Strengthening functional community–provider linkages: Lessons from the Indore urban health programme

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Abstract
Weak linkages between health providers and slum communities hinder the improvement of health services for India’s urban poor. To address this issue, an urban health programme is implementing two approaches in Indore city, Madhya Pradesh, the demand–supply linkage approach and ward coordination approach. The former is based on the premise that building social capital, i.e. norms and networks within a community facilitating collective action, helps improve the demand and supply of health services for the urban poor. The latter focuses on encouraging local stakeholders to function in a coordinated manner to ensure better health service coverage in underserved slum areas. Findings suggest that the programme has enhanced utilization of services among Indore’s slum communities and helped improve immunization coverage and other maternal and child health indicators.

Keywords: Vulnerability assessment, social capital, demand–supply linkage approach, ward coordination approach, community-based organization, cluster coordination team

Introduction
As a result of rapid urbanization, 28% of India’s population, 285 million people, now live in its cities. This is the culmination of a hundredfold increase in the twentieth century, and a 40% increase during the 1990s (Office of the Registrar General and Census Commissioner 2001a). Rural–urban migration, coupled with natural population growth within cities and expansion of city limits, has caused an increase in the number of urban poor and the proliferation of slums.
The National Sample Survey Organisation (NSSO 2001) estimates that 67 million people (24% of the country’s total urban population) are poor. This estimate is based on the official urban consumption expenditure poverty line of INR454 (approximately US$11) per capita per month, a questionable measure since INR454 is sufficient only to meet basic food requirements and ignores other requirements, such as health care. The actual number of urban dwellers living in poverty may, thus, be substantially higher than officially reported.

According to the Census of India, about 43 million of India’s urban citizens live in slums (Office of the Registrar General and Census Commissioner 2001b). However, even this estimate does not reflect the real magnitude of urban slum populations, for it fails to capture ‘unaccounted’ for and unrecognized squatter settlements and other populations residing in inner city areas, pavements, constructions sites, urban fringes, etc. Data that include only officially listed or notified slums often excludes some of the poorest settlements.

**Health status of the urban poor in India**

The health status of poor urban dwellers is characterized by high morbidity and mortality. Sclar et al. (2005) note that in overcrowded slums communicable diseases, such as tuberculosis, acute respiratory infections, diarrhoea, and worm infestations, are exacerbated in the absence of adequate water sanitation and timely medical help, while vaccine-preventable diseases, such as measles, pertussis (whooping cough), and diphtheria, spread more rapidly among their typically under-immunized populations.

Although, in aggregate, Indian women in cities and their children have better health outcomes, findings from the disaggregated 1998–1999 National Family Health Survey 2 (NFHS-2) data by economic groups reveal that mortality rates for neonates, infants, and those under 5 years old are considerably higher among the urban poor as compared to overall national averages (see Figure 1).

More than half of India’s urban poor children (0–3 years old) suffer from malnutrition. In most states, malnutrition rates among urban poor children are

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**Figure 1. Mortality levels among children in India.**
far higher than those among children living in rural areas (see Figure 2) (IIPS 2000).

The vaccination of children against six serious but preventable diseases, namely tuberculosis (BCG), poliomyelitis (polio), diphtheria, whooping cough (pertussis), tetanus (DPT), and measles, is an integral part of the National Immunisation Programme in India. Children who receive BCG, polio (excluding the polio dose given at birth), three doses of DPT, and measles vaccine, before they reach 12 months of age, are considered fully vaccinated (IIPS 2000). However, about 60% of urban poor children are not completely immunized by their first birthday (USAID–EHP Urban Health Programme 2003). As few as 3 out of 10 urban poor children suffering from diarrhoea are treated with recommended home remedies, such as an oral rehydration solution (USAID–EHP Urban Health Programme 2003).

