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EDITORIAL VIEW

Your expert knowledge may put them off: Curse of knowledge among anesthesiologists

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Received: 29 June 2018
Reviewed: 1 July 2018
Accepted: 2 July 2018

ABSTRACT

The curse of knowledge" is a human cognitive bias that may lead to ineffective communication and we should acknowledge that we are affected by it. The communication with patient should be simple and clear. Though anesthesia has become safer following better drugs and technology but still we may face patients with grave co-morbidities. Anesthesiologists may not get enough time to communicate with patients, preoperatively, but we should endeavor to collect as much information as possible from a patient using simple rather technical terms. Effective communication may avoid 'curse of knowledge' and result in improved patient safety. Anesthesiologists should make an effort to spend considerable time in pre-anaesthesia check-up clinics or in ward to communicate with patient who is likely to undergo surgical procedure. Similarly, we should have a candid communication with trainees in anaesthesia so that the events are not taken for guaranteed. This would avoid the curse of knowledge and assure better patient care. The same approach of clear communication should be applied to our surgical colleagues.

Key words: Curse of knowledge; Patient; Student; Anesthesia; Surgery

Citation: Choudhury M. Your expert knowledge may put them off: Curse of knowledge among anesthesiologists. Anaesth Pain & Intensive Care 2018;22(2):145-147

"Businesses often fail to get their marketing message across effectively" -- **Donald Miller**

The "curse of knowledge" (COK) is a human cognitive bias that makes it very grueling for us to remember that "it is like not to know something". In other words, while communicating with a patient or a student, unknowingly we assume that every patient or student has adequate background knowledge to understand what we intend to convey to him.[1] Consider one most obvious example in anesthesiology and intensive care practice; when a postgraduate anesthesiology resident, who has recently joined cardiac anesthesia, enters into operating room (OR) on day one, where a patient is posted for coronary artery bypass grafting under cardiopulmonary bypass. You, as a consultant, need to go out of OR for some time, and tell the new trainee, "Until aortic cannulation it's just a simple affair; not a big deal to manage this patient. It's just like any other surgical case." The student typically blinked at you, missed a heartbeat, and with a hoarse voice says tells you that he did not know how to manage if there was a sudden hemodynamic swing. In your heart you wonder, "Why he doesn't know this simple thing". This is the COK, you as an anesthesiology faculty, are suffering from. Remarkably, it does not initially occur to you that despite being completely new to the environment, he might not understand that specific local terminology. The COK is a universal phenomenon, but its effects are felt most intensely in highly specialized fields that require a lot of study and experience in order to understand the intricacies of practices. In other words, when you join in a super-specialty branch after MD anesthesiology, you may understand some acronyms relatively quickly, but when it comes to something like how a centrifugal pump works, the knowledge gap tends to be wider.

And what differentiates a successful doctor in a tertiary healthcare center / research institute from his counterparts in smller hospitals is how better they are at overcoming the COK and making their students happy and fast learners.

Let us consider another example from a preoperative visit.

Anesthesiologist to a female patient with khyphoscoliosis, "You have been posted for replacement of your aortic valve it does not initially occur to you. I am your anesthesiologist and will provide you anesthesia and ensure your safety during the surgery as well as during the postoperative period".

Patient answers; "Yes, I know Dr 'X' is going to do my surgery and he is an excellent surgeon". This conversation is quite relevant. The anesthesiologist asks. "Have you ever had anesthesia before? If yes, what kind of anesthesia did you have?" The majority of the patients from a country like ours usually know nothing about it. An occasional patient might say that the only thing she remembers is that she underwent a cesarean delivery five years back and bled a lot during the procedure, but that she was lucky that her obstetrician was an excellent doctor so she managed to survive. Then, the anesthesiologist goes through the rest of the preoperative evaluation, briefly explaining the monitoring aids e. g. a pulse oximeter to see blood oxygenation, ECG to monitor heart rate etc. Then he goes on to explain how and why he might put an intravenous and intra-arterial line under local anesthesia, give something to make her seep, take care of her respiratory system by providing artificial ventilation, via a machine through the endotracheal tube, which he will put in her throat. He then explains how he would take care of the patient's intraoperative and postoperative pain as well as postoperative nausea and vomiting. The entire conversation might have taken 5-10 minutes, but it remains unanswered if it does convince the patient about your role in his peri-operative management. This is what COK is, when our interaction with the patient is concerned.

