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40th WEDC International Conference, Loughborough, UK, 2017**LOCAL ACTION WITH INTERNATIONAL COOPERATION TO IMPROVE AND SUSTAIN WATER, SANITATION AND HYGIENE SERVICES****Impact of community-led total sanitation on women's health in urban slums of Kalyani Municipality***Preetha Prabhakaran (India), Kamal Kar & Lyla Mehta***PAPER 2756**

This paper documents the impact of Community led Total Sanitation (CLTS) on women's health in urban slums of Kalyani Municipality the first open defecation free (ODF) town in India. Women's health was viewed not only in terms of their physical health status but also their social and psychological well-being. The study also looked at how the process had empowered women and the role of the external environment in stimulating and supporting the change process. The study findings indicate that improved sanitation reduced the disease burden on women and their families, increased their safety and enhanced their social status. It was found that women played a lead role in initiating and driving sanitation and hygiene behaviour change in their communities, placing them in leadership roles and involving them in the decision-making process. This enabled woman to exercise agency in achieving gains beyond sanitation to improve their lives.

Introduction

This study focuses on the slums of Kalyani, a Municipality town located 55km north of Kolkata, the capital city of West Bengal state in India. From an area plagued with rampant open defecation, Kalyani was transformed into the first open defecation free (ODF) town in India in 2009. This was achieved through the Community-led Total Sanitation (CLTS)¹ approach that ignites collective behaviour change in the community to stop open defecation. (Kar and Chambers, 2008). CLTS was introduced in Kalyani slums in the year 2006 as part of the Community-led Health Initiative (CLHI) pilot programme under urban services for the poor. This was in sharp contrast to earlier, top-down approaches of provision of toilets, which had failed to ensure ownership or usage by the community. The benefits of CLTS to the community were not limited to changed sanitation behaviour and an end to open defecation alone – there were significant health and other development gains beyond sanitation, especially for the women.

This paper seeks to understand the health and other impacts of access to sanitation for women in an urban slum, achieved through the CLTS approach. Women's health in this study has been viewed not just in terms of the presence or absence of disease burden on the physical health of women but also in terms of their socio-psychological wellbeing resulting from reduced risks and a wide range of benefits accruing from better sanitation and hygiene practices and facilities. The study had the following objectives:

- to understand the impact of improved sanitation and specifically of the CLTS process on women's physical health in terms of reduction in disease burden; and the social and psychological wellbeing of women in selected slums of Kalyani;
- to understand the impact of the CLTS process on aspects of women's empowerment and its effect on women's wellbeing and overall health in selected ODF slums of Kalyani;
- to understand the external environmental factors that have played a key role in improving sanitation in Kalyani and therefore the health of women.

Gendered aspects of health and sanitation in urban slums

Women and girls in developing countries shoulder disproportionate cultural and biological burdens and thereby health risks in relation to inadequate sanitation (Hartmann *et al.* 2015; Mehta 2013). Women and

children are located at the most disadvantageous position within these emerging power structures in urban slums (Khosla 2009). Women's lack of access to clean and safe toilets render them vulnerable to gender-specific health consequences in terms of diseases and infections. These arise from delayed and unhealthy urination and defecation practices and poor menstrual hygiene, as well as risks related to gender-related violence and psychological stress because of shame and fear affecting their overall wellbeing (Khosla 2009; Joshi, Fawcett and Mannan 2011; Sahoo *et al.* 2015; Kulkarni, O'Reilly and Bhat 2014).

Recent studies reveal that women's gendered health risks due to open defecation practices include 'increased maternal mortality risks from unhygienic birthing practices and poor infection control, uro-genital tract infections and urinary incontinence and chronic constipation' (Mudey *et al.* 2010, Fisher 2006 and Cheng *et al.* 2012, cited in Sahoo *et al.* 2015). There is also emerging evidence to show that women experience severe psychosocial stress from the shame or fear of having men see them defecate openly or the risks of physical and sexual violence, especially in urban settings (Fisher 2006; O'Reilly 2010). Studies show that women cope with their gendered experiences of menstruation and of having to defecate outside their homes by adapting certain behaviours and activities. These include: restricting intake of food and fluids at night to avoid leaving their houses for fear of being attacked; defecating either before dawn or after dusk so that they will not be seen by others, especially men; walking long distances to find a private and safe place; and defecating in groups or accompanied by a relative (Fisher 2006; McFarlane 2008; Kulkarni *et al.* 2014; UN-Habitat 2006). All these experiences are stressful and represent additional burdens on their limited time and energy while they juggle various household and livelihood responsibilities. The study by Sommer, Kjellén and Pensulo (2013) describes the lack of safe and hygienic spaces as well as privacy available to women during menstruation to change, clean and dry their materials in a comfortable manner. The lack of safe facilities in schools also increases school absenteeism for girls in many countries (see Mahon and Fernandes 2010; Summer and Kirk 2008). All these issues indicate the multiple impact pathways for women and girls that arise through the absence of good sanitation. This indicates that it is important to examine these numerous issues and factors in sanitation interventions in order to go beyond narrow health outcomes largely focused on diarrhoea reduction (see Loevinsohn *et al.* 2014).

