

PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Regional differences in utilization of antenatal care and safe delivery services in Indonesia: Findings from a nationally representative survey.
AUTHORS	Tripathi, Vrijesh; Singh, Rajvir

VERSION 1 - REVIEW

REVIEWER	Dr Rita Kabra Department of Reproductive Health and Research World Health Organization 20, Avenue Appia, 1211 Geneva 27 Switzerland
REVIEW RETURNED	09-Aug-2016

GENERAL COMMENTS	<p>This is an important issue and publications on the subject are needed. Few comments to improve the draft-</p> <p>In abstract include implications of this study... what policy change you are addressing?</p> <p>Reference to MDGs and SDGs needs to be updated on page 3 and 15.</p> <p>On page 4 some parts of methodology are included in the introduction and results are included in the methodology. This needs to be corrected.</p> <p>Result section could be shortened and made to the point. It keeps going on and on.</p> <p>Discussion could be more strengthened including implications for policy and programmes for Indonesia</p>
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REVIEWER	Shigeko Horiuchi,NM,PhD St.Luke's International University,School of Nursing
REVIEW RETURNED	11-Aug-2016

GENERAL COMMENTS	<p>The results explanations are difficult to understand for reader. All the tables and the descriptions were too long to grasp the features.</p> <p>For example,at the table 1, the reader could not understand the meaning of figure inside parenthesis. Are there figures are percentage or something else?</p> <p>The reader could not understand with the explanation of manuscript using table 1, because the figure and explanation did not fit .</p> <p>Table 2 was also same conditions.The results explanation did not adjustment at the table 2's figures.</p> <p>The results showed each of the seven regions compare with many variables using basic statistics.These showed two variables</p>
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	relationship. If the author try to grasp the features of each region,the author should use multivariate analysis.
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REVIEWER	Edwin van Teijlingen Bournemouth University, UK
REVIEW RETURNED	25-Sep-2016

GENERAL COMMENTS	<p>ANC Indonesia.</p> <p>Page 2 The first line of the Abstract has two abbreviations which are not given ion full. "Background: Indonesia has shown a nominal increase in utilizing ANC services from 93% to 96% in the IDHS 2012 survey". Throughout the paper ensure all abbreviations are given in full on first use.</p> <p>Introduction I wonder whether details such as page 3 lines 24-29 are strictly needed "The country is divided into 34 provinces that comprise some 500 districts, divided into nearly 7,000 sub-districts in which there are almost 80,000 villages¹." I think the key information about the country is already given the previous sentences.</p> <p>Methods Also this research is based on secondary analysis which has strengths and weaknesses in general and related to this Indonesian data set in particular. The authors should have a closer look at their reference 11, whose authors even have 'secondary data analysis' in the title. 11. Sreeramareddy CT, Harsha Kumar HN, Sathian B. Time Trends and Inequalities of Under-Five Mortality in Nepal: A Secondary Data Analysis of Four Demographic and Health Surveys between 1996 and 2011. PLoS ONE 2013; 8(11): e79818. Surely one of the 'strengths and weaknesses', is that the data cover only ever-married women, hence it excludes unmarried women, obviously only about one percent of births were outside marriage in 2009-2009, but there might be regional differences. Page 5 lines 5-10 I find the definition of "safe delivery" very imprecise: "... is described as delivery attended by a general practitioner or obstetrician or nurse or midwife or village midwife or traditional birth attendant (TBA) or others." Who are these others, faith healers? Is there no requirement of any level of training/ recognition for TBAs at all? Moreover, this particular statement has no reference. Bell and colleagues in 2003 defined for Indonesia, deliveries by health professionals (doctor, nurse or midwife) and deliveries attended by 'non-health personal' (auxiliary midwife, relative, other, none). I would have thought the former constitutes safe delivery and the latter does not??</p> <p>Page 6 lines 49-55 should a lack of cultural insight "Most mothers were not working across the seven regions while most fathers were either in unskilled/ other occupations ..." Most women would be working very hard in rural Indonesia, the fact that they tell the interviewer that they are not in paid employment ('a job') does not mean they are not working every day on the family land, the vegetable garden, etc. Also page 10 line 3 "Most mothers were not working ..." The statement regarding employment is more nuanced</p>
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	<p>on page 8 line 32 “..ANC services compared to those not working outside home...”</p> <p>Page 8 lines 7-9 “A higher level of father’s education ...” should probably be “A higher level of fathers’ education ...” as it refers to more than one father. See correct use page 10 line 52.</p> <p>Throughout the article the authors should make sure that they always refer to association for effect. Page 9 lines 10-14 “Utilization of ANC services in Sumatra, Lesser Sunda Islands and Kalimantan regions is not affected by listening to radio and/or reading newspapers and magazines less than once a week compared to no ...” surely ‘affected’ cannot be used in cross-sectional study of this kind. Similarly page 14 line 52 the authors use the verb “positively impact ...”, were associated would be more appropriate.</p> <p>Page 15 The section ‘limitations’ I would have called ‘strengths and limitations’, I would add strengths and weaknesses of conducting secondary analysis on this particular data set.</p> <p>Conclusion Many editors do not like the introduction of new material in the Conclusion. You should mention SDGs in the Discussion or not at all.</p> <p>Grammar/style/typos Page 5 line 14 ‘data’ is plural from Latin, hence “Data was ...” should read: “Data were ...” Check throughout paper. Page 6 line 43-44 “Most births took place in rural areas than urban areas ...” This should be “More births took place in rural areas than urban areas ...” Page 8 lines 43-45 the sentence “... in Kalimantan there was a difference between skilled and unskilled workers but had no difference between those...” should probably read “... in Kalimantan there was a difference between skilled and unskilled workers but there was no difference between those...” Page 9 line 43 in English one would use: “consists of” or “comprises” NOT “comprises of”! Page 10 line 18 odd statement: “were reported alive.” should this not read: “were reported to be alive.” Page 15 line 3 perhaps better to use WHO preferred ‘low-income country’ than ‘developing country’. Page 15 lines 33-35 is slightly odd, since age will have changed not may have changed: “These variables may have changed since the birth of the child.”</p>
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VERSION 1 – AUTHOR RESPONSE

