Available online on 15.01.2015 at http://jddtonline.info Journal of Drug Delivery and Therapeutics

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RESEARCH ARTICLE

EMPATHY AND SYMPATHY AMONG MEDICAL STUDENTS: CHANGING TRENDS

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Received 12 Dec 2014; Review Completed 08 Jan 2015; Accepted 13 Jan 2015, Available online 15 Jan 2015

ABSTRACT:

Objectives: There is general belief that empathy is crucial for the physician-patient relationship and thus an important issue in medical education. This comparative study was designed to establish the changing attitude in empathy and sympathy among the first year, second year and final year medical students.

Methodology: A comparative study among 100 first year, 100 second year and 75 final year medical students was conducted in Government Kilpauk medical college Chennai from January 2012 to June 2012. The study subjects were selected using simple random sampling technique from the list of the students. Study participation was voluntary.

Results: Out of the total 275 students, according to our analysis, we found 82.67% of final year students and 80.21% of second year students and 40% showing average or above average levels of empathy. Sympathy scores of final year, second year and first year students were 32%, 40%, and 80% respectively.

Conclusion: The results of our study show that students in the first year have higher sympathy levels, students in their second year and final year had higher empathy levels compared to first year students and final year students had highest empathy levels.

Keywords: Empathy and Sympathy among Medical Students, physician-patient relationship, medical education

INTRODUCTION:

Medicine at its core is a human service profession, cultivating humanistic values in general and enhancing interpersonal skills. Sympathy and empathy in particular are of paramount importance in any human service endeavour.

Despite the consensus of professional organizations and medical education leaders on the importance of empathy in medical education and the practice of medicine, empirical research on empathy, including its development and erosion is scarce¹. It is generally accepted that if doctors empathize with their patients, they will succeed in fostering a therapeutic relationship². Empathy earns global attention and cited as the backbone of the patient in recent years. Empathy is one of the basic ingredients of good physician-patient relationships. Empathy is often considered an important attribute for professionals in health field and positive clinical outcomes.

Empathy was first introduced in the context of patient care by Hojat [2007] as predominantly cognitive attribute that involves an understanding of experiences, concerns and perspectives of the patients, combined with a capacity to communicate this understanding. Both empathy and sympathy involve sharing but the concept of empathy lies in cognitive understanding whereas sympathy involves sharing emotions with the patients. Numerous studies have reported a decline in empathy level among undergraduate medical students as they progress through their professional education, as well as during their PG –training, still some students are more empathetic than junior students³.

Researchers agree on the positive role empathy plays in interpersonal relationships, when providing health care⁴. In Hojat et al.'s review of the literature, he found that empathy had a positive impact on both physicians and patients. For patients, empathy facilitated patients' satisfaction, their compliance with treatment regimens, provided a more humanistic relationship, and more accurate diagnosis. For physicians, greater empathy reduced the likelihood of malpractice litigation, improved competence in history taking, improved attitude to elderly patients, and improved resource utilization and performance of physical examinations.

In health care, an important aspect of physician empathy is being able to communicate this understanding of the patient to the patient. It is also important that the health care professional has this understanding of the patient without intense emotional involvement, sometimes referred to as maintaining a professional distance. Not becoming emotionally involved is what distinguishes empathy from sympathy, and, in the context of health care, this is an important distinction. Sympathy has the

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potential to 'jeopardize clinical neutrality and personal durability', whereas empathy has no such concern because its focus is on understanding and not personal involvement⁴.

Communicating with patients is an essential activity. Patient physician communication has been shown to have a positive effect on healing⁵. Empathy is considered as basic component of all helpful relationships, being one of the strongest for pro-social behaviour. It is the vital component of the high quality health care and an important aspect of medical practice and professionalism⁶.

Empirical research on empathy among medical students and physicians has been hampered not only by a conceptual confusion but also by the lack of a sound instrument to measure empathy specifically in the context of medical education and patient care. Without a valid measurement of empathy that is content-specific to patient care, it is not feasible to determine what factors lead to its enhancement or degradation among physicians-in-training¹.

Empathy versus sympathy

Sympathy means feeling pity and sorrow for someone's misfortune. Empathy is often characterized as the ability to experience the outlook or emotions of another being within oneself, a sort of emotional resonance⁷.

