



## Medical Students' Perspective towards Empathy: Current Discourse and Way Forward

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### ABSTRACT

**Background:** Empathy can help to build a good physician-patient relationship and essential treatment to the patients but the current level of empathy in medical students shown the decline. This study aims to look into what medical students discourse empathy, such as their definition of empathy and approaches for them to develop empathy.

**Methods:** A mixed-method study design was conducted among 316 students. A questionnaire from Jefferson Scale of Empathy (student version) was distributed to measure the level of empathy. Whereas 11 medical students had been chosen by convenience sampling for the focus group interview.

**Results:** The finding showed a mean score of the level of empathy is 100.33 out of 140. Medical students had moderately understanding about the definition of empathy. They also have moderately understanding on approach to develop empathy whereas the factors to develop empathy are also reasonably understood by medical students but at the lower point. The above findings for understanding the definition of empathy is supported by the results from the focus group interview where medical students capable of defining empathy. Contradiction to that, medical students unable to identify factors that can develop empathy. They also have a lack of understanding regarding the approaches on how to build empathy in them rather than through academic experiences and social experiences.

**Conclusion:** In conclusion, medical students able to define empathy but they fail to explain more about factors and approaches that can develop empathy. The findings are significant to be used for medical students to understand empathy and improve empathic behaviour.

### ARTICLE HISTORY

Received: December 11, 2021

Accepted: January 13, 2021

Published: January 23, 2021

### KEYWORDS

Empathy; Medical students; Definition; Factors; Approaches

### Introduction

One of the importance of empathy is to build a doctor-patient relationship which it can form by understanding the gravity of patients' suffering by engaging with patient spiritually, intellectually, emotionally and physically; however the level of empathy in medical students decline upon they enter clinical years which they started to criticized and do cynicism to the patients [1]. Thus, concern among researcher about the decline of empathy had increased where many researches had been developed. Based on the findings, the common reasons for the decline are distress among medical

students especially when they entered clinical years, hidden curriculum during study and aspects of the formal/informal curriculum in the syllabus of medical education [2].

Because of that, this current level of empathy should be repaired to a better standard because empathy does help in the treatment of disease like a study done for the relationship of empathy with diabetes complications. In the study, the result showed patients of physicians with high empathy had a significantly lower rate of acute metabolic complications compared to patients of physicians with a moderate and lower level of empathy [3].

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As empathy can improve treatment and diagnosis of patients, there is research done by researcher in Malaysia include public and private universities to compare the mean score of empathy between the first year and final year of medical students and dental students. Although the result showed the mean score of empathy for medical students and dental students within the average score range, the score is lower from the mean score reported elsewhere. In addition, first-year students showed a higher score of empathy compared to final year students. Besides, female students also have a high level of empathy compare to male students [4]. That research shown current status of empathy in medical student in Malaysia but in this research, we want to identify the current medical students discourse regarding empathy like how they define empathy, what factors that can develop empathy and approaches that can be used by them in developing empathy because the result from this research can be a guide for medical students to develop the empathic behaviour. This is very fundamental to the medical field because a good medical student is a step further to become a good medical physician whom they will involve in treatment and diagnosis of patients.

The current study aims to look into what medical students discourse empathy, such as their definition of empathy and factors or approaches for them to develop empathy.

## Methods

### Study design and population

An exploratory mixed-method study design which used a combination of qualitative and quantitative methods was conducted among medical students from private medical university in Shah Alam, Selangor. Respondents mainly from two programmes, Bachelor of Medical Science (BMS) and Bachelor of Medicine and Bachelor of Surgery (MBBS) have been included as study population, and other students from different courses have been excluded.

Jefferson Scale of Empathy – student version was used to collect data regarding the status of empathy among medical students [5]. In 2009, the questionnaire was modified, and the student version of the questionnaire is constructed, which include 20 items where each item is answered using the 7-Likert scale. Focus group study also being used to collect data regarding empathy among medical students by asking them to discourse their understanding of empathy in the interview. Focus group interview is an interview which involves a small group of students and allows them to discourse regarding

empathy. During the interview, the participants have been asked with open-ended questions which are constructed to achieve the objectives. The questions asked are also being arranged to follow the logical flow and align with objectives. Besides, for each question, there are prompts and probes which aim to facilitate the interview session and to explore the information more in-depth.

