Community advocacy groups as a means to address the social environment of female sex workers: a case study in Andhra Pradesh, India

Swarup Punyam,1 Renuka Somanatha Pullikalu,1 Ram Manohar Mishra,2 Prashanth Sandri,1 Balakrishna Prasad Mutupuru,1 Suresh Babu Kokku,1 Prabhakar Parimi1

ABSTRACT

Background To examine the association between the presence of community advocacy groups (CAGs) and female sex workers’ (FSWs) access to social entitlements and outcomes of police advocacy.

Methods Data were used from a cross-sectional survey conducted in 2010–2011 among 1986 FSWs and 104 NGO outreach workers from five districts of Andhra Pradesh. FSWs were recruited using a probability-based sampling from 104 primary sampling units (FSUs). A PSU is a geographical area covered by one outreach worker and is expected to have an active CAG as per community mobilisation efforts. The presence of active CAGs was defined as the presence of an active committee or advocacy group in the area (FSU). Outcome indicators included acquisition of different social entitlements and measures of police response as reported by FSWs. Multivariate linear and logistic regression analyses were used to examine the associations.

Results Areas with active CAGs compared with their counterparts had a significantly higher mean number of FSWs linked to ration cards (12.8 vs 6.8; p < 0.01), bank accounts (9.3 vs 5.9; p = 0.05) and health insurance (13.1 vs 7.0; p = 0.02). A significantly higher percentage of FSWs from areas with active CAGs as compared with others reported that the police treat them more fairly now than a year before (79.7% vs 70.3%; p < 0.05) and the police explained the reasons for arrest when arrested the last time (95.7% vs 87%; p < 0.05).

Conclusion FSWs from areas with active CAGs were more likely to access certain social entitlements and to receive a fair response from the police, highlighting the contributions of CAGs in community mobilisation.

INTRODUCTION

In India currently about 2.3 million people are infected with HIV.1 The epidemic in the country is predominantly heterosexual and is assumed to be driven through unprotected sex with female sex workers (FSWs).2 HIV prevalence among Indian FSWs is about 15 times higher than the general populations.3-4 Studies indicate that FSWs are at high risk for HIV and are highly vulnerable to various forms of violence, abuse and stigma.5 They are often deprived of social benefits and entitlements that are otherwise accessed by women in the general population.6-10 Violence experienced by FSWs and their limited access to social entitlements may contribute to HIV risk-taking behaviours in various ways.7-12 For example, forced sex is usually unprotected and can result in injuries that increase the transmission of HIV.13 Similarly, barriers to accessing services such as bank accounts increase FSWs’ vulnerability to theft as well as debt from informal sources such as money lenders, madams and pimps that reduce their negotiation ability in sexual exchange.11 The role of violence and lack of access to social entitlements in increasing the vulnerability of FSWs has been documented in the state of Andhra Pradesh, which is one of the six HIV high-prevalence states in India.1 A recent community-based survey in eight districts of Andhra Pradesh found HIV prevalence among FSWs ranging from 6.5% to 23.3%.14 FSWs from the state experience substantially high rates of physical and sexual violence, which is positively correlated with economic insecurity.10 Another study has concluded that unstable housing among FSWs is linked to experience of sexual and physical violence and their risky sexual behaviours.12