Methodology

This is a qualitative study conducted in two slum colonies in Kalyani -, Vidyasagar Colony and Harijan Para, in the year 2015. These slums were inhabited by two different categories of migrants residing in the slums – in one were Bengali-speaking Hindu refugees from Bangladesh and in the other were Hindi-speaking *dalit* migrants from two other states in India, Jharkhand and Uttar Pradesh. This cultural variation allowed the researchers to capture experiences from different perspectives. During the investigation the research team employed a combination of methods for collecting data related to the study objectives. These methods included: focus group discussions (FGDs) with a wide range of women and adolescent girls, including some of the leaders who mobilised the community to take action to change their sanitary and hygiene behaviours; personal interviews (PIs) with some women who played key leadership roles during the CLTS activities; key informant interviews (KIIs) with key institutional actors in order to understand the role of the Municipality in facilitating the adoption of sanitation and hygiene behaviour by the community; and participant observation.

Findings

In terms of impact on physical, social and psychological health and well-being of women, the study indicated that overall, women across all age groups from both the slum communities reported reduced incidence of illnesses such as diarrhoea and other health problems, both personally and in their families, especially among the children. This has led to fewer hospital visits and an increase in disposable incomes, due to reduced medical expenditure. Women stated that, with the presence of toilets in their homes, their experiences during menstruation had become more pleasant as they had a private and clean space in which to maintain their hygiene. Women across all age groups expressed a sense of security, safety and convenience due to the presence of toilets in their homes. Other positive benefits included the time saved for undertaking other activities; the ability to carry out their tasks and daily activities in a more organised manner; and a positive outcome regarding their earnings and livelihood opportunities. Most women expressed a feeling of pride and higher social standing with the ownership of a toilet. Greater consciousness about sanitation had led to an improvement in other living conditions and other collective efforts in both the

slum communities. In Harijan Para, women's collective efforts had succeeded in eradicating alcoholism in the community and had led to men realising that they needed to improve their lives.

In terms of understanding whether the CLTS process empowered women, it must be stated that CLTS strategies do not specifically focus on empowering women, however it has been seen across varied cultural contexts that often it is the women who take the active lead and become catalysts for change. As discussed earlier, one of the reasons could be that it is the women who disproportionately experience the gendered burdens of ill health and different forms of violence and inequality that arise from poor sanitation. Another reason for women's active role in Kalyani could be that CLTS was introduced in the community as part of a health initiative, thus involving the health workers who were mostly women. This made it possible to mobilise women more easily to create demand for sanitation. In Kalyani, women had played a lead role in making their communities ODF and this experience had enabled them to exercise agency in many areas of their lives, both within their households and in the community. Women in Harijan Para said that this community-led action had empowered them in many ways and for the first time they were included in decision-making processes in their own homes or in the community, which had given them greater self-confidence. Many women from both the slums emerged as Natural Leaders, advocating for the end of open defecation and motivating the community to invest in low cost toilets as a collective good.

However, it must be said that while both men and women mentioned that many positive changes had occurred in their lives in terms of their physical health, how far this has altered the power equations or gendered norms within households cannot be ascertained through this study. The CLTS intervention did not focus on improving or challenging gender inequality apart from the issue of sanitation, and therefore there was no specific activity designed to address unequal gender norms governing other aspects of women's lives. The positive changes noted by women can clearly be linked to the processes around CLTS but could also be attributed to other processes of social change such as urbanisation, working environments and the role of the media. If anything, the study highlights the fact that the CLTS approach could usefully focus more squarely on using its success to challenge the dominant status quo and to tackle multiple forms of gender and social inequalities. This could be a focus for action in the post-ODF phases of the intervention. Finally, it is important to look at the context within which the approach can be sustained over time. This is why the external environment is crucial, which is discussed next.

The Kalyani Municipality authorities played a very strong role in facilitating the process of achieving access to sanitation for the people in Kalyani slums. Former chairman of Kalyani Municipality, Dr Shantanu Jha, and Dr Bakshi, a medical doctor working in the health department, were key players in this regard. CLTS was brought into the ambit of the health department rather than the sanitation department, which is usually firmly fixed on a 'construction' approach (see Mehta 2013 for evidence that CLTS usually works better under a health rather than a rural development department). While all credit goes to the slum dwellers for stopping open defecation, a supportive Municipality is needed to allow existing resources and mechanisms to be utilised to the maximum capacity to facilitate this community process, followed by mobilising support from political leaders and ward councillors. The communities' achievements in sanitation led to the Municipality supporting the communities to gain access to other basic services. The former chairman, Dr Jha, announced that ODF slums would be given priority for forthcoming development works. In Harijan Para, where the community is settled on land owned by the State Agricultural University, the Municipality helped in getting a water pipeline installed near the boundary wall of the University to facilitate a water connection for the community; legally, the pipeline could not be extended inside the *para*. Solar street lamps were installed in Vidyasagar Colony, which meant that for the first time, electric street lights lit up the community's dark streets at night. Gradually, with some assistance from the Municipality as well individual investments made by the families themselves, water hand pumps were installed in many households in the colony. All these additional services accrued from the collective benefits of becoming ODF, in terms of both the collective spirit among the community and the Municipality's willingness to support the colonies to improve their lives in various ways beyond the initial goal of ODF.

