

# Structural actions toward HIV/AIDS prevention in Cartagena, Colombia: a qualitative study

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## ABSTRACT

**Objective.** To obtain a thorough understanding of the complexity and dynamics of the social determination of HIV infection among inhabitants of Cartagena, Colombia, as well as their views on necessary actions and priorities.

**Methods.** In a five-year ethnography of HIV/AIDS in collaboration with 96 citizens of Cartagena, different methods and data collection techniques were used. Through 40 in-depth interviews and 30 life histories of inhabitants, the scenario of HIV vulnerability was summarized in a diagram. This diagram was evaluated and complemented through group discussions with key representatives of local governmental and nongovernmental organizations and with people who were interested in the epidemic or affected by it.

**Results.** The diagram illustrates the dynamic and complex interrelationships among structural factors (i.e., social determinants) of HIV infection, such as machismo; lack of work, money, and social services; local dynamics of the performance of the state; and international dynamics of the sexual tourism industry. On the basis of the diagram, groups of key representatives proposed prioritizing structural actions such as reducing socioeconomic inequalities and providing access to health care and education.

**Conclusions.** The social determinants displayed in the diagram relate to historic power forces that have shaped vulnerable scenarios in Cartagena. Collaboration between participants and researchers generates conceptual frameworks that make it possible to understand and manage the complexity of HIV's social determination. This way of understanding effectively connects local inequalities with international flows of power such as sexual tourism and makes evident the strengths and limitations of current approaches to HIV prevention.

## Key words

HIV infections; AIDS; ethnography; social environment; qualitative research; Colombia.

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According to UNAIDS (1), Colombia has a concentrated epidemic characterized by higher prevalence of HIV among so-called risk groups, such as men who have sex with men (MSM) and sex workers. While the national prevalence rate of HIV infection is 0.6% (2), provinces on

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the Caribbean Coast show prevalence rates up to 1.6%, with heterosexual transmission and infection among women predominating (3). Cartagena, the country's main port on the Caribbean Coast, reported an HIV incidence of 7.5 per 100 000 inhabitants in 2007. This rate equates to 69 cases, of which 90.0% were acquired by heterosexual contact and 70.0% were identified as women with a

stable partner (4). Studies across Colombia illustrate that HIV infection is related to social inequalities; most people with HIV live in poverty and have minimal access to health care, education, and secure jobs (5, 6). This picture converges with worldwide studies on HIV/AIDS that also describe how structural factors shape people's vulnerability to HIV infection (7–9). In agreement with what Latin American Social Medicine calls social determination of illness (10, 11),<sup>6</sup> this study conceives structural factors as dynamic social and historic processes in which power relations, systems of economic capital accumulation, political organization, and cultural processes have led to social inequalities. In this article, structural actions refer to actions that aim to transform these structural factors.

Worrisomely, local (Cartagena) and national (Colombia) HIV prevention programs emphasize changing individual behavior in vulnerable/high-risk groups (12). A recent study focusing on five Colombian cities showed that centering HIV prevention on risk groups increases the stigmatization of people with HIV and leads to social rejection and limited access to material and immaterial goods (i.e., health care, therapy, and work opportunities) (6). In addition, such preventive approaches enhance women's vulnerability to HIV infection by diminishing risk awareness among women with stable partners (6). A study in Cartagena (13) explained the lack of compliance with HIV prevention campaigns as a result of divergences between public health risk concepts and local risk perceptions, the latter entangled with family composition and gender roles. These unfavorable consequences could have been avoided by focusing on the complexity of the social determination of illness by including people's perceptions of the situation in the problem analysis (14, 15). The objective of the study was to obtain a thorough understanding of the complexity and dynamics of the social determination of HIV infection among inhabitants of Cartagena, Colombia, as well as their views on necessary actions and priorities.

## MATERIAL AND METHODS

The study was based on ethnographic research and inspired by methodologic approaches from two participatory action research approaches (16), in which through active involvement of local communities, local and scientific understanding is integrated: collaborative ethnography (17) and Latin American Social Medicine (18). The study has three phases: preliminary study, collective analysis, and participants' proposal for action (see Table 1).

### Phase I

Through purposeful sampling (19), eight participants from government sources and the general population were selected to provide information on major health issues. Semistructured interviews revealed that HIV/AIDS was a major health concern.

### Phase II

Five key persons were selected through purposeful sampling: a housewife living with HIV (LWH), a male leader of a community-based organization working for people LWH, a male and a female community leader, and an officer of the HIV-prevention program. They selected and invited more inhabitants. The initial sample consisted of a majority of general population representatives and a minority of representatives from governmental organizations and nongovernmental organizations (NGOs). The researchers added to the sample 6 sex workers, 7 MSM, and 20 heterosexual men and women LWH.

