

## PEER REVIEW HISTORY

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## ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	"Just a GP": A mixed method study of undermining of General Practice as a career choice in the UK
<b>AUTHORS</b>	Alberti, Hugh; Banner, Kimberley; Collingwood, Helen; Merritt, Kym;

## VERSION 1 – REVIEW

<b>REVIEWER</b>	Ryuichi Kawamoto Ehime University School of Medicine
<b>REVIEW RETURNED</b>	28-Jul-2017

<b>GENERAL COMMENTS</b>	<p>This paper examined to ascertain what comments, both negative and positive, are being made in UK clinical settings to GP trainees about GP and to further explore these comments and their influence on career choice. This study demonstrates that negative comments towards GP as a career do exist within clinical settings and are having a potential impact on poor recruitment rates to GP training. The study was carefully done and reported. I think that this manuscript is very interesting. The topic meets the scope of BMJ Open. However, I have some questions and concerns to be addressed by the authors.</p> <p>Major comments Major critiques 1) The major problem of this study is Relevance and reliability of mixed method study.</p> <p>Introduction 2 ) Authors should describe more new concepts about this study in introduction</p> <p>Methods 3 ) Since many FDs were excluded. Did the authors select the subjects with a selection bias?</p>
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<b>REVIEWER</b>	Sven Streit Institute of Primary Health Care (BIHAM) University of Bern Gesellschaftsstrasse 49 3012 Bern Switzerland
<b>REVIEW RETURNED</b>	07-Aug-2017

<b>GENERAL COMMENTS</b>	<p>Alberti et al. aimed to describe the frequency of comments being made about GP career choices in a one Health Education England region. Further, the reasons to these comments and their consequences were intended to investigate. This study showed that both positive comments were made to GP trainees in the UK. Through focus groups and survey data, a number of factors emerged. The authors suggest a zero-tolerance policy towards undermining comments in GP training.</p> <p>The strengths of this study are the novelty since data on undermining GP career choices seem lacking as well as a low risk of selection bias due to very high response rates (between 86 and 93%). Lastly, the mixed method design allowed to triangulate findings.</p> <p>Some suggestions to further improve:</p> <ol style="list-style-type: none"> <li>1. Risk of misclassification: Page 6, line 26: the research team classified comments to be negative, positiv or mixed. How do the researchers interpret the risk of misclassification? While I see in the results that comments were grouped as mixed if doubts were present, I suggest to further in the methods.</li> <li>2. Research questions and results. Page 5, line 48 describes the third aim to investigate if "comments influence the eventual career choice of potential GPs". While I see the need to ask this question, I believe the study design did not completely to answer it since all participants were current GP trainees, thus those not choosing GP training e.g. due to negative comments about GP profession were not asked.</li> <li>3. Comments by whom? Page 6, line 44: I understand participants were asked to recall comments by "primary or secondary care clinicians". Wat was the reason not to ask for comments by family, peers or non-clinicians (e.g. nurses)? Also, in the survey, comments been made only during GP training were asked while in focus groups also during medical school. An explanation to why the different approaches and their consequences would help.</li> <li>4. Different comments for different trainees? Page 9, line 29, I was thinking if comments differ by gender or age or other factors where the authors collected data in the survey.</li> </ol> <p>Minor points:</p> <ul style="list-style-type: none"> <li>- 1st paragraph of results section is rather strange and more appropriate to put as first paragraph in the discussion.</li> <li>- Table 1: define "easy choice", "E-portfolio", "QOF"</li> <li>- Page 11, line 37: define "A&amp;E"</li> </ul>
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<b>REVIEWER</b>	Kinouani Shérazade University of Bordeaux, France
<b>REVIEW RETURNED</b>	13-Aug-2017

