Module 1 Unit 1

This is a **OPTIONAL READING.**

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The Complexity of Social Mobilization in Health Communication: Top-Down and Bottom-Up Experiences in Polio Eradication

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The Polio Eradication Initiative (PEI) has been one of the most ambitious global health efforts in recent times. Social mobilization (SM) has been a strategic component of the PEI. Yet, a close-up analysis of SM dynamics seems to be lacking in the health communication literature. We examine critical aspects of the PEI experience in an attempt to move from dominant informational perspectives to a focus on emerging challenges in polio eradication efforts and new levels of complexity to SM. We examine available literature on communication and public health, available data on SM experiences that support polio eradication in Africa and Asia, and field work conducted by the authors where polio eradication efforts are ongoing. Our analysis suggests that (1) SM should not be casually approached as a top-down informational strategy to advance pre-established health goals; (2) centralized strategies hardly amount to SM; and (3) hybrid options that combine both activist and pragmatic SM are concrete possibilities for global health initiatives. In the context of renewed global democratization and persistent conflicts rooted in ethnicity, religion, and economics, it cannot be assumed that communities will either diligently espouse global goals or necessarily oppose them. Communication and SM strategies should rely on a clear understanding of the motives and agendas of involved actors. Resistance or opposition are important analytical dimensions as they may uncover new opportunities for effective health interventions. Further studies using these perspectives should be a priority for global health programs, including studies of the trust level, or lack thereof, among social actors.

The Polio Eradication Initiative (PEI) has been one of the most ambitious global health efforts in recent times. Its success has been premised on the collaboration among global, regional, national, and local actors. Social mobilization (SM) has been a strategic component of the PEI and a form of intersectoral collaboration. At the national level, SM activities typically have been the responsibility of specific committees that were part of interagency bodies. Institutions primarily responsible for SM activities have included national immunization programs, national UNICEF offices, Rotary Club, Red Cross, and various donor-funded contractors.

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Implementation of SM has focused primarily on vaccination campaigns conducted during National Immunization Days (NIDs) aimed at delivering vaccination services, particularly in countries with low immunization rates and health systems with chronic infrastructural problems. Social mobilization (SM) within NIDs have relied on the work of health workers and local volunteers to deliver oral polio vaccine (OPV), mass media campaigns to reach caretakers and other key audiences about benefits of polio vaccines, house-to-house identification of unimmunized children, education of communities on benefits of polio vaccines, and monitoring case surveillance. Campaigns have counted on a variety of community associations (educational, religious, business) for fund-raising, training, education and communication, and service delivery. It has been estimated that 10 million people have participated in polio immunization SM activities globally (Aylward & Linkins, 2005).

Because SM has been central to the PEI, several experts have expressed concerns about "campaign fatigue" amidst the adjustment of target eradication dates and the continuation of NIDs (Basu, 2004; Lahariya, Khandekar, & Pradhan, 2006; Dugger & McNeil Jr., 2006). Countries have stepped up efforts and held several NIDs annually in the past years, followed by sub-NIDs as in the case of India and other endemic countries. Observers have worried about the impact of multiple rounds of immunization on community participation. Studies have reported declining numbers of volunteers and health workers in NIDs and have challenged program coordinators to seek other alternatives to maintain the intensity of mobilization and outreach efforts needed to keep polio eradication within sight (Paul, 2008).

The impact of SM has been discussed in relation to internal and external effects to the PEI. As a core strategy of the PEI, SM is intended to increase OPV uptake, particularly among hard-to-reach populations (UNICEF, 2003). In areas where health services are weak, the mobilization of volunteers and health workers has been crucial to deliver vaccines and to address cases of local resistance to polio immunization (Athar, Khan, & Khan, 2007; Obregon et al., 2009). The contributions of communication in SM also have been discussed in terms of external impact (Waisbord, 2007). The PEI has been credited with strengthening linkages among health staff, volunteers, and communities (Aylward, Acharya, England, Agocs, & Linkins, 2003; UNICEF, 2003). For some observers, the PEI has left a lasting legacy of strong human resources and social capital that can be mobilized in support of other health interventions (Levinsohn et al., 2002). Community participation for polio eradication has been a net investment to support various health programs. For example, community networks and infrastructure built or mobilized during polio campaigns have been utilized to support various health programs, including measles immunization, deworming campaigns, avian influenza control, and community surveillance.

A close-up analysis of the dynamics of SM in polio communication, however, seems to be lacking in the health communication literature. As we discuss below, accounts of SM in health promotion and communication often describe it as the aggregation of multiple activities—community-based, interpersonal communication, mass media, and advocacy—that are intrinsically positive and necessary to achieve a particular goal (i.e., polio eradication). In this article, we examine critical aspects of the polio eradication experience in an attempt to move from dominant informational perspectives on SM to a focus on emerging challenges in polio eradication efforts and new levels of complexity to social mobilization efforts. We ask three questions: (1) What has been the impact of social mobilization efforts on polio eradication? (2) Drawing on the polio eradication experience, what dimensions suggest new

levels of complexity in social mobilization and how could they improve health communication practice? (3) What implications can be drawn from this experience for similar initiatives aiming to mobilize communities to support global goals?

Social Mobilization and Health Programs

Since the 1978 Alma-Ata Conference, the notion that SM and community participation should be central to primary health care gained currency (McFarlane, Racelis, & Muli-Muslime, 2000; Rifkin, 1996). Over the past three decades, much has been said about why SM is indispensable to strengthening primary health care around the world (Arroyo & Cerqueira, 1997; Oakley, 1989). There has been no shortage of examples of health programs featuring SM that national governments and international agencies have designed and implemented, mainly under the auspices of the World Health Organization and UNICEF. Social mobilization (SM) has been a strategic component of programs that promote disease control and surveillance (Ndiaye, Quick, Sanda, & Niandou, 2003) of tuberculosis (Maher, van Gorkom, Gondrie, & Raviglione, 1999), dengue (Renganathan et al., 2003; Toledo-Romani, Baly-Gill, Ceballos-Ursula, Boelaeert, & Van der Stuyft, 2006), Chagas disease (Black et al., 2007; Grijalva et al., 2003), and sleeping sickness, and eradication of tropical diseases such as measles and guinea worm (Cairncross, Braide, & Burgi, 1996). Many initiatives in community-health insurance, disease surveillance, and treatment delivery also feature the active participation of citizens and local institutions.

