Journal of Anesthesia & Clinical Research

Gallie, J Anesth Clin Res 2016, 7:9
DOI: 10.4172/2155-6148.1000668

Commentary Open Access

Threat & Error Management-The WHO Checklist from a New Perspective

Heather Gallie*

Consultant Anaesthetist, Human Factors Lead Salford Royal NHS Foundation Trust, UK

***Corresponding author:** Heather Gallie, Consultant Anaesthetist, Human Factors Lead Salford, Royal NHS Foundation Trust, UK, Tel: 07919837701; E-mail: heathergallie@doctors.net.uk

Received date: August 22, 2016; **Accepted date:** September 15, 2016; **Published date:** September 21, 2016

Commentary

I read a case report in the Medical Protection Society Casebook discussing two cases of a retained throat pack [1]. In the first case the patient was having facelift surgery, the WHO sign in was completed [1]. At the end of the procedure the patient was extubated, the anaesthetists did not perform laryngoscopy (which was their usual practice) as it was difficult to open the patient's mouth [1]. The patient complained of dyspnoea in recovery, this was attributed to delirium and medications were given, 3 hours later the patient coughed up the throat pack [1].

In the second case the anaesthetist was new to the hospital, the WHO team brief was performed for 3 cases, 2 required throat packs, the plan for insertion of throat packs was discussed but the plan for removal was not [1]. In all cases the WHO sign in was performed but the sign out was not. The first case on the list had a throat pack which the surgeon removed. At the end of the second case there was confusion as to who had removed the throat pack; the anaesthetists presumed this had been performed by the surgeon again [1]. Later on the patient experienced some shortness of breath and eventually coughed the throat pack up in recovery [1].

Does this mean that the checklist has failed or does the problem lie in application?

I would argue the latter. Checklist, briefings & standard operating procedure do not in and of themselves eradicate error [2]. We need to have a more sophisticated understanding of our own professional fallibility. There are some important lessons we can learn from these cases:

Firstly, the importance of a "sign out" as a final checks with all team members taking part.

Secondly the danger of presumption, (something we are all prone to), the doctor in the second case presumed a task which had been done on a previous case had been repeated- we need to verify things, if there is any doubt we need to test the hypothesis.

Thirdly we do not know the circumstances surrounding the WHO team briefing but distractions, interruptions or team changes all diminish the effectiveness of the checklist.

Details from the latest national report of serious untoward incidents found that all of the cases reported included elements of distraction, interruption, time pressure, multiple teams and culture in the generation of these errors [2].

Repeated, routine skills and checks can become so familiar they are performed with little attention (involuntary automaticity) thus becoming a potential source of error [3]. In these circumstances the performance actually generates a false sense of security and may even reduce vigilance [3]. If we do not engage our mind we will become blind to the threats around us and be unable to recognize errors.

If we take a new perspective and use the WHO checklist as a tool to identify threats and reduce error this requires attention, we are actively evaluating the specific risks posed to that patient for that procedure.

A threat is any situation or event that occurs outside the influence of the team which may affect safety [4]. For example, a throat pack is required for the procedure but the presence of a throat pack is an "airway threat", (we presume that everyone knows this) but if we state at the brief "this patient will have a throat pack in situ, this is a threat to their airway. We will manage this by including it in the swab count, I will tie it to the endotracheal tube and we will specify the need to remove it at sign out". There is more potential for team engagement and understanding of the potential risks for the case.

In case 2 the anaesthetist was new to the hospital; this is a "threat" to performance because the team and the routine practices of that department are unknown. This should be stated during the team brief with the request that the team keep the new doctor informed regarding their normal practices.

These are just two examples but this could be taken further, the WHO checklist incorporates factors such as allergy status, bleeding risk, aspiration risk, & airway assessment [5]. It seems obvious that these pose a risk to the patient but did you know that high blood loss was a frequent feature in cases of retained swabs? [2].

At Salford Royal NHS Trust we have a "Team brief Board" which in addition to the factors stated above includes ASA grade, medications, positioning, equipment and skill mix. We list these factors every day but did you know positioning, equipment and skill mix were all features in cases of wrong site surgery [2].

We could use this information to enhance our team briefings- we could state "there is a significant risk of blood loss; this means not only do we need to prepare for blood administration BUT it is also a risk for retained swabs so we need to be vigilant at sign out"

I would also suggest that when discussing patient co-morbidity we state the risks posed e.g. "this is an ASA 3 patient with COPD therefore is at risk of bronchospasm". This also prompts the team to plan for these eventualities.

The WHO checklist can create shared situational awareness. Situational awareness is a term used to describe recognizing key elements of the situation, comprehending their meaning and anticipating what may happen [6]. If we use the WHO checklist as a threat identification tool we are recognising key elements of the situation, comprehending their meaning, not just in isolation but in context of the whole procedure (e.g. patient positioning and risk of

wrong site surgery) and anticipation means we plan ahead (e.g. there is a throat pack in situ, it will be removed by the anaesthetist at sign out).

A simple way of understanding situational awareness is "APU-Alert, Prepare, and Update" [7]. We alert the team to threats at team brief, we prepare strategies to manage them, we update at the team at "sign out" and assess if the threats have been averted.

To conclude, the WHO check list has great potential to assist us in understanding the risks of the particular situation, creating shared situational awareness and team collaboration. We need to use this potential and not restrict it to a tick box exercise, nor limit ourselves to discussing only the elements written on the paper- if we have any issues that will affect the performance of the team we should raise them at the brief e.g. new staff members, visitors, unfamiliar teams, changes in list order, shift changeover and working in an isolated site are all potential "threats" to performance.

References

1. Hartley H, Seymour C (2015) Retained Throat Packs. Casebook 23:13.
2. [No authors listed] (2015) National Safety Standards for Invasive Procedures (NatSSIPs) NHS England Patient Safety Domain.
3. Toft B, Masci-Taylor H (2005) Involuntary Automaticity: a work-system induced risk to safe health care. Health Service Management Research 18: 211-216.
4. http://www.skybrary.aero/index.php/Threat_and_Error_Management_(TEM)
5. [No authors listed] (2014) Civil Aviation Authority (CAA) Flight Crew Human Factors Handbook 8:72-79 .
6. http://www.who.int/patientsafety/safesurgery/ss_checklist/en/
7. http://www.artofmanliness.com/2015/02/05/how-to-develop-the-situational-awareness-of-jason-bourne/