DOI: 10.1590/1809-4503201500050007

ORIGINAL ARTICLE / *ARTIGO ORIGINAL*

Sex, human rights and AIDS: an analysis of new technologies for HIV prevention in the Brazilian context

Sexo, direitos humanos e AIDS: uma análise das novas tecnologias de prevenção do HIV no contexto brasileiro

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ABSTRACT: Worldwide, HIV prevention is challenged to change because clinical trials show the protective effect of technologies such as circumcision, preexposure prophylaxis, and the suppression of viral load through antiretroviral treatment. In the face of demands for their implementation on population levels, the fear of stimulating risk compensation processes and of increasing riskier sexual practices has retarded their integration into prevention programs. In this article, following a narrative review of the literature on risk compensation using the PubMed database, we offer a critical reflection on the theme using a constructionist approach of social psychology integrated to the theoretical framework of vulnerability and human rights. The use of biomedical technologies for prevention does not consistently induce its users to the increase of riskier practices, and variations on the specificity of each method need to be carefully considered. Alternatives to the theories of sociocognitive studies, such as social constructionist approaches developed in the social sciences and humanities fields, indicate more comprehensive interpretations, valuing the notions of agency and rights. The critical analysis suggests priority actions to be taken in the implementation process: development of comprehensive programs, monitoring and fostering dialog on sexuality, and technical information. We highlight the need to implement a human rights-based approach and to prioritize dialog, stressing how complementary these technologies can be to meet different population needs. We conclude by stressing the need to prioritize sociopolitical changes to restore participation, dialog about sexuality, and emphasis on human rights such as core elements of the Brazilian AIDS policy.

Keywords: HIV. Sexuality. Human rights. Health Vulnerability. Public Policy. Prevention & Control.

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Conflict of interests: nothing to declare – **Financial support:** none.

RESUMO: Globalmente, o campo da prevenção do HIV está desafiado a mudar, especialmente depois que ensaios clínicos mostraram o efeito protetor de tecnologias como a circuncisão, a profilaxia pré-exposição e a supressão da carga viral pelo tratamento com antirretrovirais. Diante de demandas pela implantação destas tecnologias em escala populacional, o temor de estimular processos de compensação de risco e de aumentar práticas sexuais mais arriscadas, entre outras questões, retardam a sua integração nos programas de prevenção. Seguindo uma revisão narrativa de artigos científicos sobre o tema recuperados na base PubMed, oferecemos uma reflexão crítica sobre o tema adotando a vertente construcionista da psicologia social integrada à análise da epidemia no quadro da vulnerabilidade e dos direitos humanos. O uso de tecnologias biomédicas para a prevenção não induz grande parte dos usuários ao aumento de práticas mais arriscadas, havendo variações relativas a cada método, segundo observa-se na literatura. Abordagens das ciências sociais e humanas alternativas às sócio-cognitivistas, como as de base construtivista, indicam interpretações mais abrangentes, que preservam a noção de sujeitos da prevenção e de direitos. Apontamos ações prioritárias no processo de implantação: desenvolvimento de programas abrangentes, realização de estudos de acompanhamento e diálogo sobre sexualidade e informações técnicas. Enfatizamos a necessidade de respostas dialógicas baseadas na perspectiva dos direitos humanos, buscando ressaltar a complementaridade entre tecnologias que atendam às necessidades da população. Concluímos destacando a necessidade de mudanças sócio-políticas que reestabeleçam a participação, o diálogo sobre a sexualidade e a ênfase nos direitos como elementos centrais da política brasileira de aids.

Palavras-chave: HIV. Sexualidade. Direitos humanos. Vulnerabilidade em saúde. Políticas Públicas. Prevenção & Controle.

INTRODUCTION

The first HIV prevention strategies were the result of the creativity of the most affected, socially stigmatized, and discriminated groups, which renewed their practices owing to their urgent need for prevention[1,2,3]. In the late 1980s, when the denial of the magnitude of the epidemic started to be overcome[1], the investment in the scientific production along with those experiences improved prevention strategies[3] and established as a priority behavioral interventions and, in the late 1990s, the structural ones[2]. The condom was established as the main prevention material for offering high protection level, in addition to representing an emancipatory strategy, which expressed the recognition of personal choices in the field of sexuality as an inviolable right.