Recognising the importance of such structural barriers, researchers have argued that HIV prevention programmes must go beyond the peer-led intervention approach to address the complex social, cultural, political and economic vulnerabilities faced by marginalised population groups most at risk of acquiring HIV infection.9 15-18 One of the strategies to address these structural barriers is through the development of community-based organisations (CBOs), in which vulnerable populations, especially FSWs and men who have sex with men/transgenders, participate in group formation and work towards reducing the vulnerability of marginalised communities.6 9 19-21 An essential component of these structural interventions is to reduce the stigma, abuse and violence directed at sex workers, particularly incidents perpetrated by the police, goondas (abusive men) and sexual partners/clients.6 10 Another important component is to provide organised support to FSWs to obtain their social and economic entitlements, such as ration cards, bank accounts and plots of land for housing (L Ramachandar, unpublished, 2011).1 A specific advocacy structure within CBOs has also been recommended to address the social vulnerabilities faced by FSWs and to create an enabling environment.22-24 An example of such structural intervention is the setting up of an active advocacy group which works at different levels to influence...
policy makers and state administrative agencies to benefit marginalised communities. However, less is known about the scale-up strategy in development and implementation of an active advocacy group and their relative benefits. This paper describes the development of a scaled-up community advocacy group (CAG) system and its effect on related programme outcomes: increasing FSWs' access to social entitlements and fair response from the police (less police arrests, police informing FSWs of the reasons for arrest and perceived fair treatment by the police in general). These outcomes were examined by comparing the FSWs from areas where CAGs were active (functional) and areas where there were no active CAGs.

Description of the programme: the CAG

The HIV prevention programme considered in this paper covered a total of 14 districts in Andhra Pradesh. CAGs were initiated in 2006 as part of the development of CBOs and other components of the programme. The development of CBOs in Andhra Pradesh, as in many other states of India, has drawn lessons from community mobilisation in the Sonagachi project in Kolkata, which has reported the increased empowerment of FSWs.11,12

During the early phases of the structural intervention programme, it was observed on many occasions that FSWs could not use condoms or access clinical services due to factors such as threats from the police and local goondas and fear of identification as a sex worker. The experience of violence and abuse also contributed to low self-esteem, thus undermining the possibility of effective HIV prevention.13,14 Surveys carried out among FSWs in the early phases of the programme showed that most sex workers had low expectations concerning the usefulness of group action. ‘Overall only one in four FSWs strongly believed that participating in a peer group could empower them .... Similarly, perceptions of social support among the entire sample were low....’15

This evidence led the programme to develop an organised system of advocacy, which involved the participation of FSWs. Training of FSWs in communication and advocacy skills and building their knowledge of legal rights and related information began on a pilot basis in four districts in November 2006. Initially, CAGs focused on sensitising the police, local goondas, auto rickshaw/taxi drivers and others to reduce violence among FSWs. After six months of intervention, interaction with FSWs revealed that the advocacy activities were leading to a significant reduction in the abuse of FSWs and increase in their access to social entitlements. The types of social entitlements accessed in the programme and the key stakeholders approached for these are detailed in table 1.

| Table 1 Type of social entitlement accessed in the programme and key stakeholders approached |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------|
| **Type of social entitlement** | **Definition** | **Key stakeholders involved** |
| Ration card | Allows an individual or a family living below the poverty line to access certain essential commodities like rice, sugar and kerosene at subsidised prices | District/local-level government officials |
| | Used as a proof of identity | |
| | In some cases makes the card holder eligible to obtain other benefits such as membership in a state-sponsored health insurance scheme and cooking gas at a reduced price | |
| Voter identity card | Provides evidence of an individual's civic identity | District/local-level government officials |
| | Gives a person the right to vote in elections | |
| Bank account | Allows independent savings and independent access to savings | Bank managers, guarantors |
| Free education for children | Allows children of school-going age to access free education services | District/local-level government officials, staff of local schools |
| Health insurance | A state-sponsored community health insurance scheme for BLP families (Rajiv Aarogyasri) | District/local-level government officials |
| | Entitles card holders to access medical services from corporate hospitals | |
| House site pattas (certificates) | Poor houseless persons are given government wasteland for housing | District/local-level government officials |

Structure and functioning of the CAG system

At places where FSWs solicit clients (referred to as hotspots), small groups of FSWs, locally known as community action teams, were formed to address FSWs' problems, including abuse, violence and lack of access to social entitlements. These groups of FSWs were assisted to form CAGs at the mandal (subdistrict) and the NGO (multiple mandal) levels. Community action teams from different hotspots coordinated advocacy needs with CAGs at the mandal and NGO levels. Meetings of NGO-level CAGs were held once a month to address difficult cases and review the progress of advocacy activities at the mandal and local levels. Every NGO-level team was provided a crisis telephone number, which a sex worker could call in the event of violence. The functioning of the community action team was similar to the crisis response system established within community mobilisation programmes in other settings.16 The structure and functioning of CAGs are detailed in figure 1.

