Patterns of Maternal Weight Gain During Pregnancy and Birth Weight

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Anthropometric parameters are an important indicator of health and nutritional status comprising the whole span of mans life. However, they are not of the same degree of simplicity and sensitivity in assessing the public health status. During recent decades many studies have attempted to examine the relationships of these measurements in order to present simple alternatives for similar purposes, resulting in a simple health technology which enjoys inexpensiveness, simplicity, reliability and feasibility.[1]

Sizes at birth are a significant indicator for predicting neonatal health and future outcome. Low birth weight, as a well known risk factor associated with increased morbidity and mortality, has been studied extensively.[1,2]

An attempt is made to evaluate the utility of Mid Arm Circumference (MAC) to detect the Low Birth Weight (LBW) during neonatal period. Measurement of MAC is a simple and valid method of screening for low birth weight babies. Birth weight is one of the most sensitive and reliable predictors of the health of any community. Detection of low birth weight immediately at birth is of paramount to ensure infants survival.[3]

Anthropometric indicators are useful tools for screening women at nutritional risk, monitoring nutritional status and predicting unfavorable outcomes related to pregnancy.[4] Strong correlation between Mid Upper Arm Circumference (MUAC) with weight and Body Mass Index (BMI) suggesting that MUAC can be used to estimate BMI, and detect nutritional disorders.[5]

Due to technical difficulties in measuring birth weight in developing countries, several studies have shown that different anthropometric measurements at birth can predict birth weight and can be used as valid indicators of low birth weight.[6-8]

An article appeared in this issue entitled: "Patterns of weight gain and birth weight amongst Indian women" attempts to elaborate a reliable association in family health circle. Low weight gain during pregnancy and MUAC are associated with the increased risk of low birth weight. MUAC can be used as an indicator and alternative to birth weight categories for risk assessment and may serve as a simple health technology which can be comprehended by mothers of various backgrounds easily using a very cheap non stretchable strip. However, due to environmental variations, local reference values are recommended for evaluating risks realistically.

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