In the late 1990s, the Azidothymidine (AZT) and, later on, the high power antiretrovirals (TARVs) were incorporated to the AIDS programs for postexposure chemoprophylaxis (PEP) use for specific groups (exposed babies, health professionals who experienced occupational accidents with sharps, and people who experienced sexual assault). In some countries, PEP was soon adopted for consensual exposure situations, being then called nPEP or PEPSE, which was only officially adopted in Brazil in 2010.

In the late 2000s, the evidences on the effectiveness of other biomedical-based technologies for the prevention of HIV gained prominence. In 2007, three clinical trials in African countries showed that male circumcision reduced by 60% the risk of HIV infection among men

who had sexual relations with women in countries with generalized epidemics and mainly heterosexual transmission[4-6]. The World Health Organization (WHO) began recommending and supporting the implementation of the method in countries with epidemiological characteristics similar to those of the studied sites[7], even without an evidence of a protective effect for neither women nor men who have sex with men (MSM).

In 2008, the Swiss National AIDS Commission, based on the consensus of experts, argued that people living with HIV/AIDS (PLHA) in use of TARV and without other sexually transmitted infections did not transmit the virus sexually[8]. Four years later, the clinical trial HTPN052 confirmed this finding, showing that the treatment of the PLHA with ARV may cut down by 96% the risk of HIV transmission, an effect that sustained even when the treatment began in the early stages of infection and contributed for the reduction of morbidities associated to HIV[9]. Its results, in addition to the evidences of previous studies, sustained the recommendations of the adoption of the so-called Treatment as Prevention (TasP) by the WHO[10].

Clinical trials showed that the preexposure prophylaxis (PrEP) also has a protective potential, varying from 44 to 90%, with higher effectiveness among gay men and serodiscordant couples and invariably associated to adherence[11-13]. Results differing from these were found in two studies, which analyzed the protective effect of the daily ARV intake among the women of African countries, interrupted owing to the lack of positive evidence findings[14,15], which was attributed to the low adherence[16]. Among women, positive results were found in a clinical trial on the use of a topical gel based on 1% tenofovir before and after sexual relations[17].

The results of these clinical trials led to both optimism and doubt. The optimism led to the announcement, in 2012, of the possibility of the end of the epidemics in its fourth decade[18]. In theory, the accumulated knowledge, the worldwide commitments made, the achievements in the field of human rights, and the technologies existing nowadays, if properly used, could lead to the elimination of HIV transmission[19].

The doubts focus on the possibilities of operating the use of these technologies at population level and ensuring its maximum efficiency. In this sense, one of the frequent questions on the matter refers to the possible effects that their implementation may have on sexual behavior. It is feared, above all, the occurrence of the so-called "risk compensation", a notion that postulates that each person accepts living up to a certain level of health risk, estimated subjectively, in exchange of the benefits that a given practice is able to offer them[20]. Given the introduction of a new intervention, people could increasingly adopt nonprotected behavior for perceiving themselves in lower risk[21]. Considering the partial protection of these new prevention technologies, it is often questioned whether their offering will lead to an increased incidence of HIV, in case people give up or reduce the use of condoms, start having many sexual partners, or adopt any other behaviors understood as greater exposure to the virus.

Researchers, policymakers, and people affected by AIDS have been tempted by matters such as: in which ways will it be possible to implement new technologies to the programs and services, disclose them in campaigns, and disseminate the scientific information on their

risks and benefits? Would this result in falsely protective practices and attitudes and in risk compensation? Would it be a right for people who have not found condoms to be a viable technology to have access to other technologies? Would it be a duty of the prevention programs to ensure access to those? How could this be done in Brazil, where the emergency of this debate occurs in a scenario of fragile perspective of rights and collective participation in the decision-making processes?

The objective of this text is to offer a critical reflection on this debate and their specificities in the Brazilian context. In such a complex and broad theme in the global response to AIDS, we chose to focus on two matters that we consider central for the discussion in Brazil: which actions to prioritize in order to ensure an effective and appropriate implementation of the new prevention technologies, considering the technical, sociopolitical, and cultural aspects? How to reintroduce sexualities of the 21st century in new prevention speeches in the country and to deal with the so-feared "risk compensation"?