Empathy is often confused with sympathy. Some argue that sympathy represents feelings and empathy represents thinking, while others challenge this notion, suggesting that sympathy and empathy require compassion and passion, respectively. However, it is suggested that empathy is more altruistic, objective, and intellectual, and less innate, spontaneous, and energyconsuming when compared with sympathy. Conversely, sympathy is more primitive, emotionally driven, and egoistic. Knowing, and indeed applying these differences is important because patients want to be understood rather than pitied. For research and practical purposes, a universal definition is needed to be able to review the relevant studies collectively⁸.

Sympathy as opposed to empathy is predominantly an affective or emotional attribute that involves intense feelings of patients' pain and suffering.

The interchangeable use of these two concepts may not cause a problem in the context of social psychology, but it is important to separate the two in the context of patient care. In social psychology, both empathy and sympathy can lead to similar outcome, but in the context of medical education and patient care we must make a distinction between the two as they lead to different clinical behaviour and outcomes.

Another implication for making a distinction between empathy and sympathy in medical field is the fact that prominent ingredients of sympathy are less amenable to change, whereas prominent ingredients of empathy can be enhanced by education¹.

Hence the present study is undertaken to find out the changing trends in empathy and sympathy among

medical students of government Kilpauk medical college, Chennai.

MATERIALS AND METHODS

Procedures

Study population

The study participants included 275 medical students from the first, second and final year curriculum of the Government Kilpauk medical college. There were a total of 100 students in the first year and 100 students in the second year and 75 students in the final year. Students who were not present during the administration of the questionnaire were not included in the study.

Instruments used

All students participating in the study received an explanatory statement about the study and were informed that participation was voluntary and anonymous prior to commencing the survey. Each participant was required to complete a self-reporting questionnaire. The questionnaire consisted of 15 questions, which was given to first year, second year and final year students. An additional 4 questions was given to the first year students to introduce them to the medical curriculum and increase their comfort level for their participation in the study. Of the 15 questions, 7 questions judge the empathy of the participants and 7 questions judge the sympathy of the participants (see Table 1). The remaining question is included to distract the participant from the constant exposure to empathy and sympathy questions.

Ethics

Ethics approval for the study was obtained from the institutional ethical committee, Government Kilpauk medical college, Chennai.

Data analysis

Student's t tests were conducted to examine the differences in the attitude of students in showing empathy or sympathy to the patients. A p-value of <0.05 was considered to indicate statistical significance.

RESULTS

 Table 1: Item numbers for empathy and sympathy assessment questions

Question type	Item numbers
Empathy assessment	1, 3, 9, 11, 12, 13, 14,
Sympathy assessment	2, 4, 5, 6, 7, 8, 10

Each question had the option of three different responses (highly empathetic response scored 1 mark neutral response scored 0 marks and low empathetic scored -1 mark) for the following questions: 1, 3, 9, 11,12, 13, 14, 15 similarly the "strongly sympathetic " response carried 1 points while neutral response score d 0 points and low sympathetic carried -1 mark on the following questions: 2, 4,5, 6, 7, 8, 10.Question 15 was a filler question to divert the attention of the participant. Participants who

ISSN: 2250-1177

failed to complete or return the administered survey were defined as a non-responder

The comparison of sympathy and empathy levels among medical students from first year to final year medical students was done using student's t test.

Mean empathy score for final year students and second year students (mean=5.066, SD=0.929), (mean=3.533,

SD=0.957) respectively was significantly higher than the mean empathy score for first year students (mean=2.066, SD=0.928), p=0.002. Final year students reported the highest levels of empathy (mean=5.066, SD=0.929) while first year students reported the lowest levels of empathy (mean=2.066, SD=0.928).

Mean empathy scores for each course are reported in Table 2.

First-Year Mean (SD)	Second year. Mean (SD)	Third-Year Mean (SD)
2.066(0.928)	3.533 (0.957)	5.066 (0.929)

Mean sympathy score for first year students and second year students (mean=5.0, SD=0.966), (mean=3.40, SD=0.879) respectively was significantly higher than the mean sympathy score for final year students (mean=1.866, SD=0.718), p=0.002. First year students

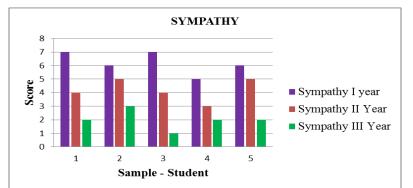
reported the highest levels of sympathy (mean=5.0, SD=0.966) while final year students reported the lowest levels of sympathy (mean=1.866, SD=0.718).

