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Evaluating the Health Effects of Micro Health Insurance Placement: Evidence from Bangladesh

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Summary. — We examine the impact of Micro Health Insurance placement on health awareness, healthcare utilization, and health status of microcredit members in rural Bangladesh, using data from 329 households in the operating areas of Grameen Bank. The results are based on econometric analysis conditioned on placement of the scheme and show that placement has a positive association with all of the outcomes. The results are statistically significant for health awareness and healthcare utilization, but not for health status and these findings are potentially important for the expansion and replication of Micro Health Insurance.

Key words — microcredit, Micro Health Insurance, Grameen Bank, Bangladesh

1. INTRODUCTION

Microcredit provides collateral free small loans, especially to women, to enable them to develop household-based micro enterprises. A key aim is to break the vicious circle of poverty where low income leads to low saving, therefore low investment, thus low income. The importance of microinsurance emanates from the limitations of conventional loan-based microcredit programs in protecting the poor from all sorts of vulnerabilities. Although microcredit has been shown to generate various beneficial outcomes, there is also evidence that not all sectors of the poor can benefit. One such group is those who experience severe health shocks, which reduce work capacity and investment and require a redirection of resources to the consumption of healthcare. Due to increased evidence that microcredit does not help the poorest poor, welfarists stress the value of adding auxiliary services to improve the effectiveness of the programs (e.g., Bhatt & Tang, 2001; Woller, Dunford, & Woodworth, 1999; Woller & Woodworth, 2001). Insurance can protect vulnerable people from risks and shocks when existing coping strategies fail. However, traditional health insurance markets are almost entirely absent in the rural areas of Bangladesh. There is no social health insurance scheme even in the formal sector, and in addition the government has not been able to meet the healthcare needs of the rural poor (BBS, 2006; IMF – International Monetary Fund, 2005; NIPORT – National Institute of Population Research, 2009).

Grameen Bank [1] (GB) has played a major role in developing microcredit in Bangladesh. The organization emerged from an action research project by Professor Muhammad Yunus in 1976, examining the possibility of providing banking services for the rural poor. GB as a microfinance institution (MFI) provides a number of services including loans and savings schemes. It added a Micro Health Insurance (MHI) scheme in the late 1990s, in order to protect its clients from health risks with the aim of preventing their economic downfall. Other MFIs have also introduced MHI schemes with similar aims. These schemes may increase the health status of the participating households via increased health awareness and utilization of modern healthcare. Improved health status may lead to higher productivity, higher labor supply, fewer workdays lost, and reduced healthcare expenditure. In addition, if households are insured against health risk, they may invest in high return riskier assets because they do not need to retain cash or to hold highly liquid assets for precautionary purposes. Kochar (2004) finds, from a study in rural Pakistan, that overall savings of households rise in the expectation of future illness of adult males, but investments in productive assets decline. The empirical verification of this issue is important for policy decisions concerning the expansion and replication of MHI schemes.

However, to date there has been very little research on the added effects of MHI. Mosley (2003) examined the added effects of the MHI scheme of BRAC [2] on outcomes such as assets, household expenditure, current saving, educational expenditure, and education level. However, the study did not explore the impact on health outcomes. The evidence was not conclusive because the study was conducted at a very early stage of program development using a small sample. Other MHI studies have concentrated mainly on health outcomes: healthcare utilization and the equality of access to healthcare in the Philippines (Dror, Koren, & Steinberg, 2006; Dror *et al.*, 2005); healthcare use and out of pocket expenditure in Senegal (Jutting, 2004); utilization of healthcare and financial protection from health shocks in Tanzania (Msuya, Jutting, & Asfaw, 2007); and cost recovery in Rwanda (Schneider & Hanson, 2007). However, there is no existing evidence regarding the impact of MHI on health outcomes in Bangladesh. This is a serious omission given the size of the microcredit sector in Bangladesh; according to the Palli Karma Sahayak

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Foundation (http://www.pksf-bd.org) in December 2005, there were about 700 MFIs and 33.17 million microcredit members in Bangladesh.

In this paper, we have explored the added effects of MHI on a broad set of health outcomes: health awareness, utilization of modern healthcare, and perceived health status. We use data collected from a primary survey of 329 households in three areas where GB operates microcredit programs. The areas are distinguished according to their experience of MHI: areas with at least 5 years experience of MHI, those with 2 years or less experience, and those where MHI is not available. Our evidence is based on econometric analysis of the impact of placement of MHI. This paper is organized as follows. Section 2 presents a brief description of health, microcredit, and MHI programs in Bangladesh; Section 3 describes the methodology; Section 4 gives the findings; Section 5 provides a discussion on the findings; and Section 6 provides the conclusion.

