

Reflective writing in case summary assignments

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Abstract: Outcome and competency-based undergraduate and graduate medical education is the desired standard embraced by many medical educationists worldwide. Reflective capacity is an integral component of that strategy and reflective writing has shown tremendous potential as a delivery tool. But there are various challenges in the implementation of the initiative. Efficacy as a delivery tool, achievement of pedagogical outcomes, reliability issues, challenges in assessment outcomes/tools, and whether it can be taught and learnt, need to be addressed. Many questions are still not satisfactorily answered, and this review attempts to offer some perspective on the issues.

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Introduction

Worldwide, outcome and competency-based undergraduate and graduate medical education with reflective capacity as an integral component, is the desired standard nowadays to produce life-long reflective practitioners with competent doctoring skills and professionalism. Reflective capacity is a recognized trait and characteristic of these practitioners. Its inclusion as part of the core professional competencies outlined by the Accreditation Council of Graduate Medical Education of the United States of America (ACGME) further reflects its importance.¹ As a result of increasing focus on reflective capacity, various delivery tools and pedagogies have emerged to facilitate and foster reflective capacity in medical education. Narrative medicine in the subset form of reflective writing has been much favoured, compared to various other initiatives and pedagogies. Narrative medicine is synonymous to clinical reasoning which is core to clinical practice. Clinical reasoning is described as a narrative, experiential and interpretive activity², which is what reflective capacity is all about.

When writing the learner utilizes written words as medium of communication, expresses feelings, emotions, makes sense of the encounter and names ambiguities, variables and unknowns. Sometimes clarity is achieved, sometimes not, but in the process of description and the subsequent transformative act of reflection, the implicit becomes explicit and deep meaningful learning takes place. Both the ACGME and the General Medical Council of UK have set standards mandating reflective portfolios (written format), demonstrating the acquisition of core professional competencies by the learners.¹ Charon has shown conclusively that the use of literature and reflective writing improves narrative competence and subsequently enhances patient-centred medical practice.³ There are various challenges in pushing reflective writing to the forefront of medical education. Efficacy as a delivery tool, its reliability, issues whether it can be taught and learnt, and challenges with assessment of outcomes need to be addressed; and with the lack of robust data, is quite an endeavour.

Defining reflection and its value

Reflection is an innate and personal response to encounters, experiences, situations, scenarios and new information. It is a processing phase where if executed properly, invokes deep and critical learning, where the learner becomes aware of the learning process. During reflection, past experiences and knowledge are revisited. Values, beliefs, attitudes, assumptions, moral and ethical boundaries also impact thought processes; hence these also need to be examined and explored. Reflective thinking brings valuable knowledge to every experience and encounter, and helps to make the connection between what the learners already know and new knowledge learnt.^{4,5} Sandars *et al.* defined reflective thinking as “a metacognitive process that occurs before, during and after the encounter with the purpose of greater understanding of self and situation, so that future encounters with the same situation are informed from the previous encounters”.⁶ Mann *et al.* in his comprehensive review highlighted the tenets

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of reflective capacity in medical education, mainly reflection during and after the encounter⁷, importance attached to feelings and emotions as a result of the encounter⁸ and interpretation of the encounter either as a confirmatory or transformative process of the mindset⁹. Reflection in medical practice allows deep learning to take place with a greater understanding of disease, and constant reflection promotes life-long learning. The end result is constant practice-changing behaviours and perspectives in doctoring, where the practitioners become better with more encounters and experiences.

What is reflective writing?

Reflective writing is speculated to improve and enhance professionalism, humanistic values and ethics in medical education.¹⁰ Writing is a hands-on, experiential activity that increases the clinician's awareness about the meaning of illness and doctoring.¹¹ To understand how reflective writing brings about the desired pedagogical outcomes, one needs to analyse the various processes and stages involved in reflective writing. Various theories are abound on how reflective writing functions and cause effects and changes in medical learners.

