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Effect of the Food Distribution on Household Food Security Status in Iran

Authors: Delaram Ghodsi, Nasrin Omidvar, Hassan Eini-Zinab, Arash Rashidian, Hossein Raghfar

Abstract: Food supplementary programs are policy approaches that aim to reduce financial barriers to healthy diets and tackle food insecurity. This study aimed to evaluate the effect of the supportive section of Multidisciplinary Supplementary Program for Improvement of Nutritional Status of Children (MuPINSC) on households' food security status and nutritional status of mothers. MuPINSC is a national integrative program in Iran that distributes supplementary food basket to malnourished or growth retarded children living in low-income families in addition to providing health services, including sanitation, growth monitoring, and empowerment of families. This longitudinal study is part of a comprehensive evaluation of the program. The study participants included 359 mothers of children aged 6 to 72 month under coverage of the supportive section of the program in two provinces of Iran (Semnan and Qazvin). Demographic and economic characteristics of families were assessed by a questionnaire. Data on food security of family was collected by locally adapted Household Food Insecurity Access Scale (HFIAS) at the baseline of the study and six month thereafter. Weight and height of mothers were measured at the baseline and end of the study and mother's BMI was calculated. Data were analysed, using paired t-test, GEE (Generalized Estimating Equation), and Chi-square tests. Based on the findings, at the baseline, only 4.7% of families were food-secure, while 13.1%, 38.7% and, 43.5% were categorized as mild, moderate and severe food insecure. After six months follow up, the distribution of different levels of food security changed significantly (P<0.001) to 7.9%, 11.6%, 42.6%, and 38%, respectively. At the end of the study, the chance of food insecurity was significantly 20% lower than the beginning (OR=0.796; 0.653-0.971). No significant difference was observed in maternal BMI based on food security (P>0.05). The findings show that the food supplementary program for children improved household food security status in the studied households. Further research is needed to assess other factors that affect the effectiveness of this large scale program on nutritional status and household's food security.

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