### Approval to use JSE questionnaire

Usage of the questionnaire was approved by the Centre for Research in Medical Education and Health Care of Thomas Jefferson University in Philadelphia.

Jefferson Scale of Empathy – student version had been distributed by stratified random sampling to the medical students from bachelors in medical science (BMS) and bachelors in medicine and bachelors in surgery (MBBS). Next, for the focus group interview, convenience sampling is used to find the participants. There are 11 students chosen to do the interview where six students from BMS and five students from MBBS.

### Data analysis

The first step in data analysis was the classification of questions in JSE (student version) questionnaire into three objectives which are the definition of empathy, factors that can develop empathy and approaches can be used in developing empathy. The questions being classified based on the structure of the sentence of question. Question 1, 2, 9, 14, 15 and 20 from JSE (student version) questionnaire were classified under definition of empathy. Then, question 3, 6, 8, 10, 11, 12 and 19 were classified under the factors that can develop empathy. Next, question 2, 4, 5, 8, 12, 13, 16, 17 and 18 were classified under approaches in developing empathy. Then, themes have emerged each question in JSE (student version) questionnaire. The themes emerged based on keywords that contain in the sentence.

Data analysis started by using SPSS version 23.0 to measure the mean score of questions classified under the definition of empathy, factors that can develop empathy and approaches in developing empathy. For the focus group interview, Krueger's framework analysis was used to triangulate data obtained from the questionnaire. There are five critical stages used, which are familiarisation, identifying a thematic framework, indexing, charting, mapping and interpretation of data.

### Result

In total, 316 medical students answered JSE (student version), 66 students (20.9%) were male, and 250

students (79.1%) were female. Table 1 showed the classification of 20 questions from JSE (student version) questionnaire were classified into three objectives. Table 2 showed the mean score of 6 questions in JSE (student version) which were classified into the definition of empathy. Table 3 showed the findings from the focus group interview obtained when medical students discourse regarding the definition of empathy. Table 4 showed the mean score for questions classified under factors that can develop empathy in medical students. Table 5 showed the finding from focus group interview for factors that can develop empathy in medical students. Table 6 showed the mean score questions classified under approaches that can be used by medical students in developing empathy. Table 7 showed the finding from focus group interview for approaches that can be used by medical students in developing empathy.

**Table 1.** Classification of questions into three objectives and themes emerged from questions

| OBJECTIVES  | QUESTIONS                      | THEMES  |
|---|--------------------------------|---|
| Obj 1: What medical students define empathy                           | 1, 2, 9, 14, 15, 20            | Emotion, Understanding, Imagination, Skills, Sense      |
| Obj 2: Identify factors that can develop empathy                      | 3, 6, 8, 10, 11, 12, 19        | View, Attentiveness, Understanding, Emotional, Sense    |
| Obj 3: Identify the approaches that can be used in developing empathy | 2, 4, 5, 8, 12, 13, 16, 17, 18 | Understanding, View, Attentiveness, Thinking, Influence |

**Table 2.** Mean score for questions classified into the definition of empathy

| QUESTION         | MEAN SCORE |
|------------------|------------|
| Question 1       | 5.04       |
| Question 2       | 5.45       |
| Question 9       | 5.98       |
| Question 14      | 4.72       |
| Question 15      | 4.59       |
| Question 20      | 5.84       |
| TOTAL MEAN SCORE | 5.27       |

**Table 3.** Themes emerged during the discourse regarding the definition of empathy and codes classified under each theme

| THEMES          | CODES  |
|-----------------|--|
| 1.Understanding | 1.1 Able to understand others emotion<br>1.2 Able to understand other situations<br>1.3 Able to understand others feeling  |
| 2.Emotion       | 2.1 Feel sympathy to others<br>2.2 Sharing feelings with other   |
| 3.Imagination   | 3.1 Put ourselves in other's shoes<br>3.2 Put ourselves in others life<br>3.3 Feel patients' feeling toward disease  |
| 4.View          | 4.1 Able to view others perspective<br>4.2 Not look down to patients<br>4.3 Doctor sees patients as themselves<br>4.4 Doctor need to think as a patient as a human being |
| 5.Skills        | 5.1 Able to respond with others situation<br>5.2 Doctor able to relate towards the patientbody<br>5.3 Doctor able to comfort patient                                     |

