

PEER REVIEW HISTORY

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ARTICLE DETAILS

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| TITLE (PROVISIONAL) | Reliability of demographic and socio-economic variables in predicting early initiation of breastfeeding: A replication analysis using the Kenya Demographic and Health Survey data |
| AUTHORS | Matanda, Dennis; Mittelmark, Maurice; Urke, Helga; Amugsi, Dickson |

VERSION 1 - REVIEW

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| REVIEWER | Dr.Archana Patel Lata Medical Research Foundation and Indira Gandhi Government Medical College, Nagpur |
| REVIEW RETURNED | 12-May-2014 |

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| GENERAL COMMENTS | The stated objectives in the abstract indicate the reliability of variables to predict an outcome over different time periods. However the study aim states that the authors wish to examine the reliability of the regression model. These are two different objectives and not consistent. The population, practices and field realities change over time. The same variables may not remain relevant at different time periods. Therefore to conclude that they were not relevant at the time would be incorrect or to conclude that they are reliable because the same variables show association to the outcome at different time periods with different populations is naive. It is possible that each regression model could fit the data of that year well and fit statistics need to be reported to examine the fit of the model to the data used. |
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| REVIEWER | Charlotte Tawiah Agyemang Kintampo Health Research Centre Ghana |
| REVIEW RETURNED | 19-May-2014 |

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| GENERAL COMMENTS | This manuscript is well written and of high scientific rigour. However, there are some issues which the authors can address. 1. The authors should state how permission or ethical approval was obtained to use the datasets for their study. As it stands now, it is not clear whether or not ethical approval was obtained from the appropriate quarters in Kenya. 2. What was the duration of the study? When was this analysis done? |
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| | <p>3.The authors should describe the statistical model building approach used in arriving at the final model in the methods section</p> <p>4. Table 1 should be given a heading that clearly explain its content. E.g Characteristics of samples of what? This needs to be clearly defined. Are the authors referring to the socio-demographic variables? If so, then this should be clearly stated. There should also be a sub-heading on the lines 4 and 5 on table 1</p> <p>5. Headings or titles for tables for regression analysis should clearly specify whether they are adjusted or unadjusted logistic regression</p> <p>6. The authors should also provide the summary statistics for child's age and mothers' age in table 1. Also the average number of children aged 5 years and below for households should be mentioned.</p> <p>7.The authors should provide the total number of children less than 5 years and below for various years of DHS data used in table 1.</p> <p>8.Please use the term "sex" not "gender" in the tables to describe the difference between the boys and the girls. This is a biological difference not a social construction.</p> <p>9.Please provide numbers and percentages (n and %) for the various categories for each categorical variable included in the regression analysis for breastfeeding initiated later than an hour after delivery.</p> <p>10. For continuous variables such as child's age in table 4, can the authors specify the units in which they were measured? (in months or years)</p> |
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| REVIEWER | Ojo Melvin Agunbiade Department of Sociology and Anthropology, Obafemi Awolowo University Ile-Ife, Nigeria |
| REVIEW RETURNED | 21-May-2014 |

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| GENERAL COMMENTS | I think a few aspects of the manuscript reequires further elaboration to enhance readers' understanding of the core issues in the paper. |
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VERSION 1 – AUTHOR RESPONSE

REVIEWER 1: DR. ARCHANA PATEL

Issue: The stated objectives in the abstract indicate the reliability of variables to predict an outcome over different time periods. However the study aim states that the authors wish to examine the reliability of the regression model. These are two different objectives and not consistent. The population, practices and field realities change over time. The same variables may not remain relevant at different time periods. Therefore to conclude that they were not relevant at the time would be incorrect or to conclude that they are reliable because the same variables show association to the outcome at different time periods with different populations is naive. It is possible that each regression

model could fit the data of that year well and fit statistics need to be reported to examine the fit of the model to the data used.

Response: We have fixed this in Line 220, and added fit statistics (r^2) in Tables 2-4.

REVIEWER 2: CHARLOTTE TAWIAH AGYEMANG

Issue 1: The authors should state how permission or ethical approval was obtained to use the datasets for their study. As it stands now, it is not clear whether or not ethical approval was obtained from the appropriate quarters in Kenya.

Response: Ethical approval was obtained in Kenya, and this has been addressed (Line 234-236)

Issue 2: What was the duration of the study? When was this analysis done?

Response: We have indicated the periods of data collection, see Lines 228-230. The analysis of this paper started in October 2013.

Issue 3: The authors should describe the statistical model building approach used in arriving at the final model in the methods section

Response: This has been summarized in Figure 1 and now explicitly stated, see Lines 276-280.

Issue 4: Table 1 should be given a heading that clearly explain its content. E.g Characteristics of samples of what? This needs to be clearly defined. Are the authors referring to the socio-demographic variables? If so, then this should be clearly stated. There should also be a sub-heading on the lines 4 and 5 on table 1

Response: This is now addressed, see Table 1.

Issue 5: Headings or titles for tables for regression analysis should clearly specify whether they are adjusted or unadjusted logistic regression

Response: This is now addressed, see Lines 610,623 and 640.

Issue 6: The authors should also provide the summary statistics for child's age and mothers' age in table 1. Also the average number of children aged 5 years and below for households should be mentioned.

Response: We have included these descriptive statistics in text, see Lines 283-286.

Issue 7: The authors should provide the total number of children less than 5 years and below for various years of DHS data used in table 1.

Response: This is added to Table 1.

Issue 8: Please use the term "sex" not "gender" in the tables to describe the difference between the boys and the girls. This is a biological difference not a social construction.

Response: This has been rectified, see Tables 1 and 4.

Issue 9: Please provide numbers and percentages (n and %) for the various categories for each categorical variable included in the regression analysis for breastfeeding initiated later than an hour after delivery.

Response: Now addressed, see Table 1.

Issue 10: For continuous variables such as child's age in table 4, can the authors specify the units in which they were measured? (in months or years)

Response: This has been specified, see Table 4.

REVIEWER 3: OJO MELVIN AGUNBIADE

Issue: I think a few aspects of the manuscript require further elaboration to enhance readers' understanding of the core issues in the paper.

Response: We have worked hard to enhance readers' understanding through the edits in this version of the paper.