<b>GENERAL COMMENTS</b>	<p>-The subject is original. The objective is clear and the method is adapted to answer to the research question.</p> <p>-Abstract: it does not report correctly the results of this study. Results section should present: 1) the nature of the main comments heard by the medical students about a career choice like GP (positive, negative or ambiguous comments) and then 2) factors influencing the perception of general practice by students.</p> <p>-Introduction :</p> <p>*Page 5: the aim is clearly defined but the introduction does not correctly present the research questions (lines 45-50). Contrary to what is written, the study also focuses on positive comments and their influence. Therefore, the research questions seem to be the following: what were the comments made to trainees in their clinical UK settings about general practice? What were the factors underlying these comments? How did these comments could influence to the career choice of trainees who have chosen general practice?</p> <p>Method :</p> <p>*Page 6: In the online survey, it seems that one first closed question was asked to the trainees, searching if they heard comments about general practice as a career choice. An open question seems to have been asked, in the event of a first positive answer, to clarify these comments. These collected comments were then analyzed by the research team. The wording of the questions in the online survey must be more precise. The number of recalls is not specified. A descriptive statistical analysis of the nature of the comments and their origin has been made. Method section must specified that number and proportion were used to present these results.</p> <p>*Page 6: The criteria for selecting trainees who participated in focus groups are unclear. The authors declared that trainees were "most likely to be able to recall the rationale for their career choice and potential influencers" (lines 32-34). This criterion is difficult to verify. Thus, it should be clarified whether it was a convenience or purposive sampling. Method section should report the period of trainees solicitation for the qualitative research and the period of focus groups. The analytical approach must be more described: Is it an inductive approach (without an initial hypothesis) or a deductive one (with a starting theory)? This section should also relate how data saturation has been verified.</p> <p>Results:</p> <p>*Page 7: a brief description of trainees who participated in the online survey is required: age, gender, number of general practice internships, a GP among family members. These factors may influence students' perceptions of general practice. If these data have been collected, they should be shown and discussed. If they have not been collected, this is a weakness which must to be discussed.</p> <p>*Page 8, line 57: The subtitle "Comments" is useless.</p> <p>*Page 9: the number of students participating in the GF must be specified. Their brief description is required.</p>
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	<p>*Illustrations: The denominators used to perform the proportions in Tables 1 and 2 are not clear. These numbers must be specified in the tables. All abbreviations in the tables should be explained in a note (QOF, GPST, etc.). The definition of "consultants" should be added at the bottom of Table 2. The figure 1 needs a title. Where is the figure 2, cited page 14 (line 17)?</p> <p>-Discussion:</p> <p>*Page 13: The first sentence of the discussion should be withdrawn in this step because it is an early interpretation of the data (lines 19 to 21).</p> <p>*The qualitative study should be discussed with the criteria of the COREQ or RATS checklist.</p> <p>Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. <i>Int J Qual Health Care</i> 2007;19(6):349-57.</p> <p>Clark JP. How to peer review a qualitative manuscript. In <i>Peer Review in Health Sciences</i>. Second edition. Edited by Godlee F, Jefferson T. London: BMJ Books; 2003:219-35.</p>
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## VERSION 1 – AUTHOR RESPONSE

### Reviewer: 1

#### General comments

This paper examined to ascertain what comments, both negative and positive, are being made in UK clinical settings to GP trainees about GP and to further explore these comments and their influence on career choice. This study demonstrates that negative comments towards GP as a career do exist within clinical settings and are having a potential impact on poor recruitment rates to GP training. The study was carefully done and reported. I think that this manuscript is very interesting. The topic meets the scope of BMJ Open. However, I have some questions and concerns to be addressed by the authors.

#### Major comments

#### Major critiques

1) The major problem of this study is Relevance and reliability of mixed method study.

Response: We agree that there are differences of opinions on mixed method studies in educational research. In order to acknowledge this we have added to the first paragraph of the methods – “Although not without its critics [20], we agree with Bryman and others that there is utility and validity in combining both quantitative and qualitative methods in one study. [21,22]”

#### Introduction

2) Authors should describe more new concepts about this study in introduction

Response; We have added “To our knowledge, no studies previously have sought to address these aims using qualitative and quantitative methods, in the UK or indeed internationally” to the end of the Introduction section.

#### Methods

3) Since many FDs were excluded. Did the authors select the subjects with a selection bias?

Response: Apologies if this is unclear; we did not exclude any FDs and all FDs in our region were asked the question with a response rate of 93% (780 of 839). This is now the first line of the results section (having moved the initial paragraph in response to another reviewer's comment) so this should now be clearer.

**Reviewer: 2**

Alberti et al. aimed to describe the frequency of comments being made about GP career choices in a one Health Education England region. Further, the reasons to these comments and their consequences were intended to investigate. This study showed that both positive comments were made to GP trainees in the UK. Through focus groups and survey data, a number of factors emerged. The authors suggest a zero-tolerance policy towards undermining comments in GP training.

The strengths of this study are the novelty since data on undermining GP career choices seem lacking as well as a low risk of selection bias due to very high response rates (between 86 and 93%). Lastly, the mixed method design allowed to triangulate findings.

Some suggestions to further improve:

1. Risk of misclassification: Page 6, line 26: the research team classified comments to be negative, positive or mixed. How do the researchers interpret the risk of misclassification? While I see in the results that comments were grouped as mixed if doubts were present, I suggest to further in the methods.

Response; Yes we agree there is a risk of misclassification and as stated we would group the comment as mixed if in doubt. We have made this clearer in the paper by adding "Where classification was unclear or ambiguous, the comments were classified as mixed" to the end of the survey section within the methods.

2. Research questions and results. Page 5, line 48 describes the third aim to investigate if "comments influence the eventual career choice of potential GPs". While I see the need to ask this question, I believe the study design did not completely to answer it since all participants were current GP trainees, thus those not choosing GP training e.g. due to negative comments about GP profession were not asked.

