ABSTRACT

Background: Hyperglycemia in pregnancy is among the commonest health challenges among pregnant women. Infants born from these women are at risk of developing complications such as macrosomia, hyperglycemia, perinatal asphyxia, cardiac and respiratory problems, birth injuries, and congenital malformations. This study aims at assessing the clinical profile of neonates born to hyperglycemic mothers at a tertiary hospital in Tanzania. **Methods:** A cross-sectional study was done among women who had hyperglycemia during pregnancy, admitted from January 2020 to September 2021 at Muhimbili National Hospital (MNH). A total of 130 files (of hyperglycemic women) were reviewed. Data were analyzed descriptively using SPSS version 26, categorical variables were analysed using frequencies. Mean and standard deviation were used to summarize continuous variables. The chi-square test was used to assess associations of Glucose control measures and the neonates' characteristics. The p-value < 0.05 was considered as statistically significant. **Results**: A total of 130 files of mothers with hyperglycemia were included in the study. There was a total of 130 newborn deliveries, two-thirds, 67.7% being through cesarean section (CS) whereby elective CS and emergency CS accounted for 47.7% and 20% respectively. For newborns, 45.4% had abnormal birth weight (low birth weight 22.3% and macrosomia 23.1%). Moreover, 20% of these children presented with a low Apgar score, however there was no documented neonatal death. **Conclusion**: The prevalence of neonatal complications in mothers with glucose intolerance is high in our settings. Emphasis on lifestyle modification among pregnant women as primary prevention should be advocated to minimize neonatal complications. **Recommendation**: Further studies should be done to explore on the long-term neonatal outcomes. Care providers should be ready to take care of these newborns who need special attention at delivery.