METHODS

The functioning of the CAG system was regularly monitored using two data streams: (1) the monitoring and information system (MIS) and (2) the Behavioural Tracking Survey. The MIS captured the number of violence cases documented, the number of FSWs who applied for social entitlements and the number of police personnel who attended advocacy meetings. The Behavioural Tracking Survey is a cross-sectional survey conducted among FSWs and outreach workers who work with the NGOs to provide programme services to FSWs.

This paper utilises data primarily from the Behavioural Tracking Survey conducted in 2010–2011 in five districts of Andhra Pradesh, namely Khammam, Warangal, Kurnool, Medak and Ananthapur. The objectives of the survey were to monitor the key components of the HIV prevention programme such as community mobilisation, access to social entitlements, violence and abuse, treatment seeking for sexually transmitted infection and the formation and functioning of advocacy groups. The study districts were purposively selected to include areas where the HIV prevention programme is being implemented, and behavioural and biological surveys have not been conducted prior to the Behavioural Tracking Survey. A sample size of 400 FSWs was calculated for each district based on the prevalence of consistent condom use and expected level of change with each unit change in the degree of community mobilisation.

In order to prepare the sampling frame for the selection of FSWs from each hotspot, a rapid mapping exercise was conducted by the data collection agency using key informant
interviews with community members, police staff and social workers in the area to validate the existing list of hotspots that were originally developed by the programme-implementing agency. The hotspots were grouped into two categories: (1) non-public place hotspots (brothels, hotels, lodges, roadside eating establishments and homes) and (2) public place hotspots (streets, market areas, highways and cinema halls). For each non-public place hotspot, data were gathered on the number of FSWs available at the hotspot. For each public place hotspot, data were gathered on the number of FSWs at the hotspot, segregated by the time slots when they gathered for sex work (eg, 9:00-13:00; 15:00-19:00, etc). Primary sampling units (PSUs) were defined as the geographical area covered by an NGO outreach worker for programme implementation, which usually consists of approximately 250 FSWs. Thus, each PSU consisted of several public place and non-public place hotspots.

FSWs in each PSU were recruited through a two-stage sampling procedure. In the first stage, a fixed number of hotspots within each PSU were selected using the proportion to population size procedure. The number of interviews to be conducted in each PSU was proportionally allocated in accordance with its share in the total population of FSWs in the district. In the second stage, FSWs were randomly selected within each selected hotspot. Data on socio-demographics, incidents of violence, behaviour of the police and access to different social entitlements were collected through face-to-face interviews using a structured questionnaire.

Of the total 2389 FSWs approached, 403 either refused to participate in the study or withdrew during the course of the interview. This resulted in a total analytical sample of 1986 FSWs from 104 PSUs. The response rate was 83.1%. The main reasons for non-participation were phone calls or interruption from clients, heavy rain and objections from pimps/brokers or madams.

In addition to interviews with FSWs from the 104 PSUs, all the 104 outreach workers from these PSUs were interviewed face-to-face using a semistructured questionnaire to assess: whether FSWs in their area perceived the need for a particular social entitlement such as ration cards, voter identity cards, bank accounts, free education for children, health insurance and other (eg, housing pattas (certificates) and cooking gas connections); whether a cell group/individual had been assigned to facilitate access to the particular entitlement and the number of FSWs who had been linked to a particular entitlement in the past 1 year. Of the 104 outreach workers interviewed, 98 were FSWs.

