Assessment as a Chamber of Horrors: Lived Experiences of Health Professional Students and Implications for Institutional Reform

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Abstract
Introduction: In any educational setting, assessment is a key driver of learning. Among all stakeholders, students take center stage, as they are directly affected by assessments as they progress from one stage to another. It is therefore important to understand their experiences.
Methods: Health professionals attending a postgraduate course in assessment and evaluation at the University of Western Australia reflected on their past experiences of assessment. Through the analysis of their lived experiences, this qualitative study explored the challenges that students face and identified potential interventions.
Results: Content analysis was used to identify categories, which emerged into three main themes: the Learner, the Assessment, and the Assessor.
Discussion: Multiple interventions are required at the institutional level to facilitate the learning process. These interventions should be incorporated into a well-formulated assessment policy aligned with accreditation body requirements and the nature of the course itself.

1. INTRODUCTION

Assessment is the cornerstone of learning, and the two are closely interconnected [1]. In medical school, assessments are designed to evaluate the knowledge, skills, and attitudes of students as they progress through their training. The purpose is to ensure that graduates are competent and capable of providing safe, effective, and compassionate patient care. Medical education is unique in that it requires the integration of a vast body of knowledge with practical clinical skills, ethical reasoning, and professional behavior. Consequently, assessment methods in medical school are diverse and multifaceted, incorporating both formative and summative approaches.

Literature has identified key components of effective assessment, including reliability, validity, practicality, standardization, and educational effectiveness, based on decades of research. These components provide guidance to assessors and educators, who are key stakeholders. However, an equally important stakeholder is the student community, and it is essential to understand their experiences with assessment.

There is a paucity of literature focusing on students' experiences of assessment; most research has instead emphasized the provision of feedback, student performance, and comparisons between different assessment tools. During the COVID-19 pandemic and in the post-pandemic period, online assessment became a major focus of investigation, while more recently, the role of artificial intelligence has increasingly dominated research on assessment [2, 3]. Hoosen *et al.* observed positive student experiences with online assessment using a questionnaire [2]. Templeton et al. investigated students' perceptions as they prepared for Step 1 of the United States Medical Licensing Examination through focus group discussions and found that emotional and financial impacts, among other factors, affected students' well-being [4].

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In another study, help seeking behaviours of students who failed high stakes examination at two medical schools in United Kingdom were explored [5]. Several barriers were identified which stop students to seek help. This implies the need to understand students' lived experiences of assessment at various stages of education. It enables educators to take appropriate actions within the learning environment and the assessment approach. Using qualitative descriptive design, the research question in this study was:

"What are the challenges that affect students' performances in assessment?"

This approach is recommended for understanding areas which are less understood without going into the detailed explanations and causations [6]. Therefore, it is widely used in healthcare, education and social sciences and more aligned with our research question to identify interventions.

2. METHODS

In this study, health professionals enrolled in the course on assessment and evaluation at the University of Western Australia were required to reflect on their past experiences of assessment. (Box 1) The reflections were submitted through discussion board in the Learning Management System over the course of one week and were used for discussion during the class.

Box 1: Student exercise.

> **Chamber of Horrors: Describe your experience of assessment as a student that you still remember?**

Fifty-seven students submitted their assessment through learning management system and thirty-two students who consented to use their reflections are used in this analysis.

In qualitative research design, the content analysis categorises data into themes/patterns and does not require complex theoretical frameworks. The analysis can be either manifest content or latent content [7]. Manifest content explores the content in terms of usage, frequency of patterns and regularities while latent content relies on interpreting the underlying sense of the text used in the research. In this study, latent content was more relevant to understand the experiences based on the sample used as all participants have come from different specialties and institutions.

Each reflection was read and re-read to identify categories. As these reflections were part of discussion board available to all students in the online environment, the author used the content in the class to identify the categories and themes with possible interventions which further supported the initial analysis.

3. RESULTS

3.1. Theme One: The Learner

3.1.1. Emotional Responses

Twenty-one reflections refer to anxiety, fear, and stress related to assessment. These responses are mainly due to lack of information about the assessment and no opportunities for practice.

"*there was no guidance at all as to what content would be assessed in the exam. The format was changed to written exam and a research paper.*"

"*I have to say my worst experience will have to be my first anatomy oral examination, I was a first year medical student in XX and unfortunately prior to that I did not have much exposure to oral exams. So, I did prepare, I made sure I knew all the past exam questions, I read and read all the important chapters. The day of the exam came and guess what, I was petrified, the examiner asked me the first question and I could feel the sweat on my back, I wanted to run away, it was as if I was in a state of complete panic, I could barely talk, I kept looking at my shoes. He was a really nice man and kept encouraging me however I just couldn't do it. I had to leave. I will never forget that particular day. I of course failed the exam, not from lack of knowledge but from that fear that suddenly took over.*"

3.1.2. Situations Beyond Control

Three students mentioned sudden change in their circumstances due to health and family reasons which affected their performance during assessment.