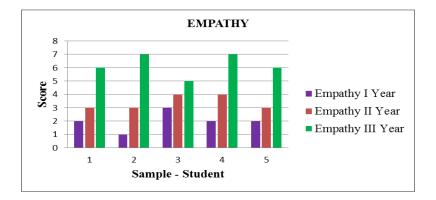
Mean empathy scores for each course are reported in Table 3.

Table 3: Levels of sympathy among First, second and Third-Year students

First-Year Mean (SD)	Second year. Mean (SD)	Third-Year Mean (SD)
5.0 (0.966)	3.40 (0.879)	1.866(0.718)

For pictorial representation five random samples were taken from each year and the results were tabulated using bar charts.





DISCUSSION

Our study is undertaken to assess the changing attitude of showing sympathy and empathy towards the patients from first year to final year medical students in Government Kilpauk medical college, Chennai. Our results display novel findings, with higher sympathy levels and a lower level of empathy in first year which changes progressively to lower levels of sympathy with higher levels of empathy in second year and final year medical students contrary to various studies, which state that empathy decreases as the level of medical education increases. In our study students in their final year had highest level of empathy. It may be due to the fact that students in their first year do not have clinical exposure and, in the second year, most students spend only a small amount of time completing clinical education. It is not until third year that students have considerable exposure to patients gained much in the way of clinical experience or exposure.

The emphasis placed during medical training on medical ethics, a considerate attitude towards the patient's wellbeing and a concentration on a patient centred approach might have increased empathy in second year and final year students. Furthermore, after the second year of medical school, there is constant patient exposure where students are required to learn history-taking skills and regular examinations that build the student's professional attitude and approach to gaining patient cooperation, factors may enhance student empathy. Subjects such as behavioural sciences and medical ethics are taught in the third year of medicine; integrating behavioural sciences at the undergraduate levels can help doctors-in-training to have a better understanding of behavioural issues in clinical settings later on. Hence, the training obtained throughout medical school may persuade students to implement empathetic manner in their interpersonal relationships with patients rather than a more emotional sympathetic behaviour.

Empathic engagement is the pillar of the patientphysician relationship. Mutual understanding leads to empathy; the bedrock of a trusting relationship improves compliance, thus leading to optimal patient outcomes. Through our empathy research over the past decade we have found that empathy among physicians clearly matters. Students with high empathy scores were more likely to pursue 'people oriented' specialities such as primary care or psychiatry⁹.

Empathy and related skills of support, legitimation and partnership involve first the recognition of a negative feeling or concern on the part of the patient and second a response to the feeling that acknowledge it.

It is important to distinguish empathy from sympathy. While empathy involves recognition and reflection of the patient's feelings sympathy is a more directly parallel response to emotion¹⁰. Physicians frequently deal with the emotional burden of life, death, and patients in pain during their practice, yet still have to relate to patients in an empathic manner. There are several ways a physician can be empathically neutral and perform what needs to be done

to the patient without feeling grief, regret, or other difficult emotions. Alternatively, detached insight could be used to communicate with and treat the patient¹¹.

Medicine is a field where interpersonal skills and concern for others are of key importance, for it is a field whose very core is based on service to humanity. It is thus essential that empathy should be nurtured in medical students rather than eroded away with time and clinical exposure. It was surprising to see that a large majority of both first years and fifth years maintained adequate empathy levels despite no significant emphasis placed on the matter throughout the medical curriculum. Our research paves the way for further research to be carried out which may further justify our results and identify additional influencing variables.

When the empathic connections between patient and doctors are broken, both patients and doctors suffer; patients receive worst care and doctors burn out¹². There is general consent that empathy is crucial for the physician-patient relationship and thus an important issue in medical education. Empathy represents the "touch" in modern medicine, at present ill-reputed as "high tech, low touch"¹³. Empathy has been viewed as an ambiguous concept. Although there is some variation regarding the concept of empathy, it is generally defined as the ability to "see the world as others see it, be non-judgmental, understand another's feelings, and communicate the understanding".

Empathy is viewed as an important attribute for medical care-givers¹⁴. Empathy is one of medicine's cornerstones. Not only does empathy encompass an ability to recognize and understand the perspective of the patient, but also requires communication appreciation in return⁸.

