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)	A micro-phenomenological approach to explore the patient
	experience during an initial spirometry examination to diagnose
	COPD in general practice in France
AUTHORS	BREMOND, Matthieu; BERTHELOT, Anthony; Plantier, Laurent;
	BRETON, Hervé; PAUTRAT, Maxime

VERSION 1 – REVIEW

REVIEWER	Welch, Lindsay University of Southampton, School of Health Sciences, School of
	Health Sciences
REVIEW RETURNED	07-Feb-2021

GENERAL COMMENTS	This is a nicely written phenomenological piece, addressing a routine procedure, but from a novel perspective. The use of microphenomenology - is appropriate for addressing the research question, and understanding the depth of the emotions and perspectives surrounding the phenomenon of spirometry.
	However, a few corrections or adjustments are required; In table 1: Sexe (please remove the e) Wean is perhaps not a phrase we would use in smoking cessation - reduction perhaps.
	In the discussion and conclusion you state that self-confidence is the key to changing behaviour- however, the spirometry does not provide the confidence - they perhaps now had the impetus. Again this is a group of 10 people, so a small sample, appropriate for the methodology but be careful in making broad statements. However, it is clear from your findings that spirometry testing provides the opportunity to support a behaviour change.
	Another comment is how you have linked the findings to Kubler Ross- it feels appropriate - but I do think you need to be clear that the findings where grouped in this way in the analysis and then Kubler Ross steps overlaid - be clear on this - as it may look as though you then purposefully aligned the statements into the Kubler Ross stages of grief.
	The references are appropriate and recent. PPI involvement would have optimised this piece -especially as it directly discusses the experiences of a lay person.

REVIEWER	Stokes, Tim Otago University, General Practice & Rural Health
REVIEW RETURNED	16-Feb-2021

GENERAL COMMENTS

This qualitative study reports the experiences of patients undergoing spirometry for confirmation of a diagnosis of COPD using a micro-phenomenology approach. It is set in primary care settings in France.

Overall this paper asks an important research question - the existing literature on achieving a diagnosis of COPD focuses on a broader part of the pathway to diagnosis than spirometry - and uses a novel analytic approach.

There are however a number of major issues which need addressing by the authors (major essential revisions):

- 1. Data analysis (p.7, LL 41-57, p. 8, LL1-7). As worded the actual steps of data analysis are unclear. No account is given as to how the investigators developed the stated themes from the transcribed patient interviews.
- 2. Results. Theme 3. After spirometry. This theme seems to go beyond the collected data to categorise receiving a diagnosis of COPD as fitting the well known Kubler-Ross stages of grief model. Short statements are given accompanied with verbatim quotes. I consider this analysis limited in the context of the process of being diagnosed with COPD. For example, Lindgren et al. (reference 14) present a much more detailed and nuanced understanding of the process of receiving a diagnosis of COPD.
- 3. Discussion. This needs to be re-structured in line with BMJ journals guidance: Summary of Findings; Strengths and limitations of the study (in terms of methods used); Comparison with existing literature and implications for health policy and/or clinical practice.
- 4. Discussion., p.12, LL19 p.13, LL1-19. The authors present here further analysis of their results into three themes derived from health behavioural change models. Such an analysis needs to be presented in the results section, not the discussion section.

Minor revisions required. Overall the quality of the English is acceptable however there are frequent grammatical errors. These will need addressing at proof stage.

- 5. Strengths and "limits" box. P.3. This should be worded as "limitations", EI and DPA need defining in full, there is no need to report COREQ-32 checklist in this section.
- 6. Methods Study procedure. P.6, L41-42. Should be "research team" not "methodological team"
- 7. Table 1. Ensure all French is translated into English. In particular, I suggest that english generic drug terms for medication are used throughout (e.g., salbutamol) instead of french spelt proprietary names e.g., ventoline)
- 8. Discussion, P.13, L58-59. Spirometry is not useful as a diagnostic tool it is necessary to diagnose COPD according to accepted international guidelines -(https://goldcopd.org/wp-content/uploads/2019/12/GOLD-2020-FINAL-ver1.2-03Dec19 WMV.pdf) as the authors state elsewhere (p.5, L1).
- 9. Appendices to allow the anglophone reader to assess these appendices could they be presented in both French and English. Appendix 4 is not necessary.

