Volume 2, No. 1, April 2012

THE JOURNAL *of* SOCIAL BUSINESS

Social Intervention Towards Sustainability

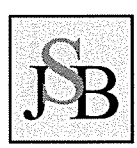
First Issue of
The Journal of Social Business
During the Second Year 2012

THE JOURNAL *of* SOCIAL BUSINESS

An International Quarterly Journal

Volume 2, No. 1, April 2012

ISSN 2045-1083



Published By

The Centre *for* Development (C*f*D) Scotland

Glasgow University Union Complex

32 University Avenue

Glasgow G12 8LX, Scotland, UK

www.journalofsocialbusiness.net

The Journal Committee of The Centre for Development (CfD) offers a Warm and Cordial Thanks to All – Article Contributors, Subscribers (Individuals, Institutions, Organisations, etc), Readers and P romoters during the Challenging Year One 2011.

NOTE:

The Editors apologise for the author order reversed in the article 'The Value of Social Return on Investment in Public Sector Procurement Decisions', published in JSB Vol 1, No, 4, December 2011. The names of authors should have appeared in the order as Katherine Hanlon and Alex de Ruyter.

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Health and Microfinance: Leveraging the Strengths of Two Sectors to Alleviate Poverty

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Abstract: Freedom from Hunger and five microfinance institutions (MFIs) from Benin, Bolivia, Burkina Faso, India, and the Philippines tested whether MFIs could sustainably offer health-related services with positive health and social impacts for client. The health services ranged from education, health-financing (loans, savings and micro-insurance), to linkages to health providers and health products. Impact research included client interviews; focus-group discussions; a randomised controlled trial; and cost-benefit analyses at the institutional level. Positive benefits were detected at the client and household levels, including improved health knowledge and

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behaviours, and in access to health services and products. These findings support the idea that MFIs offer large and growing distribution networks that can provide an integrated set of services to improve both health and financial security of poor families.

Keywords: microfinance, MFI, health, poverty, access, cross-sectoral

1. Introduction

MFIs reach more than 205 million households,[3] providing credit and other financial services to help the poor start and grow small businesses, build productive assets, and better cope with financial shocks. Although access to financial services is undeniably important to poor families, it is insufficient on its own to address the multi-dimensional challenges of poverty. Ill-health and the inability to access health care are key factors both leading to and resulting from poverty (World Bank) and the financial and time costs of illness and seeking treatment represent a large burden on households (McIntyre et al 2006; Russell 2004). MFI clients and staff report that the cost of illness causes difficulties with loan repayment and savings deposits, often requiring clients to use their business loans and other household assets to pay for health-care expenses. Clients report low utilisation of health services and delays in seeking care, citing barriers of cost, geographic access, cultural beliefs, lack of trust in providers, and inadequate information about how to prevent and treat illness.

MFIs are well positioned to play a cross-sectoral role in reaching the poor with a range of simple but important health services. MFIs have long-term, trusting relationships with clients, mostly women, and bring them together regularly over months and years to repay loans and deposit savings. These group meetings can also provide established distribution points for health-related information, products, and services. Microfinance providers take an interest in the health of their clients for both business reasons and because they care about their social welfare.

This interest is reflected in a small but growing number of MFIs that are providing various types of health services as a part of their product and service offerings to clients. In 2009 Freedom from Hunger conducted an informal global survey of organisations offering both financial and health services. Information obtained on 89 organisations in the resulting

[3] The State of the Microcredit Summit Campaign Report 2012 reported 3,652 microfinance institutions reaching 205,314,502 clients as of December 2010.

dataset indicate that the microfinance and health interventions are well-dispersed geographically, with 37 percent in Asia, 26 percent in Sub-Saharan Africa and 29 percent in Latin America and the Caribbean. Most of the MFIs reported providing group-based education, although referrals to health providers, the direct provision of health services, and health microinsurance were also reported by 20 percent of the MFIs. Additional interventions were mentioned, such as facilitating access to affordable medicines, healthcare vouchers, support for community water and sanitation, mobile services or treatment for a single health condition such as tuberculosis. (Leatherman et al 2011, 2012)

