ORIGINAL PAPER

The Social Conditions for Successful Peer Education: A Comparison of Two HIV Prevention Programs Run by Sex Workers in India and South Africa

Flora Cornish · Catherine Campbell

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Abstract Peer education is a community-based intervention being implemented worldwide as an approach to HIV prevention. However, its results are inconsistent, with little consensus on why some projects succeed while others fail. Considering peer education as an 'intervention-incontext', we systematically compare the context and the implementation of two peer education interventions run by sex workers, one in India and one in South Africa, which produced contrasting outcomes. In so doing, we aim to identify key factors in the projects' successes or failures that may inform future peer education efforts. The Indian project's relative success was facilitated (1) by a more stable and supportive social, material and political context, and (2) by a community development ethos which devoted significant resources to sex workers' involvement, ownership and empowerment, as opposed to a biomedical approach which marginalised sex workers' concerns. We conclude with lessons learned and implications for current trends in peer education.

Keywords HIV/AIDS · Participation · Social context · Project implementation · Community development · India · South Africa

F. Cornish (🖂)

School of Nursing, Midwifery and Community Health, Glasgow Caledonian University, Cowcaddens Road, Glasgow G4 0BA, UK e-mail: flora.cornish@gcal.ac.uk

C. Campbell

The need for greater community participation in HIV prevention efforts is an article of faith in international HIV/ AIDS management policy. Peer education is the key participatory strategy in the HIV prevention field, and is used world-wide, particularly with hard-to-reach groups, but with varying outcomes. Much remains to be learned about the factors which lead some projects to succeed while others fail. This paper presents a comparative case study of two peer education programs led by sex workers in developing countries, using their contrasts to develop an understanding of the social conditions which promote success or failure of community-led HIV prevention interventions.

The two programs to be compared targeted similar groups (defined from a health intervention point of view), namely, female commercial sex workers from very deprived backgrounds, living in conditions of poverty and gender inequality, and at high risk of poor sexual health. They also drew on the same intervention approach-peer education as a means of empowering sex workers to insist on condom use. But they led to very different outcomes. The Sonagachi Project in India is often hailed as one of the success stories of participatory HIV prevention, and is being used as a model project for replication around India and overseas (Blankenship et al. 2006; Kerrigan et al. 2008; UNAIDS 2000). It has been successful on several counts: in biomedical terms, it has increased condom use and decreased levels of sexually transmitted infections (STIs) in the red light districts of West Bengal (Jana et al. 1998; Basu et al. 2004). In social terms, it has empowered and mobilized sex workers to run a long-standing sexual health project, with significant impacts on sex workers' safety (Cornish 2006a). Moreover, it has proven sustainable, having run for 16 years, since 1992. The Summertown Project in an informal shack settlement in a South

Institute of Social Psychology, London School of Economics and Political Science, Houghton St, London WC2A 2AE, UK e-mail: c.campbell@lse.ac.uk

African mining community had more disappointing results. Despite skilled external support and an enthusiastic group of sex worker peer educators, the project failed in its aims to mobilize an organized local response, had no impact on levels of condom use or HIV/AIDS, and was not sustainable (Campbell 2003; Williams et al. 2003).

In two independent pieces of research, the authors of this paper have conducted detailed ethnographic case studies of these programs. Through a systematic comparison of the two cases, the current paper sets out to account for the differing outcomes of the projects. By identifying factors helping and hindering successful outcomes, we seek to facilitate more effective peer education efforts.

Peer Education and Social Context

Peer education engages members of a 'target' community, such as sex workers, injecting drug users or young people, and trains them in health-related information and communication skills, to promote healthy behavior, such as safer sex, to their peers. Peer education is a core pillar of HIV prevention efforts globally. In Africa, for example, 60% of major HIV prevention NGOs carry out peer education (Kelly et al. 2006). In India, peer education is the government's primary approach for bringing about behavior change among high risk groups (NACO 2007).

Despite the popularity of peer education, and some successes (Kelly et al. 1992; Ngugi et al. 1996; Jana et al. 1998), its results have been equivocal and often disappointing (Harden et al. 2001). Rarely has peer education been found to produce dramatic, consistent positive effects. More often, programs produce an inconsistent pattern, with small effects on some outcome measures but not others (e.g. Bryan et al. 2006; Merakou et al. 2006), and it is not unusual for a program to achieve no positive health effects at all (Elford et al. 2001; Sloan and Myers 2005; Williams et al. 2003).

The ecological perspective (Bronfenbrenner 1979; Kelly 2006) of community psychology offers an approach to understanding this inconsistency of findings. The idea that persons are not isolated, but are always 'persons-in-context' is fundamental to ecological theory, and indeed, to community psychology (Nelson and Prilleltensky 2005). Thus, differences between people, and people's different states of health and well-being, are not attributed to factors inherent to the person, but to factors within their social context. The same logic can be used to understand why interventions sometimes succeed and sometimes fail. On one hand, we may look to factors within the intervention itself, but on the other (ecological) hand, we may look to the wider social context, to understand how the intervention was enabled or impeded by that context. That is,

interventions are always 'interventions-in-context', and the details of their implementation, such as the specific activities of peer educators, gain their significance according to the particular context in which they are being implemented.

We can use this distinction to describe the different explanations offered for the inconsistent findings on peer education. Some authors have focused on the variability of the implementation of peer education, arguing that poor outcomes are due to flawed implementation (e.g. Kelly 2004). Following this approach, program managers and evaluators focus on issues pertaining to the details of the intervention itself, such as the health promotion messages to be conveyed, the education program, the recruitment and retention of peer educators, or the behavior of peer educators (Adamchak 2006; Ozer et al. 1997). In this approach, peer education is treated as a technology that can be perfected and then "rolled out" in a diverse range of settings.

However, others have argued that standardizing implementation methods will not be sufficient to guarantee positive outcomes, because a peer education program's prospects are deeply shaped by the social conditions, or environment, within which it takes place (Hart et al. 2004). An environment of extreme symbolic, social and material marginalization of youth, for instance, in a poor South African community, raises major obstacles to the success of their peer education efforts (Campbell et al. 2005). Initiating peer education in such a context is not the same task as initiating peer education in a well-resourced supportive school which promotes high expectations for young people's achievements. Following this line of argument, Elford et al. (2004, p. 157) "challenge the notion-or hope-that social interventions can be precisely defined and replicated in different places and at different times as though they were pharmaceutical products". Drawing on the ecological perspective, in this paper, we consider peer education as an 'intervention-in-context'. We look both to the interventions themselves and to their social contexts, to identify the key issues that have helped or hindered peer education efforts in our two cases.

