Community-based intervention to control STD/AIDS in the Amazon region, Brazil

ABSTRACT

OBJECTIVE: To describe a case study of community-based intervention, developed in a constructionist-emancipatory framework to control STD/AIDS.

METHODS: Descriptive study developed in the town of Manacapuru, in the state of Amazonas, from 1997 to 2004, focusing on procedures designed in collaboration with government agents, health professionals and the community. Data on the dynamics of prostitution and condom sales in this town, preventive practices and STD/AIDS care and process assessment were collected. Actions targeting STD prevention and care in the public healthcare system, a testing center, an epidemiological surveillance system and sex workers’ qualification were established concomitantly.

RESULTS: It was observed the strengthening of sex workers as peer educators and their legitimization as citizens and health agents in projects involving transvestites, homosexuals and students. There was an increase in condom sales in town, as well as in condom use among sex workers; reduction in bacterial STD; and stabilization of the incidence of HIV/AIDS infections and congenital syphilis. The sustainability of the intervention program studied, organized within the sphere of action of the Sistema Único de Saúde (National Health System), was promoted by a political pact, which guaranteed headquarters and municipal law-regulated budget, as well as by the constant debate over the process and program results.

CONCLUSIONS: The study strengthened the notion that effective control of STD/AIDS depends on a synergic approach that combines interventions on individual (biological-behavioral), sociocultural and programmatic levels.


INTRODUCTION

Effective control of viral and bacterial sexually transmitted diseases (STD) continues to be a problem in the majority of regions in the world, especially in Latin America. Despite technological development, estimates of new cases keep increasing exponentially,\(^\text{10,*}\) posing a higher risk for HIV/AIDS infections as well.

STD/AIDS control policies that do not reflect on the sociopolitical context have been considered insufficient.\(^\text{3,11,14,17,18}\) Alternatively, interventions that consider the different dimensions of vulnerability to STD/AIDS – sociopolitical, programmatic and individual – analyzed according to the human rights framework

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in the organization of care and prevention constitute a promising path, especially when proposing a “synergy of interventions” to handle at the local level the so-called “synergy of plagues”. The promotion of ecological tourism constituted a strategic priority for the socioeconomic development of Manacapuru in 1997, proposed by the newly elected municipal administration. However, local leaders feared the increase of HIV transmission in the region, resulting from the migratory flow caused by ecotourism. Thus, it was established a dialogue with researchers, politicians, union leaders, and health technicians, aiming at implementing a set of actions of a structural and programmatic nature, focusing on both the general population and the most vulnerable groups.

The objective of the Projeto Princesinha, resulting from this dialogue, has been to stop STD/AIDS transmission, as well as expanding the access to proper diagnosis and treatment of incident cases in the sphere of the Sistema Único de Saúde (SUS – Brazilian Health System), valuing principles of social control, self-sustainability and reproducibility.

The activities were designed in a participative manner, involving: researchers; local sanitary authorities; outside consultants; political authorities; parliament members; unions, community and clergy leaders; and representatives from the education and security sectors. The image utilized for negotiations was “Healthy town, without STD/AIDS, more visited by ecotourists”. It was decided to begin with the implementation of the Centro de Testagem Anônima para HIV – CTA (Center for Anonymous HIV Testing), the first ever in the state of Amazonas, as well as the STD care program with a syndromic approach and case notifications by the Sistema de Vigilância Epidemiológica Aprimorada das DST – SIVA-DST** (Improved STD Epidemiological Surveillance System) in 1998. Regarding preventive education practices, the choice was to begin the program with sex workers and their clients.

In 1998, health professionals of the municipal public health system participated in the skills training program in syndromic approach for STD*** and counseling.*** Concomitantly, five female sex workers were selected in prostitution areas to work as STD/AIDS peer educators. The selection criteria were the following: higher level of education, ease on communicative abilities and interest in the project. Peer educators participated in prevention planning practices among the other sex workers of this town and their clients, and entitled the project Projeto Princesinha, a name that was also adopted by the town authorities. Solimões’ Little Princess is how Manacapuru is known and the peer educators would like to feel like princesses.