![Figure 1](structure_of_the_community_advocacy_system.png)

**Figure 1** Structure of the community advocacy system. *Approximate values are presented which may vary depending upon the size of female sex workers’ population in the area.*
All interviews were conducted by trained researchers with verbal and written skills in Telugu, the local language of Andhra Pradesh. All the researchers had a Bachelor’s degree in sociology or statistics. The survey instrument was developed in English and translated into Telugu. The translated forms were reviewed by study investigators who were fluent in both English and Telugu. The interview schedule was then pretested in communities that were similar to the survey sites. Field staff checked the data immediately after the interviews to ensure accuracy and completion of questionnaires. Field supervisors reviewed the data on the same day and survey forms were sent every week to the data management team for data entry. A user written computer programme in CSPro (V4.0) was used for double data entry by trained data entry officers.

Ethical considerations

The overall study design and questionnaires were reviewed and approved by the institutional review boards of Family Health International and the Karnataka Health Promotion Trust. A comprehensive informed consent process was followed; respondents were informed about the study, including the duration of the interview (approximately 30 min), and their queries addressed before verbal consent was taken. For ethical reasons, only those FSWs who were at least 18 years of age were interviewed. To protect confidentiality and respect privacy, all questionnaires were anonymous and interviews were conducted in a private or public location depending on the FSW’s preference. A small room was hired in each PSU where interviews were conducted in privacy. In areas where it was not possible to hire a room, public locations were identified such as parks or isolated corner roads where others would not be able to listen to the interview. Participants were not given any monetary compensation for their time in the study but were provided information on HIV services available in the area.

Key measures

Socio-demographic characteristics of FSWs

The socio-demographic characteristics of FSWs considered in this paper were current age, any formal schooling (no, yes), marital status (currently married, not currently married), typology of sex work (brothel-based, home-based, public place-based) and duration of sex work. Any formal schooling was defined as the ability to both read and write. Typology of sex work was derived on the basis of primary place of solicitation.

CAG status

The key independent variable in the present study was the status of the CAG (non-active, active) in each PSU. For each social entitlement considered in the paper, PSUs were defined to have an active CAG if at least one individual or a group was assigned to facilitate access to that particular social entitlement. Any active CAG was defined as the presence of any type of advocacy group in the PSU (no, yes).

Acquisition of social entitlements

FSWs were asked whether or not they have the following social entitlements: ration card, voter identity card, bank account and free education for children. Those who reported having a social entitlement were further asked when they had acquired the particular entitlement. Based on responses to these questions, a variable measuring duration of acquisition of the social entitlement with the following three categories was computed: not acquired, acquired for more than 36 months and acquired within the last 36 months. The cut-off point of 36 months was chosen because CAGs were formed approximately 36 months prior to the survey.

Behaviour of the police with FSWs

The behaviour of the police with FSWs was measured by the following indicators collected by interviewing FSWs: ever arrested by the police (no, yes), whether the police explained reasons when arrested last time (no, yes), whether the police had informed at least one friend or relative about the arrest when arrested last time (no, yes), whether ever interacted with the police (no, yes) and whether FSWs perceive that the police treat them more fairly now than they did a year before (no, yes).

Statistical analyses

The association between CAG status and acquisition of social entitlements (as per the programme-monitoring data) in the past 1 year was examined by using multivariate linear regression models with the number of FSWs linked to different social entitlements in the PSUs as the continuous outcome measure. Separate linear regression models were used to estimate the regression coefficient ($\beta$) and corresponding SEs for CAG status for different social entitlements. The number of FSWs registered in the HIV prevention programme in PSUs was considered as a covariate in each regression model. To supplement the observed association between CAG status and number of FSWs linked to different social entitlements in each PSU, data sets collected from FSWs and outreach workers were merged. The percentage of FSWs in categories of duration of acquisition (not acquired, acquired for more than 36 months, acquired within last 36 months) for different social entitlements was compared for PSUs with and without active CAGs. Significance of the differences in the percentages was tested using the Z test statistic. The merged data were also used to examine the association between CAG status and police behaviour with FSWs.