The Summertown Project

Our South African case study comes from a project designed to prevent HIV transmission among sex workers and migrant mineworkers in the gold mining district of Summertown, an hour's drive from Johannesburg. It was funded by a major overseas donor for 3 years, after which it was intended to be taken over by a group of local stakeholders. The project had three arms: aggressive syndromic management of STIs, peer education, and multistakeholder management. The sex worker peer education program was launched in a set of isolated and povertystricken illegal squatter camps on the perimeter of the mine fences, where the main activity was entertainment of the mineworkers through provision of commercial sex and alcohol. There were about 400 residents, most of them female sex workers, landladies or landlords (who sell liquor and provide free lodging to sex workers, who attract clients to their liquor businesses).

An inspired nursing sister was employed as Outreach Co-ordinator to run the sex worker peer education program. In a social context characterised by competitiveness, distrust and a sense of fatalism, she exercised immense skill in gaining the trust of the gangster gatekeepers that governed the settlements, and mobilizing a group of women to form an energetic peer education group under chaotic social conditions. The peer education program was based on the approach developed by the Project Support Group at the University of Harare (Dube and Wilson 1999), which provides detailed guidance on the procedures for setting up, conducting and monitoring a peer education project. Peer educators were trained in participatory health promotion methods (including high profile public meetings, dramas, singing, and one-to-one counselling), and in organizational skills for monitoring the quality of peer education and conducting meetings.

In addition, a range of powerful stakeholders was invited to form a management committee. Representatives from the provincial health department, the gold mining industry, the mineworker trade unions, and an assortment of local and international academics and overseas funders were brought together with the intention that they would use their influence to create conditions supportive of good sexual health, and that they would collectively take on responsibility for the sustainability of the project after its first 3 years of funding.

Despite all these efforts, however, biomedical outcome measures showed that after 3 years the project had had no impact on levels of STIs (Williams et al. 2003). The peer educators' role remained a difficult one, as their peers were often suspicious of their motives, or simply had insufficient control over their own sexual encounters to be able to put the peer educators' advice into practice. The stakeholder committee did not become a cohesive and active group capable of sustaining the project.

The Sonagachi Project

Sonagachi is the largest red light area in Kolkata, India, where an estimated 5,000 sex workers live and work. Following an epidemiological survey which revealed a high level of risk for HIV transmission in the area, a major international donor initiated the Sonagachi Project in 1993. Twelve sex workers were initially recruited to serve as peer educators, who were to disseminate information regarding HIV transmission and prevention, promote condom use, and encourage sex workers to attend the project's sexual health clinic. The role and training of peer educators evolved gradually over time as project staff gained experience of what was needed and what worked.

During the early stages of the project, it became evident to the project's founder, an occupational health doctor, and to the peer educators, that the social environment of the red light district was limiting sex workers' capabilities to protect their health. Living in poverty, often rejected by their families, and in hierarchical working relationships with brothel managers and agents, sex workers had little freedom to control their own lives or their sexual behavior. Accordingly, the project evolved to support the women in their everyday struggles, such as disputes with customers, neighbours or landladies, exploitation or violence by brothel managers or local hoodlums, and the pressure of debt. A sex workers' collective, Durbar Mahila Samanwaya Committee (DMSC, translated as Unstoppable Women's United Committee), was set up to support sex workers, and to struggle for improvement of their living and working conditions. A variety of overseas donors funded the project before it was handed over to the State AIDS Control Society in 2001. Applying for funds is an ongoing activity.

An outcome evaluation of the project 3 years after its commencement found that STIs had fallen significantly and condom use had increased (Jana et al. 1998). The project has come to be seen, in Sonagachi, as a relevant and credible source of support for sex workers. It has expanded to cover most of the red light districts in Kolkata and many throughout the state of West Bengal, with a complement of 200 peer educators by 2001. Sex workers are proudly taking on positions of increasing responsibility in the project. In this paper, we seek to understand why these outcomes were so different to those in Summertown.

Methodology

In a major review of the sexual health literature, Wellings et al. (2006) call for detailed case studies of sexual health interventions in context, based on their findings that the social context powerfully shapes sexual health interventions, and that there is limited academic literature on this relationship. Case studies of participatory HIV prevention (e.g. Asthana and Oostvogels 1996; Busza and Schunter 2001) provide individually rich illustrations of how complex social relations have shaped the implementation and degree of success of particular interventions. However, it is not always easy to extract general concepts or generalizable lessons from individual in-depth studies. As Yin (2003) suggests, comparative case studies can increase the validity and generalizability of interpretations, if those interpretations make sense of very different situations. The present article adds to previously published work on the Summertown and Sonagachi projects in two ways. Firstly, the juxtaposition of the two cases flags up factors in their success or failure that had not previously been highlighted. Secondly, when the themes that we identify can make sense both of failures and of successes, this adds weight to their importance and validity.

Our comparative study is consonant with the logic of 'dichotomous case selection', in which contrasting cases, which represent the extremes of a phenomenon of interest, are analyzed, in the interest of exploring the reasons for variation in that phenomenon (Schensul et al. 1999). Although such dichotomizing is always a simplification, it also serves a useful analytical purpose of prompting conceptualization of the differences between cases.

In the course of the analysis, we shall explore key differences, as well as similarities, between the contexts and the implementation of peer education in each case. That Summertown and Sonagachi are very different places is already evident from our brief introductions to them above. In what sense, then, are these projects comparable? They are both instances of the global effort to respond to the challenge of HIV/AIDS with peer education, and both work with the same 'risk group' as defined from a public health perspective: sex workers. The major differences between the projects do not confound our analysis, but they are the object of the analysis.

The most challenging difference for the analysis is that the research in Summertown was carried out during the first 3 years of that project, while in Sonagachi, it was carried out between 12 and 16 years into the project in India. We have sought to take account of this in our analysis by focusing on the pre-existing social context and the general approach of the Sonagachi Project rather than the details of its established intervention. However, this difference remains an important limitation.

Data Collection Methods

Both case studies used multiple qualitative methods to build up a multi-faceted ethnographic understanding of the processes through which successes or failures were produced. The research in Summertown took place between 1995 and 2000. The core data were provided by annual interviews over a 4-year period (1997–2000) with approximately 20 sex workers each time. Interviews with mine workers, local residents, and a broad constituency of stakeholders helped to elucidate the context of the sex workers' lives. In addition, project documentation was collected and analyzed, including Project policy documents, minutes of monthly stakeholder meetings, consultancy reports commissioned by the Project's funding agencies, and fieldwork diaries. Further details about the methods used can be found in previously published work (Campbell 2000; Campbell and Mzaidume 2001).

