Article submission received

From: research@f1000.com

To: ninuk_hariyani@yahoo.co.id

Date: Monday, 27 April 2020 at 09:47 pm GMT+7

Dear Ninuk

Thank you for submitting your manuscript:

Factors influencing the utilization of dental services in East Java, Indonesia Ninuk Hariyani *et al.*

Funders: you have stated during the submission process that this work has been funded by: the ministry of technology, research, and higher education of the Republic of Indonesia (563/UN3.14/LT/2019)

WHAT WE DO NEXT

Before accepting your article: we will check content suitability, readability and manuscript format; adherence to ethical standards for the type of study; that the underlying data have been supplied (where appropriate); and that there is sufficient detail to enable others to replicate the study (if applicable).

Before publishing your article: if we accept your article, we will be in touch in the next two or three working days with any issues that need addressing. You will then receive a final proof of your article for approval, prior to publication.

WHAT YOU NEED TO DO NEXT

Before doing anything else, we need you to suggest **at least 5** suitable reviewers to peer review your manuscript following publication (in accordance with our publishing model), should it be accepted. We ask that authors do not contact reviewers directly about the peer review process. We will need your reviewer suggestions before we can publish the article so we recommend identifying them now via your Suggest Reviewers page for this article. You can also access this page via the article's record at My Research >> Submissions.

Please quote the article number 23698 in any correspondence.

Kind regards

The F1000Research Team

Press releasing articles: Please avoid promoting articles in the media until the article has passed the open peer review process. Promotion on social media is encouraged once the article has been published; please ensure the full citation is included, as this contains the peer review status. F1000Research should be cited as the source of these articles with a link to the article.

Do not delete (filing code): F1KR00CDE F1R-VER26147-A (end code)

F1000Research is the trading name of F1000 Research Limited. This e-mail is confidential and should not be used by anyone who is not the original intended recipient. If you are not the intended recipient, you are hereby notified that any disclosure, distribution, copying or use of this message or taking any action in reliance on the contents of it is strictly prohibited. If you have received this electronic message in error, please destroy it immediately, and notify the sender. F1000 Research Limited does not accept liability for any statements made which are clearly the sender's own and not expressly made on behalf of F1000 Research Limited. No contracts may be concluded on behalf of F1000 Research Limited by means of e-mail communication. F1000 Research Limited is Registered in England and Wales with Company Number 8322928, Registered Office Howick Place, London SW1P 1WG, UK.

Open Peer Review

Current Peer Review Status: 💙 👘

Version 1

Reviewer Report 11 September 2020

https://doi.org/10.5256/f1000research.26147.r70071

© **2020 Gupta A.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

?

A. Gupta 问

Deakin University, Geelong, Vic, Australia

This is a very interesting paper but has some inconsistencies throughout. First, it is unclear whether the paper focusses on exploring factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia. The background makes a case for LOW utilisation but the title and the overall conclusion state otherwise. Further, the discussion section is very superficial and will benefit from a thorough discussion of the study findings with the existing evidence. Some specific comments for the authors to consider are as follows:

Specific comments -

<u>**Title:</u>** Clarify whether the paper focuses on exploring factors influencing HIGH or LOW (or both) utilisation of dental services in East Java, Indonesia</u>

Background:

- 3rd paragraph: Support the sentences with more and relevant evidence.
- 5th paragraph:
 - In the sentence, 'Despite.....2013b)' do you mean 'use of dental treatment' or 'UTILIZATION OF DENTAL SERVICES'? Some clarity will be helpful.
 - In the sentence "However.....2013b)", the phrase 'treat utilization for dental issues' needs clarity.
 - Some discussion on the QUALITY of the public dental service will be helpful. Further, some statistics on 'PRIVATE DENTAL CARE UTILIZATION' as compared to the public dental service will be helpful.
 - Revise the study aim for clarity- whether the paper aims to explore factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia.

Methods:

- Page 4, 2nd line: "Indicators of.....condition" seems inappropriate as it is meant to be the findings of this study. Suggest either deleting this sentence or adding the word 'POTENTIAL' at the start of this sentence. It will also be good if the authors can support this sentence with evidence, assuming that their choice of exposure variables was informed by previous literature.
- In the same paragraph as above- in the sentence 'East Java province..... districts), it will be helpful if the authors can expand on what they mean by 'where municipalities are usually *ahead* of the districts'.
- Statistical Analysis: Authors mention 'no imputation was done for missing data' but no information (eg., n =?) on the missing data is provided. Please include the necessary information. Also, justification on how was missing data treated if no imputation was done will be helpful.

<u>Results:</u>

• Please insert the total sample size (n) in Table 1.

Discussion:

- Overall the discussion section in its current form is weak and superficial. It might be worth including a thorough and integrated discussion of the findings with the existing literature.
- Page 5: Sentences such as "Lack of awareness about oral health could be a reason behind the lower utilization of dental services" will be worth discussing a bit more.
- Can authors include a bit more discussion in each of the paragraphs below:
 - In the paragraph that talks about the difference in AGE for the utilisation- authors can include some discussion on Dental anxiety as one of the potential reasons for low utilisation among participants <25 years.
 - In the paragraph that talks about the GENDER difference for the utilisation- some more discussion on why there exists contradictory evidence will be helpful. Also supporting evidence stated is primarily from developed countries. Is there any evidence from developing countries that can support the justification- given that women's perspectives and beliefs may differ culturally?
- Suggest including similar discussions in other paragraphs on education, health behaviours, etc.
- In the limitations section, it will be helpful if the authors can include some discussion on the potential of bias arising due to self-reported data and residual confounders.
- A paragraph on the research and policy implications of this study is missing and will be worth including. This study has the potential to inform guidelines, or specific changes to existing policy or practice in Indonesia.

Conclusion:

• A clear and precise conclusion will be helpful.