**Table 4.** Mean score for questions classified into factors that can develop empathy

| QUESTION         | MEAN SCORE |
|------------------|------------|
| Question 3       | 4.23       |
| Question 6       | 3.91       |
| Question 8       | 5.09       |
| Question 10      | 5.69       |
| Question 11      | 5.1        |
| Question 12      | 4.71       |
| Question 19      | 4.38       |
| TOTAL MEAN SCORE | 4.73       |

**Table 5.** Themes emerged during the discourse regarding factors that can develop empathy and codes classified under each themes

| THEMES                  | CODES  |
|-------------------------|--|
| 1.Sense                 | 1.1 Sign of sense<br>1.2 Empathy is nature                       |
| 2. Knowledge            | 2.1 Knowledge about empathy<br>2.2 Education can develop empathy |
| 3. Religious            | 3.1 Religious can develop empathy                                |
| 4. Environment          | 4.1 Environment can develop empathy                              |
| <b>TOTAL MEAN SCORE</b> | <b>4.73</b>  |

**Table 6.** Mean score for questions classified into approaches can be used in developing empathy

| QUESTION                | MEAN SCORE  |
|-------------------------|-------------|
| Question 2              | 5.98        |
| Question 4              | 5.78        |
| Question 5              | 5.49        |
| Question 8              | 5.09        |
| Question 12             | 4.71        |
| Question 13             | 5.4         |
| Question 16             | 5.03        |
| Question 17             | 4.85        |
| Question 18             | 3.59        |
| <b>TOTAL MEAN SCORE</b> | <b>5.10</b> |

**Table 7.** Themes emerged during the discourse regarding approaches in developing empathy and codes classified under each theme

| THEMES       | CODES  |
|--------------|--|
| 1. Knowledge | 1.1 Learn empathy from experiences or movie<br>1.2 Build a module related to empathy<br>1.3 Read some books to gain knowledge<br>1.4 Do research regarding empathy |

|               |  |
|---------------|--|
| 2. Skills     | 2.1 Socialize with others (faculty) inactivity<br>2.2 Develop communication and thinking skills<br>2.3 Doctor have more training toward practical<br>2.4 Do campaign or awareness of empathy                                 |
| 3. Understand | 3.1 Open-minded listening to the patient's story<br>4.1 Able to view others perspective<br>4.2 Not look down to patients<br>4.3 Doctor sees patients as themselves<br>4.4 Doctor need to think as a patient as a human being |
| 4. View       | 5.1 Able to respond with others situation<br>5.2 Doctor able to relate towards the patient body<br>5.3 Doctor able to comfort patient  |
| 5. Skills     |  |

## Discussion

### Definition of empathy

Based on the findings, the findings from the focus group interview supported the findings from JSE (student version) questionnaire where medical students moderately understood the definition of empathy. Based on JSE (students' version) questionnaire, five themes (emotion, understanding, imagination, skills, and sense) have emerged from the questions that had been classified under the definition of empathy. This finding is supported by findings from the focus group interview where students define empathy as put ourselves in other's shoes. This finding also supported by the previous study done in 2016 by Vinay and Swanad where they define empathy as the ability to understand and share the feelings of others [6].

Then, when medical students discourse regarding definition empathy, they were able to include all the



five themes that emerged from JSE (student's version) questionnaire. The themes emerged for the definition from JSE (students version) questionnaire are emotion, understand, imagination, skills and sense. During the interview, students defined empathy as understanding others emotion, situation and feeling. This definition given by them parallel with question 1 where the question is about understanding patients' feelings and the feelings of patients' family. It was proved that medical students could define empathy. The previous study about the concept of empathy also gives a definition of empathy as understanding others emotion, feeling and situation [7].