Pioneering organisations that include BRAC (Bangladesh), Grameen (Bangladesh), and ProMujer (in several countries in Latin American) have made health interventions part of their work from the start. By improving the health of clients and communities, the health programmes of these organisations reach millions with health education, health services, and health financing products. The health protection models of these organisations have provided a source of inspiration to others, such as Bandhan in India (discussed below), which adapted key features of the BRAC model to create its own unique health programme. Yet despite the considerable success of these organisations and a growing number of other MFIs throughout the world, the evidence of the impact of linking health and microfinance and the potential for replication by others is still not widely documented or understood by practitioners, policy makers, and investors.

In 2006, Freedom from Hunger launched the Microfinance and Health Protection (MAHP) initiative to test the feasibility and impact of adding health interventions to financial services with MFIs in Benin (Projet d'Appui au Developpement des Micro-Entreprises – PADME), Bolivia (Credito con Educacion Rural – CRECER), Burkina Faso (Réseau des Caisses Populaires du Burkina – RCPB), India (Bandhan) and the Philippines (Center for Agriculture and Rural Development – CARD). Our aim was to document both the feasibility of broader integration of health across a range of types of MFIs and locations and to add to the global evidence base on the impact on poor families. This paper reports results of this initiative in terms of health-related impacts for clients, their families, and, in some cases, their communities.

2. Methods

2.1 Market Research

Market research at each MFI generated data regarding the perceived needs of clients and families and the availability and current patterns of use of local health resources. Data were collected using Participatory Rapid Appraisal (PRA) tools and focus-group discussions with clients, MFI staff, and local health providers. Secondary sources, such as available epidemiological data, were consulted (Metcalfe and Reinsch 2008). The results confirmed a significant burden of ill-health and provided a detailed understanding of health access issues and coping strategies of the MFI clients. Overall, the research showed that the clients wanted and needed both health services and financing products that would work together to improve access to preventive and routine care, while also protecting from the financial shock of more serious illnesses.

Three main barriers to health emerged to provide the conceptual framework for the design and implementation of health-related interventions:

- Insufficient knowledge and information about health risks, health-related behaviours, and appropriate use of health services;
- Inadequate access to effective and appropriate health services and products;
- Inability to afford necessary health services.

2.2 Design and Pilot-Testing of Health Intervention Packages

Context-specific packages of health services and products were developed at each MFI and introduced in 2007 as outlined in Table 1 [overleaf].

2.3 Evaluation

Quantitative and qualitative data were collected from client interviews (some with baseline and endline analyses), focus-group discussions, interviews with staff and health-care providers, and regularly reported MFI financial indicators. At PADME (Benin), a randomised, controlled trial (RCT) examined the impacts of health education in all-female and mixed-gender groups. Since it was not possible to measure health

Table 1: Health Protection Interventions Developed by MFIs

MFI (Country) **Total Number of Clients** **Health Program Outreach as of December 2009**	**Health Knowledge and Information**	**Access to Health Services and Products**	**Health Financing**
Bandhan (India) Total Clients: 1.9 Million Health Program Outreach - 51,900	Health education provided in community Education reinforced by individual visits from trained community volunteers	Health products (e.g. oral rehydration salts, oral contraceptives, antacids, etc.) sold and delivered locally by community health volunteers Referrals to local providers	Health loans
CARD MRI (Philippines) Total Clients - 991,474 Health Program Outreach - 152,424	Health education at credit meetings	Discount network of private health providers	Linkage to national health insurance program with loans to finance premium payments
CRECER (Bolivia) Total Clients - 102,212 Health Program Outreach - 26,296	Health education at credit meetings	Mobile services provided through "health days" in local communities Referrals to health providers Contract linkages with private health providers	Health loans
PADME (Bénin) Total Clients - 48,962 Health Program Outreach - 11,290	Health education at credit group meetings	Distribution of insecticide-treated mosquito nets (1000 nets distributed)	
RCPB (Burkina Faso) Total Clients - 671,909 Health Program Outreach - 59,746	Health education at credit group meetings		Health savings Health loans

outcomes of the interventions within the available time and resources, the evaluation of benefits to clients was organised around the following key process dimensions of health:

- *Responsiveness.* The extent to which programmes addressed client need and demand.
- *Change in Knowledge and Behaviour.* Changes in client knowledge and health behaviours that would be expected to affect prevention

and management of common diseases and planning for illness.

