



# Fostering an open surgical culture: strategies to eliminate inappropriate behavior in surgical practice

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#### **Abstract**

Surgery is a demanding and stressful profession. Unfortunately, inappropriate behavior is still not banished from the daily surgical practice and we are dealing with the negative consequences (e.g. negative working environments or burn-out). To adequately treat this type of behavior we first have to acknowledge its existence and create a proper path to discuss it inside our own ranks. The only manner to achieve this, is through an open culture. An 'open surgical culture' is the key, as it creates an environment with psychological safety and allows all involved parties to be able to speak up without fear for retaliation. Theoretical models such as Bateson's pyramid, McClelland's iceberg, and Dweck's Growth Mindset Theory can serve as valuable sources of inspiration to addressing cultural change by approaching both individual and organizational levels. Examples of cultural change attempts can be as small as discussing inappropriate behavior through pocket cards with statements of certain behavior or during national conferences, e.g. the annual meeting of the Dutch Surgical Society (Chirurgendagen). Only together we are able to achieve an open surgical culture, in order to ban mistreatment from the surgical profession. Here a roadmap to achieving an open surgical culture is presented and discussed.

**Keywords:** behavior, interprofessional relations, surgery, workplace environment

#### Introduction

Surgery is a demanding field in medicine that requires dedication and perseverance. Stressful aspects such as long working hours, performing high-risk procedures and life-or-death responsibility are everyday practices. Even though these facets might add extra strain to the psychological work load, they should never be an excuse for inappropriate behavior. Mistreatment (inappropriate, undesired, or boundary-crossing behavior) encompasses bullying, discrimination, verbal abuse, physical violence, and sexual harassment. More data on mistreatment in medicine have become available in recent years, possibly because of global

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#### **HIGHLIGHTS**

- Inappropriate behavior is still not banished from the daily surgical practice and we are dealing with the negative consequences (e.g., negative working environments or burn-out).
- To adequately treat inappropriate behavior, its existence first has to be acknowledged and a proper path to discuss it has to be created.
- An open surgical culture is the key to success in discussing, addressing and changing cultures with inappropriate behavior
- In order to create an open and safe surgical environment, several steps have to be taken and conditions have to be set, e.g., strong leadership, continuous feedback, life-long learning, monitoring and accountability, open communication and long-term commitment.

#metoo revelations in the media<sup>[1]</sup>. Unfortunately, the surgical field is not different<sup>[2,3]</sup>.

A recent survey among health care professionals and medical students in the Netherlands demonstrated that 52% of the respondents experienced at least one form of inappropriate behavior. These findings were confirmed by the annual survey of the Dutch Society for Surgical Trainees: 46% of residents experienced inappropriate behavior (90% caused by attending surgeons). Similar statistics have been presented outside of the Netherlands, with a pooled harassment prevalence of 31% <sup>[3]</sup>, supported by other pooled estimates from international studies, ranging from 12% to 58% <sup>[2]</sup>.

Beyond the intolerable nature of such behavior, mistreatment can have various negative consequences: burn-out rates, anxiety/ depression rates and suicidal thoughts in surgical residency programs were found to be as high as 39% [4,5]. Shockingly, 71% of surgical residents did not report the behavior, mainly due to fear of retaliation and feeling that no action would be taken<sup>[5]</sup>. This confirms it is imminent we proactively act on the situation by stimulating and maintaining an "open culture" in surgery. This "open surgical culture" would encompass a situation in which there consists a safe working environment, where colleagues are able to interact and discuss each other's (potentially inappropriate) behavior, without fear or risk of retaliation. Even though this seems to be a logical, desirable and ideal situation, several steps have to be taken first in order to achieve this concept of an open culture. Unfortunately, such a culture is not common in all hospitals and also differs fundamentally from existing workplace initiatives to tackle mistreatment, as they are rarely incorporated and fully embraced by the complete (surgical) staff, leading to a more perpetuated situation.

# Acknowledging inappropriate behavior

# Policy strategies

The first step is acknowledging the problem. In the Netherlands inappropriate behavior is a top priority on the (surgical) agenda. The Board of the Dutch Surgical Society (DSS) issued their disapproval of inappropriate behavior and explicitly indicated that they will "actively investigate working environment and culture within the surgical departments and promote culture change if necessary". The Royal College of Surgeons (RCS) went one step further and published a guide to manage disruptive behavior in surgery. These tools are used to recognize and manage inappropriate behaviors. Adopting a zero-tolerance approach, making expectations explicit with a code of conduct, ensuring board support, providing support and training, implementing proactive surveillance systems, and a graduated set of responses depending on the severity of the incident. Similarly, others have described that strategies for tackling bullying, undermining behavior, and harassment in the surgical workplace should include education, simulation training<sup>[2]</sup>, and self-evaluation tools. While these efforts to address inappropriate behavior should be applauded, the difficulty lies in getting colleagues to act on these policy plans and well-intended advices by transforming their behavioral patterns. By addressing these topics in the long-term plan, the DSS has set the first step in initiating a new policy that that explicitly disapproves such behavior. Last years' DSS fall meeting, results of a survey among all DSS members were presented and widely discussed with all attending surgeons/ residents. By measuring and "unmasking" the problems, further follow-up can be scheduled to handle these issues in the future. Eventually, this would lead to a zero-tolerance approach or national code of conduct, comparable to the RCS. Another example was set by the American College of Surgeons (ACS) in 2019, when they approved a Statement on Harassment, Bullying, and Discrimination and published several documents online, among which a corresponding toolkit as designed by the ACS Women in Surgery Committee.