The final sample size was determined by the point of saturation (20)—that is, when additional interviews and life histories did not yield new topics or experiences—and consisted of 35 women and 35 men between 15 and 60 years of age from diverse socioeconomic strata, social classes, ethnic groups, and sexual orientations; 30 people LWH and 40 who had not been HIV-tested or tested negative. The latter were invited for an open-ended interview consisting of one major question: "Please tell me everything you know about AIDS."

Participants LWH were asked about their life histories. Their personal experiences complemented data collected through interviews. On participants' ini-

tative, in both interviews and life histories, the data collection process included drawing a diagram that included major social determinants of HIV infection and their interconnectedness.

The first and fourth authors conducted participant observations. Ethnographic data were coded by the first author, combining the factors raised by participants with findings from critical anthropology, sociology, and political economy. This analysis, which resulted in a preliminary diagram of social determinants of HIV infection, was triangulated (21, 22) with a group of anthropologists (transcriptionists) and with the fourth author (local coinvestigator). No major differences were found in the data collected regarding the main social determinants of HIV infection among participants living with HIV and other participants. However, participants living with HIV reported experiencing social rejection and barriers to access material goods and services that other participants did not mention.

In the second fieldwork, key representatives of local governmental organizations and NGOs as well as inhabitants who were interested in HIV/AIDS or affected by it were asked for critical feedback on the preliminary diagram. Initially, eight people who had participated in the first fieldwork were consulted on how to proceed for evaluation of the preliminary diagram: a housewife with a primary education LWH, a female sex worker, a leader of an organization involved in women's rights, a MSM, an employee of a private foundation concerned with sexual health, a man involved in sexual tourism networks, an officer of the local HIV-prevention program, and an officer of the social welfare department.

They proposed presenting the preliminary diagram to other inhabitants through group discussions. Then, through purposeful sampling they contacted 18 additional participants and organized 6 heterogeneous groups consisting of 6 people each with representatives from local government, community-based organizations (CBOs), local and national foundations and NGOs, heterosexual men, heterosexual women, and MSM, because all these groups of inhabitants had relevant information to contribute to the preliminary diagram of HIV infection. The 36 individuals included men and women between the ages of 15 and 60 from diverse

<sup>6</sup> Latin American Social Medicine strives to achieve a collective production of knowledge, acknowledging communities as equal partners and merging community and science perspectives to produce new knowledge.

**TABLE 1. Methodology followed in this collaborative ethnographic study of HIV/AIDS in Cartagena, Colombia, 2004–2009**

Time line	Steps	Actors	Data collection and analysis techniques	Results
Phase I: Preliminary study 3-week period in 2004	1. Identification of major issues	<ul style="list-style-type: none"> <li>• 3 health officers</li> <li>• 5 inhabitants from different areas of the city at diverse socioeconomic levels</li> <li>• First author</li> </ul>	<ul style="list-style-type: none"> <li>• 8 preliminary semistructured interviews</li> </ul>	HIV/AIDS as significant health problem in Cartagena
Phase II: Collective analysis <sup>a</sup> 1st fieldwork: 7-month period between 2006 and 2007	2. Participants' problem definition and analysis	<ul style="list-style-type: none"> <li>• 70 inhabitants</li> <li>• First author</li> </ul>	<ul style="list-style-type: none"> <li>• 40 open-ended interviews</li> <li>• 30 life histories of people living with HIV</li> <li>• Participant observations on social interaction between men and women in public places</li> </ul>	Participants' critical self-reflection process displayed in diagrams illustrating social determinants of HIV infection
2006–2008	3. Researchers' analysis	<ul style="list-style-type: none"> <li>• Local coinvestigator<sup>b</sup></li> <li>• Transcriptionists (5 anthropologists)</li> <li>• Local coinvestigator</li> <li>• First author</li> </ul>	<ul style="list-style-type: none"> <li>• Summarizing and precoding participants' diagrams</li> <li>• Transcription of ethnographic data</li> <li>• Independent coding and researchers' triangulation</li> </ul>	Data collected, summary of diagrams, and initial coding
2nd fieldwork: 3-month period in 2009	4. Consensus on social determinants of HIV infection in Cartagena (local scientific diagram)	<ul style="list-style-type: none"> <li>• First author</li> <li>• Initial discussions with 8 key previous participants</li> <li>• Local coinvestigator</li> <li>• 6 groups: local government, community-based organizations, local–national foundations and nongovernmental organizations, heterosexual men, heterosexual women, men who have sex with men</li> </ul>	<ul style="list-style-type: none"> <li>• Extension of participants' diagrams through deep exploration of risk perception, preventive strategies, sexual practices, and roots of each social determinant of HIV pointed out by each participant</li> <li>• Extended diagrams worked into an overarching diagram</li> <li>• Critical evaluation of preliminary diagram of HIV infection by participants in group discussions</li> </ul>	Extended diagrams  Preliminary diagram of HIV infection in Cartagena  Consensus on local scientific diagram in each group
Phase III: Participants' proposal for action	5. Participants' definition of priorities within the local scientific diagram	<ul style="list-style-type: none"> <li>• Local coinvestigator</li> <li>• First author</li> </ul>	<ul style="list-style-type: none"> <li>• Both actors summarized the diagrams resulting from consensus of each group in the overarching concepts of the local scientific diagram</li> </ul>	Summary of consensus in one local scientific diagram
	6. Participants' proposals for preventive actions based on the local scientific diagram	<ul style="list-style-type: none"> <li>• Groups</li> <li>• Local coinvestigator</li> <li>• Local coinvestigator</li> <li>• First author</li> </ul>	<ul style="list-style-type: none"> <li>• Severity of threats of social determinants of HIV infection was established by using nominal group technique</li> <li>• Group discussions about possible actions</li> <li>• Data obtained in group discussions were summarized into the participants' proposal for HIV prevention by both actors</li> </ul>	Structural determinants as priority  List of actions to address each determinant  Summary of participants' proposals for HIV prevention
Future actions to be accomplished in later stages	7 and 8. Implementation and evaluation of participants' proposals	<ul style="list-style-type: none"> <li>• Local community</li> <li>• Local coinvestigator</li> <li>• First author</li> </ul>	<ul style="list-style-type: none"> <li>• Dialogue in implementation of actions</li> </ul>	