After countless interventions and a substantial literature on the subject, SM still is beset by conceptual ambiguity. Not only does SM have multiple meanings, but it also often is used liberally as synonymous for "community participation," "community health," "community mobilization," and other similar concepts. United Nations Children's Fund (UNICEF) is widely credited for having pioneered SM in global health and development programs. It has defined SM as a process of intersectoral coalition building and action by which social actors come together to raise awareness about specific issues, raise demand, support service delivery, and strengthen local participation (UNICEF, 2003). Scholars have identified several constitutive elements of SM, including the ability of communities to identify health problems, make decisions about priority goals and actions, mobilize resources, develop and implement strategies, provide health services, and inform and educate about health issues. Social mobilization (SM) is loosely used to refer to tasks or decisions that multiple actors—community members, beneficiaries, local organizations, policymakers, and government officials—perform in support of health programs. At the very least, any program that counts on local participation is evidence of SM, regardless of whether communities decide objectives or execute goals decided elsewhere, and are mobilized to raise funds or to deliver services. Just like with the concept of "participation," a term that also became central and loosely used in the literature on development and global health in the past decades (Mefalopoulos, 2007), common usage does not consistently differentiate among various dimensions of SM and the roles that communities perform in improving public health.

While assuming that reaching a consensus definition is improbable, in analyzing SM in the PEI we follow the analytical distinction between "activist" and "pragmatist" perspectives (Morgan, 2001). The main dividing line between these perspectives is the question of power and decision-making, namely, whether SM essentially is

about addressing health problems rooted in political inequalities and local participation in decisions to improve health conditions and services, or, alternately, bringing together various community actors toward a common goal. Authors have analyzed such differing approaches through the lense of broader theoretical discussions (i.e., new social movement theory and resource mobilization theory) on social movements and community participation (Canel, 1997; Cardacci, 1997).

"Activist" approaches conceive SM as community participation and local empowerment through which communities discuss needs and objectives, decide interventions, and are engaged in the implementation of programs. They offer a "bottom-up" understanding, for they conceive mobilization in terms of communities taking charge of health programs, including wrestling decision making away from central actors. This notion emphasizes the need for communities to express demands, define goals, and make key decisions that eventually may reduce disparities (Morgan, 2001). "Activist" SM is about communities gaining control over their lives and planning and implementing strategies for collective action.

"Pragmatic" perspectives, instead, view SM as a means to strengthen health services and achieve critical goals (McKee, Manoncourt, Yoon, & Carnegie, 2000; Morgan, 2001; UNICEF, 2003). They do not necessarily make local empowerment the core element of SM. Instead, the actions of nonhealth personnel in support of health goals whether through delivering services, raising funds, or training, show SM at work. Social mobilization (SM) is seen instrumentally as a boon for health programs, for it adds significant human and monetary resources to accomplish program goals. In a sense, "pragmatist" perspectives to SM are concerned with providing a response to the immediate needs of communities and population groups that might worsen while awaiting results of long-term mobilization processes (Morgan, 2001).

This conceptual tension has important implications for assessing the impact of SM. Authors have raised concerns about the difficulties in measuring the role of SM in larger health promotion programs (Nyamwaya, 2003) and the effects of SM (UNICEF, 2003). Besides methodological challenges to assess the success of SM on eradication goals, those difficulties are grounded in different understandings of essential dimensions of SM. What "activists" see as essential dimensions of SM (empowerment, local decision making), "pragmatists" view as strategic tactics (e.g., education, staffing immunization teams) to deliver vaccines and, thus, reduce the burden of disease. While for the latter SM is, at best, a means to reach an end more efficiently, the former are more interested in measuring whether SM contributes to various dimensions of empowerment and social change.

Social Mobilization in Polio Eradication

From successes to setbacks, the history of polio eradication is rich with a wide range of SM experiences. Social mobilization (SM) committees have been tasked to conduct various activities such as delivering OPV, managing the "cold chain," training and staffing vaccination teams, raising funds, conducting advocacy, and carrying out education and media activities. It is difficult to generalize about the effectiveness of SM. Just as there have been cases of SM plagued with enormous problems, there also have been effective cases. Massive numbers of health workers, volunteers, associations, families, and policymakers who participated in the aforementioned activities suggest the vibrancy of SM worldwide (Aylward & Linkins, 2005). In

contrast, considerable gaps in immunization rates and the disarray of polio campaigns in countries or specific regions in India, Nigeria, and Pakistan reflect weak or inadequate SM. Studies have suggested that the prevalence of centralized structures and decisionmaking (which undermine local ownership), coupled with poor bottom-up planning and management (Favin, Tyabji, & MacKay, 2001; Shah, John, Thacker, Vashishtha, & Kalra, 2006; Taylor, 2003) and lack of greater diversity in the composition of policy, decision-making, and technical bodies that provide guidance to the PEI in some cases, accounts for poor SM.

The evolution of and challenges encountered in polio eradication efforts illustrate the complexity of SM. Social mobilization is not only about expanding the reach of health services or getting communities involved in various activities in support of global goals. It also is about the expression of local interests and the negotiation of goals and strategies among actors at local, national, and global levels. Just as some communities lent their support, others mobilized to oppose the PEI. Countries that have succeeded in eradicating polio as well as those in the process of eradicating it have implemented strong SM, components in their programs and have experienced pragmatic and activist responses in SM. In the next sections we discuss several such examples of SM, including the role of community mobilizers, professional organizations, and religious leaders; interpersonal communication to address resistance; the role of media as a strategic stakeholder; political opposition to OPV; and gender dimensions embedded in SM efforts.