When writing reflectively the learner retreats into self and very innate and personal facets operate. Medical students will have learnt a very specialized vocabulary and prescribe to a rather uniform and clinical cognitive framework that values scientific evidence, certainty, authority and logic. The framework does not much allow latitude and subjectivity. By writing the events, familiar orientating points in thought processes and framework are challenged; learners gain new vantage points and begin seeing the encounter from personal and subjective angles.¹²

After the initial stage, writing encourages a reflective stance, "what happened?" Learners then pause and consider the big picture. This allows the students to make sense of the experience on their own terms¹³, and tap into imaginative and creative problem-solving skills and moving them away from the rigid positivist-empiricist model of knowledge¹⁴. Medical training

inevitably results in learners assuming new sets of values and attitudes, where original perspectives often clash and slowly disappear.^{15,16} With reflective writing the learner is able to reclaim that and the patients' perspectives as well. An understanding develops that various perspectives may exist and clash in a given situation. Reflective writing allows generous and various types of emotions to be expressed, contrary to case report and formal charting. This allows the students to speak from their emotional experience, and helps to express and explore them.¹⁷

So the purpose of reflective writing in a nutshell, is to make connection between what a learner already knows and what is being learnt, examine learning processes, clarify what is being learnt and reflect upon positive and negative outcomes, so in the end the learner becomes an active, and aware learner benefitting from deep learning. Reflective writing is meant to produce more questions than answers. Rather than limiting to academic evidence and dry factual knowledge, one is encouraged to write based on personal experiences. Apart from being logical and reflective, and since writing is personal and subjective, hypothetical, creative and imaginative thinking are encouraged as well. Descriptive (what, when, who), explanatory (why, how) and expressive (I feel, believe, think) writing styles can be employed and are very advantageous.

The common types of assignment that have been used for reflective writing are:

- Portfolios
- Learning journals
- Log book
- Case summary
- Web-based learning
- Peer review
- Self assessment

Portfolios are collections of the student's work, pieces that reflect on his or her learning. Others have described portfolios in a more structured form as to address specific

areas using a clinical case encounter. Communication skills and community issues may be addressed using the case. Learning journals could be weekly entries throughout the years where the student reflects on what he or she has learnt and how to improve further in the years to come. Log books should be dynamic in their entry and should not exist as a mere record of observations and encounters. Just noting what has been done could be uninspiring if the student had not been guided and enlightened to what he needs to log in. Personal views could be expressed if care pathways were followed and how counselling for the procedure was done. Case summaries are often required of students in the clinical years. To avoid stereotyping, they could be used for reflective writing.

Students are encouraged to write critically and use evidence based medicine. Apart from learning how to express themselves in professional writing, the reflective reports can be used to assess students' progress through the posting. Their writing style and their comprehension of the case and analytical skills could be evaluated and if there are shortfalls or gaps in their knowledge, such deficiency can be rectified through feedback. Project work like research project, community and family studies, provide excellent opportunities for peer review. As they engage in collective and cooperative work, learning is enhanced as they share with each other their output and reflective thinking. Self assessment needs a great deal of discipline in commenting on one's own work. It is imperative that assessors encourage the correct approach be taken in learning. Self esteem can be low if the reflections are reported negatively and timely intervention and appropriate measures should be taken by supervisors to promote 'healing effects' and correction of misguided learning.

Reflective writing and pedagogical outcomes

It is postulated that by writing reflectively during formal medical education, pedagogical outcomes in the domain and form of professional development and patient-care skills will be achieved by "transfer-effect",

that is you put in practice what you learn.¹⁸ The practice of medicine is a reflective practice where the process of patient care and the synergy between care-provider and patient is continually examined and reflected via cognitive and affective loops.¹⁹⁻²² Writing offers a steady platform for reflection and critical analysis of these clinical events.

During the long process of medical training, the learner encounters vast conflicting and competing values and interests. This is compounded further by the lack of life-experiences and clinical wisdom, so reflective writing allows the novice learner to clarify and crystallize values. They then learn to gain moral agency over their thoughts and actions. With passage of time and more experiences, the learners then progress to a state of being where their professional identity and values are defined and refined.^{23,24}

Narrative competency is central to good doctoring, and it has been defined by Charon³ as the ability to take a good, coherent and meaningful history. Close attention is paid to the plot and form of the story, identifying and recognizing differing perspectives, ambiguities and contradictions, finally making a coherent and meaningful interpretation and understanding of the story. Reflective writing is said to build narrative competence.

Challenges in implementation of reflective writing in curriculum

Reflective writing is an effective mean to promote self-reflection and self-directed learning in the medical curriculum, but reflection is not intuitive and does not necessarily occur every time reflective writing task is undertaken. Recent researches have demonstrated that only low levels of reflection occur in reflective writing during undergraduate medical education²⁵, hence the need for educational interventions. Individualized faculty feedback in the unstructured written form or reflective interviews and discussions may help to improve the level and efficiency of reflections.

