



Full Length Research Article

INTEGRATING MICROFINANCE AND COMMUNITY HEALTH INTERVENTIONS: A NARRATIVE REVIEW OF EVIDENCES FROM INDIA

¹Sheila Leatherman, ²Somen Saha, ³Marcia Metcalfe and ¹Dileep Mavalankar

¹Gillings School of Global Public Health, University of North Carolina at Chapel Hill, USA

²Indian Institute of Public Health Gandhinagar, Drive in Road, Thaltej, Ahmedabad, Gujarat 380054, India

³Director of Health programs at Freedom from Hunger, USA

ARTICLE INFO

Article History:

Received xxxxxxxxxxxx, 2013
Received in revised form
xxxxxxxxxxxxxxxx, 2013
Accepted xxxxxxxxxxxx, 2013
Published online xxxxxxxxxxxx, 2014

Key words:

Community health,
Poverty,
Health outcomes,
Health promotion,
MDGs,
Microfinance,
Development

ABSTRACT

The inextricable relationship between poverty and ill health is increasingly well-understood; poor health and the inability to access healthcare are key factors both leading to, and resulting from, poverty. Yet, in India and worldwide, rather than combining poverty alleviation and community health interventions in an integrated strategy, approaches are largely unisectoral. By combining financial services for the poor with proven community health interventions, two fundamental needs can be met through an outreach infrastructure that already exists within the self-help microfinance programs in India. Ninety three million members (impacting over 300 million people including households) are engaged in MFIs and SHG -Bank Linkage programs in India. Through a review of integrated approaches in India, the paper argues that leveraging the microfinance and self-help networks represents a pragmatic and sustainable mechanism for reaching a greater proportion of the poor with proven low-cost health interventions. Such integrated approaches can harness and complement existent governmental programs to have a synergistic impact on health and poverty and address multiple Millennium Development Goals focused on poverty, gender equality, empowerment of women, maternal and child health, and combating diseases such as HIV and malaria.

Copyright © 2014. Sheila Leatherman et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Wide income disparities in India are preventing the poor from becoming the beneficiaries of growth. The burden of ill health is inequitably distributed across geographical, social, gender, income and educational strata, with substantial differences in health indicators between and within different states. Profound gender inequities exist in access to health care; in rural India, women are three times more likely than men to go without treatment for long-term ailments, a trend that persists even among the non-poor and even when treatment is sought, significantly smaller sums of money are spent on medical treatment for women than for men (Iyer *et al.*, 2007). The poor not only bear a disproportionate portion of disease burden (WHO, 2008) but also face the burden of both the direct costs of medical care and the indirect costs of time lost to work (McIntyre *et al.*, 2006; Russell, 2004). Poor health contributes to the persistence of India's high poverty rates, with health

expenditures driving 39 million families into poverty each year (Selvaraj and Karan, 2009). Yet, in India and worldwide, rather than combining poverty alleviation and community health interventions in an integrated strategy, approaches are largely unisectoral. By combining financial services for the poor with proven community health interventions, two fundamental needs can be met through an outreach infrastructure that already exists within the microfinance sector and self-help group movement. Integrating community health interventions into self help microfinance programs is a nascent yet promising field. A small but growing body of evidence suggests high potential for a low-cost and sustainable way to reach poor families with simple, but important health interventions. While findings are admittedly constrained by the uneven rigor of research from a small number of countries, the evidence is directionally positive and relevant in India.

How is integrated microfinance and community health relevant to India?