<sup>a</sup> Characterized by ongoing dialogue to integrate participants' analysis of HIV/AIDS and researchers' interpretation of ethnographic data in the local scientific diagram.

<sup>b</sup> Local coinvestigator is a key participant, an activist who was trained in qualitative research through the entire process and was appointed as research assistant in the second fieldwork. In both fieldworks, data collected through participant observations contributed to the structure of the preliminary diagrams and the researchers' analysis.

socioeconomic strata, ethnic groups, and sexual orientations.

A leader in each group coordinated discussions and summarized participants' views until they reached a consensus on each item in the diagram. The goal of these discussions was to integrate the participants' and researchers' analyses and create an overarching local scientific diagram.

**Phase III**

Participants were asked whether, on the basis of the local scientific diagram, they considered it necessary to define priorities and specify actions. The lists of actions proposed were grouped separately by the first and fourth authors and later triangulated into the overarching diagram presented in this paper as the participants' proposal for HIV prevention in Cartagena.

This research followed the ethical norms of the Colombian Ministry of Health and was approved by Universidad de los Andes ethics committee. All participants gave informed consent.

**RESULTS**

**Local scientific diagram of social determinants of HIV infection in Cartagena**

Participants' language is preserved and presented here in quotation marks. The local scientific diagram portrays six social determinants for the presence of HIV infection and AIDS in Cartagena: "machismo," "occasional sex," "homosexuality and bisexuality," "prostitution," "sexual tourism," and "lack of work, money, and social services" (see Figure 1).