Although these interventions are promising, data and evidence are lacking. A practical, structured and written feedback on learners' reflective writing represents a transition from an intuitive-type approach to a more theory and evidence-based initiative.^{26,27} Much research has been undertaken in this aspect. BEGAN (Brown Educational Guide to the Analysis of Narrative) is an example of a construct that guides faculty to give relevant feedback to improve reflective writing, by incorporating reflective-inviting questions, sharing anecdotal and personal clinical experiences and addressing "lessons-learnt".²⁸

The current generation of learners, who indulge in image-rich media, group-work for social interactions, with higher levels of connectivity and electronic and computing gadgetry, have varied response and "buy-in" to reflective writing. Their learning styles present a big challenge in its successful implementation in the medical curriculum. A peer-to-peer feedback within a reflective writing group enhances social interaction and allows the potential use of social media tools like blogs and podcasts.²⁹ Reflective writing and sharing by reading, with a group of peers also improves mindfulness (a state of accurate and empathic listening and observation), makes them feel less vulnerable and allows listeners to acknowledge and understand the testimony of the struggle presented at a much deeper and empathic level, rather than turning away (a concept known as "witnessing").

Assessment tools and measurement of outcomes of reflective capacity in reflective writing is still in its infancy and very difficult to construct, mainly because it is a very innate, personal and tacit metacognitive process. Various assessment tools like story-telling templates, self-reporting, close reading and thematic analysis are theoretically promising and have been tried, but more research, data, inventions and adjustments are needed before reliable, valid and user-friendly constructs emerge. Once formal assessment is implemented, there is also a danger of formulaic approach to reflective writing, especially when difficult

and ethical issues are shared in a group, for the purpose of obtaining good grade.

Reflective capacity along with writing forms and assignments differ and mature through various stages of the professional training. The initial exuberance about reflective writing is dampened by the fact that all the reflective writing initiatives and constructs need to be assessed for their effectiveness throughout all the stages of the professional life cycle and their impact during clinical practice. When the learner progresses through reflective writing during preclinical years, to "mindful" training during clinical years and finally to reflective initiatives in groups, the constructs introduced at various stage of medical training may be effective, but identifying best-practices may be difficult and need more research. Students mature with increasing exposure to clinical learning and with increasing age come rational thinking and wisdom. Some educators have suggested that reflective writing need to be introduced in slow incremental means as one gauges the degree of assimilation by students of healthcare and disease pattern. This approach should then extend through to the internship and postgraduate years. It would then be prudent to determine the efficacy of this mode of learning through an inbuilt mechanism that permits continuous assessment involving both assessor and student feedback.

Negative feedback from assessors could have an adverse effect on the enthusiasm of the students. Methods of imparting the feedback should be such that the emotive reactions are neutralized by explanation and providing the support needed to adjust to desired outcomes. Teaching undergraduates reflective writing itself can be challenging and hence require teacher-training. The aim is to provide a safe environment for learning to occur and the continued need for students to take responsibility for the contents of the writing as they exhibit insight and personal views. Although reflective learning facilitates meaningful and deep learning, concerns prevail as to whether the subsequent clinical practice improves.³⁰

Conclusion

As reflective capacity continues to garner tremendous interest among medical educationist and medical curriculum designers, the reflective writing initiatives are experimented in a plethora of aspects like improving communication skills, achieving competencies in ethical, cultural and empathic competencies, and enhance patient-centred care and clinical decision making skills. These initiatives are promising on paper, but require much more research and data to support its implementation. Some aspects like improving feedback and improved diagnostic reasoning are already shown to be associated with reflective writing constructs in the curriculum.³⁰ Reflective thinking and writing has merits in evaluating deeper learning that occurs using various assignments given to students. The ability to describe, analyse and write in perspective allows learning objectives to be met and enables educators to evaluate the extent of deep learning. Educators need to develop skills in providing guidelines so that learners are aware what reflective writing entails and how it can be used as an effective assessment tool to meet the objectives of the curriculum. As both relevant and non-relevant views may be expressed, assessors need to tackle the issues so that personal conflicts are resolved. Reflective writing may used in case summary assignments to gauge the student's personal engagement with the case, his or her ability to analyse derived information and articulate expressed views on both clinical management and strengths and weaknesses of the health delivery system. Reflective thinking remains a proxy to critical thinking and would be an enabling learning tool in best practice.

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