**Challenges in reaching the urban poor in India**

Health services rarely reach all of India’s urban poor, especially those living in hidden pockets of urban poverty and in slums not on official lists. This situation usually arises due to the following reasons:

1. Long delays in updating official slum lists in most cities; slums may remain unrecognized for years (Agarwal and Taneja 2005).
2. The illegal nature of the land they occupy prevents the inclusion of the urban poor in official slum lists (Ramanathan 2004).
3. There is underreporting of the actual number of slum dwellers within slum clusters.
4. There are genuine difficulties in listing ‘hidden’ urban poor settlements, such as communities of brick/lime kiln workers, labourers living on factory premises, and transitory and mobile populations, such as construction workers (Government of West Bengal 2004).

![Malnutrition among children 0-3 years](image)

Figure 2. Malnutrition among children 0–3 years old.
As a result, urban health infrastructure in most cities is inadequate to meet the needs of the urban poor. In most Indian cities, primary health care facilities in urban areas, namely, the Urban Health Posts and Urban Family Welfare Centres (UFWCs), lack basic infrastructure, medical equipment, and staff. Moreover, several cities do not even have such centres. If they do exist, the population they are expected to cover is typically far larger than the norm of one centre for every 50,000 persons, thus overburdening urban posts and centres with a high workload (Shekhar and Ram 2005). Consequently, most slums are either uncovered by primary health services or receive very poor quality care. The overcrowding and distance to the secondary and tertiary level facilities results in poor utilization of such facilities by the poor. The private sector is also not accessible by the urban poor because of their inability to pay.

India’s Integrated Child Development Services (ICDS) programme provides child health services through a nationwide network of child care or *anganwadi* centres (AWCs). AWCs aim to offer health, nutrition, and hygiene education to mothers, non-formal preschool education to children aged 3–6 years old, supplementary feeding for all children and pregnant and nursing mothers, growth monitoring and promotion, and linkage to primary health care services, such as immunization and Vitamin A supplements. However, Dhar (2006) notes that ICDS centres are concentrated mostly in rural areas and cover only one-sixth of the urban population. As a result, these health and nutrition services fall far short of meeting the requirements of the urban poor.

Another steep barrier to improving the health of the urban poor is the weak linkage between slum communities and health providers. Slum dwellers have limited awareness on the location of health facilities and the services they provide, as well as the schedule and nature of outreach visits by health workers. Slum communities also lack the confidence to demand and negotiate for services in an often-unfriendly public sector set-up. Instead, slum dwellers seek treatment from faith healers (also called ‘babas’), informal health providers or ‘quacks’, and medical stores. A recent study found that medical stores near Indore slums are often the first place residents approach for medicines to relieve distressing health symptoms (Mursaleena et al. 2006). This study also found that the store keepers sell medicines without seeing the patient; drugs being offered solely on the basis of a description of an ailment, such as diarrhoea, by any family member, even a young child.

This situation results in poor demand for, and utilization of, quality health services. Slum dwellers also receive little support to raise their awareness regarding appropriate health behaviours within their control, such as immediate and exclusive breastfeeding of newborns and other life-saving simple health practices. From the providers’ perspective, health service delivery in slums is a major challenge, given the often-unsanitary environmental conditions and occupations, such as rag-picking, typical in poor urban communities.

In such situations, the experiences of non-governmental organizations (NGOs), as well as government-run programmes, have shown that a focus on
building community-provider linkages through slum-based volunteers can improve community demand and usage of primary health services. Community groups can also effectively facilitate health service delivery in slums (Barua and Singh 2003, Vasundhra and Rao 2004). Building on these experiences, the urban health programme in Indore attempted to facilitate linkages of slum communities with the health system by building on their capacities.

Community-provider linkages: The Indore experience

Background

Indore is the economic capital of Madhya Pradesh and the state’s most populous city, with a population of 1.8 million. Being an economic hub, it attracts migrants from adjoining hinterlands. Migration, coupled with natural increases in population and expansion of the city limits, itself has led to a spurt in the city’s population. Indore’s decadal population growth (1991–2001) was 47% (Office of the Registrar General and Commissioner of Census 2001a). As per reports from the Indore Municipal Corporation, the slum population in Indore has been growing at a faster pace than the overall city’s population.