Methodology

In conducting this research, we followed principles of the case study method. Case studies are used to understand more in-depth complex social phenomena whose multidimensional factors cannot be explained by one or a handful of data sources (Cresswell, 2009; Morgan, 2001; Yin, 2008). Case studies also can draw on multiple data sources, both qualitative and quantitative, that provide a more comprehensive perspective of the phenomenon being studied (Yin, 2008). Even though we look at the polio eradication efforts in India, Nigeria, and Pakistan, we approach this study as a single case study (Yin, 2008), in which we pay particular attention to social mobilization aspects embedded in polio eradication efforts in those countries.

In conducting our analysis we draw from various types of data. First, we reviewed the academic and "grey" literature on communication and public health, and SM experiences that support the eradication of poliomyelitis in countries in Africa and Asia where, despite substantial progress in recent years, virus transmission has not been interrupted yet. In reviewing the academic literature, we also looked at research that has analyzed polio eradication efforts broadly. The review of "grey" literature included newspaper accounts that reported on specific examples of SM and official statements or publications of organizations involved in polio eradication efforts. Second, we analyzed data on SM and polio eradication efforts in endemic countries in Africa and Asia, particularly India, Nigeria, and Pakistan. Such data included technical government and nongovernment reports; evaluation reports; and primary data collected by organizations involved in polio eradication efforts such as UNICEF and the CORE (Child Survival Resources) Group.

Third, we also drew on the authors' field experience with SM and polio communication activities, particularly as members of various technical review teams that have assessed progress of polio eradication efforts in India, Pakistan, and

Nigeria. In conducting field activities we interviewed numerous health and public officials, health providers, community mobilizers, and staff from multilateral and bilateral agencies, and nongovernmental organizations (NGOs), involved in polio eradication work. We also interacted with mothers and caretakers of children in several communities and with media professionals who have covered polio eradication stories over the years. In addition, we also visited health centers, polio vaccination booths, and witnessed polio eradication activities as part of Sub-NIDs. Through an iterative process of data analysis and reflection, we looked at the emergence of key categories associated with SM activities, and then organized those categories into larger themes according to theoretical concepts associated with pragmatic and activist approaches to SM.

"Pragmatic" Social Mobilization

Adopting an instrumental view to SM, global polio partners initially espoused a "pragmatic" approach to SM that consisted of engaging key local organizations to obtain support and thus maximize the reach of eradication efforts. Pragmatic SM assumed that local actors would join global efforts and facilitate the overall process. With these goals in mind, they were interested in the activation of local institutions to inform and persuade families to accept polio vaccine. Examples include the involvement and actions of community mobilizers, professional associations, and political and religious leaders.

The Contribution of Community Mobilizers

Studies on the impact and contribution of SM activities in India have provided strong evidence ranging from reduction of polio cases to changes in attitudes and behaviors toward OPV among parents, to parents' decisions to vaccinate their children after initial refusal or resistance, to greater engagement of local organizations and individuals. We provide several examples of this evidence.

In four high-risk districts of Uttar Pradesh, India (Azamgrah, Basti, Meerut, and Moradabad), where a combination of (block mobilization coordinators BMCs), and (community mobilization coordinators CMCs)[1] was used, the number of wild poliovirus cases dropped from 116 in 2001 to 49 in 2002, and by 2003, these districts had experienced a significant increase in booth coverage—50% to 75%—compared with overall district coverage—19% to 35% (UNICEF, 2003). Important changes were reported on perception of polio risk for a child without OPV. In communities in India where SM activities took place, 87.4% of people surveyed perceived that children who had not received OPV were at polio risk, compared with 76% among people in communities without SM (Cheng, 2004). Evaluations conducted after NIDs support CMCs' contribution to efforts to reach and improve acceptance of OPV among resistant families. Data showed statistically significant differences ($p < 0.05$) between families and communities in CMC areas and non-CMC areas on positive attitudes and behaviors toward OPV (Cheng, 2004; UNICEF, 2005).

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[1]Block mobilization coordinators (BMCs) and CMCs are responsible for working in specific areas in a local district. BMCs supervise SM activities and assist CMCs in a cluster of neighborhoods, and CMCs are responsible for visiting, engaging, and mobilizing families and caregivers.

Communities covered by CMCs were half less likely to refuse OPV compared with communities not covered by CMCs (Cheng, 2004).

Smaller and focalized studies showed similar results. Researchers at a local medical college in Uttar Pradesh conducted a study in five urban areas in Aligarh District (Ansari, Khan, & Khan, 2007), a high-risk area due to the high number of resistant houses. Results showed that 79.32% ($n = 813$) of resistant houses accepted OPV after repeated visits by members of the SM team. Ansari and colleagues concluded:

> Families were persuaded and convinced by the teams of interns, social workers and influential persons that polio drops did not have any side effects. They were more receptive to the advice given by medical interns compared to other staff members of the Government District Hospital because of quality of health services provided to the community. (p. 278)

The authors remained focused on persuading and convincing parents to accept OPV only, even though the interaction among mobilizers and families went beyond OPV and included an invitation to visit local clinics to vaccinate children against other diseases.

Evidence of impact of CMCs and field workers has been documented also in other countries (Quaiyum, Tunon, Baqui, Quayyum, & Khatun, 1997). In Pakistan, a study conducted in 2005 by UNICEF included 2,143 household interviews in eight high-risk areas (on the basis of poor campaign indicators or poor coverage) and four low-risk areas. Researchers found that in districts with intensive SM, 78% of participants said that polio drops protected their children from polio, compared with 71% in areas without SM. In districts with intensive SM, 93% of the respondents agreed that polio was a serious health problem compared with 83% in districts without SM efforts, and 95% of respondents in high-risk communities where UNICEF supported intensified SM believed that OPV generally was safe for children, compared with 88% in districts without SM. The study consistently showed greater improvements in knowledge and attitudes in areas where SM activities took place compared with areas without SM activities. Table 1 summarizes main findings from the Pakistan household polio knowledge study.

