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Patients' impact on the hidden curriculum of medical students a qualitative study on undergraduate medical students

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Aim: To explore and understand professional practice development through medical students' observation of patient's responses towards the medical students, illness, and hospital staff.

Methodology: Semi-structured focused group discussions were conducted between 3rd September 2019 and 3rd May 2020 using non-probability purposive sampling. Three focused groups were conducted with fourth year medical students (n=19) to discuss about their third-year clinical placement experience. The focused group discussions were audio-recorded and transcribed verbatim. Data were analysed using Interpretative Phenomenological Analysis framework to label the concepts, attached code to the data, and the codes were subsequently grouped into similar themes. Themes that emerged from the interpretation of the coded data were identified.

Results: Four main themes emerged from the focus groups: (1) Student's observation on patient's responses towards students, illness, and staff; (2) Patient's perspectives towards students; (3) Students were affected by the experience; and (4) Factors influencing patient's responses to students, illness, and staff. The impact of patient's behaviour has influenced students' professional practice in two ways. The first impact is collaboration of students' observation during clinical placement with what has been learned through the written curriculum. The second impact is through a hidden curriculum.

Conclusions: The hidden curriculum has influenced our students' learning through observation of new aspects and implementation of the learned written curriculum. Students can aspire medical educators, doctors, and medical staff to adopt approaches and attitudes that have a positive impact on students' professional practice and to acknowledge that they are the role models for the new generation's learning through the hidden curriculum.

Keywords: Hidden curriculum, factors influence patients' behaviour, professionalism, medical students, communication

Introduction

Background

There are three distinct curricula types in medical education. These include normal curriculum (the stated, intended, and endorsed curriculum); informal curriculum (unscripted, generalised, interpersonal lesson embodied mainly through day-to-day interpersonal interactions among students and faculty); and the hidden curriculum (a set of influences that function at the level of organisational structure and culture) [1].

The hidden curriculum is a longitudinal experience that conveys an unspoken, unwritten, and unstudied educational program ^[2]. It includes the social and behavioural development of students, among other salient lessons ^[3]. The hidden curriculum is a dynamic process rooted in moral behaviour and its success depends on the behaviour portrayed by role models. Students acquire authentic ethical competence through knowledge, socialisation, and observing model behaviour. This will become an internalised, qualitative professional identity for the student/learner rather than a mere add-on tool or technique ^[4].

The values and behaviours that individual physicians demonstrate in their daily interactions with patients and their families, physician peers, and other professional colleagues, become the foundation on which their medical professionalism rests ^[5]. Implicit learning is something that the learners picked up during the learning process which is not written in the curriculum or syllabus ^[6].

Rationale

Medical students are exposed to two different perspectives of the hidden curriculum; one is by the academic clinical staff and the other is by the hospital non-academic staff. Students will observe, perceive, and learn from this hidden curriculum which subsequently influence their medical career. Patients also have a role in this curriculum, but how big is that effect, is an issue need to be considered.

The aim of this study is to explore and understand professional practice development through medical students' observation of patient responses towards the medical students, illness, and hospital staff.

The objective of the study is to identify the effects of patients' behaviour on students' professional practice, addressing the research question "How does patient behaviour influence medical students' professional practice during their third-year clinical placement?"

Methodology

This is qualitative research using interpretivist stance to study the relativist nature ^[7]. The methodology is used to study patients' impact on the hidden curriculum of medical students during their third year clinical teaching at Newcastle University Medicine Malaysia (NUMed). The study was conducted between 3rd September 2019 and 3rd May 2020.

All fourth-year medical students who had successfully completed their third-year clinical rotations were sent an invitation to participate in the study via email. Using a nonprobability purposive sampling, three focus groups were conducted with 6 to 7 students per focus group (n=19). The focus group target sample size was intended to be of ratio 1:5 (20:100) to the total number of students in the cohort.

Semi-structured discussion questions were developed to evaluate the depth of impact of patients' responses and interactions towards students, illness, and staff on the student's professional practice (refer to Table 1). The research team administered a focus group discussion (FGD) to fourth-year medical students to discuss about their third-year clinical placement experience. The FGD sessions were carried out by 2 researchers with one of the researchers conducted the interview and another co-researcher recording the non-verbal cues of the participants observed during the discussion. The interviews were conducted in a private room in the medical school library and ranged from 42 to 55 minutes in duration. The FGDs were audio-recorded and transcribed verbatim.

Informed consent was obtained from all the participants prior to focus group commencement and anonymity is maintained. Ethnical approval was sought from NUMed Research Ethics Committee and Newcastle Institutional Review Board.

Data were analysed using Interpretative Phenomenological Analysis (IPA) framework to label the concepts, attached code to the data, and the codes were subsequently grouped into similar themes. Themes that emerged from the interpretation of the coded data were identified. Findings are reported through associated anonymous quotations.