- *Improvements in Access and Use of Services and Products.* Impact on client ability to access needed health services, including increased geographic access and affordability.

The research and evaluation studies were carried out over a two-year period, after programme start-up. Detailed descriptions of research methods and the complete findings from studies at each MFI are available for reference (see Freedom from Hunger Research Reports). While not every indicator in each study showed significant change, many did, and some of the more significant changes across the dimensions of interest are presented in the tables below. Mixed results or negative findings were limited; primarily in areas of hand-washing (India), management of childhood diseases (Benin), and some behaviours-related to malaria and HIV/AIDS (Benin). Our intention is to influence policy and practice in this emerging field of integrating microfinancing with community health interventions; therefore, we are presenting the findings that can guide programming in the future.

2.4 Limitations and Constraints

Several aspects of the design and implementation of the health interventions proved challenging to the evaluation process:

- Rapid expansion of the health programmes – in some cases more than 10 times as many participants as originally anticipated – changed the number, geographic location, and diversity of target populations reached and made it difficult to compare indicator measures before and after the health protection interventions were introduced, and between intervention and non-intervention areas.
- With the exception of the education at RCT at PADME, the health interventions were not randomly assigned, precluding the ability to establish causality between the provision of the health services and subsequent client knowledge and behaviour change.
- All client data were self-reported with risk of subjective bias and may not accurately represent actual behaviours.
- In the case of PADME (Benin), changes in MFI leadership led to service interruptions that may have impacted how the health programme was implemented across the treatment and control areas.

These limitations were anticipated and addressed by the use of a multiplicity of mixed methods, enabling the comparison of findings using more than one study and approach. This is particularly important given the reliance on self-reported data. In some cases, quantitative data show only small, though statistically significant impact. Yet these same indications of positive impact are echoed and even amplified in qualitative studies. While the triangulation of results and findings are not conclusive, it provides additional support for the conclusion that there was movement in the direction of positive impact across the studied health dimensions.

3.0 Findings

3.1 Responsiveness to Client Needs

The assessment of client responsiveness was based on client satisfaction, recommendation of services to others, and intent to repeat use. Qualitative data were collected through client focus groups and interviews and are summarised in Table 2 [opposite].

Across all programmes, clients reported high levels of satisfaction with the availability and features of the health interventions, indicating they would recommend the services to others. Health loans, savings, and insurance were reported as meeting client needs for safe, secure, and affordable sources of funds to finance health-care expenses; the intent to repeat use of health loans was widely reported. Clients at RCPB and CRECER repeatedly reported that they valued access to health loans through their MFI over seeking funding from family and friends with the accompanying uncertainty and perceived loss of dignity. At CARD, the only MFI to experiment with health micro-insurance, 87% of enrolled clients continued their insurance after two years.

3.2 Changes in Health Knowledge and Behaviour

In each MFI, clients received health education designed to improve both knowledge and behaviour for the prevention and management of illness.

New education modules were developed and delivered focusing on financial planning for health and rational use of available health services. The MFIs also extended previously designed educational modules on prevention and management of malaria, HIV/AIDS prevention and integrated management of childhood illness.

