
ANESTHESIA SAFETY NETWORK

QUARTERLY PERIOPERATIVE INCIDENTS REPORT
Newsletter #008 - june 2018



**TOWARD EXCELLENCE
IN HEALTHCARE**



INTRODUCTION

Anesthesia Safety Network
Newsletter #008 - June 2018

Newsletter#008, done!

We have had very good news since newsletter #007 was published! Firstly, we're very pleased to have connected the French Society of Anesthesiology with Mark Warner and Steven Greenberg (respectively President and Editor-in-Chief of the APSF: Anesthesiology Patient Safety Foundation). The joint goal is to continue to improve Patient Safety Education.

Secondly, Christian Morel, author of the three volumes of "Absurd Decisions", published by Gallimard has chosen one of our reported cases to illustrate a theory in safety processes.

Lastly, I recently attended the International Forum for Patient Safety and Quality in Copenhagen which was jointly provided by the European Society of Anesthesiology and the American Society of Anesthesiology. The faculty's talks were very interesting. The networking with colleagues was intense and I'm looking forward to new partnerships in the future, which will lead to a more interesting quality of this quarterly newsletter.

At the beginning of 2018, I expected that the 2.0 version of the Anesthesia Safety Network would be delivered by June 2018. Unfortunately, due to various constraints the new version should be available online in January 2019. Nevertheless, some changes have been with a more focused newsletter on specific skills. This time we've picked up in the database some events involving bad communication among healthcare givers.

We've also invited Jérôme Cros who is an anesthesiologist. He's written a French book entitled: « Better communication among Care Givers: a major safety issue »¹ published on the 14th of June 2018. In this ASN issue, he shares with us his expertise and reviews one of the following incidents. His book is a practical guide about Medical Phraseology. He suggests some basic, practical and effective rules to improve and standardise communication.

The next newsletter should be published in September 2018. We'd like to work on human interactions with medical devices and ergonomics. Don't hesitate to share with the network your hazardous events or successes in this field. Different human factors experts will study and analyse these reported cases.

The network is growing every day thanks to your help and commitment. Thank you, on behalf of all the subscribers!

If you like this newsletter, please share the website address with your colleagues through social networks or at work with your team!

Enjoy

Frédéric MARTIN



EDITORIAL

Communication...

The major goal of communication is the ability to establish a relationship with other members of the team to perform an action safely and efficiently. It's not just a matter of speech stream.

Establish a relationship to cross check shared information, to anticipate difficulties and plan strategies, to distribute workload, to speak up when an error occurs, to coordinate roles among all the stakeholders,

Not checking, anticipating, organising, reporting, speaking up, coordinating can hurt patients ...

Safety is not relying on a single person but it's a team's concern. The communication, the relationship with healthcare providers and patients are very central concerns of patient safety in all these reported cases.

Claude Valot

Claude Valot is a Senior Human Factors Consultant who works for DEDALE company. He's a former researcher at IRBA (Institut de Recherche Biomédicale des Armées - France).

