Alma-Ata: Rebirth and Revision 5

Community participation: lessons for maternal, newborn, and child health

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Primary health care was ratified as the health policy of WHO member states in 1978.[1] Participation in health care was a key principle in the Alma-Ata Declaration. In developing countries, antenatal, delivery, and postnatal experiences for women usually take place in communities rather than health facilities. Strategies to improve maternal and child health should therefore involve the community as a complement to any facility-based component. The fourth article of the Declaration stated that, "people have the right and duty to participate individually and collectively in the planning and implementation of their health care", and the seventh article stated that primary health care "requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care". But is community participation an essential prerequisite for better health outcomes or simply a useful but non-essential companion to the delivery of treatments and preventive health education? Might it be essential only as a transitional strategy: crucial for the poorest and most deprived populations but largely irrelevant once health care systems are established? Or is the failure to incorporate community participation into large-scale primary health care programmes a major reason for why we are failing to achieve Millennium Development Goals (MDGs) 4 and 5 for reduction of maternal and child mortality?

Introduction

Soon after the Alma-Ata Declaration, arguments for selective rather than comprehensive primary health care dominated health system debates.[2] Policy makers in favour of selective primary health care argued that community interventions such as oral rehydration solution, immunisation, or vitamin A capsules could be targeted effectively at poor, albeit passive, recipients with immediate benefit. They recognised that community participation was important in supporting the provision of local health services and in delivering such interventions at scale, but believed that pilot programmes showing long-term benefits from more comprehensive community mobilisation had been much less successful when governments tried to take them to scale.

More recently the lack of progress with the Millennium Development Goals (MDG) and primary health care in many poor countries has encouraged those in favour of comprehensive primary health care to question whether the failure to address community care and participation effectively within health programmes is a major reason for poor sustainability and ineffective scaling-up of selective interventions of proven efficacy. The review of the WHO Integrated Management of Childhood Illness strategy reinforced these questions: "Delivery systems that rely solely on government health facilities must be expanded to include the full range of potential channels in a setting and strong community-based approaches. The focus on process within child health programmes must change to include greater accountability for intervention coverage at population level."[3]

A crucial policy question is whether specific community participation interventions aimed at women and their families have a direct effect on maternal and child health? If so, how do these interventions work most effectively, and how can they be taken to scale?

What are participation, mobilisation, and empowerment?

The closely related concepts of participation, mobilisation, and empowerment require definition. Participation has been used to indicate active or passive community involvement. In the past, mobilisation consisted of communities responding to directions given by professionals to improve their health. This process usually took the form of mass campaigns for immunisations where communities were passively involved as the setting where the interventions were implemented or the target of the specific intervention. More recently, health and development workers have begun to act as facilitators focusing on the process of health improvements as well as the outcomes. In this approach the facilitators support local communities to become actively involved—to participate—in both activities and decisions that affect their own health, either as a resource that can provide assets to address a health problem or an agent of change that uses its own supportive and developmental capacities to address its needs. In this paper we will discuss this more recent form of community mobilisation, which we define as "a capacity-building process through which community individuals, groups, or organizations plan, carry out, and evaluate activities on a participatory and sustained basis to improve their health and other needs, either on their own initiative or stimulated by others".[4]

Health programmes today often identify empowerment rather than participation as an objective. Empowerment

can be defined as the process and outcome of those without power gaining information, skills, and confidence and thus control over decisions about their own lives,[5] and can take place on an individual, organisational, and community level. Community mobilisation, by our definition, is a way to support this empowerment process and reach this empowerment outcome (figure 1).

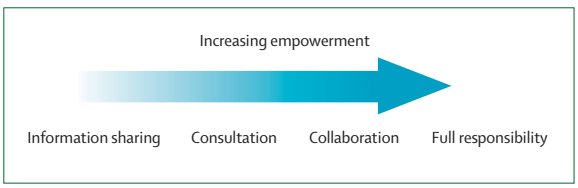

Figure 1: **From passive to active community participation**

What evidence led to Alma-Ata?

