

# Alcohol Consumption and HIV Risk

## A Peer Education Strategy for Bar Patrons



Busy street in Chennai, India

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In a busy neighborhood in Chennai, cars, motorcycles, bicycles, and pedestrians jostle for space on the narrow streets. Small shops line the sidewalks, offering everything from bright silk saris to auto parts. From a nondescript storefront comes the sound of clinking glasses and loud voices. Inside, one wall has shelves stocked with beer and hard liquor. In a back room are groups of men at counters and tables, laughing with friends or arguing about politics or cricket. Each has a glass and sometimes an entire bottle of alcohol in front of him.

One of the largest cities in South India, Chennai attracts men from all over the country seeking seasonal, unskilled, or hourly wage work. Away from their families, these men go to bars to socialize. Establishments that sell alcohol in Chennai range from holes-in-the-wall offering home-brewed toddy to high-end clubs selling expensive foreign alcohol. Somewhere in the middle of this spectrum are more than 600 wine shops,<sup>1</sup> popular among men of all ages.

But the wine shops offer more than just a chance to relax and drink. Female sex workers also frequent many of the shops; at some locations, younger boys and *hijras* (transgendered persons) solicit sex. As male customers consume alcohol, inhibitions loosen, peer pressure builds, and the temptation to engage in high-risk commercial sex becomes harder to resist.

By Reshma Trasi

<sup>1</sup> Chennai's wine shops sell liquor of all kinds over the counter that can be consumed on site. Snacks are available from a nearby vendor, who may also sell tobacco and condoms.

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***CPOL peer educators communicate their own thoughts and experiences as they promote HIV prevention strategies to others.***

In 2002, the Y.R. Gaitonde Center for AIDS Research and Education (Y.R.G. CARE), a nonprofit known internationally for its comprehensive HIV prevention, care, and treatment programs, initiated a five-year research intervention to study alcohol consumption and risky sex among male patrons of Chennai's wine shops. The Collaborative HIV/STD Prevention Trial identified, recruited, and trained peer outreach workers called Community Popular Opinion Leaders (CPOLs). CPOLs disseminated HIV prevention messages to their peers, delivering them as personal endorsements of risk-reduction and health-seeking behaviors. The Research Triangle Institute and Johns Hopkins University partnered with Y.R.G. CARE on the research, which was funded by the U.S. National Institute of Mental Health.

Programs that address the link between alcohol and HIV are extremely rare worldwide. In recent years, though, a few promising interventions in sub-Saharan Africa and India have provided invaluable information about the feasibility, acceptability, and effectiveness of several approaches to reducing alcohol-related sexual behavior. Y.R.G. CARE's innovative CPOL approach offers important lessons on the effectiveness of peer educators who communicate their own thoughts and experiences as they promote HIV prevention strategies to others. The project also demonstrates the value of using data gathered during the intervention to inform upcoming stages of the project.

## Alcohol Use and Risky Sex

Alcohol consumption may impair judgment and reduce inhibition. Drinking is also a social activity, where peer pressure might influence individual behavior. Taking risks—including sexual risks—can be the result.

These risks translate into sobering public health data. Key research findings reveal that alcohol use and HIV risk behavior are strongly associated in developing countries. A number of surveys have found that people who drink alcohol engage in unprotected sex, multiple partnering, and commercial sex more often than do non-drinkers. Several large-scale studies have shown that drinking alcohol before sex or being intoxicated during sex is directly linked with HIV.

A 2006 study of more than 14,000 women and men in Rakai, Uganda, found that alcohol use was significantly associated with inconsistent condom use and multiple sexual partners among men and women, and incident HIV infection (Zablotska et al. 2006). Among men who visited beer halls in Harare, Zimbabwe, having sex while intoxicated was strongly associated with having recently acquired HIV infection (Fritz et al. 2002). In Mumbai, India, men who had sex with sex workers while under the influence of alcohol were more likely to be infected with HIV or a sexually transmitted infection (STI) than men who were not under the influence during paid sex (Madhivanan et al. 2005).

***A study of wine shop patrons showed high rates of risky behaviors occurring simultaneously.***



Exterior of a wine shop in Chennai, India.