Microfinance has multiple definitions and models. It can be a powerful force for good when ethically and competently

***Corresponding author: Somen Saha,**
Indian Institute of Public Health Gandhinagar, Drive in Road,
Thaltej, Ahmedabad, Gujarat 380054, India

conducted, though admittedly some practices have generated controversy and concern. At its simplest, microfinance is the provision of financial services such as loans, savings, and business training for the poor who lack access to formal banking services. The wide variety of models and levels of financing range from perhaps the best known model by the Grameen Bank of group-based lending (primarily to women), to the more informal village savings model where the very poor both save and give loans to one another without an intermediary. The later model promoted actively through government support is also known as the SHG-Bank Linkage program. Ninety three million members in India (benefiting over 300 million people when average household size is considered) are engaged by MFIs and SHG -Bank Linkage programs. Poverty renders families vulnerable to health shocks in absence of proper health awareness, a formal insurance cover or other health financing mechanisms, and poor living condition. For example in Indonesia, consumption drops 20 percent when a household member falls severely ill (Gertler and Gruber, 1997). Microfinance, when done ethically and guided by a social performance agenda, it may certainly help to reduce some of the ill effects of income inequity.

For example, in post tsunami Sri Lanka microloans were instrumental in reducing the income gap and consumption smoothing (Becchetti and Castriota, 2011). Additional research has documented the role of microfinance in consumption smoothing and protection against health shocks in rural Bangladesh (Islam and Maitra, 2012), improving food security in India (Meyer, 2010), and against illness in Indonesia (Gertler *et al.*, 2009). The nature of the microfinance transaction where (usually) women meet together in formal groups on a frequent basis to repay loans and deposit savings creates solidarity and social capital among members. The solidarity and social capital has been empirically linked to, among other things, improved child development and adolescent well-being, increased mental health, lower violent crime rates and youth delinquency, reduced mortality, lower susceptibility to binge drinking, to depression, and to loneliness, sustained participation in anti-smoking programs, and higher perceptions of well-being and self-rated health (Szreter and Woolcock, 2004). This review intends to analyze the emerging evidence of integration of health and microfinance programs in India in reducing the impact of illness and the vulnerability of the poor.

MATERIALS AND METHODS

We conducted desk review of published evidence of impact of health programs by microfinance institutions on public health priority areas in India. Given the paucity of literature in peer-reviewed journals, after reviewing the initial set of peer-reviewed articles, we sought articles available through Google, Google Scholar and Microfinance Gateway. Following the typology suggested by Leatherman *et al.* (2012), we described the impact of microfinance health program in addressing barriers to health for the poor into three major categories: lack of awareness and information; lack of financial resources to pay for medical care; and lack of access to effective and safe health care services and products.

Emerging evidence and experience linking health and financial services for the poor

Summary of global evidence: In addition to gains in income, participation in microcredit programs is associated with better

health outcomes, social gains for women, and even greater school enrolment for the children of borrowers (Narayan-Parker and Glinskaya, 2007). A growing body of evidence strongly suggests that when health and financial services for the poor are linked in a systematic and cohesive manner, key barriers to health can be reduced. MFIs can contribute to health improvement by increasing knowledge leading to behavior change, and by enhancing access to health services through addressing financial, geographic and other barriers. Studies indicate benefits in diverse areas such as maternal and child health, malaria, HIV, infectious diseases and gender based violence (Leatherman *et al.*, 2012). Health education is the most common health service offered. Health education, often delivered during regularly scheduled group microfinance or SHG meetings, can lead to behavioral change in areas fundamental to achieving the Millennium Development Goals related to women and children and reduction of life-threatening illness (Leatherman *et al.*, 2010). Considerable evidence exists of the positive impact of health education on health knowledge and practice (Hadi, 2001; Smith, 2002; Sherer *et al.*, 2004; De La Cruz *et al.*, 2009; Hadi, 2002; Ahmed *et al.*, 2006) with notable findings such as; improvement of maternal and neonatal health outcomes in Nepal and India (Manandhar *et al.*, 2004; Tripathy *et al.*, 2010), reductions in rates of childhood diarrhea in Dominican Republic and Honduras (Dohn *et al.*, 2004), reductions in the risk of physical or sexual abuse by intimate partners by more than half in South Africa (Pronyk *et al.*, 2006) and a significant increase in contraceptive use with decline in fertility in Bangladesh (Amin *et al.*, 2001).