« THE MAJOR GOAL OF
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HAEMORRHAGE DURING C-SECTION

A patient was operated on 17:30 for an emergency C-section due to abnormal foetal heart rate under spinal anaesthesia. The spinal anaesthesia was performed easily but the woman was really anxious. Just after the skin incision she said that she was uncomfortable and feeling pain. After obtaining the permission from the patient, the surgeon (close to retirement) continued the procedure until the child was born. After the newborn extraction, she was in a lot of pain. The anesthesiologist decided to proceed with a general anaesthesia. It was 18:00 and my night shift was beginning so there was at this moment two anesthesiologists for administering the general anaesthesia. I asked the surgical team twice to make a time out without receiving any response from them. The measurement of the non-invasive blood pressure was ineffective so I rebooted it before induction. Finally, the value was normal and I yelled one more time at the surgeon to stop. He answered: "I can't, it's bleeding a lot!" The patient was quickly put to sleep and we called for help informing the team that it was a major haemorrhage. The cognitive aid was used and all the steps checked. No leader was clearly designated but the workload was distributed with roles assigned. The communication seemed to be effective between both anesthesiologists, the midwife and a nurse. Nevertheless, the surgeon assistant asked for silence several times arguing that "it's too noisy!" (during cross-check, check-back). After ten minutes of stress (blood loss 1500 cc) we asked the surgeon if he needed some help. He accepted before changing his mind. Another surgeon had already been called. Five minutes later and after more blood loss (now approximately 2000 cc), the haemorrhage stopped. Several treatments were administered according to current guidelines. The husband was informed about the procedure and left the OR just before general anaesthesia. The surgeon assistant was very angry after the event and blamed a midwife reporting that she was too noisy during the procedure. She said "Everybody was speaking and things got messy" and "Many years ago, we knew our roles without talking and it worked very well!" The medical team didn't share this point of view. Interestingly, three days later whilst I was leaving the hospital, I met the patient's husband and spoke with him. He said that he was a non-professional plane pilot with human factor training. He reported that he felt that there wasn't any leader because the surgeon hadn't spoken with the team in the operating room.

Good points : *use of cognitive aid / communication with relatives / Two challenge concept (TeamSTEPPS)*

Ways for improvement : *lack of situation point / SBAR has not been used / Any leader designated / surgeon tunnelisation / immediate structured debriefing impossible due to angry*

KEY WORDS : *communication / SBAR / Team work*

Structure your communication

How many times did we find ourselves in a situation where we had to explain something, quickly realising that our verbal message was not clear. Our cue was the nonverbal signals that our interlocutor sent back to us. How many times did we receive a message we didn't understand, not because it was complicated, but because all kinds of information were mixed up?

When we have to convey a message, structuring it facilitates its processing by 40%. It's like telling a story. All stories have a structure that facilitates their understanding.

When we have to explain something, one way to structure our speech is «P-S-B». This method starts by exposing the problem, then the solution and finally the benefits of this solution. This clarifies the message and facilitates its processing by the receiver.

In aviation, when pilots have to communicate information about a problem to the cabin crew, for example, in case of a diversion to an airport different from the initial destination, we use the «N-I-T-S» structure. We begin by giving the Nature of the problem and then we explain our Intentions, the Time remaining until the landing, and the possible Specific information.

The purser, who is our privileged interlocutor in this type of situation, then repeats the information to us in this same order, so that we can check the good understanding of the message. The purser will then pass it on to the other crew members.

There are several advantages in using a structure known by the transmitter and the receiver. Firstly, it is more likely that the issuer transmits all the relevant information. Secondly, the receiver knows in what order he will receive the information, which allows him to assimilate and retain it more easily. Finally, if the transmitter forgets to give one element, it will be detected by the receiver who will then clarify the situation.

The first allusion to a structured communication technique dates from the 80s. It originates in the submarine community, which used it when a low-level seafarer had to pass on mission-critical information to a more senior officer. This method is well known as the acronym «SBAR» for Situation, Background, Assessment and Recommendation.

The «SBAR» is now used in healthcare for passing on orders. SBAR is also used to quickly update a person who joins a team, for example when responding to a «call for help». In this case, however, it is important to be wary of the letters «A» and «R». Indeed, if the team that called for help shares its analysis of the situation and its recommendations, in the event that they were erroneous, there is a significant risk of leading the respondent to the same false appreciation of the situation. It would be best in such a situation to provide only factual information, without any analysis, in order to allow the respondent to build up his own understanding of the situation. This will allow him to take a fresh look, and he may have a different idea that might be closer to reality.

Another limitation of SBAR is that it lacks any notion of time and in many incidents and accidents, the loss of consciousness of passing time is a major cause of the dramatic outcome.

