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Normalising good communication in hospital teams

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Poor communication is widely acknowledged as a causal factor in healthcare failures and adverse events.[1] Modern healthcare is a complex sociotechnical system, in which effective communication between clinical personnel and patients is critical to the delivery of safe and appropriate healthcare. At the negative extreme, dysfunctional communication, including bullying, harassment, explicit bias, and discriminatory behaviours, is known to have powerful deleterious effects on individual and team performance.[2]

Many researchers have considered the structural elements of communication, often focusing on communication deficits, including missing, unclear, misdirected, mistimed, or unresolved utterances.[3] Efforts to improve communication based on such deficit models frequently involve strategies to promote competencies in clear, concise, and directed communication, using structured handovers and recaps, and graded assertiveness. Other researchers have considered the relational components of communication: the social and cultural influences of interactions between team members, and the extent to which team members respect each other and value the contributions and perspectives of all members of the team.

Consistent with the relational approach to communication, in this issue of the *British Journal of Anaesthesia*, Bertrand and colleagues[4] consider how the way we talk to each other in the clinical environment has knock-on effects in terms of subsequent clinical performance. In particular, they position their

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research around positive communication, not just competent, but positively reassuring and affirming. They hypothesise that because stress disrupts cognitive processes during demanding tasks, such as crisis management, interventions that reduce stress could be expected to improve crisis management. Thus, positive communication (verbal and non-verbal) will likely reduce the stress response, and consequently improve crisis performance, with stress reduction as the presumed mediator.

In a robustly designed RCT in a simulated clinical environment, the authors have measured the effects of a positive communication intervention during patient handover on subsequent clinical performance. The comparison group could be considered a negative, rather than a neutral control, given the negative nature of the delivery of information during the handover in this group. It is worth noting that the clinical information about the patient imparted in both groups in this study was identical, and so it is the context or mode of delivery of this information that presumably makes the difference in terms of improved (or degraded) clinical performance in the subsequent simulations. The primary outcome measure was clinical team performance during simulated paediatric laryngospasm. Secondary outcomes were three common measures of participant stress level, including HR variability.

The investigators found that overall team performance scores, as rated by trained observers, improved in the positive communication intervention group compared with the negative communication group (scoring an average of 44/100 points *vs* 35/100, respectively; $P=0.04$). However, there was no significant difference seen in the three measures of stress between groups.

Contemporary understanding of safety and resilient performance in complex systems, such as healthcare, emphasise the need to go beyond the elimination of negative or adverse aspects of work systems (Safety-I), and to consider ways in which to improve good outcomes to make them even better outcomes (Safety-II).[5] The emphasis of Bertrand and colleagues[4] on positive communication and their demonstration of benefits in terms of improved clinical performance attributable to positive communication are consistent with ideas of Safety-II, and so is a welcome contribution to modern efforts to advance the quality and safety of patient care.

The authors suggest that positive communication should be used in daily handovers, and call for resources to be devoted to teaching and implementing such positive communication strategies. However, their results raise some important and interesting questions in terms of the mechanism of action and sustainability of such efforts. Given the inability to demonstrate stress reduction, how might positive communication improve clinical performance? The study may have been underpowered to detect differences in stress levels, or perhaps some other causal mechanism was operating. Given the relatively prescribed wording during the positive delivery of the information in the handover, positive communication may require training and could be effortful to maintain. How could the cues that prompt positive communication be sustained during normal work practices, or in other contexts? The authors did not include simulation debriefs as part of their study, or any qualitative work on why participants in the two study groups behaved differently, or indeed failed to demonstrate reductions in stress measures between groups. To answer such intriguing questions in future work, we will likely need to know what is going on inside the heads of the participants in the study.

Whilst RCTs and objective endpoints are useful and powerful study methods, the assessment of certain mental phenomena, critical to team performance, such as workload, mental models, and emotional aspects of cognition, is most accurately accessed with self-reported measures.[6] Furthermore, some of the best explanations of objective measures can be arrived at by considering the mental models or other internal states of participants in such studies through qualitative work; such qualitative or mixed-methods work can give the quantitative findings an explanatory context that would not otherwise be possible.[7,8] For example, in this study, such a context might have allowed an explanation of why stress levels did not reduce in the intervention group.

