

Pedagogical And Clinical Implications Of A Longitudinal Study Of Changing Personal Health Care Views By Medical Students

Zhu Qiaoyan^{1*}, Emmanuel Hans², Syed Ahmed Salman³

ABSTRACT

Researchers surveyed 49 fourth-year medical students from two universities as part of a qualitative study. The major way of information gathering was the use of formative assessment statements. In order to investigate the data, the researcher employed the qualitative content analysis approach. There were found to be three major causes for the GP's issues. They are emblematic of primary care's unique qualities, the presentation of patients' symptoms, and the opinions of general practitioners on real encounters, and are referred to as "prerequisites," "patients' concerns," and "mastery and professional judgement," respectively. Students identified the following as essential qualities in a GP: the ability to handle a wide variety of conditions, good communication skills, and a no-nonsense approach to therapy. They took many perspectives on their patients and linked the data they gathered to the disjointed nature of this branch of medicine. This phase of schooling is crucial since it is at this time that students' perspectives on general practise are formed.

Keywords: General practitioner, medical students, student's perspective, reflective writing

INTRODUCTION

Unexpected problems should be resolved by the patient independently. Here's an outline of primary care as well. A remote general practitioner serves as the clinical rotation supervisor for certain students. Some children have daily trips and overnight stays. Students are often given free supervision by general practitioners. General practitioners want to instruct and oversee graduate practitioners after completing a foundational course. Since there isn't much information available, the researcher chose to do a qualitative study at the University of Gothenburg in Sweden on the perspectives of students on GP competency. This study looked at the opinions of fourth-year medical students about the abilities of family doctors. Finding out whether students believed general practitioners (GPs) were superior to other specialists in handling specific clinical issues was the second aim of the study (Anxiety vs. Anxiety Disorders, 2019).

Medical education must change to keep up with the changing demands put on students who want to work in the medical industry. It's feasible that as medical understanding as well as scientific methods develop, the patient's involvement in the therapeutic process will become less crucial. Physicians need to know the importance of using a patient-centered approach in clinical treatment now more than ever since the health care system has become more interconnected and complex. The provision of medical care would become less humanitarian if we were to lose sight of this. This chapter will cover the definition of empathy, its importance, and efforts to instill it in aspiring medical professionals and students. Developing the traits that characterize a "good doctor" is one of the main goals of medical education. Most people would agree that feelings of compassion is one of the most important traits for a healthcare professional to possess. Actually, according to 80% of patients, they would suggest a physician who shows compassion to their friends and family. When a doctor can show compassion for anxious patients, it is really beneficial for them. discovered that patients with cancer who thought their doctors were kind and understanding had better emotional outcomes than those who did not. Empathy for a patient not only increases treatment results but also contributes to the patient's overall pleasure, according to studies. Patients with diabetes who saw doctors who exhibited empathy were able to regulate their hemoglobin A1c levels much better than those who saw doctors who lacked empathy. Additionally, their chances of controlling their LDL-C levels were much higher. Patients who saw experts who exhibited empathy also had a reduction in the intensity and duration of a common cold. One possible explanation for the health-related results might be that patients who trust their doctors are more inclined to share private information with them about their habits and health. The doctor is better equipped to treat you now that they have more information. Numerous studies have shown that when patients feel that their doctors understand their situation on an emotional level, they are more inclined to trust them. Additionally, going to a doctor who demonstrates empathy may help reduce anxiety and enhance an individual's ability to handle difficult circumstances.

BACKGROUND OF THE STUDY

A physician's capacity to impart medical information to their patients in an efficient manner is essential to the growth of their professional identity. On the other hand, developing a communication strategy that respects the patient by including them in a real situation and listens to their concerns in a caring manner is a more challenging task than gathering factual information. For many trainees, providing "patient-centered" consultations may be difficult, and in the worst situation, it might even make them lose their growing compassion. Active listening is particularly crucial while speaking with doctors and nurses who practise a range of disciplines. To help pupils better grasp how to interact with one another, teachers provide a range of instructional tactics that students may use, such as group projects and individual research (World Health Organisation, 2017).

