

## **Risk Management in Medicine: A Change in Culture**

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Team performance can be seen as the product of skills and technology involved multiplied by the behavior of the team members. Accident investigation in aviation shows proof of the absence of consistent and adequate team behavior in critical phases in the majority of the accidents and incidents studied. It is mostly not the lack of skills, but rather the failure of behavior relevant to team performance within a group that contributes significantly to a mishap. Helmreich and Schaefer found similar causes for error in the operating room [1].

Industry has invested heavily into developing technology and technical training. A lot of new monitoring systems have been introduced in the field of anesthesia and emergency care, without any impact on the number of critical incidents. The primary focus of training courses in the field of medicine, such as the ATLS, ACLS, PALS, etc., is still primarily an accumulation of personal technical skills.

The area of systematically developing critical behavior standards and training tools to implement such standards has been neglected in most professions. In aviation, driven by the grim outlook of expecting a major air disaster weekly after the turn of the 20<sup>th</sup> century, behavioral training was developed, implemented and, only recently, enforced by law. Human factor experts note that medicine has tended only to focus on technical proficiency rather than the dynamics of human interaction, and, because of this, the medical profession is beginning to call for more attention to the latter.

In safety sensitive cultures, such as operative or emergency medicine, information flow is critical. Ideas and concepts must be actively sought, discussed, and evaluated with all members of the team no matter what the status is of the person having such information. In view of the fact that communication is the heart of every team's activity, it is surprising how little attention this process factor has gained in the medical literature [2].

Most behavior is learned, being shaped by such factors as socio-cultural background, education, company or hospital culture, and an internal value system. Communication in a team is a function of the attitudes displayed, and attitude is a function of the value system of the individual. This in turn has to do with ones concept of self or of others and, thus, with the motivational structure of the individual. Although these interactions are complicated, the effects of these links are evident in our daily lives; especially in the operational environment of a severely injured patient. Thus a skilled professionalism is not only required in the technical area of anesthetic skills, but also in the area "nontechnical skills".

During the course of medical training there is much pressure to acquire competence in a broad specter of medical knowledge and the anachronistic belief may still persist that once this has been accomplished, the task is mostly complete. Those with experience, however, know that this is only the beginning. Clinical acumen comes from the constant honing and refining of our skills, especially in the cognitive sphere. Perhaps the reason why excellent clinicians are less able to articulate what

they do than others who observe them is because, traditionally, there has been little emphasis on developing insight into the cognitive aspects of decision-making or the deeply hidden elements that underlie our mental deliberations [3, 4]. Therefore, to systematically develop methods for identifying important attitudinal links, improving relevant nontechnical team skills, enhancing the appropriate attitudes, and generally learning about this area, were all considered to be important steps for improving patient safety.

The following dimensions are always present in successful teams.

- Maintenance of team structure and climate
- Application of problem solving strategies
- Communication within the team
- Execution of plans and management of the workload
- Improvement of team skills

We must place a strong emphasis on caregiver interactions. Health care is not delivered by individuals in isolation, even though our education, training, and testing seems to be based on this assumption. Good interactions amongst members of a health care team can have great potential for preventing errors. However, health care contains many hierarchical, territorial, and other impediments that impede communication and cooperation and create or compound errors.

It is through the development of human potential that we will be able to strive for and to achieve the highest level of safety, service, efficiency, and well-being.

## References

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