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	How much shared decision making do Canadians experience when facing
Title	healthcare decisions? A web-based population survey
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Authors	F. Légaré BSc(Arch) MD PhD
Reviewer 1	Denise Campbell-Scherer
Institution	Department of Family Medicine, University of Alberta, Edmonton, Alta.
General comments (author response in bold)	<ol> <li>Thank you for the opportunity to review this very nice paper by Haesebaert and colleagues on Canadians' experience of shared decision making. Overall this is an excellent addition to the field, bringing needed data on the populations' experience. I recommend it be accepted with a couple of small changes below.</li> <li>We thank the reviewer for the time spent reviewing our manuscript and for the useful feedback on our work.</li> <li>Re presentation of results - the error rate is 2.5% for this method, so it is not appropriate to present the results' precision to 2-3 decimal points.</li> </ol>
	We deleted decimals to present our results with one decimal for univariate results in Appendix 3.
	3.In the limitations section, it is useful to highlight that the population surveyed - by virtue of their participation in this web portal program - may be meaningfully different than other Canadians. One may expect those with lower literacy, lower SES and other disadvantaged populations to be relatively less represented in the population  We agree. To counter this issue, we weighted the responses. We also added this limitation to the Discussion section:  "Second, the response rate was low (1,591/100,000, or 17%). This is an inherent limitation to this type of survey, designed to respond quickly to client questions. Participants are only given two days to complete the survey once they receive the invitation, no reminders are sent, and there is no possibility of relaunch. However, to compensate, a very large sample size is contacted and so we reached our expected sample size of 1591 respondents. Regarding representativeness, characteristics of panel members and
	respondents may differ from other Canadians, notably regarding educational or literacy level, but we applied weighting to correct for potential selection bias on major sociodemographic characteristics."  4. Finally, for future work, it would be very nice to know the multimorbidity burden
	in the sample, and to have a sense of the severity of conditions for which they were seeking care. One might expect a simple presentation for a skin rash might have a different need for SDM than a complex condition.  We agree and thank the reviewer for her proposal. We will consider this major point for future work.
Reviewer 2	Lee Green
Institution	Department of Family Medicine, University of Alberta, Edmonton, Alta.
General comments (author response in bold)	1. This paper reports a web-based survey, weighted to population demographics, of patient experience with shared decision making over the year prior to the survey date. The issue is significant and the relevant literature summarized concisely.
	We thank the reviewer for the time spent reviewing our manuscript and for
	the positive feedback on our work.

2. The survey methodology appears to have been carried out well. However, the nature of the panel makes self-selection bias inevitable. That is not always important but in this case it is. Preferences regarding shared decision making differ sharply among patients (see, e.g., Pierce PF. Deciding on breast cancer treatment: a description of decision behavior. Nurs Res 1993;42:22–8). It is very likely that this sample over-represents "deliberators," those with a strong preference for an active role.

Thank you for this comment which helped us address this issue in more detail. We agree that panelists are potentially more educated than the Canadian population as a whole and we have added a section on the risk of selection bias in the Interpretation section.

However, as we mentioned in response to reviewer 1, Léger Web Panel is the second largest pan-Canadian web panel; its 400,000 volunteers are approached through various strategies: phone surveys, e-mails, social media advertising, word of mouth and snowballing to cover a broad range of socio-demographic profiles.

We countered the risk of self-selection bias by applying weighting, as we explain in the Interpretation.

Moreover, today, the use of the Internet can no longer be considered as a limitation to reaching all strata of the population: a recent survey in the province of Quebec revealed that 90% of households were connected to the Internet (Netendance survey, 2017,

https://cefrio.qc.ca/media/1208/netendances\_2017-portrait-numerique-desfoyers-quebecois.pdf.

Regarding representativeness on shared decision making, we explained as follows: "The questionnaire included a first question on language preference (English/French), a section on sociodemographic characteristics, and 14 sections on a variety of topics proposed by clients. The 8th section was on SDM and the others were unrelated to health. When they agreed to participate in the survey, panel members unlikely to be motivated by having a strong opinion on the topic as they were unaware that it addressed SDM or health conditions."

Regarding representativeness on the proportion of home care received, we added the following sentence:

"About 8% reported receiving home care which is similar to the estimate by Statistics Canada on Canadian population

(https://www150.statcan.gc.ca/n1/pub/89-652-x/89-652-x2014002-fra.htm)." We summed up these limitations and mitigating factors in the Interpretation as follows:

"...Characteristics of panel members and respondents may differ from other Canadians, notably regarding educational or literacy level, but we applied weighting to correct for potential selection bias on major sociodemographic characteristics. Moreover, since participants were not aware of the topic of the study, it is unlikely that they were biased in their viewpoint toward SDM. Finally, the proportion of respondents who received home during the past 12 months in our sample was congruent with the proportion found in the whole Canadian population, which attests to the adequate representativeness of our respondent panel."

The statistical methods are generally well considered, and the starting point of a factor analysis a good choice. The two-stage variable inclusion process is appropriate. There is however no adjustment for multiple comparisons when modeling five individual and one composite outcome, so the findings where p values are not < 0.01 are doubtful. This issue and the strong intercorrelation of the six outcome variables are not mentioned in the limitations.

We chose not to apply such correction because of the exploratory nature of the study and also for the reason that given the high intercorrelation between the outcomes, using a Bonferroni correction would be far too drastic.

The discussion in general highlights the important issues. It does not address self-selection bias as a limitation of the external validity of the findings. Given that self-selection bias, this work can be regarded only as demonstrating that there is a deficit in SDM, not as a reliable measure of its magnitude.

We have argued above why we believe that our participants are more representative than they first appear. We have better justified our choice and explained mitigating factors.

## **Reviewer 3**

## Institution

## General comments (author response in bold)

Sheryl Brown

Genesis Professional, Concord, Ont.

I enjoyed reading this paper which addressed an issue that physicians constantly endeavour to strive toward.

We thank the reviewer for the time spent reviewing our manuscript and for the positive feedback on our work.

In regards to the last paragraph, Line 15 and 16, where you address reasons for not implementing, I would counter in my experience that major obstacles include time constraints of the current medical system that we practice in, and lack of access in many practices to allied health care practitioners such as nurse practitioners.

We thank the reviewer for this proposal and we agree that medical systems, and not only health professionals, are not always ready for SDM. We agree that the barrier of time constraints is not studied enough. Reasons for not implementing SDM were handled briefly in the conclusion section, where we mentioned your example of time constraints:

"Several reasons, such as time constraints, have been raised to explain this lack of implementation of SDM in daily clinical practice." However, as Legare et al. show, most reasons can be offset and SDM can be implemented in daily clinical practice without needing additional human resources. No evidence yet support the claim that shared decision making takes too much time. As mentioned in the manuscript by Légaré et al, in a 2014 Cochrane systematic review, two studies found that shared decision making interventions took longer than usual care; one found that it took less time than a traditional consultation, and six found no statistically significant difference in consultation lengths.