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Original Research Article

Physicians' empathy toward patients at a private medical college, Manipur: a cross-sectional study

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ABSTRACT

Background: According to The Society of General Internal Medicine, empathy is defined as 'the act of correctly acknowledging the emotional state of another without experiencing that state oneself'. Empathy appears to be beneficial for both the doctor and patient according to studies findings. There is significant paucity of studies on this topic in India and in Manipur also. Hence the study was proposed to understand the empathy level of medical professionals towards patients.
Methods: The study was a cross-sectional study conducted at Shija Academy of Health Sciences, Langol, Manipur, from August to September 2023. It was done among all the doctors involved in patient care services. A validated self-administered questionnaire of the Jefferson scale of physician empathy (JSPE) was used.
Results: A total of 117 participants took part in the study. Mean age of participants was 36±11.52 years. The mean score of empathy was 106±15.27. "Perspective taking" component score was 54.38 out of 70 and "compassionate care" component score was 41.85 out of 56. Average score of physicians "filling in patients' shoes" component was 10.46 out of 14. There was statistically significant association between age and designation of the physicians to the empathy score.
Conclusions: The empathy level among the participants was a little more than three-fourth of the total score. This study can provide important implications in uplifting the quality of health services by the doctors.

Keywords: Empathy, Healthcare professionals, JSPE, Medical college

INTRODUCTION

Empathy may be regarded as an important tool in medical profession to understand the patients from their perspectives. It can undoubtedly uplift the relationship between a doctor and a patient when employed in a right manner.[1-5]

Sometimes, the concepts of empathy and sympathy are mistakenly intertwined, but they should be distinguished in situations of patient-care. This is because excess of sympathy in clinical practices may interfere the doctor's judgement on diagnosis and treatment.[6]

So, the basic difference between the two, although both the concepts involve the notion of sharing, empathetic doctors share their understanding while sympathetic doctors share their emotions with their patients.[7]

Hence, according to The Society for General Internal Medicine, empathy is defined as 'the act of correctly acknowledging the emotional state of another without experiencing that state oneself'.[8] There are 2 domains under empathy which comprises of cognitive and affective domains. Cognitive domain refers to understanding of another person's inner experiences and feelings with the capability of viewing the outside world from that person's

perspective. Affective domain refers to the ability to enter into or join the experiences and feelings of another person.[9] In short, empathy is the ability to stand in the shoes of another person, to consider a situation from someone's point of view and thereby gain a greater understanding of the person's perspectives.[10]

Empathy has an important niche in medical field. In medical science, it is described as the intellectual quality that all the healthcare professionals must possess; which will help in understanding the experiences, feelings and thoughts of the patient as well as developing the skills to communicate that understanding.[11,12]

Empathy appears to be beneficial for both the doctor and the patient.[13] Some studies have shown that doctors who are more empathetic have more job satisfaction, enhanced ability to diagnose and treat, reduction in medical malpractice and are less likely to feel burnt-out than their less empathetic counterparts.[14-18] Also, patients will experience more trust, more satisfaction, better compliance with clinical decisions and participate actively.[19-21] All of these are found to lead improved clinical outcomes with better patient care.[22,23]

Furthermore, to become a high-quality medical doctor, interpersonal skills and empathy are progressively more documented as the core clinical skills, although detailed understanding of clinical cases and technical expertise are essential.[24] However, some researches have revealed that this clinical empathy level seems to decline with age and seniority. A systematic review also reported that empathy started to decline during the period as medical undergraduates and as residents.[25-27] So, understanding the empathy level of medical doctors at various stages/designations becomes necessary.

Moreover, India has a very large population and the required doctor patient ratio is yet to be met. As such, stress is very common among medical doctors and the relation that an empathetic doctor experiences lesser stress has already been described earlier. Nevertheless, the concept of empathy in medical profession seems to be largely neglected and less explored. There is also a significant paucity of studies on the same topic in India. Additionally, there is dearth of such studies in Manipur. Hence, realising the need for understanding the empathy level of medical professionals towards patients, which will in turn affect the quality of healthcare services, the study has been proposed with the aim to assess the empathy of physicians towards patient at a tertiary care hospital and to explore the various associated variables with it.