Table 2: Responsiveness of Health Services and Products

MFI	Findings
Bandhan (India)	**Health Education** - 100% of focus-group participants reported that they § were satisfied with education and had gained new knowledge § would recommend to others **Health Loans** § 84% of clients were relieved they could access health loans § 98% would recommend the loan to others, and 80% would take out the loan again **Health Products** § 90% of groups were satisfied with product availability and also asked for additional products
CARD (Philippines)	**Health Microinsurance** (with premium loans) § 94%–98% of clients indicated the insurance was affordable § 100% of clients in focus groups would recommend to others
CRECER (Bolivia)	**Health Education and Mobile Health Days** § 82% of clients were satisfied with the number of education sessions § 76% were satisfied with content § 83% of participants felt comfortable with care received at health fairs **Health Loans**: § Clients expressed high satisfaction with availability of health loans (77%), interest rates (80%) and size of loan (88%) § 100% of clients who had used a health loan would do so again
PADME (Benin)	**Health Education and Distribution of Nets** § Availability of mosquito nets and health education was important factor in overall client satisfaction with the MFI's credit program
RCPB (Burkina Faso)	**Health Loans and Savings** § High level of satisfaction with access to health loans (100%) and health savings (71%)

Four of the MFIs delivered the education through their credit officers and as part of regularly scheduled credit-group meetings. In India, Bandhan adapted a model from BRAC (Bangladesh), in which separate staff were hired and trained to deliver education in monthly health forums for entire communities. This education was reinforced during home visits by trained community volunteers, who also sold a range of health products, including oral rehydration salts, oral contraceptives, antacids, analgesics, antiseptic solutions, bandages, and sanitary napkins. Table 3 [overleaf] summarises examples of knowledge and behaviour changes across three of the implementing MFIs.

Table 3: Changes in Health Knowledge and Behaviours

MFI and Education Topics	Findings	Research Methods
Bandhan (India) Care of newborns, feeding of babies and treatment of child diarrhea	Increase of 17 percentage points (from 75% to 92%) in clients who knew about exclusive breast-feeding for six months* (n_1=240; n_2 = 62) Increase of 24 percentage points (from 54% to 77%) in number of clients who knew to dry and wrap newborns* (n_1=151; n_2=60) Increase of 27 percentage points (from 71% to 98%) in number of clients who knew how soon after birth an infant should be breastfed* (n_1=260; n_2=62) **Health Behaviours** Increase of 35 percentage points (from 61% to 96%) in women in sample who had or were caring for child 12 months of age or younger who reported breastfeeding child within one hour of birth* (n_1=98; n_2=57) Increase of 16 percentage points (from 39% to 55%) in women in sample reporting they had introduced complementary foods into a child's diet at age six months or older* (n_1=106; n_2=48) Increase of 28 percentage points (from 60% to 88%) in women in sample with a child who had diarrhoea in the last 10 months who reported treating the child with ORS* (n_1=10; n_2=42)	Baseline (n1) and follow-up (n2) studies administered about one year apart to clients in villages with health program.
CARD (Philippines) Planning and saving ahead for illness	**Health Savings Behaviours** 15% increase in women who reported talking to a family member about saving money for future medical needs Increase of 13 percentage points (79% to 92%) in women who reported were saving to prepare for a future illness or medical emergency*	Client surveys before and after education using Lot Quality Assurance Sampling (LQAS) methodology (n=90)
* Statistically significant at $p \leq 0.05$		

PADME (Benin) Malaria prevention education and distribution of insecticide treated bed nets. HIV/AIDS prevention education	**Malaria Prevention Knowledge** Knowledge that mosquito nets and insecticide-treated nets could prevent malaria: Difference of +6 percentage points for mixed groups (men and women) with education (n=807) compared to mixed groups without education (n=899)* Knowledge that pregnant women and children under age five are at high risk for malaria: Difference of +8 percentage points for all groups with education (n=1 766) compared to groups without education (n=1 859)* **HIV/AIDS Prevention Knowledge** Knew that AIDS is not transmitted by mosquitoes, sharing food or supernatural means: Average difference of +6 percentage points for all groups with education (n=1 766) compared to groups without education (n=1 859)* Knew where to get a condom: Difference of +6 percentage points for all groups with education compared to groups without education*	Randomized control trial (RCT) evaluation in 138 villages where credit was provided to all-female groups and mixed (male and female) groups. Half of each type of group received education and credit, and half of the groups received only credit.

* Statistically significant at $p \leq 0.05$

In India, where the education was targeted at maternal and infant health and hand-washing, we observed significant improvement of knowledge about maternal health, care of newborns, child-feeding, and management of diarrhoea, but not for hand-washing.