# Traditional surgical behavior and barriers

However, as surgery is a long-standing profession, certain "traditions" are deeply incorporated into the surgical culture. A culture

that was - for many years - dominated by male surgeons. Addressing and discussing inappropriate behavior remains a difficult issue, and acknowledging it touches the core of our being. As most surgeons exhibit a high drive to excel, it feels like being criticized as a person and as if all surgeons are bad people; "we are doing something wrong and we have to pay for it". The feeling of criticism towards us as a group makes it very difficult to initiate a cultural change. Furthermore, it is difficult to pinpoint what exactly constitutes surgical culture. Several characteristics are attributed to this: hierarchy, high standards, and meaningful work. Characteristics behind which mistreatment perpetrators might be hiding<sup>[6]</sup>. Future generations are well aware of their wishes on how to shape their professional lives and inappropriate behavior has no part in this<sup>[7]</sup>. Something has to change, but on an individual level excuses are made and the situation is downplayed ("things aren't that bad, are they?"). The only way to actually initiate a cultural change is by addressing the issue; at group and individual levels, with all involved parties, from attending surgeons to medical students. The traditional and conservative nature of the surgical profession however, probably makes it more difficult to initiate an actual culture change and takes time. By addressing the issues at hand, and convincing our colleagues of the importance, fellow supporters can be found and be made part of the solution.

#### Theoretical models

In the context of cultural change, theoretical models such as Bateson's pyramid, McClelland's iceberg, and Dweck's Growth Mindset Theory can serve as valuable sources of inspiration. Bateson's pyramid (Fig. 1) provides a hierarchical model that maps the different levels of learning and behavioral change, from superficial behavioral adjustments to profound transformations in identity and mission. McClelland's iceberg model highlights the often-invisible drives and values that influence visible behavior and performance, which are crucial for understanding and altering organizational cultures. Dweck's Growth Mindset Theory emphasizes the power of believing in personal growth and the ability to develop competencies through effort and perseverance, which can lay the foundation for a culture of continuous



Figure 1. Bateson's pyramid with different levels of learning and behavioral change.

#### Table 1

#### Examples of statements used to discuss inappropriate behavior

#### **DSS** symposium statements

- #1 It is inappropriate for a surgeon to text a resident in the evening stating "we had a good working streak today"
- #2 Whenever I see inappropriate behavior, I will hold my colleague accountable
- #3 I am aware of my own position in the organization(al) hierarchy
- #4 Complex situations and inappropriate behavior are part of our job as a surgeon

#### **Pocket card statements**

- #1 A surgeon slaps the hand of the surgical trainee away during an operation
- #2 A medical resident introduces himself, to which the attending reacts "I will just call you Saskia, if you don't like that then your parents should not have given you a foreign name"
- #3 A medical attending makes a sexual suggestive comment to a female medical intern after which he adds "Are you immediately going to run to the complaints committee now?"
- #4 A medical attending makes a remark about how the length of the hair of a male medical intern is unprofessional

improvement and innovation in healthcare. Together, these models offer a holistic framework for addressing cultural change by approaching both individual and organizational levels<sup>[8-10]</sup>.

# Discussing inappropriate behavior

In the Netherlands inappropriate behavior is currently discussed on a national, regional, and local level. During last year's annual meeting of the DSS, inappropriate behavior was scheduled as a main topic. Apart from several key-note speeches, a specific 1-hour session was organized during which several statements (Table 1) were discussed with a panel of surgeon representatives and the audience. Following this format, examples of similar discussions are seen in regional symposia. At the local (hospital) level, examples that should be highlighted are the use of so-called pocket cards used to start the discussion on inappropriate behavior and a local code of conduct addressing inappropriate behavior of medical professionals in a local teaching hospital, which was soon adopted by the surgical department. The pocket cards were designed by a regional board of medical interns and present statements of situations that occurred during surgical internships (Table 1). It presents an easily accessible way of opening the discussion on the topic, and has even been picked up by national newspapers as a promising tool for culture change. These the pocket cards can be adjusted to the needs of different cultural or institutional contexts, for example by first extracting where the cultural "difficulties" lie and using these as a basis for the statements on the pocket cards. However, discussing such a contentious issue is only feasible when an open surgical culture exists. We believe that of the key conditions for changing a culture towards an open culture, is that (top) key positions are filled by positive role models who act to tip the scale towards a positive change and participate in the discussion needed for that change.