In early 2002, the Urban Health Resource Centre (UHRC) identified Indore as the site for implementation of an Urban Health Programme (UHP). UHRC is a non-profit organization that works in partnership with national and state governments, NGOs, public and private sector health providers, and communities, to bring about sustainable improvements in health conditions among the urban poor through a consultative and knowledge sharing approach. UHP’s main objectives in Indore are as follows:

- To increase coverage of services and adoption of key health behaviours in neonatal survival, diarrhoea control, and other child health priorities.
- To improve the capacities of local stakeholders and slum-based groups in health behaviour promotion.
- To develop replicable models of urban maternal and child health (MCH) programmes.

Programme planning

UHP in Indore evolved through three processes, namely urban health situation analysis of the city, slum identification, and plotting and vulnerability assessment, before culminating in consultative programme planning. To understand and assess the needs of the urban poor, and gaps in the health service delivery system, the UHP team undertook a systematic situation analysis, between July and December 2002, through a review of key government and other programme documents, key informant interviews with government and non-government functionaries, and group discussions with local stakeholders, health workers, CBOs, and slum dwellers.
This analysis attributed the high child mortality in Indore slums to vaccine-preventable causes, poor hygiene practices, and inappropriate diarrhoea management. The reach of immunization and maternity services to the urban poor was found to be low. Most pregnant women delivered their babies in their slum homes with the assistance of untrained family members or dais (traditional birth attendants or midwives). Moreover, an analysis of the distribution of ICDS services in Indore revealed that AWCs were located in the relatively ‘better off’ slums. The situation analysis also indicated that the Census of India estimate of Indore’s official slum population, at 257,599 (Office of the Registrar General and Commissioner of Census 2001a), was far below the city’s actual slum population and omitted many slums. Hence, slum identification and plotting was undertaken to locate unlisted, hidden, and needy slums, so as to include them in the intervention area.

The knowledge of local stakeholders, including ICDS workers, community representatives, and local NGOs, was tapped to identify all slums, not only officially listed ones. Through this process, a total of 539 (including 101 unlisted slums) were identified. The total slum population was estimated to be over 600,000, approximately a third of the city’s total population of 1.8 million (Taneja and Agarwal 2003).

Programme team discussions with slum-based community groups, NGOs, active in Indore city, and visits to slums showed wide disparities in health conditions among slums. These consultations concluded that slum residents’ vulnerability to increased morbidity or mortality stem from both a compromised ability to practice healthy behaviours and to access adequate care for illnesses requiring medical attention. To identify and map the slums where residents were more compromised in these abilities than others, a health vulnerability assessment was undertaken.

As a starting point to the vulnerability assessment, slum lists were compiled from sources such as the Indore Municipal Corporation (IMC) office, the ICDS archives, and the mayor’s office. Subsequent discussions with CBO and NGO representatives and public sector health workers, including slum-level ICDS workers (all groups and individuals familiar with Indore’s slums), helped develop specific vulnerability criteria. These criteria included: measures of community member economic and social conditions and education attainment; availability of water, sanitation, and other basic services; quality of housing and land tenure status; presence of NGO or CBO activities in the area; disease incidence; health status; and access to public health services. Based on these criteria, slums were categorized as extremely vulnerable, moderately vulnerable, and less vulnerable. These vulnerability assessment findings were validated through visits to the slums and discussions with local stakeholders (see Figure 3).

Slums located in unauthorized areas, such as on the roadside or in settlements that were not officially recognized as slums, were typically extremely vulnerable. Social conditions characterizing extremely vulnerable slums included high incidence of alcohol abuse, low status of women, lack of education among adults
and non-enrolment of children in school, and high incidence of child labour. In terms of economic conditions, household members in extremely vulnerable slums did not have steady incomes, or were employed as daily wage workers and did not have access to fair sources of credit or borrowed at high rates of interest. Extremely vulnerable slums generally lacked regular water supply, toilet and drainage facilities, and proximity to an ICDS centre. Community-based efforts in the extremely vulnerable slums were very limited. Table 1 details these conditions, as well as the ones that characterized moderately and less vulnerable slums.