In the Philippines, where CARD's education emphasised the risks and costs of illnesses, the need to save money to prepare for health needs, and use of CARD's discounted provider network, women reported saving more money for health-related expenses. At PADME (Benin), credit with and without education on HIV/AIDS and malaria were randomly assigned to groups in different villages with a total of four different interventions: all-female groups with credit only; all-female groups with credit and education; mixed-gender groups with credit only; and mixed-gender groups with credit and education. The results indicate that villages receiving health education performed better than credit-only villages in

knowledge gain and behaviour change. However, no significant differences were found in certain indicators of important behaviour change: use of mosquito nets, numbers sleeping under nets or numbers with treated nets in the home, reported use of a condom during last sexual intercourse, or women having talked to their husbands about AIDS. Out of the four interventions, the mixed-gender groups with education performed better in knowledge and behaviour change than all-women groups with education. This unexpected result is perhaps understandable in the context of rural Beninois culture in which women often rely on the financial and nonfinancial support or permission from men in their lives in order to make key decisions or implement changes.

It is of interest that the positive differences in health knowledge and behaviours at PADME were detected in samples of the general population in villages where credit groups received education, and not just among PADME clients. This suggests impact beyond the firsthand participants in the credit and health education programme. A similar spill-over effect was observed at Bandhan, where clients reported much higher and statistically significant levels of providing advice to others on breast-feeding, ante- and neonatal care, and treating respiratory illness and diarrhoea following the introduction of the health education programme than before.

3.3 Changes in Access to and Use of Health Services

A major need of MFI clients was to have more reliable access to health services with respect to both geographic access and affordability. A range of mechanisms was developed to link or extend access for clients to local health services and products, in lieu of the MFI developing and providing health services directly. These included the training and supervision of community health promoters and health product distributors, discounted referral arrangements with private providers, and mobile health 'fairs' with diagnostic and preventive services.

Four of the MFIs also included financial products in their health programmes, as requested by clients, to pay for and manage the costs of illness and accidents. MFIs in India, Bolivia and Burkina Faso developed individual health loans with lower interest rates than the microenterprise loans and with more flexible repayment terms. A health savings product at RCPB (Burkina Faso) enables clients to establish savings accounts designated solely to pay health expenses. The Filipino MFI (CARD) enrols clients in PhilHealth (the government-sponsored health insurance

program) on a voluntary basis, provides loans to pay the annual premium, and remits the premium payments to PhilHealth.

Table 4 [below and overleaf] summarises findings from the various interventions to increase geographic and financial accessibility.

Table 4: Linkages to Health Services and Products and Financing

MFI and Intervention	Findings	Research Methods
Bandhan (India) Health loans, community health workers, health product sales	**Access/Use of Services** Women who had received active advice and/or referrals from community health volunteers for: • Children with diarrhoea in the past three months (81%, n=52) • Children with acute respiratory problems in the past two weeks (80%, n=180) • Neonatal care (77%, n=81) 40% of new mothers (n=78) were visited by a community health worker within 48 hours of birth 41% of respondents had purchased ORS from the village health volunteers (n=180) **Financing** 62% felt able to afford other necessities as a result of loan availability 33% indicated that without a loan, they would have delayed treatment	Client interviews conducted as part of follow-up study one year after implementation of interventions. Individual in-depth interviews with health loan users (n=65)
CARD (Philippines) Health microinsurance, with loans to pay premium; discounted network of health providers	**Access/Use of Services** 9% of clients reported use of a network-preferred provider 100% indicated a positive experience with accessing a network provider and would recommend to others **Financing** 88% of clients with insurance reported that the insurance "helped a lot" 97% indicated that this insurance gave them protection from health emergencies 35% indicated that the insurance covered more than one-half of their total medical expenses; 58% that it covered half or less.	In-depth client interviews conducted one-and-half years post-introduction of intervention In-depth interviews of randomly selected clients who had enrolled in the insurance (n=40)