Reviewer: 1

Reviewer Name: Dr Rita Kabra

Institution and Country: Department of Reproductive Health and Research, World Health Organization, Geneva, Switzerland

Competing Interests: None

This is an important issue and publications on the subject are needed. Few comments to improve the draft-

In abstract include implications of this study... what policy change you are addressing?

Done

Reference to MDGs and SDGs needs to be updated on page 3 and 15.

Updated and the script has been adjusted accordingly.

On page 4 some parts of methodology are included in the introduction and results are included in the methodology. This needs to be corrected.

These have been corrected.

Result section could be shortened and made to the point. It keeps going on and on.

Sub-headings have been added and the results have been slightly shortened for easy reading without compromising with the content.

Discussion could be more strengthened including implications for policy and programmes for Indonesia

Slight changes and arrangements have been done to highlight policy changes.

Reviewer: 2

Reviewer Name: Shigeko Horiuchi, NM, PhD

Institution and Country: St. Luke's International University, School of Nursing, Japan

Competing Interests: None declared

The results explanations are difficult to understand for reader.

All the tables and the descriptions were too long to grasp the features.

Figure 1 is added to explain the data extraction for the study sample.

For example, at the table 1, the reader could not understand the meaning of figure inside parenthesis. Are there figures are percentage or something else?

The reader could not understand with the explanation of manuscript using table 1, because the figure and explanation did not fit.

Table 2 was also same conditions. The results explanation did not adjustment at the table 2's figures.

The Tables are revised to reflect the results and vice versa. An explanation has been added to the text. To explain Table 1 and 3: The percentages of ANC or Safe delivery column are derived within each category of independent factor. For example in Table 1, Age has 15-19 yrs, 20-24 Yrs, 25-29 Yrs and 30+ Yrs categories for 2744 cases of ANC. Column value 89 (75.4%) of age category 15-19 Yrs indicates that 89 cases of ANC constitute 75.4% whereas $100\% - 75.4\% = 24.6\%$ i.e. 29 cases are Non-ANC in this category. If we give within ANC percentages $(89/2744(0.03\%))$, $550/2744(20\%)$, $859/2744(31.3\%)$ and $1246/2744(45.4\%)$, these will not reflect the full picture of the independent variable for what we are looking for i.e. we cannot make out what number or percentage of Non-ANC cases will be in each corresponding category.

