

The Kolkata Mobile Teaching Kitchen Project: Assessment of the Knowledge, Attitudes, and Practices of Mothers after participating in a Microenterprise Intervention Pilot.

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Introduction

Malnutrition represents a burden for individuals, families and the broad society. In India, malnutrition affects the population significantly, especially women and children. The Need for Nutrition Education/Innovation Programme (NNEdPro) Global Centre for Nutrition and Health along with Indian partners launched the Mobile Teaching Kitchen (MTK) Project in two slums of Kolkata, India. The MTK is a multi-phase, public-health research initiative.

Aims

To assess the impact of the pilot MTK project on mothers and children's outcomes.

Methodology

This project was conducted in RG Kar Canal Slum and Chetla Slum in Kolkata, from 2018 to 2019. For 6 months, mothers were trained by a team of nutritionists and trained volunteers through a "See one, Do one, Teach one" learning model. Mothers were taught the principles of healthy cooking, and how to transfer acquired knowledge. Then, a mobile kitchen unit allowed mothers to prepare healthy menu templates and give nutrition education. Mothers' knowledge, attitudes and practices (KAP) were measured through questionnaires. Mothers and children had measurements of anthropometry and clinical signs of micronutrient deficiencies assessed before and after the intervention.

Results

The MTK educated 12 slum-dwelling mothers and 9 children. Knowledge, attitudes and practices, showed statistically significant improvements overall ($P < 0.05$) following the intervention, specifically for 'Understanding healthy nutrition for children' and 'Sources of protein'. Furthermore, 12 signs of deficiency were identified in the mothers before the intervention and only 3 post-intervention, with the children having 2 signs prior to the intervention and 1 after. No significant changes were noted in anthropometry over the assessment.

Conclusions

Whilst the sample size of this study is small, MTK pilot showed promising results. Expanding the MTK model as an educational tool and microenterprise led by the beneficiaries can be a useful strategy to combat the global burden of malnutrition whilst also empowering marginalised communities.