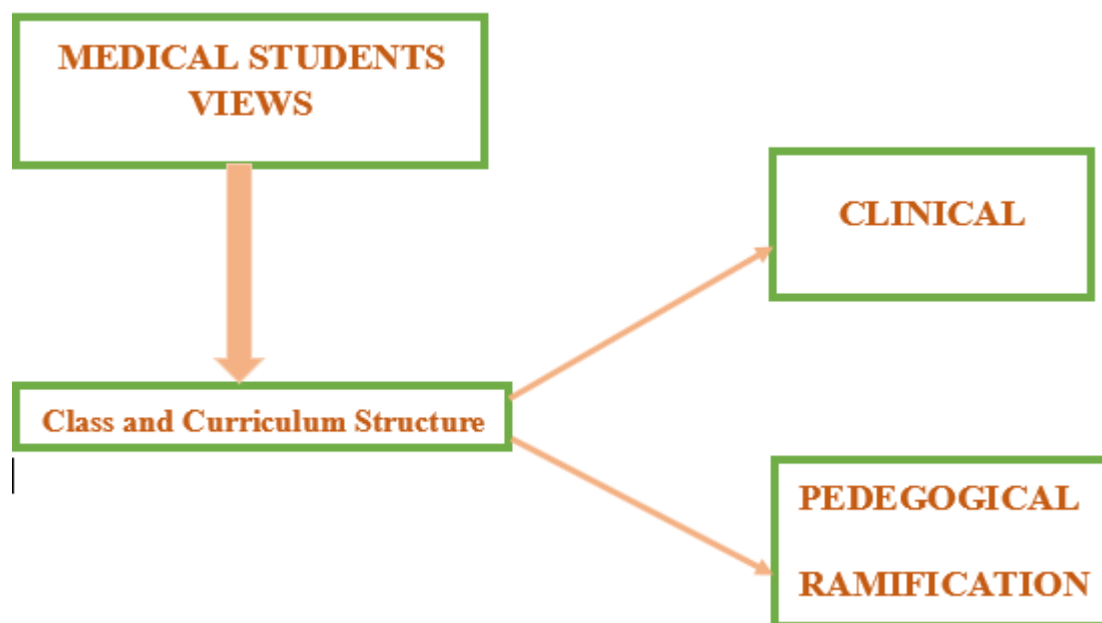
PROBLEM STATEMENT

“To make education and mental health care more focused on the community and on people's well-being. It is imperative that our primary focus be placed on the creation of environments that inspire students to participate in the redesigned educational system.”

In the field of medicine, it is widely acknowledged that adult students have equivalent perceptual modalities and should be treated similarly for consistency's sake. There has been a shift in emphasis away from utilizing visual, auditory, or kinesthetic modalities and more towards the lecture format. The quantity of pupils graduating from these programming has increased as a consequence of this adjustment. The main focus of teaching is movement, which may or may not be tailored to the learner's deficiencies and strengths. The researchers anticipate similar diversity among the various learning styles shown by each of the groups that were studied when the results of this study are applied to the whole population. One reason for the pressing need for a variety of teaching strategies in the area of medical education is the recognition that every student has a unique learning profile.

CONCEPTUAL FRAMEWORK

Under the framework of problem-based learning, utilizing these tactics has become normal practice. A lot of studies have been conducted to examine and contrast the efficacy of different educational methodologies. But, researchers have, for the most part, neglected to take into account one factor: the attitudes of students about the development of their language skills and their engagement in groups. It is a valid assumption to make that the mindset of a student and the personal ideas that they hold play key roles in the progression from student to physician (**National Family Health Survey,2017**).



RESEARCH OBJECTIVE

- 1.To evaluate a relation between the class & curriculum structure for medical student.
- 2.To determine the longitudinal study of medical student.
- 3.To identify the changing views on personal health care.
- 4.To understand about the pedagogical ramification.
- 5.To obtain the full medical care and personal health care process.