The Role of Professional Organizations and Involvement and Contribution of Religious and Community Leaders

Engagement of various stakeholders, including professional organizations and community groups, has been central to the polio response in countries such as India. In 2008, the Indian Academy of Pediatrics (IAP) held its Second Consultative Meeting on Polio Eradication and Improvement of Routine Immunization. Two issues are worth noting from the IAP's report. First, IAP has thrown its support behind the final push toward polio eradication. While demanding a sense of urgency and a need to introduce corrections, the IAP states that it "believes polio can be eradicated provided all the resources are utilized in an intelligent and evidence-based way. IAP reiterates its support to the ongoing efforts" (IAP, 2008, p. 368). Second, IAP underscores the centrality of SM to polio eradication, but it warns about the need to step up SM efforts and to address critical issues such as strengthening routine immunization and considering the introduction of injectable vaccines. While

Table 1. Social mobilization and community knowledge and risk perceptions on polio vaccines

Social mobilization activities	Learned about polio through interpersonal communication?		Do you think polio is an important health problem?		Is it safe to give OPV to children?		If your children don't get OPV, are they at risk of getting polio?		Do you know where to get your children vaccinated if the vaccination team does not visit your home?	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Done	71.0%	29.0%	93.2%	1.2%	94.6%	1.5%	87.4%	7.9%	78.2%	20.3%
Not done	66.2%	33.8%	82.9%	3.4%	87.5%	1.9%	76.0%	6.2%	71.7%	23.6%

SoSec Study, 2005, Household Polio Knowledge Study, Pakistan.
Missing values are for options: do not know; no response; any other response.

IAP and other professional organizations (i.e., Indian Medical Association) have been involved in polio eradication efforts almost from the inception of the program, the fact that such an influential organization takes a bold step illustrates the level of participation and ownership reached with certain stakeholders.

Polio cases have been overwhelmingly clustered in socially marginalized areas. This led UNICEF and PEI partners in India and Pakistan to implement a strategy aimed at reaching underserved groups, especially in hard-to-reach areas. In India specific actions to engage religious leaders and other community influencers were necessary. In 2004, a total of 2,697 Muslim religious leaders and 1,892 Muslim occupational and community leaders in India were contacted and asked to take part in the polio campaign. Two thousand eighty-two religious leaders (77% of those contacted) and 1,500 occupational and community leaders (79% of the total contacted) participated in the campaign. Muslim influencers mobilizing or supporting efforts at converting resistant caregivers to vaccinate their children succeeded, on average, in 87% of the houses in their area of operation, reaching 100% in some districts. Government officials in the health sector also joined the alliance to both gain the trust of and help educate the imams about OPV, followed by efforts aimed at encouraging community members to accept OPV. Involvement of religious and community leaders and influencers contributed to the reduction of the immunity gap among Muslim and Hindu children in the Western region of Uttar Pradesh. Muslim children in Uttar Pradesh who had not received at least two polio drops went from 5% to nearly 0% between 2002 and 2004 (Cheng, 2004). Religious leaders also have contributed to addressing refusals and misperceptions in Pakistan's North-West Frontier Province (NWFP). Results from 2007 showed a sustained increase in coverage and vaccination of children among families who previously had refused OPV (Jabbar, 2008).

Engagement of community and religious leaders has shifted from enlistment to disseminating messages that motivate families to vaccinate their children, to weekly community meetings and targeted interaction with religious leaders to discuss benefits of polio vaccination and address rumors and misperceptions in a more dialogic manner. This process has turned community meetings into broader community dialogues that allow them to interact with local authorities and address local development issues. In the long run, this component of SM has increased the motivation of religious leaders and community influencers to support PEI. For instance, data from India show that the proportion of Muslim influencers who accompanied teams during house-to-house (HTH) visits over a 1-year period increased from 35% to 77% in CMC areas, while in non-CMC areas it remained between 2% and 9% (Child Survival Resources Group [CORE/UNICEF], 2008). These efforts are in stark contrast with the early years of the PEI when social mobilization and communication activities rarely were driven by evidence and research while primarily relying on an all-out approach.

"Activist" Social Mobilization

Activist SM refers to instances in which local communities sought to wrestle decision-making power from national and global bodies either to adapt immunization campaigns to local needs and demands or to oppose the goals of the PEI. While forms of pragmatic SM suggest that communities readily accepted programs goals, cases of activist SM showed negotiated or rejected methods and objectives.

The first scenario refers to cases in which local actors adapted PEI needs to facilitate the role of vaccination teams in their communities. This resulted in a process of debate and negotiation with program implementers that has led to the delivery of services beyond OPV. In Uttar Pradesh, SM activities implemented under the coordination of the CORE led to a process of dialogue and negotiation about the most effective way to address some of the challenges faced by the polio program. The CORE's local partner, the Social Welfare Society (SWS), an organization attached to the Diocese of Varanasi, has been responsible for coordinating SM activities in three districts in the Eastern part of UP. The SWS's SM work has built on its integrated approach to social development, creating a relationship of mutual benefit for their programs and polio eradication efforts.

Two examples illustrate the SWS experience. First, the SWS has linked polio eradication efforts to other community development activities that include working with families with disabled children. In a context where disabled children often are excluded and whose rehabilitation needs are given limited attention, working with these families to provide physical therapy and education to their affected children, some of them by polio, have added a sense of hope to many families. Second, SWS has worked with adolescent girls in the local community on a variety of activities that include basic literacy, life skills, and recreation. In turn, adolescent girls have been motivated to participate in PEI efforts by educating pregnant women and other young women with small children for vaccinating children against polio. The SWS's integrated focus has facilitated access to parents and caretakers in the community, communication with local leaders, and overall an enabling environment for implementation of polio-related activities.[2]

The SWS approach has positioned the polio program more broadly as a social program that works with future mothers and family members who soon will make health-related decisions such as whether to vaccinate children against polio or not. In doing so, it has contributed to the PEI efforts and goals in critical districts. A 2008 review of ongoing activities showed that booth coverage for CMC areas improved steadily in the previous year, with overall booth coverage in high-risk areas ranging from 52% to 56%. The conversion rate from resistance to acceptance of OPV also improved in all CMC-covered districts from September 2006 to June 2008. Conversion rates in the last two rounds varied from 28% to 42% (Athreya & Obregon, 2008). This expansion of program activities facilitated through the PEI points toward two important SM aspects. First, SM is a dynamic process and as such it allows for the exploration of multiple interactions with the community that eventually contribute to achieving the goals of the polio program (Bourdages, Sauvageau, & Lepage, 2003). In certain contexts, SM may serve as a platform to address local development issues without losing the primary focus of the program's efforts.

