

# The Influence of Serodiscordance on the Behavior and Motivation of Sexual Practices among People Living with HIV/AIDS: A Qualitative Study

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## Research Article

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## ABSTRACT

**Introduction:** The advent of antiretroviral treatment has contributed to increasing the quality of life of people who live with HIV, making it possible to change concepts and behaviors related to their life context, such as the acceptance of the disease and establishing or maintaining serodiscordant sexual relationships.

**Objective:** This study's objective was to analyze the influence of serodiscordance on the sexual practices of people living with HIV/AIDS.

**Method:** It is an exploratory study is a qualitative character. In-depth interviews were held with people living with HIV regarding serodiscordant sexual practices, in the Northeast of Brazil. The Information-Motivation-Behavioral Skills Model was used for interpretation and analysis of the data.

**Results:** The participants showed that the condition of serodiscordance influences the adopting of safe sexual practices, such as condom use. Fear and concern about transmitting the virus to the partner are significant, and show how essential it is to receive care from the health service.

**Conclusion:** The main motivation, therefore, for safe sexual practices found in this study, was the fear of infecting the seronegative partner, and the behavior adopted most in the sexual practices was condom use.

## INTRODUCTION

It is estimated that each year approximately 2 million people worldwide are infected by the Human Immunodeficiency Virus (HIV); most new infections are acquired through sexual contact<sup>[1]</sup>.

The advent of Anti-retroviral Treatment (ART) has contributed to a reduction in the morbidity and mortality as well as to an increase in the quality of life of individuals infected with the HIV virus. This implies changing concepts and behaviors related to the life context of people living with HIV/AIDS. As for example, there is a greater acceptance of the disease and involvement in sexual/affective serodiscordant relationships, characterized by the fact that only one partner has the HIV virus<sup>[2-4]</sup>.

The risk of transmitting the HIV virus between serodiscordant partners varies depending on the type and frequency of sexual practice, as well as on the viral load of the infected partner<sup>[5]</sup>. As a result, serodiscordant couples need to reflect on how and which prevention strategies to use individually or in combination to ensure optimal levels of risk reduction for HIV transmission.

Due to the effectiveness in reducing the risk of HIV transmission during sex and at low cost, the condom is most adopted the preventive strategy in health services worldwide between serodiscordant couples<sup>[6,7]</sup>. However, recently other preventive strategies have been employed as well like Treatment-as-Prevention (TasP), Pre-exposure Prophylaxis (PrEP) and Post Exposition Prophylaxis (PEP)<sup>[8-11]</sup>. Among Brazilians serodiscordant couples the condom is the most common practice in relation to TasP, PEP and PrEP<sup>[12]</sup>.

Diverse emotional, cultural and social factors are involved in decision by safe sexual practices in serodiscordant relationships. These issues range from desire of maternity or paternity, stable love relationships to chauvinism and sensations of invulnerability about the seronegative partner's infection<sup>[13,14]</sup>.

In order to help these serodiscordant couples to overcome their fears, difficulties and doubts, it is necessary to understand what the influence of infection by HIV/AIDS on motivation of safe sexual activities; and consequently, what its influence is on the behaviors found in these couples' sexual practices. As this is a subjective question, it is necessary to carry out a subjective analysis for each variable involved.

To the best of the authors' knowledge, no data has been published in the literature regarding the influence of serodiscordance on the motivation and behavior related to couples' sexual practices, through the Information-Motivation-Behavioral Skills Model. As a result, this article aimed to analyze the influence of serodiscordance on the sexual practices of people living with HIV/AIDS, mediated through this theory.

## METHOD

### Study Design

This is an exploratory study with a qualitative character. The study was approved by the Committee for Ethics in Research with Human Beings of the Federal University of Maranhão, under Opinion 1,378,162. All the participants signed the terms of free and informed consent prior to joining the study.

The investigation was undertaken between January and June 2016, in an outpatient center specializing in the treatment and monitoring of persons with HIV/AIDS in the city of Imperatriz, in the state of Maranhão, in the Northeast of Brazil. This multidisciplinary service currently treats 1022 people with HIV/AIDS.

### Participants

The following were established as inclusion criteria: to be a person aged 18 years old or over, carrying the HIV virus, registered in the STD/HIV/AIDS outpatient clinic and in a sexual relationship with a partner, previously tested, whose serological status is negative for the HIV virus. The following were excluded: people with cognitive deficits, communication deficits, or who were seriously ill and unable to participate in the interview. Analysis of the medical records assisted in ascertaining these factors.