Table 1: Semi-structured questions for focus group discussion

	During your clinical placement:
	How do you perceive the patient's interaction with students?
7	What is your assumption of the patient's interaction with students?
How did patie	nt's interaction with students affect your professional practice towards patients?
WI	hat did you notice from the patient's behaviour towards their illness?
How do you th	ink the patient's perception of illness affects your clinical practice performance?
What observations have you made on patient-staff interaction?	
	What assumptions did you have on patient-staff interaction?
How do	you think that patients-staff interaction affects your professional practice?

Results

Four main themes emerged from the focus groups: (1) Student's observation on patient's responses towards students, illness, and staff; (2) Patient's perspectives towards students; (3) Students were affected by the experience; and (4) Factors influencing patient's responses to students, illness, and staff.

Theme 1: Student's observation on patient's responses towards students, illness, and staff

Patients' responses to students were generally positive, friendly, cooperative, and inviting. A student reported that patients have told them to study harder, were willing to allow them to perform a physical examination, etc. The student said, "I met a few patients that tell us to study harder, were willing to let us do physical examination and even ask me to ask my friends to come because he has some like... rare signs". Patients may have different presentations for the same condition.

Some patients may give different information to students than those given to doctors. A student mentioned that, "Patients think they do not need to share all their information with them because they are just students. Often, the details and histories that the patients are telling about themselves to the students would not be the same ones documented by the doctors".

Patients were more interactive with a confident and knowledgeable student who were helpful and kind. A student noted that patients who observed less confident students were less likely to be shared information with, due to lack of trust in the student's competency.

Patients communicated with nurses more than doctors because the nurses were seemed to be more caring and friendly. Patients respected and trusted the doctors, yet they may consider them as unapproachable or even fear them. Based on one of the patients reported that, "The doctor is scary, and I was afraid to approach them".

In general, patients were pleased and thankful for the free services in the public health care. Some patients made assumptions that the private healthcare service was better than public service. They relate public services to overworked staff, inadequate staffing, slower service, and less efficient practice. A student commented that, "I have heard so many people telling me, 'Don't go to a government hospital, don't go to government hospital!' When I go to a government hospital now, I feel like the equipment is better

than private hospitals".

Patients sometimes complained or get upset if they felt discriminated for a certain illness, mistreated, delayed attendance at the emergency unit or delayed in meals serving when they were treated as inpatients. Some patients did not understand the importance of repeating investigations, which they demanded some explanations and requirements.

Variation in patients' behaviour towards their illness, may be over or underestimated in some conditions. However, they accepted doctors' instructions and considered illness as fate, mostly due to religious beliefs. For instance, they have stated, "If I live today, then I live, if tomorrow morning I don't wake up, then God wants to take me away then so be it" or saying, "I leave everything to God". Some didn't take it well, they said, "Why should I deserve this?"

Theme 2: Patient's perspectives towards students

Patients regarded medical students as doctors, even when they knew that they were students. A student mentioned "Patients just see us as doctors (Hopeful), even though I tell them I am a medical student, they still call me a doctor. So, you must behave like a doctor". They asked them about their condition, expressed their concerns, asked some questions or sometimes just having a conversation. Another student Commented "When you can't answer certain questions that patients ask, because it might conflict between the information you give out and information given by the doctor (Afraid). It really makes you think how much of information can we divulge to the patient when we are healthcare professionals".

Some patients gave students life's advice about their illnesses, a student said "In the oncology ward, the patients have already accepted their illness and they just want to feel better by being with their family members and they give life advice to students about their illnesses". Other patients tend to ask a lot about the side effects, effectiveness of their medications, and availability of other alternatives.

Theme 3: Students were affected by the experience

Observation on patients' response added valuable experience to students' learning. This influenced their professional practice, motivated them to improve knowledge, grew their sense of responsibility, and prompted them to behave like doctors, including on manner how they handled information taken from patients.

They also realised the importance of conveying information from patients that might be significant and not found in the medical record to staff. A student mentioned, "I had a patient in my first rotation who said' 'I want to kill myself', at that moment I was taken aback and I just said, 'Oh okay... hope you feel better' and I walked off, feeling lost. I was thinking to myself, 'What should I do now?' I was not expecting such a comment from a patient until I experienced that during mental health rotation. I kept thinking it was a difficult situation". Reassurance, the motivation of patients to continue treatment and follow up, keeping them positive especially when a violation of ethical issues as ending life was disclosed. A student said, "When it comes to an ethical issue such as patients ending their own life to end their suffering, it is not what they want, conflicts with these kinds of patients' perspective, I think we need to convey this to the doctors".

