

Compromising patient safety: Lessons learnt from some critical incidents

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SUMMARY

During my professional career as a clinician for nearly five decades, I have come across several instances where I felt that my role as a clinician has been a failure. I consider these instances as critical incidents that have molded my clinical practice and hopefully made me a better clinician. In this paper, I will discuss about few of those situations, narrating the experience that I lived through, highlighting where I think I went wrong and how best we clinicians should perform under such circumstances.

I have divided the paper into lapses in history taking, lack of completeness in physical examination, premature closure in making a diagnosis and inadequacies in treatment, and each of these will be illustrated using a real-life scenario that I have lived through. As clinicians, we should strive for zero error, but we human beings are imperfect and often have room for improvement in the ways we act and react. In your clinical practice, irrespective of whether you experience critical incidents or not, it is always better to reflect how you could have treated each patient you have seen, better and make your practice more reflective rather than thinking in a stereotyped manner.

Key words: *Metacognition, patient safety, reflective practice.*

'Value of experiencing is seeing not in seeing much, but in seeing wisely'

- Sir William Osler

Critical incidents: What it means to a clinician?

A critical incident from the clinician's perspective is a clinical event where he or she thinks that something was wrong with the diagnosis and/ or subsequent management, inclusive of holistic care (1). Critical incidents are a part of clinician's clinical experience. These are travails and challenges of being a doctor. These incidents are disturbing to the conscientious clinicians. They should self-reflect on these incidents and go further to share these experiences with colleagues. It is a good habit to share lessons that we learn, with our colleagues so that they too will not fall into similar traps.

Critical incidents are clinical events that are also of educational value, influencing personal and professional development of doctors. Therefore, I shall share some of my bad experiences as a clinician to invoke and encourage a habit of self-reflection among the readers with regards to failures they may have endured when delivering clinical care.

Role of metacognition

Self-reflection is a metacognitive process (thinking about one's own thinking) which may also be defined as 'those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to a new understanding and appreciation' (2).

Such new levels of understanding can be achieved by having an experience, then thinking about strengths and weakness and thereby learning from the experience, paving way to perform better the next time. This concept shown in Figure 1 is called Kolb's Experiential Cycle Learning Model (3). As each reflective cycle takes the performer to a higher level of performance each time, repetitive cycles can be considered to be an upward spiral taking the performer from an amateur level to an expert level.

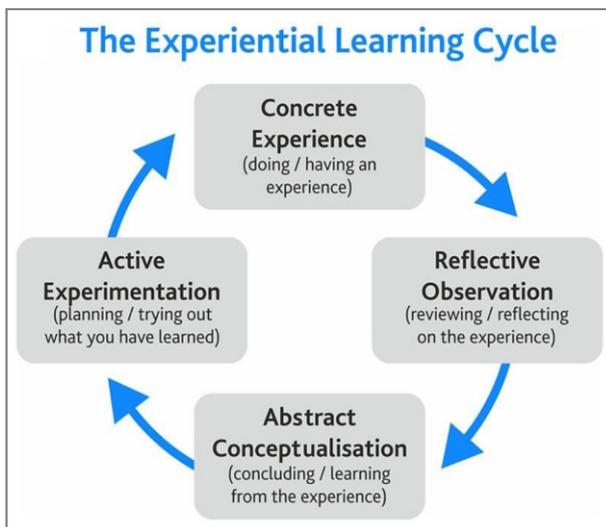


Figure 1: Kolb's Experiential Cycle Learning Model (Ref3)

Sharing the experience

During my professional career as a clinician for nearly five decades, I have come across several instances where I felt that my role as a clinician has been a failure. I consider these instances as critical incidents that have molded my clinical practice and hopefully made me a better clinician. In this account, I will discuss about few of those situations, narrating the experience that I lived through, highlighting where I think I went wrong and how best we clinicians should perform under such circumstances. I have divided this account to lapses in history taking, lack of completeness in physical examination, premature closure in making a diagnosis and inadequacies in treatment and each of these will be illustrated using a real-life

scenario that I have lived through. These mishaps have haunted my mind making me reflect as to how I should do better, and hopefully it has helped me to become a better clinician. I hope this account will help young clinicians to make them better.

Scenario 1

The first patient that I am discussing was seen by me in 1974 as a post-intern doctor in Kegalle hospital which then was a Base Hospital. She was an unmarried woman about 20 years of age. When I saw her for the first time, she was in a medical ward with a rash on the face. Prior to that she has been admitted several times to the same ward with the same complaint. She mentioned that the rash regularly erupts on the face and that doctors have not told why she is getting the rash. You may have already made a diagnosis. Is it SLE? Is it endometriosis?

On detailed history taking, the Consultant Physician elicited that the rash coincides with her menstrual periods and she gets it only on the face. On further inquiry, she said she has severe dysmenorrhoea which is relieved by paracetamol and as her menstrual flow subsides a facial rash erupts. What would be your diagnosis, now? It is a fixed drug eruption due to paracetamol allergy.

This case illustrates that the diagnosis can be easily missed if attention to detail is not paid during history taking. It is important to probe into details contextually, with an aim of arriving at the diagnosis. Doctors rarely have patience to listen to the whole story and they often interrupt the patient within a minute (4). We need to remember that if we are not good listeners, it will be hard for us to become good doctors.

Scenario 2

This patient is a teenage girl that I saw in 1980 as a Medical Registrar, in Newcastle, England. She had several hospital admissions for recurrent bouts of haematemesis. I saw some fresh blood in her mouth, on few occasions. She did not give a history suggestive of peptic ulcer, or a history of taking alcohol or NSAIDs. She looked well and did not

seem to be too concerned. Physical examination and several upper GI endoscopies were normal. We were unable to arrive at a diagnosis.