• Please clearly state whether age (what age group?), sex (male/female), education (low/high), and residential location (district/municipal) are indicators of low utilization.

Is the work clearly and accurately presented and does it cite the current literature? Partly

Is the study design appropriate and is the work technically sound? $\ensuremath{\mathsf{Yes}}$

Are sufficient details of methods and analysis provided to allow replication by others? $\ensuremath{\mathsf{Yes}}$

If applicable, is the statistical analysis and its interpretation appropriate? $\ensuremath{\mathsf{Yes}}$

Are all the source data underlying the results available to ensure full reproducibility? $\ensuremath{\mathsf{Yes}}$

Are the conclusions drawn adequately supported by the results? $\ensuremath{\mathsf{Yes}}$

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Public health, oral health

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Author Response 03 Apr 2021

Ninuk Hariyani, Faculty of Dental Medicine Universitas Airlangga, Surabaya, Indonesia

Reviewer: 2. A. Gupta

University of Melbourne, Melbourne, Vic, Australia **Comment 1:-** This is a very interesting paper but has some inconsistencies throughout. *Response:-* Thank you for your constructive feedback on our manuscript. Point by point responses to your comments is provided.

Comment 2:- Title: Clarify whether the paper focuses on exploring factors influencing HIGH or LOW (or both) utilisation of dental services in East Java, Indonesia *Response:-* The objective of this study was to see which of the included sociodemographic, behavioural, and clinical factors influenced the existing dental service utilisation. The study does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we have detailed the study objectives in the abstract and the introduction.

Comment 3:- Background: 3rd paragraph: Support the sentences with more and relevant evidence.

Response:- Some references have been added to support and extend the topic.

Comment 4:- Background: 5th paragraph: In the sentence, 'Despite.....2013b)' do you mean 'use of dental treatment' or 'UTILIZATION OF DENTAL SERVICES'? Some clarity will be helpful. *Response:*- The sentence has been revised.

Comment 5:- Background: In the sentence "However.....2013b)", the phrase 'treat utilization for dental issues' needs clarity.

Response:- Thank you for your comments. The consistent term of the utilization of dental services was used to reduce the ambiguity.

Comment 6:- Background: Some discussion on the QUALITY of the public dental service will be helpful. Further, some statistics on 'PRIVATE DENTAL CARE UTILIZATION' as compared to the public dental service will be helpful. *Response:*- Some discussion has been added.

Comment 7:- Background: Revise the study aim for clarity- whether the paper aims to explore factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia.

Response:- The aim of this study was to see which of the included sociodemographic, behavioural, and clinical factors influenced the existing dental service utilisation. The study does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we has detailed the study objectives in the abstract and the introduction.

Comment 8:- Methods: Page 4, 2nd line: "Indicators of.....condition" seems inappropriate as it is meant to be the findings of this study. Suggest either deleting this sentence or adding the word 'POTENTIAL' at the start of this sentence. It will also be good if the authors can support this sentence with evidence, assuming that their choice of exposure variables was informed by previous literature.

Response:- Thank you for the suggestion. It has been adopted and the changes have been made.

Comment 9:- Methods: In the same paragraph as above- in the sentence 'East Java province..... districts), it will be helpful if the authors can expand on what they mean by 'where municipalities are usually *ahead* of the districts'. *Response:*- Explanation has been added.

Comment 10:- Methods: Statistical Analysis: Authors mention 'no imputation was done for missing data' but no information (eg., n =?) on the missing data is provided. Please include the necessary information. Also, justification on how was missing data treated if no imputation was done will be helpful.

Response:- The total sample size of the final analysis has been added both in the method and Table 3 /multivariable analysis. The comparison of the characteristics of the total study participants and the final participants included in the multivariable analysis was also added

in table 1 and the first paragraph of the results section. The included respondents were similar in all characteristics to the total number of respondents except in the educational level. The implication of this reduced sample size to the general finding has also has been added in the discussion. While previous article showed that people with lower educational background have lower access to dental treatment, this new article showed that due to the fact that the analysis sample in this study were better educated than the total respondent population, the influence of education on dental service utilization might only be underestimated.

Comment 11:- Results: Please insert the total sample size (n) in Table 1. *Response:-* The sample size has been added as an additional column. We also provided a comparison of the characteristics of the total study participants and the final participants included in the multivariable analysis

Comment 12:- Discussion: Overall the discussion section in its current form is weak and superficial. It might be worth including a thorough and integrated discussion of the findings with the existing literature.

Response:- The discussion has been expanded in each of the suggested sections.

Comment 13:- Discussion: Page 5: Sentences such as "Lack of awareness about oral health could be a reason behind the lower utilization of dental services" will be worth discussing a bit more.

Response:- The discussion has been expanded.

Comment 14:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the difference in AGE for the utilisation- authors can include some discussion on Dental anxiety as one of the potential reasons for low utilisation among participants <25 years. *Response:-* Discussion and literature on dental anxiety has been added.

The discussion for each paragraph has been expanded.

Comment 15:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the GENDER difference for the utilisation- some more discussion on why there exists contradictory evidence will be helpful. Also supporting evidence stated is primarily from developed countries. Is there any evidence from developing countries that can support the justification- given that women's perspectives and beliefs may differ culturally? *Response:-* The discussion has been expanded.

Comment 16:- Discussion: Suggest including similar discussions in other paragraphs on education, health behaviours, etc. *Response:-* The discussion has been expanded.

Comment 17:- Discussion: In the limitations section, it will be helpful if the authors can include some discussion on the potential of bias arising due to self-reported data and residual confounders.

Response:- The discussion has been expanded.

Comment 18:- Discussion: A paragraph on the research and policy implications of this study is missing and will be worth including. This study has the potential to inform guidelines, or specific changes to existing policy or practice in Indonesia. *Response:-* The discussion has been expanded.