The research in Sonagachi took place over 10 months between 2000 and 2005, with the majority of interviews carried out in 2001. Ten group discussions and eleven interviews were carried out with sex workers who had little involvement in the project. These were complemented by 19 interviews with sex workers employed as peer educators or otherwise involved in the project, and 20 interviews with other local stakeholders, including professional project staff, clients, boyfriends, and brothel managers. Observation of project activities took place throughout the fieldwork period and was recorded in fieldwork diaries. Further details can be found in Cornish (2006a, b) and Cornish and Ghosh (2007).

Analysis

The analysis is a 'bottom-up' one. Informed by the idea of 'intervention-in-context', we compared the contexts and the implementation of each project, considering how each dimension of context or implementation may have influenced the possibility of peer education being successful. When looking in more detail at each project, unsurprisingly, they become more complicated, so that neither can be said to be a complete failure or a complete success on all counts. While the premise of this paper is that the Sonagachi Project is a success, and the Summertown project a failure, our analysis sought out examples counter to this position, and sought similarities as well as differences between the projects. The following sections present the dimensions identified. In the discussion section, we then aim to synthesise this wide range of contrasts, to produce a general conceptual approach for understanding the prospects for peer education, and a set of implications for peer education efforts.

Table 1 presents the key features of the context which we have identified, and Table 2 presents the features of the interventions. The first column in each table contains the feature of the context or intervention to be compared. The second and third columns then sum up the characteristics of Summertown and Sonagachi on those features. The fourth column contains our interpretation of what it is, conceptually, about these differences between Summertown and Sonagachi, from a community psychology point of view, which may link the differences between the projects to their differing outcomes. The following findings section presents our analysis of the important contrasts between the projects' contexts and implementation.

Key feature	Summertown	Sonagachi	Conceptual issue
Social fabric: Sex workers' lives	Extreme poverty Sex workers support families Stigma, wish for a man, despise the area Clients and boyfriends resist condoms	Extreme poverty for most, some well off Sex workers support families Stigma, wish for a man, 'bad place' Clients and boyfriends resist condoms	Similar marginalizing and disempowering contexts
Social fabric: Social organization of the communities	Disorganized, little stability Peer educators embroiled in local power struggles	Established red light district with hierarchical (and exploitative) social organization Project avoided local power struggles, kept low profile	Existing legitimacy of social order to build upon
Social fabric: Social relationships among sex workers	Competitiveness, jealousy Some support in the face of danger	Competitiveness, isolation Some solidarity	Little legitimate authority
Infrastructural context	No infrastructure, insecure shack settlements	Water, electricity and sanitation; police presence, etc	Expectations as citizens
Political context	New democracy, little evidence locally that poor women can have power	Familiarity with themes of democracy and workers' movements	Confidence in possibility of change

Table 1 Key features of social context in Summertown and Sonagachi

Table 2 Key features of project implementation in Sonagachi and Summertown

Key feature	Summertown	Sonagachi	Conceptual issue
Project activities	Promotion and distribution of condoms	Promotion and distribution of condoms	Sharing strategies, building norms
	Resolution of local conflicts by Outreach Co-ordinator	Committees of sex workers mediate in local conflicts	Giving sex workers greater control in their lives
		Wider community development: Micro-loan and savings co-op; children's access to school; negotiate tenancies etc.	Incentives for participation Promoting solidarity and confidence
		Critical thinking about sex work and stigma	
Project management: Involvement of sex workers	Hierarchical organization	Hierarchical organization	Integration of field staff and management promotes realism and ownership
	Separation between proposal writer, management and fieldworkers	Management have been fieldworkers and are in close contact with field	
		Sex workers are well represented on decision- making committees and change is gradual	
Project management: Involvement of other stakeholders	Managed by diverse stakeholder committee, sex workers not represented	Managed by Director and heads of the various programs, including sex workers	Difficulty of managing diverse and disconnected stakeholders
Project management: Provision of support	Peer educators have weekly meetings with Outreach Co- ordinator	Peer educators have daily meetings with co- ordinator and daily education sessions Regular meetings of all fieldworkers and leaders	Social change is slow and requires intensive support
	No support for Co-ordinator	Timeframe: Expected to evolve slowly; expects to be funded for years to come	
	Timeframe: Aimed for 'sustainability', i.e. end of external support, after 3 years		
Model of community intervention	(sex workers secondary,	Aims: Promote health among sex workers (sex workers the public to be served by the project) Scope: broad view of health as dependent on security, autonomy, etc	Positioning of sex workers as agents or objects
	'conduits of disease') Scope: narrow view of health		Community development vs. medical view of change

Context

Social Fabric

In both Sonagachi and Summertown, at the projects' inception, the social contexts of sex workers' lives were deeply marginalizing and disempowering. Materially, both settings were characterised by extreme poverty, with most women barely making ends meet through the sale of sex. In a situation of competition for clients, relationships between sex workers were often characterised by tension, conflict and jealousy, though in each case, there were times when sex workers offered each other support. In both settings, at a symbolic level, the sex trade was profoundly stigmatised, with sex workers colluding in this stigmatization, speaking of their work with contempt.

Notwithstanding these similarities, the social structures of the two communities are very different. The sale of sex in Sonagachi is governed by an established set of hierarchical relationships and rules, which are widely viewed as legitimate. Sex workers are often locked into hierarchical relationships with brothel managers (madams) who take half of their income and exert control over their sexual encounters. A minority rent rooms independently, and some work with agents (pimps). Summertown, by contrast, has a less complex social order. Sex workers work independently, involving no middlemen or women.

While Sonagachi's hierarchical working arrangements are exploitative of sex workers, when compared to the social disorganization of Summertown, certain advantages emerge. In Sonagachi, sex workers have certain (minimal) entitlements. For instance, brothel managers and sex workers divide the income from sex work so that each receives 50%. If a brothel manager takes more than this, it is generally agreed that this is wrong. Another norm states that the pimps or other men of a house are not to seek sexual services from a woman who works from the same house. The existence of these basic rules protective of sex workers gave the Sonagachi project a minimal starting point from which to promote sex workers' interests. We observed no such norms in Summertown. Here, sex workers were considered the lowest and most despicable residents, and there was no precedent for protecting sex workers' rights. Neither sex workers nor other residents had any expectation that rules for the protection of sex workers were realistic or feasible. Thus, the prospect for peer educators to inspire confidence was much greater in Sonagachi than in Summertown.