The Alma-Ata Declaration arose from evidence generated by the Joint WHO/UNICEF Study of Alternative Approaches to Meeting Basic Health Needs of Populations in Developing Countries under the leadership of Halfdan Mahler (Assistant Director-General at WHO, 1970–73) and Kenneth Newell (Director of Research in Epidemiology and Communications Science at WHO, 1962–72), who were influenced by the work of the Christian Medical Commission in Geneva and its growing commitment to community-oriented primary health care as the most appropriate approach to addressing the health needs of poor people.[6,7,8] This evidence revealed the successes of national health programmes in China, Cuba, Sri Lanka, Tanzania, and Venezuela as well as in subnational programmes in Guatemala, India, Indonesia, Iran, Kenya, and Niger, which all used community participation as a fundamental component of primary health care.

The Jamkhed Project in the state of Maharastra in India and the Kakamega Project in Western Kenya are examples of successful smaller-scale subnational pilot programmes where community mobilisation was a key intervention (panel 1).[10,11] Communities were assisted to identify their own problems, collect their own data, and implement their own solutions. These demonstration projects provided clear evidence of a dramatic effect on health but could not be easily replicated by governments on a larger scale. Once part of a national programme, bureaucratic rules and top-down directives changed the nature of community participation and heavy donor support emphasised performance targets rather than the unhurried process necessary for engagement with communities. Miriam Were, director of Kakamega, lamented that "officials and international experts could not understand that successes had arisen from the process, not from the setting of performance targets, and that the forward momentum had been generated from within the community and not from external financing".[11]

The failure to scale-up Jamkhed, Kakamega, and other similar projects through national governments contributed to a move away from participatory approaches to primary health care. Since 1990 the focus of child survival efforts has been on increasing the coverage of health commodities with proven effectiveness—such as oral rehydration solution for diarrhoea,[12,13,14] cotrimoxazole for childhood pneumonia,[15,16] vitamin A supplementation,[17,18] insecticide-treated bednets,[19,20] and vaccinations.[21] At the same time, maternal survival efforts also moved away from community approaches focusing on traditional birth attendants, which lacked clear evidence of effectiveness, to efforts entirely focused on strengthening district hospital midwifery and obstetric care services and health systems.[22,23]

These approaches to the diseases of poverty proved more saleable to policy makers for two main reasons. Firstly, the clear-cut and rapid public health gains shown by these approaches fitted well within the new culture of evidence-based medicine. Secondly, the scalability of distribution of these approaches seemed intrinsically easier and less expensive than more long-term comprehensive primary health care approaches involving community mobilisation despite strong evidence supporting their effectiveness and affordability.[24]

What is the effect of community mobilisation on maternal, newborn, and child health ?

Progress towards MDGs 4 and 5 in the poorest countries has remained slow in high-mortality settings.[25,26] Between 1990 and 2005 there was no substantial change in maternal mortality in sub-Saharan Africa, and of the 68 priority countries targeted for child survival improvements, 41% were deemed to have made insufficient progress and 38% made no progress.[26] Additionally, in 11 African countries there were reversals in under-5 mortality rates in the same period.[26] The evident ineffectiveness of existing programmes and conclusion that this may in part be due to the lack of community involvement has led to a renewed focus on community mobilisation strategies for maternal, newborn, and child survival.[3]

Most studies of community mobilisation interventions have investigated the effectiveness of specific interventions targeted at a passive recipient community—the old style of community mobilisation (for example, breastfeeding promotion, diarrhoea prevention and treatment, growth promotion,[27,28,29,30] promotion of complementary feeding after 6 months of age,[31] treatment of severe acute malnutrition[32] and pneumonia prevention and treatment[33,34,35]). Far fewer studies have investigated the effectiveness of community mobilisation interventions, either on their own or in combined packages with other interventions, where the community provides the resources and is the active agent of change (table). In Ethiopia a cluster randomised controlled trial (cRCT) showed that mobilising women's groups to effectively recognise and treat malaria at home led to a

Panel 1: **Projects in rural India and Kenya which influenced Alma-Ata**

Jamkhed Project (1970 to date)

In 1970, Raj and Mabelle Arole, two doctors, started a primary health care programme in Jamkhed, a rural area in Maharashtra state in India.[9,10] The project used a participatory approach to bring villages together and establish farmers clubs. These clubs identified problems facing the community and chose to focus on improvements to water supplies and sanitation. As the clubs evolved they became women's development organisations and implemented solutions such as: identifying women to be trained as health workers; funds for women with a household health emergency or food crisis; keep village clean drives; literacy programmes; advocacy for encounters with bureaucracy; and micro-credit schemes. The programme expanded to other villages, eventually covering a population of more than 250 000. Over the first 20 years (1972–1992) the project showed a reduction in infant mortality rate from 176 to 19 per 1000, and a birth rate decline from 40 to 20 per 1000.[10] Additionally, rates of antenatal care, safe delivery, and immunisation are nearly universal and rates of malnutrition have declined from 40% to less than 5%.[10] In parallel, the women's groups have developed a greater sense of their potential for agency, and caste barriers among women have gradually diminished.