Response: We agree that asking GP trainees this question is a limitation and have acknowledged this "Focus group participants were GPSTs and we were therefore not able to determine whether any potential applicants to GP training had truly been dissuaded due to negative comments." In addition, we have changed the third aim to include the word "perceived" to acknowledge that we can only answer this question in our study from the perception of those who have actually chosen GP as their career choice – "Thus, the aim of our study was to ascertain what comments, both negative and positive, are being made in clinical settings to trainees about GP and to explore these comments and their perceived influence on career choice with trainees who have chosen a career in GP." (last line of introduction)

3. Comments by whom? Page 6, line 44: I understand participants were asked to recall comments by "primary or secondary care clinicians". What was the reason not to ask for comments by family, peers or non-clinicians (e.g. nurses)? Also, in the survey, comments been made only during GP training were asked while in focus groups also during medical school. An explanation to why the different approaches and their consequences would help.

Response: We agree that it would be very interesting to explore comments made to students and trainees about GP as a career choice by non-clinicians and indeed these may potentially be even more important. However, we felt it was necessary to focus our research aims in order to gain more depth and understanding, and therefore limited it to clinicians comments. We would recommend further studies to explore comments from a broader audience. We have rewritten the first research question in the introduction to clarify this: "Firstly, what comments, both negative or indeed positive, are being made by clinicians about GP as a career choice? "

You rightly point out that the survey questions asked about comments made in the trainees most recent placement because the question was within the trainees post-placement evaluation, whereas the focus groups were a more open exploration of comments made throughout their medical training. We have explained and acknowledged this difference in the limitations section by adding

"Although the mixed method aids triangulation of our findings these are some differences between the survey and focus groups: For example, the survey questions asked trainees about comments made in their most recent placement only, due to being a component of the trainees post-placement evaluation, whereas the more open and explorative focus group discussions included comments heard throughout their undergraduate and postgraduate training."

4. Different comments for different trainees? Page 9, line 29, I was thinking if comments differ by gender or age or other factors where the authors collected data in the survey.

Response: This is an interesting question. Due to the fact that the survey questions were anonymous we do not have any demographic data on the responders to be able to answer the question but agree it would be interesting to look at this in future studies.

Minor points: All changes below made, thank you.

- 1st paragraph of results section is rather strange and more appropriate to put as first paragraph in the discussion.

- Table 1: define "easy choice", "E-portfolio", "QOF"

- Page 11, line 37: define "A&E"

### **Reviewer: 3**

The subject is original. The objective is clear and the method is adapted to answer to the research question.

#### **Abstract**

Comment: It does not report correctly the results of this study. Results section should present: 1) the nature of the main comments heard by the medical students about a career choice like GP (positive, negative or ambiguous comments) and then 2) factors influencing the perception of general practice by students.

Response: Thank you. We have rewritten the results section of the abstract:

"Positive comments reported by trainees centred around the concept that choosing GP is a positive, family focused choice which facilitates a good work/life balance. Workload was the commonest negative comment, alongside the notion of being "just a GP"; the belief that GP is boring, a waste of training and a second class career choice. The reasons for, and origin of the comments are multifactorial in nature. Thematic analysis of the focus groups identified key factors..."

## Introduction

### Comment:

Page 5: the aim is clearly defined but the introduction does not correctly present the research questions (lines 45-50). Contrary to what is written, the study also focuses on positive comments and their influence. Therefore, the research questions seem to be the following: what were the comments made to trainees in their clinical UK settings about general practice? What were the factors underlying these comments? How did these comments could influence to the career choice of trainees who have chosen general practice?

Response: Useful point. We have amended the research questions at the end of the introduction to "Firstly, what comments, both negative or indeed positive, are being made by clinicians about GP as a career choice? Secondly, why are these comments being made, i.e. what are the factors underlying the comments? And thirdly, how do the comments influence the eventual career choice of potential General Practitioners?"

## Method

### Comment:

Page 6: In the online survey, it seems that one first closed question was asked to the trainees, searching if they heard comments about general practice as a career choice. An open question seems to have been asked, in the event of a first positive answer, to clarify these comments. These collected comments were then analyzed by the research team. The wording of the questions in the online survey must be more precise. The number of recalls is not specified. A descriptive statistical analysis of the nature of the comments and their origin has been made. Method section must specified that number and proportion were used to present these results.

Response: Thank you. yes we now realise that we had omitted the open question that followed the initial closed question and have added "Please provide the exact nature of the comments and by whom they were made?" to the questions in the methods section.

We could add the sentence "Two reminders were sent to trainees to complete the surveys" to the methods if the reviewer/editor feels that this would add to the paper.

