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## Editorial

# What is 'risk and safety in medicine'?

It may seem strange for us to be asking this question given that the Journal's objectives should be well known and obvious. It is clear, however, that changes in the ways of the world, and even in the use of language, have been extensive and complex since the *International Journal of Risk and Safety in Medicine* was first conceived more than three decades ago.

We say that the Journal is 'concerned with rendering the practice of medicine as safe as it can be, that involves promoting the highest possible quality of care, but also examining how those risks which are inevitable can be contained and managed'. This is true, but we now take a broader understanding of this vision, as the content of this latest version shows. Safety is 'the condition of being protected from or unlikely to cause danger, risk, or injury' (from Oxford Languages). Risk is included, but that word describes the potential/possibility/likelihood of the *state* of safety. Moreover, the Journal is also concerned with 'the highest possible quality of care', which must always include benefit for the recipient - lack of safety must negatively impact the potential benefit!

This issue contains the following articles:

1. An article on the management of COVID-19 reminds us that within just over a year of the onset of a new viral disease pandemic we have gone from knowing little about anything and trying to choose treatments by inference from past experiences, to actually having vaccines to choose from and considering the *relative* benefits and risks of each, and to whom.

2. A paper from Turkey reminds us that a national effort is necessary to collect information on errors and other poor outcomes from medical treatments in general. The three most common errors were inappropriate medicine doses being administered, haemolysis of blood samples for the laboratory, and failure in prior marking of surgical operating sites.

3. Another paper on the topic of surgical safety comes from Sierra Leone. The authors used the WHO surgical safety guidelines for a 'before and after' training study. 'Planning involved service evaluation to understand relevant barriers to effective care, discussion with key stakeholders and formation of a working group to develop tailored interventions.'…… 'A significant improvement was noted in the performance of airway evaluation, correct administration of antibiotics, marking of the surgical site and preoperative team briefing.'

4. Continuing the surgical theme, a paper from Thailand reports a large survey and intraoperative awareness. Not a common problem but most often due to inexperience by the anaesthetist and poor monitoring of equipment.

5. A more general criticism relating to safety is in a contribution on selective reporting of clinical trial experiences. This paper is a harsh reminder that one would like to see the actual raw data, if it were possible, (as well as many other relevant details) surrounding every published scientific study. We think we have all experienced the conflicts in views and understanding exemplified over the various research findings about the COVID-19 pandemic.

6. Physiotherapy seems to be another area where doubtful practices were found and reported from Pakistan and in relation to the use of NSAID analgesia. Lack of knowledge over the risk profile of this class of drugs was widespread.

7. Lastly, from Eritrea, a salutary lesson that another commonly used medication, ranitidine, caused deaths in three out of four case reports where cardiac arrest occurred after intravenous injection, without knowing/observing the instruction to use a diluted medicinal product and an infusion rather than a fast injection.

All the above papers were related to risks, but none of them in the sense of a measure of probability as the term is used in statistics. Risk in this more general context means more simply a described alert to a conceivable harm occurring.

The papers do contain aspects of phenomenology around medical treatments; the circumstances in which interventions are used, the times and places when they were used, the dispositions of the individuals who were exposed to the interventions, the illnesses and the aims of the intervention, and the skills of those administering to the patients are all important factors in risk, safety and benefit, and the Journal is keen to be able to capture such in real-life outcomes, as do some of the papers in this edition. These include issues of education and experience of health professionals as well as the reliability and relevance of their sources of information.

No practice of medicine is on 'an island entire of itself' (apologies to John Donne). Patients are not the only ones that are affected by medical interventions. Whole families may benefit from successful treatment of individual members, but relatives suffer because of their loved one's diseases or death. Carers for people with illness are under considerable pressures and are at risk of contracting infectious diseases, sometimes being harmed by inhalations of fumes, physical injuries caused by lifting or protracted fixed postures during work, or even attacks by patients.

Finally, society as a whole can benefit, as with herd immunity, or suffer as in pandemics or through inequities in societies and in health care itself.

Consideration of risk, safety and benefit in medicine can be complex in attributing causation in an individual and be incalculable, even unimaginable, in the broadest context at the population level. We will have a great load of information as we consider the outcomes of the COVID-19 pandemic, but will we have the knowledge and skills to digest, interpret and learn from the huge swathes of data? Will we do better in the future?

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