Our study has found that there was significant increase in empathy levels between first year and final year medical students. But there was significantly higher level of sympathy among first year students as compared to final year students. May be a positive result of the students training and experience through clinical years of the students. It has been stated that emotional relationships that elicit emotional response are conceptually more relevant to sympathy than to empathy¹².

Though sympathy is to feel for others, empathy is the most needed quality for medical profession as empathy makes the physician to understand the problem and make decision genuinely. More of sympathy for the patients interferes with decision making and it is harmful to both the doctors and the patients. Hence the empathy levels should be improved by proper training and exposure to patients.

CONCLUSION

The findings from this study indicate a higher level of empathy in the first year and a progressive increase in the sympathy level in the subsequent year medical students .The main finding of this study was that empathy in medical students increased significantly after one year of medical education.

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REFERENCES

- Mohammadreza Hojat, PhD, Michael J. Vergare, MD, Kaye Maxwell, George Brainard, PhD, Steven K. Herrine, MD, Gerald A. Isenberg, MD, Jon Veloski, MS, and Joseph S. Gonnella, MD : The Devil is in the Third Year: A Longitudinal Study of Erosion of Empathy in Medical School. Academic Medicine, Vol. 84, No. 9 / September 2009.
- 2. Alka Ganesh, Gayatri Ganesh: Reflective writing by final year medical students; lessons for curricular change. The national medical journal of India, 2010; 23(4): 226-230.
- Syed Shahzad Hasan, Muneer Gohar Babar, Kheng Kai Chan, Syed Imran Ahmed, Shahid Mitha: An assessment of pharmacy students' empathy levels in Malaysia. Journal of advanced pharmacy education and research, Oct-Dec 2013; 3(4):531.
- 4. M Boyle, B Williams, T Brown, A Molloy, L McKenna, L Molloy, B Lewis: Levels of empathy in undergraduate health science students. The internet journal of medical education, volume 1, number1-5, ISPUB.COM
- Dr.Melanie Neumann, Dr Friedrich Edelhauser, Dr.Diethard Tauschel, Dr.Martin R. Fischer et al: Empathy decline and its reasons: A systematic review of studies with medical students and residents. Academic medicine, august 2011; 86(8): 996-1009.
- Florian Ahrweiler, Melanie Neumann, Hadass Goldblatt, Eckhart G Hahn and Christian Scheffer : Determinants of physician empathy during medical education: hypothetical conclusions from an exploratory qualitative survey of practicing physicians. BMC Medical Education 2014, 14:122
- Margo Kirtikar PhD: Sympathy versus Empathy. Published on SelfGrowth.com (http://www.selfgrowth.com), June 28, 2007

- Brett Williams, Sivalal Sadasivan, Amutha Kadirvelu, Alexander Olaussen: Empathy levels among first year Malaysian medical students; an observational study. Advances in Medical Education and Practice 2014; 5: 149– 156.
- Mohammedreza Hojat PhD: Viewpoint: Guiding Medical Students toward Empathetic Patient Care. AAMC Reporter: June 2012, AAMC Association of American medical college.
- 10. Richard M Frankel: Emotion and the physician patient relationship. Motivation and emotion- Vol.19, no3, 1995.
- Bruce W Newton: Walking a fine line: is it possible to remain an empathic physician and have a hardened heart?, Frontiers in Human Neuroscience www.frontiersin.org June2013|Volume7|Article233 | 1
- 12. David S. Jones MD, PhD. Medicine and society. A Complete Medical Education Includes the Arts and Humanities. Virtual Mentor, American Medical Association Journal of Ethics August 2014; 16(8): 636-641.
- 13. Sandra Dehning, Eshetu Girma, Sarah Gasperi, Sebastian Meyer, Markos Tesfaye and Matthias Siebeck: Comparative cross-sectional study of empathy among first year and final year medical students in Jimma University, Ethiopia: Steady state of the heart and opening of the eyes. BMC Medical Education 2012; 12:34.
- 14. Sarah E. Wilson, PhD, Julie Prescott, PhD, and Gordon Becket, PhD University of Central Lancashire, United Kingdom: Empathy Levels in First- and Third-Year Students in Health and Non-Health Disciplines. American Journal of Pharmaceutical Education 2012; 76 (2): Article 24.