

PERSPECTIVE

Employing reflective writing as a tool to enhance development of critical thinking skills among medical students

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ABSTRACT

In medical education delivery, reflective writing is a process where medical students evaluate their thoughts and personal experiences. Critical thinking helps medical students and clinicians reach a provisional diagnosis, and decide about the management plans. Reflective writing encourages medical students to deeply analyze their clinical and learning experiences, and this entire process is vital for development of critical thinking skills. Acknowledging the need to train medical students in critical thinking, it is the need of the hour that teachers must explore and encourage students to reflect upon their learning experiences and in the process aid in the attainment of learning outcomes.

KEYWORDS

Critical Thinking; Reflections; Reflective Writing; Medical Education

INTRODUCTION

In medical education delivery, reflective writing is a process where medical students evaluate their thoughts and personal experiences, which becomes crucial for in-depth understanding, long-term learning, and professional growth (1). This process promotes students to devise a plan for improvement and attainment of the learning outcomes (2,3). In terms of patient care, the act of reflective writing aids in gaining deeper insights into patient experiences, which can further improve communication skills, development of empathy, and provision of patient-centered care (4-6). Moreover, reflective writing is crucial for lifelong learning as students continuously assess and refine their knowledge and skills extending beyond the duration of medical training (7).

CRITICAL THINKING

With the rapid advancement of the medical field, medical students and healthcare professionals have to deal with a huge volume of knowledge and complex clinical cases that present a wide range of clinical findings (8). Critical thinking helps medical students and clinicians obtain relevant history, assess symptoms, examine available laboratory and radiological reports, reach a provisional diagnosis, and decide about the management plans (8). This entire process is systematic and is based on the available evidence and thorough analysis and not on some assumptions, and thus there is a reduced possibility of misdiagnoses which brings about an improvement in patient outcomes (9). In addition, critical thinking also helps the treating physician in identifying the most pressing needs of an individual patient, and also takes into account other parameters (viz. available resources, condition of the patient, etc.) (10,11). In continuation, this

encourages them to always take actions keeping ethical principles in mind and also sustain professional standards (12). Finally, we must understand that critical thinking does not end with decision-making, rather it involves constant evaluation of the effectiveness of the decisions that have been made, and based on the response in patients, clinicians can modify their strategies (8-11). At Datta Meghe Medical College, Nagpur, the Off-Campus of Datta Meghe Institute of Higher Education and Research, Deemed-to-be University, Sawangi, Wardha, Maharashtra, wide range of teaching-learning methodologies have been adopted by different departments to inculcate critical thinking skills among medical students.

REFLECTIVE WRITING AND CRITICAL THINKING

Reflective writing motivates students to deeply analyze their learning experiences, owing to which they can question their actions, decisions, the potential reason for patient outcomes, and this entire process is vital for the development of critical thinking (13,14). As students analyze their experiences, they understand their thought processes, and this enables students to objectively evaluate their decisions and also identify areas that need improvement (15). Moreover, students realize the gaps or the ways to connect their knowledge with authentic clinical scenarios thereby improving their clinical decision-making (16). In other words, there is a definite improvement in the decision-making skills of the medical students, as they learn the art of practicing evidence-based medicine (17). The act of reflective writing brings about an improvement in the ability of students to approach any problem in a structured manner by breaking down the complex problems and anticipating the potential outcomes (14,15). As students engage themselves in reflective writing, they begin to consider the viewpoint of different stakeholders (viz. patients, peers, etc.) and this broadens their critical thinking because they realize that the same situation can be solved from different angles (14,17).

METHODS TO IMPLEMENT REFLECTIVE WRITING

Realizing the scope of reflective writing in developing critical thinking, it is crucial that faculty members should encourage medical students to reflect upon their different learning experiences in varied settings (1,2). Before initiating this practice of reflective writing, students must be trained in the intricacies of a reflection and the merits of the same for their current and future professional and personal growth (18,19). This can be materialized through journaling which allows students to

express their thoughts and feelings about various learning experiences, and they can be periodically reviewed by teachers (20,21). Students can also be asked to record case-based reflections, where students can write their feelings about interesting or challenging cases that they encountered during their clinical rotational postings (22). These reflections can also highlight the ethical perspective, as it will help them in understanding and dealing with complex ethical issues (12,22). These reflective writings can be encouraged using structured frameworks (like Gibbs, Kolb's, etc.) and the medium can be either on paper or online depending on the resources available in the institution (14,19).

CONCLUSION

In conclusion, reflective writing plays a vital role in the acquisition of critical thinking skills in medical education. Acknowledging the need to train medical students in critical thinking, it is the need of the hour that teachers must explore and encourage students to reflect upon their learning experiences and in the process aid in the attainment of learning outcomes.

AUTHORS CONTRIBUTION

All authors have contributed equally.

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CONFLICT OF INTEREST

There are no conflicts of interest.

DECLARATION OF GENERATIVE AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors haven't used any generative AI/AI assisted technologies in the writing process.

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