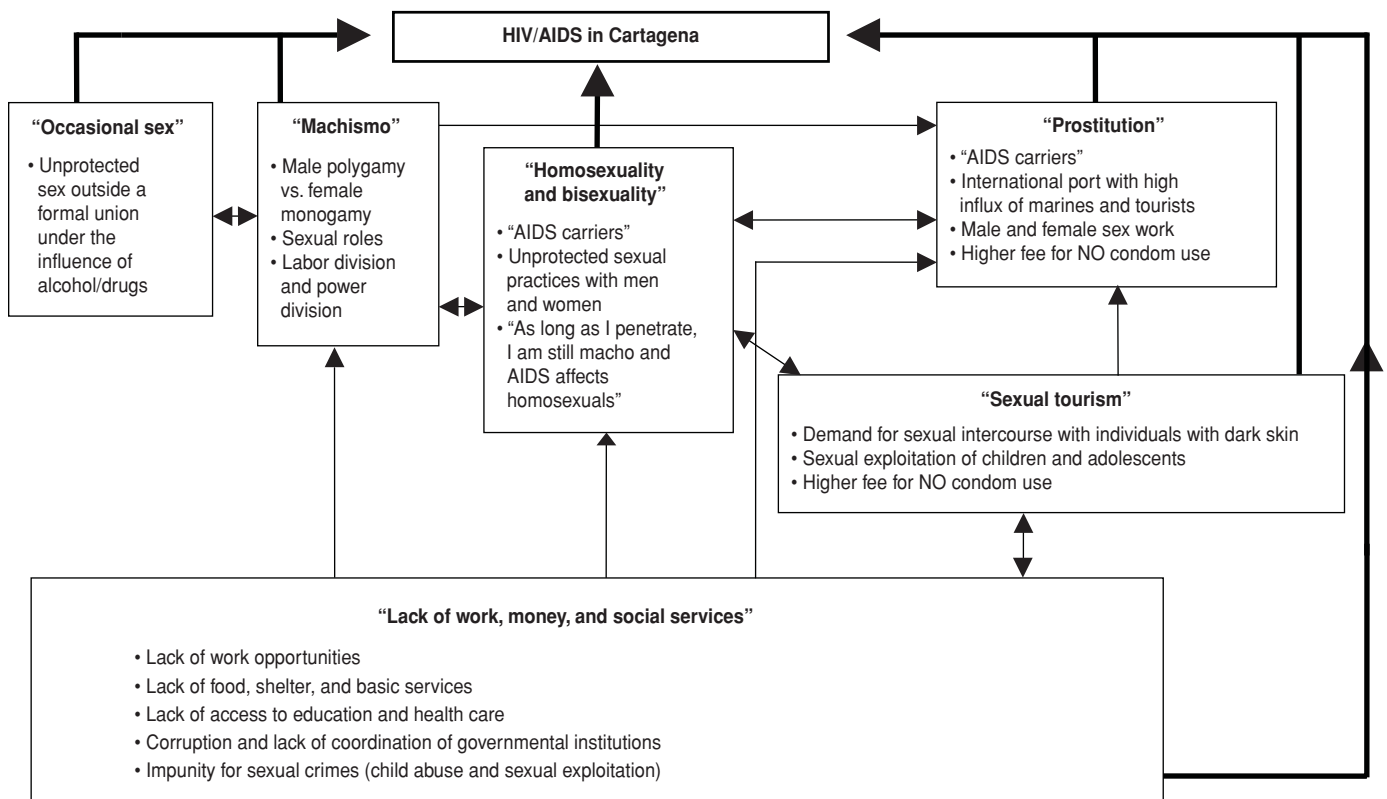
**Machismo.** Study participants referred to a popular saying: "Men have the right to have seven women and a half-man." Men are raised to seduce women and to be economic providers and protectors of women, while women are supposed to "stay at home" and be faithful. Women who violate the norm of virginity until marriage and monogamy are labeled as "women from the street" or "prostitutes." Men also may have occasional sex with men, but when they allow penetra-

tion by other men they lose their reputation as "machos" and become "homosexuals." "Prostitutes" and "homosexuals" transgress machismo norms and, according to participants, that is why they are identified as "AIDS carriers."

Although the infectious agent is HIV, HIV was not evident in peoples' discourse about a physical affliction because it did not produce visible symptoms; therefore, participants' notion of "AIDS carriers" was based on the term AIDS, which is included in their everyday language as "the name of the disease."

Participants did not reject the distinction between women, or the notion of "AIDS carriers," but they warned against the preventive trajectories that derive from it. First, men try to avoid infection by refraining from sex with "women from the street." They believe they can distinguish these women by the way they dress and behave from "women from the house" with whom "it is safe to have unprotected sex." Second, men try to avoid being penetrated to avoid becoming a "homosexual." Consequently, men who penetrate other men feel safe

**FIGURE 1. Social determinants of HIV infection, Cartagena, Colombia (local scientific diagram), 2004–2009**



and do not use condoms when practicing anal and oral sex. Third, people in Cartagena think they can distinguish between “healthy or sick” people by their bodily appearance. As these trajectories lead to people not using condoms, participants in all discussion groups warned that they contribute to the spread of AIDS.

“Machismo” was related to HIV infection because the pressure on having multiple partners interfered with men’s role as protectors of their women and family. Male participants illustrated that the norm of “having many women” resulted in a greater chance of acquiring HIV, which they would “pass on to their woman at home.” Male and female participants pointed out that a man has the power to decide about women’s private (sexual) and public (studying and working) activities. This power hinders educational and work opportunities for women, increasing their economic dependence on men. Female participants argued that economic dependence and unequal power relations reduce women’s possibilities for health-related self-protection and increase sexual violence.

**Occasional sex.** “Occasional sex” under the influence of alcohol or drugs was assumed to take place outside a formal union with a “woman from the street,” who by transgressing the norms has become an “AIDS carrier.” Consequently, it was associated with HIV infection.