These experiences motivated students to involve patients

more in decision making, give patients a space to improve their confidence, improve patients' knowledge about their illnesses, and behave patiently with patients outside the hierarchy attitude. This all-in turn improved clinical practices and patient cooperation. A student stated, "I think that when we've been taught in medical school about how to communicate with patients, involving them in decision making, but is it seen in practice? We try to incorporate what we have studied and how to approach patients into our real practices ".

The experience of observing patients' responses raised the awareness to students for implementing what has learnt in their curriculum into practice including communication skills, polite approach, empathy, use of visual aids during interview, despite the pressure of work and limitation of time. Students recognised the significance of building rapport, communication, and prioritising patient care and clarifying this to patients to avoid conflicts.

Students can predict the patient's response towards them by observing the patient's personality and body language.

Students felt that patient's communication style with them was below their expectations in some cases. They believed that they needed to structure their questions to patients and use understandable phrases by avoiding medical jargons.

Students realised that they needed to give patients space to rest, especially when they have been seen by many students, as this turns down patient's interaction.

Students observed medical staff practice and were willing to implement behaviours that have positive impacts on patients.

Students felt and understood the humanistic nature of the profession and the holistic view of the patient's circumstances and needed to take a patient-centred rather than disease-centred approach.

Students developed variable influence on professional practice. Some suggested a patient-centred approach more than disease-centred, believing that practice should be personalised to patient's worries, beliefs, needs, and financial support, as well as relying on observation of their non-verbal ques, showing empathy, building rapport, and clarifying misconceptions. Others suggested making professional segregation of clinical practice and personal views. A student said that "Not all patients are willing to disclose their financial and personal difficulties. For this reason, doctors should be more sensitive to acknowledge their non-verbal cues and if they sense that maybe this patient might have this kind of problem then they should ask specific questions to clarify that".

Culturally, people often have reservation towards healthcare professionals; they may worry about receiving less or losing the privilege of free healthcare service. Students made their assumptions about the patient-staff interaction from their observations inside and outside the learning environment.

The experience was an eye-opening for future handling in that relation and learned from observing patient-staff interaction. Nurses and doctors were role models of a positive impact attitude. Students realised that they needed to spend adequate time with patients, reassure them, and relief their anxiety. They saw that there was an evident difference between studying and real practice.

Theme 4: Factors influencing patient's responses to students, illness, and staff

Patients' interaction with students became less if they were

in pain, feeling ill, uncomfortable, or tired especially during the afternoon session.

Patients' interaction varies with how many times they have been interviewed by students, of which they may become irritated, annoyed, and less cooperative especially in a busy hospital in the city. A student said, "When patients see medical students approach them, they will think that 'Oh, you want information from me, they're going to bother me' so they'll feel annoyed. They do not think that we just want to talk with them. They will even say that 'You've already just interviewed me' when it is people from another group, but they would not know and get easily impatient about that'.

Patients' responses to students improved with better rapport, displayed empathy, and trust building. The interaction depends on the quality of communication, staffs' attitude, and knowledge of patients about their conditions.

Elderly patients, especially in the rural areas, may have deeply rooted beliefs and perspectives about their illnesses and was very challenging to change their misconceptions.

Patients' responses to illnesses may depend on several factors like the patient's mindset, family support, and understanding of their condition especially in chronic illnesses where they are willing to share about their diseases.

Patient-staff interaction carried paternalistic trends with a hierarchy mindset. Staff were over-worked leading to poor explanation to patients about their conditions, lacked rapport, and poor procedures applied. Patients considered that all the management decision was made by the staff, and they did not have any right in their decision making. A student mentioned, "When we asked patients, 'Did you tell the doctor about what you feel?', they declined, they said, "Oh no because the doctors are very busy, there's no point telling them! They are not going to do anything". Other student said, "I think a lot of them are not involved in their decision making, so if you asked them, 'When are you going to be discharged?' They said, 'Don't know, wait for doctors, see what the doctor says".

Various factors affect patient-staff interaction like patient stress due to worries and less knowledge about their illnesses in addition to the shortage of already overworked staff.

The impact of patient's behaviour and responses towards students, illness, and staff has influenced student's professional practice in two ways.

The first impact is collaboration of student's observation during clinical placement with what has been learned through the written curriculum about communication skills; building rapport, showing empathy, respect of patient's autonomy, shared decision making, use of visual aids in explanation, avoidance of medical jargon, clarifying to patients information about their illnesses, and avoiding paternalistic attitudes.

Students raised their awareness to improve their knowledge, clinical skills, and clinical reasoning implementation in clinical practice.