The different level of social organization in each setting is related to the stability of the settings over time. Since at least the mid-nineteenth century, there have been brothels in Sonagachi (Banerjee 1998). There are long-term residents (such as sex workers who have worked there for

10-20 years, or brothel managers who have also spent decades working as sex workers) who form a core of accumulated experience and stability, and in some cases, valued support networks. In Summertown, sex workers are based in a temporary shack settlement, on illegally occupied land. There is a high turnover among the inhabitants and thus little opportunity for stable social relationships or supportive norms to develop. When the Summertown project was initiated, sex workers were wary of accepting another person's authority, even that of peer educators on issues of sexual health. They would challenge the peer educators, asking "why should I listen to you?" Peer educators themselves became embroiled in local conflicts and controversies which disrupted their relationships with each other and with other sex workers. The Sonagachi Project was not immune to such dynamics. It experienced divisive competition between sex workers for the job of peer educator, on occasion, as well as arguments between peer educators (Evans and Lambert 2008). However, the cohesion of the Project and its committees were sufficient to protect it from derailment by such problems. In Sonagachi, a stronger history of social organization seems to have supported the Project's efforts to establish legitimate authority, solidarity and collaborative working among sex workers.

Infrastructural Context

The degree of establishment of the two communities also manifests in the extent of infrastructure available to residents. The Summertown sex workers were squatting on illegally occupied land, in makeshift structures made of corrugated iron and wood, with no facilities and no support from the state aside from a mobile clinic which came to the community once a month, weather permitting. There was no water supply, sanitation or electricity. The community was very isolated, with a hardened mud track serving as the only road, and minimal access to transport.

Sonagachi has a relatively central location within one of India's major cities. Living conditions are poor, but minimal facilities exist. Sex workers live and work in single rooms within large bricks-and-mortar buildings. Typically, a pump on the ground floor supplies running water, and electricity is available, used to run an electric light and a fan in most rooms. Toilets exist, though in insufficient numbers, and there are no cooking facilities: cooking is done on paraffin stoves on the landing. Conditions are cramped and fierce arguments arise over the use of common space.

Sex workers in Sonagachi have some expectations of support from people in a variety of roles. Some of the buildings have doormen at the gates, for security, who keep an eye on the people entering the building and lock up at night. Landladies or landlords have some responsibilities for the upkeep of buildings and maintenance of the electricity supply, and brothel managers have responsibilities for housekeeping and security. Some of the brothels employ women to cook, clean and run errands on behalf of the sex workers. In terms of public services, there is a police presence (though this has typically been experienced as exploitative rather than supportive) and there are schools which sex workers wish their children to attend. All of these relationships are highly unequal, and the denial of services and support to sex workers is common. However, the situation is even worse in Summertown, where sex workers have no entitlements, and no expectation of police protection or of the provision of services such as water or electricity. We suggest that the existence of legitimate expectations among sex workers, even if these expectations are minimal and are not often met, provides a starting point for sex workers to consider themselves as citizens with legitimate demands and the beginnings of confidence in the ability of their group to effect change.

The impact of deprivation is not completely straightforward, however. In Summertown, efforts to build a peer education team were relatively successful. Sex workers explained (as they did in Sonagachi) that the lack of other sources of esteem or resources meant that they were keen to participate in the project, in the hope of benefiting individually from it.

Political Context

Differences between the sex workers' expectations of citizenship can also be related to the differing political contexts. Kolkata has a strong tradition of workers' movements and trade unionism, supported by a Left Front coalition government, since 1977. Workers in the informal sector are organized into trade unions, and discourses of workers' rights, solidarity and organization are common currency. Sex workers with leadership roles in the Sonagachi Project draw on these discourses in explaining the rationale behind their organization. They also make reference to the successes of various movements of oppressed people such as India's independence struggle and Ambedkar's movement to end 'untouchability', which provide them with plausible precedents for successful collective action among sex workers (Cornish 2006b). It was only a minority of highly politicised women who spoke in this way, but in Summertown, no examples of successful organization of workers were in circulation at all.

At the time of the study, South Africa was just establishing its new democracy. While our Indian informants drew on well-established, decades-old struggles to make sense of the value of a sex workers' organization, and to find confidence in their collective agency, their South African counterparts did not seem to have access to an empowering political discourse of exploited groups gaining recognition of their rights.

Intervention

Project Activities in the Community

In both Sonagachi and Summertown, sex workers were successfully recruited, trained and supported to raise awareness of HIV and to promote condom use to their peers. Through regular meetings of the sex worker community, the organizers in both cases aimed to create a strong and united group of women, who would be credible communicators, instilling confidence among their peers and a spirit of solidarity. In Sonagachi, peer educators receive a small salary for their part-time work, which, together with the positive social identity of being a health worker, makes sex workers keen to get the jobs and to keep them. In Summertown, participation was considered as a voluntary activity and peer educators were unpaid. T-shirts, condoms, training, opportunities to travel and social status were sufficient incentives to recruit and retain sex workers.

However, the activities of the Sonagachi Project evolved to incorporate a much wider agenda than the usual focus on health-related behavior. Firstly, the Project started to address the local social problems which sex workers faced, such as disputes with each other and exploitation by clients, madams, hoodlums or police (Jana et al. 2004). As outlined above, a sex workers' organization, DMSC, developed. Based on the model of a trade union, DMSC provides support in return for a membership fee. The organization is run by sex workers and madams who are elected onto its committees. It has supported sex workers in numerous ways, including helping the women to obtain ration cards (which give them access to government-subsidised foodstuffs), securing their release from the police station, helping their children to gain admission to schools, or negotiating solutions to disputes between sex workers and their madams. It also runs a savings and credit scheme, to give the women a more stable and flexible financial situation. Taken together, these supports give the women more control over their lives, making them less beholden to the demands of uncooperative clients.

Secondly, the Sonagachi Project actively tackles sex workers' internalized stigma. Both in South Africa and in India, discrimination, taunting and physical abuse of sex workers are legitimised by the profound stigmatization associated with selling sex. Through politicised discussions of the nature of the sex trade and the women's activities, discrimination against sex workers is actively challenged within the Sonagachi Project. It is argued that sex workers are workers like any others, and that by earning money to support their families, they are doing something good, not something bad.

Both the provision of concrete problem-solving support and the promotion of critical thinking about the stigmatization of sex workers are clearly advantageous to the women's immediate concerns, in ways that the prevention of an invisible and slowly developing disease (HIV/AIDS) may not be perceived to be. This combination, we suggest, creates a powerful set of incentives and encouragement to sex workers to join the Sonagachi Project's fight to secure their rights, and thus to benefit from the consequent solidarity and supports that the Project has to offer.