Kakamega Project (1974 to 1982)

The Kakamega project led by Miriam Were was established in western Kenya in 1974.11 Women in communities were supported to identify their own problems, collect their own data and select their own community health workers with open community involvement. Among other things communities set up village funds and bank accounts and established transport schemes enabling access to secondary care. The project achieved improvements in primary care, immunisation, water supplies, family planning, and malaria control. It also increased community support and self-reliance. As the women became empowered the visits from outside facilitators became less frequent.

40% reduction in under-5 mortality.[36] For newborn care, the SEARCH Project in India showed the value of a complex home-based newborn care package (which included community delivery of injectable antibiotics, health promotion, training of traditional birth attendants, and physician visits) within a programme where communities had been mobilised over an extended period.[37] Bang and colleagues[38] ascribe 36% of the reduction in neonatal mortality rate to sepsis management; assessing the contribution of community mobilisation within the intervention compared with control villages is more difficult, although important.

In Makwanpur district, Nepal, women's groups, led by a locally recruited woman facilitator, were supported through a community mobilisation action cycle where they discussed maternal and newborn health problems, developed strategies to address them, and then implemented and assessed the strategies in co-operation with local leaders, men, and health workers.[39] The mobilisation intervention had been developed in Bolivia under the Warmi programme [40, 41] (figure 2). The Warmi programme had seen a large reduction in perinatal mortality rate using before and after analysis of a small population, and the larger Makwanpur cRCT showed a 30% reduction in neonatal mortality rate, as well as significantly fewer maternal deaths (although the numbers of maternal deaths were few and maternal mortality ratio had not been a primary outcome for the trial).[39]

Two more recently published studies are the Hala and Projahnmo community effectiveness trials in Pakistan and Bangladesh, which combine demand and supply-side interventions, with different results.[42,43] The Hala trial was a pilot non-randomised controlled trial in which Lady Health Workers (government health workers responsible for about 200 families each) received training in home-based neonatal care and local traditional midwives (dais) received voluntary training. In addition, village health committees were established for maternal and newborn health. Compared with baseline rates the trial showed a 35% decline in perinatal mortality rate and a 28% decline in the neonatal mortality rate in the intervention villages. The control villages showed no decline.[42] The Projahnmo cRCT assessed the effectiveness of specially trained community health workers, who provided a home-care package including assessment of newborn infants on the first, third, and seventh days after birth, and referral or treatment of sick neonates. The study showed a 34% reduction in neonatal mortality rate in the final 6 months of the trial compared with the comparison group.[43] However, unlike the studies outlined above, the third community care arm, in which community mobilisers held community meetings with women in villages, showed no effect on neonatal mortality compared with the control arm.[43]

What are the current controversies surrounding community mobilisation interventions?

Community mobilisation versus home care visits

Although increasing evidence favours the effectiveness of community mobilisation interventions, a comparison of the Makwanpur and Projahnmo trials is central to this policy dilemma. The Makwanpur trial suggests that community mobilisation through women's groups is a cost-effective approach to reduce neonatal mortality rate in remote villages where developing and maintaining a programme of home visits by outreach workers has been impossible.[44] Projahnmo, by contrast, suggests that community mobilisation is less effective than a home-care strategy in reducing neonatal mortality rate in communities with a weak health system and low health-care use. Several other trials testing different combinations of interventions, with mobilisation as a core