We started with a narrative review[22] of scientific articles based on the concept of risk compensation that analyze the occurrence of changes in sexual behavior of the users of methods alternatives to condoms. The psychosocial constructionist approach and the vulnerability and human rights framework (V&HR)[23,24] have guided our critical reflection on the literature and on the moment of the Brazilian response.

METHODOLOGY

The search was conducted in the PubMed database, between September and October 2013, using the keywords as free terms: "risk compensation" AND "HIV OR AIDS" were combined in different searches according to the kind of technology studied —"circumcision," "postexposure prophylaxis OR PEP," "preexposure prophylaxis OR PrEP," "ART OR antiretroviral treatment," and "new prevention technologies." In our analysis were included studies published between 2000 and 2013, which, through qualitative and quantitative techniques, investigated the effects on sexual practices of four different technologies: the treatment of HIV infections with ARVs, the PrEP and PEP, and male circumcision.

The analysis was guided by the V&HR framework, which values the programmatic mediation in the analysis of the dynamics of the health–disease process, focusing on the social history and the institutional responses to AIDS[23]. This approach differs from the perspective of the model known as the Natural History of Disease and Levels of Prevention (HDN), still hegemonic in health education, and widens the model known as New Health Promotion (NHP)[23]. The V&HR framework is based on the interdisciplinary dialog in order to understand the health–disease process, analyzing it at three inextricably interconnected levels: the programmatic, the social, and the individual levels. For such, it seeks for transdisciplinarity, considering mainly the contributions of epidemiology, social sciences and humanities for the interpretation of their findings.

Articulated with this framework, the psychosocial approach prioritizes the understanding of the "intersubjectivity on the scene" and its implications in sociocultural scenarios. It values the dimension of people as agents of speeches and rights, in contrast to the notion of biological–behavioral individuals from health psychology[25], which remained central in the HDN and NHP models and prevail in the sociocognitive field that produced the concept of risk compensation. The understanding of the living intersubjectivity, i.e., the interaction with "the person in the context and the context in the person"[23,24] is what guides the prevention action, inspiring since the planning of the actions, the communication strategies in public campaigns, to the programmatic encounters organized by the services. Mediated by numerous knowledge developed in the fields of care, education, psychology, and counseling and clinic, these encounters value the everyday scenes and the trajectory of each person, taken as agents of rights and of preventive actions rather than an *estereo-types* extracted from population studies.

RESULTS

There is an important buildup of studies on the risk compensation phenomena among the users of technologies alternative to condom. The first studies to explore the theme were conducted in 2000, when ARVs started being used for HIV treatment and there was a speculation on the effects of the perception of AIDS as a treatable disease. Researches carried out with the gay community in the United States and Australia showed that those who believed in the potential transmissibility reduction of TARV and as well as the most optimistic about the benefits of the treatment, in fact, tended to be less concerned about exposure and, consequently, to adopt less-safe sexual practices[26,27]. However, it was observed that the growth of these practices did not result directly in the increased incidence of HIV in this groups, a fact that was addressed in several explanations. The main one proposed that the TARV would effectively reduce infectivity and transmissibility of the HIV, resulting in a population protection in those countries where there was ample access to treatment[28].

Right after that, studies started exploring the theme in the context of PEPSE use, after its implementation. A qualitative analysis performed in Australia with 88 MSM[29] indicated that users of this technology are highly motivated to protect themselves from HIV and that they used this method in exceptional situation to their usual practices. The experience of use showed to be motivating for the maintenance of safe sex practices, both by the understanding that the PEPSE was a complementary technology to condom use as for the experience of dealing with ARVs and its effects. Similarly, a US study with 397 people (most of them MSM) who used the method and were submitted to counseling sessions for the reduction of risks showed that most participants had a significant reduction in the high risk practices and the repeated search for the method was low (17%)[30]. The biggest challenges pointed out for expanding the access and effectiveness of PEPSE, nowadays, are the knowledge on the existence of the method[31] and the adherence to it, with records of high dropout rates of treatment[32], including cases of exposure owing to sexual violence[33].

