Author’s response to reviews

Title: The potential role of Illness Expectations in the progression of medical diseases

Authors:

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Version: 1 Date: 31 May 2019

Author’s response to reviews:

AU: I sincerely thank the editor and both reviewers for the insightful and helpful comments. I have addressed the raised points, as specified below:

Reviewer #1: This paper provides a fairly brief and rather superficial overview of the ways in which a patient's expectations could influence the nature and outcome of bodily symptoms during the disease process. Drawing on parallels with placebo/nocebo effects, which produce positive/negative bodily changes, the author(s) argue that expectations could have similar effects on disease progression but with involving any deception. The note that all patients develop "a certain mindset" towards their illness and that the resultant expectations will result in physiological changes, either via behaviour (eg adherence) or directly via hormonal/immunological processes. They also note that expectations are a central aspect of illness perception but argue that the main illness perception framework (CSM) does not explicitly include expectations. The latter argument seems very questionable since timeline, consequences and control beliefs reflect both current and future perceptions.

AU: The IE model has a specific focus on the expectations, while the CSM is a more comprehensive model that includes several aspects. I made it clearer that expectations are a component of the CSM, though not necessarily the main one.

The author's key message is to propose the linked concepts of Illness expectation (IE) and cognitive rigidity. IE describes the individual's beliefs about the outcome of their condition as well as unconscious/implicit processes. They equate IE with response efficacy, which seems a bit problematic as the latter is usually taken to describe the beliefs/expectancies about the outcomes of one's behaviour. They also maintain that the strength of IE effects will depend on the individual's level of cognitive rigidity, and present a fairly loose model to bring all these elements together.

AU: Correct. That is a model, preliminarily grounded on previous research, that will have to be tested to verify its value.

Although this is a clearly written paper, I do not think that it merits consideration for publication for a number of reasons. :-}
1. as it stands, it is a set of quite loose ideas, which borrow heavily from existing work but do add anything of substantive value.

AU: I see the reviewer’s point. However, as a theoretical contribution, its substantive value will have to be tested by empirical studies.

2. It does not seem to add anything more than illness perceptions but somehow claims to be both different and distinct.

AU: The hypothesis underneath the model is that the construct of illness expectation is a specific construct, which partially overlaps with illness perception, but it is focused on the anticipation of future illness scenarios, and it is merely cognitive. Illness perception is a multifaceted construct, which includes several components. I made it cleared in the text.

3. Its one potentially unique contribution is in the concept of cognitive rigidity but that seems to be no different from describing the strength with which illness beliefs are held. This could be a potentially interesting concept if it was to be investigated and analysed more systematically but it is not clear whether it is meant to be a state or trait-like concept, which could either moderate or mediate IE effects on outcome.

AU: Good point. I made that clear in the text.

4. No data are provided nor is there convincing reference to other empirical studies, which have shown the sorts of effects proposed by the authors, apart from the well-known illness perception and placebo literature, which the authors seek to distance themselves from.

AU: This is a theoretical work, grounded on several previous studies. Some were already included, others have been mentioned in this revised version.

Reviewer #2: I would like to congratulate the author to this excellent paper and the proposed model on illness expectations, which can guide future experimental and clinical research.

AU: Thanks, really appreciated!

I have a few comments that should be addressed before publication:
1) As it stands, that title, ie. effect of expectation on disease "progression" is hardly backed up by empirical data.

AU: Good point. Now the title states “possible role of…”

The author should provide an overview regarding the evidence supporting this statement, ideally including a table or list of references. Which diseases have been shown to be altered by expectation? Is there a difference between disease with subjective vs. objective primary
outcomes? Has this effect only been shown for acute effects, eg. the effect of expectation on acute pain or glucose levels or are there more examples of longer term effect of expectation on the longer term "course" of a disease?

AU: It is hard to run a comprehensive review on all the diseases that have been shown to be influenced by expectations. It is a great idea for a future work. In the current text, I put an additional example, to clarify the construct and provide more empirical background.

2) I very much like the definition of illness expectation and that this is mainly determined by the information available to the individual. The author may want to elaborate a bit how this information can be provided with a link to the experimental placebo/nocebo literature (i.e. verbal information, prior experience/conditioning etc.)

AU: A section on these aspects have been now elaborated

3) The author emphasizes the role of illness perception. Could the author explain in more detail how illness perception and expectation are linked?

AU: The differences between illness perceptions and IEs should be clearer in this revised version.

And are there any tools to assess an individual's treatment expectation in the clinical (or experimental) context?

AU: Very important point, thanks for raising it. Now it is discussed in the text.