STD prevention and care program proposals, based on the vulnerability and human rights framework have valued community-based interventions, inspired by Paulo Freire’s pedagogy of autonomy. This pedagogy presupposes, among other principles: investigation; respect for community knowledge and autonomy; recognition of cultural identity and availability for dialogue; refusal of any type of discrimination; and promotion of rights. In this constructionist and emancipatory framework, the program and its initiatives are designed in collaboration with the community, and its results are shared and discussed throughout the process. The debate over partial results, especially with those directly involved in the program actions, maintain its sensitivity and sustainability, as well as enable its analysis validation by the program participants and beneficiaries in their own terms. (Re)directing a program, particularly in the sexual health field, is not something to be reduced to technical and scientific expertise, but rather be the result of public debates over priorities, values and rights, as well as an outcome of the collective imagination to quickly respond to challenges identified in the discussion of partial results relevant at the local context.

In the town of Manacapuru, in the state of Amazonas, the Projeto Princesinha (Little Princess Project) has been developed uninterruptedly in the constructionist-emancipatory framework since 1997. The aim of the present article is to describe the community-based intervention, a case study of the period between 1997 and 2004, its activities and repercussions, within the sociocultural, programmatic and individual dimensions of vulnerability to STD/AIDS in the local population.

METHODOLOGICAL PROCEDURES

The town of Manacapuru is located on the banks of the Solimões river and is only accessible by riverboat, 70 km away from the capital, Manaus. The primary healthcare system was characterized by insufficient coverage and high turnover of health professionals typical of the Amazonas countryside. The low number of STD cases notified in the period between 1991 and 1996 indicated lack of knowledge about the local epidemiological situation.
From 1998 to 2004, peer educators were present daily in prostitution areas, where they promoted the use of condoms, informing female sex workers and their clients about STD/AIDS. Since 1998, peer educators have also resold condoms at low cost and referred sex workers with suspected STD to special outpatient clinics for medical consultation at the project headquarters, and to weekly supervised activities, recorded on a field journal.

Throughout the process, celebration date activities were established (Table 1) so as to improve project visibility and include sex workers in the general population socializing spaces in town.

Peer educators conducted mapping of condom retail locations and data collection about the town’s prostitution net and dynamics, by means of:

• data gathering on the number of condoms sold weekly in the period between November of 1998 and January of 1999, to obtain the base line, and between April and June of 2001. All the information was obtained through a formulary that was left at the previously identified condom sales locations, after explaining the attendants how to fill them out;

• detailed mapping of “prostitution spots” in town, by means of observation and open interviews with clients, establishment owners and female sex workers identified as key-informants. This data collection, which took place from 1998 to 2001 and had been described in a previous study, identified working hours, the busiest times at each spot, and those who were more receptive to preventive practices, as well as estimated the number of sex workers;

• based on a previous study, the preventive education assessment was carried out by means of a questionnaire about knowledge, attitudes and sexual practices, at the prostitution spots (148 responses in 1999 and 139 in 2001);

• interviews with 100 clients (convenience sample) about “prostitution as work”, their motivation to seek female sex workers, child prostitution, and their views on the project, in the week when Labor Day was commemorated, in 2000.

Following the presentation of partial results to the community, new procedures were planned, and researchers from other institutions, outsiders to the program, were invited to implement them:

• quality of care analysis after skills-training, standardized by the prevention indicators validated by the World Health Organization.* In 2001, an outside researcher made ethnographic observations of the Unidades Básicas de Saúde (UBS – Primary Healthcare Units), Centro de Testagem e Aconselhamento (CTA – Testing and Counseling Center), and main laboratory and maternity hospital; reviewed primary data in notification files of cases registered in the four previous weeks; and interviewed professionals responsible STD cases care in the UBSs and ten patients who were leaving their consultations;

• process assessment based on the proposal by “Coalition des organismes de lutte contre le Sida”.** In 2004, outside researchers conducted individual, semi-structured interviews with two members from the project’s local coordination, two employees from the public administration, one from the municipal STD/AIDS reference center, 17 peer educators, and ten users and three volunteers from the project headquarters. Peer educators participated in six focus groups.