Regarding PrEP, a clinical trial in the United States with 400 MSM, which compared the effect of using the method in two groups (one started taking it at the beginning of the study and the other one started it 9 months later) did not find evidence of increased riskier sexual practices in either groups, in 24 months; on the contrary, it was observed a reduction in the frequency of unprotected anal sex in both groups. When the practices were analyzed according to the partner's serology, reduced occurrence of unprotected anal sex with those of unknown or positive status and an increase of this practice with seronegative partners were observed[34]. A longitudinal analysis carried out with heterosexual serodiscordant couples who took part in *Partners PrEP* (a study that tested the effectiveness of the technology with heterosexual serodiscordant couples) compared the use of condoms before and after the disclosure of the effectiveness of PrEP among the intervention group. No changes in the practices between serodiscordant partners who had been originally selected for the study were found, although there was an increase in the number of sexual relations without condoms with new partners established after the study, which may be explained by the fact that, often, those relations occur with people of unknown serological status[35]. A mathematical model that analyzed the potential impact of the PrEP among MSM and transgender women concluded that increase in risk practices could increase the incidence of HIV only if they occurred among PrEP users with lower adherence to the method; therefore investing in educational components of the services is an indispensable and cost-effective complement to the offer of drugs[36].

Among circumcised men, the results of the studies vary. In countries where the technology is being implemented there is evidence that, although the correct knowledge about it is relatively high, up to one-third of the population believes in incorrect information that could lead to risky behaviors, such as that circumcision offers full protection (9 to 15%) and circumcised HIV-positive men do not transmit HIV (14 to 26%)[37]. A cohort in Uganda identified similar behavior changes among men who opted for circumcision throughout the study and those who chose not to do it, not having, therefore, an association between the option for surgery and the higher exposure to risky practices[38]. Similar results were found in the same country in a study that collected information from men who had participated of a randomized clinical trial after its closure[39]. In both the studies, the groups received educational activities on STD/AIDS and pre- and posttest counseling, with information on the partially protective effect of circumcision. A qualitative study in Kenya with 30 circumcised men also found that most of them kept their usual sexual practices, although reports indicating the increase of unprotected intercourse and of sexual partners have been found, motivated by the desire of skin-to-skin sex and the perception of oneself as a more desirable partner after circumcision[40]. As circumcision is a technology protecting only heterosexual men, it is questionable whether it would be ethical to be offered, especially considering that the partial protection of men can make it even more difficult to women to negotiate safe sexual practices in contexts of gender inequality. Simulation studies[41] indicate that any behavioral changes among circumcised men may increase the risk of transmission for their female partners and, in the medium term, also increase the incidence among men in the general population.

DISCUSSION

THE IDEA OF RISK COMPENSATION: FEAR OF UNBEHAVED SEX?

Narrative reviews are intended to discuss theoretically and contextually the development of a theme, based on the literature and critical analysis of its findings, configurng a qualitative approach to the knowledge available.

What the consulted literature informs is that, in general, the use of biomedical technologies for prevention does not seem to induce their users to increase risky practices, but rather that the scenario may vary according to each kind of method, meaning that the application of each one of them requires attention to specific aspects that are much more relevant than the concern with the so-feared risk compensation. Regarding PEP, the main concern is in ensuring a broad knowledge to assure its use in time, as well as is investing in adherence, which is also central for PrEP. For this second technology, it is also necessary to analyze which groups may benefit more of its use, because its effectiveness among women, for example, remains questionable, although it may become appropriate to their daily routines for topical use, as promising studies have been indicating[42]. In the case of treatment for PLHA, although the high level of protection offered may lead to the belief that its adoption outweighs the risks of behavioral aspects resulting in the increased of HIV incidence, once more adherence appears as the main challenge, because the achievement and sustaining of viral suppression depend on it[43]. In relation to circumcision, the concerns remains not because of the frequency of behavioral changes, but because, even if such changes occur in low proportion, they may be enough to increase the incidence of HIV, as the protection is only for one group and relatively low. Researchers who analyze the epidemics by the gender perspective argue that indications that circumcision may increase the risk among women cannot be ignored, especially considering the difficulties men have in remaining abstinent during the healing process, and advocate the expansion of investments in methods that protect everybody[44]. Advocates of the method claim that, in situations of generalized epidemics and with mainly heterosexual transmission, the protective effect among men would extend to the whole population at medium and long terms[45].