"*.. I had a bad tummy ache during the paper. The ache came on before the paper and I thought I could handle it, but the cramps just got worse. You could simply tell when my handwriting began to mimic the Richter scale, as its frequency and amplitude just got out of hand. I had to leave the paper...*"

"*....things don't always go according to plan, and a water main burst in my apartment and filled my place with about 10cm of water. This water also seeped through to the neighbours next door and below me. I spent all my study time drying carpets, dealing with neighbours, insurance companies, tradesmen and strata companies, and went into the exam completely unstudied.*"

3.2. Theme Two: The Assessment itself

This theme covers the experiences which were related to the content and the issues with the format that was used.

3.2.1. Content Covered

"*We were given 20-mark questions on topics that were covered in one 45 minutes lecture and then never covered again.*

After much preparation and study, we sat down to the exam to find a paper that had questions that ranged from banal to trivial. The majority of the class felt that the exam was a joke and felt ripped off as the assessment wasn't a demonstration of what we had covered over the years of the course."

3.2.2. Assessment Formats

3.2.2.1. Lab Examination

"*To make things worse, the undergraduate degree was full of very competitive students who wanted high grades for postgraduate studies in medicine, and therefore, cheated in the examination by changing the focus of the microscope or field of view to make it harder for students behind them.*"

3.2.2.2. Viva/Oral Examination

"*I think that the worst assessment experience I have faced were my final year medical student exams in clinical medicine (even though they were 20 years ago!). They remain etched in my memory as being the most stressful exams, perhaps because I felt they were the most important and there is no practice exam. I felt intense performance pressure in front of examiners. There was also considerable time constraints as each case had to be done within a time slot. Those clinical exams counted for a significant part of the assessment for that unit, which also added to the burden I felt. I always found clinical exams so much more stressful than those on paper.*"

3.2.2.3. Group Work

"*Everyone in the group got the same score, and there was no opportunity for reflection on the group process and group members' contributions. On the day of the exam, one of my group members did not contribute to the exam at all and distracted us by making jokes the entire time. We all passed the exam, including this student who made no contribution at all.*"

"*There were a couple of members in the group who had no interest in the assessment at all, so put in minimal effort and one even didn't show up on the day of the presentation. This meant that we had to improvise and present on topics we hadn't prepared for in place of the missing student. The worst part was that we were assessed as a whole group, with no opportunity to provide feedback about the group process or contribution of group members.*"

3.2.2.4. Feedback

"*When I asked the tutor, he said that he didn't like my answers – he felt I had just written on the page answers that he gave to us during his classes. We were undergraduate students at the time, who had dutifully committed to memory the definitions and descriptions of various manufacturing techniques. So, when asked in an exam to define and describe these techniques we did so, in a practiced manner.*"

3.2.2.5. Environment

"*The air conditioning broke down and had over 100 desks crammed in the court to house the students for the exam. I was already nervous, petrified and exhausted from studying too late the night before.... the exam paper ended up damp from my sweat, I was so uncomfortable I was unable to concentrate. Also, the smells that began to develop over the 2 hours from my fellow students became unbearable, thus everyone was experiencing the same nightmare.*"

"*Flashback to the first year, I am sitting in the examination hall with other students, poised to turn over the exam page. The invigilator gives us permission to start, and as I glance down over the multiple choice questions, I notice an asterisk next to one option under each question. Slowly, students around the room are noticing that we have been given the answers to the multiple choice section in our question booklets. Some students are furiously copying down the answers in the hope no one else notices. Multiple students alert the unit coordinator, who, understandably so, has a meltdown. All the exams were quickly collected and all of us were ushered out of the hall and made to stand outside. The decision was made to reprint hundreds of exam papers, whilst we waited for over an hour. During this time, the mood was tense, students were worried about missing afternoon exams which would be commencing in a couple of hours, as well as the dreaded possibility of having to resit this exam at later date. I know for many students, a scenario like this may have felt like a godsend, and created the opportunity for more study, however for most of us, we were anxiously waiting to sit the exam and then awaiting the news of whether a resit was needed. Typically, the essential component for a successful examination (from the student's perspective) is adequate student preparation, however in this case, it was inadequate assessment and administration preparation that was to blame.*"

3.3. Theme Three: Assessor's Behaviour

Assessor/Examiner is one important aspect of the whole assessment process and there were seven reflections that describe the behaviour of the assessor which was intimidating and at times causing confusion, thus

affecting the performance at an already heightened time of anxiety.