Comment 19:- Conclusion: A clear and precise conclusion will be helpful. *Response:*- The discussion has been expanded.

Comment 20:- Conclusion: Please clearly state whether age (what age group?), sex (male/female), education (low/high), and residential location (district/municipal) are indicators of low utilization. *Response:*- The discussion has been expanded.

Competing Interests: No competing interests were disclosed.

Reviewer Report 16 July 2020

https://doi.org/10.5256/f1000research.26147.r66387

© **2020 Jaafar A.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Azlan Jaafar 匝

Department of Periodontology & Community Oral Health, Faculty of Dentistry, Universiti Sains Islam, Nilai, Malaysia

The article is scientifically-well-written. No major issues related to methods or data analysis need to be highlighted. The authors have indicated the problem statement in the introduction on why they conduct the study. However, comments were given to improve the flow and content of the section.

The method is well-describe. The analysis performed is matched with the study design as recommended by others. The outcome measure of dental service utilization is following a well-versed definition by other researchers. However, there are some categorisations of independent variables that do not match the results. For example the age and dental status. The author stated that they are using ≤ 25 , 25- ≤ 50 , and ≥ 50 years old. However, in the results it was mentioned differently (less than 25, 25- ≤ 50 , and ≥ 50 . The age categorisation should not overlap thus I would like to suggest new categorisation ≤ 25 , 25- ≤ 50 , and ≥ 50 . Whereas, the dental status was informed in methods was "dentate vs edentulous" but in the results it mentioned, "not edentulous vs edentulous". Although it seems to give similar meaning but consistency in reporting is essential.

The rest including abstract, discussion, and conclusion is well-written. The citation provided is also updated evidence. I also have given some papers for citations to enrich the discussion part. Other

related information such as data sources is also stated in the identification of originality of the data.

Please see this annotated pdf.

Is the work clearly and accurately presented and does it cite the current literature? $\ensuremath{\mathsf{Yes}}$

Is the study design appropriate and is the work technically sound? $\ensuremath{\mathsf{Yes}}$

Are sufficient details of methods and analysis provided to allow replication by others? $\ensuremath{\mathsf{Yes}}$

If applicable, is the statistical analysis and its interpretation appropriate? $\ensuremath{\mathsf{Yes}}$

Are all the source data underlying the results available to ensure full reproducibility? $\ensuremath{\mathsf{Yes}}$

Are the conclusions drawn adequately supported by the results? $\ensuremath{\mathsf{Yes}}$

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Dental Public Health

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Author Response 03 Apr 2021

Ninuk Hariyani, Faculty of Dental Medicine Universitas Airlangga, Surabaya, Indonesia

Reviewer(s)' Comments to Author:

Reviewer: 1. Azlan Jaafar

Department of Periodontology & Community Oral Health, Faculty of Dentistry, Universiti Sains

Islam, Nilai, Malaysia

Comment 1:- The article is scientifically-well-written. No major issues related to methods or data analysis need to be highlighted. The authors have indicated the problem statement in the introduction on why they conduct the study.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 2:- The method is well-describe. The analysis performed is matched with the study design as recommended by others. The outcome measure of dental service utilization is following a well-versed definition by other researchers.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 3:- There are some categorisations of independent variables that do not match the results. The author stated that they are using ≤ 25 , 25-<50, and ≥ 50 years old. However, in the results it was mentioned differently (less than 25, 25-50, and ≥ 50 . The age categorisation should not overlap thus I would like to suggest new categorisation <25, 25-50, and >50.

Response:- Thank you for the correction. The categorisations of < 25, 25-<50, and \geq 50 has been used throughout the text except the one you pointed out. The change has been made to make it consistent throughout the manuscript.

Comment 4:- The dental status informed in methods was "dentate vs edentulous" but in the results it mentioned, "not edentulous vs edentulous". Although it seems to give similar meaning but consistency in reporting is essential.

Response:- Thank you for the suggestion. The change of "dentate vs edentulous" has been made in Table 1, Table 2 and Table 3.

Comment 5:- The rest including abstract, discussion, and conclusion is well-written. The citation provided is also updated evidence. *Response:-* Thank you for your constructive feedback on our manuscript.

Competing Interests: No competing interests were disclosed.

Comments on this article

Version 1

Author Response 30 Mar 2021

Ninuk Hariyani, Faculty of Dental Medicine Universitas Airlangga, Surabaya, Indonesia

<u>Reviewer(s)' Comments to Author:</u>

Reviewer: 1. Azlan Jaafar

Department of Periodontology & Community Oral Health, Faculty of Dentistry, Universiti Sains Islam, Nilai, Malaysia

Comment 1:- The article is scientifically-well-written. No major issues related to methods or data analysis need to be highlighted. The authors have indicated the problem statement in the introduction on why they conduct the study.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 2:- The method is well-describe. The analysis performed is matched with the study design as recommended by others. The outcome measure of dental service utilization is following a well-versed definition by other researchers.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 3:- There are some categorisations of independent variables that do not match the results. The author stated that they are using ≤ 25 , 25-<50, and ≥ 50 years old. However, in the results it was mentioned differently (less than 25, 25-50, and ≥ 50 . The age categorisation should not overlap thus I would like to suggest new categorisation <25, 25-50, and >50. *Response:*- Thank you for the correction. The categorisations of < 25, 25-<50, and ≥ 50 has been used throughout the text except the one you pointed out. The change has been made (page 7 line 138-139 and page 11 line 210 and 212).

Comment 4:- The dental status informed in methods was "dentate vs edentulous" but in the results it mentioned, "not edentulous vs edentulous". Although it seems to give similar meaning but consistency in reporting is essential.

Response:- Thank you for the suggestion. The change has been made in Table 1 (page 22), Table 2 (page 23) and Table 3 (page 24).