CRECER (Bolivia)	**Access/Use of Services**	
Health loans Mobile health days	Clients seeking preventive care for themselves increased by 5.2 percentage points (9.4% to 14.6%, p=.07)	Baseline (n=240) and endline (n=247) studies conducted 2 years apart
	Clients seeking preventive services for themselves and additional family members increased 8.3 percentage points (from 1.5% to 9.8%)*	Interviews of randomly selected clients who had participated in a "health day" (n=41)
	24% of mobile health day users reported never having visited a medical provider before.	
	Financing	
	Recipients reported reduced use of microenterprise loans for health purposes	Interviews of randomly selected clients who 1) access to and used health loans (n=41); 2) had access to but did not use a health loan (n=27); 3) clients who had no access to health loans (n=21).
	Clients with health loans and with access to health loans reported less frequently that costs prevented them from seeking medical treatment in the past year	
RCPB (Burkina Faso)	**Access/Use of Services**	Interviews with randomly selected clients with access to health savings and health loans (n=96) and of clients without these products (n=96).
Health savings Health loans	Clients in the intervention area reported higher use of preventive care (24% compared to 9% in non-intervention area)*	
	Financing	
	Clients in the intervention area were 2.6 times more likely to feel somewhat or very satisfied with their preparations to meet future health expenses*	
	Clients in the intervention area were 3.7 times more likely to feel somewhat to very confident that they would be able to save for future health-care expenses*	

* Statistically significant at $p \leq 0.05$

Overall, the findings suggest that the interventions creating linkages between MFI clients and health providers resulted in several benefits: services were more geographically accessible, choice of providers was increased (especially private providers), and affordability was improved though negotiated discounts of fees. The findings are insufficient to predict how much such health programmes will increase appropriate use of services by MFI clients. For example, although a large percentage of women in India reported receiving referrals from the trained

community health volunteers and many thousands of CARD clients in the Philippines have access to a discounted provider network, data that accurately tracked and measured the number who actually sought care during the study period was not collected. However, the finding at CRECER that 24% of health fair attendees had never previously seen a medical provider, along with clients at CRECER and RCPB who reported higher use of preventive services in the intervention areas as compared to areas where clients had less access to services, suggest that the health interventions will support greater access and use over time.

Health loans, savings, and insurance are perceived by clients as having improved their ability to access care and manage larger health-care expenses. Clients also reported that the MFI health financing products provided alternatives to loans from family members and neighbours and therefore greater privacy regarding their health needs. At CARD, the only MFI to experiment with health micro-insurance, the unusually high level of re-enrolment is an additional indicator of strong client valuation of this financial product.

Importantly, findings suggest that health loans enabled clients to reduce waiting times or gain access to treatment that they might not have otherwise. In addition to client reports from CRECER that suggest the cost of care may be less of a barrier for health loan users than non-loan users, clients also reported that without the health loans, they would have resorted to borrowing from family members (53.8%), selling personal belongings (24.4%), taking a loan from another institution (14.6%), and 12.2% would not have sought care at all. Similar findings from India indicate that one-third of health loan clients would have delayed or not received recommended treatment. At RCPB, clients with access to health savings and loans indicated they were able to seek treatment more quickly and reported greater use of preventive services.

However, not all financial worries were eliminated. Health loan sizes are limited, and clients at Bandhan and CRECER reported that the loans often did not cover all health expenses, sometimes leaving members with a need to borrow from other sources. Health insurance for CARD members provides coverage of many hospital expenses, yet 58 percent of interviewed clients who had used the insurance reported that it covered one-half or less of their total costs of care, with the difference made up from savings and borrowing from families or friends.

4. Discussion

In terms of health education, our results are consistent with those from other research in which the combination of health education and microfinance services was associated with significant improvements in client health knowledge and practice (Leatherman et al 2011, 2012).

Examples include: treatment of diarrhoeal illness In the Dominican Republic (Dohn et al 2004); breastfeeding, and management of diarrhoea in Ghana and Bolivia with resulting behaviour changes and significant height and weight-for-age improvements for children of participants (Dunford 2002); and knowledge of malaria prevention and treatment (including purchase and use of mosquito nets) in Ghana (De LaCruz et al 2009). Together, these findings indicate that the impact of health education provided by MFIs can be both significant and realised within relatively short periods of time.