ANALYSIS OF RESULTS

The initial mapping conducted by peer educators estimated the number of sex workers at about 500, 1/3 of them adolescents, with five to seven years of education; plus eight condom sales locations; and 35 “meeting spots”. The “spots” working hours and ways of functioning varied and the women attended to one to three clients per night. In the year 2001, a flow of around 1,000 female sex workers and 5,000 people who frequently go to these meeting spots, coming from other towns and cities, was estimated.

In the interviews and focus groups, conducted in 2004, the importance of peer educators’ performances at the places where there is prostitution and night entertainments was emphasized. Their increasing visibility in public spaces on several commemorative dates was highlighted, implying their legitimacy as references for the municipality, increasing the Project actions’ repercussions on socio-political, programmatic and individual levels.

The initial dialogue with local leaders resulted in the establishment of a municipal law regulating the implementation of the Programa de Controle das DST/AIDS de Manacapuru (Manacapuru’s STD/AIDS Control Program), defined as a public policy priority, with long-term budget provision, including the purchase of medications.

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The Figure shows that, between 1999 and 2001, the average monthly condom sales increased from 418 units at eight sales locations to 4,751 units at 26 sales locations in 2001. In addition, from 1998 to 2001, peer educators sold, at low cost, a monthly average of 2,168; 3,240 and 3,456 condom units, respectively.

The project headquarters turned into a community center, improving the inclusion of peer educators as citizens with rights. Transvestites and men that have sex with other men, never before organized or mobilized, began to go to the headquarters regularly.

On Carnivals, men who have sex with other men, transvestites and female sex workers put on costumes to dance in the Bloco sem preconceito (Prejudice-free samba group), carrying banners and posters with prevention slogans prepared in the prostitution areas, and participating in the official Carnival parade at Parque do Ingá, a place where the people of Manacapuru watch and dance samba during this holiday. In 1999, they participated in a disguised manner, their faces painted, afraid of discrimination in case they were recognized; after 2000, they never did this again. On International Women’s Day, female sex workers organized discrimination and violence testimonies and discussed research results, most times with the presence of municipal authorities. On Labor Day, they organized debates with prostitution clients about the legalization of this profession. On Valentine’s Day, they exchanged

Table 1. Activities performed by peer educators on Brazilian allusive dates to improve visibility of prevention practices and social support to the project.

<table>
<thead>
<tr>
<th>Allusive date</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>February: Carnival (1999 to 2004)</td>
<td>Slogan contest in the weeks preceding Carnival; project’s samba group parade</td>
</tr>
<tr>
<td>March 8th: International Women’s Day (1999 to 2001)</td>
<td>Peer educators organized accounts about discrimination and violence and presented research results at the Seminários sobre Direito da Mulher (Seminars on Women’s Rights)</td>
</tr>
<tr>
<td>May 1st: Labor Day (1999 to 2004)</td>
<td>Annual homage to the oldest female sex worker on Rua Tamandaré (meeting spot); data collection of clients’ testimonies</td>
</tr>
<tr>
<td>June 12th: Valentine’s Day (1999 to 2004)</td>
<td>Celebrated as lovers’ day, with the party “Uma noite caliente” (One hot night)</td>
</tr>
<tr>
<td>October 12th: Children’s Day (1999)</td>
<td>Clients’ testimonies on child prostitution at the prostitution spots</td>
</tr>
<tr>
<td>December 1st: World AIDS Day (1998 to 2003)</td>
<td>Protest and parades on the town streets; games at the Ginásio Atila Lins (Atila Lins Gymnasium) with the participation of five schools in the “Olimpíadas da Prevenção” (Prevention Olympics)</td>
</tr>
<tr>
<td>December 25th and December 31st: Christmas’ Day and New Year’s Day (1998 to 2003)</td>
<td>Decoration of the project headquarters, music, dance contest, foods and drinks with anyone’s participation. Transvestites’ parade; female sex workers would attend the event with their families (children, husbands, fiancés and others)</td>
</tr>
</tbody>
</table>
gifts with lovers or wrote post cards for the illiterate colleagues. At the Saint Anthony’s Day festival, they organized the “pleasure stall”, giving a prize to the best love sentence about prevention.