A second scenario of activist SM refers to cases of opposition to polio eradication. Social mobilization (SM) is also a form of contentious action to challenge global programs. Certainly, resistance to vaccination is not unique to OPV. Recent controversies, particularly in the media, about vaccine safety in several Western countries demonstrate that immunization remains a subject of continuous dispute even in regions with high vaccination rates (Boyce, 2007). In the case of the PEI, other factors

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[2]One of the coauthors visited three sites where the SWS implemented polio eradication activities. On those visits the coauthor interacted with local community members, the SWS staff, and government authorities.

further complicated trust in immunization. Evidence suggests that opposition has been strong in communities with poor health services, high levels of social marginalization, high distrust of government programs, and deep grievances about unmet basic needs. Resistance to OPV successfully undercut immunization campaigns and overall efforts to interrupt transmission of the virus, most notably, in India and Nigeria in the early 2000s. In other countries, such as Uganda and Niger, there has not been documented examples of active resistance, but the lack of information about the purpose of polio vaccination and perceptions about negative effects of OPV discouraged people from bringing their children to vaccination booths, and reduced turnout during NIDs (Nuwaha, Mulindwa, Kabwongyera, & Barenzi, 2000; UNICEF, 2003).

Oppositional SM took two forms: *political protest* and *passive resistance.* While the former was political, collective movements that openly defied polio immunization, the latter was expressed in the rejection of vaccination teams at household levels without becoming massive political mobilization. An example of *political protest* was the mobilization of Muslim communities against OPV in Northern Nigeria in 2003. A mix of reasons explains why they opposed polio campaigns. Antivaccination actions reflected political, religious, and ethnic conflicts, deep-seated distrust of national programs, doubts about the motivations of Western companies and governments, and broad geopolitical tensions between the West and the Muslim world (Renne, 2006; Yahya, 2007). In several states, religious, political, and health leaders raised questions about vaccine safety. They associated the goals of the PEI with ''population control ideology'' aimed to reduce the size of the Muslim population (Adamu, 2003). Religious organizations such as the Supreme Council for Sharia called the federal and state governments to halt immunization campaigns in July 2003. Political leaders urged parents not to let vaccinators approach their children. Certainly, we should be cautious not to assume that, as Taylor (2003) has suggested, all cases recorded as ''resistant'' by vaccination teams were, indeed, examples of households ''ideologically'' opposed to OPV. Reports indicating ''resistant'' households reflected gaps in the performance of the teams due to poor supervision, poor training, lack of proper investigation of absences/refusals, and people's concerns with other daily preoccupations. Even in contexts where polio has been eradicated, the road to eradication has also faced opposition from different groups. In 2000, for example, medical doctors in Kerala, India, opposed polio eradication on the basis of technical considerations and suspicion of political and economic interests. Health authorities countered that doctors were using polio for political means as they went on strike and demanded higher pay and other benefits (Nair, 2002).

Examples of *passive resistance* have been found and documented in several districts in India's Uttar Pradesh and Bihar. Families used a variety of tactics to express their disapproval of polio immunization, including refusing vaccination teams in their houses, hiding children, violent threats, and being absent during NIDs (Ansari et al., 2007; UNICEF, 2003). In contrast to political protest in Northern Nigeria, antipolio opposition did not crystallize in organized forms of collective action. Although some reasons for refusal are similar to the Nigeria case (such as distrust of the goals of polio vaccination), research shows that the perception that polio eradication is a government program that does not respond to local needs has been a leading cause of resistance. Aside from a lack of understanding about why so many rounds of immunization are needed or why other health services are

not provided, local communities may view polio eradication as someone else's priority rather than as a reflection of their needs (Dasgupta et al., 2008).

Oppositional SM prompted the PEI to adjust strategies and reset original goals. In Nigeria, global and national partners responded by engaging in an intense, prolonged process of negotiation with local leaders. The latter eventually accepted the continuation of the campaigns after it was agreed that OPV produced by an Indonesian firm would be used. After vaccination was resumed, however, opposition remained. Religious leaders and healers continued to raise objections and doubts about OPV and the motivations of immunization. Vaccination teams were reportedly treated harshly as they conducted door-to-door campaigns. In response to resistance and demands in India, polio partners incorporated additional services to immunization campaigns, including building latrines, distributing insecticide-treated nets and oral rehydration salts, and installing and repairing hand pumps (Kumar, Solomon, & Patel, 2004).

The Media as a Key Social and Political Institution

Another important lesson from SM in support of polio eradication is the need to reconceptualize the role of the media in global health programs. It is unquestionable that the explosion of media outlets and consumption in recent years, as well as the increase in access to Internet and mobile telephony, has opened new opportunities for SM. It is short sighted to continue to approach various media simply as a set of channels for top-down dissemination of information. Instead, the media, particularly print and broadcasting, need to be seen as a complex social and political institution and tied to various local and national interests.

The evolution of SM during the PEI suggests that the media are not simply the disseminators of logistical information and positive messages to promote vaccination, as it typically has been conceived of in immunization campaigns. No doubt, in some circumstances the media effectively can contribute to increasing immunization rates (Zimicki, Verzosa, & Hornik, 2002). The media, however, are more than convenient informational platforms to reach out to large populations. Media organizations are part of a multilayered field of actors that reflect owners' positions, journalists' values, and audiences interests. These factors determine the positions that various media take vis-à-vis global health initiatives such as polio eradication. Consider the case of local radio and newspapers in communities with high levels of resistance to OPV in India and Nigeria. They spread rumors and misperceptions about OPV, particularly among underserved communities, such as that the vaccine made children sick, was ineffective, and that it was intended to control population growth among Muslims. Reasons for this ranged from the weight of official sources as newsmakers to the fact that journalists, who are often parents in the same community, also had doubts and criticisms about OPV and the PEI. Also, the media tied to local audiences and beliefs picked up rumors and misperceptions, and turned them into news and facts. This, in turn, reinforced community misperceptions about OPV and added another layer of complexity to the polio eradication.