---

**Table 2** FSWs’ interaction with the police and reported experiences of abuse in five district of Andhra Pradesh. Behavioural Tracking Survey, 2010–2011

<table>
<thead>
<tr>
<th>Interaction with the police and experience of abuse</th>
<th>Ananthapur (N = 400)</th>
<th>Medak (N = 400)</th>
<th>Khammam (N = 396)</th>
<th>Warangal (N = 390)</th>
<th>Kurnool (N = 400)</th>
<th>Total (N = 1986)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever arrested by the police (%)***</td>
<td>19.8</td>
<td>2.9</td>
<td>5.7</td>
<td>7.6</td>
<td>20.3</td>
<td>14.9</td>
</tr>
<tr>
<td>Police explained reasons for arrest† (%)***</td>
<td>97.2</td>
<td>75.1</td>
<td>73.0</td>
<td>89.9</td>
<td>91.3</td>
<td>93.8</td>
</tr>
<tr>
<td>Police informed at least one friend or relative about the arrest† (%)**</td>
<td>49.2</td>
<td>30.2</td>
<td>49.5</td>
<td>23.1</td>
<td>32.1</td>
<td>44.6</td>
</tr>
<tr>
<td>Ever interacted with the police ( %)***</td>
<td>80.5</td>
<td>39.2</td>
<td>39.5</td>
<td>66.4</td>
<td>63.2</td>
<td>66.2</td>
</tr>
<tr>
<td>Feels that the police treat FSWs more fairly now than they did 1 year before† (%)***</td>
<td>83.3</td>
<td>59.5</td>
<td>59.0</td>
<td>76.6</td>
<td>74.9</td>
<td>77.9</td>
</tr>
</tbody>
</table>

*p < 0.01; ***p < 0.001. Significance of the differences in the percentages across districts was tested using $\chi^2$ test.

† Among FSWs who had ever been arrested refers to FSWs’ experience when they were arrested last time.

‡ Among FSWs who had ever interacted with the police.

FSW, female sex worker; N, number of cases.
The present study highlights the lessons learned from the setting up of a CAG system, which is part of a scaled-up community involvement programme. They also received training on how to conduct advocacy sessions with the police and other stakeholders such as the media. They then went into their communities to sensitise them and presented information on 175 different indicators of police behaviour with FSWs. The social and health authorities were made aware of the need for action to address these issues. The MIS records show that during January to December 2010, CAG members met with over 500 police officials to negotiate on acquisition of social entitlements. The community action group members were trained in the basic components of legal literacy and communication skills to help them to explain the reasons for arrest to the police, and to negotiate on the acquisition of social entitlements. The MIS records show that during January to December 2010, CAG members met with over 500 police officials to negotiate on acquisition of social entitlements. The community action group members were trained in the basic components of legal literacy and communication skills to help them to explain the reasons for arrest to the police, and to negotiate on the acquisition of social entitlements.

Table 3 Association between CAG status and FSWs’ acquisition of social entitlements in the year preceding the survey in five districts of Andhra Pradesh, Behavioural Tracking Survey, 2010–2011

<table>
<thead>
<tr>
<th>Type of social entitlement</th>
<th>Number of PSUs with an identified need for the social entitlement</th>
<th>Number of CAGs</th>
<th>Number of FSWs registered in the HIV prevention programme by CAG status</th>
<th>Number of FSWs linked to social entitlements in the last 1 year by CAG status</th>
<th>Mean number of FSWs per PSU who received social entitlements in the last year</th>
<th>Results from the multiple linear regression analyses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-active CAGs</td>
<td>Active CAGs</td>
<td>Non-active CAGs</td>
<td>Active CAGs</td>
<td>Non-active CAGs</td>
<td>Active CAGs</td>
</tr>
<tr>
<td>Ration card</td>
<td>80</td>
<td>17</td>
<td>63</td>
<td>4543</td>
<td>15436</td>
<td>1769</td>
</tr>
<tr>
<td>Voter identity card</td>
<td>59</td>
<td>12</td>
<td>47</td>
<td>2912</td>
<td>12200</td>
<td>1263</td>
</tr>
<tr>
<td>Bank account</td>
<td>40</td>
<td>11</td>
<td>29</td>
<td>2550</td>
<td>6187</td>
<td>65</td>
</tr>
<tr>
<td>Admission of children into free educational system</td>
<td>34</td>
<td>16</td>
<td>85</td>
<td>1243</td>
<td>6142</td>
<td>55</td>
</tr>
<tr>
<td>Health insurance</td>
<td>30</td>
<td>6</td>
<td>24</td>
<td>1529</td>
<td>5585</td>
<td>42</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>10</td>
<td>19</td>
<td>2273</td>
<td>4292</td>
<td>110</td>
</tr>
</tbody>
</table>