**Homosexuality and bisexuality.** “Homosexuality and bisexuality” were related to HIV infection due to the above-described association between “homosexuality” and “AIDS carriers.” The high rates of HIV infection among women with stable partners in the city were associated with “bisexuality” because “homosexual men frequently marry a woman and have unprotected sex with her to maintain the social image of macho.” Male participants who have sex with men and women reported no condom use with female partners. Male participants indicated that, in spite of the stigmatization of homosexuality, “as long as men penetrate, they could have sex with men.” Participants pointed out that homosexual practices in the city are increasing due to augmented demands of “sexual tourism” and as a consequence of the lack of job opportunities for young men.

**Prostitution.** Although “women from the street” were depicted as “prostitutes” as a

moral sanction, “prostitution” as work was described separately. “Prostitution” was related to HIV infection given the association with “AIDS carriers” and was described as a long-standing phenomenon in the city connected to national and international tourism driven by the maritime port, lack of opportunities, and machismo.

**Sexual tourism.** “Sexual tourism” was related to HIV because of the flow of national and international tourists who demand sexual intercourse with “dark-skinned” individuals, given their stereotype as better sexual performers. This stereotype merged with social discrimination against inhabitants with “dark skin,” who often lack social and work opportunities. Consequently, “sexual tourism” emerged as a means for survival in the city. All participants blamed large international networks of sexual commerce for promoting “sexual tourism” and reinforcing Cartagena’s image as “the city of pleasure.” This image and economic dependence on tourism led to the availability of a variety of “sexual offers,” including child sexual exploitation. Participants described several ways of getting involved in commercial sex networks: direct individual exchange of sex for goods or money, establishing communication channels between demander and provider, and “selling their daughters’ or grandchildren’s sexual services to tourists.” The exchange of material goods (phones, clothes, shoes) for sex between tourists and minors was described as common. All participants considered that individuals who exchange sex for goods and money run the risk of acquiring HIV, especially as higher fees are paid when condoms are not used.

**Lack of work, money, and social services.** As proof of the “absence of the state,” study participants referred to the many deprived neighborhoods in Cartagena. They considered that due to the state’s “absence” a large proportion of the population lack identity cards and do not have access to social services, health care, and education. This lack of access directly increases people’s risk of HIV/AIDS, as it decreases opportunities for early diagnosis and treatment and leads to limited knowledge, skills, and ability to practice safe sex. Moreover, those who have access are often exposed to Catholic discourses about sexuality that reinforce traditional gender roles

and inhibit open dialogue on the use of condoms. People with HIV report “administrative” and “moral” barriers to testing, treatment, and other services due to AIDS-related stigma. Participants from medium and low socioeconomic strata said that massive campaigns and informative leaflets lack impact, in part because the predominance of oral tradition overrules people’s interest in reading leaflets. Participants pointed out that the lack of social opportunities (including jobs), which diminishes access to material (e.g., food, housing) and immaterial (e.g., health, education) goods, indirectly increases the risk of HIV/AIDS as it results in a cycle of poverty and social exclusion that promotes the exchange of sex for goods and money.

Reflecting on social exclusion and the resulting vulnerability to HIV infection, study participants pointed out that the internal political conflict aggravates this vulnerability by encouraging people to seek security and work in urban areas. Sexual abuse and child sexual exploitation, which contribute to HIV infection among youth and children, were defined as symptoms of government corruption, lack of institutional coordination, and the indifference of civilians.