SBAR can therefore be a good tool in some cases, but it must be used with awareness of its limitations. We do not all have our office in a nuclear submarine. In aviation, we use NITS, and I invite you to develop your SBAR according to the specificities of your work, and to standardize its use as much as possible.

Written by Guillaume Tirtiaux, Airline Pilot, Training Director at REPORT'in





DIFFICULT HANDOFF IN THE EMERGENCY ROOM

A patient was admitted into the emergency room for fever, dyspnea and arterial hypotension. The emergency medical doctor wanted the patient admitted into a specific care unit for unstable patients (not an ICU). The anesthesiologist was called but when he arrived at the ER, he realised that the patient had septic shock and he should be transferred into an Intensive Care Unit. He helped his colleague (crystalloid infusion, venous access, large spectrum antibiotics administration, facial mask oxygen, blood samples) while the ER medical doctor was looking for a bed in another hospital. In a few minutes the ER medical doctor had found a bed and he called the Medical Emergency Ambulance. After a fast infusion of 2 litres of crystalloid IV injection, we decided to add IV continuous administration of norepinephrine. Within 30 to 60 minutes, the blood pressure and the neurologic status improved. The anesthesiologist decided to get out of the ER with the permission of his colleague because he was busy. Moreover, he didn't want to be there during the handoff process with the SAMU. He had the feeling of being evaluated and criticised as a junior doctor). What was feared happened as reported by the ER medical doctor, the handoff was very difficult (lack of goodwill, looking for negative aspects of the care or faulty decisions leading to wrong therapies).

This way of proceeding was judged as unfair by all the team (MD, nurses, etc). This behaviour was perceived as hostility so the ER medical doctor left the room during the handoff. The tracheal intubation was postponed because the ER team wasn't comfortable with this procedure, as they'd rather wait for some help and use of some specific medical devices. Instead of working as a team, the Mobile Emergency Unit senior preferred to proceed with the intubation in the ambulance for the next 30 minutes.

Good points : *organisation / « golden hour » strategy / call for help*

Ways for improvement : *teamwork beyond the hospital / structured handoff and request for more information / debriefing after the incident / set your ego // ER team stressed and frustrated.*

KEY WORDS : *transmission / goodwill / communication*

LACK OF COMMUNICATION DURING A PEDIATRIC SURGERY CASE

It was 10:00 a.m. and I was on duty in the post anaesthesia care unit (PACU) as a nurse. I was in charge of an eighteen-months old boy who was operated on for an adenoidectomy under general anaesthesia. I checked his ID bracelet and I was concerned about the mismatch between his ID on the bracelet and the sticker on his bed. The ID bracelet suggested that he'd undergone urologic surgery.

I immediately called his surgeon to confirm his ID and fortunately he'd been operated on with the right surgery. In fact, the ID bracelet was wrong. The whole team didn't check his ID as prescribed by the WHO checklist leading to this frightening situation.

Good points : *near-miss*

Ways for improvement : *No ID control before proceeding with the surgery / no cross-check among care givers and family / No check using WHO surgical checklist / resist to pressure to proceed*

KEY WORDS : *check-list / identification / near miss*



FATIGUE DURING AN EMERGENCY OBSTETRIC PROCEDURE

A patient gave birth to a child at approximately 8:00 p.m. The labor was very fast so it was without any epidural analgesia.

Twenty minutes after the vaginal delivery, the placenta was still retained so the obstetrician requested anaesthesia to remove it thereby preventing a

postpartum haemorrhage. The hemodynamical status was stable so I decided to do a spinal anaesthesia. At 8:30 p.m. the woman was laid on her back and immediately the bleeding began. Immediately, the obstetrician removed the placenta. The spinal anaesthesia wasn't effective and the patient expressed a feeling of pain. I was very frustrated, so I decided to help by informing the team that I would inject the prophylactic antibiotic treatment (amoxicillin + clavulanic acid). I had had several night shifts during the previous ten days and I knew that I was tired. When I came back into the delivery room the midwife asked the patient if she had any allergies? She answered, "yes it's strictly forbidden for me to take amoxicillin. Last time I had a serious life-threatening reaction". Then I stopped and changed the antibiotic. A few minutes later I thanked the midwife for the revelation of my potential mistake.