In Summertown, sex workers faced many similar kinds of disruption and conflict, and the nursing sister responsible for the program took active steps to solve conflicts between sex workers, and to resolve other social problems—such as encouraging women to clear up litter after weekends. However, she received no support from the directors of the project for this work. It was not possible for her to singlehandedly make inroads into the major social problems disadvantaging the sex workers. No politicizing discourse of workers mobilizing to collectively assert their rights was in circulation at any level of the project, neither among the project leaders and managers, nor among the frontline project staff or sex workers.

Involvement of Sex Workers

Like most organizations, a hierarchical structure characterised both projects, with a variety of roles, from frontline peer educators, to supervisors or co-ordinators who managed a group of peer educators, to decision-making committees and a highly dedicated and energetic founder. However, the composition and functioning of the hierarchies differed.

In Summertown, the impetus for the project had two sources: a local grassroots group of township residents concerned about rising levels of HIV, and a group of academic researchers. As the project evolved, the local voice became less prominent. A stakeholder committee had responsibility for decision-making. The committee originally met in an office an hour's drive from Summertown, making it inaccessible to local people, who felt disconnected from the project, and came to doubt its good intentions. Neither the sex workers, nor their Outreach Co-ordinator were represented on the committee, which had only very indirect means for learning about the grassroots perspective. In sum, the committee was not structured in a way that would ensure that it produced realistic decisions which community members would endorse.

The Sonagachi Project has engaged grassroots sex workers much more intensively. The sexual health aspect of the project is run through local clinics. Each clinic has a coordinator. Peer educators work from the clinic and are overseen by supervisors, who in turn report to the coordinator. The coordinator reports to the Project Director, who works with various professional staff to run the administrative apparatus (such as Accounts, Training, Monitoring). The project office is located within the red light district, and communication between fieldworkers and the central office takes place daily. Thus, decision-making is done by people with close links to realities on the ground, the project is responsive to sex workers' stated concerns, there is a local sense of ownership and an expectation that sex workers' voices should be heard.

The management roles of supervisor and coordinator were initially mainly held by social workers who were not themselves sex workers, but as the project has evolved, sex workers have increasingly taken on these positions. The community problem-solving is done by the sex workers' collective which is composed of area-based committees of sex workers, who come together on a weekly basis, and who elect a Central Committee who have responsibility and authority to manage the work of the locally based committees. Leadership by sex workers is a key priority for the project, and consequently leadership training, mentoring and the development of sex workers' management experience are prioritised. Specific policies aimed at maximizing the participation of local women exist (for instance, a sex worker can hold a post on a committee for no more than 2 years, and inexperienced sex workers are called upon to gain experience of chairing meetings). These efforts are by no means straightforward, and empowering sex workers as project leaders has been a slow and challenging process, but nonetheless, it has happened to a greater extent than in Summertown.

Involvement of Other Stakeholders

As well as working with sex workers, both projects also seek to engage with groups who exert power over sex workers' lives, but they do so in different ways. Both projects were funded by major overseas donors, which, in each case, placed the operational details of the interventions under the full control of the project leadership. In both cases, the original founders of the project shouldered almost single-handedly the major demands of establishing challenging interventions, with community members and project workers bringing all manner of problems and issues to the founders for solution.

The leadership of the Summertown project was designed to incorporate the power and influence of significant stakeholders. An overseas consultant wrote the project proposal. Based on the contemporary emphasis on the need for multisector partnership, the proposal called for the establishment of a diverse stakeholder committee to lead the project. Mine management, trade unions, academics, the government health department, and representatives of the township were represented on this committee, with the aim of eliciting their positive influence on the social context of sex workers' health. However, the divergent interests within the stakeholder group made it very difficult to achieve commitment from all parties, or consensus on how to proceed. The founder had an almost impossible set of interests to try to reconcile, with the mining industry representatives suspecting the founder of laying unwarranted blame at the feet of the mining houses. Meetings were often poorly attended, unproductive or divisive, and the stakeholder group often seemed to be more of an obstacle to peer education than a catalyst of action. Particularly problematic was the failure of the mining industry to deliver on their commitment to run parallel peer education programs amongst the gold miners.

The Sonagachi Project took a less ambitious approach to stakeholder engagement, and consequently, while it has made significant changes to the local red light area, has had little impact on wider structures beyond the red light area. In its relations with the most powerful groups of the red light district-the political parties, local men's clubs, pimps and procurers, the Sonagachi Project has often downplayed its significance, emphasizing that it is simply a health project with no interest in changing the structure of the sex trade. By doing so, it has sought to make changes behind the scenes without raising opposition from these powerful groups. Meetings are held with these groups, to seek their co-operation-but not, as with the Summertown's stakeholder committee, to jointly agree the way forward for the project. The Sonagachi Project actively involves lower-level 'stakeholders', such as madams, whose behavior impacts directly on sex workers' daily experience, with the aim of positively influencing their treatment of sex workers. This approach to engaging with stakeholders could be critiqued for not being very challenging, and colluding in their dominance, but to be more challenging may be too high a risk, if the stakeholders have the power to de-rail the project (Cornish and Ghosh 2007).

Engaging a wide range of powerful stakeholders makes good theoretical sense in the interest of creating more health-enabling communities, but mediating between widely divergent or conflicting interest groups may be so time-consuming as to undermine the grassroots peer education program.

Provision of Support

Both projects were intended to empower sex workers to take on responsibility for local health promotion, but they had different assumptions about how much support sex workers would need in order to become empowered. The intensity of involvement of project staff with sex workers is much greater in the Sonagachi Project. Peer educators meet with their co-ordinators in the morning 6 days a week, then spend 2 h doing their rounds, and return to the clinic for an hour for another meeting and education session. In these meetings, problems are debated, and experiences exchanged. If the problems are unresolved, the co-ordinator seeks suggestions at the central office. The workings of the project are discussed, and management decisions are communicated. In Summertown, after having set up the project, the Outreach co-ordinator returned to the group once or twice a week, to support them. In the interim, the peer educators, who had little formal education and no prior experience of management or organization, were expected to manage their work together independently.

The external consultant's design for the Summertown project envisaged achieving 'sustainability' (i.e. the withdrawal of external support) within 3 years, by which time a partnership of local stakeholders would take over. Accordingly, the role of the Project Director was supposed to shrink over the period of the project, as he handed over the reins to the new leaders. This ambitious time-frame may have been a good design from the point of view of funding agencies' interest in efficient use of their limited funds, but was less good in terms of a realistic assessment of the prospects for social change in a socially disrupted community. In practice, the responsibilities of the Project Director increased over the course of the project, as conflicts between stakeholders, project workers and community members grew. Also in the interest of 'sustainability', during the 3rd year, the Outreach Co-ordinator was encouraged to withdraw, to make space for sex workers to take responsibility for activities. In response, sex workers' attendance at meetings dropped, and peer educators defaulted to didactic educational styles rather than the challenging participatory techniques in which they had been trained. Three years was not long enough for the diverse stakeholder group to become sufficiently unified and committed, nor for the marginalised group of sex workers to become sufficiently organized to maintain their health promotion activities.