	Authors	Design	Type of interventions	Primary outcomes	Sample	Results	Comment
Warmi Project, Bolivia	O'Rourke[41] 1998	Before and after analysis	Women's groups using community action cycle. Intervention focused on initiating and strengthening women's organisations, developing women's skills in problem identification and prioritisation, and training community members in safe birthing techniques	Newborn mortality rate; perinatal mortality rate	Remote Bolivian mountain villages, around 15 000 population.	Evaluated by comparing perinatal mortality rate and obstetric behaviour among 409 women before and after the intervention. Perinatal mortality rate decreased from 117 deaths per 1000 births before the intervention to 43·8 deaths per 1000 births after. The proportion of women receiving prenatal care and initiating breast-feeding on the first day after birth was also significantly larger.Number of infants attended to immediately after delivery increased, but the change was not statistically significant	
SEARCH, Gadchiroli district, India	Bang[37,38] 1999 and 2005	Controlled trial (not randomised) Baseline phase (1993–1995), observational phase (1995–1996), and the 7 years of intervention (1996–2003)	Home-based newborn care consisting of sepsis management, supportive care of low birthweight newborn babies, asphyxia management, primary prevention, health education and training of traditional birth attendants. Built upon a pre-existing community mobilisation programme	Still birth rate; newborn mortality rate; perinatal mortality rate; newborn mortality rate; infant mortality rate	The baseline population was 39 312 in 39 intervention villages and 42 617 in 47 control villages. Livebirths in 10 years were 8811 in intervention villiages and 9990 in control villages	Newborn mortality rate in the control area showed an increase from 58 in 1993–1995 to 64 in 2001–2003. The rate fell by 70% (95% CI 59–81%) compared with the control area. Early newborn mortality rate decreased by 64% and late newborn mortality rate by 80%. Still birth rate decreased 49% and the perinatal mortality rate by 56%. Newborn mortality rate did not change, and the infant mortality rate decreased by 57%, (95% CI 46–68%). Cause-specific newborn mortality rate (1995–1996 *vs* 2001–2003) for sepsis decreased by 90%, for asphyxia by 53%, and for prematurity by 38%	Total reduction in newborn mortality rate during intervention (1996–2003) was ascribed to sepsis management (36%); supportive care of low birthweight newborn babies (34%); asphyxia management (19%); primary prevention (7%); and management of other illnesses or unexplained (4%). The contribution of community mobilisation in the intervention areas is difficult to estimate
Tigray, Ethiopia	Kidane[36] 2000	Cluster randomised controlled trial (cRCT)	Mother coordinators trained to teach other local mothers to recognise symptoms of malaria in their children and to promptly give chloroquine	Under-5 mortality rate	Total population of 70 506 in 37 tabias (cluster of villages) in two district were paired according to under-5 mortality rates. 24 tabias with the highest malaria morbidity were selected	190 of 6383 (29·8 per 1000) children younger than 5 years died in the intervention tabias compared with 366 of 7294 (50·2 per 1000 children) in the control tabias. Under-5 mortality was reduced by 40% in the intervention localities (95% CI 29·2–50·6; paired *t* test, p<0·003). Of 190 verbal autopsies, 13 (19%) of 70 in the intervention tabias were consistent with possible malaria compared with 68 (57%) of 120 in the control tabias.	
MIRA Makwanpur distict, Nepal	Manandhar[39] 2004	cRCT	Women's groups through community action cycle	Newborn mortality rate	24 clusters of mean 7000 people per cluster	Newborn mortality rate was 26·2 per 1000 (76 deaths per 2899 livebirths) in intervention clusters compared with 36·9 per 1000 (119 deaths per 3226 livebirths) in controls (adjusted odds ratio 0·70 [95% CI 0·53–0·94]). Stillbirth rates were similar in both groups.Maternal mortality ratio was 69 per 100 000 (two deaths per 2899 livebirths) in intervention clusters compared with 341 per 100 000 (11 deaths per 3226 livebirths) in control clusters (0·22 [0·05–0·90]).	
CHAMPION trial, Mahabubnagar district, Andhra Pradesh, India	Boone 2007	cRCT	Health promotion intervention includes a health education campaign, participatory discussion groups, training of village health workers and midwives, and improved coordination of antenatal services. The intervention group will also have subsidised access to pregnancy-related health care services at non-public health centres	Newborn mortality rate	464 villages	Ongoing	Final data analysis due in 2010