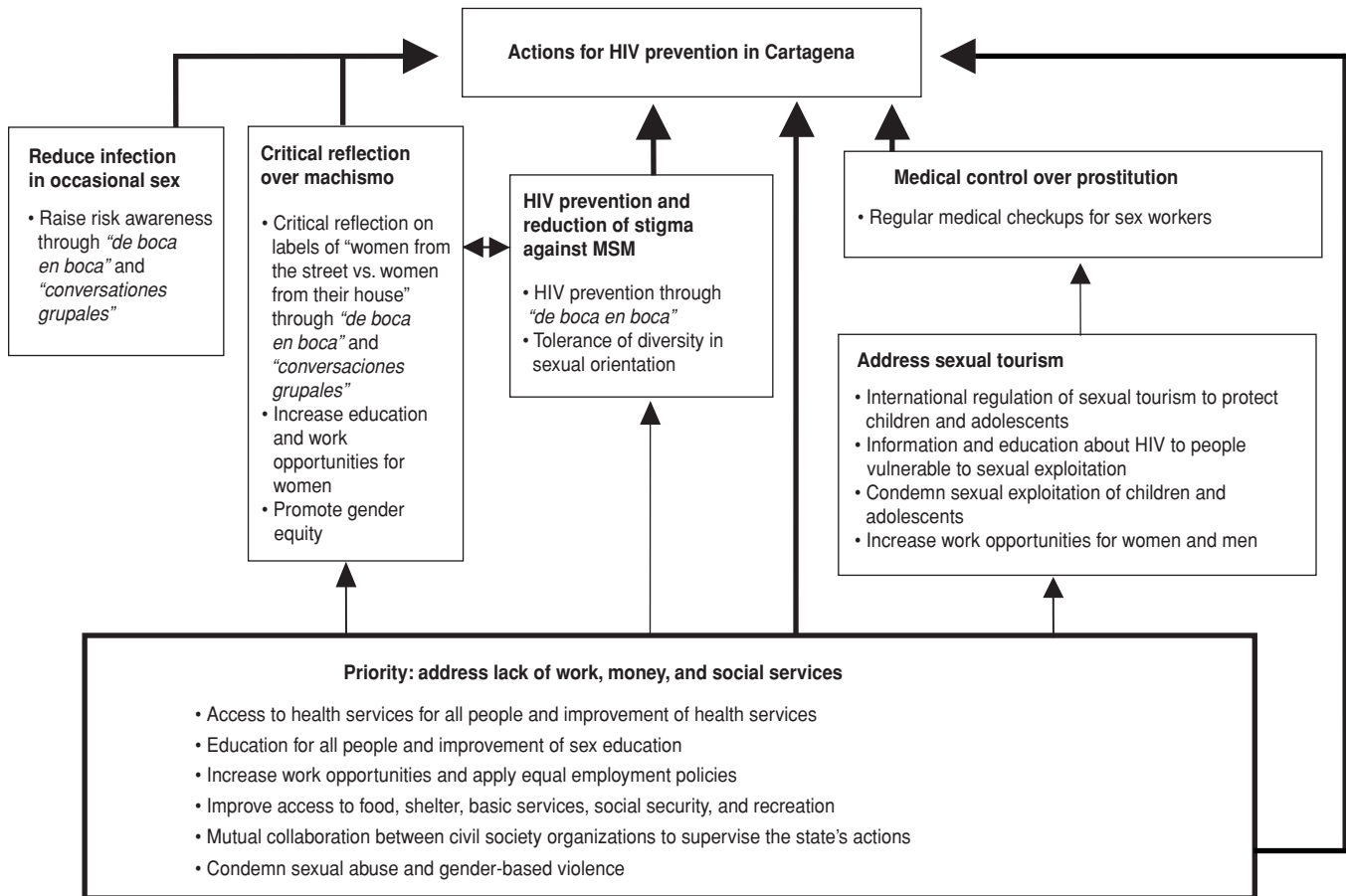
### Participants’ proposal for HIV prevention in Cartagena

Participants in all groups agreed on the need to address major social determinants and suggested that personal networks could play an important role. Participants from governmental organizations and NGOs proposed actions involving their organizations. Actions transcended national boundaries and engaged governmental organizations and diverse civil society groups. Proposed actions aimed to make structural changes in the institutional system and include critical reflection in HIV prevention programs (see Figure 2).

**“Our priority is to address the lack of work, money and social services.”** Groups generally agreed to prioritize actions that address lack of employment, poor living conditions, and lack of access to health and education.

All groups considered access to education essential for HIV prevention. Groups 2, 3, 4, 5, and 6 demanded that the state invest in education and improve its quality through uniform crite-

FIGURE 2. Participants' proposal for HIV prevention in Cartagena, Colombia, 2009



ria for schools. To reduce inequalities, foundations and NGOs proposed to offer school opportunities for people who lack access to public education.

All groups stressed the need for more job opportunities for men, women, and youth. A partnership to increase work opportunities was proposed by governmental institutions and civil society organizations to train unemployed citizens in agriculture, tourism, environmental conservation, and handicrafts. Such training, they expected, would enhance people's employability in local companies and help create small-scale business. According to group leaders, this is a sustainable coalition for income-generating projects since partners hold complementary levels of political and economic power. Additionally, all groups suggested that all employers should apply equity-oriented employment policies and requested government supervision in applying equal job policies.

All groups highlighted the need to improve living conditions by decreasing

corruption and increasing local government investment in public services such as a clean water supply and sewage system. Group 2 proposed improving living conditions through established networks. "We cannot wait until the government provides us with water; we have to go on with the community project to bring water from the nearest neighborhood. Yes, that is true; we also have to continue with our home care for sick and elderly people."