Recruitment of the participants took place through intentional sampling, due to the specific character of the participants and the qualitative richness of the data which the technique promotes. Furthermore, it is believed that through this approach it is possible to describe a subgroup, with specified similarities, in depth<sup>[15]</sup>.

As a result, a total of 14 people participated in the study, aged from 31 to 63 years old, of whom nine were male and five, female. In relation to profession, the following distribution was observed: housewives (5), retired (4), the remaining five were paid workers.

In relation to educational level, three patients had studied for over 10 years, being satisfactory educational level in accordance with the laws of guidelines and bases of the Brazilian education, nine for less than 10 years, and two were illiterate. Regarding religious practice, only three reported having no religion.

In relation to sexual orientation, three of the men stated that they were homosexual, while the other participants stated that they were heterosexual. Among participants, diagnosis and therapeutic (use of antiretroviral drugs) time was about 8.18 years (SD=6.19; min-max 1-20 years).

### Data Collection

In-depth interviews were held and audio-recorded in private rooms in the HIV/AIDS outpatient center, lasting from 45 to 90 min. A script, previously elaborated by the researchers, and containing open questions related to

sociodemographic and clinical data, as well as questions about the information provided by the health service on safe sex practices, the main difficulties in sexual practices with the serodiscordant partner, and the couple's experiences after diagnosis. Care was also taken to investigate the safe sex practices, the main difficulties in the sexual practices with the serodiscordant partner, and the couple's experiences since the diagnosis.

### Data Analysis

The empirical material was transcribed in full and was later organized into categories of meaning, in accordance with the meaning attributed by the interviewees and according to the discourse analysis technique, which allows an approach which focusses on the meaning and not only on the textual content, by revealing the essence of each account<sup>[16]</sup>. The identification of the participants in the interview was codified using the letters MP for "male patient" and FP for "female patient", so as to ensure the confidentiality of the information provided.

With the aim of examining the perception and behavior related to safe sex practices of people who live in a situation of serodiscordance for HIV, the study was based on the Information-Motivation-Behavioral Skills Model (IMB). The model includes three pillars which influence changes in behavior: information and knowledge regarding the health behavior; the individual's motivation for carrying out the behavior; and the behavioral skills which are necessary for carrying out the behavior<sup>[17]</sup>.

The data collected were validated by two nurses and psychologists who are specialized in research methods and in the care of persons with HIV/AIDS.

## RESULTS

The results are presented based on the content of the participants' reports during the interview, from which three categories emerged: The guidance of the health service regarding safe sexual practices; Motivations for safe sexual practices in the light of the serodiscordance; and safe sexual behavior in the light of the serodiscordance.

### The Guidance of the Health Service Regarding Safe Sexual Practices

It was observed that the participants obtained information on safe sexual practices mainly from the health professionals, during medical and nursing consultations, in addition to patient groups and electronic media, in specialized websites, social networks. The information, according to the patients, was shown to be a factor which facilitated adherence to safe sex practices in the light of the serodiscordance.

*"It is good to receive information about how not to infect my partner, as we are lazy and curious to know how the disease affects our body"* (MP1).

*"It is good to receive information about how to take care of our health and our partner. I say this because if I was not getting this information from the doctor and the nurse would be doing everything wrong and maybe I had already infected my partner"* (FP2).

*"I use the internet a lot to inform myself about the disease, and it was through HIV/AIDS websites that I became convinced of the importance of using condoms, both for my protection and for my partner. Whenever I can disclose the novelties of the disease in the group of patients"* (FP1).

*"It is good to receive information about safe sexual practices, we always need information, we never know everything, no matter what access we have to the internet, there is always something new that health center professionals give us, and that makes all the difference to our health, because the professionals here facilitate our understanding"* (FP3).

It was observed that the information about safe sexual practices was passed on by the health professionals with greater intensity at the beginning of the diagnosis, not being a constant practice throughout the treatment. The prevention guidelines were acquired mainly in the group activities, through the exchange of experiences lived by patients in conversation wheels and health education activities.

*"At the beginning when I was diagnosed with this disease the doctors and the nurse talked to me about the importance of condom use, but then they did not talk anymore"* (PF3).

*"I only received this information about not transmitting the virus to my partner, through the psychologist who talked a lot about condom use, in the activities of the membership group. The doctor only speaks if I ask anything"* (PF1).