As is the case in most Indian cities, HIV risk in Chennai is concentrated among most-at-risk groups (mainly female sex workers, men who have sex with men, injecting drug users, and migrant workers) and bridge populations (clients of sex workers and sexual networks of high-risk groups) and has not yet led to a corresponding increase in HIV prevalence among the general population. But a study of wine shop patrons showed high rates of risky behaviors occurring simultaneously, including sex with a non-regular partner, multiple sexual partners, consumption of five or more drinks at one sitting, and the use of alcohol before sex (Sivaram et al. 2008). A comparative study of men from the general population and of wine shop patrons showed that the latter had higher rates of HIV and STIs. The study also found male patrons of wine shops were more likely to be less educated and mobile than men in the general population (Go et al. 2007).

## The Community Popular Opinion Leaders Intervention

In 2000, two years before the project began, the research team conducted ethnographic research and pilot tests to inform project design, and the

implementing team received extensive training. After its launch in 2002, the project used the data to target patrons from 100 Chennai wine shops as well as sex workers from nearby “cruising” venues (locations where sex workers solicit customers). The project recruited and surveyed 3,000 participants—wine shop patrons and sex workers—over a five-year period from 2002 to 2007, including a baseline and two rounds of cross-sectional surveys measuring sexual behavior and alcohol use.

To build a team of peer educators, the project recruited wine shop patrons known to be trusted and respected by their peers to communicate messages about safer sexual behavior through informal, yet structured, one-on-one conversations. The messages were embedded in “I statements” made by the CPOLs that conveyed a personal endorsement of the value of behavior change based on the CPOL’s own experience. Here’s an example:

*I used to drink and have sex all the time because I thought drinking increased my sexual stamina. But when I drink, I always forget to use a condom, because everything gets blurry. So now when I drink, I go home and sleep. When I wake up, I can have sex.*

Other “I statements” delivered critical messages about drinking in moderation, using a condom when having sex with a sex worker, and refraining from sex after excessive drinking.

This peer educator strategy is based on the Popular Opinion Leader (POL) model developed in the United States. Research conducted in the 1990s showed that a POL program successfully lowered the frequency of risky sex among patrons of gay bars (Kelly et al. 1997). The POL model, now documented as a best practice in HIV prevention for gay men, has become a well-established best practice in peer education. It is based on the diffusion of innovation

theory, which suggests that a small group of forward-thinking innovators can act as agents of change for an entire social network.

All POL interventions follow these guidelines (Centers for Disease Control and Prevention 2008):

- Use ethnographic techniques to identify popular, respected, and trusted community opinion leaders and recruit them to become POL peer educators
- Train POLs to integrate risk-reduction messages into informal conversations with acquaintances, friends, and peers
- Train POLs in effective behavior change communication using personally endorsed messages
- Conduct regular meetings with POLs to help them gain confidence to use their skills
- Work with POLs to set goals for risk reduction conversations between meetings
- Review outcomes of conversations at subsequent meetings
- Provide such visual hooks as logos, buttons, and posters to help POLs initiate conversations.

## Development and Implementation

At each stage of the intervention, the project team systematically gathered data to develop and then refine strategies. The team first pilot-tested the intervention at a few wine shops before scaling up to include more. Starting in 2002, the project conducted three cross-sectional surveys of 3,000 participants at 100 wine shops: baseline, first follow-up (18 months into the intervention), and second follow-up (24 months into the intervention).

Key steps in the development and implementation of the intervention included the following.

**Conduct formative research:** The team used information collected from a baseline survey of wine shop patrons in Chennai to identify randomized neighborhood clusters, as matched pairs, into 12 intervention and 12 control clusters. Each cluster consisted of four to five wine shops. CPOLs were not recruited from the control clusters.

**Conduct mapping exercises:** The team used ethnographic techniques to identify potential CPOLs for the pilot phase and to better understand drinking patterns, social and sexual networks, and related sexual risk behavior. Participant observation carried out by trained project staff in four wine shops recorded patronage trends and social interactions among patrons while providing an opportunity to develop rapport with wine shop owners and staff. The team conducted discussions with patrons and staff between the ages of 18 and 40 about sexual and drinking behavior and about sexual and social networking dynamics. In-depth interviews conducted with wine shop staff and vendors allowed the team to bring staff members on board by allaying concerns that the project could reduce patronage or profits. As the location of “cruising” venues became apparent, so did the need to include sex workers in the project. (In its last year of implementation, the project team conducted a similar peer education pilot intervention for female sex workers that found that sex workers older than 45 reported consuming excessive amounts of alcohol.)