All groups proposed prioritizing the enhancement of "access to health services for all people." Except for governmental representatives, all groups suggested that health insurance companies be requested to comply with current regulations and proposed increasing citizens' supervision over state and insurance company actions. In addition, NGOs, CBOs, and laypeople proposed informing others about the health care system and about citizens' rights and obligations. All groups requested that health care providers address bureaucratic barriers and AIDS-related discrimination.

All groups except governmental representatives requested that the state provide access to sex education for all inhabitants. All groups claimed that sex education should be grounded on values of mutual respect, gender equity, and sexual and reproductive rights. Governmental officials proposed a coordinated effort between health and education officers to improve sex education in primary and secondary schooling following the National Sex Education Guidelines and the principles of the Healthy School Strategy.

Groups 2, 3, 4, 5, and 6 proposed citizen supervision of the state's performance in a mutual collaboration among civil society organizations. The areas of supervision are provision of health services by the state and health insurance companies, with strict monitoring of antiretroviral medication smuggling; state coverage of health and education; improvement of sex education in schools; and protection of women's rights. These groups expressed that, if necessary, they

would use the *tutela* (writ for the protection of constitutional rights) to help people obtain health and education services. These groups requested governmental institutions to condemn sexual abuse and gender-based violence and to permit greater involvement of citizens in constructing public policy.

To “address sexual tourism,” all groups indicated the need for national and international regulations to control the marketing and sales of “sexual tourism packages” involving minors. They emphasized the need to increase penalties for child sexual exploitation and abuse. Governmental representatives argued that the fight against “child sexual exploitation” should transcend national boundaries. “We are aware that more efforts are necessary, especially in condemning traders and tourists; however, we need support from the international community. They also have to assume their responsibility.”

**“Include critical reflection in HIV prevention.”** All groups expressed the need to extend preventive programs to all inhabitants, to reestablish medical check-ups for sex workers, and to provide free condoms. They also proposed that existing programs be adjusted to encourage critical reflection on AIDS, body, sexual roles, and a false sense of security. They suggested two preventive strategies that would suit Cartagena’s oral tradition:

- (1) *“Conversaciones grupales”*: This strategy involves informal conversations in small groups about questions triggered by a videotaped or a face-to-face testimony on the life history of a person LWH. Social scientists and activists in the Spanish-speaking community refer to it as *conversatorios*.
- (2) *“De boca en boca”*: this strategy refers to the well-known practice of “gossip” and involves participants discussing “confidential” issues that require advice.

All groups proposed promoting critical reflection on social determinants underlying the risk of HIV through “*conversaciones grupales*” and “*de boca en boca*” to address preventive strategies that give a false sense of security, such as looking at women’s and men’s bodies to distinguish between the healthy and the sick and the distinction between “women from the street and women from their

house,” and help counter the belief that “women from their house” do not need to use protection.

According to participants, critical reflection initiated during “*conversaciones grupales*” or “*de boca en boca*” could reduce the effects of “occasional sex” by raising risk awareness and could reduce stigma about homosexuality. The assumed link between homosexuality, “AIDS carriers,” and the “avoidance of penetration” could be tackled through “*conversaciones grupales*.” MSM explained that self-identification as “*macho*” reduces HIV risk awareness of MSM and inhibits condom use. They proposed “*de boca en boca*” to address this problem:

Group 6:

Participant 1: “We need to talk directly to the men we are having sex with.”

Participant 2: “Yes, tell all men we know that machos also get AIDS and that we all need to use condoms.”

Participant 4: “Yes, to men that we happen to meet on ‘Facebook,’ ‘Messenger,’ ‘el pasapasa,’ and in the disco.”

Participant 5: “We could spread the information *de boca en boca* as the gossip goes around in the morning program of the local radio station. The radio program that keeps everyone in Cartagena up to date with the latest gossip.”

All voices at once: “Yes! That is a fantastic idea!”

Participant 5: “Let’s try to get an appointment with the directors of the radio station.”

Female participants emphasized the need for critical reflection on the notion of “women from their house” to improve risk awareness among women who identify with this concept. They also considered that promoting gender equity in private and public spheres (including educational and work opportunities) is necessary to reduce the impact of machismo.

