Medical Education

Reflective writing by final year medical students: Lessons for curricular change

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ABSTRACT

Backgound. Reflective writing has been used in undergraduate medical curricula to inculcate empathetic attitudes in medical students. Journal writing has been used to enhance reflection in a confidential space. We aimed to introduce our medical students to reflective writing of their daily experiences, both to enhance empathetic attitudes as well as to use the entries to inform curricular changes.

Methods. We invited 16 final year medical students posted in the Department of Medicine to record their emotional experiences during a 6-week posting. Freedom to abstain without prejudice was emphasized, yet all 16 students complied.

Results. According to the principle of grounded theory, the entries were grouped into 8 themes: (i) doctor–patient relationship; (ii) personal inadequacy; (iii) empathy; (iv) communication skills; (v) doctor's competence; (vi) patient behaviour; (vii) hospital practices; and (viii) personal feelings. There were 179 entries which were evaluable under the above categories, with no significant gender differences. Based on the entries, the following curricular suggestions were made: (i) use of diaries by medical students to express their emotional reactions and make value judgements, followed by guided discussion by experienced facilitators; (ii) introduction of communication skills courses at appropriate points to enhance interview skills, empathetic listening, conflict resolution and breaking bad news; (iii) encourage reflection on healthcare delivery and its inequities and suggest methods of dealing with individual patients; and (iv) use of positive feedback and encouragement by faculty.

Conclusions. Reflective journal writing by medical students in India gives valuable insights into improving communication skills and professionalism. Appropriate curricular changes should be made to meet the challenges posed by the existing healthcare system.

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INTRODUCTION

It is generally accepted that if doctors empathize with their patients, they will succeed in fostering a therapeutic relationship.[1] Medical educators have attempted to teach empathy by a variety of methods.[2] One of these is reflective writing. The opportunity to reflect privately upon one's own daily experiences in the clinical sphere has been shown to be a powerful method of expressing feelings, and thereby rationalizing and re-enforcing their effects and validity. Diaries allow emotions to be based on a perspective of reality, and make reflections more credible, and less fleeting. The premise is that, irrespective of the facts, for an emotional statement to warrant recording it holds a degree of importance. This has been the basis for using reflective writing in undergraduate medical education to enhance attitudes of empathy.[2–4]

Anthropologists have used diaries in ethnographic research as a medium for research informants to observe situations which researchers themselves cannot access.[5] This involves asking informants to record their experiences (keep diaries) on the subject to be studied, so that the diaries themselves form part of the research process, providing both description of and reflection on events and practices.[6]

Reflective writing has not received any attention in Indian medical schools. We explored the feasibility of diary-writing by a batch of final year medical students posted in general medicine, with the aim of enhancing reflection on communication, professionalism, ethics and feelings in clinical practice. We present an analysis of the content of these diaries and use this to suggest curricular changes where appropriate.

Our objectives were: (i) to enable undergraduate medical students to record their experiences and emotional responses in dealing with patients in the 'live' practice of medicine, through a process of private reflection, and (ii) to explore and offer suggestions for teaching those aspects of communication skills that need to be incorporated into the medical curriculum.

METHODS

We used qualitative research methods. Sixteen final year medical students, posted in a medical unit for 6 weeks, were requested to maintain a diary for the entire 6-week period of their experiences, and their reactions and feelings about them. The students were made aware of, and were required to consent to the following conditions, for inclusion in the study:

1. Participation was not compulsory; there was freedom to decline participation without prejudice.
2. The diary would not be anonymous (to encourage responsibility for statements).
3. The diary would be accessible only to faculty.
4. The diary would not count towards performance evaluation at the end of the posting.
5. The diary entries would be used for presentation/publication for research purposes but anonymity would be guaranteed.
6. The diary was to be submitted on the final day of the posting.

The students were requested to make entries relating to personal experiences with patients and the health team, and to analyse their reactions and emotions to these. They were discouraged from making entries regarding medical facts they were learning as these

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were being recorded in their log books which would be assessed for internal evaluation.

Analysis and interpretation

The basic principles of grounded theory and content analysis were used while analysing the diaries.[7,8] Content analysis assumes that every text, in this case a diary, can be coded as per its characteristic units into a coding scheme.[9] All 16 diaries were read line by line by both authors. Those entries which were generated by the students' actual experience during the posting were identified; only those entries with emotional statements such as judgements or feelings were retained, while statements of mere fact or description of an activity were ignored.