The inclusion of CLTS within the CLHI project gave the Municipality better access to the community and enabled it to improve its health service delivery capacities. The honorary health workers (HHWs) played a key role in CLTS facilitation and follow-up and this process enabled them to interact on a regular basis with the community members. The interview with the former Chief Health Officer of Kalyani Municipality, Dr Bakshi, revealed that a high degree of ownership developed not only within the community, but even among the HHWs. Many of the HHWs lived in the community itself and worked for very modest salaries; the CLTS process had fostered in them a high degree of motivation and commitment. The understanding that sanitation was intricately linked to health resulted in the community being more responsive to the initiatives

of the Municipality health department and there was greater acceptance and demand from the community for health services such as polio vaccinations, tuberculosis check-ups, institutional delivery facilities, family health awareness campaigns, etc. The collective sanitation and hygiene behaviour change process that took place in Kalyani slums is a result of multi-pronged efforts and multi-stakeholder engagement. The efforts of the communities to stop open defecation and gain access to sanitation facilities were supported and further enhanced by the contributions of various institutions led by the municipal authorities. These included the departments of health, engineering, land revenue, electricity, water supply, education, etc. This multisectoral approach has been a cornerstone in Kalyani's sanitation/health success.

The challenges in sustaining the achieved health outcomes in Kalyani are numerous, however. There are several issues that potentially could reduce or negate the health benefits gained from CLTS, or even adversely affect the health of the residents, if not addressed urgently. These involve the safe disposal of confined excreta, which is currently done in a manner that is potentially hazardous, both for the environment and for the health and the dignity of the *dalits* who are engaged in manual collection and disposal of human waste in the slum communities. Technology upgrading is also needed, to avoid contamination of water and to ensure that people move up the sanitation ladder in terms of both facilities and behaviour change. The issue of land ownership is very contentious but must be tackled if people are to take ownership and invest in better sanitation facilities. The government programmes also need to be better targeted in order to cover entire populations and support them to upgrade their technologies so as to improve their sanitation and hygiene behavioural practices.

Conclusion

Kalyani is a successful example of applying CLTS to an urban context as a strategy to stop open defecation and promote hygiene practices. It focused on enabling community members to mobilise for collective action to address their own sanitation needs. Once the community collectively started achieving their sanitation goals, they extended this spirit and energy to gain access to other basic services. The Kalyani example effectively demonstrates the very important role that institutional actors such as politicians, administrators, health workers, engineers, contractors, etc., can play in achieving successful outcomes, not as direct implementers of a sanitation programme or as providers of infrastructure, but as facilitators supporting the community to design and implement its own initiatives. Kalyani shows that it is possible to address sanitation challenges through health initiatives in an urban slum area. Solving the sanitation problem requires a multi-sectoral integrated approach, with the engagement of multiple stakeholders. At the centre of any initiative, however, there must be the community, who have to take on ownership and accountability for their sanitation and hygiene behaviour and practices.

In the case of Kalyani, the role of local women was crucial and they became powerful agents of change. Sanitation also needs to be viewed as a public good that requires collective behaviour change (also on the part of bureaucrats) and action. The achievement of 'total' sanitation or an ODF environment should not merely stop at the construction of individual toilets, but issues such as sustainability, waste containment, livelihood security, gender empowerment, etc., need to be part and parcel of all programmes. Kalyani also provides a strong case for collective community demand and action in activating and strengthening formal health delivery systems and integrating health programmes with sanitation initiatives. The direct outcome of good sanitation is better health, and placing sanitation within health departments (as opposed to departments for infrastructure, rural development, etc.) can make sense. Still, a narrow focus on health benefits can mean overlooking the multiple benefits that sanitation programmes can offer in terms of gender equality. These include issues concerning dignity, security, enhanced wellbeing, education, livelihood security and bargaining power of women, etc., that cannot be captured within a narrow health lens. These non-health benefits are significant and can also go a long way to helping the realisation of several Sustainable Development Goals (SDGs) and at the same time may enable the achievement of health benefits. Finally, an enabling external environment and conducive institutional context are crucial to helping realise these benefits over and above the collective action undertaken by women themselves.

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Notes

CLTS is a methodology designed to trigger communities to stop open defecation and gain access to sanitation; it was developed by Dr Kamal Kar in Bangladesh in 2000. Since then, CLTS has been rolled out in 69 countries across the globe. Today it forms part of the national strategy of more than 25 countries in Asia, Africa and Latin America. The CLTS methodology involves a series of participatory exercises that empower the community to visually analyse their sanitation situation and the various pathways of faecal-oral contamination in their everyday lives. The understanding that sanitation is a collective good necessitating collective behaviour change, triggers them to take collective action to stop open defecation and make investments in sanitation solutions towards becoming an open defecation free community.

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