In contrast, the Sonagachi Project took a more gradualist approach. Rather than its structure being laid out from the start, it has evolved gradually in response to sex workers' stated concerns (Jana et al. 2004). It was not expected that the project would survive without the energetic input of the founder, other professionals and activists. While a key principle of the Project is to employ sex workers as project workers, there is intensive support of these women in their development of leadership experience and skills. The Project's original founder stepped down as director after 7 years, but retains a very active role as Advisor to the Project. Many important decisions continue to be brought back to him for advice and the project is not yet independent of his input.

Models of Community Intervention

The differences in implementation which we have described can be understood partly in terms of the founders' and leaders' understandings of the processes in which they were engaged. While both projects had the same aims at the micro-level of peer education activities to promote health, their underlying conceptualizations of their endeavours were very different.

The different levels of priority given to sex workers' concerns and their involvement in decision-making can be attributed to the place of sex workers within each project's remit. The primary focus of the Summertown project was to improve mineworkers' sexual health. In this context, sex workers were considered as 'conduits of disease', a source of risk for their mineworker clients, and thus as problems to be changed as opposed to partners to be engaged. Furthermore, the sex worker peer education intervention was seen as an 'add on' rather than as central to the project's functioning. For this reason, it was not considered necessary to involve sex workers or the nursing sister who ran the peer education program in project decision-making. Sex workers were the raison d'etre of the Sonagachi project, considered by project workers as the public who were to be engaged and supported. Hence, sex workers' interests were prioritized, and sex workers were involved substantially in decision-making.

While the formal goals and the health promotion activities of the two projects were similar, the philosophies behind them were different. The Sonagachi Project was based on a community development model of behavior change, which can be contrasted with the Summertown Project's medical or technical view of behavior change. The Sonagachi Project's founder was an occupational health scientist, with experience of political activism. He was thus in a position to consider sex workers' health as a product of their environment requiring mobilization of the community to address their social problems. He considered sex workers' economic and physical insecurity to be key risk factors for HIV transmission, and felt that boosting sex workers' self-respect and confidence would be fundamental to generating a commitment to protecting their health, and mutual confidence in solidarity (Jana et al. 2004). Considering sex work as an occupation rather than as a moral issue enabled a challenge to the stigmatization which undermined sex workers' confidence in their collective action. The community development perspective supported an understanding of the significant time and resources required to enable change in a historically marginalised community.

The Summertown Project leadership, by contrast, was dominated by biomedical professionals, whose expertise lay in technical aspects of disease diagnosis and treatment, not in community intervention. The problem was considered largely as a task of medical management of STIs, while individual sex workers and mineworkers would be expected to take responsibility for safer sex. The leadership had little commitment to the peer education program, tending to dismiss it as 'vague social science'. The mining industry stakeholders continued to focus their contributions on the existing program of biomedical treatment for STIs through mine clinics, and to provide miners with didactic health education, with no effort to address the social factors shaping miners' health-related behavior. Indeed, explicit hostility to a community development understanding of behavior change was evident. At one meeting, donor agency representatives suggested that income generating activities for sex workers (supported by the provision of sewing machines) would give them some independence from sex work and thus greater control over their lives. The mine industry's medical officer angrily dismissed the proposal with the assertion that "this is a health project!"-as if economic security had nothing to do with health. Such separation of health and socio-economic context is a philosophy quite at odds with the rationale for community interventions.

Discussion

This paper has sought an understanding of the contrasting outcomes of the Sonagachi and Summertown Projects in terms of differences between their contexts and their intervention designs. We have argued that the social context of Sonagachi was, at the outset, more conducive to a peer education project than was Summertown, given that it had more stable social relationships, better physical infrastructure, and credible political precedents for empowering change. This is not to say that the context was ideal, or the process was easy, however. The second component to our argument is that the community development philosophy of the Sonagachi Project was far better suited to the challenges of HIV prevention within a historically marginalised and disempowered community, than was the biomedical approach taken by the Summertown Project. The implication for action, we suggest, is that it is possible to partially compensate for very disempowering social conditions by designing an intervention which explicitly addresses the community's social problems and has commitment to and specific strategies for empowering community members.

The purpose of this analysis was to inform and facilitate successful peer education efforts. To conclude this paper, we wish to suggest 'lessons learned' from the analysis, intended to aid program designers, and then to consider some implications for three current trends in the international health and development field. Before arriving at our conclusions, however, we will address possible limitations of the study.

Limitations and Scope of Conclusions

The strength of our conclusions is necessarily tempered by the individuality of the cases that we have compared. Firstly, there has been a risk of over-simplification. While this paper is premised on the idea that the Sonagachi Project was broadly a success, and Summertown a failure, our analysis has refuted a simplistic polarization of the projects. We have seen that the Summertown Project did indeed succeed in mobilizing a committed group of peer educators, and that it sought to address the social context through mobilizing a powerful stakeholder group. On the other hand, we have seen that the Sonagachi Project faced many of the same obstacles as Summertown, including divisive competition among sex workers, poverty, exploitation and dependence on the Project's founder. It is not our intention to claim that the Sonagachi Project has been ideal in every respect, but rather, that it has struggled through a range of challenges to survive as a 'good enough project'. Indeed, it is on this basis that we suggest it is possible to learn useful lessons from Sonagachi.

Secondly, we have compared only two particular cases, each with its own unique qualities, which cannot be claimed to be 'representative' of all peer education programs. We see our endeavour of understanding the processes leading to success or failure of peer education as a gradual, collective, knowledge-building process, and hope that further comparisons and literature reviews may confirm, add to, or dispute some of our suggestions. Indeed, our perspective on interventions as 'interventions-in-context' contradicts the supposition that one intervention can simply 'represent' another. The 'lessons learned' are intended as suggestions of issues to consider, rather than definitive, universal claims. Their appropriateness needs to be assessed by a sensitive analysis of each new context in which they might be applied.