LITERATURE REVIEW

For example, while conducting health issues interviews, it is crucial to put into practise the fundamentals of the communication that occurs between a doctor and a patient. Obtaining diagnostic data is the primary goal of the physician during a clinical interview. Information sharing, specialised advice, and fighting for the patient's best interests while keeping that interest in mind. Right now, the person is seeking guidance and assistance. The patient and accompanying physician have an uneven power dynamic as a result of this arrangement. Furthermore, the physician's high moral standards and desires support a consultation style that centers on the "doctor" and the "disease," with the doctor maintaining control over the patient-physician interaction. However, the above-mentioned ethical guidelines need a conversational approach that assumes the doctor is prepared to share both information and skills with the patient and views the doctor as an equal partner in the treatment process. When they are not being evaluated in comparison to other patients, patients are now better able to express their mental conditions (Indian Journal of Public Health Research & Development,

2020). The "need to know and understand" in terms of one's intellect and "the desire to comprehend" known and understood in terms of one's emotions are two distinct psychological necessities. Prior to the 1950s, the biological theory that highlighted the value of clinical interviews mostly addressed the health issues that patients and doctors faced. Since then, advances in science and culture, including technological developments, the rise of consumerist values and market competitiveness, have led to a shift towards emphasizing the importance of the person in interactions and speech. Among these developments are the following: In the 1950s, Balint offered a humanistic and psychodynamic perspective on the role of the family doctor. Following this, the perspective on health and illness shifted from being biological to being biopsychosocial. When a doctor approaches patient treatment from a holistic standpoint, they must be actively involved in the patient's whole life and evaluate how the patient's biological problems may affect their ability to do daily tasks (Jadoon N, 2020).

METHODOLOGY

Qualitative approaches enable the gathering of more in-depth data while doing research on a subject. One observable benefit is the concentration on the performers that is maintained throughout the process. In line with. However, certain sequences are necessary in order to analyse the video observations. No matter how effectively this is done, the final product will always represent the researcher's opinion. Instead, these decisions should be based on research questions. The same degree of caution should be exercised when drawing conclusions from the data. To ensure that the data collected for this study was of the highest calibre possible, it is essential to remember that the researcher was there for the whole of the video recordings. Since they are physically there, it is probable that someone is interested in and familiar with the study issues. To get the viewpoints of educators and other scholars about the matter, they were shown excerpts from the transcripts by the researcher, who also solicited their opinions. Another property of case studies is that their conclusions can only be partially extrapolated to other situations with characteristics similar to those in the case study. The study's design—patient-centered exploratory interviews with first-year medical students—may make it impossible to extrapolate the findings to more experienced doctors or to other consultation contexts (such as giving sad news). Even while this is a possibility, it does not negate the significance of the results in any other situation. Conversely, the knowledge acquired from a single case study may serve as guiding principles for further case-based research in the future. Given that these data were acquired in 2001, it's probable that some of the subjects the researcher covered have become less relevant over time. Many of the course organisers testified that the recurring themes would still be present in spite of this.

Sampling: A pilot study was conducted with the questionnaire using a group of 20 customers from China and final study was conducted with the questionnaire on sample of 369 customers. A total of questionnaires was distributed among customers selected in a systematic random sampling. All the completed questionnaires were considered for the study and any incomplete questionnaire will be rejected by the researcher.

Data and Measurement: Primary data for the research study was collected through questionnaire survey. The questionnaire was divided into two parts – (A) Demographic information (B) Factor responses in 5-point Likert Scale for both the online and non-online channels. Secondary data was collected from multiple sources, primarily internet resources.

Statistical Software: MS-Excel and SPSS 24 will be used for Statistical analysis.

Statistical tools: Descriptive analysis was applied to understand the basic nature of the data. Validity will be tested through factor analysis.