*"I learned about the importance of using condoms mainly with the adherence group. I did not like being part of the group, but then I learned that I learned a lot about safe sex with the other patients in the group, so I was encouraged to use the condom and protect my partner who does not have the virus"* (PM2).

The participants were questioned about their knowledge on Post-Exposure Prophylaxis (PEP) and Treatment-as-Prevention (TasP), which are recent preventive strategies in Brazilian public health to reduce the exposure of seronegative couples to the HIV virus. Some patients did not know the new prevention strategies, PEP being the only one mentioned by the patients, through daily experiences.

*"No. I've never heard of these prevention strategies" (FP1).*

*"I know PEP, for example, I had sex with a girl without a condom and she risks being infected with the virus. She has a period of time to take antiretrovirals not to get the virus" (PM7).*

*"PEP is a combination of medicine that you take up to 72 hours to avoid infection, because the virus will stay in the bloodstream, but it will not infect the cells, so the cells will be protected. It will be eliminated by the body and the treatment lasts three months" (PF3).*

### **Motivations for Safe Sexual Practices in the Light of the Serodiscordance**

Experiencing an affective relationship in conditions of serodiscordance was shown to be a motivating factor for experiencing the practice of safe sex. In particular, this was due to fear of contaminating the partner.

*"Before the diagnosis of HIV we did not use the condom, my partner was lucky not to become infected. Now we have to prevent and use condoms, especially if they do not get the virus" (PM4).*

*"I would really like to be a father, but if I had sex without a condom, she would be at risk of becoming infected, so I would rather protect her and give up the desire to be a father."*

The serodiscordance condition was shown as motivation to experience safe sexual practice through the use of the male condom, but the use of condoms is a difficulty to keep the sexual act pleasurable.

*"We would really like having sex without a condom, I don't like using it, I only use it because I'm forced to" (PM1).*

*"There are difficulties because of having to use condoms, because they're not comfortable, are they, but you have to use them" (FP1).*

*"The only thing we are scared of is the condom breaking" (FP3).*

Changes related to sexual pleasure are present among the participants, and directly affect the continuity of the sexual life, being evidenced by the decrease of the sexual practice and desire.

*"It changed for me because I became less interested in sex, I don't know if it is because of the drugs which I am taking, colder, in everything." (MP6)*

*"After the HIV-positive diagnostic I don't feel as much desire to have sex. Actually, sometimes I don't have it for fear of infecting my partner" (PF1).*

*"Each day after the HIV-positive diagnostic the satisfaction with sex is worse. I don't have pleasure" (PF2).*

In contrast, two patients were convinced that accepting the serodiscordant condition allows them to experience it safely without altering the couple's sexual desire and practice.

*"I don't have any problem with it, firstly because I am very aware of the problem that I have and that she does not have, I know what I am going through, and I want her not to go through it, so... if you like somebody, you care for them" (MP7).*

*"So far, there hasn't been anything. Everything is okay between us so far" (MP3).*

### **Safe Sexual Behavior in the Light of the Serodiscordance**

A large proportion of the interviewees stated that they use condoms in sexual relations as a protective barrier, most using the male condom. Two of the female participants reported meeting resistance from their seronegative partners regarding condom use. Even so, the desire to protect the partner motivates these women to demand the use of condoms during sexual relations.

*"Just condoms, the male ones. We tried out the female ones but she doesn't use condoms, it's just me" (MP1).*

*"Condom. If you are HIV-positive or not, you are forced to use it!" (PM2)*

*"He doesn't want to use them, but I demand that he does, in order to protect him" (FP2).*

Some participants reported a strong negative feeling and of fear, when they perceive that some unforeseen event occurs during sexual relations. This is a fact that impacts on the quality of the affective relationships.

*"A condom broke, that has already happened. And I already felt guilty, you know?! Not knowing whether he had caught it or not, I had that guilt, I even wanted to let him go" (FP1).*

*“The condom broke, I nearly died, and until she did the test, my conscience didn't relax” (MP7)*

*“It broke once, I was worried, as well as me being in this life, having to come here every month, she would have to as well” (MP4).*

*“The condom breaking happened, I even got pregnant, I did all that treatment during my pregnancy, and my son was not infected, he is now thirteen years old” (FP3).*

### DISCUSSION

It was possible to observe that the reinforcement of motivation for the practicing of safe sex (through condom use) by the health professionals predominated at the start of the diagnosis and treatment. From then on, other spaces and instruments provided the couples' information.