Table 2 and 4 are provided with chi-square p values and Odds ratios with 95% Confidence Interval (C.I.) corresponding to the reference category for each independent factor for ANC and Safe delivery outcomes. Chi-Square test gives the overall picture of significance. To know which category is significant with reference category, Odds ratios are provided with 95% C.I. to make the significance level of the variable further clear. Since 15-19 years is the reference category denoted by 1, above 30 years has odds of 0.14 which is interpreted as 14% compared to those in the 15-19 years. Hence,

only 14% women above 30 years of age utilize ANC services as compared to women in the 15-19 years.

The results showed each of the seven regions compare with many variables using basic statistics. These showed two variables relationship.
If the author try to grasp the features of each region, the author should use multivariate analysis.

There were more or less similar variables that were significant at univariate analyses for each region but there were very few numbers in each category in some regions and hence multivariate analysis for each region could not be performed. Multivariate analysis on the whole data set shows that region-wise differences are important.

Reviewer: 3

Reviewer Name: Edwin van Teijlingen

Institution and Country: Bournemouth University, UK

Competing Interests: none declared

ANC Indonesia.

Page 2

The first line of the Abstract has two abbreviations which are not given in full. "Background: Indonesia has shown a nominal increase in utilizing ANC services from 93% to 96% in the IDHS 2012 survey". Throughout the paper ensure all abbreviations are given in full on first use.

Done.

Introduction

I wonder whether details such as page 3 lines 24-29 are strictly needed "The country is divided into 34 provinces that comprise some 500 districts, divided into nearly 7,000 sub-districts in which there are almost 80,000 villages1." I think the key information about the country is already given the previous sentences.

The information is retained because it is important to understand the complexity of data collection method of the IDHS-2012.

Methods

Also this research is based on secondary analysis which has strengths and weaknesses in general and related to this Indonesian data set in particular. The authors should have a closer look at their reference 11, whose authors even have 'secondary data analysis' in the title.

11. Sreeramareddy CT, Harsha Kumar HN, Sathian B. Time Trends and Inequalities of Under-Five Mortality in Nepal: A Secondary Data Analysis of Four Demographic and Health Surveys between 1996 and 2011. PLoS ONE 2013; 8(11): e79818.

We can replace "Findings" in the title with "Secondary data Analyses", if the editor allows the change.

Surely one of the 'strengths and weaknesses', is that the data cover only ever-married women, hence it excludes unmarried women, obviously only about one percent of births were outside marriage in 2009-2009, but there might be regional differences.

Added.

Page 5 lines 5-10 I find the definition of “safe delivery” very imprecise: “.. is described as delivery attended by a general practitioner or obstetrician or nurse or midwife or village midwife or traditional birth attendant (TBA) or others.” Who are these others, faith healers? Is there no requirement of any level of training/ recognition for TBAs at all? Moreover, this particular statement has no reference. Bell and colleagues in 2003 defined for Indonesia, deliveries by health professionals (doctor, nurse or midwife) and deliveries attended by ‘non-health personal’ (auxiliary midwife, relative, other, none). I would have thought the former constitutes safe delivery and the latter does not??

Thank you for pointing this out. In rural areas, most women have deliveries at home. Deliveries conducted by the nurses, midwives or auxiliary nurses are safe deliveries. Inadvertently, a line had been deleted in the uploaded manuscript. This has been corrected and reference has been added.

Page 6 lines 49-55 should a lack of cultural insight “Most mothers were not working across the seven regions while most fathers were either in unskilled/ other occupations ...” Most women would be working very hard in rural Indonesia, the fact that they tell the interviewer that they are not in paid employment (‘a job’) does not mean they are not working every day on the family land, the vegetable garden, etc. Also page 10 line 3 “Most mothers were not working ...” The statement regarding employment is more nuanced on page 8 line 32 “..ANC services compared to those not working outside home...”

Not working outside home for money is defined and consistency is now maintained throughout the manuscript and the Tables.

Page 8 lines 7-9 “A higher level of father’s education ...” should probably be “A higher level of fathers’ education ...” as it refers to more than one father. See correct use page 10 line 52.

Line has been deleted due to shortening of manuscript length.