METHODS

Study design and setting

The study was a cross-sectional study conducted at a medical college situated at Imphal West, Manipur. It was conducted for a duration of 2 months from August to September, 2023.

Study population and eligibility criteria

All doctors involved in patient care services were included. We included those who gave consent and excluded those who could not be contacted after two attempts or those who were involved in institute's administration.

Sample size and sampling method

A total of 165 doctors (faculties and residents) constituted the population, representing the whole doctor population of the study and hence universal sampling method was used for our study.

Operational definitions

'Faculty' was defined as doctors of designation Assistant Professor and above. 'Resident' were those doctors including senior residents and junior residents or tutors or demonstrators.

We defined 'medicine and allied subjects' as community medicine, general medicine, respiratory medicine, paediatrics, psychiatry, dermatology, venerology and leprosy, physical medicine and rehabilitation (as per NMC GMER 2019).

'Surgery and allied' subjects included general surgery, ophthalmology, otorhinolaryngology, obstetrics and gynaecology, orthopaedics, anaesthesiology, radiodiagnosis, radiotherapy, dentistry (as per NMC GMER 2019).

'Pre and para clinical subjects as Human Anatomy, Physiology, Biochemistry, Pharmacology, Microbiology, Forensic Medicine and Toxicology, Pathology.

Study tool

The study tool was a validated self-administered questionnaire which is a revised version of the Jefferson scale of physician empathy (JSPE) was used for this study. It included 20 Likert – type items answered on a 7–point scale (1=strongly disagree, and 7=strongly agree). The first 10 items reflected physicians "perspective taking", item 11–18 reflected the physicians "compassionate care" and 19 and 20 item reflected "standing in patient's shoes". Item 1–10 were positively worded items and was scored as per the scale of response while item 11–20 were negatively worded items and was reverse scored accordingly.

Study variables

Study variables included background information of physicians such as age, gender, designation, department, years of experience and history of training in empathy related activities was used. Score of the JSPE will be used

for the interpretation of level of empathy as the outcome variable.

Data collection procedure

For the purpose of data collection, a total of 10 teams comprising of two MBBS students in each team carried out the data collection, supervised by a Senior investigator from Department of Community Medicine, SAHS. Each eligible participant was approached individually by the teams at their respective departments or their work place for data collection during working hours from 9 am to 12 noon. After obtaining verbal consent from each eligible participant, the self–administered questionnaire (JSPE) was given to them. The JSPE took around 10-15 mins to respond by each participant. Each questionnaire was collected on the same day. Those unavailable during the first visit was attempted again on the following next working day.

Statistical analysis

The collected data was first entered in Microsoft excel and check for data consistency and correctness and later transferred to statistical package for the social sciences (SPSS) v25 (IBM, Armonk, NY) for analysis. Descriptive statistics such as frequency, percentages, mean, median and standard deviation was used. For inferential statistics, parametric test such as students t-test or F-test was used.

RESULTS

Out of the total 165 doctors, 117 (71%) participated in the study (Figure 1).

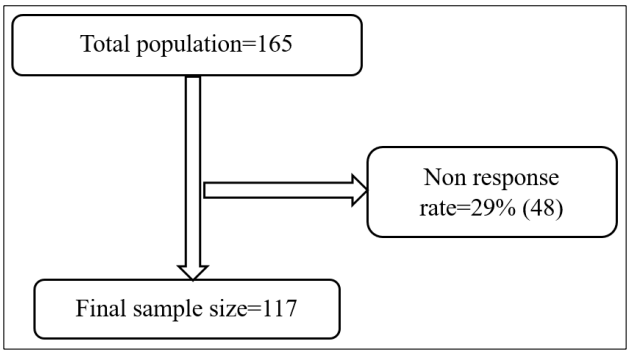

Figure 1: Participants flow chart.

The mean age of participants was 36.57±11.52 years. The age group of 25–35 years constituted almost two-third (63.2%) of the participants (Table 1).

