Mapping the violence landscape among female sex workers in Karnataka, South India: associations between violence exposure by perpetrator, and HIV/STI risk

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Violence and HIV/STI risk

Gender-based violence affects 1 in 3 women globally\(^1\).

Violence is associated with increased risk of HIV/STIs through direct and indirect mechanisms\(^2\).

Fig. 1 Illustration of pathways from gender inequality and high-risk masculinity to increased HIV risk among survivors of violence. Dunkle et al. 2013\(^2\)
Violence and sex work

Women who sell sex are at increased risk of violence\(^3\) and HIV/STIs\(^4\) compared to the general population.

Female sex workers (FSWs) are at risk of violence from a range of perpetrators\(^5\).

Workplace violence from clients is the most widely documented.

Figure 2: Categorisation of violence by perpetrator
Violence and HIV/STI risk among FSWs in India

- India’s HIV epidemic is concentrated in high risk groups including FSWs\(^6\).

- **Violence against FSWs** has been identified as a key concern.

- In 2003, the Karnataka Health Promotion Trust (KHPT) as part of the Avahan Programme, funded by the Bill and Melinda Gates Foundation, was established to scale up HIV prevention with high-risk populations.

- The intervention reached over 60,000 FSWs using a **rights-based approach** to address **violence, stigma, and poverty** as part of comprehensive HIV prevention programming\(^7\).
Aims

To examine associations between exposure to physical and/or sexual violence by perpetrator and prevalence of HIV, syphilis and high-risk sexual behaviours among FSWs.

Primary outcomes
- HIV prevalence
- Syphilis prevalence
- Self-reported STI symptom prevalence

Secondary outcomes
- Condom use at last sex with clients and regular partner
- Condom breakage at last sex
- Client or FSW under the influence of alcohol during last sex
**Methods**

- **Integrated Biological and Behavioural Assessment (IBBA) survey** in two districts in Karnataka (Bangalore and Shimoga) in 2011.

- **Behavioural questionnaire**
  - Physical and sexual violence by non-partners in the past 6 months
  - Physical and sexual intimate partner violence in the past 12 months
    - women were asked who the perpetrator of this violence was (e.g. husband, client, police etc.)
    - Exposure to violence categorised as domestic, workplace or community perpetrator

- Blood samples were taken to measure HIV and syphilis prevalence.
- Weighted, bivariate and multivariate analyses were used to examine associations between violence by perpetrator and HIV/STI risk.
**Study population**

- **n=1111** (Bangalore=718, Shimoga=393)
- **Mean age:** 32.9 years
- **Has a regular partner:** 66.2%
- **Median number of clients per week:** 6

![Place of work chart]

- Home: 38.8%
- Rented room/lodge/brothel: 54.3%
- Public place/vehicle/bar/night club: 6.1%
High rates of recent violence experience among FSWs

Figure 3: Proportional venn diagram showing recent violence experience among FSWs by perpetrator
Violence from multiple perpetrators is associated with increased syphilis infection and self reported STI symptoms

*Self reported STI symptoms include: vaginal discharge, lower abdominal pain not associated with menses and/or genital ulcer*
Reduced condom use with clients is associated with workplace/community violence and violence from multiple perpetrators.

<table>
<thead>
<tr>
<th>Condom use last sex</th>
<th>p = 0.0001</th>
<th>Condom use at last sex</th>
<th>p = 0.0003</th>
</tr>
</thead>
<tbody>
<tr>
<td>with occasional client</td>
<td>no violence</td>
<td>97.5</td>
<td>97.2</td>
</tr>
<tr>
<td></td>
<td>domestic violence</td>
<td>97.2</td>
<td>91.0</td>
</tr>
<tr>
<td></td>
<td>workplace/community violence</td>
<td>91.6</td>
<td>91.0</td>
</tr>
<tr>
<td></td>
<td>domestic and workplace/community violence</td>
<td>93.0</td>
<td>92.6</td>
</tr>
</tbody>
</table>

Condom use last sex with occasional client: 97.5% no violence, 97.2% domestic violence, 91.6% workplace/community violence, 91.0% domestic and workplace/community violence.

Condom use last sex with regular client: 93.0% no violence, 92.6% domestic violence, 85.9% workplace/community violence, 76.0% domestic and workplace/community violence.

Condom use at last sex with regular partner: 23.1% no violence, 12.2% domestic violence, 27.8% workplace/community violence, 10.4% domestic and workplace/community violence.
Violence from multiple perpetrators is associated with increased condom breakage and alcohol use at last sex.

Condom breakage at last sex by perpetrator:
- No violence: 1.2%
- Domestic violence: 3.0%
- Workplace/community violence: 3.1%
- Domestic and workplace/community violence: 15.1%

Alcohol use at last sex by perpetrator:
- No violence: 35.8%
- Domestic violence: 34.1%
- Workplace/community violence: 53.9%
- Domestic and workplace/community violence: 56%

*p < 0.0001 for condom breakage
*p < 0.024 for alcohol use
Discussion

- Domestic violence is the most prevalent violence by perpetrator → currently few programmes address domestic violence among FSWs.

- Risk may be highest among FSWs experiencing violence from domestic and workplace/community perpetrators.

→ Increasing levels of violence may increase sexual risks.

- Effective HIV/STI prevention programmes need to include violence interventions that address violence across women’s personal and working lives.
Thank you

Questions?
References


