## **Peer Review Report**

# Review Report on COVID-19 information-seeking, health literacy, and worry and anxiety during the early stage of the pandemic in Switzerland: a cross-sectional study

Original Article, Int J Public Health

Reviewer: Giacomo Pignataro Submitted on: 19 Mar 2022

Article DOI: 10.3389/ijph.2022.1604717

#### **EVALUATION**

#### Q 1 Please summarize the main findings of the study.

The paper represents a contribution to the description of the Covid-19 information-seeking behavior and to the analysis of its determinants. The work is based on a survey carried out in Switzerland, from May 4 to July 6, 2020, which included 1505 participants. Results are presented in terms of association between frequency of information-seeking and type information sources, on one side, and different predictors related to health literacy, worry and anxiety, personal Covid-19 situation. In particular, the frequency of information-seeking is significantly associated to health literacy, some of the variables related to the personal Covid-19 situation, and age. The use of the different sources (in different ways, depending on the type of source) to the same variables plus the education level.

## Q 2 Please highlight the limitations and strengths.

The main and strong limitation of the paper is related to the composition of the sample of individuals at the basis of the empirical analysis. The sample is far from being representative of the general population of Switzerland. Respondents are mainly well-educated women, in the age range 26-65. Of course, this weakness is not easily amendable and would require additional investigations. This means that the relevance of the paper and of its results is limited and the latter can be "sold" only in terms of behavior of selected groups of population.

Please provide your detailed review report to the authors. The editors prefer to receive your review structured in major and minor comments. Please consider in your review the methods (statistical methods valid and correctly applied (e.g. sample size, choice of test), is the study replicable based on the method description?), results, data interpretation and references. If there are any objective errors, or if the conclusions are not supported, you should detail your concerns.

The paper represents a contribution to the description of the Covid-19 information-seeking behavior and to the analysis of its determinants. The work is based on a survey carried out in Switzerland, from May 4 to July 6, 2020, which included 1505 participants. Results are presented in terms of association between frequency of information-seeking and type information sources, on one side, and different predictors related to health literacy, worry and anxiety, personal Covid-19 situation, and a set of individual characteristics. The paper deals with a relevant issue, since the quantity and "quality" of information affects the behavior of individuals, which is crucial in general for their health and, specifically, in a situation like a pandemic, when the individual behavior has relevant externalities and, therefore, important public health implications. The survey at the basis of the analysis carried out in the paper includes significant information on the issue and the methodologies of empirical analysis are consistent with its objectives.

Major comments.

1) A serious concern, shared by the author(s) of the paper, is related to the composition of the sample, which is far from being representative of the general population of Switzerland. Respondents are mainly well-educated women, in the age range 26-65. Of course, this weakness is not easily amendable and would require additional investigations. This means that the relevance of the paper and of its results is limited and the latter can be "sold" only in terms of behavior of selected groups of population. It is necessary, therefore, that the

author(s), not only acknowledge the problem, but has (have) a discussion of how the selection bias suffered by the sample may impact on the results of the paper.

- 2) I am not convinced about the way information sources are grouped, with specific regard to pooling in the same group online resources a really heterogenous set of very different sources of information (online–only news or portals, official websites, social media, scientific resources, podcasts, and unknown internet resources). This way of dealing with these types of information sources does not allow to get interesting information about the use of some of them, like social media for instance.
- 3) The different variables related to personal Covid-19 situation are not always clearly explained and it is not clear to me what they, altogether, really represent or, to be more precise, I am not completely sure, given the uncertainty about their definition, whether they are all really representative of individual conditions. What is, for instance, the difference between the various forms of distancing and what really has been asked in the survey? How the condition of being infected with Covid-19 is captured in the survey? More discussion and explanations are due in this section.
- 4) The relation between worry and anxiety, on one side, and the information-seeking behavior on the other, is not unidirectional, because it is clear that worry and anxiety can be endogenous to the information-seeking behavior of individuals. This aspect is also acknowledged in the paper, when a study on cyberchondria is quoted, which identifies intensive information seeking as one of the risk factors for greater fear and anxiety. This quote actually can generate ambiguity about the way this relation is studied in the paper. What is more important, however, is that this issue requires further thoughts by the author(s), because of the technical bias that the mere consideration of worry and anxiety as a a predictor of information-seeking behavior mya introduce in their analysis.

# PLEASE COMMENT Q 4 Is the title appropriate, concise, attractive? It is probably too long and it includes reference to worry and anxiety and its relation with information seeking behavior, which needs further exploration. Q 5 Are the keywords appropriate? Yes, even if with the same comment on worry and anxiety as in Q4 Q 6 Is the English language of sufficient quality? Yes Q 7 Is the quality of the figures and tables satisfactory? Yes. Q 8 Does the reference list cover the relevant literature adequately and in an unbiased manner? I believe so **QUALITY ASSESSMENT** Q 9 Originality Q 10 Rigor

Q 11 Significance to the field

Q 12	Interest to a general audience	_					
Q 13	Quality of the writing						
Q 14	Overall scientific quality of the study	_					
REVISION LEVEL							
Q 15	Please make a recommendation based on y	our comments:					

Major revisions.