



# Discussion Paper BRIEFS

Food Consumption and Nutrition Division of the International Food Policy Research Institute

*Discussion Paper 151*

## **Childcare and Work: Joint Decisions Among Women in Poor Neighborhoods of Guatemala City**

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**H**igh rates of urbanization and increasing levels of female participation in the labor force are increasing demand for non-parental childcare in Latin America. Emerging shifts in the structure of urban production toward more manufacturing and industry mean that employment opportunities for women are expected to occur increasingly in settings incompatible with childcare. Market work and childcare are activities that become more separate and compete for a mother's time. In addition, rural-to-urban migration often means moving away from extended family, which decreases mothers' access to informal childcare givers.

This situation is especially true in Guatemala, where the growing rate of urbanization has also been accompanied by an increase in the number and percentage of households headed by single women, and where half of urban female-headed households are poor and one-quarter are indigent.

The higher unemployment rates and fewer working hours observed for female than for male urban household heads in Guatemala are hypothesized to be in part due to coordination difficulties between hours and location of work and the lack of availability of childcare. The scarcity of childcare options is especially crucial for unmarried women, who often choose informal sector jobs for their flexibility despite their low returns.

Does availability of childcare affect women's work and earnings? This study attempts to answer this question by analyzing work, childcare arrangements, and earnings of mothers in poor urban neighborhoods of Guatemala City. The study is based on data from a random sample of 1,300 mothers with preschool children residing in one poor residential zone of Guatemala City in 1999.

### ***Conceptual Model***

To underpin the discussion, the authors devise a conceptual model of women's labor supply and childcare choice as interrelated decisions. Several sets of factors influence the demand for various types of childcare arrangements, including the need for mother substitutes for care, whether her work is in her home or at a remote location, and the number and ages of her preschool children. The availability, price, and quality of various mother care substitutes will also influence her choice.

Conditional on her choice to be in the labor force, a higher wage, greater household income, and work hours should each increase demand for all forms of nonparental childcare through positive income effects. Mother's earning potential is expected to raise demand for day-care services because it increases the opportunity cost of her leisure time. Demand for higher quality, more reliable childcare services is expected to respond positively to household income and maternal education. Ethnicity and family background variables may capture differences in cultural preferences and attitudes regarding acceptable forms of childcare.

### ***Data and Methodology***

The data were designed by the authors and collected as part of an impact evaluation of the *Hogares Comunitarios* government sponsored day-care program by the International Food Policy Research Institute.

This report differs from previous studies on childcare choice that take mothers' labor force participation as given. Although those who demand childcare are for the most part working mothers, if a mother's work status is influenced by

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the availability of childcare, any examination of the determinants and consequences of childcare choice should not be conditioned upon her work status. This survey was designed to address this difficult issue. Information on a mother's current situation, her family background, her current household, her children, and her community was solicited from *all* mothers, working and nonworking, so that care choices could be examined in conjunction with a mother's labor-force activities.

Given the general difficulties of estimating an earnings equation even without the *double* control for selection into the labor force and into type of childcare, the authors experiment with two approaches to estimate maternal earnings. First, they use a "quasi-reduced form" equation, whereby the reduced-form determinants of wage and hours are included along with a selection term for entry into the labor force and the predicted probability of using formal day care. They then employ an intermediate strategy by estimating the two components of earnings separately.

Estimating hours and wage equations separately controls for the two selection factors each time. This lends insights into the pathways through which childcare prices influence maternal earnings; if the influence is through wages, mothers may have greater earning potential without having to sacrifice more time (leisure and other types).

### **Results**

The results indicate that the decision to work and to choose formal childcare are in fact joint

decisions for poor working mothers. Life-cycle and household demographic factors have important effects on both decisions, while mother's education is an important determinant of utilization of formal day care. Higher household wealth reduces her chances of working; however, her status within the household (as proxied by the value of assets she brought to her marriage) increases the likelihood of her working. Higher time costs of using formal day care reduce utilization of formal care. Controlling for endogeneity of labor market participation and formal day-care use, the price of formal day care has negative but insignificant impacts on mother earnings. This suggests that interventions to increase the availability and lower the time costs of formal day care in poor urban areas have the potential to raise labor-force participation rates of mothers residing in such neighborhoods, but not necessarily their earnings conditional upon their having entered the labor force.

**Keywords: childcare, day care, working mothers, Guatemala**

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