Sample phrases which best conveyed the essence of each theme were identified for verbatim presentation in the text. Gender sign-posting of these phrases has been done to highlight any differences in perceptions that could be important.

RESULTS

Though the diary task was not compulsory, all 16 students, 8 men and 8 women, agreed to participate. On an average, the diaries had entries 4–5 times a week. Only 1 or 2 diaries had weekly entries, but they contained comments on the week's activities, and summarized the student's emotions after this week-long period. Given their long and odd working hours, the pressures to study daily and work up cases, the diary entries were regular.

After reading the diaries, the statements relating to experiences and emotions were categorized according to 8 themes (Table I). Each of the themes is discussed individually with verbatim statements from the diaries as evidence of these findings.

DISCUSSION

The emotional statements in some of the themes are discussed below.

Feelings of personal inadequacy

Of all the statements, 10.5% related to feelings of personal inadequacy. These appeared to be generated by 2 factors: (i) a lack of medical knowledge and (ii) an inability to deal with pain and death.

Lack of medical knowledge. In a majority of cases, students' feelings of inadequacy stemmed from a lack of medical knowledge which they feared could arrest a patient's recovery or inadvertently harm a patient. This is well documented by Fox as 'training for uncertainty'.[10] The statement below is an example of the student realizing his inability to take a good history.

TABLE I. Themes, frequency of comments and gender of author

Theme	Number of entries		
	Men	Women	Total (%)
Doctor–patient relationship	8	12	20 (11.1)
Feelings of personal inadequacy	10	8	18 (10.5)
Empathy/sympathy	19	15	34 (19)
Communication skills	12	21	33 (18.4)
Doctor's competence	9	10	19 (10.6)
Patient behaviour	5	2	7 (3)
Hospital practices	9	9	18 (10.5)
Personal feelings	11	19	30 (16.7)
Total evaluable comments	83	96	179

Note: The differences between the entries made by men and women were not significant, using the chi-square test.

—*I goofed up by not taking the history properly… Eventually it was pretty obvious what he had.* (Male)

In the final year, students are confronted with having to translate book learning into the diagnosis and management of a disease. This coupled with the reality of the health of a human life adds to their fear and lack of ability to perform to their best. In the statements below the students allude to fear of failure when asked to carry out an investigation or medical procedure. This could be due to her lack of knowledge, being overwhelmed by the responsibility or the lack of a supportive atmosphere from the mentors.

—*I don't know enough. Why do I get tensed up when someone asks me to do something (an investigation/procedure).* (Female)
—*Have never done a pleural tap before… worried if I go too deep. Will I puncture the lung? … Hands were shaking, but the registrar's constant encouragement helped.* (Male)

Overall, the students were impressed by the knowledge of their consultants. Of all comments, 10.6% related to the competence of doctors. They realize that much information is yet to be learned. However, being the lowest in the pecking order of consultants, postgraduates, registrars and interns, does not help to alleviate these feelings of inadequacy.

—*…the realization dawned on me that both enormous knowledge and rich experience is needed, and I certainly have a long way to go.* (Female)
—*I realized how difficult it is to do medicine, and I'm really impressed by the knowledge our consultants have.* (Female)

Dealing with pain and death. Another factor prompting feelings of personal inadequacy is the inability to deal with pain, death and performing painful procedures.

Some students agreed that death and pain are an unavoidable part of the medical profession. Many questioned their ability to reconcile with this and feared that it would prevent them from becoming good doctors. Some even vowed to pursue non-clinical specialties. Yet, they are wary of becoming hardened to human suffering. The statements below illustrate these conflicting feelings.

—*Once we become interns and hard-boiled professionals … then it will be a different person who [felt] these feelings … it's so simple a solution to just shut out feelings.* (Female)
—*It's one of my biggest fears that I will forget to feel and think.* (Female)
—*I know it was not our fault that he died … he was really sick … death comes to everyone. But still, the inherent disgust of death still hangs on to me.* (Female)
—*I don't think I can deal with this. I might take up a side where I don't have to see patients and their suffering.* (Female)
—*Did I choose the wrong profession?* (Female)
—*He broke down and started begging me to do something … what could I do? So I just stood there and waited.* (Male)

Both male and female students commented on the pain caused to the patient by certain procedures they had witnessed, particularly gastric lavage and bone marrow aspiration. They expressed conflicting feelings because they were not used to causing pain to another person, but they understood that the procedure had to be performed often for the patient's survival.