Female participants constitute more than half (56%) of the participants. From the total 117 participants, resident doctors constituted more than half (52.1%). Pre-para subjects constitute almost near to half (44%) of the study participants. Only one-fourth of the participants have attended trainings related to empathy.

Table 1: Participants' background characteristics.

Variables	N	%
Age group (in years)		
25-35	74	63.2
36-46	27	23.1
47-57	5	4.3
58-68	7	6.0
69-79	4	3.4
Gender		
Male	66	56
Female	51	44
Designation		
Faculty	56	47.9
Resident	61	52.1
Branch of specialty		
Pre-para	52	44
Surgery and allied	39	33
Medicine and allied	26	22

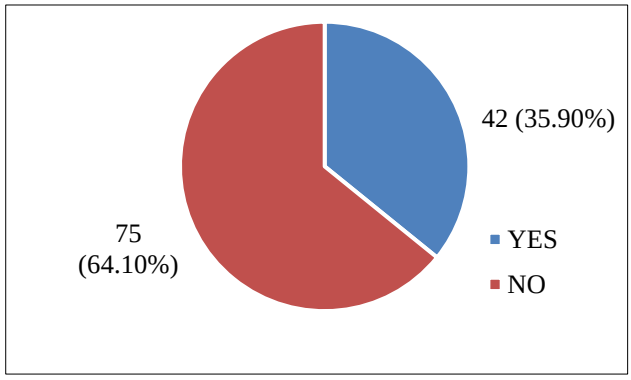

Figure 2: CME/workshop/seminars/conferences attended related to empathy.

The mean empathy score of the participants was 106±15.27 out of the total score of 140.

Regarding the three components of empathy, 'perspective thinking' mean score was 54.38±7.76 out of the total 70, 'compassionate care' mean score was 41.85±8.12 out of the total 56 and 'filling in the patient's shoes' mean score was 10.46±3.14 out of the total 14.

The age category of 58–68 years was found with the highest mean empathy score and was found to be statistically significant (p=0.005) (Table 2). The empathy mean score of faculties was more than those of resident doctors and found to be statistically significant (p=0.001) (Table 4).

Table 2: Comparison of mean empathy score by age groups.

Age category (in years)	N	Mean empathy score	SD	F value	P value
25-35	74	103.64	15.49	3.93	0.005*
36-46	27	113.85	10.246		
47-57	5	113.00	15.668		
58-68	7	114.14	12.786		
69-79	4	93.75	22.411		

*P<0.05; statistically significant

Table 3: Comparison of empathy mean score by participants' gender.

Gender	N	Mean empathy score	SD	T test	P value
Male	66	104.70	17.174	17.17	0.110
Female	51	109.25	12.073		

Table 4: Comparison of mean empathy score by designation.

Designation	N	Mean empathy score	SD	T test	P value
Faculty	56	112.13	12.59	3.91	0.001*
Resident	61	101.69	15.89		

*P<0.05; statistically significant

Table 5: Comparison of mean empathy score by speciality.

Speciality	N	Mean empathy score	SD	F test	P value
Medicine and allied	26	111.08	19.02	1.39	0.25
Surgery and allied	39	105.46	13.90		
Pre-para subjects	52	105.40	14.01		

Table 6: Comparison of mean empathy score of participants by training in empathy.

Empathy training	N	Mean empathy score	SD	T test	P value
Yes	42	103.95	15.56	1.45	0.14
No	75	108.21	14.99		

DISCUSSION

According to our study, the mean empathy score of the participants was 106±15.27. This finding was consistent with studies done by Kataoka et al.[13,20,27] Higher score was found in studies done by Hozat et al and Lillo et al.[17,28] However lower empathy score was found in study done by Cicek et al.[29] This difference in the empathy score can be attributed to the difference in Medical Education System, the difference in sample size and study setting variation.