### **Factors that can develop empathy**

The findings from the focus group interview not supported finding from JSE (student version) questionnaire where the findings showed medical students have moderately understanding regarding a factor that can develop empathy but at a lower point. Based on the questionnaire, there are five themes emerged which are view, attentiveness, understanding, emotion and sense. During the focus group interview, the themes emerged are sense, knowledge, religious and environment. However, only one theme emerged from the interview that matches with themes that emerged from the questionnaire. The theme that matches is sense. Medical students said empathy is natural and can develop in someone during their childhood without being taught. However, the previous study did also say empathy can be developed during childhood through experiences gained by students [8].

In addition, there are new themes emerged based on the interview, which is knowledge, religious and environment. These themes do not emerge from the questionnaire but emerged from the interview. Thus, the medical student needs to be guided to discourse regarding factors that can develop empathy. For theme knowledge, a medical student said that knowledge regarding empathy is crucial for them to develop empathy because if they do not have knowledge about empathy, they will not be able to understand empathy and unable to develop empathy. They suggested that there should be syllabus regarding empathy being taught in the classroom. The previous study also indicated that a structured curriculum in university could help students in developing empathic behaviour [9].

For religious, medical students agreed that religious also one of the factors that can develop empathy. This is because all religions teach their believers to create kindness among people. However, there is no previous

study mention the association of religion with empathy. The next theme is the environment. The students said the environment will lead to the development of empathic behaviour; for example, if someone always in a surrounding of war, they will be prone to develop empathy because they had suffered the pain. However, there is also no previous study regarding the association between environment and empathic behaviour.

### **Approaches can be used with medical students in developing empathy**

The finding from the focus group interview also not support results from JSE (student version) questionnaire. Based on the questionnaire, there are five themes emerged which are understanding, view, attentiveness, thinking and influence. Then, there are five themes also emerged from the focus group interview, which is knowledge, skills, understanding, attentiveness and emotion. However, only two themes match from findings from interview and questionnaire. The themes are understanding and attentiveness. However, there is a new theme emerged which is knowledge. Medical students agreed that having knowledge of empathy is one of the approaches for them in developing empathy.

For theme understanding, medical students said we have to open our mind to listen to patients' story. They also said good communication between patients and physicians could lead to a good relationship between them. Besides, they also add to the benefits of a good relationship between patients and physicians like can help in the precious diagnosis of patients.

Next, attentiveness is also one of the themes that emerged. Inattentiveness, medical students said physicians need to help patients afterwards after they got treatment from the hospital. This can train a doctor to give more attention to their patients which they believe can develop empathic behaviour.

However, there are two new themes emerged which are knowledge. Medical students agreed that knowing empathy is one of the approaches for them in developing empathy. They said that medical students could learn empathy from experiences, movie and drama. Besides, they also said that reading books related to empathy and do research regarding empathy are the approaches that can be used by medical students in developing empathy. Other than that, attend workshop related to empathy also one of the approaches based on medical student's discussion.

However, there is a limitation in this study where this study not used qualitative data software analysis, and

this led to difficulty in managing extensive qualitative data. So, in future, software for data analysis should be used because it can save time and give more precious findings. For recommendation, the structured curriculum should be applied in university because it can help medical students to get knowledge regarding empathy. Next, empathy also needs to be taught in the curriculum like in class for medical students to understand more about empathy and able to develop empathic behaviour since in their study. Lastly, the university should always organize an activity that had an element of empathy and ask their students to participate in the activity because it is one of the informal learning processes in developing empathy. Hopefully, this research will be beneficial for medical students to understand empathy and can be a guidance for them in developing empathy during their study. So, they will already have empathic behaviour when they work in future.

### Conclusion

In conclusion, medical students able to discourse regarding empathy. They understood the definition of empathy in medical term and able to define empathy. The definition that they give is put ourselves in other's shoes. Besides, they also able to differentiate between empathy and sympathy where sympathy is just felt the feeling of patients, but empathy is to understand others feeling and ready to react with the situation. Then, medical students only have a moderate understanding of the factors that can develop empathy. One of the factors that have been discoursing during the focus group interview is knowledge regarding empathy. Next, medical students also just have a moderate understanding of the approach that they can use in developing empathy. One of the approaches that they can use is participating in an activity organized in university because this can give a chance for them to socialize with others. Lastly, medical

students need guidance like syllabus in academic for them to understand regarding empathy.

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