The use of health loans and health savings as part of the array of financial instruments available to the poor to weather the impact of illness has not been widely tested and reported in the literature. Year-long financial diaries from hundreds of poor families in India, Bangladesh and South Africa (Collins et al 2009) revealed how irregular and uncertain incomes challenge the poor to meet basic household-consumption needs, including health care. The average poor household used 8 – 10 different types of financial instruments, both formal and informal. While they continued to use informal sources (loans from families, moneylenders, savings groups, etc.), they strongly valued the reliability of the formal instruments available from MFIs. This is consistent with our findings that clients valued health loans, health savings, and health insurance as one of several important sources of health financing available to cope with health expenses.

The experience of CARD with micro-insurance, as a product for financing and risk management of illness, is also consistent with conclusions from other studies (Dror et al 2002). MFIs have the capacity to utilise existing low-cost delivery channels to enrol poor families and collect premiums, and to provide financing so that annual premiums can be paid over time in small, regular payments. MFI client education can be targeted toward insurance literacy and toward goals of reducing the incidence and cost impact of common diseases. Additional research is needed to look at the impact of these and other health financing

interventions on both health and financial security of poor families over longer time periods.

The MFI-negotiated provider contracts and referral arrangements, the use of community-health volunteers to provide advice and encourage clients to seek preventive and sick care, and mobile health fairs that bring providers directly to remote areas, helped mitigate some of the barriers to care faced by the rural poor. Providers demonstrated willingness and enthusiasm for forging relationships with the MFIs to reach greater numbers and at price points that enabled more clients to afford and access care. Private- and public-health providers in Bolivia, India and the Philippines quickly recognised the opportunity afforded by the MFIs to help them to efficiently extend their services to otherwise difficult or unreached families and increase their market share.

Beyond the benefits observed for MFI clients, the provider linkages also appear to yield community-level benefits. At Bandhan, the health educators and village-level health volunteers have forged informal relationships with public-health providers and informal providers, meeting with them and inviting their attendance to community health forums to help improve accuracy and consistency of health information and to coordinate efforts in support of improved health practices. As an example, Bandhan's health volunteers work with the public-health service as extenders of local health campaigns, such as oral polio vaccine distribution. CRECER's regular health fairs are open to relatives and friends of clients, and are periodically organised as multi-day, community-wide events with health education, screening, and diagnostic services available for very low or no cost. CARD's provider network that offers expanded choice and reduced costs for clients and their families is also intended to help retain health providers in the locale. Health providers of all types are in short supply in the Philippines and especially in rural areas, yet CARD has successfully recruited and retained a growing network of providers, who cite benefits that include increased number of patient visits and professional satisfaction from the opportunity to reach more of the underserved.

5. Conclusions

In conclusion, we find that MFIs offer large and growing distribution networks that can provide services to improve both health and financial security with value accruing to multiple stakeholders. Relatively modest investments to support integration of health and financial services can yield substantial financial and non-financial benefits for the MFIs, their clients, and the communities in which they work. Other research from in-depth cost and benefit studies conducted during this initiative presents evidence that the health protection options are practical and low-cost for MFIs to provide, and that they provide competitive advantages by attracting and retaining clients (Reinsch, Dunford and Metcalfe 2001). As evidence of the MFIs' ability to sustain and extend such services, by mid-2010, all of the MFI partners were actively expanding their health programmes to reach greater numbers of clients. Linkages with MFIs offer health-care providers and micro-insurers feasible, low-cost delivery channels to reach remote areas and populations with simple yet effective health services and products.