Such examples put in evidence the need for a renewed understanding of the media, one that approaches various media outlets as an integral part of communities and vital SM actors. The need to rethink the role of media has been demonstrated, for example, by the call of the Institute of Medicine (IOM) (2001) to adopt a revised model of a public health system that identifies key sectors and organizations with a

critical role in improving people's health. Defined as a "complex network of organizations that works toward fulfilling the public health mission of assuring conditions for a healthy population," organizations in the public health system include the government and the public health infrastructure, academia, communities, the health care delivery system, employers and businesses, and, for the first time, the media. By acknowledging the media as a member of the public health system, the IOM was signaling the need to redefine media in public health.

The PEI implemented a number of strategies that gradually transformed how the PEI approached the media. From standard dissemination of official information to media outlets and the assumption that it would suffice to quell rumors and misperceptions, the PEI launched outreach efforts that included one-on-one interaction with editorial staff and journalists of state and local media, ongoing tracking of media coverage of polio issues, and strengthened capacity of district information officers. In some cases, such actions resulted in positive changes. In India, media coverage of polio has shifted from being predominantly negative and inaccurate to less negative, more neutral, and more accurate. Data from December 2006 through February 2007 show that negative coverage in four intervention districts in Western UP decreased from between 20% and 55% to 1% and 24% (UNICEF, 2007).

It is critical to redefine the media from an information resource and channel used to carry key messages to a vital actor and community stakeholder that should be engaged in public health programs in a different way. The idea of approaching the media as a stakeholder to advance important public policy issues is well established in the United states (Holder & Treno, 1997; Wallack, 1996; Yanovitsky & Stryker, 2001), as well as in international health programs such as maternal health in Zambia (Manandhar, Maimbolwa, Muulu, Mulenga, & O'Donovan 2009), domestic violence in South Africa (Usdin, Scheepers, Goldstein, Japhet 2005), and child and adolescent health in Brazil (Agencia de Noticlias da Infancia [ANDI], 2009). This approach has been recognized only partially in the PEI. Program implementers often failed to engage media professionals and organizations in a serious and sustained manner as major partners in SM. Approaching the media as channels for advertising placements or relaying news stories is problematic. Such approaches can backfire for several reasons, such as the reluctance of media organizations to appear to be taking sides with government initiatives, or supporting one set of interests amidst political conflicts between officials and the press. Also, the traditional approach of using the news media merely as a tool or channel for disseminating information has limitations due to the highly competitive news environment. On the contrary, when news such as polio rumors and misperceptions break, they constitute very compelling news stories, which often build on media professionals', own perceptions of local issues and beliefs. The PEI's experience illustrates how the programs have shifted their approach toward increased engagement of the media.

From Information to Persuasion: IPC as Dialogue and Engagement

Interpersonal communication (IPC) has been another central component of SM during polio campaigns. Given the difficulties in stopping virus transmission in hard-to-reach areas and "resisting" communities, polio partners adopted IPC as a persuasion tactic to change people's attitudes and beliefs about OPV. This was the result of the realization that simply mobilizing an array of local institutions to disseminate information about NIDs (dates, sites) to raise awareness about polio

vaccination was insufficient. Despite the activities of religious and educational associations, campaigns still faced obstacles to effectively deliver repeated doses of OPV. Also, the persistence of considerable numbers of "missed" and "resistant" households made it necessary to refine planning of IPC as part of SM activities.

Interpersonal Communication (IPC) became a central strategy to "convert" resisting households, particularly in Muslim communities in Nigeria and India (Chaturvedi, 2006; Nigeria NPI, 2003; UNICEF, 2005). It gained considerable attention at meetings and annual plans (UNICEF Nigeria, 2007). References to the importance of IPC and the role of opinion leaders and social networks became more prominent in activity reports and annual plans produced during the past decade. Whether to obtain buy-in from local leaders or to convince families to attend immunization events or let vaccination teams immunize their children, IPC was viewed as critical to the success of SM.

The growing relevance of IPC indicated a gradual shift in the overall conception of SM. Blanketing communities with logistical information about vaccination did not address basic problems. In communities with weak routine immunization, vaccination is still not a social norm, that is, a widely accepted and expected child-rearing practice. In such circumstances, polio partners realized, communication cannot be limited to reminding people to get children vaccinated. Such tactics might be sufficient in contexts where children routinely are immunized and the majority of parents do not have doubts about vaccine safety and the intentions of official health programs. Where immunization is a routine practice, however, a different set of goals is needed. Communication for polio immunization needed to lay the ground for a new social norm. The challenge became finding ways to persuade families about why polio vaccination, and immunization in general, is desirable. Achieving this was particularly difficult not only given the absence of vaccination as a standard, desirable practice, but also due to repeated rounds of polio vaccination in social settings with severe health needs that made the task more challenging. Justifying why only OPV was offered was a difficult task in situations where communities had little, if any, direct contact with central government programs and had demands for basic sanitation, food, and health services (UNICEF, 2003).

Interpersonal Communication (IPC) activities have been implicitly premised on the "two-step" flow model of information, a classic communication theory that argues that specific community members both expand the reach of media messages and are more influential than the mass media in swaying opinions and behaviors (Katz & Lazarsfeld, 1955). In the case of polio communication, such an approach was based not on theoretical premises, but rather on the insight that key opinion leaders exert influence on immunization decisions among "resisting" communities and families. People were more likely to receive information about immunization and NIDs from personal sources, particularly in rural areas. Also, plenty of anecdotal information and personal testimonies collected from local leaders suggested that IPC would be more effective than large-scale media to change knowledge and beliefs and, thus, change immunization practices. It was reasonable to think that just as opinion leaders influenced negative attitudes about OPV safety and the goals of vaccination campaigns, as actual cases demonstrated, they also could dispel such notions and convince families about the need to get children immunized.