Following the vulnerability assessment, priorities for UHP health interventions were developed and formalized in consultation with local NGOs, government medical officers, trained health workers, CBOs, and ICDS workers. The identified priorities included improving maternal and neonatal care, immunization, prevention of malnutrition, and diarrhoea prevention/management.

Several stakeholder consultations revealed the existence of several NGOs and community-based organizations (CBOs) working in Indore’s slum communities. A CBO is a slum-based community group of men and women. Before initiation of the UHP in Indore, NGOs and other agencies had helped establish community groups which were primarily involved in improving livelihood opportunities. Other activities, such as vocational training and health camps, were organized sporadically, not as part of their core strategies. It emerged that utilizing the presence of CBOs, and building their capacity, would be a viable strategy to improve health conditions in slums of Indore. The consultations also elicited the willingness and keenness of NGOs and CBOs to expand their activities to target these health priorities in slums. The process of stakeholder consultations and situation analyses also revealed that, even though several governmental and non-governmental stakeholders were working towards slum improvements, there was little coordination among them. There was considerable scope for synergy in the efforts of the several agencies.

On the basis of the above discussed situation of urban poverty in Indore, and the available opportunities, the following two approaches were designed: demand–supply linkage approach and ward coordination approach. The demand–supply linkage approach seeks to actively engage CBOs and NGOs. It aims to utilize the capacities of slum-based community groups to spread
Table 1. Criteria for health vulnerability assessment in slums.

<table>
<thead>
<tr>
<th></th>
<th>Extremely vulnerable slums</th>
<th>Moderately vulnerable slums</th>
<th>Less vulnerable slums</th>
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</thead>
<tbody>
<tr>
<td><strong>SLUM STATUS</strong></td>
<td>Unauthorized settlement i.e. slums not recognized (situated along roadside, on private land)</td>
<td>Land belongs to local authorities and possibility of sanction/leased land</td>
<td>Own land or authorized quarters or a registered slum</td>
</tr>
<tr>
<td><strong>HOUSING</strong></td>
<td>House is <em>Kuchcha</em> (made with mud, tatch, or other low quality materials) with weak structure; high density in the area; no separate place for cooking; minimal ventilation</td>
<td>Semi-pucca (made with partly low quality and partly high quality material); relatively better than the earlier category</td>
<td>Permanent structure, ventilation present; separate space/veranda for cooking</td>
</tr>
<tr>
<td><strong>BASIC SERVICES</strong></td>
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<tr>
<td>Toilet</td>
<td>No toilets and defecation in the open by adults and children</td>
<td>Bathing in the open, use of common toilets for defecation; children’s use of toilets is low</td>
<td>Majority have bathing and toilet facilities within their homes</td>
</tr>
<tr>
<td>Water</td>
<td>No water supply in the slum. People travel far for water</td>
<td>Number of public water taps disproportionate to the need in the slum and irregular water supply</td>
<td>Many public taps with supply of water at regular intervals</td>
</tr>
<tr>
<td>Drainage</td>
<td>No drains, or drains are clogged, un-cemented roads</td>
<td>Open drains, narrow but cemented lanes</td>
<td>Majority of the slum areas have underground drains and paved roads (cemented)</td>
</tr>
<tr>
<td>Electricity</td>
<td>No electricity or tapped illegally</td>
<td>Pay to the landlord for point wise or otherwise</td>
<td>Metered individual electricity connections</td>
</tr>
<tr>
<td><strong>EMPLOYMENT PATTERN</strong></td>
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<tr>
<td>Pattern</td>
<td>Amount below INR1,000 per family per month; daily wage earner with irregular pattern</td>
<td>INR1,000–2,000 earning per household; daily wage but regular self employment</td>
<td>&gt;INR2,000 earning per household; majority service class</td>
</tr>
<tr>
<td>Occupation hazard</td>
<td>Majority are in hazardous work, such as rag picking, sex work, recycling of garbage</td>
<td>Vendors, semi, and unskilled labourers engaged in odd jobs</td>
<td>Private or government job holders, petty traders, shopkeepers, etc.</td>
</tr>
<tr>
<td><strong>CREDIT</strong></td>
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<tr>
<td>Loaning/savings</td>
<td>Loans from unorganized sector through mortgage or with rates of interest higher than 10%; no savings</td>
<td>Loans from landlords or money lenders at lower rates of interest. Irregular savings</td>
<td>Loans from organized community group/institutions; saving regularly at bank, self-help groups</td>
</tr>
<tr>
<td><strong>STATUS OF HEALTH AND HEALTH SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Morbidity</td>
<td>High incidence of illnesses, malnutrition, and mortality among children</td>
<td>Better conditions than previous category</td>
<td>Lesser morbidity and mortality among children</td>
</tr>
<tr>
<td>Services</td>
<td>Extremely low immunization among children; home deliveries by untrained <em>dais</em></td>
<td>Irregular immunization; majority of deliveries are institutional</td>
<td>Complete immunization; all deliveries are institutional</td>
</tr>
</tbody>
</table>
awareness about healthy behaviours, generate demand for services, and improve utilization of existing health facilities. The ward coordination approach aims to expand service coverage by encouraging existing stakeholders to complement each other's resources and deliver outreach health services in a coordinated manner.