## DISCUSSION

Approaches that integrate people’s understanding of their social reality are important to reveal the social determinants of HIV/AIDS and to improve social responses to the epidemic. The local scientific diagram and the proposed actions derived from it convey that the multiple interconnections of the socio-cultural dynamics of HIV/AIDS in the city are a complex historic process that

requires structural changes. Such a collaborative analysis is in line with other studies on class and gender inequalities as main social determinants of HIV/AIDS (23–26) and highlights the interactions between local constructions of labor, sexuality, body, gender roles, state performance, and the sex tourism industry. Such a complex framework to understand HIV infection argues against previous studies in Latin America (8) that separate HIV-related factors into individual and collective domains. Furthermore, it shows the limitations of individual behavioral approaches to understand and deal with HIV infection—not only in Cartagena (13) but also in Colombia (12)—that leave aside structural factors such as the deficient performance of the state, the economic power of the sex tourism industry, and the appalling social inequalities in the city (27). According to participants, these factors result in limited access to health, education, and other services.

Prioritizing structural actions that aim to reduce social inequities in order to prevent HIV infection has been recommended in the health promotion literature (28, 29) and in previous studies in Colombia (5, 6, 30). However, our results illustrate that, through collective analysis, promising bottom-up proposals for HIV prevention are feasible and sustainable given that they consider local networks and key stakeholders.

## LIMITATIONS

The fact that researchers relied on insights from critical anthropology and sociology in their analysis influenced the structure and concepts of the preliminary diagram. However, group discussions in the second fieldwork were introduced by retrieving initial data on the social determination of HIV infection from participants in the focus groups, which led to diagrams similar to those of the researchers. Yet, issues of biased interpretation remain. Religion, for example, though identified as a barrier during the first fieldwork, was hardly given attention during the group discussions, perhaps because discussion leaders were emphasizing other topics. However, despite the lack of action on religious barriers, we believe the methodologic thoroughness we applied significantly reduced potential threats to the validity of our interpretations and analyses.

Reaching a balance between participants and researchers is not an easy task. It was necessary to emphasize the high value of participants' voices over scientific voices to reach equal dialogue and to obtain the desired richness of information and conceptual analysis. The question remains, however, whether real bottom-up constructions materialize when conceptual exercises are "facilitated" by researchers, who are more familiar with this kind of abstraction of social reality. Even though we are seeing some progress in the way people are involved in initiating structural actions, the framework of the social determination of illness brings forward the powerful forces and players that need to be confronted.

## Conclusion

Social determinants of HIV in Cartagena relate to historic power forces that have shaped vulnerable scenarios around sexuality, gender, education, and labor. This research showed that a collective analysis can lead to a conceptual framework that makes the complex scenario of the social determination of HIV understandable and manageable. This conceptual framework connects local inequalities with international flows of power, such as international tourism, and makes evident the strengths and limitations of current approaches to HIV prevention. Communities need to be included as equal partners in producing knowledge and action in HIV/AIDS research projects

in the country, region, and worldwide and in other health-related concerns associated with complex social processes.

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**RESUMEN****Medidas estructurales para la prevención de la infección por el VIH/sida en Cartagena, Colombia: estudio cualitativo**

**Objetivo.** Explorar la comprensión de los habitantes sobre la determinación social de la infección por el VIH en Cartagena, Colombia, y sus criterios sobre las medidas necesarias y las prioridades.

**Métodos.** Se usaron diferentes métodos y técnicas de recolección de datos en una investigación etnográfica quinquenal de la infección por el VIH/sida en colaboración con 96 ciudadanos de Cartagena. Se resumió en un diagrama la situación de vulnerabilidad al VIH tras analizar la información obtenida en 40 entrevistas a profundidad y 30 historias de vida de los habitantes. Este diagrama se evaluó y se complementó por medio de análisis grupales con representantes clave de organizaciones gubernamentales y no gubernamentales locales y con personas interesadas en la epidemia o afectadas por ella.

**Resultados.** El diagrama ilustra las interrelaciones dinámicas y complejas que existen entre los factores estructurales (es decir, determinantes sociales) de la infección por el VIH, como el machismo; la falta de trabajo, dinero y servicios sociales; la dinámica local de la función del estado; y la dinámica internacional de la industria del turismo sexual. Sobre la base del diagrama, los grupos de representantes clave propusieron medidas estructurales prioritarias, como reducir las desigualdades socioeconómicas y proporcionar acceso a la atención de salud y la educación.

**Conclusiones.** Los determinantes sociales que se muestran en el diagrama se relacionan con las fuerzas de poder que históricamente han configurado situaciones de vulnerabilidad en Cartagena. La colaboración entre los participantes y los investigadores genera marcos conceptuales que permiten comprender y gestionar la complejidad de la determinación social de la infección por el VIH. Este enfoque permite relacionar las desigualdades locales con los flujos internacionales de poder, como el turismo sexual, y pone de manifiesto las ventajas y las limitaciones de los métodos actuales para la prevención de la infección por el VIH.

**Palabras clave**

VIH; SIDA; etnografía; medio social; investigación cualitativa; Colombia.