The care program for people with STD and their sexual partners in the town’s basic health system was implemented in 1998, in accordance with the principles and directives from the Sistema Único de Saúde. Thus, free, universal access to proper diagnosis and treatment and the systematic offer of HIV testing and counseling were guaranteed, contributing to the reduction in vulnerability among the STD/AIDS sexually active population.

In the period between 1997 and 2004, 8,629 people were tested for HIV, regularly offered at the CTA, blood center and maternity hospital. Only 16 people were diagnosed with HIV, besides six others notified as AIDS cases.

<table>
<thead>
<tr>
<th>Question</th>
<th>1999 Yes</th>
<th>1999 %</th>
<th>2001 Yes</th>
<th>2001 %</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you changed you sexual behavior to prevent STD/AIDS?</td>
<td>111</td>
<td>75.0</td>
<td>132</td>
<td>94.7</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Have you had an anti-HIV test done yet?</td>
<td>29</td>
<td>19.6</td>
<td>64</td>
<td>46.0</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Has there been a situation when you could not prevent STD/AIDS for lack of condom?</td>
<td>77</td>
<td>52.0</td>
<td>44</td>
<td>31.0</td>
<td>0.002</td>
</tr>
<tr>
<td>Do you insist that your clients use condoms?</td>
<td>93</td>
<td>62.8</td>
<td>120</td>
<td>86.3</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Do you insist that your steady partner use condoms?</td>
<td>75</td>
<td>50.6</td>
<td>78</td>
<td>56.1</td>
<td>0.350</td>
</tr>
<tr>
<td>Do you use condoms for vaginal sex with clients?</td>
<td>102</td>
<td>68.9</td>
<td>108</td>
<td>77.7</td>
<td>0.090</td>
</tr>
<tr>
<td>Do you use condoms for oral sex with clients?</td>
<td>55</td>
<td>37.2</td>
<td>78</td>
<td>56.1</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Do you use condoms for anal sex with clients?</td>
<td>55</td>
<td>37.2</td>
<td>67</td>
<td>48.2</td>
<td>0.050</td>
</tr>
<tr>
<td>Do you use condoms in all situations?</td>
<td>0</td>
<td>0.0</td>
<td>108</td>
<td>77.7</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Have you reduced the number of sexual partners?</td>
<td>18</td>
<td>12.2</td>
<td>53</td>
<td>38.1</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Have you demonstrated how to use condoms correctly?</td>
<td>15</td>
<td>10.1</td>
<td>82</td>
<td>59.0</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Have you demonstrated to have condoms at the moment of interview?</td>
<td>21</td>
<td>14.1</td>
<td>76</td>
<td>54.7</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Did you use condoms last week?</td>
<td>62</td>
<td>41.9</td>
<td>107</td>
<td>78.0</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Do you think condoms are expensive?</td>
<td>43</td>
<td>29.0</td>
<td>3</td>
<td>2.1</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>If you didn't have condoms, would you still have sexual relations with clients?</td>
<td>68</td>
<td>45.9</td>
<td>2</td>
<td>1.4</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Would you only use condoms if the client asked you to?</td>
<td>52</td>
<td>35.1</td>
<td>11</td>
<td>7.9</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Do you consider necessary to use condoms with your steady partner?</td>
<td>118</td>
<td>79.2</td>
<td>123</td>
<td>88.5</td>
<td>0.030</td>
</tr>
<tr>
<td>Do you feel less pleasure when using a condom?</td>
<td>77</td>
<td>52.0</td>
<td>32</td>
<td>23.0</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Does the client feel less pleasure when using a condom?</td>
<td>77</td>
<td>52.0</td>
<td>49</td>
<td>35.0</td>
<td>0.004</td>
</tr>
<tr>
<td>Do you think condoms break easily?</td>
<td>60</td>
<td>40.5</td>
<td>21</td>
<td>15.1</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Can condoms stay inside the vagina?</td>
<td>97</td>
<td>85.5</td>
<td>49</td>
<td>35.2</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Can condoms cause loss of erection?</td>
<td>74</td>
<td>50.0</td>
<td>52</td>
<td>37.4</td>
<td>0.030</td>
</tr>
</tbody>
</table>


As a further programmatic result, men who have sex with men and transvestites leaders who regularly went to the headquarters prepared an intervention project (Projeto Manacá) utilizing Projeto Princesinha as a model and thus expanding the articulation with the Programa Nacional de Aids (AIDS National Program) that financed it.