COK and the surgeons

Surprisingly many surgeons appear to lack the knowledge about or tend to ignore the pathophysiological changes a sick patient might have, as well as what stress their anesthetist colleagues undergo while dealing with such patients. This is because he might have his own apprehension regarding his surgical technique. His only focus is the surgical aspect of the patient and at times he is not aware of the fact that the adverse physiological changes are iatrogenic and occur due to a faulty surgical technique; still it is easier to blame others.

COK and the patient

This especially happens when we expect that the patient should not hide anything from us. How is it possible? The patient might not know about what we enquire and why we enquire from him. Due to lack of full medical knowledge he might not give importance to some signs and symptoms, which are crucial to make up a proper diagnosis.

What role COK plays in our practice?

The curse makes it difficult for us to identify ourselves with the other person's situation and explain in a manner that is easily understandable to someone who is a novice. This is absolutely similar to a situation, when a brilliant professor no longer remembers the difficulties which a young trainee may encounter when learning a new subject. It means when we walk into a preanesthetic check-up (PAC) clinic or bed side of a patient in the ward, we assume the patient knows us to be doctors and anesthesiologists. This is COK on our behalf as most of the patients really do not know that you are a doctor and/or you are as qualified as their surgeon.[2-4] Secondly, we assume that the patient understands our statements relevant to his condition or the anesthesia practice, which might not always be the case. We are so used to these things, that these become a routine matter for us and we might disregard the level of intellect of our patients.

What to do? Easy communication is the best answer

So, how to avoid COK? The practice is very simple, but it requires a high level of conscious commitment when verbally communicating with patient, students, trainees or surgeons. Imagine the variation of internal dialogue, if a patient hears a phrase, "Have you ever been hospitalized before for an episode of syncope or heart rhythm disturbances?" instead of "Have you ever been hospitalized before for becoming unconscious or some irregularity in your heart beat?" At times just substituting one simple word might make a big difference.

We should appreciate that lack of being able to put yourself in others' shoes is a hurdle to effective communication, leading to misunderstanding, disregard to surroundings and frustration as why people fail to understand what seems so clear to me.[5]

The following are few basic steps to overcome COK

in anesthesia practice;[6]

1. Be aware and understand that you are suffering from COK.
2. Communicate in the simplest way possible. The advent of safer, more selective drugs coupled with more sophisticated technology, has made practice of anesthesia safer, yet more complicated. The patients may be old and have multiple systemic co-morbidities. With increasingly complex workload have come additional pressures of time and resource allocation. Patients are admitted on the day of surgery, leaving minimal or no time for pre-anezzsthetic assessment. Anesthesiologists remain frequently busy, isolated and unavailable when working in the OR, or find themselves working at multiple sites leaving little opportunity for interaction with colleagues and patients. At every step of clinical anesthetic practice the ability to communicate effectively is a vital component to overcome COK and thus improve patient care. Anesthesiologists frequently communicate using highly technical language. This is likely to create misunderstanding and might adversely affect patient safety. So give some direct suggestions like "you will feel better when you wake up" rather than saying "you will feel better when the anesthetic drugs effect wares off".
3. Consciously, audit your message or order. We dedicate enormous time and energy towards mastering a specific area of expertise e.g. pain medicine. However, we fail to alter our 'expert' linguistic dialogue when interacting with patients, juniors or surgeons.
4. Use metaphors or analogies to relate to common terms.
5. Ask a non-expert in the subject to review and give feedback.

Conflict of interest: None declared by the author

REFERENCES

1. Kennedy J. Debiasing the curse of knowledge in audit judgment. The Accounting Review.1995;70:249–273.
2. Keep PJ, Jenkins JR. As others see us: The patients' view of the anaesthetists. Anaesthesia. 1978;33:43–5. [PubMed] [Free full text]
3. Shevde K, Panagopoulos G. A survey of 800 patient's knowledge, attitudes and concerns regarding anesthesia. Anesth Analg. 1991;73:190–8. [PubMed]
4. Hume MA, Kennedy B, Asbury AJ. Patient knowledge of anaesthesia and perioperative care. Anaesthesia. 1994;49:715–8. doi: 10.1111/j.1365-2044.1994.tb04408.x. [PubMed] [Free full text]
5. Nickerson RS, Baddeley AI, Freeman B. Are people's estimates of what other people know influenced by what they themselves know? Acta Psychol. 1987;64:245-59.
6. Gopnik A. How we know our own minds: The illusion of first person knowledge of intentionality. Behav Brain Sci. 1993;16:1–14. doi: 10.1017/S0140525X00028636.

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