

Enhancing Participants' Response Rate in Online Medical Educational Surveys

Saurabh RamBihariLal Shrivastava, Prateek Saurabh Shrivastava¹

Medical Education Unit Coordinator and Member of the Institute Research Council, Department of Community Medicine, Shri Sathya Sai Medical College and Research Institute, Sri Balaji Vidyapeeth – Deemed to be University, Ammapettai, Nellikuppam, Chengalpet District, ¹Department of Community Medicine, Shri Sathya Sai Medical College and Research Institute, Sri Balaji Vidyapeeth – Deemed to be University, Ammapettai, Nellikuppam, Chengalpet District, Tamil Nadu, India

Abstract

In the field of medical education, surveys remain one of the most common methods for the planned and conducted educational research. However, the validity of the obtained results depends on the adequate representation of the study population and the number of participants who have responded to the survey. An extensive search of all materials related to the topic was carried out in the PubMed search engine and a total of seven articles were selected based on the suitability with the current review objectives. Owing to the ongoing coronavirus disease-2019 pandemic, a sudden rise in the incidence of online educational surveys has been observed. There is an immense need to improve the response rates to the online surveys and thereby get representative results. In conclusion, online surveys are exceedingly being used in the field of medical education research by different stakeholders. It is the responsibility of the researcher to ensure that they follow simple steps to reduce both unit nonresponse and item nonresponse and thereby ensure more representation to the study findings.

Keywords: COVID-19, educational research, online, surveys

INTRODUCTION

In the field of medical education, surveys remain one of the most common methods for the planned and conducted educational research.^[1] However, the validity of the obtained results depends on the adequate representation of the study population and the number of participants who have responded to the survey.^[2] In other words, the results of the survey might not reflect the true picture or represent the entire group if an adequate number of people have not responded.^[1,2] Surveys through a questionnaire can be carried out in a wide number of ways (namely face-to-face, telephone, postal mail, e-mail, survey link in social media apps, etc.).^[1,2] In general, the survey response rate refers to the percentage of potential participants who complete and return the surveys.^[1]

METHODS

An extensive search of all materials related to the topic was carried out in the PubMed search engine. Relevant research articles focusing on online medical education surveys in the

2010–2020 period were included in the review. A total of 11 studies similar to the current study objectives were identified initially, of which four were excluded due to the unavailability of the complete version of the articles. Overall, seven articles were selected based on the suitability with the current review objectives and analyzed. Keywords used in the search include medical education, online surveys, and response rate. The collected information is presented under the following subheadings, namely Coronavirus disease-2019 and Online educational surveys, Improving the unit response in online educational surveys, Strategies to improve item response, Implications for practice, and Implications for research.

Address for correspondence: Dr. Saurabh RamBihariLal Shrivastava, MD, FAIMER, PGDHHM, DHRM, FCS, ACME, Professor, Department of Community Medicine, Shri Sathya Sai Medical College and Research Institute, Sri Balaji Vidyapeeth (SBV) – Deemed to be University, Tiruporur - Guduvancherry Main Road, Ammapettai, Nellikuppam, Chengalpet District - 603108, Tamil Nadu, India. E-mail: drshrishri2008@gmail.com

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Coronavirus disease-2019 and online educational surveys

Owing to the ongoing coronavirus disease-2019 pandemic, a sudden rise in the incidence of online educational surveys has been observed.^[3,4] These educational surveys have aimed to assess various domains of online teaching–learning (like employment of different apps or portals for online teaching), assessment (namely pros and cons of online assessment, challenges in online assessment, use of various apps in online assessment, etc.) views of the medical students toward online classes, engagement of medical students during teaching sessions, etc.^[3-5] These studies have been carried out not only to share success stories (like what worked or what did not work) but also to generate adequate evidence for the regulatory bodies to formulate guidelines for online teaching–learning and assessment for all the medical colleges.

Improving the unit response in online educational surveys

However, the findings of the results remain questionable, when a significant number of potential participants have not responded to the survey, either in full (unit nonresponse) or only to few questions in the questionnaire (item nonresponse).^[1] Here, arises the need to improve the response rates to the online surveys and thereby get representative results.^[1,2,6] To reduce the unit nonresponse, the researchers should ensure delivery of online educational survey (by avoiding any typographical errors in E-mail or by posting in the correct Google/WhatsApp group or by sending a reminder or by using more than one online media) and take measures for the acknowledgment of survey like addressing the potential respondent by their name and also adding a brief invite to be a part of the study and share their response.^[1,6]

Finally, a number of strategies can be tried to improve the participation of the respondents to online educational surveys, such as adding some form of incentives for completion of the tool (with a caution to avoid not influencing the nature of response), keeping the questionnaire brief, personalizing the invite and thanking the participants for their time, and allowing at least three attempts to complete the questionnaire.^[2,6,7] In addition, owing to the online nature, the survey can remain open for a significant duration of time to receive responses and it is always advised to send periodic reminders to motivate the potential respondents to complete the survey. By adhering to these recommendations, the unit nonresponse rate can be significantly minimized and all educationists should follow them.^[1,2]

Strategies to improve item response

On a similar note, interventions need to be taken to improve the item response, and this includes adding a brief introduction, framing of an interesting and easy first question to attract attention, selecting the option of mandatory for questions, and separating each pair of question and answers from others to avoid missing them.^[6] Moreover, it is also recommended to limit the number of drop-down options, as many participants might go for smartphones to complete the questionnaire, and thus all options should fit on the same screen.^[2,6] Further, the

number of figures can be reduced to minimize the time for downloading of a page and it is advisable to frame close-ended or brief open-ended questions. From the appearance perspective, the online survey can be designed using Arial or Times New Roman font, and there can be a progress bar to help the respondents know how much percentage they have completed.^[1,6]

Implications for practice

There is a definite need to perform educational research to ensure curricular reforms and that cannot be accomplished without obtaining views from a significant sample of the study participants. Considering the advancement in technologies and the feasibility of conducting an online educational survey, it will be a positive move to strengthen and facilitate online educational research. The first and foremost thing will be to train the faculty members about different tools (namely Google Forms, Survey Monkey, etc.) that can be used for performing online surveys. At the same time, the faculty members can also be trained about the do's and don'ts to enhance the response of participants in online educational surveys. The Medical Education Unit and Research Unit play an indispensable role in the capacity building of different stakeholders. At Shri Sathya Sai Medical College and Research Institute, the constituent unit of Sri Balaji Vidyapeeth, Puducherry, the Institute Research Council and the Medical Education Unit have joined their hands together and are being involved in the capacity building of undergraduate students, postgraduate students, faculty members, and PhD scholars. Further, the Medical Education Unit organized a national-level webinar for the teaching staff of medical colleges and exposed them to different online educational survey tools.

Implication for research

The need of the hour is to ensure the successful implementation of online educational surveys in the medical education setup. We have to gain insights into the factors that promote better responses in online educational surveys and the tools which are more acceptable by the survey respondents. Depending on the survey findings, the different aspects of the curriculum implementation can be reformed or modified for better acceptance and to be more effective. The Research Unit of the institution can encourage faculty members to carry out a number of online education surveys, as they are easy to be performed.

CONCLUSION

Online surveys are exceedingly being used in the field of medical education research by different stakeholders. It is the responsibility of the researcher to ensure that they follow simple steps to reduce both unit nonresponse and item nonresponse and thereby ensure more representation to the study findings.

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Conflicts of interest

There are no conflicts of interest.

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