**Tailor the training content:** Four wine shops served as sites for focus group discussions with male patrons to determine how to adapt a U.S. training manual for POLs to the local context. As a result, a new section on addressing local myths about HIV, commercial sex, and condoms was added. In addition, the team created a new training session to focus on the role of alcohol in one’s personal life and sexual health, on communication strategies (talking to friends when they are sober, asking friends to carry condoms all the time), and on messaging



(knowing and sticking to one's drinking limit, thinking about the burden on the family if something happens to the breadwinner).

### **Train trainers and pilot the intervention:**

Five male project staff chosen to become CPOL trainers received instruction on both the content of the tailored manual and facilitation skills. Ten groups of CPOLs were recruited from four wine shops that were not part of the intervention or the control. The facilitators each conducted two five-session training workshops; these were videotaped and studied to assess session content, facilitator knowledge, and training skills. During the training, the trainers developed strategies to sustain interest in the intervention messages over time. As trainers sharpened their facilitation skills, the sessions and training content were modified based on lessons learned from the pilot. Technical issues were noted, and trainers were prepared to address these in subsequent sessions. Session logistics and coordination were perfected for the main intervention.

### **Identify, select, and train CPOL candidates:**

At the 50 targeted wine shops, the project recruited CPOLs based on nominations from wine shop owners and patrons and on structured participant observation by the project team. Another important way to identify potential CPOLs was to observe the bar over a period of time and talk to patrons about their social networks at the bar and who among their peers they admire, trust, and respect.

Patrons recruited from the intervention clusters formed a “parent group” of 120 CPOLs. To be selected, CPOLs had to be:

- Between 18 and 45 years old
- Residents of the area for at least three years
- Patrons of the wine shops, frequenting them at least three times per week
- Able to communicate well
- Able to elicit respect or be a confidante for others.

CPOLs attended five weekly training sessions of 90 to 120 minutes each. The sessions focused on how to craft effective HIV/STI prevention messages, initiate conversations using these messages, discuss how excessive alcohol consumption affects individual and family health, and help others overcome barriers to safer behavior. Between sessions, the CPOLs carried out such “homework” assignments as practicing informal conversations with peers using key messages. After the five sessions were completed, the CPOL “graduates” received a certificate and a gift voucher for Rs 300 (about US\$6), and were asked to invite two friends to attend a later session so they could also become CPOLs. Later, a smaller group of highly motivated CPOLs received training to become trainers themselves.

**Formulate effective behavior change messaging:** Messages were crafted using the following principles.

- Characterize HIV as a serious infection that can be prevented.
- Avoid inducing fear by using positive messages about the benefits of risk reduction rather than negative ones.
- Include practical advice to increase condom use (e.g., “carry condoms with you”).
- Explain that using condoms and practicing safer sex are a new trend; they are the right and smart things to do.
- Speak informally with friends and neighbors rather than preaching or lecturing to them.
- Use “I statements” to endorse and recommend HIV prevention.

**Provide conversation “hooks”:** The project placed posters with project logos—a question mark in a circle—in wine shops. CPOLs often wore the logo as a badge to pique curiosity among other patrons and wine shop staff, encourage questions,

## EXAMPLES OF SUCCESSFUL “I STATEMENTS”

- I used to think that condoms reduce pleasure, but lately I’ve heard of different ways that condoms can actually increase pleasure and I am going to start exploring them.
- I am not giving up sex. I am using condoms to give up risk.
- Whenever I go to drink now, I make sure I have a condom with me because I know that drinking puts me in the mood to have sex.
- If I’ve had too much to drink, I put off sex. I want to be clearheaded and safe.

and initiate conversations. Over time, project staff began to notice that the logo would occasionally appear on the walls of bars and wine shops that were not part of the intervention.



Reshma Trasi/ICRW

**Red condom vending machine located outside a wine shop in Chennai, India.**

### Ensure the availability of condoms:

The project team made sure that condoms were visible and available throughout the intervention. Team members placed condom boxes in autorickshaw stands (autorickshaw drivers often drive clients to sex workers) and in shops frequented by wine shop patrons. Government vendors replenished condom stocks.

### Use post-training meetings to learn more about CPOLs’ experiences:

At meetings of CPOLs that took place during the intervention, the project team gathered feedback about CPOLs’ experiences with communicating project messages. At these meetings, project staff learned valuable information from CPOLs, such as the following.

