

What is Level of Empathy of Our Medical Students?

NAILA MUSHTAQ, MUSHTAQ AHMED SHAHID, MEHAK AHMAD, ASAD SHAHEER KHAN

ABSTRACT

Background: Medical students in any medical college are considered as most intelligent and educated people. But it is important to know the personality traits of the medical students.

Aim: To determine the level of empathy among final year medical students and to determine the difference in two genders

Methods: This cross-sectional study was conducted at Avicenna Medical College, Lahore. The total duration of this study was 3 months. All the final year medical students studying in our college were included in the study. We used Interpersonal Reactivity Index (IRI) for determination of Empathy score. All data was analyzed using SPSS version 20.

Results: A total of 89 students were included and mean age was found as 22.90 ± 0.905 years. Most of the students were female in this study. The mean empathy scale score was found as 61.84 ± 10.47 of our students. The total empathy score and its subscales were stratified for gender and it was found that empathy score was higher in females than males in all subscales and in total scores. However, this difference was significant in empathic concern only.

Conclusion: We conclude that empathy is higher in females than males in our medical students. So we recommend special workshops on the topic to be inculcated into our medical students, particularly in male medical students.

Keywords: Medical students; Empathy; Doctor-patient relationship

INTRODUCTION

Relational connections are crucial to a significant human presence. Creating important relational connections amongst patients and specialists is essential to ideal clinical results¹.

Patient doctor relationship not just helps catch the anamnesis and communicate effectively, yet in addition has a helpful impact on the patient's satisfaction. Patient-doctor relationship has been appeared to positively affect psychosocial results (e.g., quality of life, uneasiness, sadness)^{2,3}.

Doctor compassion is an especially powerful remedial component of patient-doctor relationship. To an expansive degree, the nature of the patient-doctor relationship relies upon the specialist's relational aptitudes. Such abilities are among the variables that are regularly mulled over in the appraisal of clinical ability^(4, 5). Empathy is one of the most important aspects in the patient-doctor relationship and it determines the patient's satisfaction and their trust over the physicians^{6,7,8}. The main objective of this study was to determine the level of empathy among final year medical students and to determine the difference in two genders.

MATERIALS AND METHODS

This cross-sectional study was conducted at Avicenna Medical College, Lahore. The total duration of this study was 3 months, conducted in January, 2016. After

approval from ethical committee, this study was planned. All the final year medical students studying in our college were included in the study. We excluded the partially filled proforma from this study. All the proforma were anonymous and after asking demographic details, we used Interpersonal Reactivity Index (IRI) for determination of Empathy score. It is a validated questionnaire having 28 items. All the questions in the scale are answered by participants on a 5-point Likert scale. The overall Empathy score is calculated and it is subdivided into 4 subscales including personality taking, fantasy scale, empathic concern and personal distress. The more score is present, more empathy is considered regarding subscales and total score also. All data was analyzed using SPSS version 20.

RESULTS

A total of 89 students were included and mean age was found as 22.90 ± 0.905 years. Most of the students 72(80.9%) were female in this study. The mean empathy scale score was found as 61.84 ± 10.47 of our students. Regarding the four subscales, maximum mean value was found for personality taking while minimum value was observed for fantasy scale. Also total empathy score and its subscales were stratified for gender and it was found that empathy score was higher in females than males in all subscales and in total scores. However, this difference was significant in empathic concern only. All the data is given in table 1.

¹Department of Gynaecology & Obstetrics,

²Department of Medicine, Avicenna Medical College, Lahore.³Fatima Memorial Hospital, Lahore.

⁴Department of Surgery, SZH, Lahore

Correspondence: Dr. MushtaqShahid, Assistant Professor,
Cell: 03334233583, Email: mushtaq_shahid@hotmail.com

Table 1: Mean values of personality traits among medical students

Empathy scale	Total Score	Male	Female	P-Value
Personal taking	16.38 ± 4.56	16.23 ± 4.75	16.41 ± 4.55	0.884
Fantasy scale	14.47 ± 3.82	14.05 ± 3.49	14.56 ± 3.92	0.624
Empathic concern	15.95 ± 3.32	13.76 ± 3.40	16.47 ± 3.11	0.002
Personal distress	15.03 ± 5.01	13.52 ± 5.51	15.38 ± 4.86	0.171
Total empathy score	61.84 ± 10.47	57.58 ± 9.67	62.84 ± 1.46	0.062

DISCUSSION

The mean empathy scale score was found as 61.84±10.47 of our students. This score is lower than score reported in previous studies. It has been asserted that physicians in Asia in general adopt a more paternalistic role in a doctor-patient relationship. This might be partly responsible in explaining the finding. But further assessment is required to find the factors associated with such low scores, so that steps can be taken to address the situation⁹.