**Demand-supply linkage approach**

Under this approach, the capacities of slum-based community organizations are built to achieve the objective of improved health outcomes. There is an increasing recognition that these local community networks that facilitate collective action have a positive impact on health (Berkman and Berslaw 1983, Israel et al. 1994, Rogers 1996, Yen and Syme 1999, Woolcock and Narayan 2000). Community-level organizations, with strong existing presence in slum areas, are empathetic towards and better informed about the various dimensions of deprivation among the urban poor. Hence, their involvement would address health issues in a more effective and sustainable manner, and would be more responsive to the issues faced by the slum community (see Figure 4).

Seventy-nine slums, including 44 extremely and moderately vulnerable, and 31 less vulnerable, were selected for implementing this approach. The community

### Table 1 (Continued)

<table>
<thead>
<tr>
<th>Extremely vulnerable slums</th>
<th>Moderately vulnerable slums</th>
<th>Less vulnerable slums</th>
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</thead>
<tbody>
<tr>
<td><strong>Health facility</strong></td>
<td>No public health facility within 2–3 km; visit faith healers, store keepers, and quacks for treatment</td>
<td>Visit quacks and qualified doctors; government facility used only for prolonged illnesses</td>
</tr>
<tr>
<td><strong>DEVELOPMENTAL SUPPORT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government NGO/CBO</td>
<td>No government or non-government programmes; limited community based efforts</td>
<td>ICDS and other programmes present but function irregularly; NGO and CBO activities are sporadic</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children and adults</td>
<td>Majority of children work and are not enrolled in schools; illiteracy among adults</td>
<td>Children enrolled in schools but drop out rates are high; adults have functional literacy</td>
</tr>
<tr>
<td><strong>GENDER STATUS</strong></td>
<td>Low gender status (seen in high incidence of domestic violence, limited choices over fertility)</td>
<td>Seen as improvement over the extremely vulnerable category</td>
</tr>
<tr>
<td><strong>IDENTITY PROOFS</strong></td>
<td>Majority do not have any documents (ration cards, voter ID, caste certificate)</td>
<td>Some have ration cards, voter ID, caste certificate</td>
</tr>
</tbody>
</table>
groups were envisaged to undertake the following activities for health improvements:

1. Increasing awareness and demand of health services in slum communities.
2. Increasing supply of health services by engaging with government and private health providers.
3. Improving the linkages between health providers and slum communities.

The demand for health services among slum communities is enhanced through capacity building of community-based organizations, which are women’s groups comprised of of 10–15 active women from the community. Several of the CBOs (called Basti CBOs) were formed before the UHRC programme was initiated but they did not undertake any activities related to health. The Basti CBOs were given significant training inputs in order for them to undertake health promotion and demand generation activities in slums. These CBOs also tracked eligible mothers and children in their slums and counseled them with regard to healthy behaviours. They also facilitated the conduct of health activities in slums such as health camps.