SM partners developed an extensive array of activities to identify and engage local opinion leaders in vaccination campaigns (UNICEF, 2003, 2005). Depending on the characteristics of the community, opinion leaders included a variety of individuals

and organizations such as traditional leaders, women's networks, religious associations, community health volunteers, and field workers. Extensive training was conducted to familiarize opinion leaders with the goals of the PEI, strategies, and basic epidemiological information. Polio partners have been conducting "community dialogues" to explore persistent attitudes and beliefs about OPV and address misinformation and rumors (Athreya & Obregon, 2008). The incorporation of local women in vaccination teams, which had been staffed by local men or males from other communities in the past, also reflected the conviction that IPC between trusted sources and families was critical (Jabbar, 2008). Also, vaccination teams began receiving IPC training to equip them with information and strategies to persuade resisting households.

Available evidence suggests that intense IPC successfully can change community attitudes about OPV, and thus lead to a decrease in missed children and OPV uptake (UNICEF, 2003). Unfortunately, we still do not know how and why IPC effectively made people change their minds. A lack of data leaves us with limited understanding of how communities that were previously opposed to OPV eventually accepted immunization for their children. The reversal of attitudes is telling especially considering that those communities had been "inoculated" with "anti-polio beliefs" by local social networks, opinion leaders, and the media. Here "inoculation" is used as defined by social psychologist William McGuire (1964), who argued that certain beliefs may be spread through social networks just as viruses are injected into the human body. Those "inoculated" beliefs offer resistance to subsequent opposite, attitudinal messages. In the case of "polio resistant" communities, not only had they been inoculated against OPV, but also distrust of top-down, government programs was widespread. The "conversion" of "resisting" families and communities seems a remarkable achievement considering the previous strength of oppositional attitudes.

Entry Point to Critical Development and Health Dimensions: Lessons on Gender

It is beyond contention that gender is a critical dimension in development efforts, including health (Doyal, 2002) and immunization efforts (Hanmer, Lensink, & Whie, 2003). The experience of the PEI shows how challenges encountered in the implementation of polio eradication efforts have served as an entry point to facilitate the participation of women as members of vaccination teams or of local dialogues, therefore creating opportunities for increased visibility of women and space for their voice.

Some areas in Pakistan were confronted with the need to address two interrelated factors found to affect PEI implementation, and that required changes in the communication strategies: (1) the custom of isolating infants, particularly boys, from all outsiders for 40 days after they are born; and (2) not permitting male, nonfamily members to enter Muslim households. Addressing the isolation of infants required the implementation of a door-to-door strategy with vaccinators well trained in IPC whose task was to get caregivers to allow their infants to be vaccinated against polio. Male door-to-door teams were not effective due to the custom of not permitting unrelated males to enter homes. As a result, female vaccinator teams, who could reach female child caretakers with the youngest children under their care, were formed and trained to visit families unwilling to vaccinate newborns (Cheng, 2004a, 2004b).

In India, community meetings and dialogues also created space for women to engage in discussion and dialogue about polio and other local issues. A "lessons learned" report from the local SM team in Varanasi district in India (Personal

Communication, Satyavir Singh, Subregional Coordinator, Polio Team, Varanasi, August 17, 2008) described the following:

> An "Itjema," a religious gathering of Muslim women which is preached by a female religious leader, Maulani/Aapa/Bazee, was created to strengthen SM activities. Maulani are highly respected in Muslim communities, and women trust and follow their teachings. In critical pockets 15 Maulanai were identified and led "Itjema" at some community leader or influencer's residence whose house was among or in vicinity of refusal families. Maulanai recite "Hadees" (religious message) on health and later on explain how important oral polio vaccination is to 0–5 year kids."

Meetings generally ended with the distribution of educational materials and an opportunity to talk about other local community issues.

While the PEI has not specifically collected data to assess the nature of the interaction and dialogue among female participants, involvement of women in the program at the very least has opened up a new space for women's dialogue and inter-action, and a greater sense of a particular contribution to the eradication of polio in the country. In contexts where opportunities for women's participation in certain activities are limited, these community spaces must be seen as an important step toward empowering women.

Implications of SM and Polio Eradication for Global Health Programs

The existence of different understandings of SM is important to assess its impact on polio eradication. Just like other massive, donor-driven, global health projects, high-level international bodies set out the goals for the PEI. The decision to eradicate polio was not necessarily the result of a piecemeal, broad, bottom-up process. Rather, it was the outcome of advocacy and decisions at national and international levels. The legitimacy of global polio eradication ultimately rests upon the decision of the World Health Assembly (WHA) and the national governments that endorsed it. Certainly, it is debatable whether by endorsing the WHA's decision to eradicate polio, national governments effectively functioned as representatives of thousands of communities within their political jurisdiction. The experience of polio eradication shows that the endorsement by national governments does not necessarily lead to local support. Nor should we infer that local organizations will not rally behind such goals, especially when adequate engagement is undertaken. Instead, we argue that understanding the complexities and gray areas is essential to successful SM efforts Research about local health concerns and communication cultures is key to assess the context for SM and global health objectives.

The PEI's experience suggests that the tensions between "activist" and "pragmatic" SM are constitutive of global health programs. On the one hand, the participation of local communities is a necessity to achieve programmatic goals in countries where health systems suffer from appalling deficits. Where the quality and the reach of health systems are poor, efforts to control or eradicate diseases seem impossible without community involvement. It is not a question of whether local participation is desirable to fulfill democratic ideals in health. Rather, SM is necessary to overcome structural weaknesses, raise funding, deliver services, and drive global initiatives forward. Social mobilization (SM) may be the only effective avenue to expand the reach of services.

On the other hand, it is difficult to imagine how a comprehensive bottom-up decision-making process about health issues with global implications can be implemented successfully. Given existing mechanisms in global health governance, it seems unlikely that the process of assessing needs and defining goals affecting six billion people can resemble a true, comprehensive "activist" process of SM. A grassroots process of consultation about unmet needs and demands that eventually results in the definition of global goals seems, if not impossible, exceedingly difficult. Within the current order, absolute inclusion seems practically unfeasible, and technocratic decision making is inevitable. The experience of polio eradication shows that the majority of communities have enthusiastically participated to support programmatic goals decided by global bodies, while others have mobilized against them. Unlike other health programs, in the case of polio, the presence of even a few minority voices can be the difference between success and failure.

