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LETTER TO THE EDITOR

Letter to the Editor concerning "The short-term impact of COVID-19 pandemic on spine surgeons: a cross-sectional global study" by Khattab MF, et al. (Eur Spine J; [2020]: doi: 10.1007/s00586-020-06517-1)

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Dear Editor,

We have read with great interest the article by Khattab et al. [1], which reported the short-term impact of the COVID-19 pandemic on the practice of spine surgery. We commend the author's effort in undertaking the qualitative study to highlight the effect of COVID crisis on spine surgeons' community. However, we have some concerns regarding the methodology and the sampling process.

In a qualitative research study, sampling is the process of choosing a part of population to represent the whole so analysis will be more comprehensive and generalizable to the whole population [2]. Probability and non-probability sampling methods are two common ways of choosing study sample. In probability sampling methods, the rules of probability are applied and as their main feature, each sample has a chance to be selected and results can be generalized. On the contrary, non-probability methods of sampling involve samples that are available to the researcher or are selected by the researcher. In this method, not everyone gets equal chance to participate in the study and generalizability of findings may not be applicable [3].

Our first concern is that authors mention snowball sampling method. Snowball sampling also called "chain method" is non-probability method and used to study population that are rare and who would otherwise be very difficult to find or unattainable. In this method, the researcher asks the first few samples, who are usually selected via convenience sampling, if they know anyone with similar views or situations. Snowball sampling may give enough sample size but not guaranteed they are representative of target community.

Second is that in study design section authors mention self-administered online-based questionnaire was sent to more than 3000 spine surgeons all over the world by e-mails and other Internet applications and overall 781 spine surgeons took part, filled and submitted the questionnaire which gives a survey response rate of about 26%. We note in statistical analysis section they state as 780 surgeons agreed on filling the questionnaire which is clear discrepancy in the quoted figure and pre-agreed convenience sampling raises the concern of generalizability of the findings.

Third point is that on going through their regions of respondents, it is concerning that spine community from South Asia has been inadvertently missed out in their sampling process.

We again appreciate the authors' effort in presenting this study but in our view a robust probability sampling method would be ideal whilst undertaking qualitative research on a wider accessible spine community.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest for this study. Dr Sajan K. Hegde is a consultant for Globus Medicals.

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