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Ms. Lindsay Welch, University of Southampton, School of Health Sciences

Comments to the Author:

This is a nicely written phenomenological piece, addressing a routine procedure, but from a novel perspective. The use of micro-phenomenology - is appropriate for addressing the research question, and understanding the depth of the emotions and perspectives surrounding the phenomenon of spirometry.

However, a few corrections or adjustments are required;

In table 1: Sexe (please remove the e)

Wean is perhaps not a phrase we would use in smoking cessation - reduction perhaps.

Author Response: Thank you for highlighting issues with the table. Key data from table 1 is now captured intext.

In the discussion and conclusion you state that self-confidence is the key to changing behaviour-however, the spirometry does not provide the confidence - they perhaps now had the impetus. Again this is a group of 10 people, so a small sample, appropriate for the methodology but be careful in making broad statements.

However, it is clear from your findings that spirometry testing provides the opportunity to support a behaviour change.

Author response. The authors agree with reviewer 1. The participants have gained confidence to manage their illness with the support of their doctor. Please see amended the text line 1151, 1234 and the conclusion.

Another comment is how you have linked the findings to Kubler Ross- it feels appropriate - but I do think you need to be clear that the findings where grouped in this way in the analysis and then Kubler Ross steps overlaid - be clear on this - as it may look as though you then purposefully aligned the statements into the Kubler Ross stages of grief.

Author response: the authors thank the reviewer for this advice, in fact the verbatim were very naturally aligned with Kubler-Ross statements. See amended text line 838.

The references are appropriate and recent.

PPI involvement would have optimised this piece -especially as it directly discusses the experiences of a lay person.

Author response: The authors agree with reviewer 1, as for the study of any chronic disease the involvement of patients is a measurement of success. However, in this instance, it is difficult to involve this patient group as they are mostly in denial.

Reviewer: 2

Prof. Tim Stokes, Otago University

Comments to the Author:

This qualitative study reports the experiences of patients undergoing spirometry for confirmation of a

diagnosis of COPD using a micro-phenomenology approach. It is set in primary care settings in France.

Overall this paper asks an important research question - the existing literature on achieving a diagnosis of COPD focuses on a broader part of the pathway to diagnosis than spirometry - and uses a novel analytic approach.

There are however a number of major issues which need addressing by the authors (major essential revisions):

1. Data analysis (p.7, LL 41-57, p. 8, LL1-7). As worded the actual steps of data analysis are unclear. No account is given as to how the investigators developed the stated themes from the transcribed patient interviews.

Author response: Appendix 2 has been translated and included in the manuscript (table 2) to describe the process by which themes were developed from transcribed interviews more clearly. Also the iterative process used has been described more clearly. See amended text line 430 and 570

2. Results. Theme 3. After spirometry. This theme seems to go beyond the collected data to categorise receiving a diagnosis of COPD as fitting the well-known Kubler-Ross stages of grief model. Short statements are given accompanied with verbatim quotes. I consider this analysis limited in the context of the process of being diagnosed with COPD. For example, Lindgren et al. (reference 14) present a much more detailed and nuanced understanding of the process of receiving a diagnosis of COPD.

Author response: the authors agree that it would be interesting to link the verbatim to the Kubler-Ross grief model, however this was not the objective of the study. In fact, some Kubler-Ross steps emerge from the verbatim which resembled the patient stories Lindgren et al described.

3. Discussion. This needs to be re-structured in line with BMJ journals guidance: Summary of Findings; Strengths and limitations of the study (in terms of methods used); Comparison with existing literature and implications for health policy and/or clinical practice.