RESULT

The article "Talking with clients and peers: Medical students' difficulties in learning communication skills" (A. Lumma, L. Sellentin) Seven groups of student complaints were identified:

Establishing a safe environment
2. Analysing and organising the patient's financial records
Bringing up controversial subjects
Sixth, the classroom environment
Seventh, the educational value of group discussions
One common concern amongst medical students is whether or not their patients would see them as capable doctors. Lack of biological knowledge was cited as a major contributor to students' feelings of ineptitude. Trustworthiness was also considered in relation to external factors (such as white jackets and where people sat). Second, when presented with in-depth explanations, many students said they struggled to make sense of the data. Other times, they said, patients were too reticent. Interrupting patients who are talking and asking them direct questions may be seen as rude. Third, while discussing the patient's private life or mental health issues such work-related stress, loneliness, depression, or poor family relations, students often felt invasive or nosy. It was unclear to many people how much the patients' personal histories had an impact on their illnesses. The emotional demands of their patients, especially if they were in pain, were a source of confusion for the students. Many of them lacked the emotional intelligence to provide genuine empathy to their patients. 5. Self-evaluating one's interview performance - comparing one's own behaviour with the theoretical model - might generate cognitive overload and disrupt the conversational flow. The managers advocated for easing methods, such as formulas for common scenarios. They

assisted the students in developing a specialised lexicon that included metaphorical and categorical terms for often encountered circumstances and patient categories. 6. The rigorous scrutiny of their own performance might be seen as emotionally taxing. This included making up remarks for feedback. Although interacting with actual patients was valued, the presence of a video camera was seen to be a barrier to genuineness and candour. 7. Peer students were employed for role plays that aimed at implementing various strategies. Study III: "Medical Students' Attitudes Towards Group and Self-Regulated Learning" (Lumma Sellenthin, A., 2012) 6.3 Researchers looked examined how demographic factors, as well as problem-based and blended curricula, influenced freshmen students' views on and use of group work for academic purposes. There were no significant gender disparities in students' beliefs about the value of either solitary or group study or in their familiarity with study techniques. Students who had previously worked in health care reported greater group learning experience ($t(341) = 2.971, p = .003$), greater knowledge ($t(340) = 2.258, p = .025$), and better regulation of learning strategies ($t(333) = 3.307, p = .001$). Students whose parents worked in the healthcare industry also indicated higher levels of familiarity with their learning techniques ($t(340) = 2.255, p = .025$). They reported feeling greater social norms towards participation in group learning ($t(337) = 3.014, p = .003$). The highest mean difference was found between students who had attended the German problem-based school in Witten/Herdecke and those who had attended the German programme at Marburg, which uses more conventional teaching approaches. Marburg (Witten/Herdecke) = 1.45 (on a scale from 1 to 7), standard deviation = .181 ($p = .000$). The highest proportion of students having direct experience in the health care industry was found at Witten/Herdecke (90 vs. 48% at Linköping, 64% at Marburg, and 51% at Gothenburg). It was revealed that group learning experiences in Swedish schools were not significantly different from one another. Witten/Herdecke students also performed better than Gothenburg students in modulating their own learning techniques (mean difference 0.18, std. error 0.084, $p = .034$). Finally, compared to students from other universities, those from Linköping reported significantly higher levels of social pressure to participate in collaborative learning (mean difference Linköping vs. Witten/Herdecke 1.71, std. error = .303, $p = .000$; Linköping vs. Gothenburg 1.81, std. error = .281, $p = .000$; Linköping vs. Marburg 2.24, std. error = .281, $p = .000$). Thus, there was no correlation between students' gender or age and their understanding of learning methodologies or their attitudes towards solo learning and group work. 54 Work experience, either one's own or a parent's, was connected with higher metacognitive abilities and group work experience. This suggests that students' pre-academic clinical experience may offer necessary circumstances for the acquisition of professional competence. Students' demographics, metacognitive abilities, and the value they place on patient-centered care were examined alongside their perspectives on the importance of developing communication skills in both conventional and problem-based German and Swedish curricula. Students' favourable attitudes towards acquiring communication skills was predicted by a caring patient orientation, strong self control of learning processes, and female gender ($R^2 = .23, F(9,310) = 9.72, p < .001$). The students' age, gender, and willingness towards developing communication skills predicted a caring patient orientation ($R^2 = .23, F(9,307) = 13.48, p = .001$). Compared to students in Witten/Herdecke (Positive Attitude Scale (PAS): mean difference .49, on a 7point Likert scale; SE = .07, $p = .001$), Linköping (Positive Attitude Scale (PAS): mean difference .46, SE = .09, $p = .001$), and students in Marburg's traditional German curriculum (PAS: mean difference .46, SE = .09, $p = .001$).

