ABSTRACT

Intrapartum foetal weight estimation using only symphysio-fundal height as a tool can be an important aspect of intrapartum care. This will help to reduce maternal and neonatal morbidity and mortality. It is a cheap non-invasive clinical method that estimates foetal weight during labour, an idea of which can help in early birth preparedness, referrals and complication readiness, especially for weights deviating from the normal foetal weight ranges.

The aim of this study was to assess foetal weight using symphysiofundal height and compare this with the actual birth weight within six hours post delivery.

The study was a cross-sectional study of a consecutive series. Three hundred and twenty nine women were enrolled into the study from the labour ward of Plateau State Specialist Hospital. After they had met the inclusion criteria and were in active phase of labour, consents were gotten and an interviewer administered questionnaire was filled out. The age range of the respondents was between 15 years and 43 years. Majority of them were married (98.8%) and educated (96.1%) to either a primary, secondary or tertiary level. Primiparous women formed 30.4%, multiparous 57.8% and grand multiparous women formed 11.9% of the total respondents. Of the 329 respondents, 1.8% (6) had medical problems before pregnancy while 13.3% (44) of them were treated for one medical problem or the other during pregnancy.

The symphysio-fundal height of each parturient was measured using a tape and weight of the foetus was estimated from a fitted birth weight normogram that had been derived by Onah HE. The results showed 99.4% (327) of the foetuses had normal birth weights between 2.5kg and 4.0kg when estimated from the normogram. The mean actual birth weight was 3177.23g ± 316.51g while the mean estimated weight from the normogram was 3337.71g ± 277.96g. Also the mean SFH was 37.71cm ± 1.28cm and the mean SFH from the normogram was 37.81cm ± 1.20cm. A regression analysis revealed that SFH could be used to
predict foetal weight intrapartum. A correlation analysis was also done which was statistically significant (45%) showing that there was an association between SFH and the actual birth weight. This followed a sensitivity of 99.7% and a specificity of 8.3% of SFH as a tool. Multiple logistic regression showed the sociodemographic characteristics had no effect on the foetal weight (both estimated and actual).

In conclusion, SFH measurement can be used to estimate foetal weight intrapartum. It is a cost beneficial, non-invasive, safe and an easy to do procedure that could be taught to other health workers both in the rural and urban areas, considering the lack of equipments, poor power supply and man power.