Author response: Following medical writer review, the discussion section has been restructured. We have also edited to the text so that the reader understands that the three characteristics of behavioural change (importance, opportunity and confidence) are interpretations of the temporal verbatim presented in the results section.

4. Discussion., p.12, LL19 - p.13, LL1-19. The authors present here further analysis of their results into three themes derived from health behavioural change models. Such an analysis needs to be presented in the results section, not the discussion section.

Author response: In this qualitative, micro-phenomenological approach, the verbatim is a key feature of this approach and it is imperative to respect it free from interviewer or analysis judgement or interpretation. Hence the verbatim is presented in the results according to the temporal structure in which the participants told their story. In this way the patient voice is retained. The text has been amended to make the distinction clearer between results and discussion

Minor revisions required. Overall the quality of the English is acceptable however there are frequent grammatical errors. These will need addressing at proof stage.

- 5. Strengths and "limits" box. P.3. This should be worded as "limitations", EI and DPA need defining in full, there is no need to report COREQ-32 checklist in this section.

 Author response: the authors agree and this has been corrected.
- 6. Methods Study procedure. P.6, L41-42. Should be "research team" not "methodological team" Author response: the authors agree and this has been corrected.
- 7. Table 1. Ensure all French is translated into English. In particular, I suggest that english generic drug terms for medication are used throughout (e.g., salbutamol) instead of french spelt proprietary names e.g., ventoline)

Author response: The table has been completely redesigned and corrected.

8. Discussion, P.13, L58-59. Spirometry is not useful as a diagnostic tool - it is necessary to diagnose COPD according to accepted international guidelines -(https://goldcopd.org/wp-content/uploads/2019/12/GOLD-2020-FINAL-ver1.2-03Dec19_WMV.pdf) - as the authors state elsewhere (p.5, L1).

Author response: The authors agree that spirometry provides the impetus to change their behaviour. This has been amended in the text. Please see line 1132

9. Appendices - to allow the anglophone reader to assess these appendices could they be presented in both French and English. Appendix 4 is not necessary.

Author response: The authors agree and the content of the appendices have been included in the manuscript where appropriate.

VERSION 2 - REVIEW

REVIEWER	Welch, Lindsay University of Southampton, School of Health Sciences, School of Health Sciences
REVIEW RETURNED	06-May-2021

GENERAL COMMENTS	This paper has improved considerably, and now the objectives, scope and findings are clear. The language is clear and the papers flows well.
	A micro-phenomenological approach to explore the patient experience during an initial spirometry examination to diagnose COPD in general practice in France. Improvement to the title
	Clearer concise objectives and improved abstract.
	Conclusion line 61: Stepping stone – could another word be used here? Advances?
	Improved clear strengths and limitations
	Line 78: A elicitation interview – this ideally need to be defined – or removed as it is not clear what the purpose is.
	Line 102: and act to "slow the progression associated with COPD
	Line 115: suboptimal use? In France / Europe / Globally?
	Line 121: revise the phrase 'stepping stone'
	Line:131 great definition of micro-phenomenology
	Line 150: Four were female

Line 151. 152: Incomplete sentence
Line: 242 Participant recruitment – not patients if they are in the
study
Line 308: The coding framework table is a great improvement to
ensure the methodology is clear
Participant quotations – Just to check these are verbatim the
translated – how can you change the words? Or do they translate
in different ways?
402: Thank you the grief stages and alignment are clearer here
now
Line 467: This is clearer and reads better
Line 488: Thank you – this is clearer
Line 546: This is a nice opening to the summary section and
defines what this work adds to the field
Line 575: good summary
Line 583: will you remove this title- or does it link to the section
below (not clear in the tracked changes version)

REVIEWER	Stokes, Tim Otago University, General Practice & Rural Health
REVIEW RETURNED	05-May-2021

GENERAL COMMENTS	The authors have extensively revised the paper and have in general addressed the reviewers' concerns. There remain, however, a number of minor essential revisions required:
	 Strengths and limitation bullet point 1 p.3, LL 60-61. This does not make sense as written. Can it be re-worded please. Introduction. p.5, LL84-85 Given that we are now in 2021 this sentence should be re-written as: "Chronic Obstructive Pulmonary Disease (COPD) is currently the third leading cause of death in the world" Participants. p. 5, LL134-135. Sentence needs rewording "There were of which" doesn't make sense.