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	Authors	Design	Type of interventions	Primary outcomes	Sample	Results	Comment
(Continued from previous page)							
Projahnmo Project, Shylet district, Bangladesh	Baqui[43] 2008	cRCT	Female community workers doing home care visits (1 per 4000) and community mobilisers running health education groups every 4 months *vs* control comparison areas	Newborn mortality rate	24 clusters of 20 000 per cluster in. 14769 livebirths in the home-care groups, 16325 in the community-care groups, and 15350 in the comparison groups	Newborn mortality rate was reduced in the home-care arm by 34% (adjusted relative risk 0·66; 95% CI 0·47–0·93) during the last 6 months of the trial *vs* that in the comparison arm. No mortality reduction was noted in the community-care arm (0.95; 0·69–1·31).	The community care arm involved fairly infrequent contact with community groups (once every 4 months) and provided health education rather than community mobilisation
Hala, Pakistan	Bhutta[42] 2008	Before and after analysis	Lady Health Workers and traditional birth attendants providing health education and maternal and child health services	Still birth rate; newborn mortality rate; health service use	315 villages with a total population of 138 600	Still birth rate reduced from 66 to 43 per 1000 and newborn mortality rate 57 to 41 per 10000 before and after in intervention sites. Skilled birth attendance from 18 to 30%	Preliminary results to be confirmed in an adequately powered trial
SNEHA Project, Mumbai, India	More 2008	cRCT	Women's groups through community action cycle	Newborn mortality rate; maternal and newborn morbidity; care practices and health care use	48 urban slum clusters of 1000–1500 households each. 24 clusters randomly allocated to receive the community intervention. 24 clusters will act as control groups, but will benefit from health service quality improvement	Ongoing	Final data analysis due in 2010
MaiMwana Project, Mchinji district, Malawi	Unpublished	cRCT	Womens groups through community action cycle and volunteer infant care and feeding counsellors	Newborn mortality rate; still birth rate; perinatal mortality rate; maternal mortality ratio	48 clusters (3000 people per cluster)	Ongoing	Final data analysis of 20 000 births due in November 2008
Perinatal Care Project DAB, Bangladesh	Unpublished	cRCT	Womens groups through community action cycle and management of birth asphyxia in the home using traditional birth attendants trained in bag and mask resuscitation	Newborn mortality rate; still birth rate; perinatal mortality rate; maternal mortality ratio	18 union clusters in 3 districts (25000 people per cluster)	Ongoing	Final data analysis of 32 000 births due in November 2008
Ekjut, Jharkhand and Orissa, India	Unpublished	cRCT	Women's groups through community action cycle	Newborn mortality rate; still birth rate; perinatal mortality rate; maternal mortality ratio	36 clusters across 3 districts. 7000 people per cluster	Ongoing	Final data analysis of 20 000 births due in December 2008
MIRA, Dhanusha district, Nepal	Unpublished	cRCT	Womens groups through community action cycle and newborn sepsis management in the home using female community health volunteers	Newborn mortality rate; still birth rate; perinatal mortality rate; maternal mortality ratio; nutrition indicators	60 clusters, 7000 people per cluster	Ongoing	Final data analysis due in 2009
Ifakara, Tanzania	Unpublished	cRCT	Community-based package focussed around interpersonal communication through home visits in pregnancy and the early neonatal period by a village-based "agent of change" linked to existing village health volunteers.	Newborn mortality rate	24 divisions in 5 districts	Ongoing	Data analysis due in 2011

***Table*: Published and currently ongoing trials of interventions involving community mobilisation for maternal and child health**

component, are currently in progress (table). The interpretation of the findings of these trials must be considered carefully to guide policy makers. For example, the community mobilisation component of Projahnmo was less intensive than in Makwanpur. Thus, an important question to ask of these trials might be, what is the necessary level of intensity and coverage of community mobilisation and home-care interventions, to produce the most cost-effective effect? Other important questions include which are the most effective models of these interventions, can they be scaled up in the poorest communities, and what are the institutional and financial barriers to scale-up?

Community health workers

The use of so-called barefoot doctors in China inspired primary health care. This model involved local community residents—community health workers—liberating communities by providing first line health care and facilitating others to embrace changes brought about by the new government.[45] This model was adopted by many governments and non-governmental organisations after the Alma-Ata Declaration and in many cases became the definition of primary health care. However, by the 1990s many government programmes for community health workers had vanished because of problems in integrating them into national programmes.[46] People also questioned whether community health workers actually empowered or oppressed as a result of the existing, socioeconomic political structures, bureaucracies, and lack of support from health professionals.[47]

Recently, community health workers have generated renewed interest, in part because they are seen as a cheap way of scaling up primary health care, and also because HIV/AIDS programmes demand more care at community level. The pandemic has claimed the lives of many health workers especially in Africa. The current interest lies mainly in community health workers as care providers but this can be problematic as large-scale government training programmes often lack standards, supervision, and resources. Furthermore, the evidence suggests that community health workers are most effective when they also facilitate change at the community level[48,49] and participatory approaches promoted by the online journal Participatory Learning and Action have provided structures and frameworks that support this role.[5] Overall, community health workers are most successful when they have the respect and support of governments, public service workers, and the communities they serve.