Comment 5:- The rest including abstract, discussion, and conclusion is well-written. The citation provided is also updated evidence.

Response:- Thank you for your constructive feedback on our manuscript.

Reviewer: 2. A. Gupta

University of Melbourne, Melbourne, Vic, Australia

Comment 1:- This is a very interesting paper but has some inconsistencies throughout. *Response:-* Thank you for your constructive feedback on our manuscript. Point by point responses to your comments is provided.

Comment 2:- Title: Clarify whether the paper focuses on exploring factors influencing HIGH or LOW (or both) utilisation of dental services in East Java, Indonesia *Response:-* The objective of this study was to see which of the included sociodemographic, behavioural, and clinical factors influenced the existing dental service utilisation. The study does

behavioural, and clinical factors influenced the existing dental service utilisation. The study does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we have detailed the study objectives in the abstract (page 2 line 31-33) and the introduction (page 6 line 107-109).

Comment 3:- Background: 3rd paragraph: Support the sentences with more and relevant evidence.

Response:- Some references have been added to support and extend the topic (in the 3rd paragraph page 4 line 71-74; and in the references page 13 line 303-305, page 18 line 341-343, page 20 line 386-390).

Comment 4:- Background: 5th paragraph: In the sentence, 'Despite.....2013b)' do you mean 'use of dental treatment' or 'UTILIZATION OF DENTAL SERVICES'? Some clarity will be helpful. *Response:*- The sentence has been revised (page 6 line 98-99)

Comment 5:- Background: In the sentence "However.....2013b)", the phrase 'treat utilization for dental issues' needs clarity.

Response:- Thank you for your comments. The consistent term of the utilization of dental services

was used to reduce the ambiguity (page 6 line 104-105).

Comment 6:- Background: Some discussion on the QUALITY of the public dental service will be helpful. Further, some statistics on 'PRIVATE DENTAL CARE UTILIZATION' as compared to the public dental service will be helpful.

Response:- Some discussion has been added (page 5 line 87-92)

Comment 7:- Background: Revise the study aim for clarity- whether the paper aims to explore factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia. *Response:*- The aim of this study was to see which of the included sociodemographic, behavioural, and clinical factors influenced the existing dental service utilisation. The study does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we has detailed the study objectives in the abstract (page 2 line 31-33) and the introduction (page 6 line 107-109).

Comment 8:- Methods: Page 4, 2nd line: "Indicators of.....condition" seems inappropriate as it is meant to be the findings of this study. Suggest either deleting this sentence or adding the word 'POTENTIAL' at the start of this sentence. It will also be good if the authors can support this sentence with evidence, assuming that their choice of exposure variables was informed by previous literature.

Response:- Thank you for the suggestion. It has been adopted and the changes have been made (page 7 line 133-135)

Comment 9:- Methods: In the same paragraph as above- in the sentence 'East Java province..... districts), it will be helpful if the authors can expand on what they mean by 'where municipalities are usually **ahead** of the districts'.

Response:- Explanation has been added (page 8 line 144-145)

Comment 10:- Methods: Statistical Analysis: Authors mention 'no imputation was done for missing data' but no information (eg., n =?) on the missing data is provided. Please include the necessary information. Also, justification on how was missing data treated if no imputation was done will be helpful.

Response:- The total sample size of the final analysis has been added both in the method and Table 3 /multivariable analysis (page 8 line 159 and page 24, respectively). The comparison of the characteristics of the total study participants and the final participants included in the multivariable analysis was also added in table 1 (page 25) and the first paragraph of the results section (page 9 line 173-178). The included respondents were similar in all characteristics to the total number of respondents except in the educational level. The implication of this reduced sample size to the general finding has also has been added in the discussion (page 13 line 257-258).

Comment 11:- Results: Please insert the total sample size (n) in Table 1. *Response:-* The sample size has been added as an additional column (table 1 in page 22 column 2)

Comment 12:- Discussion: Overall the discussion section in its current form is weak and superficial. It might be worth including a thorough and integrated discussion of the findings with the existing literature.

Response:- The discussion has been expanded in each of the suggested sections (page 10-15)

Comment 13:- Discussion: Page 5: Sentences such as "Lack of awareness about oral health could be a reason behind the lower utilization of dental services" will be worth discussing a bit more. *Response:-* The discussion has been expanded (in the discussion section in page 11 line 215-224 and in the references in page 21 line 406-412; page 19 line 362-363; and page 24 line 477-478)

Comment 14:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the difference in AGE for the utilisation- authors can include some discussion on Dental anxiety as one of the potential reasons for low utilisation among participants <25 years.

Response:- Discussion and literature on dental anxiety has been added (in the discussion section in page 12 line 231-234 and in the references in page 22 line 431-433)

The discussion for each paragraph has been expanded (in the discussion section in page 12 line 234-243; page 13 line 250-255 and line 259-264; page 14-15 line 290-293 and page 15 line 302-308) and in the references (in page 18-24).

Comment 15:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the GENDER difference for the utilisation- some more discussion on why there exists contradictory evidence will be helpful. Also supporting evidence stated is primarily from developed countries. Is there any evidence from developing countries that can support the justification- given that women's perspectives and beliefs may differ culturally? *Response:-* The discussion has been expanded (discussion section in page 13 line 250-255 and in the references in page 18-24).

Comment 16:- Discussion: Suggest including similar discussions in other paragraphs on education, health behaviours, etc.

Response:- The discussion has been expanded (discussion section in page 13 line 259-264 and in the references in page 18-24).

Comment 17:- Discussion: In the limitations section, it will be helpful if the authors can include some discussion on the potential of bias arising due to self-reported data and residual confounders.

Response:- The discussion has been expanded (discussion section in page 15 line 300-301 and in the references in page 18-24).

