# 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)	Knowledge and perspectives of the new National Cervical
	Screening Program: a semi-structured interview study of North
	Queensland women – "I could be that one percent"
AUTHORS	Nagendiram, Archana; Bidgood, Rachel; Banks, Jennifer; Heal,
	Clare

## **VERSION 1 - REVIEW**

REVIEWER	Joel Boggan
	Duke University School of Medicine
	United States
REVIEW RETURNED	21-Oct-2019

GENERAL COMMENTS	General Comments Nagendiram et al. interviewed 14 women from a single practice in Queensland re: changes planned for the National Cervical Screening Program in Australia. The concerns highlighted seem most significantly related to missing cancer when switching modalities or expanding timeframes between screening.  Additionally, several women seemed motivated to continue screening because of personal knowledge of someone who had had significant abnormalities noted. In general, this work could be placed in better context by expanding the introduction and discussion sections to include additional work on this topic from
	other, similar settings.  Abstract  1. While the inclusion criteria ranged from 18-74 years, the sampled women had an age range of 20-57.  2. The first sentence of the conclusion statement is currently a runon sentence and would have increased clarity with editing.
	Background 1. In general, additional information may help put this work in context for readers. Specifically, in the first paragraph, it may be helpful to identify other countries now adhering to similar HPV screening algorithms. A recent paper by Maver and Poljak has highlighted different screening efforts across Europe, for example. 2. It also may be helpful to identify other qualitative research around HPV screening to put this work in context, such as those highlighted in the Discussion section (below).
	Methods

- 1. More details about the thematic analysis may be helpful, particularly around how the coding and themes were modified/reinforced by the second author and if there were reasons transcripts were not provided to the participants for review.
- 2. Definitions of 'under-screened' and 'well-screened' should be included somewhere within the Methods section.

### Results

1. How many of the 14 eventual respondents were identified through snowball sampling vs. convenience sampling?

#### Discussion

- 1. In general, the discussion was brief and seemed to move through the results quickly and sometimes in a disjointed manner. The discussion may benefit from expansion to put these results into a broader national and international context and some of the paragraphs could be subdivided to provide more clarity for some of the points.
- 2. More specifically, only one Irish study of qualitative work around cervical cancer is quoted; however, additional work in England and in several other countries has explored attitudes via qualitative research and surveys around different screening methodologies/frameworks (see separate works by H Patel in England, and B Wood and GS Ogilvie from Canada, as well as additional work by Obermair et al. from Australia also in BMJ Open and many others in lower-income settings). The previous work within Australia, in particular, may be important to discuss more fully.
- 3. In the current first paragraph of the discussion (line 41), the comment is made that younger women are becoming sexually active earlier. Was this highlighted as a concern raised from the transcripts? If it was not included in this way, it should include citations as it reads as a declarative statement. Additionally, the later portion of this paragraph re: health literacy and information being provided seems like it might be better included with the start of the second paragraph.
- 4. Similarly, the points about general practitioners and financial concerns at the end of the second paragraph do not fit as well with the initial points about educational programs and probably should be expanded into separate paragraphs with additional citations/discussion.
- 5. While some of the limitations are listed in the bullet points accompanying the article text, they could be better highlighted within the text of the discussion. For example, the sampling methods may have led to increased expressions of fear of missing cervical cancer with changes, as those most motivated by this concern may be more likely to both be screened and participate in this project. Additionally, women who participated in more frequent and/or earlier screening historically may also be more concerned about changes in screening timing / frequency or use of self-swab techniques.

REVIEWER	Jesper Bonde
	Molecular Pathology Laboratory
	Dept. Pathology
	Hvidovre Hospital
	Denmark
REVIEW RETURNED	29-Oct-2019

#### **GENERAL COMMENTS**

"I could be that one percent": A qualitative study of North Queensland women's knowledge and perspectives on the new National Cervical Screening Program

The manuscript represents data from a quantitively study on women's perception of the new national AUS Cervical screening program. The manuscript is a timely representation of some of the concerns amongst women participating in screening, it reads well, and the interviews were conducted according to materials and methods in a structured way minimizing any interviewer related bias.

"I could be the one percent" is a slightly dramatic title, however, points given for the marketing effort. The title will attract an audience.

With 28 pre-screened and a resulting 14 interviewed persons, the dataset is too small to conduct any sort of analysis. The reporting, however, touches upon general themes also raised in our national screening program.

As a general comment I would have preferred a structured questionnaire attached i.e. with statements for the women to rate in order of importance to enable a more focused discussion. In general the authors should discuss strenghs and weaknesses of their approach, incl. but not limited to a discussion on why they selected this particular format.

I noted that the study targeted the perception on cervical cancer in the new programme, however, the majority of the statements referred could as easily be representation of any cytology based screening effort, and if possible I would like the authors in the discussion to elaborate on which statements are general for screening and which related to the new molecular AUS program. I have only a few minor comments

## Introduction

Pp3, line 42, please provide reference for %-of underscreened CxCa women

pp.3, line 50, please provide reference for AUS screening program Discussion

Pp 10, line 41; Please provide reference for the statement re. earlier sexual debut age.

### **VERSION 1 – AUTHOR RESPONSE**

Reviewer(s)' Comments to Author:

Reviewer: 1

Reviewer Name: Joel Boggan

Institution and Country:

Duke University School of Medicine

**United States** 

Please state any competing interests or state 'None declared': None declared.