Method section has been amended to include at the end: "A descriptive analysis was undertaken grouping the themes depending on their nature and source, and the number and proportion of comments were presented."

### Comment:

Page 6: The criteria for selecting trainees who participated in focus groups are unclear. The authors declared that trainees were "most likely to be able to recall the rationale for their career choice and potential influencers" (lines 32-34). This criterion is difficult to verify. Thus, it should be clarified whether it was a convenience or purposive sampling. Method section should report the period of trainees solicitation for the qualitative research and the period of focus groups. The analytical approach must be more described: Is it an inductive approach (without an initial hypothesis) or a deductive one (with a starting theory)? This section should also relate how data saturation has been verified.

Response: Thank you for these comments: It is always difficult to decide how much detail to include in the methods section and especially for qualitative work: We have added "We purposefully selected year one trainees who were more likely to have chosen GP as a career relatively recently and thus able to recall the rationale for their career choice and potential influencers, such as comments made by clinicians. Convenience samples of groups of year one GPSTs were selected based on the timing of their central teaching: Trainees were invited by email to participate one month and one week prior to the focus group that took place shortly after their pre-arranged central teaching session."

The focus groups lasted approximately forty minutes: "Each interview lasted approximately 40 minutes"

We have added towards the end of the analysis section: "Thematic analysis, based on the model outlined by Braun and Clarke[20] was carried out by two members of the research team using a mixed deductive and inductive approach" and have included details about data saturation in the COREQ checklist as supplementary data (see below)

Results:

Comment:

Page 7: a brief description of trainees who participated in the online survey is required: age, gender, number of general practice internships, a GP among family members. These factors may influence students' perceptions of general practice. If these data have been collected, they should be shown and discussed. If they have not been collected, this is a weakness which must to be discussed.

Response: The demographic details of participants was not included but we agree, with hindsight, that this would have been informative.

Comment: Page 8, line 57: The subtitle "Comments" is useless.

Response: We have removed this subheading and the prior subheadings "FD" and "GPST"

Comment:

Page 9: the number of students participating in the GF must be specified. Their brief description is required.

Response: We have stated in the methods section that "Focus group interviews varied in size from three to fourteen participants" and have added "with an average size of eight (total number of participants=49)"

Illustrations

Comment: The denominators used to perform the proportions in Tables 1 and 2 are not clear. These numbers must be specified in the tables. All abbreviations in the tables should be explained in a note (QOF, GPST, etc.). The definition of "consultants" should be added at the bottom of Table 2. The figure 1 needs a title. Where is the figure 2, cited page 14 (line 17)?

Response: Thank you for these comments

We have amended in the tables: "Percentages are based on the number of comments reported by that group of trainees; i.e. the denominator is the number of positive or negative comments in total for that group of trainees"

Abbreviations in the tables now explained as suggested

Figure 1 title added: "Factors influencing clinicians' perceptions of General Practice"

Figure 2 included

Discussion:

Comment:

Page 13: The first sentence of the discussion should be withdrawn in this step because it is an early interpretation of the data (lines 19 to 21).

Response: We have moved this sentence to the conclusion at the end of the paper. Following advice from one of the other reviewers, the beginning of the results section was also moved to the beginning of the discussion section (see above).



Comment: The qualitative study should be discussed with the criteria of the COREQ or RATS checklist.

Response: We have completed the COREQ checklist as completed and have included it now as supplementary material. Many of the comments (e.g. sampling, size, recruitment) are now included in the methods section as outlined above.

Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007;19(6):349-57.

Clark JP. How to peer review a qualitative manuscript. In *Peer Review in Health Sciences*. Second edition. Edited by Godlee F, Jefferson T. London: BMJ Books; 2003:219-35.

### VERSION 2 – REVIEW

<b>REVIEWER</b>	Ryuichi Kawamoto Ehime University School of Medicine, Japan
<b>REVIEW RETURNED</b>	12-Sep-2017

<b>GENERAL COMMENTS</b>	The authors have revised the manuscript carefully according to the reviewer's comments. The manuscript will be acceptable. Thank you very much for giving me the opportunity to review this manuscript.
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<b>REVIEWER</b>	Sven Streit Institute of Primary Health Care (BIHAM) University of Bern, Switzerland
<b>REVIEW RETURNED</b>	11-Sep-2017

<b>GENERAL COMMENTS</b>	Thank you for the efforts to address all comments from the first peer-review. I believe the manuscript has improved and I have no more comments to add.
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<b>REVIEWER</b>	Kinouani Shérazade University of Bordeaux, France
<b>REVIEW RETURNED</b>	26-Sep-2017

<b>GENERAL COMMENTS</b>	This new version is clearer and more precise than the first, in particular in the Methods section. Our proposals have been incorporated into the text. Unfortunately, We still have not seen Figure 2 ...
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