Due to the chronic nature of the infection, safe sexual practice must be ongoing in the discourse of the health professional who cares for these couples. Furthermore, it is important to incorporate other strategies into the health education, for the motivation of this practice while never disassociating these strategies from the routine which is the basis for the understanding, reflection on, and solving of health problems in primary care.

Serodiscordance influenced the participants to use condoms as a way to protect their partners, but condoms were identified as one of the most difficult difficulties, since their use implies limiting a pleasurable relationship and its use converges with the concept of restriction of the condom. Naturalness and spontaneity of the sexual act.

The use of condoms among couples has been shown as a barrier to maintaining sexual desire and practice. A study conducted in Kenya with serodiscordant couples showed that despite receiving information about the importance of condom use, this was not a frequent practice among couples due to interference in sexual satisfaction and fertility plans [18].

Research conducted with patients from this service revealed that condom use is a constant practice among married couples, being used less frequently among single people, and women had difficulties in negotiating condom use with the male partner, but the study did not reveal the motivations and behaviors in the involvement of safe sex practices [19].

In the light of the difficulty faced by couples in establishing or maintaining condom use, it is necessary to choose alternative methods which favor pleasurable sexual practices, which are technically safe, and which are planned as part of holistic, individualized and multidisciplinary care [20,21].

In Brazilian public health services, the main strategy to reduce HIV infection is still the male condom. In recent decades, other ways such as TasP, PrEP and PEP have been added into health services, maybe due to this they are still poorly understood by the community [12,22].

For example, a review study based on studies from different countries concluded that the majority of people living with HIV/AIDS investigated were not aware of preventive measures such as PEP and the use of ART in reducing the risk of transmission [23].

Our findings reveal that there still is a lack of knowledge about preventive practices for safe sex beyond condoms.

Studies have shown that PrEP and PEP have offered serodiscordant couples an additional strategy to reduce the risk of HIV transmission, meet their sexual and fertility desires, and contribute to the acceptance of the serodiscordance condition [14,18]. Both themes are very common and important in Brazilian relationships. Consequently, we are confident that these therapeutic tools can help in coping and managing serodiscordant couples.

Fear was a predominating feeling in the reports of the participants in this study, in both motivation and in behavior. Nevertheless, the serodiscordance can trigger other conflicts, such as guilt, related to the changes in behavior of the sexual practices, sexual abstinence and consequently a drop in the quality of the affective relationships [24]. In all the cases, the negative feelings are maintained by this group's lack of empowerment, a crucial fact in the experience of safe and pleasurable sexual practices.

The adoption of sexual behaviors and strategies for preventing the virus—besides protection—allow the couple to experience a feeling of understanding and decision-making in relation to the condition of serodiscordance [5,25].

Previous investigations have indicated that in spite of the feeling of anguish which permeates the affective and sexual relationships of people who live with HIV/AIDS, serodiscordant couples maintained an active sex life, with the strengthening of affective bonds and emotional support, manifested not only through the sexual act, but also through the help given in care related to the partner's health [26,27].

It is a fact that the transmissible and incurable character of HIV infection leads to a need for changes and adaptation in serodiscordant couples' sexual practice. This tension may be reflected in behaviors which are negative or positive for the



couple's life. In the first case, it is possible to indicate denial of the risk of transmission, reduction in sexual desire, or even sexual abstinence [28]. On the other hand, the recognition of the risks of infection, the adoption of protective measures and reflection on the couple's new sexuality can have positive repercussions in these couples' quality of life [29,30].

The use of the "Information-Motivation-Behavioral Skills Model" in this research has contributed to support health professional's activities, especially the vulnerability behaviour measurement and the planning of strategies such as the use of psychometric scales, focus groups or active listening in order to assess the motivation and behavior of the sexual practices of serodiscordant couples in relation to HIV/AIDS. Knowing these couples' vulnerabilities is the first step to establishing motivation and change of behavior for a healthy sexuality.

This paper has some limitations for the generalization of the findings: the sample was restricted to a single locale and cultural scenario, the partners (seronegative) were not included, and the accounts were not differentiated according to the relationship the interviewee was in or time since infection.

It is recommended that this study design should be reproduced in such a way as to overcome the above-mentioned limitations, so as to explore other problems and generalizations. In this way, it will be possible to construct a more consistent panorama of the affective and sexual conditions of people who live with HIV/AIDS in conditions of serodiscordance.

### CONCLUSION

Based on the participants' reports, it was noted that the principal motivation for safe sexual practices was fear of infecting the seronegative partner. As a result, the behavior adopted most in the sexual practices was condom use.

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