Comment 18:- Discussion: A paragraph on the research and policy implications of this study is missing and will be worth including. This study has the potential to inform guidelines, or specific changes to existing policy or practice in Indonesia.

Response:- The discussion has been expanded (discussion section in page 15 line 302-308 and in the references in page 18-24).

Comment 19:- Conclusion: A clear and precise conclusion will be helpful. *Response:-* The discussion has been expanded (conclusion section in page 16 line 313-315)

Comment 20:- Conclusion: Please clearly state whether age (what age group?), sex (male/female),

education (low/high), and residential location (district/municipal) are indicators of low utilization. *Response:-* The discussion has been expanded (conclusion section in page 16 line 313-315)

Competing Interests: NA

The benefits of publishing with F1000Research:

- Your article is published within days, with no editorial bias
- You can publish traditional articles, null/negative results, case reports, data notes and more
- The peer review process is transparent and collaborative
- Your article is indexed in PubMed after passing peer review
- Dedicated customer support at every stage

For pre-submission enquiries, contact research@f1000.com



Open Peer Review

Current Peer Review Status: 🗸

Version 2

Reviewer Report 28 April 2021

https://doi.org/10.5256/f1000research.55792.r83675

© **2021 Gupta A.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



A. Gupta 匝

Deakin University, Geelong, Vic, Australia

No further comments. Thank you.

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Public health, oral health

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Version 1

Reviewer Report 11 September 2020

https://doi.org/10.5256/f1000research.26147.r70071

© **2020 Gupta A.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

🥐 🛛 A. Gupta 匝

Deakin University, Geelong, Vic, Australia

This is a very interesting paper but has some inconsistencies throughout. First, it is unclear whether the paper focusses on exploring factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia. The background makes a case for LOW utilisation but the title and the overall conclusion state otherwise. Further, the discussion section is very superficial

and will benefit from a thorough discussion of the study findings with the existing evidence. Some specific comments for the authors to consider are as follows:

Specific comments –

<u>**Title:**</u> Clarify whether the paper focuses on exploring factors influencing HIGH or LOW (or both) utilisation of dental services in East Java, Indonesia

Background:

- 3rd paragraph: Support the sentences with more and relevant evidence.
- 5th paragraph:
 - In the sentence, 'Despite.....2013b)' do you mean 'use of dental treatment' or 'UTILIZATION OF DENTAL SERVICES'? Some clarity will be helpful.
 - In the sentence "However.....2013b)", the phrase 'treat utilization for dental issues' needs clarity.
 - Some discussion on the QUALITY of the public dental service will be helpful. Further, some statistics on 'PRIVATE DENTAL CARE UTILIZATION' as compared to the public dental service will be helpful.
 - Revise the study aim for clarity- whether the paper aims to explore factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia.

<u>Methods:</u>

- Page 4, 2nd line: "Indicators of.....condition" seems inappropriate as it is meant to be the findings of this study. Suggest either deleting this sentence or adding the word 'POTENTIAL' at the start of this sentence. It will also be good if the authors can support this sentence with evidence, assuming that their choice of exposure variables was informed by previous literature.
- In the same paragraph as above- in the sentence 'East Java province..... districts), it will be helpful if the authors can expand on what they mean by 'where municipalities are usually *ahead* of the districts'.
- Statistical Analysis: Authors mention 'no imputation was done for missing data' but no information (eg., n =?) on the missing data is provided. Please include the necessary information. Also, justification on how was missing data treated if no imputation was done will be helpful.

<u>Results:</u>

• Please insert the total sample size (n) in Table 1.

Discussion:

- Overall the discussion section in its current form is weak and superficial. It might be worth including a thorough and integrated discussion of the findings with the existing literature.
- Page 5: Sentences such as "Lack of awareness about oral health could be a reason behind

the lower utilization of dental services" will be worth discussing a bit more.

- Can authors include a bit more discussion in each of the paragraphs below:
 - In the paragraph that talks about the difference in AGE for the utilisation- authors can include some discussion on Dental anxiety as one of the potential reasons for low utilisation among participants <25 years.
 - In the paragraph that talks about the GENDER difference for the utilisation- some more discussion on why there exists contradictory evidence will be helpful. Also supporting evidence stated is primarily from developed countries. Is there any evidence from developing countries that can support the justification- given that women's perspectives and beliefs may differ culturally?
- Suggest including similar discussions in other paragraphs on education, health behaviours, etc.
- In the limitations section, it will be helpful if the authors can include some discussion on the potential of bias arising due to self-reported data and residual confounders.
- A paragraph on the research and policy implications of this study is missing and will be worth including. This study has the potential to inform guidelines, or specific changes to existing policy or practice in Indonesia.

Conclusion:

- A clear and precise conclusion will be helpful.
- Please clearly state whether age (what age group?), sex (male/female), education (low/high), and residential location (district/municipal) are indicators of low utilization.

Is the work clearly and accurately presented and does it cite the current literature? Partly

Is the study design appropriate and is the work technically sound?

Yes

Are sufficient details of methods and analysis provided to allow replication by others? $\ensuremath{\mathsf{Yes}}$

If applicable, is the statistical analysis and its interpretation appropriate?

Yes

Are all the source data underlying the results available to ensure full reproducibility? $\ensuremath{\mathsf{Yes}}$

Are the conclusions drawn adequately supported by the results?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Public health, oral health

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard, however I have significant reservations, as outlined above.

Author Response 03 Apr 2021

Ninuk Hariyani, Faculty of Dental Medicine Universitas Airlangga, Surabaya, Indonesia

Reviewer: 2. A. Gupta

University of Melbourne, Melbourne, Vic, Australia **Comment 1:-** This is a very interesting paper but has some inconsistencies throughout. *Response:-* Thank you for your constructive feedback on our manuscript. Point by point responses to your comments is provided.