Improving communication in healthcare should be a priority area of research, as we know that poor communication contributes to so many adverse events and much patient harm. Bertrand and colleagues[4] provide tantalising objective evidence that improvements can be made, but much work remains to be done to understand why, and how, improved communication can be translated into clinical practice in a reliable and sustainable way.

Initiatives that rely on personal efforts, or trying harder, are likely to fail, whereas a systems redesign approach is likely to produce a more sustainable means to achieve improvements in team performance. The work environment in which health professionals' practice could be considered in terms of structural and sociocultural components. Each of these may in turn be amenable to systems redesign to produce the desired outcomes.

Structural changes

Prompts and cues can be embedded in the work environment and in aspects of the everyday workflow to remind clinicians to perform certain communication or checks at certain points. One celebrated example is the WHO Surgical Safety Checklist involving scheduled stops at critical points in care to share information.[9] Another study identified four transition points in care pathways for patients leaving and entering the operating theatre, and developed a checklist attached to the hospital trolley that took only 10 s to complete, but resulted in the complete elimination of errors during handover in the 12 months after its introduction.[10] Other approaches that have shown significant benefits in error reduction in healthcare involve the better and more standardised layout of work areas (so that others may understand the status of the task or procedure at a glance), colour coding, and electronic alerts.[11,12] The design of such system-centred approaches is critical to their usability, and a mixed-methods approach combining quantitative and qualitative research is also important here to understand why clinicians find aspects of system-centred initiatives useful or burdensome.

Sociocultural changes

Salas and colleagues[13] describe three mechanisms underpinning effective team performance: shared mental model,

clear concise communication, and mutual trust and respect. Whilst to some extent the first two can be built into the system with scheduled cues, the last is at the heart of positive communication. Trust and respect are relational, develop over time, and can be fostered. We are more likely to communicate positively with colleagues we respect. We are less likely to react defensively when concerns are raised by a colleague we trust and respect.[14] The need for a work environment, in which staff enjoy working, has been acknowledge by the Institute for Healthcare Improvement (http://www.ihi.org/Topics/Joy-In-Work/Pages/default.aspx). When a relationship of trust has been established, good communication is not an effort, but a natural state. Organisations can engineer inter-professional relationship building into the system, such as through morning 'huddles' for operating theatre staff briefings,[15] end of list debriefs, and inter-professional staff training. Instead of maintaining the traditional siloed approach to continuing professional development, organisations could build professional development around the inter-professional team.[16] Such initiatives would go some way to establishing the mutual respect and trust required for sustained good communication practices.

The components of positive communication described by Bertrand and colleagues[4] would not necessarily come naturally even in a positive work environment, and could thus be difficult to maintain. Perhaps between actively positive and positively negative (the two groups in their study), there is a middle ground of 'good-enough' communication to aim for, for example, a handover that is clear and correct and respectfully delivered, and that does not invoke any particular emotional response. Good-enough communication would require no special effort in an environment with key structural prompts built into workflows, and where we were naturally kind to each other, enjoyed our work, and felt valued and supported.

Conclusions

The way we talk to each other is important and has impacts on individuals, teams, and ultimately on patients. Numerous communication strategies have been developed (e.g. graded assertiveness, civility training, and negotiation skills training) but, like the graded assertiveness algorithm for speaking up, these are not necessarily adopted. Rather than teaching positive communication and learning to parrot particular affirmative phrases, would positive communication, or at least neutral and effective communication, emerge as a natural consequence of workplaces that aimed for more fundamental changes (e.g. shared mental models, and mutual trust and respect) and designed workplaces to support effective exchanges of information without requiring additional effort?

Authors' contributions

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Declarations of interest

JMW is a member of the editorial board of the *British Journal of Anaesthesia*. CSW is a shareholder in SAFERsleep®, an electronic anaesthesia record keeping system.

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