Selective decontamination: no oracle needed

Elan Gorshein1*, Prapti Shingala1, Lindsay Elbaum2, Naynesh Patel3 and Amay Parikh4

We read with interest the study by Cuthbertson and colleagues [1] in a recent issue of *Critical Care*, and we appreciate their attempts to support studies regarding selective decontamination of the digestive tract (SDD). However, we have some concerns.

The argument supporting a randomized controlled trial (RCT) for the evaluation of SDD is ambiguous. The Delphi method embraces ‘quasi-anonymity’, in which the researcher is aware of the responses of the participants [2]. The selection of experts is prone to bias, as participants were chosen on the basis of their inclusion among a particular group. Moreover, participants’ perception of SDD via a self-rated questionnaire is often misleading. Capacity to accurately reflect upon self-knowledge may be skewed, as we inflate the scope of our experience and understanding. The validity of a consensus is dubious, as dissidents are encouraged to alter their responses so as to better comport with the majority [2]. Knowing the time frame between rounds would be useful for readers.

Using the Delphi technique and examining barriers to implementation may be novel, but the need for further evidence of effectiveness of SDD is not the limiting factor to widespread application. Given the 36 RCTs referenced, which consistently support its use, the benefits of SDD are proven, but rather the hindrance appears to be the lack of public attention or the concern for antibiotic resistance [3]. The digestive tract is particularly fragile in critically ill patients, and antibiotics have been shown to destabilize the gut microbiome, and this may increase developing resistance [4].

Notwithstanding these remarks, the authors highlight a promising intervention. Antibiotic resistance is an ongoing concern and should serve to prompt future studies.

**Authors’ response**

Brian H Cuthbertson and Jill Francis

We disagree that the argument supporting an RCT is ambiguous. We have clearly demonstrated that the vast majority of respondents agreed this was necessary. They also agreed that such a trial was ethical and that they would take part.

The argument that the method embraces ‘quasi-anonymity’ is also unjustified as the key to anonymity in a Delphi is that the survey participants are blinded to the identities of other participants at all times. The authors are incorrect when they state that the ‘validity of the consensus is dubious’ since we did not attempt to achieve consensus and no consensus was identified.

We do agree that participants’ perception of any issue via a self-rated questionnaire is often misleading if the objective of the study is to identify clinical ‘truth’. However, perceptions drive behavior and give insights into the thinking that may influence practice.

Our colleagues state that ‘the need for further evidence of effectiveness of SDD is not the limiting factor to widespread application’. It is unclear where the authors derived this statement, but it appears to be opinion-based and is therefore prone to bias. Conversely, we have produced specific evidence that there was a perceived need for more generalizable evidence with regard to effectiveness and ecological impact.

**Abbreviations**

RCT: Randomized controlled trial; SDD: Selective decontamination of the digestive tract.
Competing interests
The authors declare that they have no competing interests.

Author details
1Internal Medicine Division, Department of Medicine, Rutgers Robert Wood
Johnson Medical School, 1 Robert Wood Johnson Place, P.O. Box 19, New
Brunswick, NJ 08903-0019, USA. 2Rutgers Robert Wood Johnson Medical
School, 1 Robert Wood Johnson Place, New Brunswick, NJ 08903-0019, USA.
3Pulmonary and Critical Care Division, Department of Medicine, Rutgers
Robert Wood Johnson Medical School, 1 Robert Wood Johnson Place, New
Brunswick, NJ 08903-0019, USA. 4Divisions of Nephrology and
Pulmonary/Critical Care, Department of Medicine, Rutgers Robert Wood
Johnson Medical School, 1 Robert Wood Johnson Place, P.O. Box 19, New
Brunswick, NJ 08903-0019, USA.

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