- People viewed CPOLs as a resource and respect them.
- CPOLs experienced a sense of increased self-worth because their peers and society in general see them as inspirational figures.
- Self-help group members in communities where CPOLs live invited them to speak at meetings about the dangers of mixing excessive drinking and unprotected sex.
- CPOLs referred peers with STI symptoms to treatment centers.
- CPOLs reported using condoms consistently, drinking moderately, and practicing safer sex.
- CPOLs reported practicing monogamy.
- CPOLs reported that the sessions they led helped reduce HIV-related fear and stigma among wine shop patrons.
- Over time, CPOLs became less inhibited about conducting condom demonstrations.

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## Program Evaluation

The project team is analyzing the second follow-up cross-sectional survey done in 2007. Initial findings reveal increases in knowledge and self-reported risk reduction behaviors among patrons of wine shops targeted by the intervention (The NIMH Collaborative HIV/STD Prevention Trial Group 2010). However, similar increases in knowledge and self-reported risk reduction behaviors were reported by patrons of bars that were not actively targeted or included in the intervention. A closer examination of this finding revealed that wine shop customers often patronize more than one wine shop, making it likely that CPOs were delivering messages in wine shops that were not involved in the intervention. The reduction in risk behavior in intervention and nonintervention wine shops could also be the result of prevention services (HIV educational materials, access to counseling services, and condoms) provided to everyone in the geographical area. This finding hints at a possible “multiplier effect” of this peer-led approach that had an impact beyond its specific targets, as well as the benefits of providing intensive prevention services to all.

## What Worked Well

### **Mapping and participant observation:**

The team used formative research to explore the feasibility and acceptability of bars as a venue for HIV prevention services. The ethnographic

information revealed by mapping and participant observation helped the team understand drinking and socializing patterns as well as the links between wine shops and nearby cruising venues for sex workers, and consequently revealed the prevalence of alcohol-related sexual risk. This detailed study of the environment helped make the intervention appropriate, relevant, and responsive.

### **Focusing on risk reduction in messaging:**

The project focused on risk *reduction* rather than risk *elimination* so that important gatekeepers would accept and support the intervention. Messages promoting abstinence from drinking would have been unpopular with wine shop owners, patrons, and staff. Alienating owners would have been counterproductive; their buy-in was key to the success of the intervention. Advocating “moderate drinking” rather than abstinence from alcohol and emphasizing the importance of the health of the bar patrons were not seen as threatening to wine shop profits. Abstaining from sex with sex workers would have met with equal resistance from pimps, who were likely to be wine shop patrons. The key messages thus encouraged sex with one’s spouse, drinking in moderation, not having sex with a sex worker without a condom, and postponing sex if inebriated.

### **Conveying personal messages to**

**encourage change:** “I statements” proved to be a powerful vehicle for encouraging behavior change, combining peer-led message delivery and personal endorsement. These statements used in informal conversations successfully dispelled myths and

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misconceptions about high-risk sexual behavior and alcohol-related sexual risk behavior.

**Responsive, evidence-informed intervention development:** The project systematically used the data it gathered to adapt, tailor, and fine-tune the intervention to better address the local context. For instance, the project used group discussions to unearth common misconceptions about alcohol use and risky sex and then addressed these in training content. The “I statements” were developed based on feedback from CPOLs. The trainers responded to CPOLs’ requests for information, spending time in each training session to answer questions. They actively supported CPOLs by developing and adapting communication strategies to help them address barriers to behavior change.

## Challenges

**Retention of CPOLs:** Many of the CPOLs were hourly wage earners (e.g., construction workers) whose work hours changed with little advance notice. This made it difficult to conduct tightly planned training sessions and follow-up meetings. The team responded by conducting sessions at more convenient times (often late evenings or early mornings), closer to the work location, as well as offering make-up sessions. When CPOLs missed training sessions, the project staff followed up, in person, to ensure that they would return for make-up sessions. Despite early challenges in retaining CPOLs, several strategies helped improve retention:

- Providing a gift voucher for a small amount after five sessions were completed.
- Responding to requests for more information in subsequent sessions.
- Developing collective solutions to address challenges faced by CPOLs in speaking to peers.
- Developing CPOLs’ facilitation skills.

**Avoiding violent reactions:** The project team occasionally reported violent responses from patrons and occasionally from CPOLs and had to develop strategies to deal with it. The team tried going to the wine shops in pairs to deal with aggressive patrons.

**Resource investment for scaling up:** While the CPOL model is promising, it required an intense level of effort, attention, monitoring, and resources, as well as considerable funding. Well-established organizations and universities played a key role in its design, development, implementation, and evaluation. It will be worthwhile to examine whether such an intervention can be replicated at a larger scale, in different settings, or with different groups, without such a high level of financial investment or academic examination. With fewer resources, programmers will need to make hard choices about where to invest those resources to generate the best outcomes.