2. BACKGROUND

The constitutional commitment of the government of Bangladesh is to provide basic medical care to all its citizens. The government has been investing substantially since independence to develop the health infrastructure as well as strengthen health and family planning services with special attention to the rural population. Providing Primary Health Care (PHC) to attain "Health for All" is the major thrust of the health program. There is a three-tier mechanism for providing healthcare in rural areas: (i) domiciliary services provided by a Health Assistant and Family Welfare Assistant at the household level; (ii) Health and Family Welfare Centers at the union level;[3] and (iii) upazila Health Complexes (UHCs) at the sub-district level. UHCs provide both outpatient and inpatient services including maternal and child health and family planning; they are the main center for implementing the Essential Services Package (ESP) which was designed to attain Health for All. In addition to public provision of healthcare, there is a large private sector in Bangladesh, that includes both not-for-profit and for-profit organizations; the former is relatively small and run by NGOs, MFIs, and charitable institutions.

Despite this infrastructure for healthcare delivery, the government has largely failed to meet the healthcare needs of the rural population and this is due mainly to supply side constraints. Firstly, problems in retaining doctors in UHCs due to poor working conditions; secondly, a lack of proper input and skill mix due to under-resourcing and recruitment problems; thirdly, unfriendly and unapproachable behavior of the healthcare providers which discourages contact from the local population; and finally, the charging of unofficial fees. Thus, although there is under utilization in many UHCs, the majority of patients seek healthcare from private providers, especially from informal providers who often have no formal medical qualifications (BBS, 2006).

Microinsurance refers to "the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved" (Churchill 2006:12). In order to expand into areas of social protection not covered in conventional loan-based microfinance, GB set up an MHI scheme for the poor to insure against some health risks.[4]

The key features of the GB MHI scheme are shown in Table 1. GB sells annually renewable prepaid insurance cards to its clients and offers primary healthcare directly from health centers that it operates. The service package comprises mainly curative care and maternity and child healthcare. Some services such as ultrasound and ECG, which are not available under the government ESP, are also provided. Non-cardholders can also seek healthcare from these health centers, but they are charged higher prices than cardholders. The annual premium is low; coverage for a family of up to six costs approximately 1.3 times the average daily male wage for GB microcredit members and 1.7 times for non-members. The main benefits include reduced medical consultation fees (40% of the fee to non-cardholders), discounts on drugs and tests, hospitalization benefits, and free annual health checks and immunization. There are three main ways that someone can join the scheme: GB members can join at weekly microcredit meetings where health workers explain the benefits of joining the MHI scheme; GB members can also enrol during the domiciliary visits provided by the health visitors; and GB members and non-members may also buy insurance cards directly from the health centers. GB members can have the costs deducted directly from their GB savings accounts.

3. DATA AND METHODOLOGY

(a) *Data*

We collected primary data from a household survey in GB areas in 2006. At this time the MHI scheme was being operated in 32 GB branches; 14 of these had MHI for at least 5 years; and the remaining 18 for less than 5 years (two for 2 years or less). GB microcredit and MHI programs are identical across these branches. In order to construct a meaningful study design, we stratified branches into three distinct types: (i) GB1 – branches with at least 5 years experience of MHI; (ii) GB2 – branches with 1 or 2 years experience; and (iii) GB3 – branches without MHI.

The sample selection was multistage. One GB branch was selected randomly from each of GB1 and GB2; these are Madhabpur and Pakutia, respectively. Madhabpur is located at Singair upazila (sub-district) of Manikgonj district; it has had a microcredit scheme since 1983 and MHI was added in 1996. Pakutai is at Nagarpor upazila of Tangail district; it has had a microcredit scheme since 1986 and MHI was added in 2004. One GB branch (Joy Mantap) was purposively selected from GB3; it was chosen from the same upazila (Singair) as Madhabpur, in order to make a meaningful comparison group. There are eight GB branches in Singair and an MHI scheme has been operating in its three unions (Madhabpur, Shaharil, and Jamsaha) since 1996. Among the remaining five unions where GB has not yet placed its MHI scheme, Joy Mantap has had a microcredit scheme since 1983; it is adjacent to Madhabpur and they are connected by a main road. GB planned to introduce its MHI scheme into Joy Mantap in the near future,[5] which may reduce program placement bias in this design.

Around 96% of GB members are female, so we selected only female members for our study. A list of all the villages holding at least one female center of GB was prepared for each selected area. In the second stage, two villages from each area were selected randomly; a total of six villages. In the third stage, two female microcredit centers were selected randomly from each village where more than two microcredit centers existed. Each credit center consists of 40–50 microcredit members and they usually live in a particular area of the village. A list of current GB microcredit member households was made in each selected GB loan center, using information obtained from the respec-