Good points : *"speak to the room" process / congratulate your colleague for their feedback and celebrate it.*

Ways for improvement : *fatigue awareness / briefing or situation point amongst stakeholders / interprofessional documentation checking before surgery.*

KEY WORDS : *allergy / communication / near miss*

HIERARCHY AND COMMUNICATION

A young anaesthesiology resident was alone at midday during a difficult thyroid surgery. The surgeon, who was performing this case, was the head of the Thoracic Surgery Department. He asked the anesthesiology resident to change the position of the table. The resident wasn't confident and decided to repeat loudly and clearly the order closing the loop of communication. He was concerned about making a mistake (wrong move). The surgeon was surprised and angrily expressed his irritation saying, "Stop that immediately! You're not a bartender. It's driving me crazy!" The resident didn't understand the response of the surgeon. He tried to discuss it with him. The surgeon responded sarcastically using an ironic tone. He ordered the resident to stop repeating all of his instructions because it was pointless and dumb. The resident was frustrated and didn't say anything for the rest of the day. He stopped communicating with the surgical team. Any surgical team members would have expressed their discomfort regarding this situation. There's a long way to go before effective and supportive communication can be achieved in all healthcare organisations.

Good points : *reporting this instructive case*

Ways for improvement : *learn and implement safer communication tools / patient safety culture / speaking up when other members are concerned by inappropriate behaviour / analysis during a morbi-mortality review*

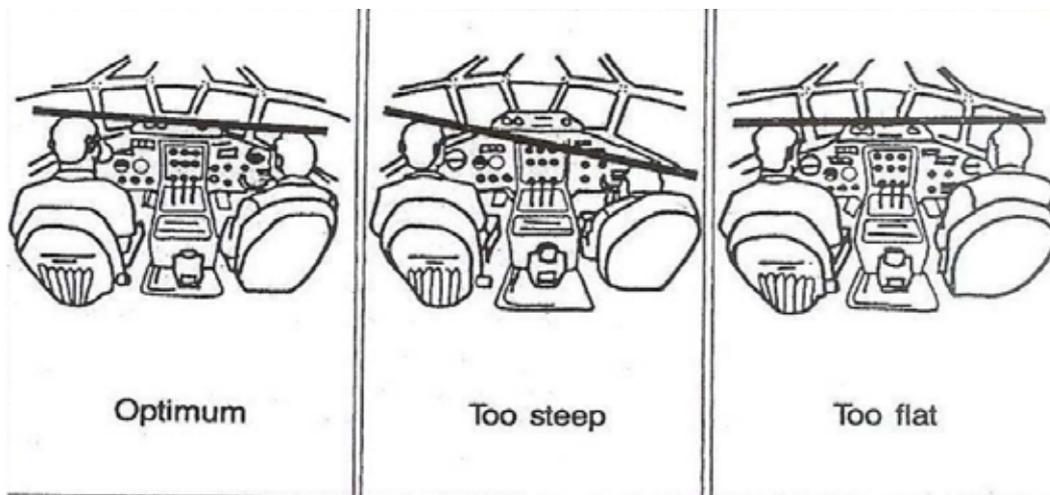
KEY WORDS : *hierarchy gradient / close loop communication / discomfort*

Analysis of the incident (adapted from Systems Analysis of Clinical Incidents: London protocol ³⁾)

CONTRIBUTORY FACTOR TYPE	CONTRIBUTORY FACTORS
Patient Factors	Difficult thyroid surgery
Individual (Staff) Factors	Changing the table position during the procedure
Task and Technology Factors	Anesthesiology resident (recently arrived in this surgical department) / surgeon at the head of the thoracic surgery department Young resident: hungry / insecure
Team Factors	Resident without a senior present, hierarchical gradient No issues reported by the team members
Work Environmental Factors	Resident (isolated in the operating room Surgery longer than expected
Organisational & Management Factors	Lunchtime between 11:00 a.m. and 3:00 p.m. Incident reporting system not used No morbid mortality review performed
Institutional Context factors	No "good communication rules" learned during medical education (the effective communication is viewed as abnormal).

