#### Letter to the Editor on published material

Jan Hansel MD, North West School of Anaesthesia, Health Education England North West, Manchester, UK

Naomi Cochrane MBBS, North West School of Anaesthesia, Health Education England North West, Manchester, UK

Danielle Eusuf MBChB, North West School of Anaesthesia, Health Education England North West, Manchester, UK

Angela Gardner MBChB, Wythenshawe Hospital, Manchester University NHS Foundation Trust, Manchester, UK

Tom Hardern MSc, North West School of Anaesthesia, Health Education England North West, Manchester, UK

Daniel Haslam MBBS, North West School of Anaesthesia, Health Education England North West, Manchester, UK

Holly Moxon MBChB, North West School of Anaesthesia, Health Education England North West, Manchester, UK

Clifford Shelton PhD, Department of Anaesthesia, Wythenshawe Hospital, Manchester University NHS Foundation Trust, Manchester; Lancaster Medical School, Faculty of Health and Medicine, Lancaster University, Lancaster, UK

#### Title:

"Nature exposed to our method of questioning" – resuscitation preferences and complex interventions

#### Short title:

Resuscitation status and complex interventions

## **Corresponding author:**

Jan Hansel

Department of Anaesthesia, Royal Lancaster Infirmary, Lancaster, UK jan.hansel@nhs.net, +447960819027

## **Declaration of Interests:**

The authors have no conflicts of interest and no funding to declare.

# "Nature exposed to our method of questioning" – resuscitation preferences and complex interventions

Dear Editor,

We enjoyed discussing Taneja *et al*'s paper on discordance between documented and preferred resuscitation preferences<sup>1</sup> at our virtual journal club, based in Manchester, UK. This study aimed to assess the degree of discordance between elicited and documented resuscitation preferences among medical inpatients at a tertiary hospital. We congratulate the authors for investigating a potentially controversial issue that is sadly particularly relevant in this time of the COVID-19 pandemic.

The means by which resuscitation preferences were elicited in Taneja's study comprised research nurses conducting open conversations with patients during their hospital admission, after their resuscitation status had been documented by the medical team.<sup>1</sup> This process identified discordance between documented status and patient preference in 90 out of 349 participants (25.8%). However, this degree of discordance may be explained to some extent by the conversation as outlined being not just analytical, but also intrinsically interventional. For example, the mere fact that a patient is approached for a second conversation about resuscitation preference might significantly influence their responses.<sup>2</sup>

The quotation referenced in the title of this letter is attributed to physicist Werner Heisenberg, author of the *uncertainty principle*, which describes how atoms can only be observed in one state, but actually exist across multiple states simultaneously.<sup>3</sup> Building on Heisenberg's work, Hanz-Dieter Zeh proposed the theory of *quantum decoherence*: if a quantum system remains perfectly isolated, it will maintain coherence indefinitely, but cannot be manipulated or investigated. The moment we disrupt isolation, coherence is shared with the environment and therefore lost.<sup>4</sup> A similar phenomenon is potentially at play on a social level in Taneja's study,<sup>1</sup> and although 'reflexivity' is more commonly associated with qualitative research, a richer description of the intervention and the positionality of those delivering it would have allowed the reader to better assess the extent to which this may have been the case.<sup>5</sup>

Taneja *et al* state that where discordance was identified, it was 'reconciled' in 77% of cases.<sup>1</sup> While this certainly supports the utility of their intervention, we question whether such a definitive term is appropriate, as further discussion may identify (or provoke) further discordance, *ad infinitum*. Resuscitation preference should perhaps not be perceived as stable, particularly during acute hospital stays. Future research could usefully focus on characterising preference instability over time, and finding ways of empowering patients to communicate with healthcare professionals about resuscitation preferences, whilst minimising the risk of introducing bias to shared decision-making.

## **Acknowledgments:**

The authors acknowledge the contribution of Drs Sarah Thornton and Louise England in establishing the Self-isolAting Virtual Education (SAVEd) project to support postgraduate education in the North West School of Anaesthesia during the COVID-19 pandemic.

## References

- 1. *Taneja R, Sibbald R, Elliott L, et al.* Exploring and reconciling discordance between documented and preferred resuscitation preferences for hospitalized patients: a quality improvement study. Can J Anesth/J Can Anesth 2021; doi: 10.1007/s12630-020-01906-y
- 2. Hall CC, Lugton J, Spiller JA, Carduff E. CPR decision-making conversations in the UK: an integrative review. BMJ Support Palliat Care 2019; 9: 1-11.
- 3. *Hilgevoord J, Uffink F.* The Uncertainty Principle. *In*: Zalta EN (ed). The Stanford Encyclopedia of Philosophy (Winter 2016 Edition). Available from URL: https://plato.stanford.edu/entries/qt-uncertainty/ (accessed February 2021).
- 4. *Kiefer C, Joos E.* Decoherence: Concepts and examples. In: Blanchard P, Jadczyk A (eds) Quantum Future. From Volta and Como to the Present and Beyond. Berlin: Springer; 1998: 105–28.
- 5. *Shelton C, Smith A.* On the qualities of qualitative research. Can J Anesth/J Can Anesth 2015; 62: 3-7.