Thirdly, the value of our conclusions about opportunities for more effective action could be undermined by the differences in the contexts of Sonagachi and Summertown. If the major problem is the existing social context, there may be little that program designers can do other than conclude that participatory approaches such as peer education are not suited to disempowering environments. To respond to this argument, we return to our theory and values. A core principle of the ecological approach is that environments are not stable or given, but constantly in flux, and interdependent with their inhabitants. In the terms of the current paper, it is not just interventions that change, but contexts also change. To change a context-intervention system, it is possible to focus either on the context or on the intervention (or on both). No doubt, disempowering social contexts often reflect entrenched economic and status relations, and may be very difficult to change, but they are not fixed. This means that the choice of what to change-the context or the intervention-is, at least in part, a question of values. The position that peer education is not workable in a disempowering environment would deny the marginalised sex workers of Summertown an opportunity to increase their agency, and would further entrench their status as passive victims. Our analysis has suggested that project mechanisms can be designed to create some of the social conditions supportive of peer education (see also Campbell et al. 2007). If our values prioritise a participatory intervention, because it seeks to increase the agency of marginalised women, then instead of rejecting peer education under adverse circumstances, a new task emerges, of creating the environment which can support that intervention. It is here that we believe useful lessons can be learned from our comparison.

Lessons Learned

We have argued that interventions in disadvantaged contexts need to work hard to reduce the negative impact of the social context. The basic orientation here is that interventions depend upon communities' agency to function, and they can foster that agency and become more effective. On the basis of our analysis, we suggest the following principles:

Address the Social Factors Disempowering the Community

Core problems and disadvantages such as poverty or conflict will limit the relevance and effectiveness of any efforts to change health-related behavior in isolation. Addressing such issues will encourage community participation and enable healthy behavior change. The Sonagachi Project's problem-solving committees may provide a useful model.

Involve Community Members Actively in Project Design

A community intervention is a complex social process which depends upon community members' action. The active involvement of the community in project planning and implementation is more likely to produce a project sensitive to the local context, and with local commitment.

Devise Strategies and Commit Resources to Community Empowerment

Almost by definition, a historically disempowered community is not immediately in a position to run and lead a challenging project. While active sex worker groups were achieved in both Sonagachi and Summertown, without intensive support for them in Summertown, their sustainability and effectiveness were limited.

Anticipate a Lengthy Time Frame

Social change is a slow and gradual process, and quick fixes are unlikely to work. Project planning needs to allow for an extended period of support and very gradual improvements.

Manage Stakeholder Involvement Carefully

Interest groups within and beyond the community may have the power to enable or inhibit the intervention. Close attention to their interests in change or the status quo, and to their potential to undermine the intervention, is required. Their role may need to be carefully delimited to prevent them obstructing progress.

Implications for Current Trends

We now turn to the implications of our analysis for three current discussions concerning participatory interventions in developing countries. Firstly, now that peer education has been successful in some contexts, there is a current concern to bring peer education "to scale" so that it can have an impact at a national level, rather than in a small number of isolated communities (e.g. Steen et al. 2006). Our analysis suggests that scaling up peer education is not a simple process of replication. Rather, in each new setting, an assessment of the social context should be undertaken, to anticipate the factors which might help or hinder peer education, and to take advantage of the helping factors, while ameliorating the hindering factors. Thus, a peer education program will not be the same in every context, but will be sensitively adjusted to maximise the community's agency in the most locally appropriate ways.

Secondly, with pressures on human resources, and tight development budgets, part of the current interest in participatory approaches to HIV prevention comes from a hope that community-led interventions may save on resources. In the discourse of health system managers and financiers, 'empowerment' of communities is sometimes used as a euphemism for the reduction of costly services, as communities are expected to take on responsibility for their health, with little or no pay. In a similar way, 'sustainability' is used to mean the continuation of a project after funding ends. However, we have suggested that the Summertown project's aim of entering a profoundly disrupted and disempowered community, initiating sustainable collaboration between diverse interest groups, and withdrawing external support after 3 years was simply over-ambitious. If we acknowledge that current behavior patterns are a product of a powerful set of social conditions, to change this whole system will require enormous investment of time and resources. Community participation in development is not a cheap option. The impetus to achieve 'sustainability' should not lead to unrealistic assessments of the speed at which the development of independent, powerful indigenous groups can be achieved (Sivaram and Celentano 2003).

Thirdly, in recognition of the profound importance of an intervention's social context, recommendations for community interventions to engage a wide range of stakeholders as partners are gaining ground (Wellings et al. 2006). Our comparison supports this recommendation as a means of ensuring that stakeholders are facilitating the community's agency as much as possible. But our analysis also shows that this is a high risk strategy. When resources are scarce and/or the stakes are high, 'partnerships' may be characterised more by competition than collaboration. There is a risk that the 'partners' will stall a change process or will actively pursue their own interests. Bringing together diverse interest groups always risks generating conflict. If such complex partnerships are to be effective, much effort will be required to establish a secure basis for working together.

Our discussion of peer-education-in-context has highlighted how extremely challenging it is to implement peer education in disempowering social contexts. But we have suggested that, if we value the principle of participatory intervention, then we have a responsibility to create social environments supportive of such interventions. This is a tremendously challenging task, but one to which community psychologists should be committed.

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References

- Adamchak, S. E. (2006). Youth peer education in reproductive health and HIV/AIDS: Progress, process and programming for the future. Youth Issues paper 7. Washington, DC: Family Health International.
- Asthana, S., & Oostvogels, R. (1996). Community participation in HIV prevention: Problems and prospects for community-based strategies among female sex workers in Madras. *Social Science* and Medicine, 43(2), 133–148.
- Banerjee, S. (1998). *Dangerous outcast: The prostitute in nineteenth century Bengal*. Calcutta: Seagull Books.
- Basu, I., Jana, S., Rotheram-Borus, M. J., Swendeman, D., Lee, S.-J., Newman, P., et al. (2004). HIV prevention among sex workers in India. *Journal of Acquired Immune Deficiency Syndromes*, 36(3), 845–852.