The literature also points out to important limitation in the available knowledge about the effects of new technologies on sexual practices. The limitation is that, for some technologies, the existing information is limited to the experience of specific groups, as is the case of PEPSE, investigated almost exclusively among MSM. Besides that, a great part of the existing analysis was carried out in controlled studies, which limits the extrapolating of the data into "real life" and the routine of health services, for a number of reasons[20]: the interventions performed in this kind of study are not reproducible in large scale; the probability of finding significant differences among the control and intervention groups is small, once that for ethical reasons both groups receive identical standardized interventions, which will not occur in implementation; and the confidence of users in technologies being studied tends to be lower than when they are actually offered in health services. Methodological

solutions for those limits include[20]: identifying innovative designs for clinical trials, such as the so-called *nested-trial strategy* that proposes the allocation of the subjects in the arms of the study in the proportion of 2:1, in order to interfere in their perception on the probability of being effectively using the studied drug; in phases II and III trials, including questions to identify participants who believe they are receiving the effective intervention and comparing their behavior with those who believe to be receiving a placebo; carrying out qualitative and mixed-method studies to deepen the knowledge on the risk perception and sexual behaviors; and investing in implementation studies, including analysis of programmatic issues involved in offering the methods.

From the theoretical point of view, the main limitation refers to the fact that the concept of risk compensation, originated in sociocognitive theories, considers the biological–behavioral individual the only responsible and preferred "target" of prevention actions, reducing the social context to the "environment," as the dimension in which the individual can deal with it. This approach has practical consequences , because it artificially abstracts the complexity of the ways in which sexuality is lived up and disregards the structural, contextual, and intersubjective aspects that affect the protection resources that each person may access and use in each intersubjective sexual encounter. By doing it, it results in insufficient preventive strategies, especially when answering to situations of greater social and programmatic vulnerability to the HIV, among which, for example, racism, sexism, homophobia, and the violation of human rights are frequent.

As an alternative, approaches from social sciences have been producing important information by analyzing sexual practices as social practices. When analyzing, for example, the reduction in condom use among the gay community after the introduction of TARV, these approaches broadened the classical investigations of use/not use by kinds of partners and began to investigate how and on what grounds the decision of using condoms was made[3,46]. A set of seroadaptive practices were identified, consisting in at least four types:

1. serosorting: choice of sexual partners of the same serological status;
2. seropositioning: choice of positions for anal sex between serodiscordant partners;
3. negotiated safety: agreement of not using condoms with a seroconcordant stable partner and using it with casual partners; and
4. withdrawal: removal of the penis from the anus before ejaculation.

The identification of the everyday dynamics of these practices showed that the reduction in condom use should not be interpreted, invariably, as risk compensation. It revealed, in fact, the occurrence of a cultural reinterpretation of the safe sex culture produced by and inside gay communities in the 1980s, in search of more feasible prevention strategies that could be adopted among these communities, which had already been dealing with the epidemics for over 20 years. The decision about condom use based in a process of risk classification following biological markers of serostatus and viral load indicates that people have agency over prevention speeches and practices. Moreover, it shows a process of acculturation of the knowledge produced by

bioscience,[47] which, as the constructionist approach of sexuality and the human rights framework teaches us[48-50], is always expected. Each person, at each meeting, reframes the prevention speeches that they access, according to their experience, their particular context of life, and their happiness projects. What happens in daily life routine, therefore, is not just a compensatory process, but instead, an action, more or less informed, of people who act out as agents of the speeches they know and who put into practice the resources they have access to.

Because people are routinely agents of their sexual practices and because behaviors are produced or socially supported, an important part of the Brazilian population was already not using condoms even before there were other prevention technologies. For the same reason, the use rates always varied according to gender, age, partnership, and marital status, reflecting the inequalities of power in the society that are updated in the intersubjective dynamics of each sexual scene. As already reported[48] in testimonials of PLHA, when they were "catching AIDS," they were "not catching AIDS," "not exposing themselves to the virus," or "having risky behaviors": they were loving; surrendering to a passion; without money or place to include a condom; full of money, but with a "messed up" head; working; being abused; and having sex with their husband by obligation; i.e., they were living lives in a similar way to others.