Table: Demographic characteristics of panel members

Number	Occupation	Gender
02	Clinical teacher	Female
02	Unit coordinator	Female
02	Graduate nurse	Male
02	Head nurse	01 Male, 01 Female
02	Staff nurse	Female
Total	10	

The panelists were given a Likert scale with four points for each of the four criteria, and they were asked to evaluate how much they agreed with each item in the Inventory. These criteria included the rating scale's relevance, clarity, and comprehension, as well as its appropriateness. In addition, we asked the members of the panel for their feedback on whether or not any item should be altered, as well as suggestions on how the wording of the Inventory may be improved to make it more understandable. To assess the conceptual and content equivalence of the translated Inventory, the content validity index (CVI) at the item and scale level was computed.

According to the findings, the CVI for each item was within acceptable ranges. The Item-level Content Validity Index (I-CVI) had a minimal average of .85 (Appendix M), while the Scale-level Content Validity Index (S-CVI/Ave) had an average of .995.

Table: Average scale-level content validity index (S-CVI/Ave)

Inventory Subscales	S-CVI/Ave			Adequacy of the rating scale
	Relevance	Clarity	Comprehensiveness	
Affordances and Engagement (16 items)	.996	1.0	1.0	1.0
Student-centredness (18 items)	1.0	.996	.993	1.0
Enabling Individual Engagement (four items)	1.0	1.0	1.0	1.0
Valuing Nursing Work (three items)	.967	.983	.983	1.0
Fostering Workplace Learning (six items)	.997	1.0	1.0	1.0
Innovative and Adaptive Workplace Culture (three items)	.977	.943	.943	1.0

Revisions made in response to the comments provided by the panelists

In regard to the substance of the item, several adjustments were made to be consistent with the remarks given by the panel members. In regard to point 5, examples were included following the term "new ideas" in order to make it more clear whose new ideas were being discussed. The language structure of item 19a/b has been revised to make it simpler and easier to understand. In addition to this, examples were added to item 20 to make it clearer who the term "others" referred to. After that, the final translated version (Appendix N) was completed and finalized.

Demographic characteristics of the sample

There were 216 participants who were eligible, and 209 of them finished the Inventory. This gives us a response rate of 97%. There were 188 females out of those total, with just 24 males accounting for 11.5% of the total. This sample consisted of young people, with an average age of 20.6 years and a standard deviation of 0.72 years. More than half of the participants had gone on to complete their college education immediately after graduating from high school (56%). General Medical, Intensive Care Unit, Ophthalmology, Dental and Maxillofacial, Ear, Nose, and Throat, and General Surgical were some of the wards that students had the opportunity to rotate through during their most recent clinical rotation. The prior clinical rotation that they had participated in lasted an average of 1.54 weeks. Prior to this semester, no students have participated in this clinical rotation. There were just two students who were missing from the planned clinical rotation for a full day, which represents 1% of the total student body. The further demographic statistics may be found in table

Table: Demographic characteristics (n = 209)

Characteristic	Result (n, %)
Gender	
Female	185 (88.5%)
Male	24 (11.5%)
Age (mean, SD)	20.6 ± .72 years
Clinical practice location	
General Medical	52 (24.9%)
ICU	61 (29.2%)
Ophthalmology	22(10.5%)
Dental and Maxillofacial	27 (12.9%)
Ear, Nose, and Throat	26 (12.4%)
General Surgical	21 (10.0%)
Length of the clinical rotation (n, %)	
01 weeks	96 (45.9%)
02 weeks	113 (54.1%)
Number of participants absent from the clinical rotation (n, %)	
No	207 (99%)
Yes	2 (1%)
Repeated clinical rotation (n, %)	
No	209 (100%)
Yes	0 (0%)