Acknowledgements

The authors of this paper thank all of the staff and clients from our Microfinance Institution partners who devoted their time and expertise to develop, pilot, and evaluate integrated health services at their MFIs: Bandhan, CARD (Center for Agriculture and Rural Development), CRECER (Credito con Educacion Rural), PADME (Projet d'Appui au Developpement des Micro-Entreprises), and RCPB (Reseau des Caisses Populaires du Burkina). We also acknowledge many staff, interns and others from Freedom from Hunger who assisted with the research and evaluation studies, as well as several research firms and collaborators including:: AC Nielson and GfK Mode Ltd. (India); CARD Research Unit (Philippines); PRIME and EMCON (Bolivia); Institute for Empirical Research in Political Economy (Benin and Burkina Faso); Innovations for Poverty Action, John Brett (University of Colorado); and Benjamin Crookston (University of Utah School of Medicine). We also acknowledge and thank the Bill & Melinda Gates Foundation for their support and funding of Freedom from Hunger's Microfinance and Health Protection initiative from 2006 through 2010.

References

Collins, D, Morduch J, Rutherford, S, and Rutheven, O (2009): *Portfolios of the Poor: How the World's Poor Live on $2 a Day*. Princeton, NJ: Princeton University Press.

De La Cruz, N, Crookston, B, Gray, B, Alder, S and Dearden, K (2009): 'Microfinance against Malaria: Impact of Freedom from Hunger's Malaria Education when Delivered by Rural Banks in Ghana', *Transactions of the Royal Society of Trop Med &Hyg*, 103(12), Pp1229–36.

Dohn, A L, Chavez A, Doshn, M, Saturria, L and Pimental, C (2004): 'Changes in Health Indicators related to Health Promotion and Microcredit Programs in the Dominican Republic','*Rev Panam Salud Publica,* March 15(3), Pp185–93

Dunford, C (2002): 'Building Better Lives: 'Sustainable Integration of Microfinance with Education in Health, Family Planning, and HIV/AIDS Prevention for the Poorest Entrepreneurs', *Pathways Out of Poverty,* Sam Daley-Harris (ed) Bloomfield, CT: Kumarian Press, Inc; Pp75–131.

Dror, D, Radermacher R, Khadilkar, S, Schout, P, Hay, F and Singh, A (2009): 'Microinsurance: Innovations in Low-cost Health Insurance'.'*Health Affairs*, 2009, Vol 28 (6), Pp1788–98.

Freedom from Hunger. Research reports (http://www.ffhtechnical.org/resources/microfinance-health)

Leatherman, S, Dunford, C, Metcalfe, M, Reinsch, M, Gash, M, and Gray, B (2011): 'Integrating Microfinacne and Health: Benefits, Challenges and Reflections for Moving Forward', Commissioned workshop paper for 2011 Global Microcredit Summit, Vallodalid, Spain.

Leatherman, S, Metcalfe, M, Geissler, K and Dunford, C (2012): 'Integrating Microfinance and Health Strategies: Examining the Evidence to Inform Policy and Practice','*Health Policy and Planning*, Vol 27, Pp85-101.

Metcalfe, M and Reinsch, M (2008): 'Enhancing the Impact of Microfinance: Client Demand for Health Protection Services on Three Continents', Unpublished manuscript (http://www.ffhtechnical.org/resources/microfinance-health).

Maes, J and Reed, L (2012): *State of the Microcredit Summit Campaign Report 2009*. Washington, D.C. As of 31 December 2010, 3,652 microfinance institutions reported reaching 205,314,502 clients.

McIntyre, D, Thiede, M, Dahlgren, G and Whitehead, M (2006): 'What are the Economic Consequences for Households of Illness and of Paying for Healthcare in Low- and Middle-income Country Contexts?', *Social Science & Medicine*, 62:858-65.

Narayan, D and Patesch, P (2000) eds *Voices of the Poor: From Many Lands*, Washington: World Bank.

Reinsch, M, Dunford, C and Metcalfe, M (2001): 'Costs and Benefits to Microfinance Institutions offering Health Protection Services to Clients','*Enterprise Development and Microfinance*, 22(3), Pp241-258.

Russell, S (2004): 'The Economic Burden of Illness for Households in Developing Countries: A Review of Studies focusing on Malaria, Tuberculosis, and Human Immunodeficiency virus/acquired immunodeficiency syndrome', *Am J Trop Med Hyg*, 71(Suppl 2), Pp147-55.