of empathy and more time should be spend on history taking.

KEYWORDS: Empathy, Dental, Students, Education, Jafferson Scale Of empathy (JSPE-HPS)

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INTRODUCTION

In the field of medicine Empathy is one of the cornerstones of effective physician-patient relationship.¹ It originates from Greek words, "em" and "pathos", meaning 'feeling

into' and a German word "Einführung".² Empathy is described as having two domains; cognitive and affective. The understanding of an individual's inner experiences along with his / her outside world from another person's view of point is described as cognitive domain. In contrast, the affective domain is solely to enter the experiences of another individual. Empathy contributes greatly in understanding the patient's perspectives, experiences and concerns.³ In terms of patient care, empathy would be defined as "a cognitive attribute that involves an ability to understand the patient's perspective, experiences, pain, suffering and a capability to communicate this understanding with the sole intention to help".⁴ According to Pedersen (2009) empathy is defined as "Understanding the Patient Properly".⁵ Although sharing is the common element of empathy as well as sympathy; empathy however, lies truly under cognitive

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understanding and sympathy as sharing emotions with the patients.² Multiple studies agree on the fact that competence, respect and empathy are the true qualities of professionalism.⁸ These attributes not only augment patient's satisfaction and comfort, but also boost up his / her level of trust.⁶ Patients who trust their doctors are considered to be more open hence give an effective history; leading to better diagnosis and decision making.⁷ The empathy and sympathy can be differentiated on the basis that empathy is intellectual understanding, while sympathy is sharing feelings. Empathy is considered as the second most important competency for dentistry.⁸ Dentists with emotional intelligence and empathetic nature have proved to reduce patient's anxiety level, continued patient's adherence to orthodontic treatment plan, and increased pediatric patient's cooperation; thus leading to higher rate of patient compliance.¹ It is the need of the hour to understand and identify the in-campus practice of empathy among undergraduate dental students at Lahore Medical and Dental College. This will also allow us to plan improvements in the future.

AIMS AND OBJECTIVES

To assess the gender difference and measure the empathy scores of Dental students of Undergraduates (3rd, 4th year, Interns) and Clinical Post graduates of Lahore Medical and Dental College.

METHODOLOGY

Study Design: Quantitative Cross-Sectional Descriptive Study.

Study Settings: College of Dentistry, Lahore Medical and Dental College, Lahore Pakistan.

Study Duration: January to March, 2022.

Inclusion Criteria:

Willingness in research participation with written consent form.

Exclusion Criteria:

Incomplete questionnaire

Target Population:

3rd & 4th year BDS students, House officers and Dental Post graduates at Lahore Medical and Dental College, who fulfil the inclusion criteria.

Sample Size: 180 students responded out of 230.

Data Collection Instrument:

Self-reported questionnaire by using Jefferson Empathy Scale of Health Care Provider- Student's Version, [Table 1] has two parts.

Part I - Questions related to participants demographics data.

Part II - 20 items with 7point Likert scale ranging from strongly disagree (1) to strongly agree (7).

Out of these 20, 10 are positively phrased questions and 10 are negatively phrased questions. The scores are reverse for negatively phrased questions. 20 to 140 is a range of total score, greater the score, greater is the empathetic level.

Data Collection

Ethical clearance of the study had been received from Ethical Committee Dental College LM&DC. A written consent form was signed before the start of study and the words 'empathy' and 'sympathy' were well explained and differentiated.

The questionnaires were hand distributed to 3rd and 4th year students at the end of their respective lectures in the classroom. While it was circulated to the postgraduates and interns during their clinical rotations (collected after completion).

Data Analysis:

Data was entered and analyzed using SPSS 20. Pilot testing of the questionnaire has been done, Internal Consistency was analysed using Cronbach's coefficient alpha for the JSPE and value of the scale was 0.80, indicates acceptable and satisfactory.

Kolmogorov-Smirnov one sample test used to assess the normality of data. Independent t-test and one-way analysis of variance (ANOVA) used to test the significance difference ($P < 0.05$).

RESULT

A total of 180 students gave their consent to participate in the study; with their mean age of 23.2 ± 2.7 years. There was an overall female predominance in our participants

Table 1: Mean empathy scores of respondents (gender and years of study)

	N (%)	Mean \pm SD	Minimum	Maximum
Gender				
Male	46 (25.6)	81.8 \pm 8.2	67	102
Female	134 (74.4)	85.3 \pm 10.7	60	113
Years of study				
3 rd year students	41 (22.8)	85.2 \pm 9.5	65	112
4 th year students	63 (35.0)	86.1 \pm 10.2	66	113
House officer	50 (27.8)	80.7 \pm 9.0	62	108
PG	26 (14.4)	86.1 \pm 11.9	60	110

(74.4%). Most of them were from 4th year of BDS (28.3%) and house officers (27.8%). The total score ranged from 20 to 140, with a minimum score of 60 to a maximum of 113.