Testing of the V-CLEI's psychometric properties

Reliability

The first Inventory was completed by 209 students, which indicated that sufficient items were completed to assess the instrument's construct validity. The first thing that needed to be done was to figure out how reliable the instrument itself was; as a result, the coefficient of reliability known as Cronbach's was computed for each of the V-CLEI subscales. Cronbach's alpha was calculated to be .88 across the board for all 50 variables that were included in the V-CLEI. However, there was a significant disparity in the Cronbach's values of the six different subscales, which varied from .19 to .75 (see Table 6.6 for more information). Because a Cronbach's value of less than .70 was regarded to be satisfactory for this subjective scale, the reliability of subscales 1 (Affordances and Engagement) and 2 (Student-centeredness) was determined to be high, with values of .75 and .74, respectively.

The score of .60 on Subscale 3 (Enabling Individual Engagement) was lower than the threshold that had been chosen beforehand. The dependability of this subscale did not significantly shift as a consequence of the sequential elimination of items from the scale. It was determined that Subscale 5 (Fostering Workplace Learning) had a value of .66, which was lower than the permissible threshold, and the value did not improve when any items were removed from the scale. The dependability of subscale 6 (Innovative and Adaptive Workplace Culture) was lower than expected, coming in at a value of .58, and removing individual items in a similar fashion did not succeed in raising the score. The reliability of the fourth subscale, "Valuing Nursing Work," was the lowest, with a coefficient alpha of only .19. The value increased to .23 when item 10 was removed; nonetheless, this was still much below the level that was considered acceptable. When it comes to subscales that featured b-items, also known as items that were associated to preceptors, the dependability of these subscales was not increased when the b-items were taken out. There were several exploratory modifications tried, such as eliminating and merging subscales; nevertheless, such alterations did not result in an improvement of the overall coefficient to a level that was deemed acceptable.

Table 1: V-CLEI: Internal consistency reliability measure

	Cronbach's α	Cronbach's α (without b- items)	The modified CLEI (original English version)
Subscales			
1. Affordances and Engagement	.75	.75	.88
2. Student-centredness*	.74	.69	.88
3. Enabling Individual Engagement	.60	.60	.65
4. Valuing Nursing Work	.19	.19	.57
5. Fostering Workplace Learning*	.66	.59	.67
6. Innovative and Adaptive Workplace Culture	.58	.58	.50
Overall	.88		

Note. * Subscales consist of b-items (preceptor items).

CONCLUSION

A considerable proportion of students acquire compassion for their patients beyond a professional level. They get to know the individuals who look for them as well as their loved ones. Although the feelings that medical professionals have when seeing the struggles that their patients endure due to sickness may be helpful to them, if they internalize their patients' suffering beyond what is seen to be reasonable bounds, they run the risk of being burned out. The bulk of medical school coursework on empathy focuses on behavioral components. Through role-playing, students get experience engaging with patients and displaying compassion.

Although there isn't much evidence to support LEAP's efficacy as a training method for empathy, this study does provide a framework for further research on related subjects. Emotional intelligence tends to diminish throughout the course of a career in business, although it is possible to reverse this trend. Medical schools may be able to provide their students with a more comprehensive approach to teaching empathy if they integrate LEAP with other humanistic medicine courses. In addition to classroom instruction on empathy and patient-centered activities, students in LEAP participate in continuing interaction with a real patient. In addition to being made aware of the medical setting, students are also given the chance to actively participate in the process of developing empathy. But one advantage of a programme like LEAP is that it lets students experience medicine from the perspective of the ill, which is something that more and more medical schools are include in their curricula. More courses are being offered on empathy and the relationship between a doctor and patient.

LIMITATION OF THE STUDY

A disadvantage of the study was that it was difficult to acquire data from medical students in their third year of school. When medical students begin their clinical rotations, they are seldom grouped together in large groups for the purpose of survey administration. We have discovered that the level of student involvement in surveys conducted either on campus or online is often not as high as we would want it to be. Students start their required clinical rotations in Year 3, and it is logical to expect that this greater exposure to patients will have an influence on the students' worldviews as a result of this increasing contact with patients. However, the evidence from the previous research does not support this notion. More study has to be carried out in order to have a better understanding of how clinical interactions affect perceptions and behaviours.

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