The lessons of oppositional SM during polio campaigns should caution global health programs about simply assuming that goals would be necessarily embraced in communities worldwide. Social mobilization (SM) around polio eradication has offered opportunities for waging conflicts, making demands, expressing dissatisfaction with official health services, and voicing distrust of national and global powers. Social mobilization (SM) does not always function as a predictable, efficient transmission belt of decisions made at national and global levels. It is messier and more conflictive than what it typically has been assumed. Without local ownership of planning and implementation and sensitivity at national and state levels, it is dubious whether SM can be effective.

Certainly, political protest and passive resistance against polio has been exceptional in the history of the PEI. Social mobilization (SM) generally has been supportive of polio immunization around the world, even when there have been serious cases in recent years that not only delayed eradication efforts, but also further complicated an already challenging endeavor. Just as important as it is to recognize the exceptional nature of oppositional SM, it is also necessary to acknowledge that global programs are bound to meet with different levels of acceptance at the local level. Just because national governments endorse global goals, it hardly follows that communities would readily accept their decisions and implications. Even when the vast majority of communities accepted OPV, it would be shortsighted to assume that global goals would meet a similar response everywhere.

The receptivity of global efforts depends on various conditions. Trust is fundamental for efficient immunization services (Das & Das, 2003). Even when people have poor information about the linkage between vaccination and disease prevention, they are more likely to accept the latter if they trust the provider. This is why distrust of provider, particularly in settings where governments are perceived as distant and disinterested in local health needs, undermines the credibility of external interventions. When people have other health and livelihood priorities and the quality of official health services is abysmal, they may hold reservations about why specific services, instead of what they demand, are provided. Such a milieu provides fertile ground for misinformation and rumors against global programs spread by influential local sources.

Equally important is building trust among global, national, and local partners. Without strong, ongoing relationships, it is doubtful that local actors eagerly would participate in SM activities. The perception that programs are foreign driven undermines the sense of local ownership, a key condition for ensuring long-term sustainability. The experience of SM in the PEI suggests that global programs should not expect

communities to uncritically accept global health objectives and mobilize enthusiastically in their support just because their governments had endorsed global actions. Local SM is contingent on multiple dynamics and tensions that need to be properly acknowledged and integrated in overall decisions, plans, and strategies early in the process. This includes recognizing the role of local leaders who wield tremendous influence through religious, political, and media networks, an issue that the PEI only belatedly recognized as it confronted obstacles to stop transmission in the last remaining countries.

Conclusions

In closing, we draw three conclusions that are relevant for the implementation of international health programs such as the PEI, as well as for theory and research in health communication in global contexts.

A first conclusion has direct implications for the design and implementation of global health programs. The experience of the PEI suggests that SM should not be approached casually as a top-down informational strategy to advance preestablished health goals, particularly in underserved communities with enormous needs and poor health services. Just like any other communicative process, SM is a complex, open-ended process. Community participation is not conflict-free, consensual mobilization. The unfolding and consequences of SM cannot be predicted precisely because participation puts in motion uncertain dynamics and demands whose results cannot be established beforehand.

Various contextual factors determine whether communities support or oppose external initiatives. From trust and quality of government health programs to circumstantial local politics, a host of factors shapes the evolution and characteristics of SM. This is why global programs should not take a cookie-cutter approach to SM. Social mobilization (SM) is not simply about relying on community associations; rather, it needs to be informed by the recognition of local distinctiveness, including health needs, perceptions, and attitudes vis-à-vis health services, structures, and dynamics of local power and participation, and the role of local influencers. When local needs do not match global goals, there are greater chances of program dissonance with respect to what different stakeholders may expect from program implementation. Also, the relevance of local context should be recognized ex ante rather than post facto, as often has happened in the case of polio eradication. It should not be "in reaction to" but, instead, an original, essential component of health programs.

A second conclusion is that centralized strategies hardly amount to SM. Both bottom-up microplanning and strong local commitment are essential to SM. Without local empowerment, that is, the process by which communities gain control over decisions and believe that their actions are directly relevant to the improvement of health conditions, SM is unlikely to be effective or sustainable. Too often, particularly in areas with poor health services and low immunization rates, SM for polio eradication was not properly decentralized to allow local communities to make key decisions about strategies, staffing, funding, and so on. National or state governments remained in control over crucial aspects that further reinforced the distance between polio eradication and local demands and a sense of disempowerment. Without the devolution of power, SM functions as a top-down strategy that aims to capitalize on local resources to maximize external goals.

Third, the experience of polio eradication confirms the insufficiencies of informational approaches to SM and communication. Local voluntary associations,

the media, religious and political leaders, and informal social networks should not be seen narrowly as channels for raising awareness about vaccination campaigns, or about changing attitudes about immunization. They are essentially social and political actors rooted in local contexts. Just as they can relay information that is functional to health programs, they also express community needs, are immersed in local and national political battles, and pursue various interests and goals. In countries where the quality of health services is extremely poor and communities have a vast array of demands, SM linked to global health initiatives may act as opportunities for the expression of local needs and politics rather than smooth information channels in support of preestablished goals.

Finally, our analysis of the experience of polio eradication patently illustrates that both activist and pragmatic SM are concrete possibilities for global health initiatives. Hybrid options that combine pragmatism and activism have been called for in other SM contexts (Canel, 1997). The responses to global health initiatives are unpredictable. They are contingent on how goals and strategies resonate with local needs and demands. Immunization programs are particularly vulnerable to uncertain local receptivity given that vaccine safety has been a subject of controversy and attention in recent years, not only in Nigeria and India, but also in many Western countries. In the context of renewed global democratization and persistent local conflicts rooted in ethnicity, religion, economics, and other causes, it cannot be assumed that mobilized communities would either diligently espouse global goals or necessarily oppose them. Communication and social mobilization strategies in public health, therefore, should rely on a clear understanding of the motives and agendas of involved actors. Resistance or opposition are also important dimensions for analysis as they may uncover new opportunities for effective interventions to improve health conditions worldwide. Further analysis and studies using these perspectives should be a priority for global health programs faced with similar challenges. Issues such as understanding the trust level among social actors, or the lack of trust, might provide important insights.

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