Other refers to housing pattas (certificates) and cooking gas connections. Active CAG: at least one individual or cell/group or committee assigned to work for the particular social entitlement; non-active CAG: no individual or cell/group or committee assigned to work for the particular social entitlement.

*Adjusted for the registered number of FSWs in the PSU using linear multivariate regression. Separate linear regression models were estimated for each of the social entitlements.
mobilisation strategy where individual FSWs in the intervention districts were facilitated to acquire social entitlements and the efforts were done to sensitise police behaviour. Although the system was established uniformly across the intervention districts around the same time, there were some sites where the CAG system was active and others where the CAG was not active at the time of the survey. The results of the survey suggest that a larger number of FSWs belonging to areas where CAGs were active received ration cards, bank accounts and health insurance as compared with FSWs in areas where CAGs were not active. Similarly, a larger percentage of FSWs from areas where CAGs were active perceived fair treatment by the police and perceived that the police explains the reasons for arrest (if they were arrested) as compared with FSWs in areas where CAGs were not active. The findings of this paper are similar to reports from other programmes in Andhra Pradesh as well as the qualitative materials of programmes in Karnataka, which show the positive effects of advocacy, one of the components of the community mobilisation programme (L Ramachandar, unpublished, 2011).

The communities identified ration cards as the most needed social benefit, whereas lower priority was given to entitlements that have long-term benefits such as enrolment of children in the free education system and health insurance. This preference can perhaps be attributed to poverty and the community’s immediate need for essential commodities. The CAGs facilitated several interactions between marginalised groups such as FSWs and those who wield power, such as the police. Facilitating such interactions and establishing communications between these two groups was an essential step to make the police understand the problems that FSWs face in a particular social, cultural, political and legal milieu. The survey data support this hypothesis and more positive response from the police in areas with active CAGs as compared with others. These findings highlight the need to initiate special advocacy measures within HIV prevention programmes, which include strategies to work with administrative agencies like the police and municipal corporations and agencies like banks and educational institutions to create an enabling environment for the sex worker community.

In addition to the quantitative data presented in this paper, several ‘success stories’ based on the activities of the CAG system have been presented in the news media.6,9 These narratives show that ongoing advocacy efforts and the principle of ‘strength in numbers,’ coupled with FSWs’ sound knowledge of legal matters, are often key factors in advocacy encounters. For instance, in Khammam district of Andhra Pradesh, CAG leaders took a batch of FSWs’ applications for ration cards and voter identity cards to the appropriate government offices and made a number of follow-up visits to these officials. Following ongoing pressure, after two months, the ration cards and voter identity cards were issued to all the members who had applied.

Although CAG members made persistent efforts to sensitise the police during the initial intervention period, the frequent transfers of sensitised police staff within and outside the implementation districts was a challenge as CAG members would have to restart the process of sensitising new incumbents each time new staff were posted. To address this issue, CAG members began organising ‘thanksgiving parties’ for sensitised staff, where community members as well as new incumbents were invited. These parties provided a platform for new incumbents to be sensitised by their own colleagues.