Comment 2:- Title: Clarify whether the paper focuses on exploring factors influencing HIGH or LOW (or both) utilisation of dental services in East Java, Indonesia *Response:-* The objective of this study was to see which of the included sociodemographic, behavioural, and clinical factors influenced the existing dental service utilisation. The study does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we have detailed the study objectives in the abstract and the introduction.

Comment 3:- Background: 3rd paragraph: Support the sentences with more and relevant evidence.

Response:- Some references have been added to support and extend the topic.

Comment 4:- Background: 5th paragraph: In the sentence, 'Despite.....2013b)' do you mean 'use of dental treatment' or 'UTILIZATION OF DENTAL SERVICES'? Some clarity will be helpful. *Response:-* The sentence has been revised.

Comment 5:- Background: In the sentence "However.....2013b)", the phrase 'treat utilization for dental issues' needs clarity.

Response:- Thank you for your comments. The consistent term of the utilization of dental services was used to reduce the ambiguity.

Comment 6:- Background: Some discussion on the QUALITY of the public dental service will be helpful. Further, some statistics on 'PRIVATE DENTAL CARE UTILIZATION' as compared to the public dental service will be helpful. *Response:*- Some discussion has been added.

Comment 7:- Background: Revise the study aim for clarity- whether the paper aims to explore factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia.

Response:- The aim of this study was to see which of the included sociodemographic, behavioural, and clinical factors influenced the existing dental service utilisation. The study

does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we has detailed the study objectives in the abstract and the introduction.

Comment 8:- Methods: Page 4, 2nd line: "Indicators of.....condition" seems inappropriate as it is meant to be the findings of this study. Suggest either deleting this sentence or adding the word 'POTENTIAL' at the start of this sentence. It will also be good if the authors can support this sentence with evidence, assuming that their choice of exposure variables was informed by previous literature.

Response:- Thank you for the suggestion. It has been adopted and the changes have been made.

Comment 9:- Methods: In the same paragraph as above- in the sentence 'East Java province..... districts), it will be helpful if the authors can expand on what they mean by 'where municipalities are usually *ahead* of the districts'. *Response:*- Explanation has been added.

Comment 10:- Methods: Statistical Analysis: Authors mention 'no imputation was done for missing data' but no information (eg., n =?) on the missing data is provided. Please include the necessary information. Also, justification on how was missing data treated if no imputation was done will be helpful.

Response:- The total sample size of the final analysis has been added both in the method and Table 3 /multivariable analysis. The comparison of the characteristics of the total study participants and the final participants included in the multivariable analysis was also added in table 1 and the first paragraph of the results section. The included respondents were similar in all characteristics to the total number of respondents except in the educational level. The implication of this reduced sample size to the general finding has also has been added in the discussion. While previous article showed that people with lower educational background have lower access to dental treatment, this new article showed that due to the fact that the analysis sample in this study were better educated than the total respondent population, the influence of education on dental service utilization might only be underestimated.

Comment 11:- Results: Please insert the total sample size (n) in Table 1. *Response:-* The sample size has been added as an additional column. We also provided a comparison of the characteristics of the total study participants and the final participants included in the multivariable analysis

Comment 12:- Discussion: Overall the discussion section in its current form is weak and superficial. It might be worth including a thorough and integrated discussion of the findings with the existing literature.

Response:- The discussion has been expanded in each of the suggested sections.

Comment 13:- Discussion: Page 5: Sentences such as "Lack of awareness about oral health could be a reason behind the lower utilization of dental services" will be worth discussing a bit more.

Response:- The discussion has been expanded.

Comment 14:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the difference in AGE for the utilisation- authors can include some discussion on Dental anxiety as one of the potential reasons for low utilisation among participants <25 years.

Response:- Discussion and literature on dental anxiety has been added. The discussion for each paragraph has been expanded.

Comment 15:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the GENDER difference for the utilisation- some more discussion on why there exists contradictory evidence will be helpful. Also supporting evidence stated is primarily from developed countries. Is there any evidence from developing countries that can support the justification- given that women's perspectives and beliefs may differ culturally? Response:- The discussion has been expanded.

Comment 16:- Discussion: Suggest including similar discussions in other paragraphs on education, health behaviours, etc.

Response:- The discussion has been expanded.

Comment 17:- Discussion: In the limitations section, it will be helpful if the authors can include some discussion on the potential of bias arising due to self-reported data and residual confounders.

Response:- The discussion has been expanded.

Comment 18:- Discussion: A paragraph on the research and policy implications of this study is missing and will be worth including. This study has the potential to inform quidelines, or specific changes to existing policy or practice in Indonesia. Response:- The discussion has been expanded.

Comment 19:- Conclusion: A clear and precise conclusion will be helpful. *Response:-* The discussion has been expanded.

Comment 20:- Conclusion: Please clearly state whether age (what age group?), sex (male/female), education (low/high), and residential location (district/municipal) are indicators of low utilization.

Response:- The discussion has been expanded.

Competing Interests: No competing interests were disclosed.

Reviewer Report 16 July 2020

https://doi.org/10.5256/f1000research.26147.r66387

© 2020 Jaafar A. This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Azlan Jaafar 匝

Department of Periodontology & Community Oral Health, Faculty of Dentistry, Universiti Sains Islam, Nilai, Malaysia

The article is scientifically-well-written. No major issues related to methods or data analysis need to be highlighted. The authors have indicated the problem statement in the introduction on why they conduct the study. However, comments were given to improve the flow and content of the section.