When you are faced with a diagnostic dilemma it is good to take a step back and revisit basics. We need to remember that blood that get coughed-up (haemoptysis) or blood that drips down from the nasopharynx (epistaxis) due to nasal or nasopharyngeal pathology can masquerade as haematemesis. She was not a smoker and she did not give a history of cough and her chest radiograph was normal - effectively ruling out any lung pathology. Despite negative findings she was treated with cimetidine which is a H2-receptor blocker which was the drug of choice for peptic ulceration, 40 years ago.

Then the patient was referred to the ENT surgeon who wrote back: *"There are multiple bite marks on inner aspects of both cheeks. Nasal cavity, pharynx and larynx are normal"*. She was diagnosed to have Munchausen syndrome (5). She was referred to the Psychiatrist. Patient faked haematemesis by biting the buccal aspects of her cheeks and manipulated her doctors

In a situation like this lateral thinking (thinking outside the box) can be useful. Lateral thinking, as opposed to tunnel vision is a good skill to be developed by clinicians. When in doubt, always question yourself as to whether you are correct. Often, rather than revising the diagnosis and admit that the conclusion is wrong, the tendency is to show that we are always correct, and we start looking for evidence to justify our foregone wrong conclusion. This is poor clinical reasoning, and it should be avoided. It can lead to unwarranted mortality and morbidity besides wasting time, energy and money. We need to lead by example and learn to admit we can sometimes be wrong and be prepared to be flexible. It is always good to entertain a differential diagnosis rather than be dogmatic. As we become senior in service there is a tendency to develop fixed ideas and being not receptive to others, including junior colleagues and patients. We need to remember that clinical medicine should be practiced as an art as well as a science and be mindful that it evolves with advancement of science.

Scenario 3

This patient was admitted as an emergency to the medical ward of Teaching Hospital, Karapitiya, Galle in 1997. As the Physician-on-call, I was called to see this young man who looked very ill and we learned that he had been in good health before he fell from a coconut tree 3 days ago. During the fall he had sustained few bruises in his chest but had not lost consciousness or sustained any head injuries. As he had chest pain, he visited a doctor in his village soon after the fall, and he was reassured and sent home on pain killers.

He was tachycardic, tachypnoeic, hypotensive with very high fever. Breath sounds were absent, and the percussion note was stony dull on the left side. Chest radiograph taken at the time of admission showed features suggestive of a left sided hydropneumothorax. As the patient was extremely breathless, we swiftly inserted an intercostal drainage tube to relieve the hydropneumothorax and evacuated few hundred milliliters of turbid, foetid fluid with fine particulate matter.

Our surgical colleagues who were consulted wanted the patient to be sent to the operating theatre for immediate surgery for treatment of a condition we had missed. They suspected a traumatic diaphragmatic hernia on the left side resulting herniation of the stomach and intestine with subsequent strangulation and perforation. As there was extensive intestinal gangrene which has resulted in septic shock, patient succumbed in the operating theatre.

In retrospect we found multiple rib fractures and few small fluid levels in addition to the large fluid level that we had noted earlier on the left side in the chest radiograph. The main reason for missing the diagnosis was our lackadaisical approach of just holding the radiograph against ambient light and reading it. The other reason for missing the diagnosis was framing of our thoughts to fit a preconceived diagnosis (a bottoms-up approach) – of a medical condition disregarding the history of trauma as the patient was seen in a medical ward with high fever, dyspnoea and signs of fluid in the chest. This type of clinical reasoning can be considered a cognitive bias leading to confirmation bias with goal directed behaviour - a failed attempt at

pattern recognition. As a clinician gains experience, he or she tends to rely more and more on 'pattern recognition' to arrive at a diagnosis (6). In challenging clinical encounters, even experienced clinicians may have resort to 'hypothetico-deductive' approach in clinical reasoning.

Scenario 4

A middle-aged woman with bronchial asthma was seen around mid-1990s as a Physician in the out-patient clinic. As she had to take metered dose inhaler (MDI) several times at night, I started her on a regular steroid MDI and reviewed her two weeks later. During the review visit, as her asthma was not under control, I wanted first to check her compliance, before escalating her treatment. When she was asked to demonstrate the inhalation technique, she triggered the MDI without taking the cap off. Then I told her to trigger it after taking the cap off, but she could not do it. When I tried to take off the cap, I had to struggle as the cap was stuck to the MDI with the spray that has collected and condensed from within under the cap, with no medication being delivered to her all along.

As you would realize, the patient has not received any benefit from the steroid MDI. Who should be blamed for this error? Doctor, pharmacist or patient? Of course, I am ready to take the full blame. Often doctors scribble some medications on the prescription pad and tear off the page and just give it to the patient and tell 'take these medicines' - in Sinhala 'mei beheth tika bonna'. This practice should be deplored, and it demonstrates a huge gap in communication. The better practice for prescription of medications would be to (7): 1) explain what condition you are treating, for how long, how often medications need to be taken and how it should be taken, 2) find out about any drug allergies and avoid offending drugs, and in case an allergy develops that all medications be stopped followed by a quick visit to the doctor, 3) check whether the patient is already on any other medications including over-the-counter medications and traditional medicines, 4) wrap up by checking whether the patient understood and whether he or she needs any clarifications and to tell her when to come back. 5) In special situations,

like when prescribing inhalers demonstrate how devices can be used with or without the help of pharmacists.

Conclusions

As clinicians, we should strive for zero error, but we humans being are imperfect and often have room for improvement in the ways we act and react. In your clinical practice, irrespective of whether you experience critical incidents or not, it is always better to reflect how you could have treated each patient you have seen better and make your practice more reflective rather than thinking in a stereotyped manner.

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