In the second year of project activity, the female sex workers were invited to give a lecture on STD/AIDS and use of condoms in public schools. As a result, students mobilized to systematize STD/AIDS education and prevention practices in Manacapuru’s municipal school system, leading to the approval of the Municipal Law 014/2001, which instituted a specific program for STD/AIDS prevention in the schools of the municipal system.

The sustainability of the whole program has guaranteed sales of low cost condoms at the prostitution spots,
weekly planning meetings, and specialized gynecological care at the project headquarters, financed by the municipal health department, where projects dedicated to sex workers, homosexuals and students have next-door rooms.

Several actions, such as the ones performed at the prostitution spots and on commemorative dates (Table 1) enabled to strengthen a “care & prevention” culture, with perceptible changes on the sphere of the individual careers of several participants in the project.

“The girls’ bedrooms are all decorated with the project’s posters and folders. Also, in the bars, after our table approach practice, we haven’t seen any of our materials scattered on the floor”. (peer educator)

“Nobody has ever thrown a party for us”. (peer educator, during Mother’s Day celebration)

“I’l keep the ribbon and crown forever!” (comment by peer educator elected Carnival princess)

“Homosexuals walk in the town with their heads up!” (peer educator from the homosexual program)

The local culture is marked by the typical, normative Latin American male chauvinist culture, which exploit and discriminates female sex workers and even becomes violent towards them.

“They arrested my son and said he’d stolen a backpack. The cops throw his food on the floor of the cell without a plate or silverware, saying that the son of a bitch has to be treated like a dog.” (peer educator)

Despite highly traditional sexual values, there was a noticeable increase in the number of clients seeking women who used condoms, demand for condoms at the meeting spots, and recognition of the peer educators’ work, as observed in the following narrative:

“Hey, brunette! Got the product I wanna buy?!”

“Whoever touches them is gonna get stabbed!” (Client who had urethral discharge and was given care in the UBS after being referred by peer educators)

“These girls know everything”. (Client commenting on peer educators showing how to put on a condom with the mouth)

The prevention training program with the purpose of improving the peer educators field practice performance, strengthened them individually as sexual health promoters, qualifying them and boosting their self-esteem. All of them have kept their contract as municipal employees of the Secretaria Municipal de Saúde de Manacapuru (Manacapuru’s Municipal Health Department). The outcome of their work as “peer educators” can be observed in the changes of sex workers’ attitudes and practices when comparing the research results from 1999 with the ones from 2001. The profile of the sample and other results are given in detail in another article.5

On Table 2 it can be observed an increase in condom use among clients, better adequacy of the procedures of placing and removing a condom as demonstrated on penis prosthesis presented at the moment of interview by researchers, higher percentage of female sex workers who had condoms with them at the moment of the second interview, increasing numbers of refusals of sexual relations with clients without condoms, and increase in the proportion of women tested for HIV. However, significant changes concerning the use of condoms with steady partners (husband, fiancé, boyfriend, lover) and alcohol consumption with clients were not observed. Regarding the presence of suggestive STD symptoms in the previous year (referred incidence) and at the moment (referred prevalence) of the questionnaire, it was observed a decrease from 72.3% to 36.7% and from 21.6% to 8.6% respectively.

FINAL CONSIDERATIONS

Projeto Princesinha’s receptivity among the general population and local authorities was crucial for its launching and development. The legitimization of peer educators, selected among female sex workers, as true health agents, reference in the field of STD prevention, including schools, was the most emblematic fact. The growing sales of condoms, introducing them into the local sexual scenes, and the handling of STD/AIDS in the spaces of the project or within the care given in the sphere of the SUS were assessed as adequate in other community-based projects.7,14 In the present study, the handling of STDs fit the region’s traditional values.