Please leave your comments for the authors below

### **General Comments**

Nagendiram et al. interviewed 14 women from a single practice in Queensland re: changes planned for the National Cervical Screening Program in Australia. The concerns highlighted seem most significantly related to missing cancer when switching modalities or expanding timeframes between screening. Additionally, several women seemed motivated to continue screening because of personal knowledge of someone who had had significant abnormalities noted. In general, this work could be placed in better context by expanding the introduction and discussion sections to include additional work on this topic from other, similar settings.

Thank you for reviewing this manuscript. The authors appreciate the time you have taken to review this article and have taken on your feedback.

### Abstract

1. While the inclusion criteria ranged from 18-74 years, the sampled women had an age range of 20-57.

Authors have changed this as per your recommendation.

2. The first sentence of the conclusion statement is currently a run-on sentence and would have increased clarity with editing.

This sentence has been changed to improve clarity.

## Background

1. In general, additional information may help put this work in context for readers. Specifically, in the first paragraph, it may be helpful to identify other countries now adhering to similar HPV screening algorithms. A recent paper by Maver and Poljak has highlighted different screening efforts across Europe, for example.

Thank you for this helpful suggestion. The authors have included international context and used Maver and Poliak.

2. It also may be helpful to identify other qualitative research around HPV screening to put this work in context, such as those highlighted in the Discussion section (below).

Authors have provided more qualitative research in the background section to put this in context.

## Methods

1. More details about the thematic analysis may be helpful, particularly around how the coding and themes were modified/reinforced by the second author and if there were reasons transcripts were not provided to the participants for review.

Authors have added further detail to better describe how the second author reinforced the themes.

2. Definitions of 'under-screened' and 'well-screened' should be included somewhere within the Methods section.

This has been included in the methods section.

#### Results

1. How many of the 14 eventual respondents were identified through snowball sampling vs. convenience sampling?

Authors have specified the number of participants recruited through snowball sampling and convenience sampling.

#### Discussion

1. In general, the discussion was brief and seemed to move through the results quickly and sometimes in a disjointed manner. The discussion may benefit from expansion to put these results into a broader national and international context and some of the paragraphs could be subdivided to provide more clarity for some of the points.

Thank you for this feedback. Authors have attempted to expand on the discussion as per your suggestions.

2. More specifically, only one Irish study of qualitative work around cervical cancer is quoted; however, additional work in England and in several other countries has explored attitudes via qualitative research and surveys around different screening methodologies/frameworks (see separate works by H Patel in England, and B Wood and GS Ogilvie from Canada, as well as additional work by Obermair et al. from Australia also in BMJ Open and many others in lower-income settings). The previous work within Australia, in particular, may be important to discuss more fully.

The suggested articles and other research was reviewed by the articles and included to put results into a broader national and international context.

3. In the current first paragraph of the discussion (line 41), the comment is made that younger women are becoming sexually active earlier. Was this highlighted as a concern raised from the transcripts? If it was not included in this way, it should include citations as it reads as a declarative statement. Additionally, the later portion of this paragraph re: health literacy and information being provided seems like it might be better included with the start of the second paragraph.

The statement that young women are becoming sexually active earlier was a theme that emerged from participants. This has been modified in the text to reflect this. The second half of the paragraph has been moved to the next paragraph to improve flow.

4. Similarly, the points about general practitioners and financial concerns at the end of the second paragraph do not fit as well with the initial points about educational programs and probably should be expanded into separate paragraphs with additional citations/discussion.

This has been separated into another paragraph and elaborated on in the discussion.

5. While some of the limitations are listed in the bullet points accompanying the article text, they could be better highlighted within the text of the discussion. For example, the sampling methods may have led to increased expressions of fear of missing cervical cancer with changes, as those most motivated by this concern may be more likely to both be screened and participate in this project. Additionally, women who participated in more frequent and/or earlier screening historically may also be more concerned about changes in screening timing / frequency or use of self-swab techniques.

Authors have elaborated on limitations in the discussion as per reviewer recommendations.

Reviewer: 2

Reviewer Name: Jesper Bonde

Institution and Country:

Molecular Pathology Laboratory

Dept. Pathology

Hvidovre Hospital

Denmark

Please state any competing interests or state 'None declared': None declared

Please leave your comments for the authors below

"I could be that one percent": A qualitative study of North Queensland women's knowledge and perspectives on the new National Cervical Screening Program

The manuscript represents data from a quantitively study on women's perception of the new national AUS Cervical screening program. The manuscript is a timely representation of some of the concerns amongst women participating in screening, it reads well, and the interviews were conducted according to materials and methods in a structured way minimizing any interviewer related bias.

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As a general comment I would have preferred a structured questionnaire attached i.e. with statements for the women to rate in order of importance to enable a more focused discussion. In general the authors should discuss strengths and weaknesses of their approach, incl. but not limited to a discussion on why they selected this particular format.

I noted that the study targeted the perception on cervical cancer in the new programme, however, the majority of the statements referred could as easily be representation of any cytology based screening effort, and if possible I would like the authors in the discussion to elaborate on which statements are general for screening and which related to the new molecular AUS program.

I have only a few minor comments

Thank you for your kind feedback on our research article. The authors appreciate your input and time spent reviewing the article. The authors have provided further elaboration on limitations in the discussion and provided references in the introduction as requested. A copy of the interview guide has been attached as a supplementary file for editor review.

Introduction

Pp3, line 42, please provide reference for %-of underscreened CxCa women

Reference has been provided

pp.3, line 50, please provide reference for AUS screening program

Reference has been provided

Discussion

Pp 10, line 41; Please provide reference for the statement re. earlier sexual debut age.

This was a recurrent theme from participants and hence does not require a reference. Discussion has been changed to improve clarity.