- Blankenship, K. M., Friedman, S. R., Dworkin, S., & Mantell, J. E. (2006). Structural interventions: Concepts, challenges and opportunities for research. *Journal of Urban Health*, 83(1), 59–72.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. London: Harvard University Press.
- Bryan, A., Robbins, R., Ruiz, M., & O'Neill, D. (2006). Effectiveness of an HIV prevention intervention in prison among African Americans, Hispanics, and Caucasians. *Health Education and Behavior*, 33(2), 154–177.
- Busza, J., & Schunter, B. T. (2001). From competition to community: Participatory learning and action among young, debt-bonded Vietnamese sex workers in Cambodia. *Reproductive Health Matters*, 9(17), 72–81.
- Campbell, C. (2000). Selling sex in the time of AIDS: The psychosocial context of condom use by sex workers on a Southern African mine. *Social Science and Medicine*, 50(4), 479–494.
- Campbell, C. (2003). 'Letting them die': Why HIV/AIDS prevention programmes fail. Oxford: James Currey.
- Campbell, C., Foulis, C.-A., Maimane, S., & Sibiya, Z. (2005). The impact of social environments on the effectiveness of youth HIV prevention: A South African case study. *AIDS Care*, 17(4), 471–478.
- Campbell, C., & Mzaidume, Z. (2001). Grassroots participation, peer education and HIV prevention by sex workers in South Africa. *American Journal of Public Health*, 91(12), 1978–1986.
- Campbell, C., Nair, Y., & Maimane, S. (2007). Building contexts that support effective community responses to HIV/AIDS: A South African case study. *American Journal of Community Psychol*ogy, 39, 347–363.
- Cornish, F. (2006a). Empowerment to participate: A case study of Indian sex workers' participation in HIV prevention. *Journal of Community and Applied Social Psychology*, 16(4), 301–315.
- Cornish, F. (2006b). Challenging the stigma of sex work in India: Material context and symbolic change. *Journal of Community* and Applied Social Psychology, 16(6), 462–471.
- Cornish, F., & Ghosh, R. (2007). The necessary contradictions of 'community-led' health promotion: A case study of HIV prevention in an Indian red light district. *Social Science and Medicine*, 64(2), 496–507.
- Dube, N., & Wilson, D. (1999). Peer education programmes. In B. Williams, C. Campbell, & C. MacPhail (Eds.), *Managing HIV/ AIDS in South Africa: Lessons from industrial settings*. Johannesburg: CSIR.
- Elford, J., Bolding, G., & Sherr, L. (2001). Peer education has no significant impact on HIV risk behaviours among gay men in London. AIDS, 15(4), 535–538.
- Elford, J., Bolding, G., & Sherr, L. (2004). Popular opinion leaders in London: A response to Kelly. *AIDS Care*, 16(2), 151–158.
- Evans, C., & Lambert, H. (2008). Implementing community interventions for HIV prevention: Insights from project ethnography. *Social Science and Medicine*, 66, 467–478.
- Harden, A., Oakley, A., & Oliver, S. (2001). Peer-delivered health promotion for young people: A systematic review of different study designs. *Health Education Journal*, 60(4), 339–353.
- Hart, G., Williamson, L., & Flowers, P. (2004). Good in parts: The Gay Men's task force in Glasgow—a response to Kelly. *AIDS Care*, 16(2), 159–165.
- Jana, S., Bandyopadhyay, N., Mukherjee, S., Dutta, N., Basu, I., & Saha, A. (1998). STD/HIV intervention with sex workers in West Bengal, India. AIDS, 12(suppl B), S101–S108.
- Jana, S., Basu, I., Rotheram-Borus, M.-J., & Newman, P. (2004). The Sonagachi Project: A sustainable community intervention program. AIDS Education and Prevention, 16(5), 405–414.

- Kelly, J. A. (2004). Popular opinion leaders and HIV prevention peer education: Resolving discrepant findings, and implications for the development of effective community programmes. *AIDS Care*, 16(2), 139–150.
- Kelly, J. (2006). Becoming ecological: An expedition into community psychology. New York: Oxford University Press.
- Kelly, J. A., Somlai, A. M., Benotsch, E. G., Amirkhanian, Y. A., Fernandez, M. I., Stevenson, L. Y., et al. (2006). Programmes, resources, and needs of HIV-prevention nongovernmental organizations (NGOs) in Africa, Central/Eastern Europe and Central Asia, Latin America and the Caribbean. *AIDS Care*, 18(1), 12–21.
- Kelly, J. A., St Lawrence, J. S., Stevenson, L. Y., Hauth, A. C., Kalichman, S. C., Diaz, Y. E., et al. (1992). Community AIDS/ HIV risk reduction: The effects of endorsements by popular people in three cities. *American Journal of Public Health*, 82(11), 1483–1489.
- Kerrigan, D., Telles, P., Torres, H., Overs, C., & Castle, C. (2008). Community development and HIV/STI-related vulnerability among female sex workers in Rio de Janeiro, Brazil. *Health Education Research*, 23(1), 137–145.
- Merakou, K., & Kourea-Kremastinou, J. (2006). Peer education in HIV prevention: An evaluation in schools. *European Journal of Public Health*, 16(2), 128–132.
- NACO. (2007). National AIDS control programme III. Delhi: NACO.
- Nelson, G. B., & Prilleltensky, I. (2005). Community psychology: In pursuit of liberation and well-being. Basingstoke: Palgrave Macmillan.
- Ngugi, E. A., Wilson, D., Sebstad, J., Plummer, F. A., & Moses, S. (1996). Focused peer-mediated educational programs among female sex workers to reduce sexually transmitted disease and human immunodeficiency virus transmission in Kenya and Zimbabwe. *Journal of Infectious Diseases*, 174(suppl 2), S240–S247.
- Ozer, E. J., Weinstein, R. S., Maslach, C., & Siegel, D. (1997). Adolescent AIDS prevention in context: The impact of peer educator qualities and classroom environments on intervention efficacy. *American Journal of Community Psychology*, 25(3), 289–323.
- Schensul, S. L., Schensul, J. J., & LeCompte, M. D. (1999). Essential ethnographic methods: Observations, interviews, & questionnaires. Walnut Creek, CA: Altamira Press.
- Sivaram, S., & Celentano, D. D. (2003). Training outreach workers for AIDS prevention in rural India: Is it sustainable? *Health Policy & Planning*, 18(4), 411–420.
- Sloan, N., & Myers, J. (2005). Evaluation of an HIV/AIDS peer education program in a South African workplace. *South African Medical Journal*, 95(4), 261–264.
- Steen, R., Mogasale, V., Wi, T., Singh, A., Das, A., Daly, C., et al. (2006). Pursuing scale and quality in STI interventions with sex workers: Initial results from Avahan India AIDS Initiative. *Sexually Transmitted Diseases*, 82(5), 381–385.
- UNAIDS. (2000). Female sex worker HIV prevention projects: Lessons learned from Papua New Guinea, India and Bangladesh. Geneva: UNAIDS.
- Wellings, K., Collumbien, M., Slaymaker, E., Singh, S., Hodges, Z., Patel, D., et al. (2006). Sexual behaviour in context: A global perspective. *Lancet*, 368, 1706–1728.
- Williams, B., Taljaard, D., Campbell, C. M., Gouws, E., Ndhlovu, L., van Dam, J., et al. (2003). Changing patterns of knowledge, reported behaviour and sexually transmitted infections in a South African gold mining community. *AIDS*, *17*(14), 2099–2107.
- Yin, R. K. (2003). Case study research: Design and methods (3rd ed.). London: Sage.