INTERFACES BETWEEN ANTHROPOMETRIC AND NON-ANTHROPOMETRIC INDICATORS: IMPLICATIONS FOR QUICKLY IDENTIFYING FOOD AND NUTRITIONALLY INSECURE HOUSEHOLDS IN MALAWI

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ABSTRACT
Unlike time consuming and expensive anthropometric measurements, though precise, this study had identified some non-anthropometric measurements (socio-economic indicators) that are equally valid for monitoring food and nutritionally insecure households in Malawi. The research had established relationships between anthropometric and non-anthropometric indicators in order to verify the appropriateness of socio-economic indicators as valid indicators for malnutrition and food insecurity measurements. They have equally been tested through validity, relevance, and timeliness criteria outlined by different researchers over years. Precise indicator were anthropometric measurement namely Mid-Upper-Arm-Circumference (MUAC), Weight-for-Height (WHZ) measuring wasting), Weight-for-Age (Waz measuring underweight), and Height-for-Age (HAZ measuring stunning). Among others, non-anthropometric indicators were various socio-economic variables like household education level, access to safe sanitation, access to safe water, access to social amenities and prevalence of diarrhea. These indicators had been found to be cost effective, quick and country specific, as well as, potentially pinpoint the underlying association of malnutrition and food insecurity at household level so that interventions could be done quickly. In this study, it has been found that most socio-economic variables were equally valid indicators for monitoring poverty and nutritionally insecurity households. Some of the major findings were better nutritional status of children was positively correlated with increasing level of education of mothers and of household heads (irrespective of sex). This was also true for wealth of the household, where number of rooms as an indicator of wealth, was found positively correlated with good health and nutrition of the children. Also access to safe sanitation as defined by availability of toilet facilities, and accessibility of health centers were positively correlated with good nutritional status and health of the households (especially children), respectively. Furthermore, it examined the strength of association between socio-economic variables and precise indicators. Where access to safe water like public tap is positively and significantly (P<0.01) correlated with Mid-Upper-Arm-Circumference (MUAC) and Height-for-Age-Z-score (HAZ). VIP/sanplat toilet was found significantly (P<0.01) correlated with Weight-for-Age-Z-score (WAZ) and HAZ. But prevalence of diarrhea and fever was

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negatively and significantly (P<0.01) correlated with MUAC, WAZ and Weight-for-Height-Z-score (WHZ). Similarly distance to market, under 5 clinic and health centers were negatively and significantly (P<0.01) correlated with Height-for-Age-Z-score.