The permanent dialogue won the mobilization and negotiation oriented by common interests (to include the town in the ecological tourist itinerary and to control STDs) and mitigated the stigmas associated to sex. The framework of universal right to health materialized into the practice of the SUS’ principles, stimulated the promotion of equity with projects that are adapted to the needs of specific populations.

It was observed the decrease in the incidence rate of the main STD syndromes and the maintenance of a low level of HIV/AIDS epidemic, analyzed in another article.9 These results are consistent with dissemination prevention mechanisms that better explain the change in tendency of curable STDs described by Anderson:5 reduction of transmission by means of barriers (condoms) and reduction of the period of transmissibility due to early diagnosis and efficient, opportune treatment of STD cases (syndromic approach) and their contacts.
The reproduction of this experiment in other socio-political, cultural contexts must be dealt carefully. The reaction of more conservative leaderships (which was small in Manacapuru) has to be considered, and dialogue with the local community may point to different directions. It will not always be easy to guarantee projects such as this one are free from political parties’ manipulation. The acceptance of the organization and the mobilization of men who have sex with men, transvestites, female sex workers and students in the same headquarters, for instance, is an indicator of the local mentality, which can hardly be generalized to every other region in Brazil. The organization of a special outpatient clinic for sex workers may be controversial and it is known that in different contexts the approach may be limited to attendances in the outpatient clinic, integrated to primary care.

To sustain the political commitment between governments, guaranteeing material resources and motivated, qualified staff for STD/AIDS adequate care in the sphere of the SUS constitutes a challenge. Nonetheless, dialogue-based negotiations and political commitment that can define new institutional mission to health professionals improve staff motivation to perform.6

Without implementation of specific condom sales campaigns in commercial establishments, an increase in demand for condoms was observed at these locations. This suggests higher consumption by the general population, which may be attributed to distribution at “prostitution spots”, followed by educational practices that achieved a great number of clients and bar-goers, the main “bridge-population” with the general population. Similar results were found in Thailand, where the reduction of STD/AIDS prevalence in the general population was attributed to the increase in the use of condoms at the prostitution spots.1

The positive results of quantitative indicators traditionally employed in the assessment of attitudes and sexual behavior in the field of STD/AIDS, as well as those that measure the quality of care, indicated favorable changes in the STD epidemiological picture and contributed to the project’s expansion, sustaining new actions on the local level. On the other hand, recent assessment of prevention programs showed that such prevention staff stability is rare, though necessary to the country.16

Even though there has been advancement in the intersectorial articulation with governmental education departments, the same advancement could not be achieved with the police or guardian councils. Violence in the prostitution areas or the lack of protection and discrimination against female sex workers and their families by the police would occasionally suspend the activities. The politicians’ attempts to win votes in the headquarters, or to use peer educators as assistants to identify voters were a permanent problem.

In conclusion, the present study emphasized the need to take into consideration that, when assessing community-based interventions that aim at changing the environment or people’s behavior wherever impact estimates are usually insufficient, information on the design, planning and implementation process has implications for their evaluation.12,14 The experiment in Manacapuru, though difficult to be generalized to any contexts, strengthens the notion that effective STD/AIDS control depends on a synergic approach that combines biomedical and political interventions.3,12-17

The use of constructivist, emancipatory psychosocial intervention strategies3,13,14,15 may contribute to transform individual careers and renew intersubjective contexts, having repercussions for the local culture and the population’s habits. In the political sphere, the community-based intervention process co-produced and validated step-by-step by the agent-leaders of this change (municipal civil servants from several sectors, peer educators from different peer education projects built throughout time) guarantees not only visible results on an individual level (biological and behavioral), but also on sociopolitical and programmatic levels that enable to act on the STD/AIDS vulnerability and guarantee full enjoyment of human rights – health rights in particular. The articulation on these three levels can explain sustainability, which has repercussions on all other results.

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