In this study, we found that empathy was higher in females than males in all of its subscales as well as overall score. In another previous study, empathy was reported to be significantly higher in females than males. However, they also noticed that this difference got diminished as the semester of students increased¹⁰. Another study, however, reported that decline of empathy was observed in males only over a period of time⁽¹¹⁾. But a lot many studies have emphasized that total empathy score is higher in females than males^{8,12,13,14}.

There may be many explanations for empathy being higher in female gender and most commonly narrated is the logical and traditional emotional lability and traditional gender role of females¹⁰. Interestingly in a study, authors have suggested that tools developed for empathy are formulated in such a way that it automatically directs the bias towards female gender¹⁵. At the same time, some studies have reported no difference in both genders^{16,17}.

Our study had some limitations also. As it was a cross-sectional study and empathy is a changing concept as any person gets experiences of life, so temporal coordination could not established. So we suggest more studies over the topic and which must assess the change of empathy over some period.

REFERENCES

- Batt-Rawden SA, Chisolm MS, Anton B, Flickinger TE. Teaching empathy to medical students: an updated, systematic review. *Acad Med.* 2013;88:1171-77
- Roh M-S, Hahm B-J, Lee DH, Suh DH. Evaluation of empathy among Korean medical students: a cross-sectional study using the Korean Version of the Jefferson Scale of Physician Empathy. *Teaching and Learning in Medicine.* 2010;22:167-71
- Neumann M, Edelhäuser F, Tauschel D, Fischer MR, Wirtz M, Woopen C, et al. Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Acad Med.* 2011;86:996-1009
- Berg K, Majdan JF, Berg D, Veloski J, Hojat M. Medical students' self-reported empathy and simulated patients' assessments of student empathy: an analysis by gender and ethnicity. *Acad Med.* 2011;86:984-88
- Brazeau CM, Schroeder R, Rovi S, Boyd L. Relationships between medical student burnout, empathy, and professionalism climate. *Acad Med.* 2010;85:S33-S36
- Chen DC, Pahilan ME, Orlander JD. Comparing a self-administered measure of empathy with observed behavior among medical students. *Journal of general internal medicine.* 2010;25:200-02
- Nunes P, Williams S, Sa B, Stevenson K. A study of empathy decline in students from five health disciplines during their first year of training. *International Journal of Medical Education.* 2011;2:12
- Tavakol S, Dennick R, Tavakol M. Empathy in UK medical students: differences by gender, medical year and specialty interest. *Education for Primary Care.* 2011;22:297-303
- Claramita M, Van Dalen J, Van Der Vleuten CP. Doctors in a Southeast Asian country communicate sub-optimally regardless of patients' educational background. *Patient education and counseling.* 2011;85:e169-e74
- Chatterjee A, Ravikumar R, Singh S, Chauhan PS, Goel M. Measurement of clinical empathy using Jefferson Scale of Empathy - Student Version in medical students in India. *J Educ Eval Health Prof.* 2017
- Shashikumar R, Chaudhary R, Ryali V, Bhat P, Srivastava K, Prakash J, et al. Cross sectional assessment of empathy among undergraduates from a medical college. *medical journal armed forces india.* 2014;70:179-85
- Villadangos M, Errasti J, Amigo I, Jolliffe D, García-Cueto E. Characteristics of Empathy in young people measured by the Spanish validation of the Basic Empathy Scale. *Psicothema.* 2016;28:323-29
- McIntyre HH. Gender differences in the nature and linkage of higher-order personality factors to trait and ability emotional intelligence. *Personality and Individual Differences.* 2010;48:617-22
- Panksepp J, Panksepp JB. Toward a cross-species understanding of empathy. *Trends in neurosciences.* 2013;36:489-96
- Baez S, Flichtentrei D, Prats M, Mastandueno R, García AM, Cetkovich M, et al. Men, women... who cares? A population-based study on sex differences and gender roles in empathy and moral cognition. *PloS one.* 2017;12:e0179336
- Ang RP, Goh DH. Cyberbullying among adolescents: The role of affective and cognitive empathy, and gender. *Child Psychiatry & Human Development.* 2010;41:387-97
- Rahimi-Madiseh M, Tavakol M, Dennick R, Nasiri J. Empathy in Iranian medical students: a preliminary psychometric analysis and differences by gender and year of medical school. *Medical teacher.* 2010;32:e471-e78