Does community mobilisation empower people to address socioenvironmental causes of ill-health?

Health, particularly in marginalised groups, is indirectly but powerfully affected by the social environment in which personal behaviours are embedded. Risk factors (such as isolation, lack of social support, low self-esteem) and risk conditions (such as poverty, discrimination, steep power hierarchies) can impair control or capacity and the respectful relationships that enable good maternal and child health.[50,51] Community mobilisation initiatives reported to improve the socioenvironmental causes of ill health have addressed a range of concerns including alcohol related violence, breast cancer treatment, and safety in public environments.[59,60,61] The impetus to address these causes of ill-health began when there was sufficient support to form a community of interest. This community started a process of capacity building—community empowerment—toward gaining more control over the decisions for resource allocation such as the award of a grant or to decision making such as the development of policy or legislation (panel 2). The key to the success of community empowerment was the moment when the community engaged with the problem-posing, problem-solving process and recognised that they could collectively change their circumstances. However, effect can vary greatly depending on decisions about the goal, who constitutes the community, who is facilitating and supporting the process, the social and political context, the duration of external or donor support, and the cost-effectiveness of the programme.[62] Different forms of community mobilisation might simply mobilise communities to initiate localised actions based on their immediate needs rather than broader social and political actions.

What is not known is to what extent peoples' involvement can actually increase resources to support health care, whether participation can create a genuine social learning partnership between people and professionals, whether

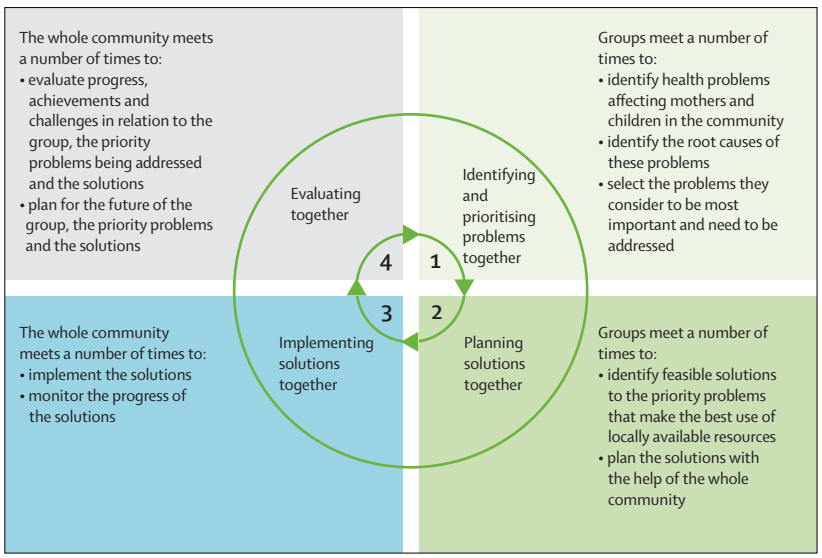

Figure 2: **Women's groups community mobilisation action cycle**
The Warmi project in Bolivia developed a model for community mobilisation using this community action cycle.[40] Women's groups discuss and prioritise their problems, develop strategies to solve them, and, after engaging with other community members, implement and evaluate these solutions. The completed Makwanpur (Nepal) trial and ongoing trials in Mumbai (India), Jharkhand and Orissa (India), Mchinji (Malawi), Dhanusha (Nepal), and Bangladesh are assessing the effect of different women's group models, developed from this model, on mother and child health (table).

Panel 2: Building community empowerment

Community empowerment is a synergistic interplay between individual empowerment,[52] organisational empowerment,[53] and broader social and political actions.[54] Empowered community-based organisations are at the heart of community empowerment, since they link empowered individuals and effective political action.[55] This interplay can be conceptualised as a continuum of five progressively more organised and broadly based forms of social and collective action (main bullets).[56,57] These five forms can be further subdivided into domains (sub-bullets), which represent the means through which individuals and groups can organise themselves to harness the interpersonal elements of empowerment and address the broader determinants of their health.[58]

- Personal action
  - Community participation
- Small mutual groups
  - Problem assessment
  - Local leadership
- Community organisations
  - Local leadership
  - Organisational structures
  - Resource mobilisation
- Partnerships
  - Organisational structures
  - Resource mobilisation
  - Links to others
  - Asking why
- Social and political action
  - Links to others
  - Asking why
  - Role of outside agents
  - Programme management

community mobilisation can really change a commitment to social justice and democracy, and whether community mobilisation can actually accelerate progress at scale toward achievement of MDGs 4 and 5 in high-mortality, resource-poor settings.