The method is well-describe. The analysis performed is matched with the study design as recommended by others. The outcome measure of dental service utilization is following a well-versed definition by other researchers. However, there are some categorisations of independent variables that do not match the results. For example the age and dental status. The author stated that they are using ≤ 25 , 25- ≤ 50 , and ≥ 50 years old. However, in the results it was mentioned differently (less than 25, 25- ≤ 50 , and ≥ 50 . The age categorisation should not overlap thus I would like to suggest new categorisation ≤ 25 , 25- ≤ 50 , and ≥ 50 . Whereas, the dental status was informed in methods was "dentate vs edentulous" but in the results it mentioned, "not edentulous vs edentulous". Although it seems to give similar meaning but consistency in reporting is essential.

The rest including abstract, discussion, and conclusion is well-written. The citation provided is also updated evidence. I also have given some papers for citations to enrich the discussion part. Other related information such as data sources is also stated in the identification of originality of the data.

Please see this annotated pdf.

Is the work clearly and accurately presented and does it cite the current literature? $\ensuremath{\mathsf{Yes}}$

Is the study design appropriate and is the work technically sound? $\ensuremath{\mathsf{Yes}}$

Are sufficient details of methods and analysis provided to allow replication by others? $\ensuremath{\mathsf{Yes}}$

If applicable, is the statistical analysis and its interpretation appropriate? $\ensuremath{\mathsf{Yes}}$

Are all the source data underlying the results available to ensure full reproducibility? $\ensuremath{\mathsf{Yes}}$

Are the conclusions drawn adequately supported by the results? Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Dental Public Health

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Author Response 03 Apr 2021

Ninuk Hariyani, Faculty of Dental Medicine Universitas Airlangga, Surabaya, Indonesia

Reviewer(s)' Comments to Author:

Reviewer: 1. Azlan Jaafar

Department of Periodontology & Community Oral Health, Faculty of Dentistry, Universiti Sains

Islam, Nilai, Malaysia

Comment 1:- The article is scientifically-well-written. No major issues related to methods or data analysis need to be highlighted. The authors have indicated the problem statement in the introduction on why they conduct the study.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 2:- The method is well-describe. The analysis performed is matched with the study design as recommended by others. The outcome measure of dental service utilization is following a well-versed definition by other researchers.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 3:- There are some categorisations of independent variables that do not match the results. The author stated that they are using ≤ 25 , 25-<50, and ≥ 50 years old. However, in the results it was mentioned differently (less than 25, 25-50, and ≥ 50 . The age categorisation should not overlap thus I would like to suggest new categorisation <25, 25-50, and >50.

Response:- Thank you for the correction. The categorisations of < 25, 25-<50, and \geq 50 has been used throughout the text except the one you pointed out. The change has been made to make it consistent throughout the manuscript.

Comment 4:- The dental status informed in methods was "dentate vs edentulous" but in the results it mentioned, "not edentulous vs edentulous". Although it seems to give similar meaning but consistency in reporting is essential.

Response:- Thank you for the suggestion. The change of "dentate vs edentulous" has been made in Table 1, Table 2 and Table 3.

Comment 5:- The rest including abstract, discussion, and conclusion is well-written. The citation provided is also updated evidence.

Response:- Thank you for your constructive feedback on our manuscript.

Competing Interests: No competing interests were disclosed.

Comments on this article

Version 1

Author Response 30 Mar 2021

Ninuk Hariyani, Faculty of Dental Medicine Universitas Airlangga, Surabaya, Indonesia

Reviewer(s)' Comments to Author:

Reviewer: 1. Azlan Jaafar

Department of Periodontology & Community Oral Health, Faculty of Dentistry, Universiti Sains Islam, Nilai, Malaysia

Comment 1:- The article is scientifically-well-written. No major issues related to methods or data analysis need to be highlighted. The authors have indicated the problem statement in the introduction on why they conduct the study.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 2:- The method is well-describe. The analysis performed is matched with the study design as recommended by others. The outcome measure of dental service utilization is following a well-versed definition by other researchers.

Response:- Thank you for your constructive feedback on our manuscript.

Comment 3:- There are some categorisations of independent variables that do not match the results. The author stated that they are using ≤ 25 , 25-<50, and ≥ 50 years old. However, in the results it was mentioned differently (less than 25, 25-50, and ≥ 50 . The age categorisation should not overlap thus I would like to suggest new categorisation <25, 25-50, and >50.

Response:- Thank you for the correction. The categorisations of < 25, 25-<50, and \geq 50 has been used throughout the text except the one you pointed out. The change has been made (page 7 line 138-139 and page 11 line 210 and 212).

Comment 4:- The dental status informed in methods was "dentate vs edentulous" but in the results it mentioned, "not edentulous vs edentulous". Although it seems to give similar meaning but consistency in reporting is essential.

Response:- Thank you for the suggestion. The change has been made in Table 1 (page 22), Table 2 (page 23) and Table 3 (page 24).

Comment 5:- The rest including abstract, discussion, and conclusion is well-written. The citation provided is also updated evidence.

Response:- Thank you for your constructive feedback on our manuscript.

Reviewer: 2. A. Gupta

University of Melbourne, Melbourne, Vic, Australia **Comment 1:-** This is a very interesting paper but has some inconsistencies throughout. *Response:-* Thank you for your constructive feedback on our manuscript. Point by point responses to your comments is provided.

Comment 2:- Title: Clarify whether the paper focuses on exploring factors influencing HIGH or LOW (or both) utilisation of dental services in East Java, Indonesia *Response:-* The objective of this study was to see which of the included sociodemographic,

behavioural, and clinical factors influenced the existing dental service utilisation. The study does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we have detailed the study objectives in the abstract (page 2 line 31-33) and the introduction (page 6 line 107-109).

Comment 3:- Background: 3rd paragraph: Support the sentences with more and relevant evidence.

Response:- Some references have been added to support and extend the topic (in the 3rd paragraph page 4 line 71-74; and in the references page 13 line 303-305, page 18 line 341-343, page 20 line 386-390).