Our study revealed that the mean empathy score for the female was higher than male but unexpectedly this finding was not statistically significant. However, in a study done at Korea by Suh et al female had higher score (100.3±11.7) than male (96.5±12.0).[30] This difference in finding can be attributed to women having greater capacity for social relationships as compared to male counterparts and cultural backgrounds in shaping empathy.[31]

There was statistically significant higher mean empathy score of the faculties than the resident doctors in our study. This finding was consistent with Osim et al and Sahini et al study findings.[32,33] Interestingly our study also revealed that the mean empathy scores of those who attended any training on empathy was lower than those who had not attended, however, not statistically significant. An explanation can be attempted by stating that the newer generation healthcare professionals followed a more structured curriculum and syllabus for imparting the essence of empathy, senior faculties had more exposure and experience towards patients' empathy and hence reflecting in daily practice.

Doctors from medicine and allied subjects had higher mean score of empathy than the counterparts in our study. However, it was not statistically significant. Study done by Hojat et al found out similar result with our findings but with statistical significance.[34] The difference in the scores in the specialties might reflect the notion that different individuals with different degrees of interpersonal skills are attracted to different specialities.[35] These differences might also result from the amount of emphasis in training placed on interpersonal skill placed on each specialty training.

Our study suffered from certain limitations. First, the small sample size owing to the single study center affects the generalizability of the study. Secondly, because of self-reporting measures were used, desirability in the response can be a factor of bias. Thirdly, non-response might have caused sampling errors and affected the result estimate.

CONCLUSION

This study highlights the level of empathy level of the physicians. It also explores the sub-domains levels of the empathy. There was a statistically significant association between age and designation of the physicians to the empathy score. Our study can provide important implications in uplifting the quality of health services by the doctors. Periodical trainings or workshops on empathy for doctors may be conducted as the need has been revealed by the level of empathy. Further qualitative studies required among doctors to understand the in-depth behavioral manifestations of empathy rather than self-reported empathy.

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REFERENCES

1. Jha V, Bekker HL, Duffy SR, Roberts TE. A systematic review of studies assessing and facilitating attitudes towards professionalism in medicine. Med Educ. 2007;41(8):822-9.
2. Hojat M, Louis DZ, Markham FW, Wender R, Rabinowitz C, Gonnella JS. Physicians' empathy and clinical outcomes for diabetic patients. Acad Med. 2011;86(3):359-64.
3. Del CS, Louis DZ, Maio V, Wang X, Rossi G, Hojat M, et al. The relationship between physician empathy and disease complications: an empirical study of primary care physicians and their diabetic patients in Parma, Italy. Acad Med. 2012;87(9):1243-9.
4. Hojat M. Empathy in patient care: Antecedents, development, measurement, and outcomes. Springer Science & Business Media. 2007.
5. Hojat M, Vergare M, Isenberg G, Cohen M, Spandorfer J. Underlying construct of empathy, optimism, and burnout in medical students. Int J Med Educ. 2015;6:12-6.
6. Wispe L. The distinction between sympathy and empathy: to call forth a concept, a word is needed. J Pers Soc Psychol. 1986;50:314-21.
7. Aring CD. Sympathy and empathy. JAMA. 1958;167:448-52.
8. Nightingale SD, Yarnold PR, Greenberg MS. Sympathy, empathy, and physician resource utilization. J Gen Intern Med. 1991;6:420-3.
9. Markakis K, Frankel R, Beckman H, Suchman A. Teaching Empathy: It can be Done. Working Paper. San Francisco, CA, USA: The Annual Meeting of the Society of General Internal Medicine. 1999.
10. Davis MH. Empathy: A Social Psychological Approach. Madison, Wis, Brown and Benchmark; 1994.
11. Hojat M, Mangione S, Nasca TJ, Cohen MJM, Gonnella JS, Erdmann JB, et al. The Jefferson Scale of Empathy: development and preliminary psychometric data. Educ Psychol Measurement. 2001;61:349-65.
12. Williams B, Brown T, McKenna L, Boyle MJ, Palermo C, Nestel D, et al. Empathy levels among health professional students: A cross-sectional study at two universities in Australia. Adv Med Educ Pract. 2014;5:107-13.
13. Kataoka HU, Koide N, Ochi K, Cicekella JS. Measurement of empathy among Japanese medical students: Psychometrics and score differences by gender and level of medical education. Acad Med. 2009;84:1192-7.
14. Sinclair S, Beamer K, Hack TF, McClement S, Raffin Bouchal S, Chochinov HM, et al. Sympathy, empathy, and compassion: A grounded theory study of palliative care patients' understandings, experiences, and preferences. Palliat Med. 2017;31:437-47.
15. Halpern J. What is clinical empathy? J Gen Intern Med. 2003;18:670-4.
16. Hojat M, Louis DZ, Maio V, Gonnella JS. Empathy and health carequality. Am J Med Qual. 2013;28:6-7.
17. Hojat M, Gonnella JS, Nasca TJ, Mangione S, Vergare M, Magee M, et al. Physician empathy: Definition, components, measurement, and relationship to gender and specialty. Am J Psychiatry. 2002;159:1563-9.
18. Hojat M, Gonnella JS. Eleven years of data on the Jefferson scale of empathy-medical student version (JSE-S): Proxy norm data and tentative cutoff scores. Med Princ Pract. 2015;24:344-50.
19. Hojat M, Gonnella JS, Nasca TJ, Mangione S, Veloksi JJ, Magee M, et al. The Jefferson scale of physician empathy: Further psychometric data and differences by gender and specialty at item level. Acad Med. 2002;77:S58-60.
20. Shariat SV, Habibi M. Empathy in Iranian medical students: Measurement model of the Jefferson Scale of Empathy. Med Teach. 2013;35(1):913-8.
21. Beckman HB, Frankel RM. The effect of physician behavior on the collection of data. Ann Intern Med. 1984;101(5):692-6.
22. Falvo D, Tippy P. Communicating information to patients: patient satisfaction and adherence as associated with resident skill. J Fam Pract. 1988;26(6):643-7.
23. Levinson W, Roter DL, Mullooly JP, Dull VT, Frankel RM. Physician-patient communication: the relationship with malpractice claims among primary care physicians and surgeons. JAMA. 1997;277(7):553-9.