VERSION 2 – AUTHOR RESPONSE

Reviewer 1.

Conclusion line 61: Stepping stone – could another word be used here? Advances? Improved clear strengths and limitations

Ammended as follows:

These awareness gains may be considered as small steps towards health behavioural change. Spirometry may have educative potential and support lifestyle changes

Line 78: A elicitation interview – this ideally need to be defined – or removed as it is not clear what the purpose is.

Ammended as follows:

The elicitation interview method may have been limited in this specific population due to participant low level of insight into the procedure.

Line 102: and act to "slow the progression associated with COPD Ammended as follows:

symptoms and act to slow the progression associated with COPD

Line 115: suboptimal use? In France / Europe / Globally?

In France and amended accordingly.

Line 121: revise the phrase 'stepping stone'

As each of these 'awareness gains move the patient bit by bit towards behavioural change, we suggest the following amendment.

These techniques may be useful for a stepwise improvement in the delivery of care to patients with chronic respiratory conditions

Line:131 great definition of micro-phenomenology

Thank you

Line 150: Four were female

Thank you, this has been corrected.

Line 151. 152: Incomplete sentence

Thank you, this was and editing error and has been deleted.

Line: 242 Participant recruitment – not patients if they are in the study

Thank you we agree, this was an error and has been corrected.

Line 308: The coding framework table is a great improvement to ensure the methodology is clear Thank you.

Participant quotations – Just to check these are verbatim the translated – how can you change the words? Or do they translate in different ways?

Thank you for raising this point. The verbatim was translated by a professional medical translator and cross-checked with an additional translator. All care was taken to ensure that the level and tone of the vocabulary and grammar were maintained.

In fact, we felt it necessary to translate into Englsih for the readership. However, we took particular care to ensure that the translation mirrored the verbatim and the grammar or syntax remained unaltered. For example, "It makes me cough like an animal" Is a typical expression in French rural areas. Although it sounds odd to the anglosaxon ear, we chose to keep the literal translation.

Line 402: Thank you the grief stages and alignment are clearer here now

Good!

Line 467: This is clearer and reads better

Thank you!

Line 488: Thank you - this is clearer

Thank vou!

Line 546: This is a nice opening to the summary section and defines what this work adds to the field

Much appreciated!

Line 575: good summary

Thank you.

Line 583: will you remove this title- or does it link to the section below (not clear in the tracked changes version)

This has been removed.

Reviewer: 2

Prof. Tim Stokes, Otago University

Comments to the Author:

The authors have extensively revised the paper and have in general addressed the reviewers' concerns. There remain, however, a number of minor essential revisions required:

1. Strengths and limitation bullet point 1 p.3, LL 60-61. This does not make sense as written. Can it be re-worded please.

This has been amended as follows:

To avoid subjective bias, the researchers coded the verbatim separately and then cross- checked their findings.

2. Introduction. p.5, LL84-85 Given that we are now in 2021 this sentence should be re-written as: "Chronic Obstructive Pulmonary Disease (COPD) is currently the third leading cause of death in the world ..."

Thank you for noticing this. Please not amended text as follows: Chronic Obstructive Pulmonary Disease (COPD) is currently the third leading cause of death in the world, and in France.

3. Participants. p. 5, LL134-135. Sentence needs rewording "There were of which" doesn't make sense.

Thank you for noticing this error, which has been corrected.