—*Bone marrow aspiration looks so gruesome … well, someone has got to do the job!* (Female)
—*Bone marrow biopsies are evil necessities.* (Male and Female)
—*Then I helped to do the gastric lavage …very nauseating procedure!!* (Male)

Feelings of personal inadequacy have been well documented in previous western research as 'uncertainty'.[10–12] Fear of making mistakes is a major cause of mental strain for medical students. The main themes related to facing uncertainty as found in reflective writing exercises were insecurities about professional skills, own credibility, facing the inexactness of medicine, fear of making mistakes, coping with responsibility, tolerating oneself as incomplete, and accepting oneself as a good enough doctor-to-be.

These studies found reflective writing and open discussion to be powerful tools for medical students to deal with uncertainty and aids in their process of maturation.

Suggestions for the curriculum

A forum should be provided, open or confidential, for students to express their fears about personal inadequacy, death, pain and suffering. A guided discussion by an experienced facilitator is useful to provide counselling on coping strategies to deal with these emotions. This opportunity could be provided at all stages of the clinical years. Medical teaching faculty should consciously adopt a more facilitatory rather than adversarial attitude while teaching. Ridiculing the student for incorrect answers is a common practice. Faculty must be taught the methods and benefits of using positive feedback and constructive criticism.[13]

Feelings of sympathy for patients and their relatives

A majority of comments made (19%) relate to the emotion of sympathy with patients or their relatives. Interestingly, when they talked about patients, all students mentioned the name of the patient. This could signal a connection developed at this early stage with a patient as a person rather than a bed number. In some cases entries made a few days after the event still contained the patient's name. This recall of personal information is noteworthy.

Students felt sympathy for patients in physical pain and for those who appear emotionally helpless. They also felt guilty that they could not do more to alleviate the patient's suffering.

—The diagnosis is lymphoma, prognosis poor; makes me feel horrible. (Female)
—Saw Karuna, a lady with ascites, she was in a lot of pain. I felt bad for her. (Female)

Students also felt sympathy for the social or economic situation as a consequence of a patient's illness. For instance, all students were affected by a particular case of a butcher who had to have his hand amputated because of diabetes and would have to give up his livelihood.

However, students seemed to be confused or felt inadequate when having to deal with a patient's emotional outburst such as crying, emotional breakdown or anger. They were unsure of how to react—whether to offer re-assurance which can often feel like giving someone false hope, or to just listen to the patient and offer their (silent) presence as comfort. This also happened when dealing with the relatives of a patient facing death or a serious medical condition.

—He was extremely depressed, I did not manage to console him, but at least I let him vent his feelings. (Female)
—After their dad died, their hopes have been crushed, what more do they have to contend with. (Male)
—… one of his relatives had died … he was grief-stricken … Really could not say anything so I just walked away … Told one of my classmates about my feeling of hopelessness, and she told me to 'get over it'. I really think I cannot take up anything clinical. (Female)

It is important to look at not only what students said, but also at what they did not say. For instance, students commented more on extreme situations that affected them emotionally as these are more obvious and noticeable. Patients with a 'regular' condition or a mundane fever or headache received few sympathetic comments. On days when so called 'simple' cases were presented they are referred to as 'boring days' or days where 'nothing much happened'. In these cases, patients' names were not mentioned. Students failed to recognize that these mundane cases are also people who are suffering. They tended not to get to know these patients, or make personal connections as well as they would with a patient with a more serious, complicated condition. Students also rarely made sympathetic comments about the relatives or patients with a yet undiagnosed condition. Instead, they made extensive entries on the medical condition of the patient. At these times it is the illness that is challenging and the person is less relevant. It is fair to conclude that it is the extreme cases of suffering, rather than the everyday (or 'common' suffering) that grabbed their attention.

When they visited a low-cost unit funded by the college, where extremely poor people are given free treatment, they appeared sympathetic to the patient's poverty and not necessarily the illnesses, which were often very advanced. The concept of the low-cost unit also affected them with many wishing they had known about it in their first clinical year. It was mainly the social and economic condition of the people rather than their illnesses that warranted comment in their diaries.

However, most students agreed that they cannot afford to be strongly affected by every patient's suffering or else they would be in a state of emotional breakdown and they would not be able to cope with the day-to-day practice of medicine.