24. Kim D, Bae H, Chon Park Y. Validity of the subjective units of disturbance scale in EMDR. J EMDR Pract Res. 2008;2:57-62.
25. Kim SS, Kaplowitz S, Johnston MV. The effects of physician empathy on patient satisfaction and compliance. Eval Health Prof. 2004;27:237-51.
26. Becker MH, Maiman LA. Sociobehavioral determinants of compliance with health and medical recommendations. Med Care. 1975;12:10-24.
27. Barnett MA, Howard JA, King LM, Dino GA. Helping behavior and the transfer of empathy. J Pers Soc Psychol. 1981;115:125-32.
28. Newton BW, Savidge MA, Barber L, Cleveland E, Clardy J, Beeman G, et al. Differences in medical students' empathy. Acad Med. 2000;75:12-5.
29. Hojat M, Gonnella JS, Mangione S, Nasca TJ, Veloski JJ, Erdmann JB, et al. Empathy in medical students as related to academic performance, clinical competence and gender. Med Educ. 2002;36(6):522-7.
30. Díaz NVP, Alonso PLM, Caro SE, Silva MG, Castillo JA, Bilbao JL, et al. Empathic orientation among medical students from three universities in Barranquilla, Colombia and one university in the Dominican Republic. Arch Argent Pediatr. 2014;112(1):41-9.
31. Epstein RM, Hundert EM. Defining and assessing professional competence. JAMA. 2002;287:226-35.
32. Sherman JJ, Cramer A. Measurement of changes in empathy during dental school. J Dent Educ. 2005;69:338-45.
33. Hojat M, Mangione S, Nasca TJ, Rattner S, Erdmann JB, Gonnella JS, et al. An empirical study of decline in empathy in medical school. Med Educ. 2004;38:934-41.
34. 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. Int J Med Educ. 2011;2:12-7.
35. Ward J, Cody J, Schaal M, Hojat M. The empathy enigma: An empirical study of decline in empathy among undergraduate nursing students. J Prof Nurs. 2012;28:34-40.

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