Some of the CBOs were more experienced and capable than others, and were designated as cluster coordination teams or Lead CBOs. Cluster coordination teams are comprised of four to five trained women from slum communities who had worked together in slum areas, other than their areas of residence, for at least

Figure 4. Demand–supply linkage approach, Indore.
2 years prior to the initiation of the urban health programme. The Lead CBOs were mandated to provide monitoring, support, and supervision, to the activities of the Basti CBOs. There were nine CCTs in operation, and they played key roles in engaging with the health providers in the public and private sectors to conduct health services in slums. Typically, a Lead CBO supervises 9–11 Basti CBOs. The activities of the CBOs are supported and supervised by five NGOs, who train the CBOs and provide supportive supervision. The NGOs are also responsible for networking with public and private health providers, ICDS, charitable institutions, and the Indore Municipal Corporation, and building the institutional and programme capacity of the CBOs.

The supply of health services to slum communities is enhanced by NGOs and CBOs by effectively persuading government health facilities to conduct health camps in slums. As the slum level logistical support is provided by the CBOs and NGOs, it is easier for the health facilities to provide health services in slums which were previously uncovered. The NGOs and CBOs also engage with socially committed private doctors to provide antenatal care checkups in slums. These doctors are provided a token amount to take care of their transport and other expenditure by levying a small user fee from clients. Organized slum members have also been able to effectively influence the municipal bodies to improve water, sanitation, and drainage in slums, which have beneficial impact on health in the slums.

Even though there are a number of health providers, both in the public and private sectors, they were not accessed by slum communities due to lack of confidence or simply because they have been turned away from health facilities. Helping communities organize themselves helps them negotiate for better and more regular services and helps them demand and utilize services when needed. Strengthening the community-provider linkage was envisaged as an important outcome of this process of empowering the community to demand and utilize health care.

Outcomes. Since April 2003, the five NGO-CBO consortia have been actively addressing health issues in the 79 slums covering a population of approximately 150,000. Through the synergistic efforts of slum CBOs, CCTs, NGOs, and health providers, the public sector health services have expanded their reach to hitherto unreached and vulnerable slums, and improved service quality through optimized use of existing labour and resources. CCTs and Basti CBOs have coordinated directly with the health department to organize at least 50 MCH outreach camps each month. In addition, in partnership with eight private doctors, monthly antenatal check-up clinics, that also provide counselling to pregnant women and their families, have been instated. One doctor attends each check-up clinic, held at locations covering two to three slums, or approximately 3,000 slum dwellers. Beneficiaries pay a nominal fee to help maintain doctor interest and, hence, continuity.
Data from a baseline survey (October–November 2003) and an independent evaluation study in March 2006\(^1\) suggest a substantial increase in institutional deliveries, exclusive breastfeeding, and immunization rates, for both pregnant women and children in the slums where the demand–supply and linkage approach is being implemented (see Figure 5).

Counselling sessions by CBOs, training of slum-based dais, antenatal and postnatal care, and other programme interventions over 2 years, have assisted in improving delivery and postnatal care outcomes. Findings from the 2005 Maternal and Newborn Health study\(^2\) on the practice of the ‘five cleans’ (clean hands, clean blade, clean surface, clean tie, clean cord stump), show improvement among deliveries conducted at home (see Figure 6).

Strengthened social capital is evident from the improved health promotion and negotiation capacity (assessed qualitatively through interaction with CBO representatives) of the CBOs. These CBOs now have at least six active members who meet once a month to review and plan health promotion activities for their respective slums/areas, are actively involved in group and individual counselling and Behaviour Change Communication (BCC) activities, and maintain information on MCH in their respective slum communities. They are also able to negotiate directly with local government officials and elected representatives for improved access to water or health services in their Basti. Indeed, seven CBOs are now registered formally with the government as independent organizations. They are also recognized as credible urban health organizations by the district administration and local NGOs and are, therefore, involved in other slum development programmes in Indore. These CBOs now clearly appreciate the value and benefit of collective action to achieve shared community goals.