Suggestions for the curriculum

Students need to find a balance between being challenged by investigating a patient's medical condition—the science of medicine; and at the same time not being divorced from the person they are treating—the emotional side of medicine. They need to learn how to embrace these emotions with clarity, but not be debilitated by them, so that they can apply their medical knowledge. Reflective writing facilitated through a diary and the discussion of the diary in a confidential forum can help in achieving this balance.

The first clinical year after completion of the basic science semester is perhaps the most appropriate time at which these feelings should be addressed. This will allow them to use the insight gained during the initial semesters of their clinical training, during the rest of their course.

Patient behaviour

Comments on patients' behaviour usually refer to those resulting from emotional stress such as crying or shouting in anger. For instance, students do not know how to deal with a domestic dispute during an examination or history-taking. These disputes can be very useful in revealing new findings in a patient's condition. In the comment below the student misses an opportunity to find out what the argument is about, why it has taken place, and its relevance to the patient's medical history. This student would rather avoid the situation than extract useful information from it.

—His wife yelled at him and asked him to stop lying … The couple got into a loud argument … I wonder how I am going to handle patients like these! So I just walked away and came back later when they had calmed down. (Female)

Some comments were made on patient cooperation. For instance, students were surprised by how willing some patients were to be examined by many people and, conversely, how some were reluctant to reveal the full picture about their medical history. It appears that students are not formally instructed on how to react to such situations.

—*The patients here are so willing to be examined.* (Female)
—*One patient refuses to tell me his history … maybe he is afraid … I must learn to be aware of fearful patients.* (Female)

Suggestions for the curriculum

Students need to be taught how to take control and advantage of situations where vital clues to psychosocial mechanisms of causation of illness are being played out in front of them. The use of simple interviewing techniques, calming body language, and how to diffuse a dispute needs to be taught.

Students in their first preliminary clinical postings can be given demonstrations through live role play or recorded videos on how to actively listen for important cues which would point the way for sensitive questioning. At this early stage of training the cues would have to be overt, but more subtle cues and situations can be introduced in the final year.

Doctor–patient communication

The communication students observed between doctors and patients formed the basis of 18.4% of comments. Of 33 entries relating to communication with patients, 21 were by women and 12 by men students. This is interesting though not numerically significant.

The most important aspect students noticed was the benefit of spending time with patients explaining their condition to them. They also personally experienced the benefits of 'connecting' with their patients, which some students believed builds trust and confidence in the doctor. Others felt that this could even empower the patient.

—*She was really interested in knowing about her illness, so I explained whatever she wanted. She seemed satisfied.* (Female)
—*I had a long chat with patient … she is quite depressed … I could not do much except listen to her talk.* (Female)
—*I was talking to her daughter who suddenly broke down into tears and this introduced me to a dimension which was totally new to me. I was able to comfort her.* (Female)
—*I realize that the more time you spend with the patient, the more the patient trusts and confides in you.* (Male)
—*I love the way she talks to her patients … she tries to empower them.* (Female)
—*However, the patients were not always satisfied with what was told to them, because the time in which this education was done was very short and in a hurried fashion.* (Male)

Another key learning for students was 'just listening' to patients vent their feelings. However, as mentioned earlier, students generally felt ill-equipped to deal with emotional breakdowns, grieving relatives, arguments over payment or hospital practices, and requests for free treatment, to name a few. There is no formal instruction provided on such aspects and they seem to learn how to cope from observing other doctors.

—*We learnt an important lesson today: when a patient is angry don't try to justify, if they feel better blaming you, let them.* (Female)

Students were also quick to notice situations where doctors were abrupt or curt with their patients. They attributed this to a lack of time to spend with each patient due to the heavy workload. They seemed to understand and often excused this behaviour although they admitted it felt short of best practice.

—*…Then the doctor got angry and shouted at the lady. Maybe he had too many patients to see and he thought she was wasting his time.* (Male)
—*I really think consultants should be spending more time explaining things to patients.* (Female)

Communicating with relatives about the payment of bills, particularly after the patient has died, can be tricky for students. Students experienced much sympathy for patients' relatives and felt awkward to burden a family with talk of money when their relative had just died. In the comment below, the student speculated over how dealing with payment of bills could affect a grieving family.