Potential for large scale change in India

Innovations integrating microfinance and health are many in India, involving both public and private sector initiatives, and at scale. Among the most established is the Self-Employed Women's Association (SEWA), an organized group of 1.2 million poor and vulnerable women, who have access to various financial services alongside a comprehensive health program comprised of education, directly delivered health services and health microinsurance. The Society for Elimination of Rural Poverty (SERP) which was started in 2000 by the Government of Andhra Pradesh as an anti-poverty program, works closely with SHGs reaching out to 10.7 million women using trained health workers, and managing health savings and health risk funds to help defray the expense of medical emergencies, while offering additional risk protection through a link with the *Arogyashree* social health insurance scheme of Andhra Pradesh.

The Kudumbashree initiative of the government of Kerala is characterised as a women-oriented poverty eradication program. Started as poverty eradication program in 2008, the program added a component of community-based nutrition access to improve the nutritional status of women and children. A three-tiered structures composed of neighbourhood groups (NHGs) federated into area development societies at the ward level, which were in turn federated into a Community Development Society (CDS) at the municipal level, were formed, composed exclusively of women from families identified as poor through a non-income-based index (Devika and Thampi, 2007). India's National Rural Livelihood Project (2011-16) is building a cadre of social entrepreneur health activists among SHG members to promote changes in health

seeking behaviour and act as a bridge to formal health delivery institutions; promote preventive health including community hygiene and sanitation); immunize all pregnant and lactating mothers and children; act as; and advocate for a dedicated health savings account and health risk fund model.

Role of social capital and community engagement for health awareness and behavior

While direct Behaviour Change Communication (BCC) improves awareness, in the presence of community structures like microfinance and SHGs, the incremental effect may be enhanced. Using data from the national district level household survey (DLHS-3) in India, Saha *et al* showed that respondents from villages with a SHG in India were 19 percent more likely to have delivered in an institution, 8 per cent more likely to have fed newborns colostrum, have better knowledge and utilization of family planning products and services. The results were significant after controlling for individual and village-level heterogeneities and provided empirical evidence to the hypothesis that social capital generated through women's participation in SHGs influences health outcome (Saha *et al.*, 2013). A classical randomized control trial in rural areas of Jharkhand and Odisha, randomly assigned women's SHGs to develop and implement community strategies to address maternal and newborn health problems, showed 32 percent reduction in neonatal mortality rate, compared to control areas (Tripathy *et al.*, 2010). Further study found newborn babies born to mothers that are the main decision-makers within their households in SHG communities had significantly improved likelihood of surviving the first six weeks of their lives in response to the Ekjut intervention compared to babies born to analogous households in non-SHG communities (Montalvao *et al.*, 2011).

In Maharashtra state, a project that trained women SHG members as health workers, initiated literacy programmes and provided funds for household health emergencies showed in the two decades after 1970 a reduction in infant mortality from 176 to 19 per 1000, a birth-rate decline from 40 to 20 per 1000, nearly universal access to antenatal care, safe delivery, and immunization, and a decline in rates of malnutrition from 40% to less than 5% (Rosato *et al.*, 2008; Arole *et al.*, 2002). Bandhan, an MFI serving nearly four million members in 18 Indian states initiated health services in West Bengal, including monthly educational sessions reinforced by a network of *Shastho Shohayikas* —women community health volunteers. The volunteers make home visits selling low-cost health products (e.g. oral rehydration solution, paracetamol, oral contraceptives, pregnancy tests, de-worming pills, antiseptic lotions) and encouraging people to use local health services when appropriate. Bandhan makes health loans available, with lower interest rates than their microenterprise loans, to assist clients with high medical cost events. The program has resulted in major increases in health knowledge (e.g., the importance of exclusive breastfeeding for newborns) and significant changes in health behaviours (e.g., treatment of child diarrhoea with oral rehydration solution) (Metcalf *et al.*, 2012). In Karnataka, Sampark an NGO that helps underprivileged, rural poor women to form savings and credit self-help groups (SHGs) developed an intervention to integrate mental health within a developmental framework of microcredit activity for economically underprivileged women.

This has resulted in enhancing both the economic and social capital among rural poor women (Rao *et al.*, 2011).

Financing for Health

Health awareness and knowledge are important, but alone not sufficient. Among the poor, often the investment of resources is necessary at the community and household levels to make changes essential for better health. Thus, innovation in financing is a critical area for innovation and adoption of best practices. Based on the premise that poor face an enormous amount of financial risk due to ill health, several MFIs, backed by formal insurance company provided micro insurance for the poor. In 2007, SKS Microfinance introduced “Swayam Shakti” a mandatory pilot health-insurance program offering cashless maternity, hospitalization, and accident benefits among network hospitals to its members (Banerjee *et al.*, 2011). The Velugu II project in Andhra Pradesh (renamed as Indira Kanti Patham) mitigated risk and improved security through a comprehensive insurance package covering health, life, crops, and livestock. In addition, a comprehensive basic health package aimed to provide basic care through community-managed paramedics. SEWA has pioneered the provision of insurance to poor women, drawing on both the SEWA Bank and government insurance companies.

Typically, a woman saves Rs 1,000 (about \$22) and puts it in a fixed deposit. The annual interest pays the premium and ensures uninterrupted coverage, which includes maternity benefits as well as payments in the event of various calamities such as illness, death, and loss of property (Narayan-Parker and Glinskaya, 2007). Microcredit loans by SEWA bank for basic infrastructure improvement in water supply and sanitation in urban slums resulted in a decrease in likelihood of health claims for waterborne disease from 32% before the intervention to 14% after the intervention (Butala *et al.*, 2010). A pilot project in Southern India by UNICEF and Hindustan Unilever Limited to improve the quality of drinking water for children showed membership in SHGs was critical to both increasing awareness and for the household purchase of a water purifier. The SHGs provided microcredit to members for the purifier purchase in addition to raising awareness through product demonstrations and changing social norms (Freeman and Clasen, 2011). A study in Odisha showed an increase in purchase and use rates of insecticide-treated bednets (ITNs) when micro-consumer loans were made available for to finance the cost of the bednets (Tarozzi *et al.*, 2011).

Accessible healthcare products and services

Even when the barriers of health information and financing are hurdled, there frequently remains a major barrier of geographic access to medically appropriate and safe health services and health products. Microfinance institutions and self-health groups can make important contributions through both direct and indirect delivery of health related services and products. For example, Gram Utthan, an MFI in Odisha, provides both microfinance and other development services to over 100,000 clients. Gram Utthan's health program includes health education and health savings organized through SHGs, regularly conducted health camps staffed with public and private doctors, and community “medicine points” that make a

range of generic medicines and health supplies available in small villages. The “medicine points” are operated out of the homes of 100 village health volunteers (VHVs), who provide the health education and facilitate the formation of health savings groups within organized village SHGs. The VHVs make visits to client homes and earn 20 percent commission on the sale of a selection of most commonly needed generic medicines.

RESULTS AND DISCUSSION

In India, a key challenge of the health system is its inability to reach the poor and vulnerable, leading to huge inequities in health (Balarajan *et al.*, 2011). Despite national commitment to universal health care, the poor routinely miss essential health care services due to their lack of health awareness and requisite resources coupled with a poorly functioning and uneven health system. Government failure to meet population health needs has left a gap. A recent Lancet editorial (Editorial, 2012), titled *Global health in 2012; Development to Sustainability*, issued a clarion call “to embrace a new and emerging health agenda” and “integrate other sectors into this broader vision”. Leveraging the microfinance and self-help networks represents a pragmatic and sustainable mechanism for reaching a greater proportion of the poor in India with proven programs. Such programs cannot be viewed as a panacea for government failures, but rather a complement to public provisioning of health services. For example, while efforts in the past to offer mandatory health insurance by major MFI and insurance companies have failed; those same village loan groups, SHGs and federations can play an important role in disseminating information regarding India’s National Health Insurance Scheme or RSBY with the aim of increasing enrolment and utilization.

The challenges lie in acceptance of the integrated approach and convincing individually-oriented government departments and /or private sector entities to work together. Given recent attention to unscrupulous lending practices and other activities that have implicated a very few microfinance organizations and for profit health care providers in profiting from the vulnerability of poor families, care must be taken to assure that participants from both sectors---health and microfinance---share the fundamental goal of reducing the impact of illness and the vulnerability of the poor. India is already fertile ground for innovation, with significant potential to contribute to the well-being of the poor in India as well as provide valuable insight and knowledge for the global health and development community. With the potential to reach and positively impact over 300 million people directly or indirectly engaged by MFIs and SHGs, India could take the international lead on testing the methods and impact of integrating various strategies for microfinance and health.

REFERENCES

Iyer A, Sen G, George A. The dynamics of gender and class in access to health care: Evidence from rural Karnataka, India. *International Journal of Health Services*. 2007;37(3):537-54.
WHO. The global burden of disease: 2004 update. 2008. World health organization: geneva. 2011.

McIntyre D, Thiede M, Dahlgren G, Whitehead M. What are the economic consequences for households of illness and of paying for health care in low-and middle-income country contexts? *Social science & medicine*. 2006;62(4):858-65.
Russell S. 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. *The American journal of tropical medicine and hygiene*. 2004;71(2 suppl):147-55.
Selvaraj S, Karan AK. Deepening health insecurity in India: evidence from national sample surveys since 1980s. *Econ Polit Wkly*. 2009;44:55-60.
Gertler P, Gruber J. Insuring consumption against illness. National Bureau of Economic Research, 1997.
Becchetti L, Castriota S. Does microfinance work as a recovery tool after disasters? Evidence from the 2004 Tsunami. *World Development*. 2011;39(6):898-912.
Islam A, Maitra P. Health shocks and consumption smoothing in rural households: Does microcredit have a role to play? *Journal of development economics*. 2012;97(2):232-43.
Meyer RL. Microfinance, Poverty Alleviation and Improving Food Security: Implications for India. *Food security and environmental quality in the developing world*. 2010:347.
Gertler P, Levine DI, Moretti E. Do microfinance programs help families insure consumption against illness? *Health economics*. 2009;18(3):257-73.
Szreter S, Woolcock M. Health by association? Social capital, social theory, and the political economy of public health. *International Journal of Epidemiology*. 2004;33(4):650-67.
Leatherman S, Metcalfe M, Geissler K, Dunford C. Integrating microfinance and health strategies: examining the evidence to inform policy and practice. *Health Policy and Planning*. 2012;27(2):85-101.
Narayan-Parker D, Glinskaya EE. Ending poverty in South Asia: Ideas that work: World Bank Publications; 2007.
Leatherman S, Dunford C. Linking health to microfinance to reduce poverty. *Bulletin of the World Health Organization*. 2010;88(6):470-1.
Hadi A. Promoting health knowledge through micro-credit programmes: experience of BRAC in Bangladesh. *Health Promotion International*. 2001;16(3):219-27.
Smith SC. Village banking and maternal and child health: evidence from Ecuador and Honduras. *World Development*. 2002;30(4):707-23.
Sherer RD, Bronson JD, Teter CJ, Wykoff RF. Microeconomic loans and health education to families in impoverished communities: Implications for the HIV pandemic. *Journal of the International Association of Physicians in AIDS Care (JIAPAC)*. 2004;3(4):110.
De La Cruz N, Crookston B, Gray B, Alder S, Dearden K. Microfinance against malaria: impact of Freedom from Hunger's malaria education when delivered by rural banks in Ghana. *Transactions of the Royal Society of Tropical Medicine and Hygiene*. 2009;103(12):1229-36.
Hadi A. Integrating prevention of acute respiratory infections with micro-credit programme: experience of BRAC, Bangladesh. *Public health*. 2002;116(4):238-44.
Ahmed SM, Petzold M, Kabir ZN, Tomson G. Targeted intervention for the ultra poor in rural Bangladesh: Does it make any difference in their health-seeking behaviour? *Social science & medicine*. 2006;63(11):2899-911.

- Manandhar DS, Osrin D, Shrestha BP, Mesko N, Morrison J, Tumbahangphe KM, *et al.* Effect of a participatory intervention with women's groups on birth outcomes in Nepal: cluster-randomised controlled trial. *The Lancet.* 2004;364(9438):970-9.
- Tripathy P, Nair N, Barnett S, Mahapatra R, Borghi J, Rath S, *et al.* Effect of a participatory intervention with women's groups on birth outcomes and maternal depression in Jharkhand and Orissa, India: a cluster-randomised controlled trial. *The Lancet.* 2010;375(9721):1182-92.
- Dohn AL, Chávez A, Dohn MN, Saturria L, Pimentel C. Changes in health indicators related to health promotion and microcredit programs in the Dominican Republic. *Revista Panamericana de Salud Pública.* 2004;15(3):185-93.
- Pronyk PM, Hargreaves JR, Kim JC, Morison LA, Phetla G, Watts C, *et al.* Effect of a structural intervention for the prevention of intimate-partner violence and HIV in rural South Africa: a cluster randomised trial. *The Lancet.* 2006;368(9551):1973-83.
- Amin R, St Pierre M, Ahmed A, Haq R. Integration of an essential services package (ESP) in child and reproductive health and family planning with a micro-credit program for poor women: experience from a pilot project in rural Bangladesh. *World Development.* 2001;29(9):1611-21.
- Devika J, Thampi BV. Between 'Empowerment' and 'Liberation' The Kudumbashree Initiative in Kerala. *Indian Journal of Gender Studies.* 2007;14(1):33-60.
- Saha S, Annear PL, Pathak S. The effect of Self-Help Groups on access to maternal health services: evidence from rural India. *International journal for equity in health.* 2013;12(1):36.
- Montalvao J, Nair N, Rath S, Mahapatra R, Sinha R, Prost A, *et al.* Integration of Microfinance and Health Education: Evidence from a Cluster-Randomized Controlled Trial in Rural India. 2011.
- Rosato M, Laverack G, Grabman LH, Tripathy P, Nair N, Mwansambo C, *et al.* Community participation: lessons for maternal, newborn, and child health. *The Lancet.* 2008;372(9642):962-71.
- Arole M, Arole R. Jamkhed, India—the evolution of a world training center. Just and lasting change: when communities own their futures. 2002:150-60.
- Metcalf M LS, Gash M *et al.* Health and Microfinance—Leveraging the Strengths of Two Sectors to Alleviate Poverty. *Journal of Social Business* 2012;Accepted and forthcoming.
- Rao K, Vanguri P, Premchander S. Community-Based Mental Health Intervention for Underprivileged Women in Rural India: An Experiential Report. *International Journal of Family Medicine.* 2011;2011.
- Banerjee A, Banerjee AV, Duflo E. Poor economics: A radical rethinking of the way to fight global poverty: PublicAffairs Store; 2011.
- Butala NM, VanRooyen MJ, Patel RB. Improved health outcomes in urban slums through infrastructure upgrading. *Social science & medicine.* 2010;71(5):935-40.
- Freeman MC, Clasen T. Assessing the Impact of a School-based Safe Water Intervention on Household Adoption of Point-of-Use Water Treatment Practices in Southern India. *The American journal of tropical medicine and hygiene.* 2011;84(3):370-8.
- Tarozzi A MA, Blackburn B *et al.* . Micro-Loans, Insecticide-Treated Bednets and Malaria: Evidence from a Randomized Controlled Trial in Odisha (India). *Economic Research Initiatives at Duke (ERID) Working Paper No 104.* 2011.
- Balarajan Y, Selvaraj S, Subramanian S. Health care and equity in India. *The Lancet.* 2011.
- Editorial. Global health in 2012: development to sustainability. *Lancet.* 2012;379(9812):193.
