PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (http://bmjopen.bmj.com/site/about/resources/checklist.pdf) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Training physicians in providing complex information to patients with multiple sclerosis; A randomised controlled trial
AUTHORS	Nordfalk, Jenny; Holmøy, Trygve; Thomas, O.; Nylenna, Magne; Gulbrandsen, Pal

VERSION 1 – REVIEW

REVIEWER	Pearce, Alex
	University of Waterloo
REVIEW RETURNED	22-May-2021

GENERAL COMMENTS	Great study, and such important work to put the emphasis on improving communication skills on physicians. I have no grammatical edits to contribute to this manuscript. There are some areas I have outlined in my pdf that may benefit from further details. As a note, it is interesting that often the escalation of pharmacologic therapy is often a physician-driven goal of patient interactions. There is certainly a benefit in early initiation for prevention of long term disability/disease progression, but how important adding more drugs can vary in importance for each patient. In educating your physicians on patient-centred communication, I wonder how much patients felt their questions were addressed and their priorities/goals were met. They may have had less significant recall of specific information about escalation therapy if this was not something they personally felt was a priority in the conversation.
------------------	--

REVIEWER	Reading, Jean Virginia Commonwealth University School of Medicine
REVIEW RETURNED	27-Jul-2021
GENERAL COMMENTS	 This manuscript is well written and focuses on a topic that could have tremendous impact on the quality of life and care provided to patients with MS. The authors were thorough at addressing the limitations of this study. A minor comment involves treatment fidelity. How was fidelity for the physician training measured? Likewise, was fidelity of the patient consultation measured? These two items should be addressed/included in the intervention description. If not measured, this should be included as a limitation.
	How was consent provided? Read aloud?

VERSION 1 – AUTHOR RESPONSE

Great study, and such important work to put the emphasis on improving communication skills on physicians. I have no grammatical edits to contribute to this manuscript. There are some areas I have outlined in my pdf that may benefit from further details. As a note, it is interesting that often the escalation of pharmacologic therapy is often a physician-driven goal of patient interactions. There is certainly a benefit in early initiation for prevention of long-term disability/disease progression, but how important adding more drugs can vary in importance for each patient. In educating your physicians on patient-centered communication, I wonder how much patients felt their questions were addressed and their priorities/goals were met. They may have had less significant recall of specific information about escalation therapy if this was not something they personally felt was a priority in the conversation.

Thank you, Dr Pearce, for your positive feedback, it is greatly appreciated.

It was certainly a priority in the training to make the physicians find out what the patient knew, and thus their priorities and goals in order to convey relevant information. In the created setting, the patients were asked to imagine themselves in a situation demanding a discussion about treatment escalation. The patients that participated were all in a situation in which they very possibly would end up in a scenario similar to the fictitious one sometime later in the course of their disease development. Our intention, which we believe was met, was that this made the discussion of treatments very relevant to them. We found them to be very engaged in the topic. Still, it is a fact that the treatment choice was fictitious for the patients, and we have added this as a limitation, see lines 310-312.

Attached comments:

1. Was any data collected on education levels of participants? We did not ask for education levels nor did we check health literacy, which I do regret. We have added lack of education levels data to the limitations in line 331.

2. How were the physicians recruited?

The first author held a presentation for the neurologists at a staff meeting, sent them information emails and asked them to participate. We have made changes in lines 126-128 to clarify this.

3. Were details provided about how the attacks affected them, or was it left to participants interpretation?

The patients were told that they had had two new attacks, and that their functional level had been reduced. The details were left to their own interpretation. We have made a change in lines 133-134 to clarify this.

4. Were the physicians provided with any information prior to the encounter about the patient? The physicians received the following information before the study commenced, framed like a journal exempt. This included previous exacerbation history, results of a recent MRI-scan showing new lesions and a JCV antibody index of 0.8, in addition to a more detailed description of the attacks than the patients got: reduced sensory and motor functions in the left leg in February, and increased ataxia right leg with balance problems in April. The physicians were also told which and how few details the patients were given and asked not to go into details about previous or recent clinical findings or attacks, nor to examine the patient. We have included a more detailed description of the information the physicians were given under «Setting», lines 136-139.

5. When you say specifically targeted to physicians in neurology, were the strategies discussed particularly aimed at people with MS? Was there discussion about the cognitive effects of MS specifically or was it more of a broader session on communication? More details about this intervention would be helpful to make conclusions about further steps for research.

The strategies discussed were not particularly aimed at people with MS. However, the roleplay and cases used in the intervention were about giving complex information to MS patients, with focus on the added emotional strain when receiving news of increased disease activity. The training did not focus on the cognitive effects of MS, although it was mentioned as yet another reason to prioritize, portion and check understanding of information. We have clarified this in lines 153-155.

Reviewer: 2

Dr. Jean Reading, Virginia Commonwealth University School of Medicine

Comments to the Author:

This manuscript is well written and focuses on a topic that could have tremendous impact on the quality of life and care provided to patients with MS. The authors were thorough at addressing the limitations of this study.

Thank you so much, dr. Reading, for the positive feedback.

A minor comment involves treatment fidelity. How was fidelity for the physician training measured? Likewise, was fidelity of the patient consultation measured? These two items should be addressed/included in the intervention description. If not measured, this should be included as a limitation.

I found this comment very relevant and it heightened my awareness of this issue.

Physician training fidelity was not measured. We did take some steps striving to achieve accurate implementation of the intervention:

All training sessions were conducted by the same experienced professor with a massive experience in teaching communication to medical students. The three sessions could not be absolutely similar, as they involved interaction between teacher and students, as well as roleplay, which means that the content was partly co-created by the participants. However, the physicians acted as their own controls in the study. This gives minor differences between the three sessions less consequence. The quality and length of the intervention is what is being tested in this study, and is covered in the main part of the discussion.

The research group has, however, published a study on how to define and assess quantifiable outcomes for three of the information sharing strategies taught in this intervention. It did not show significant effects on the physicians use of those three strategies(Nordfalk, Menichetti, Thomas, Gulbrandsen, & Gerwing, 2021).

Patient consultation fidelity was not measured, but efforts were made to keep it consistent for all clients, with the same amount of time available, and the same setting and situation.

We have added treatment fidelity to the limitations in lines 313-318, and also referred to the study on the three strategies.

How was consent provided? Read aloud?

All patients and physicians have received written and oral information and given written consent to participation and publication of anonymized content. This is covered in Declarations, and made clearer by an addition in line 371.