—*Would it be different if the grieving family did not have to pay costs?* (Female)

Suggestions for the curriculum

Formal instruction on protocols for talking to patients, explaining medical conditions, communication skills, body language cues, the value of listening and how to actively listen, could be useful. Students could be given a battery of reassuring statements they can use to defuse anger, show support and concern, explain the need for payment, etc. They should be encouraged to devise statements that suit their personality. With practice these statements will become second nature. Regular reinforcement of these is required to prevent bad practices from seeping into communication with patients.

These concepts could be presented in every clinical posting, by the use of role plays and mock interviews. One of us (AG) has regularly substituted one bedside clinic in every 6 week medicine posting with an exercise in conflict management, interviewing skills and breaking bad news.[14]

Hospital practices

Most students questioned hospital practices they observed, particularly long waiting times for patients in casualty, as illustrated in the comment below.

—*Kid with humerus fracture had to wait 7 hours before anything was done.* (Female)

Some students considered representatives from drug companies as having ulterior motives with the intention of pushing their treatments over others. Some saw this as multinational companies taking advantage of developing countries. The students who made these comments admitted that they had not thought about this aspect before discussion on this topic by consultants.

—*X (doctor's name) mentioned her policy of not seeing reps (representatives) from multinational companies … Developing countries are being taken for a ride.* (Male)

Free medical treatment is offered to extremely poor patients but the students realized that only a few can be helped in a private system. Students were affected by the poverty of the patients they encountered but could not judge when to offer free treatment and when not. They speculated whether the worth of a human life comes down to money. Coupled with this they questioned the use of having the latest technology to cure people if patients cannot afford to pay for that technology. The comment below illustrates these sentiments.

—How beneficial is it to have cutting-edge technology, if all it will do is to increase the family's agony?… to know that there is a cure but you cannot have it because you cannot pay for it. What does human emotion translate into? Just hard cash? (Female)

Suggestions for the curriculum

Some time should be devoted for group discussions on funding of health services, entitlement and access to health, public and private initiatives in health delivery and finally, how equitable healthcare for all can become a reality, albeit in an ideal world.

Given the cultural and economic diversity of the Indian population, it is a huge task to care for patients because doctors are not just dealing with the medical situation but the social and economic lives of patients, particularly of those from poor or marginalized sections of society. It is a big task for doctors to exercise compassion at all times, especially when they cannot materially alter the complex situations they face. Most medical students will feel ill-equipped to step into the combined role of a healer, counsellor and financial adviser. Discussions and reflection, after visits to primary healthcare centres in rural and urban, private and public healthcare delivery systems will help students to widen their perceptions on the business of healthcare. It will allow them to reflect upon the gross inequities that exist, and hopefully will inspire them to be involved in reform.

Hands-on experience

From the students' comments it is clear that the interest and confidence of most was enhanced when they observed or were allowed to perform a procedure. It gave them a sense of achievement in the training process. Also, observable symptoms of a disease, such as Parkinson disease or Bechet disease, about which they had only read in their textbooks, made them feel reassured that what they read could be applied in real-life situations.

Suggestions for the curriculum

Regularly planned hands-on performing of procedures under supervision, and demonstration of clinical findings whenever possible, keeps the interest and enthusiasm of students at a high level. In the final year, or at any stage that students begin to engage in doing procedures, a structured micro-skills transfer methodology should be crafted to teach procedural skills. This makes the transition to competency a pleasant and effective experience. The prevailing method of 'see one, do one, teach one' has been decried as unfair to patients and trainees.[15]

Gender

There were no numerically significant differences in the statements made by either gender (Table I). In 2 categories, namely in those of communication and personal feelings, there was a trend towards more entries by women; but these were not statistically significant.

Conclusion

Final year Indian medical students' diaries indicate their ability to engage in reflections of their experiences of medical practice, attaching value judgements as well as recording emotional responses. This process provided us with valuable information on students' experiences, and is a guide to improving the content of communication skills sessions.

In the light of our analysis, we suggest that diary writing, combined with sensitive faculty-guided discussion, should be introduced during the clinical years in each posting.

Communication skills teaching should be formalized in the curriculum and the various aspects of skilful interviewing techniques, and management of conflict can be taught through role plays. These sessions should be structured so that students are guided through feelings of uncertainty and personal inadequacy; furthermore, endorsement of jobs well-done will serve to cement learning through these experiences. A proper understanding of healthcare policies and confidence in performing practical procedures could provide a foundation for improving professionalism.

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