Dear Professor Davenport,

Qualitative research: a different option on the menu

Thank you for the opportunity to respond to Mr Jaffray's commentary [1] on our paper "Parents' experiences of feeding children born with oesophageal atresia/tracheo-oesophageal fistula" [2].

As described by Mr Jaffray, probability sampling and sample size calculations, used in quantitative research can give confidence in the representativeness of the sample and allow for statistical inferences to be drawn. He uses electoral polls as an example of inferences incorrectly drawn from unrepresentative sampling. His criticism of our paper would be fair if it was our aim to make statements about the prevalence of different feeding experiences in oesophageal atresia in the UK. However, there are fundamental differences in the purpose of quantitative and qualitative research. Qualitative research does not aim to determine the percentage of the population that share an experience, rather enlighten us that these experiences exist. This is achieved through examination of the breadth and nature of a particular phenomenon and thus purposive, rather than random, sampling methods are employed. The sample is "purposefully" chosen to gather the most relevant data about the phenomenon under investigation [3]. The underlying principle is the selection of "information-rich cases" [4]. Thus, we contend that sampling through a support group provided articulate, reflective informants who were willing to share their experiences, fitting the definition of a "good" sample in qualitative research [5]. We do recognise, however, that a group of such participants is likely to be a biased sample for quantitative research.

The generalisability of findings from qualitative research, given the relatively small, selective sample must also be considered from a different perspective to that of quantitative

research. Qualitative research does not allow for statistical generalisability. However, other non-probability forms of generalisability are applicable to this type of research. These include naturalistic generalisation-described as the extent to which the breadth of the results “ring true” with someone with similar experiences (in our case another parent of a children with OA/TOF), inferential generalisation-how intuitively a reader can apply this to their own experience or analytical transferability-the extent to which results resonate with an existing theory or generate a new concept, rather than generalising to a population [6].

Not all parents of children with OA will experience the more extreme reactions articulated in our research, but also those that do have poor feeding experiences may not articulate them to their paediatric surgeon. We believe that the importance of the qualitative research performed is twofold. Firstly, now that we know the breadth of experiences, we can conduct quantitative research to estimate their prevalence in the UK and worldwide. Secondly, as some of the parents who were in our study clearly felt unsupported in their early experiences of feeding their child, we hope that clinicians and allied health professionals (speech and language therapists, dieticians, specialist nurses, psychologists etc.) will specifically ask about experiences and feeding problems so that appropriate support can be put in place where necessary.

Funding statement: Alexandra Stewart is currently undertaking a PhD funded by the National Institute for Health Research (NIHR) (award reference: ICA-CDRF-2018–04-ST2-042). This publication indicates independent research funded by the NIHR. Research at Great Ormond Street Hospital for Children NHS Trust is supported by the NIHR GOS/ICH Biomedical Research Centre.

The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care.

Alexandra Stewart[a, b], Christina H Smith[a], Roganie Govender[c, d], Simon Eaton[e], Paolo De Coppi[b,e], Jo Wray[b].

[a] Department of Language and Cognition, University College London, Chandler house, 2 Wakefield Street, London, WC1N 1PF, UK

[b] Great Ormond Street Hospital for Children, Great Ormond Street, London, WC1N 3JH, UK

[c] Research Department of Behavioural Science & Health, University College London, Gower Street, London, WC1E 6BT, UK

[d] Head and Neck Academic Centre, University College London Hospital, 250 Euston Road, London, NW1 2PG, UK

[e] Stem Cells and Regenerative Medicine Section, University College London Institute of Child Health, 30 Guilford Street, London, WC1N 1EH, UK

Corresponding author:

Alexandra Stewart

Alex.stewart@gosh.nhs.uk

Department of Speech and Language Therapy, Great Ormond Street Hospital, Great Ormond Street, London, WC1N 3JH

References

[1] Jaffray B. Invited commentary on Stewart A, et al.: Parents' experiences of feeding children born with oesophageal atresia/tracheo-oesophageal fistula: A hard sample to swallow. Journal of Pediatric Surgery 2022;57(12):800.

[2] Stewart A, Smith CH, Govender R, Eaton S, De Coppi P, Wray J. Parents' experiences of feeding children born with oesophageal atresia/tracheo-oesophageal fistula. Journal of Pediatric Surgery 2022;57(12):792-9.

[3] Strauss A. C, J. Basics of Qualitative Research: Grounded Theory, Procedures and Techniques. Newbury Park, California: Sage; 1990.

[4] Patton MQ. Qualitative evaluation and research methods. SAGE Publications, inc; 1990.
[5] Coyne IT. Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries? Journal of advanced nursing 1997;26(3):623-30.
[6] Smith B. Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. Qualitative research in sport, exercise and health 2018;10(1):137-49.