While this paper provides evidence of the effect of the CAG system on the community mobilisation programme, the results
of this study must be interpreted cautiously due to several limitations. This study does not present a full-scale evaluation of the CAG system, rather it aimed to provide a description of the CAG system and demonstrate its benefits for FSWs. Moreover, the areas without an active CAG did not represent a ‘true control area’ due to several reasons. First, both areas with active CAGs and those without active CAGs had identical community mobilisation programmes. Second, advocacy with powerful state actors at the district level may have benefited even those areas within the district that do not have an active CAG. Third, FSWs are often mobile, and some of those who were interviewed might have moved from areas with active CAGs to areas without active CAGs or vice versa; such unrecorded intra- and inter-district mobility is likely to have confounded the comparison. Finally, although this study establishes the significance of the presence of active CAGs for marginalised communities in terms of increasing FSWs’ access to social entitlements, little has been achieved by CAGs in the programme. Some of the social entitlements (eg, free education for FSWs’ children, bank accounts, health insurance) still appear to be out of reach for a substantial proportion of sex workers even in the presence of active CAGs. These results highlight the need for further research on the reasons for the inability of CAGs to advocate access to certain social entitlements for FSWs and the underlying response mechanisms from civil society and government organisations to the efforts of CAGs.

In conclusion, our study findings suggest that community mobilisation programmes to influence structural-level issues may require a specialised and dedicated advocacy group to improve community well-being and reduce the potential vulnerability of marginalised groups to abuse by several stakeholders including state administrative agencies. Given that the active CAG system had increased FSWs’ acquisition of social benefits, programmes that include CAG systems need to ensure their active engagement in the programme and continuous dialogue between the community and stakeholders. Since HIV prevention interventions need to go beyond the promotion of safe sex behaviour, further attention is needed to develop community advocacy systems and strengthen existing CAGs to prevent abuse and protect the rights of marginalised communities.

Acknowledgements This paper was written as part of a mentorship programme under the Knowledge Network project of the Population Council, which is a grantee of the Bill & Melinda Gates Foundation through Avahan, its India AIDS Initiative.

Contributors SP and RSP led the study design, conception and drafted the manuscript. RMM conducted the analyses and assisted with manuscript writing. PS, BPM and SBK participated in the design of the study and assisted with interpretation of study findings. PP provided overall guidance with analytical approach, manuscript writing and interpretation of study findings. All authors read and approved the final manuscript.

Funding Support for programme implementation was provided to the India AIDS Alliance via a grant from the Bill & Melinda Gates Foundation through Avahan, the India AIDS Initiative. The views expressed herein are those of the authors and do not necessarily reflect the official policy or position of the Bill & Melinda Gates Foundation and Avahan.

Competing interests None.

Ethics approval Ethical committee of Family Health International and the Karnataka Health Promotion Trust.

Provenance and peer review Commissioned; externally peer reviewed.

REFERENCES


Community advocacy groups as a means to address the social environment of female sex workers: a case study in Andhra Pradesh, India

Swarup Punyam, Renuka Somanatha Pullikalu, Ram Manohar Mishra, Prashanth Sandri, Balakrishna Prasad Mutupuru, Suresh Babu Kokku and Prabhakar Parimi

*J Epidemiol Community Health* 2012 66: ii87-ii94 originally published online April 11, 2012
doi: 10.1136/jech-2011-200478

Updated information and services can be found at:
http://jech.bmj.com/content/66/Suppl_2/ii87

These include:

**References**
This article cites 21 articles, 2 of which you can access for free at:
http://jech.bmj.com/content/66/Suppl_2/ii87#BIBL

**Open Access**
This is an open-access article distributed under the terms of the Creative Commons Attribution Non-commercial License, which permits use, distribution, and reproduction in any medium, provided the original work is properly cited, the use is non-commercial and is otherwise in compliance with the license. See: http://creativecommons.org/licenses/by-nc/2.0/ and http://creativecommons.org/licenses/by-nc/2.0/legalcode.

**Email alerting service**
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Topic Collections**
Articles on similar topics can be found in the following collections
Open access (291)
Sociology (974)

Notes
To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/