Throughout the article the authors should make sure that they always refer to association for effect. Page 9 lines 10-14 “Utilization of ANC services in Sumatra, Lesser Sunda Islands and Kalimantan regions is not affected by listening to radio and/or reading newspapers and magazines less than once a week compared to no ...” surely ‘affected’ cannot used in cross-sectional study of this kind. Similarly page 14 line 52 the authors use the verb “positively impact ...”, were associated would be more appropriate.

Agreed and Done.

Page 15

The section ‘limitations’ I would have called ‘strengths and limitations’, I would add strengths and weaknesses of conducting secondary analysis on this particular data set.

Done.

Conclusion

Many editors do not like the introduction of new material in the Conclusion. You should mention SDGs in the Discussion or not at all.

Shifted to Introduction.

Grammar/style/typos

Page 5 line 14 ‘data’ is plural from Latin, hence “Data was ...” should read: “Data were ...” Check

throughout paper.

Page 6 line 43-44 “Most births took place in rural areas than urban areas ...” This should be “More births took place in rural areas than urban areas ...”

Page 8 lines 43-45 the sentence “... in Kalimantan there was a difference between skilled and unskilled workers but had no difference between those...” should probably read “... in Kalimantan there was a difference between skilled and unskilled workers but there was no difference between those...”

Page 9 line 43 in English one would use: “consists of” or “comprises” NOT “comprises of”!

Page 10 line 18 odd statement: “were reported alive.” should this not read: “were reported to be alive.”

Page 15 line 3 perhaps better to use WHO preferred ‘low-income country’ than ‘developing country’.

Page 15 lines 33-35 is slightly odd, since age will have changed not may have changed: “These variables may have changed since the birth of the child.”

All of the above grammar/typos have been corrected.

VERSION 2 – REVIEW

REVIEWER	Edwin van Teijlingen Bournemouth University UK
REVIEW RETURNED	28-Oct-2016

GENERAL COMMENTS	<p>ANC Indonesia, paper has improved but is not quite perfect.</p> <p>There are is no cover letter with Authors' Responses. The authors should consider submitting such letter to guide the editor and reviewers to the key changes made in the resubmitted article.</p> <p>Strengths and limitations of the study The authors list only one strength and four weaknesses/limitations. Linking to my comment about a lack of cover letter with the re-submission, I wonder why the authors have not included my comment on the original submission about secondary analysis. In the original review I stated: “Also this research is based on secondary analysis which has strengths and weaknesses in general and related to this Indonesian data set in particular. The authors should have a closer look at their reference 11, whose authors even have ‘secondary data analysis’ in the title.” Please, note this is now reference 13 in the renumbered resubmitted paper. I am happy for the authors if they want to try to convince me that this is not secondary analysis and I have misunderstood their paper. I am not happy to be ignored.</p> <p>The final bullet point “... include child births ...” should read in English: “... include births ...”</p> <p>Discussion Why the repetition: “Since Indonesia is a large country geographically spread over 17000 islands ...”?</p> <p>References are messy, the authors present their journal names in three if not four different styles: (a) in full Health &Place; (b) abbreviated with full stops Soc. Sci. Med. ; (c) abbreviated without full stops J Adv Nurs ; not all title words in capital J Epidemiol community health. Please follow BMJ Open house style.</p> <p>Ref. 25 has a mistake, it should read: Simkhada B, van Teijlingen ER, Porter M et al. Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature. J Adv Nurs 2008; 61(3): 244-260.</p>
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VERSION 2 – AUTHOR RESPONSE

Reviewer's Comments to Author:

- The strengths and Limitations have been redone with three advantages and two limitations.
- The IDHS 2012 data had collected information both from Ever-married and Never married women in the age group 15-49. Hence, this is included as a strength of the study.
- The line in the Discussion has been changed to reflect the point.
- Referencing style has been corrected and is now according to the journal style.
- Ref. 25 has been corrected.

We hope that the editor and the reviewer now find the MS worthy of publication.

VERSION 3 – REVIEW

REVIEWER	Edwin van Teijlingen Bournemouth University UK
REVIEW RETURNED	30-Nov-2016
GENERAL COMMENTS	Just one more minor comment, please note 'World Health Organization' with a 'z' not 's', the authors use both in the references.