#### Open culture is crucial

Creating and maintaining an open culture is of utmost importance when discussing important and politically charged topics, such as inappropriate behavior. The difficulty lies in creating an environment with psychological safety for the attending surgeons, residents, and interns and maintaining it in a durable manner. For example, by monitoring improved behavior (or a reduction in harassment) and measuring mental health status in an objective manner, over a longer period of time. This could be achieved via wide-spread distribution of short self-administered screening models such as the 12-item General Health

Questionnaire and the more specific Index of Psychological Well-Being at Work and Workplace Wellbeing Questionnaire scales. On a personal level, both formal and informal personal mentoring discussions should include a component of well-being and job satisfaction. One of the challenges lies in in sustaining the achieved open surgical culture over time, especially in a high-pressure environment like surgery. If addressing the topic of inappropriate behavior becomes part of the culture itself, this is possible. There should be no barrier to discuss it among all ranks of colleagues and should be taken outside of the shadows.

# Psychological safety

For the attending staff, awareness of power relations is key. There is a variety of relationship/power balance types in a hospital, including attending staff (older and younger), fellows, trainees, residents not in training, medical interns, and students. All of these can interact with each other, with each having a different power relation. In addition, a situation in itself can encompass a form of inappropriate behavior, but the key is whether the receiving party feels it to be inappropriate. This feeling differs per person and situation, with a broad grey area between appropriate behavior and explicit boundary-crossing behavior. When a psychologically safe environment is achieved, it is up to the staff to act as role models by showing that any behavior within the grey area is not inappropriate in itself, as long as everyone dares to discuss it afterwards, thereby contributing to the desired open culture.

Similar to teaching surgical procedures, we must demonstrate and teach appropriate behaviors to our students and residents, showing that promoting and maintaining an open surgical culture is mandatory for the quality of surgical care. As described by Scarlett McNally, "we must all change, not just the bad apples". Whole-team interventions to improve communication, and being able to speak up without fear of retaliation<sup>[5]</sup> will lead to behavioral change and a safe working environment. The importance of role models to achieve a psychosocial safety climate should not be underestimated, and obviously, in all of this, national surgical societies have a great responsibility.

# Pathway to cultural change in surgical practice

To effectively facilitate a cultural shift within surgical practice, a structured action plan is necessary. Below, we outline our vision for this plan, incorporating all previously discussed elements to create an open and safe surgical environment, as shown in Fig. 2.



Figure 2. Elements needed to create an open and safe surgical environment/culture.

The first step is establishing strong leadership. This involves identifying and promoting individuals who embody the values of psychological safety, ethical behavior, and open communication. These role models will play a crucial role in influencing the team positively. Next, it is essential to provide specialized training for both current and aspiring leaders. This training should focus on the importance of cultural change, effective communication techniques, and the necessity of modeling appropriate behavior. When leaders understand their critical role in shaping the culture, they can proactively foster an environment of respect and safety. While tools like pocket cards can be useful, they should be part of a broader toolkit that includes comprehensive training programs, mentoring systems, and continuous feedback mechanisms. Establishing clear guidelines that outline acceptable and unacceptable behaviors, as well as straightforward reporting procedures, is vital to ensure team members understand that their voices will be heard. Training should not be a one-time event; it must be an ongoing journey. Continuous development programs should include workshops centered on behavioral expectations, teamwork, and interpersonal skills. Utilizing real-life scenarios during training will help staff build the necessary skills to recognize and respond to inappropriate behavior effectively. Furthermore, simulation exercises can be implemented to allow team members to practice their responses in a controlled environment, boosting their confidence and preparedness.

Monitoring progress and ensuring accountability are crucial components of this cultural shift. Implementing anonymous feedback mechanisms will empower staff to report their observations regarding workplace culture and behavior without fear of repercussions. Regular assessments will help measure the effectiveness of cultural initiatives and identify areas for improvement. Promoting a culture of open communication is essential for long-term success. Creating an atmosphere where everyone feels safe to voice their concerns is vital. Leaders must model this behavior by addressing

issues transparently and encouraging team members to share their thoughts. Additionally, celebrating successes and recognizing positive cultural changes will inspire and motivate others to continue striving for improvement.

Finally, a long-term commitment to cultural change must be ingrained at every level of the organization. Leaders should consistently communicate their dedication to creating an open culture through public engagement and active participation in relevant events. To sustain these initiatives, they must be integrated into the core values and mission of the surgical department, ensuring that cultural change remains a continuous effort. By following this comprehensive action plan, we can significantly improve the surgical environment, fostering a sense of belonging and safety for all involved. Ultimately, this commitment to an open surgical culture will enhance team performance and patient outcomes, creating a healthier and more respectful workplace for everyone.

#### Conclusion

In conclusion, inappropriate behavior is regrettably still a part of daily surgical practice. Acknowledging and directly addressing this issue is crucial. Cultivating an "open surgical culture" that fosters a safe working environment for everyone is paramount for banning such behavior. This requires strong leadership and role models at all levels, as well as ongoing commitment to communication and training. By implementing actionable strategies and fostering a dialogue around these topics, we will ultimately improve not only the work environment for surgical teams but also enhance patient care through a more respectful and supportive culture. The journey toward this desired culture is achievable, particularly with the right people guiding the process. Ongoing research necessary to evaluate the long-term impact of cultural interventions is crucial. It is vital to remember that culture does not change overnight, but with concerted effort and resilience, substantial progress can be made.

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