Therefore, it seems to us that the offer of preventive methods proven to be efficient, safe, and appropriate to the Brazilian epidemiological reality is an indispensable programmatic action to ensure the right of people protecting themselves from HIV in those situations in which, for many reasons, the condom is not a viable option. Especially, if we consider that epidemiologic analysis have indicated that AIDS is growing in Brazil, mainly by sexual transmission and among stigmatized groups. The year of 2011 registered the highest number of new cases since the beginning of the 2000s[51]. Plus, studies showed that the prevalence of HIV among gay men aged 35 to 49 years reaches the worry percentage of 27.7% in specific regions of the country[52] and 14.2% at national level[53], while among prostitutes the prevalence reaches 5% among[54] and 6% among drug users[55].

This being said, we must readdress our initial questions: which are the actions that may ensure an effective and appropriate implementation of new prevention technologies in the country, considering the technical, social, political and cultural aspects? How to reintroduce sexualities of the 21st century in the prevention speech?

Regarding implementation, the literature and the knowledge accumulated by the Brazilian response allow us to enlist some central actions:

- to invest in comprehensive programs integrating structural, behavioral, educational, and biomedical interventions;
- to develop guidelines to orient the approach of central themes, such as adherence, protection degree, and combination of methods, based on the literature and on consensus of experts, which must includ representatives of the most affected groups;
- to produce actions for communication, education, and psychosocial care that can guide users in this new epidemics scenario as well as disseminate technical information,

such as the degree of protection offered by each technology, the importance of adherence as a determining factor for protection, and the importance of conducting laboratory monitoring;
- to ensure laboratory support and clinical follow-up of the users of the new technologies;
- to improve the technologies of care so that they dialogue with the intersubjective and sociocultural universe of people, broadening the possibilities of building feasible, safe strategies of self-care and adherence, based on daily scenes of using the methods[57]; and
- to carry out studies to follow-up implementation.

But, in addition to investing in technical actions and even in order to be able to carry them out, the progress depends on sociopolitical changes in the conduction of the AIDS response. The response to the epidemics in the 1990s taught us about the importance of combining the distribution of supplies and a frank talk about sexuality, whether in community workshops with the hardest hit groups or in prevention programs in schools, compromised with fighting discrimination and defending human rights of those most affected by the epidemics[58].

However, after two decades of public investment in a prevention policy based on social participation, on the human rights-approach and on the courage to innovate, since the end of the first decade of the 2000s, Brazil has faced some setbacks[59]. The crisis in the relation between governments and civil society dismantled the spaces of participation, while the setbacks in sexuality policies and the stigmas associated to them indicated a possible substitution of the rights perspective by a technicist approach to health.

In this scenario, the public debate on the innovations in HIV prevention has been marked by tensions. If, initially, the Brazilian government postponed the debate while the social movement demanded the review of the prevention programs and studies indicated the need to do it, more recently, the official announcement of the implementation of a set of new technologies was questioned by groups directly affected by this decision, which did not participate enough in the decision-making process[60].

At the same time, the attempts to desexualize the epidemics grew in the country, meaning that there were attempts to disregard sexuality as a body experience and sanitize sex. This movement (that occurs internationally since 2004[61], influenced also by the emphasis on the importance of the macrosocial and structural aspects[49]) has become more radical here since the politicization of sex as a theme in electoral campaigns grew and, against all scientific evidence, the political marketing prevailed on the principles of successful AIDS public policies, seeking to extract the physicality of sex from the sexual and reproductive health actions. The naming of a federal obstetric care program of "stork network" is emblematic, just as are the censorship by the Ministers and Secretaries of Health of campaigns aimed at fighting stigma and discriminations of prostitutes and homosexuals. This mode of managing the governmental policy contributes to reinforce and legitimize misconceptions (such as "the problem of AIDS is solved" or "one lives well with AIDS,

the disease is controlled") recurrent among those responsible by the prevention actions, such as schools managers and student's parents.

They accommodate the difficulty of talking about sexuality or prevention, and, when doing so, they barren any discussions on the implementation of preventive methods, because the effective use of all of them depends on the possibility of sexual partners dialoguing about sex and prevention.

