Reviewer’s report

Title: Attitudes of Primary Care Physicians Toward Prescribing Buprenorphine: A Narrative Review

Version: 0 Date: 01 Jan 2019

Reviewer: Jenny James

Reviewer's report:

The issues covered in this article are of immense importance given the high and increasing rates of overdose from substances involving misuse of (both pharmaceutical and illicit) opioids. The particular question asked - about attitudes of primary health care physicians to one of the two excellent, evidence based substitution treatments - should be of urgent interest to health professionals involved in planning, policy development, clinical service provision and also to consumer groups. You have highlighted some very important findings and with some significant redrafting this paper can provide a very useful resource for health professionals working in this field.

However, there is some confusion as to the purpose of this paper - is it an analysis of the attitudes of PCPs to prescribing buprenorphine as stated in the abstract background? I think your methods and results section indicate this to be the case. Your discussion section should therefore begin as a deep exploration of these attitudes that are apparent in your results but instead takes an immediate turn into 'solutions' and sites new references from, for example, pilot programs not previously mentioned in your methods and results. Whilst this is both very important and interesting, it undermines the strength of this paper as I am left wondering about all the papers you may have missed that discuss solutions, as this was not the original premise of your paper. You have also stated a set of three aims at the end of your introduction which adds to the confusion - the first aim is understanding the attitudinal barriers against buprenorphine, but then you are also wanting to 'determine implications for the treatment of OUD,' and 'identify further research opportunities.' These last two aims are different and not explicitly addressed later in this paper. Nor is 'exploring solutions' the same as 'determining implications.' I do think you should include a section on 'possible solutions' in your discussion, but within a context of addressing these concerns. Can you address these concerns in your correspondence back to the editors.

Some of your points are undermined by poor phrasing within the sentence structure, I have not commented on these examples individually but careful attention to sentence structure and phrasing is needed. One example is the final sentence under 'methods.'

INTRODUCTION:
I accessed data from your first reference (NIDA website) and it stated that 49,068 Americans died from drug overdoses involving opioids, though I can see your figure is 53,312. The discrepancy may be because we accessed data at different times and perhaps the website data is still 'provisional?' - can you address this query in your response to the editors. I would change the wording in your opening sentence ('.......died of an opioid overdose,' ) to 'died of an overdose
involving opioids' - a very important distinction as I suspect many of these deaths from overdose involve polysubstance use wherein other substances such as benzodiazepines, alcohol and other respiratory depressants contribute to the deaths. The NIDA table also states these are deaths 'involving opioids.' The figure of 115 deaths per day doesn't fit with the annual overdose death total as even if we use the 53,312 figure this equates to approx 150 deaths per day. I am unsure why you have used the words 'Even today' in the first paragraph and would drop this phrase. I think your first paragraph would be more powerful if, rather than expressing the number of deaths in 2 different time periods, (deaths per year and deaths per day,) you mentioned a statistic that highlights the dramatic increase in deaths over the years from overdose involving opioids.

Suggest commence second paragraph 'Opioid agonist pharmacotherapies methadone and buprenorphine have been....' to ensure the term 'pharmacotherapy' is understood and to mention methadone to avoid creating an impression that this paper carries any bias against the other treatment 'giant' in this opioid agonist field. Methadone is also a 'first-line treatment' option for OUD and this one fact should be made clear - there is no need to further elaborate on this other treatment. Check your use of language throughout this article to ensure it is in keeping with consumer groups' suggestions in this area - for example avoid the phrase 'OUD patients' - rather rephrase to 'patients with an opioid use disorder.'

In the third paragraph I wasn't clear what was meant by '37% had a gap of at least 5 per thousand people' - can this statement be clarified. I would also prefer a simpler piece of data to follow on from this - '77% reported at least 75% .....operating at 80% capacity.' loses its punch with 3 %s in the one sentence. The last sentence in this paragraph citing the low percentage of 'X-licensed' physicians who are prescribing is a better example of good incorporation of data to illustrate a point succinctly and clearly.

METHODS:
I would like some description of the professional backgrounds of the reviewers - for example, did the reviewers include prescribers of buprenorphine and/or primary health care physicians, other groups of people? Can you provide a small amount of elaboration as to the reasons why 41 papers were excluded following the search. Addressing both of these aspects will help alleviate concerns re the interpretative perspective.

In the second paragraph you mention not discussing 'provider self-efficacy' but I think this is relevant to your paper and I think you have partly done this - in the 'characteristics of individuals' section within your results discussion you have discussed this issue.

RESULTS:
The quotes add a lot of interest to this section. The use of the four domains from the CFIR was an effective way to group the results.

DISCUSSION:
Please refer to my general comments above - in particular my second paragraph 'there is some confusion as to the purpose of this paper' - which sum up my concerns and suggestions for changes to this section.

With reference to the section 'Suggestions for the future,' and the paragraph beginning 'Second, proponents of MAT should consider tailoring their messages to their audiences' - you have said
rural PCPs have different concerns compared to urban PCPs.' However, this was not mentioned in results, the only mention of differences between urban versus rural PCPs was the observation that there were no differences between these two groups in perceived need for buprenorphine for their particular populations.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

No

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
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