## Recommendations

**Invest in high-quality formative research:** The mapping, observation, and baseline surveys conducted at the beginning of the project were absolutely essential to its success, especially in recruitment, training, and retention of CPOLs. Early on, formative research helped identify potential CPOLs. Later, the project team made few missteps in their interactions with CPOL candidates and in developing training content because of good up-front research.

*The project team made far fewer missteps in their interactions with CPOL candidates and in the training given because of good up-front research.*



**Continue to use research data to inform each step of the project:** As the project progressed, the data gathered were used to refine key strategies and messages. These refinements not only improved the intervention but were often critical in maintaining rapport with CPOLs and other players.

**Train CPOLs in effective and natural message delivery:** CPOLs benefit from training in how to initiate conversations with friends about alcohol and HIV risk reduction that sound natural and unforced in a bar or other social setting.

**Build CPOLs' confidence by keeping them up to date:** Preparing CPOLs by giving them the latest information about hazardous drinking and HIV prevention builds self-confidence as it reinforces their credibility with peers.

**Cater to the information needs of the local context:** The training manual was adapted to address specific local myths about drinking, sex, and the role that alcohol plays in sex. These myths may differ across cultures. Programs must make a special attempt to unearth and understand what these myths and misperceptions are, and ensure that CPOLs are armed with messages and conversational approaches to address them.

**Reinforce and update prevention messages:** Each CPOL training session began with message reinforcement. Technical discussions to debunk myths could be useful additions to CPOL meetings, which also serve to establish or strengthen networks within and across CPOL groups. Creating support networks across groups also helps to create a sense of community and camaraderie among CPOLs.

**Keep CPOLs motivated:** Program staff need to give CPOLs ongoing support to maintain their motivation. Frequent meetings to check in with CPOLs and provide advice and support are important.

**Strategize early about how to get gatekeepers on board:** Had the project team not discussed early on what messages might alienate key wine shop owners and pimps, it would have been much more difficult to gain access to wine shop patrons or sex workers in situ.

## Future Programming

Programming in this area is still in its infancy. However, programmers can adapt the CPOL intervention to drinking venues around the world to address the risk to bar patrons of alcohol-induced risky sex. Men who frequent wine shops or bars are just one high-risk group. Successful, sustainable interventions to address alcohol-related HIV risk may call for a wide range of approaches implemented at multiple levels and multiple sites, targeting different high-risk populations.

The CPOL experience in Chennai suggests the following future programming opportunities.

**Reaching youth:** The wine shops in Chennai are patronized by men who are less educated and mobile than the general population. Educated youth in Chennai with disposable income frequent what are called “pubs”: usually high-end establishments, with discotheques, where social and sexual networking is similar to what takes place in wine shops. The legal age for drinking is rarely enforced in pubs, and the environment permits binge drinking and sexual experimentation. It is not clear how a POL intervention promoting behavior change using personal endorsements would work in a pub with a younger demographic trying hard to “fit in” by engaging in drinking and sex.

**Beyond individual behavior change:** The successful outcomes of interest for the intervention were at the level of self-reported individual change.

But anecdotal reports by the wives of CPOLs captured their spouses' lack of behavior change at home, while sex workers continued to experience alcohol-induced sexual violence by intimate partners. These reports underscore the critical need for future programming to address relationship issues related to, or resulting from, alcohol use and risky sex. There is evidence that excessive alcohol consumption, whether or not it is coupled with physical violence, affects the mental health of the spouse and can reduce disposable household income. It is conceivable that interventions for couples could successfully address alcohol-related sexual risk and reduce intimate partner violence, as well as offer such benefits as increased productivity (reduced absenteeism due to health problems or binge drinking) and increased household income.

**Structural approaches and interventions:**

India does not have a national policy or law that controls the manufacturing, packaging, advertising, taxation, or distribution of alcohol. Nor are there strict laws enforcing the legal drinking age in establishments. Each state is expected to create standards. With alcohol-related taxes contributing significantly to state income, states are reluctant to advocate for a national policy. Applying lessons from other substance control efforts, regulations on advertising and on increased taxation and higher pricing have proven highly successful in reducing tobacco consumption among youth. The future of programming in alcohol-related risk behaviors will depend on the creation of an enabling national policy environment. ■

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