What are the mechanisms through which community mobilisation brings about improved health outcomes?

Some observers feel that community mobilisation works simply by bringing about changes in behavioural risk factors such as home care practices and decisions about care seeking. Although undoubtedly one important mechanism through which community mobilisation works, studies of health education suggest that simply providing key messages to improve maternal and newborn care cannot possibly account for all the effect these approaches have on morbidity and mortality.[63,64] A large proportion of this effect is thought to be due to community mobilisation bringing about changes in socioenvironmental risk factors by developing the capacities of communities, the choices they make, and their ultimate empowerment. This mechanism is enshrined in the Ottawa Charter (1986) and the Jakarta Declaration (1997), which equated health promotion with goals of empowerment and a more long term and fundamental shift in village, family, and gender power relations.[65]

Women's groups in Malawi and Nepal are increasing the important capacities within communities, such as the ability to identify maternal and neonatal health problems and their root causes; the ability to mobilise resources necessary for improving the health of mothers and newborn infants; the internal and external social networks they can draw on when needed; and the development of strong local leaders who have the motivation and drive to improve maternal and neonatal health in the community.[66,67] The women's groups are also drawing on these social capacities to make fundamental choices to improve their health, such as about the equitable sharing of resources needed for better maternal and neonatal health; about planning feasible strategies to address maternal and neonatal health problems; about planning, implementation, evaluation, finances and reporting of programmes; and about which people and organisations to approach to address problems. Detailed longitudinal exploration of these processes is crucial to provide answers to policy makers about how community mobilisation works, to inform programme design, and to build the case for government investment.

Is community mobilisation less important than facility-based medical interventions?

Many safer motherhood analysts, such as policy makers and academics, would consider community mobilisation a peripheral component of a package to reduce maternal mortality, which is far more dependent on specific facility based interventions than is child survival.[22] However, the evidence supports a more central role for community mobilisation. Firstly, numerous interventions such as family planning, nutritional support for women, and the treatment of haemorrhage, sepsis, and unsafe abortion are all potentially amenable to interventions in the community.[68] Secondly, the so-called first delay (recognising a maternal problem in the home and deciding to seek care) is a key problem for safer motherhood programmes and solving it requires the participation of communities (panel 3). Thirdly, poverty and disadvantage are the underlying causes of many neonatal and maternal deaths; 99% of maternal and neonatal deaths occur in low-income and middle-income families and in poor countries, and maternal mortality is often more than twice as high in the poorest compared with the richest economic quintile household.[69,70] The link between social disadvantage and mortality is subtle and indirect but maternal and newborn survival and good health are ultimately the result of a society that values women and children irrespective of their race, social, economic, and political status and provides unimpeded

access to information and health services from the household to the hospital. Community mobilisation, in addressing inequality rather than only improving health services, is thus a priority strategy for improving survival of mothers and newborn infants.[69,70]

Although maternal survival requires improvements in comprehensive and basic obstetric care at hospitals and health centres, community mobilisation has an important role in improving care practices, increasing the use of safer motherhood services, promoting timely referral when problems arise, and reducing social disadvantage. Some of the ongoing trials cited in the table could have the statistical power to add to this debate by exploring the extent to which community approaches reduce maternal mortality directly compared with indirectly by promoting deliveries in hospitals.

How can community mobilisation be taken to scale?

Scale-up of health interventions might involve increasing coverage by geographical expansion, adding technical interventions to an existing programme, advocacy to change policies, and strengthening capacity with more resources, new alliances, and technical skills.[71] But how can governments, even in partnership with civil society organisations, achieve scale-up of community mobilisation interventions in these ways? Several approaches have been used including: government directed and implemented programmes;[72] partnerships between government and non-governmental organisations;[73,74,75] so-called living universities and centres of learning;[72,76] dissemination of methods and results through manuals, training packages, internet, radio, video, TV, and university classes; and organic spread from community to community through word-of-mouth or direct observation. These approaches have succeeded in massive scale-up of community mobilisation interventions in countries such as Bangladesh, China, Cuba, Sri Lanka, and Tanzania. Thus, these interventions, due to their dependence only on facilitation and community resources, seem to be no more difficult to scale-up than others such as immunisation programmes, which depend on cold chains, drugs, technology, and a large network of paid health workers. However, in the poorest countries the capacity and commitment for scale-up remains weak and extensive coverage alone is insufficient to ensure that the most vulnerable populations benefit in the long-term.

