

Maternal and child under-nutrition in rural and urban communities of Lagos state, Nigeria: the relationship and risk factors

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Abstract

Background

Poor nutritional status of mothers has a direct and indirect consequence on their own health and that of their children. The objective of this study was to determine the relationship between nutritional status of mothers and their children and the risk factors for under-nutrition among mothers and children in rural and urban communities of Lagos State, Nigeria.

Methods

This was a cross sectional survey conducted using the multistage random sampling technique. A total of 300 mother-child pairs were studied, consisting of 150 each from rural and urban communities. Under-nutrition in mothers and children was determined using standard criteria.

Results

The prevalence of under-nutrition among mothers was significantly higher in rural than urban communities (10.7% vs. 2.7%, $p = 0.014$). The prevalences of underweight and stunted children

were also significantly higher in rural than urban communities (19.4% vs. 9.3%, $p < 0.001$) and (43.3% vs. 12.6%, $p < 0.001$) respectively. In rural communities, the risk of stunted mothers having children with stunting was about 7 times higher than those who were not (OR 6.7, 95% CI = 1.4-32.0, $p = 0.007$). In urban communities, undernourished mothers have about 11 and 12 times risk of having children with underweight and wasting respectively (OR 11.2, 95% CI = 1.4-86.5, $p = 0.005$) and (OR 12.3, 95% CI = 1.6-95.7, $p = 0.003$) respectively. The identified risk factors for maternal and child under nutrition differs across rural and urban communities.

Conclusions

The prevalence of maternal and child under-nutrition is high in both communities although higher in rural communities. Efforts at reducing the vicious cycle of under-nutrition among mothers and children should concentrate on addressing risk factors specific for each community.

Keywords:

Mother; Children; Under-nutrition; Risk factors; Rural; Urban; Nigeria