**Figure 5.** Key indicators in Indore slums post demand–supply linkage approach.
UHP is currently focusing on further strengthening the capacities of the CBOs so they become self-sustained and independent of UHRC. Other governmental and non-governmental programmes can utilize these slum level institutions to implement their programmes. The programme also serves as a demonstration site through dissemination of lessons and evidence-based best practices to inform district, state, and national urban health strategies, and through study tours to sensitize programme implementers.

Ward coordination approach. The overarching aim of this approach is to improve access and reach of primary health services, such as immunization services, to slum communities through coordination among different stakeholders working in slums. A ward is the smallest administrative unit in Indian urban areas and is a commonly used unit for planning and implementing development programmes. This level was also taken as the unit for implementing this approach. Ward 5 in Indore was selected for the initiation of such an approach after consultation with DPH officials in March–April 2003.

Ward 5 is among Indore’s largest wards, with a population of about 55,000. Moreover, it displays poor child health outcomes among slum residents. To build on information from the overall situation analysis of Indore city, a more detailed situation analysis, mapping, and assessment of Ward 5 slums was conducted in April 2003. This exercise revealed the presence of 51 slums, of which 28 were extremely or moderately vulnerable, and only 24 have been listed in official records. There were only two trained female health workers and 16 AWCs to provide health and nutritional services to the entire ward.

A Ward Coordination Committee (WCC) was chosen as the mechanism to implement the ward coordination approach. Stakeholders participating in the

![Care during delivery](image_url)

**Figure 6.** Care during delivery in Indore slums.
WCC include the public sector (IMC, DPH, elected representatives of the IMC, the District Urban Development Authority, and the Department of Women and Child Development), private health service providers, and civil society organizations (NGOs and CBOs). The WCC meets monthly to review progress in these efforts and to develop strategies to better utilize local resources in a complementary manner (see Figure 7).

Under the ward coordination approach, these government, non-government, private, and community groups, as well as charitable organizations, are collaborating in conducting regular outreach in all Ward 5 extremely and moderately vulnerable slums.

**Outcomes.** Through these coordinated efforts in Ward 5 from May 2003 through April 2006 a total of 204 camps (primarily for childhood immunization) were organized, covering 28 underserved slums (population of 35,000), both by the DPH and by an NGO that runs an ICDS project and has its own trained health worker (Kumar et al. 2005). With support from the health department, the WCC has been able to forge linkages with organizations such as the National Neonatology Forum (NNF) and the Indian Academy of Paediatrics (IAP). These collaborations have helped the WCC provide improved health services by supporting the organization of health camps in Ward 5. Apart from undertaking health check-ups, doctors from the NNF and the IAP provide inputs to target groups for counselling on issues such as newborn care, diarrhoea management, and safe delivery practices. The WCC also collaborates with the ESIC on various national health programmes, including the promotion of family planning among slum communities.

Over time, the WCC has been able to garner support from other local NGOs for organizing health camps, thus intensifying its coverage from one camp per month (May–July 2003), covering five slums, to seven camps per month.
(November 2003 onwards), covering 28 slums. An independent evaluation, conducted in March 2006 by MODE Services, suggests that overall child immunization rates have substantially improved as a result (see Figure 8).

Efforts are currently underway to institutionalize the ward coordination approach in Indore by further stimulating and facilitating regular ward coordination meetings, ensuring the documentation of minutes of these meetings, signed by involved officials of health departments and municipal corporations representing the ward committee, and involving senior authorities, such as the mayor, district magistrate, and municipal committee, as and when feasible. The Indore Municipal Corporation has commended WCC’s efforts in reaching out to the slums of Ward 5, and has initiated efforts to replicate slum-level health activities in other wards through such coordination committees. Consequently, based on the success of the coordination approach in Ward 5, similar efforts were initiated in September 2005 in Ward 7, which has similar characteristics to Ward 5, with 26 slums of which 24 are extremely vulnerable. Between September 2005 and April 2006, 29 immunization camps, covering a slum population of 35,000 were held in Ward 7.