Case studies, trials, and large-scale programmes have shown that, when given the opportunity, communities can develop effective strategies to address their needs and reduce mortality and morbidity. These strategies are often highly innovative, practical, and culturally acceptable. What is scaled-up is not solutions but a process to support communities to develop their own solutions. As a result, programmes must be flexible enough to respond to variations between, and within, communities and must allow adequate time for this process of capacity building. Also, a favourable environment for scaling up can be created if national policies are in place which support community mobilisation. Programmes are more successful if they communicate from the same belief system. This success can be achieved by seeking to understand and take into account the social norms and local cultural context around health, community participation, gender roles, use of health services, and household decision making. Importantly, programmes should not cut out or limit essential steps such as problem identification, prioritisation, and strategy formulation by communities.

Irrespective of whether the facilitating agent is a representative of a non-governmental organisation, member of a community based organisation, government fieldworker, or volunteer they must have: credibility in the communities; language skills and cultural sensitivity; knowledge of community structures and protocols; interest in being a facilitator and in maternal and newborn health; affiliation with and support from an organisation; good interpersonal communication skills; and availability of time to do the work.

The main programme cost is building human and community capacity, which needs adequate investment. This process means prioritising investment in ongoing training, facilitation, and capacity strengthening and the use of cost-effective methods such as cascade-training structures. Costs within the programme can in part be covered by contributions from the community but this must be done carefully while respecting roles and responsibilities and keeping in mind programme principles of community ownership and sustainability.

Partnerships of government, non-governmental organisations, private sector, and community-based organisations are essential, but can face differences in organisational cultures and values, competition for resources, and varying levels of capacity. Successful programmes define roles and responsibilities clearly, allocate resources fairly, and establish operational

***Panel 3:* Case study of how women's groups are addressing first-delay in maternal and child care: Jharkhand, India**

Sini Koda comes from Tipusai, a remote hamlet of Baraibir village in West Singhbhum district of Jharkhand state. It is 25 kms from a private facility where emergency obstetric care is available and receives infrequent visits from Auxiliary Nurse Midwives. She, her husband, mother-in-law, and other members of the family regularly attend women's group meetings, facilitated by Rani Kayam who was trained and is employed by Ekjut Project, a local non-governmental organisation. The group meets monthly and engages in participatory learning and action activities focusing on maternal and child health. During one of these meetings they engaged in a "woman in labour – emergency drill" role-play session. In this session they learnt how to mobilise quickly at the time of labour and avoid delays. When it came time to deliver, Sini's in-laws tried to perform traditional rituals that would delay her from getting to the health facility. However, her husband and other women's group members used what they had learnt to collect 5000 rupees from other community members for transport and hospital costs. As a result, Sini was able to get to the facility with the minimum of delay where she delivered normally and successfully.

guidelines, communication systems, parameters for implementation, and mechanisms for dealing with problems or disputes. Finally, new technologies such as community radio, mobile phones, internet, and digital and video cameras have rapidly become more accessible and could present new opportunities for communication, gathering information, organising, coordinating, and increasing participation.

Conclusion

There is evidence that community mobilisation is an effective method for promoting participation and empowering communities among a wide range of other non-health benefits. The experience of pilot programmes before the Alma-Ata Declaration, and subsequent trial evidence, also suggests that community mobilisation can bring about cost-effective and substantial reductions in mortality and improvements in the health of newborn infants, children, and mothers. Nonetheless community mobilisation is not a feature of most large-scale primary health care programmes, because it is characterised by several fundamental controversies. What form should it take to be most effective? Does it effectively address the socioenvironmental risk factors that underpin health problems and mortality? How does it work? What part does it have to play in interventions for maternal survival? How can it be scaled-up effectively? Continuing studies and future research, particularly focusing on process, are needed to address these controversies and fully unlock the potential that community mobilisation approaches have to improve health and reduce mortality.

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