In the process of implementing new technologies, it is urgent to reestablish the principles that governed the AIDS response in Brazil and that the international consensus has shown to be central for the success of prevention programs: the participation and the emphasis on human rights. In this sense, two movements are fundamental: to strengthen the channels of participation as a primary condition for the implementation strategies to be socially legitimized and responsive to the population's needs; and to recover the dialogue about sexuality, not only with technical information but also promoting the respect to diversity and facing the stigma that contributes to the higher vulnerability of the most affected groups.

In order to move forward in the AIDS response, there is no strictly technical response, as advocated by the Ministry of Health in recent occasions[62]. As long as the virus is circulating and AIDS is still epidemic, we will have to face the challenge of sexual education and counseling, respecting the terms and values of different people, their sexual identity and their desires, which is the most productive way of educating people about prevention methods (including new technologies). Prevention methods are used because people expose themselves to the virus in their sexual scenes and practices; it is only in the context of e dialoguing about these experiences that the reflection on the use of PrEP, PEPSE, TasP, or condoms is meaningful.

With all the knowledge accumulated in the three decades of epidemics (which demonstrated that the higher the violation of the human rights, the higher the probability of being exposed, getting sick, and dying of AIDS), it would be unwise to sustain the desexualization of prevention, neglecting the right to protection against discrimination and compromising the sustainability of two decades of investment in sex education.

CONCLUSION

DIALOG TO MOVE FORWARD

By oscillating between optimism and doubt, the field of HIV prevention lives a moment of reformulation. Even with a wide set of information produced regarding new technologies, there are still gaps on the social and cultural effects that the implementation in large scale may cause.

Moments such as this are recurrent in public health and require sophisticated analysis of the risks and benefits of each decision. Making use of scientific evidences and analyzing

them critically based on theoretical, ethical, and political references are indispensable strategies in order to move forward. It was these strategies, articulated with the audacity to face the public debate on sexuality and drugs and the collaborative actions with the civil society, which justified the adoption of public policies that were essential to the success of AIDS control in Brazil, such as harm reduction and condom distribution.

In this direction, this article recurred to the critical analysis of the literature oriented by the theoretical frameworks of V&HR and of the constructionist psychology, allowing us to conclude that the fear of risk compensation does not justify paralyzing the programmatic actions, for three main reasons. First, because the data available do not confirm that this is a phenomenon that occurs often, especially for the technologies that the country has already adopted (case of the PEP) or is studying to adopt (case of the PrEP). Second, because the experience of sexuality is not limited to cognitive and compensatory processes, as the constructionist and the the V&HR approaches have validated among different populations. With theory and good practices, we have already overcome the notions of "uncontrollable desires" of men and "hormonal fever of youth," and we already know that providing information and training abilities of protected sex do not ensure the adoption of prevention (nor stimulates sexuality, the fear of the most conservative ones). Any person, even in the social conditions that produce the highest degree of vulnerability, will always be, at some level, agent of their sexuality and will manage and reinvent/adapt the preventive speeches, if they have access to them and to the necessary prevention technologies. It is not wise, therefore, to pursue strategies to control the sexual experience. Finally, if there are several possible methods coexisting with the evidence of the growth of the epidemics, one cannot justify, from the point of view of sexual rights and health, that only one prevention technology is available. Condom and all the other technologies may be more or less appropriate to the needs of each person or community, in ways that will vary according to singular and contextual matters, and so they should be thought as complementary rather than concurrent.

Approximating the scientific knowledge and the daily life in order to produce preventive practices that are feasible to be adopted by the people depends on dialogue. In this sense, the action of health services and AIDS programs will be central to ensure the right to access correct information, as well as in promoting the access to different technologies and to quality care, without losing sight of their role in the transformation of the social context in which the sexual practices take place. Simultaneously, refined epidemiological analysis and rigorous operational researches shall be conducted to guide decision-making and to monitor the effects of introduction of the technologies[63].

In spite of the challenges, the Brazilian experience certainly ensures conditions for the country to, once more, innovate. The narrow relation with the most affected groups, which has always been central for the responsiveness and legitimacy of the AIDS programs worldwide, will be indispensable in this process. The sociopolitical impasses produced by the defense of a technicist approach, which despises the debate on rights, sexuality, and participation as the core of AIDS programs in Brazil, must be overcome.

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Received on: 01/31/2014
Final version presented on: 10/12/2014
Accepted on: 01/22/2015