On 22nd May 2010, a Boeing 737 landed on the runway of the Mangalore Airport. The aircraft overshot the runway and fell into a gorge. One hundred and fifty-two passengers and all 6 crew members lost their lives (<http://www.aviation-accidents.net/report-download.php?id=238>). “Cause of this accident was the Captain’s failure to discontinue this unstabilised approach and his persistence in continuing with the landing, despite three calls from the first officer”.

In the executive summary, the experts underline the Trans-Cockpit Authority Gradient: “The captain had ignored the concern of the first officer ...”. In this case the gradient was very steep. Nevertheless it mustn’t be too flat but the first officer should have been encouraged to report concerns. In this operating room, the gradient was clearly too steep!



(Source: Edwards 1975)

Diagram 17: Levels of Trans-Cockpit Authority Gradient



In the book « Mieux communiquer entre soignants... », we talk about “how to express your disagreement “ (**rule 22**). It could be applied to the surgeon who didn’t want this cross-check procedure and also to the junior resident who didn’t know the environment and probably wished to be treated with goodwill. The resident could have used the **rule 21** to fix this trouble “declare your ignorance”. This behaviour must be highlighted and is an effective way for the leader to establish role according to skills. Lastly, the surgeon should have “chosen the right tone” (**rule 12**) to establish an open-minded space, allowing expressions of others opinions or concerns in this theatre.

Dr Jérôme Cros M.D

« Mieux communiquer entre soignant : un enjeux majeur de sécurité » ¹

This event raises the particular case of communication between people at different hierarchical levels. Communication, which can roughly be considered as the transfer of information between a transmitter and a receiver, has been the subject of many studies in industry, in particular aerospace, since the 1950s, mentioned at the end by the reporter ^{4 5 6}.

Hierarchy does not generally reduce the transfer of information but may limit it especially if the individual in a lower position does not feel comfortable communicating with those around him. In medicine, recent studies ^{7,8} confirm, as was once shown in industry, that upward communication, for example between a junior and a senior physician, reduces the occurrence of errors, adverse events for the patient in this case.

Although validated strategies to facilitate bottom-up communication are lacking in medicine, keeping the quality of care for the patient as the primary objective, regardless of your role or level of training in the team, can help overcome hesitations and express concerns especially when patient safety is at stake (and unfounded bullying...)

Without being able to generalise, this feedback nevertheless illustrates the recent progress in medical training in terms of communication, as witnessed by the intern, and which did not seem to exist a few years ago.

And you, dear reader, what answer would you give to the surgeon?

François JAULIN

Anesthesiology and Intensive Care Resident

TAKE HOME MESSAGES

TeamSTEPS® 2.0⁹ : Tools for effective communication

- **Call-Out** : To Request or Provide Information.
- **Cross-Check** : Parroting Requests for Confirmation of Understanding.
- **Check-Back** : Closing the loop of communication.
- **SBAR** : **S**ituation, **B**ackground, **A**ssessment, **R**ecommendation.
- **Brief** : Short planning session prior to start.
- **Huddle** : Team regroup to re-establish awareness and planning.
- **Hand-Off** : Transfer of information during transitions.
- **CUS** : I'm **C**oncerned, I'm **U**ncomfortable, This is a **S**afety Issue.
- **Two-Challenge** : It is your responsibility to assertively voice a concern at least two times to ensure it had been heard.

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OUTSTANDING WEBSITES AND PODCASTS :

<https://www.ahrq.gov/teamstepps/webinars/index.html>