Abstract

Background

Nutrition in the first 1,000 days of life (during pregnancy and the first two years) is critical for child growth and survival. Poor maternal, infant and young child nutrition (MIYCN) practices are widely documented in Kenya, with potential detrimental effects on child growth and survival. This is particularly a problem in slums, where most urban residents live. For example, exclusive breastfeeding for the first six months is only about two per cent. Innovative strategies to reach slum residents are therefore needed. Strategies like the Baby Friendly Hospital Initiative have proven effective in some settings but their effectiveness in resource-limited settings, including slums where many women do not deliver in hospital, is questionable. We propose to test the effectiveness of a home-based intervention on infant feeding practices, nutrition and health outcomes of infants born in two slums in Nairobi, Kenya.

Methods/Design

The study, employing a cluster-randomised study design, will be conducted in two slums in Nairobi: Korogocho and Viwandani where 14 community units (defined by the Government’s health care system) will form the unit of randomization. A total of 780 pregnant women and their respective child will be recruited into the study. The mother-child pair will be followed up until the child is one year old. Recruitment will last approximately one year and three months from September 2012 to December 2013. The mothers will receive regular, personalised, home-based counselling by trained Community Health Workers on MIYCN. Regular assessment of knowledge, attitudes and practices on MIYCN will be done, coupled with assessments of nutritional status of the mother-child pairs and diarrhea morbidity for the children. Statistical methods will include analysis of covariance and multinomial logistic regression. Additionally,
cost-effectiveness analysis will be done. The study is funded by the Wellcome Trust and will run from March 2012 to February 2015.

Discussion

Interventions aimed at promoting optimal breastfeeding and complementary feeding practices are considered to have high impact and could prevent a fifth of the under-five deaths in countries with high mortality rates. This study will inform policy and practice in Kenya and similar settings regarding delivery mechanisms for such high-impact interventions, particularly among urban poor populations.