PEER REVIEW HISTORY

ARTICLE DETAILS

TITLE (PROVISIONAL)	MORBIDITY AND MORTALITY PATTERN OF PRETERM LOW BIRTH WEIGHT NEONATES ADMITTED TO REFERRAL HOSPITALS IN THE AMHARA REGION OF ETHIOPIA: RETROSPECTIVE FOLLOWUP STUDY
AUTHORS	Genie, Yalemtsehay; Kebede, Belete; Silesh, Mulualem; Tilahun, Desalew

VERSION 1 – REVIEW

REVIEWER	Mombo-Ngoma, Ghyslain CERMEL, Clinical Operations
REVIEW RETURNED	20-Nov-2021

GENERAL COMMENTS	This is a very interesting topic and the objectives are well described and the manuscript is easy to read. however, there are several points that need to be revised. Major comment: It is not clear what are the variables that have been included in the model to determine the risk factors associated with preterm low birth weight neonates' death. It is stated in the method section that variables with p<0.25 in the univariate analyses will be kept in the multivariate model. The outcomes of interest are both morbidity and mortality from the title to the statement of study objectives, but it seems the focus is on death only. This needs to be clarified either to redefine the study objectives to be the determinants of mortality in preterm LBW neonates admitted to the NICU or first analyse the morbidity of neonates admitted to the NICU by characterizing them by mother age and medical and obstetrical conditions, newborn age and sex… show how the morbidities are associated/distributed with maternal and neonate socio-demographic characteristics. From table 1 to table 4, another column could be added to include either odds ratios or p-values to see the univariate association that the variable may have with the outcome of interest (death in these tables). Also it may be important to show the duration from admission to discharge (alive) or to death and also adjust for that variable in the multivariate logistic regression model.

VERSION 1 – AUTHOR RESPONSE

REVIEWER #1
1. This is a very interesting topic and the objectives are well described, and the manuscript is easy to read. However, there are several points that need to be revised. Thank you very much
2 Major comment
It is not clear what are the variables that have been included in the model to determine the risk factors associated with preterm low birth weight neonates' death. It is stated in the method section that variables with p<0.25 in the univariate analyses will be kept in the multivariate model. The outcomes of interest are both morbidity and mortality from the title to the statement of study objectives, but it seems the focus is on death only. This needs to be clarified either to redefine the study objectives to be the determinants of mortality in preterm LBW neonates admitted to the NICU or first analyze the morbidity of neonates admitted to the NICU by characterizing them by mother age and medical and obstetrical conditions, newborn age and sex… show how the morbidities are associated/distributed with maternal and neonate sociodemographic characteristics. Thank you for your concern, and we also share your respective concern and suggestion.
Based on your suggestion to solve any confusion about the outcomes of interest (both morbidity and mortality), we have made the analyses on the morbidity of neonates admitted to the NICU by characterizing them by mother age and medical and obstetrical conditions, newborn age and sex and other characteristics.
Also, we have made additional statistical analysis to our data to show how the comorbidities are distributed with maternal and neonate sociodemographic characteristics. (See Table 5).
The revised manuscript had improved to report both outcomes (morbidity and mortality). But the binary and multivariate logistic regression was done only for determining the factors of mortality (Death).
Morbidity and mortality also defined at operational definition in the revised manuscript. Our intention in the study was to show the Pattern of morbidity in preterm low birth weight neonates and the mortality outcome with its determinants against many neonatal and maternal characteristics in order to generate evidence on morbidity and mortality for improving survival to this risky group of participants.
3. From table 1 to table 4, another column could be added to include either odds ratios or p-values to see the univariate association that the variable may have with the outcome of interest (death in these tables). Great! We accept and took into consideration
We have added one additional column to every table to report p-values of univariate association that the variable may have with the outcome of interest (death).
4 Also, it may be important to show the duration from admission to discharge (alive) or to death and also adjust for that variable in the multivariate logistic regression model.
Thank you for your important issue, and we are happy to do so.
Based on your suggestion, we have made analysis again with considering of length of hospital stay (from admission to discharge or death in NICU) as one predictor variable for mortality outcome (death).In the revised manuscript after considering duration of hospital stay, there were some rearrangements/ changes on p-value and AOR of other predictor variables. Finally the multivariate logistic regression analysis indicates that duration of hospital stay is one of the independent predictor for neonatal mortality. (See table 1 and table 6)

General responses: we authors have made many important improvements to our revised manuscript and try to follow the journal guideline. If anyone has additional comments and suggestions, we are

happy and welcome to correct and use as learning opportunity for further improvements
Regards: