Improving Child and Maternal Health in India: A Longitudinal Study of the Impact of the Integration of Microfinance and Health Services

Microfinance and Health Protection: Bandhan, India

With 400 million of the world’s poor, India faces persistent challenges to assure equity of access to health care and improved health outcomes for poor women and children. Indian health indicators have improved over the past decade; yet despite the existence of a range of cost-effective and proven solutions to prevent or minimize serious consequences from pregnancy, childbirth and common childhood diseases, women and children in India still suffer and die needlessly. When illness strikes family members, the burden for caregiving almost always falls on female members of the household, forcing them to take time away from income-generation or, in the case of girls, time away from schooling. This further erodes the household’s potential for improving their economic and social development.

Self-Health Groups (SHGs) and groups facilitated by microfinance institutions (MFIs), by design, provide a platform for the participation and voices of women. Through these groups, women have access to financial services such as loans, savings and insurance. The power of the group also affords women the ability to educate peers, influence behaviors and more systematically benefit from streamlined services.

Building on the platform of women’s groups that come together to participate in financial services, Freedom from Hunger has been working with local partners to develop and implement programs that increase the capacity of poor families to protect and improve their health through increased health knowledge and access to essential health-related financing mechanisms and health services.
Between 2006 and 2009, Freedom from Hunger worked with Bandhan, one of the largest MFIs in India, to pilot and evaluate a program that provides a range of health products and services for its clients. Based on extensive formative research conducted with clients and local health providers, Bandhan developed and implemented a health program that included the following:

- Health education provided in local community forums (open to clients and all community members) with a focus on child and maternal health
- Health loans available to MFI clients with two years of loan experience
- Local community health volunteers, called *Swasthya Sahayikas* (SS), who visit homes and distribute health products
- Linkages to local healthcare services through referrals from the SS

At the end of the pilot phase in 2009, Bandhan’s Health Program was reaching 52,000 families and as of 2013, the program has been scaled to reach over 410,000 families and continues to grow.

Freedom from Hunger also worked with Bandhan to design and conduct mixed-methods research to evaluate the impact of the program on key indicators of health knowledge and behaviors known to be important to improve the health of mothers and very young children. Quantitative pre- and post-tests with Bandhan clients participating in the health program were completed in 2008 just after the introduction of the health program and in 2009 after one full year. In 2013, an additional follow-up survey was completed with many of the same participants in the prior two surveys.

**Key Findings**

The results from the three surveys show significant improvements that have been sustained over time in infant feeding, treatment of diarrhea, maternal care and advice seeking and other indicators related to child and maternal health. These findings also show an increase in the number of clients who report sharing information on maternal and child health with others in their communities, suggesting that the positive impact for clients may also accrue to the broader community. The following is a summary of the significant improvements found in the studies conducted over the five-year period:

**Infant Feeding and Nutrition**

- Percentage who knew a child should be breastfed immediately or within one hour after birth
- Percentage who knew they should add oil, protein or vegetables to the first foods given to their babies to make the foods more nutritious
- Percentage who reported breastfeeding their infants within one hour of birth
- Percentage who reported introducing complementary foods into a child’s diet at age six months or older

**Diarrhea Treatment**

- Percentage who treated a child in their household or under their care who had diarrhea with Oral Rehydration Salts (ORS)
- Percentage who treated a child in their household or under their care who had diarrhea with appropriate special liquids at home, such as coconut water, lentil water or rice water

“Bandhan plays an important role in achieving my dreams by providing us valuable knowledge regarding health and hygiene and also providing us loans to expand our business.” (Bandhan client)
## Prenatal and Maternal Health

- Percentage who were pregnant who received a referral for prenatal care from an SS
- Percentage who gave birth and received a home visit from an SS within 48 hours of birth

## Knowledge Sharing

- Percentage who gave advice to others on breastfeeding and malnutrition
- Percentage who gave advice to others on antenatal and postnatal care
- Percentage who gave advice to others on how to treat diarrhea and respiratory illnesses of young children

## Other Positive Health Behaviors

In addition to these statistically significant improvements, Bandhan clients also reported the following during the 2013 survey:

- 95% who were or had been pregnant in the prior 18 months visited a medical professional at least three times.
- 100% who were or had been pregnant in the prior 18 months reported receiving tetanus toxoid.
- 100% who delivered a child at home reported immediately drying and wrapping the infant.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Pre-Test 2008</th>
<th>Post-Test 2009</th>
<th>Follow-up 2013</th>
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</thead>
<tbody>
<tr>
<td><strong>Infant Feeding and Nutrition</strong></td>
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<tr>
<td>Percentage who knew how soon after birth a child should be breastfed</td>
<td>71</td>
<td>97*</td>
<td>92*</td>
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<tr>
<td>Percentage who knew to add oil, protein or vegetables to first foods for baby in order to make them more nutritious</td>
<td>93</td>
<td>96</td>
<td>98</td>
</tr>
<tr>
<td>Percentage whose child or child in their care was breastfed immediately or within 1 hour of birth (women with children&lt;12 mos)</td>
<td>61</td>
<td>93*</td>
<td>75</td>
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<tr>
<td>Percentage who reported introducing complementary foods at age 6 months or older (with children&lt;12 mos)</td>
<td>60</td>
<td>88*</td>
<td>100*</td>
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<tr>
<td><strong>Diarrhea Treatment</strong></td>
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<tr>
<td>Percentage with a child in their household or care who had diarrhea in the last 3 months who treated that child with ORS</td>
<td>60</td>
<td>88*</td>
<td>100*</td>
</tr>
<tr>
<td>Percentage who treated child in their household with special liquids at home (such as coconut water, lentil water or rice water)</td>
<td>30</td>
<td>69*</td>
<td>80*</td>
</tr>
<tr>
<td><strong>Prenatal and Maternal Health</strong></td>
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<tr>
<td>Percentage pregnant within the prior 18 months who received a referral from the SS for prenatal care</td>
<td>31</td>
<td>38</td>
<td>64*</td>
</tr>
<tr>
<td>Percentage of respondents who gave birth during the past 12 months and were visited by an SS within 48 hours of birth</td>
<td>16</td>
<td>36*</td>
<td>54*</td>
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<tr>
<td><strong>Knowledge Sharing</strong></td>
<td></td>
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<tr>
<td>Percentage who gave advice on antenatal care</td>
<td>13</td>
<td>27*</td>
<td>33*</td>
</tr>
<tr>
<td>Percentage who gave advice on how to treat coughs, colds or other respiratory illnesses of a young child</td>
<td>13</td>
<td>32*</td>
<td>31*</td>
</tr>
<tr>
<td>Percentage who gave advice on how to treat diarrhea</td>
<td>10</td>
<td>41*</td>
<td>38*</td>
</tr>
</tbody>
</table>

*Indicates statistically significant difference between pre-test and post-test and/or follow-up surveys of at least p<.05
Client Impact Story

Alpana Mahish

Alpana Mahish lives in a small village in Shyampur, India. She is married with one son and two daughters, and has been a client of Bandhan for five years. Alpana was first interviewed in 2009 after she had taken her first loan from Bandhan and she and her husband were on their way to becoming successful small entrepreneurs. But Alpana’s family remained vulnerable to health challenges. When Alpana’s grandson was hospitalized with diarrhea, Alpana paid the $100 cost out of her hard-earned savings. When Alpana was interviewed four years later in 2013, she had taken a total of eight loans. The loans were used to grow the family business that makes car batteries, to further her son’s education to become a computer engineer, and for the marriage of her daughters. The family’s small plot of land grows enough rice and vegetables selected for their nutritional value, to feed their family. Alpana attends monthly health-education meetings in her village and her first stop for advice on minor illnesses or medicines is Bandhan’s SS. For more serious illnesses, or if first-line treatment does not work, she consults a doctor. She perceives her family’s health to be quite good and that they have enough savings to manage most minor or even major health needs. She was happy to hear about recent efforts by Bandhan to promote hygiene and sanitation and although her family already has a toilet, she is looking forward to assistance from her son to arrange for a better water supply for their home.

Combining Health and Financial Services: The Broader Context

The findings from Bandhan are consistent with other evidence that demonstrates that the financial-service infrastructure—utilizing microfinance groups and SHGs—provides a reliable, low-cost and sustainable platform for reaching poor mothers and children with vital health information, products and services. This study over five years is particularly important because it strongly suggests that positive impact detected in shorter-term studies can be sustained over time, making these integrated financial and health services a durable health intervention for low-resource settings.

India is home to a strong SHG movement and a significant MFI presence that reach more than 83 million clients throughout the country. Modest investments in building the capacity of these organizations to add and integrate health services that improve the access of millions of poor families to essential health knowledge and services, offers large and mostly un-tapped potential for positive net benefits towards the achievement of national and global health targets for maternal and child health.

Freedom from Hunger brings innovative and sustainable self-help solutions to the fight against chronic hunger and poverty. Learn more at freedomfromhunger.org

Bandhan reaches more than five million poor women empowering them with access to financial services. A broad range of development work, including health is done through its affiliated not-for-profit entity. Learn more at bandhanmf.com.