**Discussion**

Implementation of the two-approach UHP strategy in Indore has brought forth several valuable lessons. In particular, use of UHP preparatory phase tools, i.e. techniques regarding situation analysis, slum mapping and vulnerability assess-

![Figure 8. Immunization status among children 12–23 months old on Ward 5, Indore.](image-url)
ment, and consultative planning with stakeholders, would lay a strong foundation for the success of any urban health programme. This preparatory phase is vital, as it helps concerned stakeholders to better understand the local context, develop ownership of the programme, and effectively implement programming in underserved slum areas. It also helps in identifying the extremely vulnerable pockets, which are often not included in the official municipal corporation slum lists and, therefore, are unable to avail themselves of, and have access to, public health services. The programme planning process also demonstrates the importance of bringing in technically correct and comprehensive information/evidence about slums, to help stakeholders develop more need-responsive programme plans and, thus, better target the needy and utilize resources more efficiently.

An important achievement of the demand-supply and linkage approach has been the evolution of slum CBOs as a potent institutional mechanism for implementing slum health and development programmes. CBO members now function as role models, empower slum families to adopt behaviours, avail themselves of services, and negotiate for other slum development programmes. Moreover, focused programme efforts by Basti CBOs and CCTs, to foster community linkages with public and private health providers, have helped expand access to health services. Implementation of the ward coordination approach in Indore’s Ward 5 has demonstrated that available local resources (public and private) can be better utilized through coordinated efforts on MCH improvement at the ward level.

While both approaches have helped better focus resources for improving the health status of the two targeted slum populations, the requirements for successful implementation of these two distinct approaches in Indore are different. In particular, differing resources are required to implement and sustain these approaches. Of the two approaches described, implementation of the demand-supply linkage approach is relatively more resource-intensive, requiring development of a functional consortia with strong CBOs and NGOs that can work to link slum dwellers and service providers. When sufficient resources are available for consortia development and member capacity building, this approach has proven effective in both Indore and in similar urban health programmes in Mumbai (Streehitkarini and Apanalaya) and Ahmedabad (Self-Employed Women’s Association [SEWA] and Saath) (Agarwal 2004).

Unlike the demand-supply approach, implementation of the ward coordination approach is less resource intensive. Only limited outside resources are required to galvanize stakeholder collaboration through the WCC. This approach has limitations in terms of narrower breadth of interventions, and is largely focused on supply side improvements. This approach can be adapted and tried out to bring about effective synergy in the activities of different agencies. However, the ward coordination approach is valuable in slum areas where stakeholders are already active in implementing and are dedicated to enhancing service coverage but are constrained by lack of resources.
At the same time, to sustain the ward coordination approach, the WCC must remain active. Only if this common platform remains active does convergence of resources lead to synergistic efforts, better resource utilization, and improved outcomes in health service coverage and utilization. As such, this approach is particularly effective in slum areas where a few ‘go-getters’, or urban health champions, exist to stimulate WCC action. At times, such support has been lacking in Indore. To sustain the ward coordination approach, it has been necessary to provide continued outside support and facilitation to ensure that the stakeholder coordination mechanism remains functional and active.

It is important for any urban health programme to identify an appropriate implementation mechanism that strengthens community networks and builds functional links between slum communities and health care providers. In Indore, both NGO-CBO consortia and ward health committees have effectively forged convergence and synergy among stakeholders. When adapting similar mechanisms in other developing country cities, the key is to select a mechanism that will both involve and strengthen the capacities of existing local, particularly slum-level, groups or networks during planning and implementation.

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Notes

1 The baseline survey was carried out by ORG in October and November 2003 to arrive at benchmark data on maternal and child health indicators in Indore slums. The survey used a pre–post experimental control design and interviewed 3,166 women who gave birth in the 2 years preceding the survey. The independent evaluation study was carried out by MODE Services.

2 The Maternal and Newborn Health Study was conducted to understand current practices of maternal and newborn care and factors influencing them in Indore slums. The study interviewed 256 mothers of infants aged 2–4 months old to assess antenatal, intra-partum, and postnatal care practices.

References