"*The examiners many times were asking questions, until you don't know the answer so they can fail you. They usually were not interested in things that you knew, but in things that you did not know.*"

"*I was one of two females on the round. I lost count of the number of times I was stopped throughout with comments such as (and I quote): 'for goodness sake, could you at least try to look like you know what you're doing?' 'What's the matter, cat got your tongue?' 'It appears our junior has been incapacitated by her two X chromosomes.' 'Have you considered nursing as a career?' And at the end, 'well, considering you're a woman and you trained in XXXX we can't expect much more than that.' The assessor then signed my assessment form (tick boxes only, no comments or helpful feedback) and had a laugh with the rest of the team as though it was all a good joke.*"

"*The examiner was hard of hearing! He had his chair stuck to mine so he could listen to what I was saying to the patient and he kept on asking me to repeat what I said. Whenever, I mentioned a clinical term (which I intended to for the exam purposes followed by an attempted explanation to the patient in laymen's terms), the examiner would slap my thigh and say 'He does not know what the trigeminal nerve is!!' even before letting me explain! I ended up not finishing the station, although it was very easy...and I failed that station!*"

"*I entered the room and introduced myself before proceeding to ask the patient's name and gain consent. I was suddenly stopped by the examiner and told to move on as this was an assessment on examination only. That confused me and I continued on mechanically while I collected my thoughts. I was then abruptly asked if there was anything else I would like to do and felt lost for an answer. The examiner then listened to my summary briefly and the exam was over.*"

4. DISCUSSION

The analysis of the reflections has identified several areas for intervention and foremost is the presence of a clear institutional policy around assessment practices [8]. This policy should also be available to students so they can access it as and when required. The over arching theme in the analysis is the emotional reaction of the students. Emotional reactions related to anxiety, stress and fear are well documented in literature [9]. From the academic perspective, interventions are required at multiple levels.

4.1. Communication

Students are the major stakeholders in the whole process. They have a need to know what is being assessed and how it will be assessed and contribute towards final grade. The institution should make it mandatory to finalise the assessment blueprint within the first week of the start of the course and communicated to the students. No change should be allowed after that unless extra ordinary circumstances occur for example during covid -19 pandemic, the institutions across the world adapted rapidly to new formats [2].

4.2. Orientation of Students

Assessments cannot improve learning if students are neither familiar with the criteria nor motivated by them [10]. Many students feel anxious because they are not used to the format of assessment for example Viva Examination and Objective structured Clinical Examination. It is important that students are offered practice opportunities before summative examination. It serves two purposes. First, students are aware of the format and second, they also receive some feedback on their performance [11].

Similarly, most of the students have experience of group work and assessment but it is also reported in studies that students do not like the group work because of a variety of reasons. Constant supervision of the group work is required to ensure that work is distributed fairly among the group members, and everyone is contributing towards the process as well as product.

4.3. Student Support

Students need support not just at the time of examinations or once they have failed but also as they prepare for the assessment. Office hours, online support and dedicated staff to deal with the issues of burnout and wellbeing is extremely helpful for the students. In the study by Winter, Patel & Norman, it was observed that students have negative perceptions about medical schools, and it can be addressed with the presence of a dedicated team or mentor that students trust [5].

4.4. Faculty

Training of assessors is important when progression status of students is at stake Several studies have emphasized the role of training of assessors including one where students have highlighted it alongside with the timing of assessment [12].

Assessment requires rigorous training of the assessors not only about the content and format but also about the conduct during assessment where interaction with the students is involved. There should be no place for discriminatory behaviours.

4.5. Organisation

If examination is timed, it requires due vigilance whether

it is lab or computerised because every second lost attributes to more anxiety.

Similarly, the physical environment should be comfortable for the students with ventilation and access to basic needs.

4.6. Feedback

Assessment is more educationally effective when learners engage with assessment processes and perceive the feedback received as credible [13].

When preparing blueprints, it is helpful to identify how feedback will be provided and what form it will take.

4.7. Special Considerations

Occasionally, students face issues outside the curriculum which affect their performance and there should always be a provision of special considerations if it happens. Again, students should know what constitutes special considerations and how they can apply for that during orientation. One other issue that emerges is the value of single assessment. An assessment tool at one single time may not be reflective of the true performance of the student over the course of studies but rather at that point. If a student cannot perform at one instance, mechanisms should be in place to compensate for that single instance.

5. CONCLUSION

Qualitative descriptive design is useful in identifying actionable insights which is the case in this study when we look at the emergent themes. Environmental and situational factors further complicate the exam experience, adding another layer to the students' struggles and triumphs. Additionally, unfair group dynamics, physical health issues during exams, concerns about assessment management and quality, the importance of assertiveness and safety during practical assessments, and the influence of exam formats are critical themes, emphasizing the need for fairness, professionalism, and effective coping mechanisms.

LIMITATIONS

More extensive research is required to understand student experiences of assessment as it was a group of health professionals from a diverse range of disciplines in one country. The areas that are not covered in this study include the differences among learners in terms of gender, status i.e. international and domestic plus discipline specific and will require more studies.

ETHICAL APPROVAL AND CONSENT TO PARTICIPATE

The UWA Human Research Ethics Committee approved

CONFLICT OF INTEREST

The author declares no conflict of interest.

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