The second impact is through a hidden curriculum that influenced students' professional practice. It raised the student's sense of responsibility towards their studies, skills, and future practice to behave like doctors, including exhibiting a responsible handling of information obtained from patients. This included reassurance of patient's worries, motivation to adhere to treatment, providing

patients space to build their confidence to express themselves, providing community health education and patients' education about their illnesses and misconceptions. These experiences motivated students to have a holistic view of patients' presentations and responses, adopting the patients-centred approach and correcting the hierarchy mindset. It motivated the student to observe the patient's personality, body language, and non-verbal cues to understand the patient's needs. Furthermore, students adopted the positive attitudes from the staff to be a good role model in the future.

Students realised the importance of working on factors that influence patients' responses; they believed that pain relief, encouragement of family, financial and social support all can improve patient responses. Considering the length of patient stays in the hospital and limiting the number of students interviewing the patient can ensure the patient's cooperation.

It is important that healthcare workers adopt a patient-centred approach to accommodate the need of patients and attend regular staff training to build up their communication skills. Good communication skills, showing empathy and clarifying patient's misconceptions and mindset are vital skills to build good rapport with patients.

Discussion

Most medical schools' curricula cover a wide range of knowledge; however, hidden curriculum still plays a vital role in the development of professional practice ^[8]. Torre and Durning (2015), stated that a student's performance to achieve clinical experience outcomes emerges from the interaction of students and environment ^[9]. Many other studies also support that clinical experience provides positive motivation on student's education and practice ^[10, 11, 12]

Interaction with patients increases the medical students' enthusiasm and motivation towards education and strengthen their positive attitude in medical profession [13, 14]. Tang *et al.* (2019) showed no significant correlation between students' self-efficacy, their clinical exposure experiences, and their learning outcomes, however, there was a positive correlation between students' learning achievement in basic medicine and their clinical exposure environment [15].

Ha and Longnecker (2010), shown in their study that most of the poor patient's interaction was due to poor communication, less expression of empathy, and unclear explanations, and health education from staff to patients. They agreed that adopting an open mindset, building rapport with the patient, and shared decision-making without the paternalistic approach will improve that interaction [16].

Clinical exposure and interaction with patients grow the student's sense of responsibility toward their practice and attitude [17, 18]. Previous studies also commented that clinical experience had boosted the student's confidence and developed a positive attitude towards their studies and future practice [19, 20]. Another study stated that clinical exposure helped the students to learn about professional roles, responsibilities, healthcare systems, and patient's needs [21].

Community health education is crucial to help correct many misconceptions including a hierarchy mindset, reduces patients' anxiety, and improve patients' confidence so that they can express themselves [22].

The clinical experience encourages socialisation and boosts the students' effective and cognitive learning. It helps them to develop a better insight and awareness of the medical profession. The clinical experience motivated social, emotional, and professional satisfaction [10, 23].

Lee *et al.* (2016) stated that interaction with patients was eye-opening for the humanistic part of patient-illness interaction, and the way they expressed their feelings ^[24]. Students believed in motivating and reassuring patients and the practice should be patient-centred rather than disease-centred ^[25].

In our study, we found that after clinical placement, students realised the significance of observing non-verbal cues, considering patient's financial needs, and family support were crucial in improving patients' interactions ^[25]. Clinical practice experienced raise the awareness of students in observing staff attitude towards patients and learning to implement the positive impact attitude ^[26].

There are limitations surrounding this study. Focus group discussions were conducted with medical students from only one medical school and cannot be generalised to other settings. We only captured a single side of the story from the students and relied solely on students' recounted impressions. Therefore, we may have captured only some aspects of the hidden curriculum. The views and perceptions from the faculty, health professionals and patients should be included to gain multiple perspectives of stakeholders for more comprehensive understanding of the hidden curriculum.

Despite the limitations of this study, we believe our findings provide useful insight into the importance of the hidden curriculum to students' learning and resource for faculty development in clinical teaching. Future research that provides a comprehensive understanding of medical students in different cultures and social challenges during their training can help student to reflect on their experiences to focus on providing the best care possible.

Conclusions and Recommendations

The hidden curriculum has influenced our students' learning through observation of new aspects and implementation of the learned written curriculum. It is time for the medical educators to incorporate the humanistic component in their teaching of clinical skills.

Students can aspire medical educators, doctors, and medical staff to adopt approaches and attitudes that have a positive impact on students' professional practice and to acknowledge that they are the role models for the new generation's learning through the hidden curriculum.

Students to emphasize the role of cultural health education to rectify the misconceptions and improve patients' confidence to participate in the shared decision making for their management. Students believe in personalisation of patients' management through improved communication, displayed empathy, and understanding patients' needs and worries despite staff heavy workloads.

Health institutes and universities should consider patients to staff ratios and patients to student ratios. There should be a shared arrangement by parties involved in each country based on places available for medical school teaching, staff availability, and planning of medical facilities expansion.

Acknowledgments

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