Comment 4:- Background: 5th paragraph: In the sentence, 'Despite.....2013b)' do you mean 'use of dental treatment' or 'UTILIZATION OF DENTAL SERVICES'? Some clarity will be helpful. *Response:-* The sentence has been revised (page 6 line 98-99)

Comment 5:- Background: In the sentence "However.....2013b)", the phrase 'treat utilization for dental issues' needs clarity.

Response:- Thank you for your comments. The consistent term of the utilization of dental services was used to reduce the ambiguity (page 6 line 104-105).

Comment 6:- Background: Some discussion on the QUALITY of the public dental service will be helpful. Further, some statistics on 'PRIVATE DENTAL CARE UTILIZATION' as compared to the public dental service will be helpful.

Response:- Some discussion has been added (page 5 line 87-92)

Comment 7:- Background: Revise the study aim for clarity- whether the paper aims to explore factors influencing HIGH or LOW (or both) utilization of dental services in East Java, Indonesia. *Response:*- The aim of this study was to see which of the included sociodemographic, behavioural, and clinical factors influenced the existing dental service utilisation. The study does not differentiate between low and high utilisation as the overall utilisation is low. To clarify this, we has detailed the study objectives in the abstract (page 2 line 31-33) and the introduction (page 6 line 107-109).

Comment 8:- Methods: Page 4, 2nd line: "Indicators of.....condition" seems inappropriate as it is meant to be the findings of this study. Suggest either deleting this sentence or adding the word 'POTENTIAL' at the start of this sentence. It will also be good if the authors can support this sentence with evidence, assuming that their choice of exposure variables was informed by previous literature.

Response:- Thank you for the suggestion. It has been adopted and the changes have been made (page 7 line 133-135)

Comment 9:- Methods: In the same paragraph as above- in the sentence 'East Java province..... districts), it will be helpful if the authors can expand on what they mean by 'where municipalities are usually **ahead** of the districts'.

Response:- Explanation has been added (page 8 line 144-145)

Comment 10:- Methods: Statistical Analysis: Authors mention 'no imputation was done for missing data' but no information (eg., n =?) on the missing data is provided. Please include the necessary information. Also, justification on how was missing data treated if no imputation was done will be helpful.

Response:- The total sample size of the final analysis has been added both in the method and Table 3 /multivariable analysis (page 8 line 159 and page 24, respectively). The comparison of the characteristics of the total study participants and the final participants included in the multivariable analysis was also added in table 1 (page 25) and the first paragraph of the results section (page 9 line 173-178). The included respondents were similar in all characteristics to the total number of respondents except in the educational level. The implication of this reduced sample size to the general finding has also has been added in the discussion (page 13 line 257-258).

Comment 11:- Results: Please insert the total sample size (n) in Table 1. *Response:-* The sample size has been added as an additional column (table 1 in page 22 column 2)

Comment 12:- Discussion: Overall the discussion section in its current form is weak and superficial. It might be worth including a thorough and integrated discussion of the findings with the existing literature.

Response:- The discussion has been expanded in each of the suggested sections (page 10-15)

Comment 13:- Discussion: Page 5: Sentences such as "Lack of awareness about oral health could be a reason behind the lower utilization of dental services" will be worth discussing a bit more. *Response:-* The discussion has been expanded (in the discussion section in page 11 line 215-224 and in the references in page 21 line 406-412; page 19 line 362-363; and page 24 line 477-478)

Comment 14:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the difference in AGE for the utilisation- authors can include some discussion on Dental anxiety as one of the potential reasons for low utilisation among participants <25 years.

Response:- Discussion and literature on dental anxiety has been added (in the discussion section in page 12 line 231-234 and in the references in page 22 line 431-433)

The discussion for each paragraph has been expanded (in the discussion section in page 12 line 234-243; page 13 line 250-255 and line 259-264; page 14-15 line 290-293 and page 15 line 302-308) and in the references (in page 18-24).

Comment 15:- Discussion: Can authors include a bit more discussion in each of the paragraphs below: In the paragraph that talks about the GENDER difference for the utilisation- some more discussion on why there exists contradictory evidence will be helpful. Also supporting evidence stated is primarily from developed countries. Is there any evidence from developing countries that can support the justification- given that women's perspectives and beliefs may differ culturally? *Response:-* The discussion has been expanded (discussion section in page 13 line 250-255 and in the references in page 18-24).

Comment 16:- Discussion: Suggest including similar discussions in other paragraphs on education, health behaviours, etc.

Response:- The discussion has been expanded (discussion section in page 13 line 259-264 and in the

references in page 18-24).

Comment 17:- Discussion: In the limitations section, it will be helpful if the authors can include some discussion on the potential of bias arising due to self-reported data and residual confounders.

Response:- The discussion has been expanded (discussion section in page 15 line 300-301 and in the references in page 18-24).

Comment 18:- Discussion: A paragraph on the research and policy implications of this study is missing and will be worth including. This study has the potential to inform guidelines, or specific changes to existing policy or practice in Indonesia.

Response:- The discussion has been expanded (discussion section in page 15 line 302-308 and in the references in page 18-24).

Comment 19:- Conclusion: A clear and precise conclusion will be helpful. *Response:*- The discussion has been expanded (conclusion section in page 16 line 313-315)

Comment 20:- Conclusion: Please clearly state whether age (what age group?), sex (male/female), education (low/high), and residential location (district/municipal) are indicators of low utilization. *Response:*- The discussion has been expanded (conclusion section in page 16 line 313-315)

Competing Interests: NA

The benefits of publishing with F1000Research:

- Your article is published within days, with no editorial bias
- You can publish traditional articles, null/negative results, case reports, data notes and more
- The peer review process is transparent and collaborative
- Your article is indexed in PubMed after passing peer review
- Dedicated customer support at every stage

For pre-submission enquiries, contact research@f1000.com

F1000 Research