Reviewer's report

Title: Gastronet survey on the use of one- or two-person technique for colonoscopy insertion

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Reviewer: Chyke A Doubeni

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Summary:
This is a well-written brief report comparing two colonoscopy techniques: one- vs. two-person insertion of the colonoscope. In the latter technique, the colonoscopist directs an assistant to insert the colonoscope while presumably freeing the colonoscopist to focus on directing the insertion and inspecting the lumen. As noted by Hoff and colleagues, and in my discussions with some clinical experts, the 2-person technique is less frequently practiced in the age of the flexible colonoscope.

The study found that the two-person technique is practiced by 13 (17%) in 6 centers, with both techniques practiced at 5 of those 6 centers. Colonoscopist using the one-person technique had a higher volume than two-person technique. Only univariate analyses were performed making it difficult to decipher whether the reported differences are the result of some unmeasured characteristic or the practice setting or patient characteristics. Compared to the one-person technique, cecal intubation better, polyp detection rate lower and intubation time shorter and use of sedation lower for patients undergoing colonoscopy by 2-person technique.

However, the distinction between one- and two-person techniques may be difficult to discern in some procedures because circumstances may necessitate the need for assistance in inserting or advancing the colonoscope even in the one-person technique.

Therefore, the study appears to have compared the outcomes for colonoscopists who predominantly perform a one-person to those who performed a two-person technique. Because some of the colonoscopists switched between techniques, and the actual technique used for each patient respondent were not determined, it is difficult to conclude that the results represent the actual merits of the two techniques. It is possible that the types of patients in the 2-arms are different. Without additional data, it is difficult to conclude that the variation in polyp detection rate is not due to some extraneous factor.

1. Major Compulsory Revisions
a. There may be a selection bias, when one looks at respondents compared to non-respondents. The authors may have missed the opportunity to survey not just colonoscopists, but also their principal assistants, which would have provided
data on those with missing survey data. It seems feasible to call the centers that did not respond to get additional data on the most commonly used technique.
b. Another question that is not answered by the study is the costs/resources for the two techniques. Is the 2-person technique using more resources for fewer colonoscopies? Does the two-person technique use more staff? Or are the staff just being used in a different way?
c. A central issue in the paper is the “so what” question. The authors’ explanation for the findings suggests that there may be merits of both techniques. What this suggests to me is the need for a qualitative study to provide context on the differences in the quality outcomes.
d. It is quite possible, and even likely, that the variations may result from factors other than technique. The authors should provide additional information on what those factors could be.
e. The discussion section is highly speculative. It should be shortened particularly the first paragraph.
f. The authors suggest that 2-person technique is a “more team-building concept.” There were no data provided to support that statement and will recommend removing or modifying that statement.
g. The limitations section ought to acknowledge that the study was not able to determine which of the two techniques was used for each individual patient but applied a characteristic of the colonoscopist to each patient treated by him/her.

2. Minor Essential Revisions
a. The title does not seem to reflect what was studied. Does this mean that with either technique an assistant was not used during withdrawal?
b. Table 2 – “no indication to reach cecum” should be reworded.
c. Table 2 – The time metric for the intubation time should be included – this is in minutes?
d. The last sentence in the statistics section seems incomplete.

3. Discretionary Revisions

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**
I declare that I have no competing interests