The male participants had mean empathy score of 81.8 ± 8.2 , and the female participants had mean empathy score of 85.3 ± 10.7 . Gender differences were compared using Independent sample t test and results indicated that the female empathy score was significantly higher as compared to male students (p-value = 0.041).

Oneway ANOVA showed that the differences on mean scores in different academic years was statistically significant (p-value = 0.024).

The postgraduates mean empathy level (88.1 ± 11.9) was found to be higher, 4th year students (86.1 ± 10.2) followed by 3rd year students. Post hoc Tukey test revealed that the mean empathy score of house officers (80.7 ± 9.0) was significantly lower as compared to 4th year students (86.1 ± 10.2) (p-value = 0.025).

Chart 1

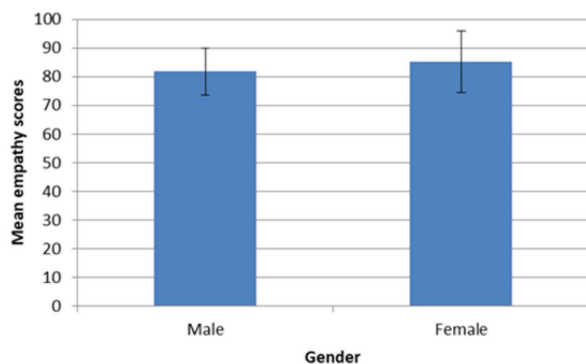
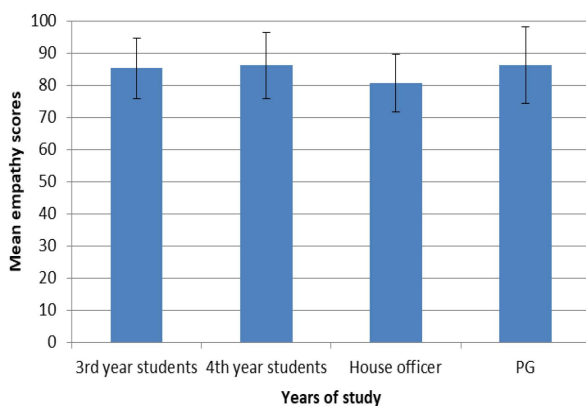


Chart 2



DISCUSSION

In this study empathy among male and female was compared, female Dental undergraduates, scored higher than males; the finding being consistent with studies reporting

American and Indian Dental participants.^{7,9}

Post graduates and 4th year students scored higher, this can be attributed to the fact that they have exposure to, hence a routine of patient assessment and examination. This leads to development of a professional attitude; this finding being contrary to the study by Aggarwal et al.⁷

Mean score of 3rd year BDS students was one point less than that of 4th year and post graduates. The reason can be linked to the reason that they come in contact with patient on chair for the first time, although academically there are more subjects but the pressure of clinical quota completion leads to a decline in empathy level. Interns (House Officers) scored the lowest, these students lay more of their efforts on practical skills rather than on "life skills". They are also more mentally relaxed during their internship after completion of their 3rd and 4th year which is accompanied by a vigorous routine.

In this study, the participants had total mean empathy score of 84.4, which was similar to Indian (84.80)¹ and Malaysian (84.76)², these scores were lower than that stated by Hojat for American Dental students (mean 115)³, and Japanese samples (104.3).¹⁰

There are many factors which influence the variation of scores in different countries. These could be age, sex, psychological well-being, culture, course content, the hidden curriculum, the communication skills, timing of clinical training and the scholastic interventions.⁶

According to Hojat et al. Empathy attributes are: social behavior, respect of elderly, moral rational, the lack of malpractice, emphasis on clinical history and the physical examination, patient and physician relationship, good clinical results.¹¹

Empathy depends on a dialectical relationship in which the undergraduate dental or allied health sciences students are not exempted, being a core ingredient of good health care system. In curriculum empathy is generally taught in context and should be formally evaluated to improve the dentist-patient relationship.¹²

CONCLUSION

Empathy-related teaching exercises like 'taught' by peer assisted learning, documentaries, role-playing and interviewing skills, must be implemented among the dental students to endorse its growth.

LIMITATIONS

Future studies required more Longitudinal research to investigate the outcomes of communication exercise, interest in joining dental course.

Empathy was constructed on validated questionnaire, limited to reflecting student's orientation not actual behavior.

CONFLICT OF INTEREST

None declared

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