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HIV serodifference: the "unsaid" in the social representations of health professionals

Sorodiferença ao HIV: o "não dito" das representações sociais de profissionais de saúde
Serodiferencia del VIH: las representaciones sociales "tácitas" de los profesionales de la salud

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RESUMO

Objetivo: Analisar as representações sociais na perspectiva do "não dito" de profissionais de saúde sobre a sorodiferença ao HIV.

Método: Trata-se de um estudo qualitativo, fundamentado no referencial teórico-metodológico das Representações Sociais, com a Teoria do Núcleo Central e Zona Muda de Jean Claude Abric. Participaram 51 profissionais de serviços especializados da região metropolitana de uma capital do nordeste brasileiro, no período de outubro a dezembro de 2020. Aplicou-se entrevistas com a técnica de substituição da associação livre de palavras. Quanto aos procedimentos analíticos foram realizadas as análises prototípica e de similitude processadas no software *Iramuteq*.

Resultados: Os resultados evidenciaram que o núcleo central demonstrou a presença velada de estigmas e déficit de conhecimento ao tratar da sorodiferença ao HIV, representados nas evocações preconceito, desconhecimento, medo, loucura e amor.

Considerações finais: Os significados atribuídos ao núcleo central sinalizam a necessidade de capacitação dos profissionais de saúde envolvidos na rede de atenção à saúde, a fim de possibilitar a práxis do cuidado, e o enfrentamento dos estigmas que permeiam a sorodiferença e provocam o distanciamento entre parceiros e serviços de saúde.

Descritores: Parceiros sexuais. HIV. Serviços de saúde. Preconceito. Enfermagem.

ABSTRACT

Objective: To analyze social representations from the perspective of the silent zone of health professionals regarding HIV serodifference.

Method: This is a qualitative study, based on the theoretical-methodological framework of Social Representations, with the Theory of the Central Nucleus and Mute Zone by Jean Claude Abric. 51 professionals from specialized services from the metropolitan region of a capital in the northeast of Brazil participated, from October to December 2020. Interviews were applied using the free word association replacement technique, with prototypical and similarity analyzes processed in the Iramuteq software.

Results: The results showed that the central nucleus demonstrated the veiled presence of stigmas and lack of knowledge when dealing with HIV serodifference, represented by the expressions prejudice, lack of knowledge, fear, insanity, and love.

Final considerations: The social representations attributed to the central core are anchored in prejudice, ignorance, fear, and insanity. Such meanings signal the need for improvements in the knowledge of health professionals involved in the health care network, in order to enable the praxis of care, and to confront the stigmas that permeate serodifference and cause distance between partners and health services.

Descriptors: Sexual partners. HIV. Health services. Prejudice. Nursing.

RESUMEN

Objetivo: Analizar las representaciones sociales desde la perspectiva de la zona silenciosa de los profesionales de la salud sobre la serodiferencia por VIH.

Método: Se trata de un estudio cualitativo, basado en el marco teórico-metodológico de las Representaciones Sociales, con la Teoría del Núcleo Central y Zona Muda de Jean Claude Abric. Participaron 51 profesionales de servicios especializados de la región metropolitana de una capital del nordeste de Brasil, de octubre a diciembre de 2020. Las entrevistas se aplicaron mediante la técnica de sustitución libre de asociaciones de palabras, con análisis de prototipos y similitudes procesados en el software Iramuteq.

Resultados: Los resultados mostraron que el núcleo central demostró la presencia velada de estigmas y desconocimiento al abordar la serodiferencia de VIH, representada en las evocaciones prejuicio, desconocimiento, miedo, locura y amor.

Consideraciones finales: Las representaciones sociales atribuidas al núcleo central están ancladas en el prejuicio, la ignorancia, el miedo y la locura. Estos significados señalan la necesidad de entrenamiento para ampliar los conocimientos de los profesionales de la salud envueltos en la red de atención a la salud, para que sea posible la praxis del cuidado, y así se pueda enfrentar a los estigmas que permean la serodiferencia y generan distancias entre las parejas y los servicios de salud.

Descriptores: Parejas sexuales. VIH. Servicios de salud. Prejuicio. Enfermería.

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INTRODUCTION

Human Immunodeficiency Virus (HIV) infections manifest in chronic conditions which are permanent and complex. Therefore, it requires long-term, integrated and proactive responses and actions on the part of health systems and professionals; the person living with HIV (PLHIV) must also take action for its efficient and effective control, as well as for the improvement of their quality of life[1].

Since HIV infections are chronic, and PLHIV have been surviving for longer, relevant experiences related to sexuality and affective life started to be reframed[2]. In these circumstances, the possibility of affective and/or sexual relationships with other individuals with negative serology is worth considering; these relations are known as HIV-serodifferent relationships[3].

The performance of health professionals is essential to maintain the status of these people, be it in specialized health care services (SHS), or Primary Health Care (PHC), as both are responsible for providing assistance to this type of sexual partnership, contributing with educational actions related to changing habits, affection, and feelings of the subjects involved, contributing to the awareness of the parties involved.[4].

Considering the context of Brazilian health services, the SAE stands out, due to its adoption of strategies to welcome PLHIV and their partners, aiming to facilitate adherence to treatment and monitoring their needs, while offering care to partners with negative serology and promoting a dialogue of accessible and updated knowledge[5].

Health care in the context of serodifference requires professionals of the multidisciplinary team to focus on preventing the seronegative partner to be exposed to the virus, as well as family planning, safe conception, and the dealing with stigmas and prejudices among these individuals[6,7]. To achieve these goals, health workers should be prepared to provide care and guidance that increase the engagement of serodifferent couples in health services[8].

The lack of knowledge to deal with the demands of HIV serodifference helps perpetuate behaviors that stigmatize PLHIV and generate conflicts in social spaces, such as family spaces, health services, and even between partners, which may contribute to their low adherence to follow-up in health services [8,9]. This is due to the fact that serodifference provokes moral judgments, since it associates two delicate topics, usually self-censored and unmentioned: the experience and expression of sexuality, and HIV infection – both surrounded by taboos and lack of knowledge in society[8,9].

This reiterates the importance of health workers, including physicians, nurses, pharmacists, psychologists, social workers and nursing technicians, who must be aware of what HIV serodifference means and how it affects the health needs of these partners. Being aware of this situation would allow them to fight against the dilemmas arising from ignorance, to prevent the reproduction of prejudices that hinder the evolution of these relationships, preventing partners from living them fully. Therefore, it is essential to understand the perception of health professionals when dealing with this subject[10].

The use of the Mute Zone (MZ), from the Central Core Theory (CCT) of social representations (SR), proposed by Jean Claude Abric, provides an opportunity to access meanings about phenomena that are latent in the mind of individuals. When individuals are asked as representatives of a group they belong to, as opposed to directly asking as subjects, individuals tend to express themselves more freely, especially when it concerns sensitive topics. This tool also allows comparisons with normative representations, enabling a clearer understanding of a reality[11].

Considering the above, health workers who attend serodifferent couples must understand the unsaid in social representations, since this knowledge can allow interventions capable of changing outdated opinions and improve the care to these couples. As a result, the following question emerges: what are the social representations of the mute zone of health workers in the Specialized Healthcare Services regarding HIV serodifference? Our goal was to analyze the social representations considering the "unsaid" in health workers, regarding HIV serodifference.

METHOD

Descriptive-exploratory and qualitative study, whose theoretical-methodological reference was the structural aspect of Social Representations (SR), especially Central Core Theory and the Mute Zone. All representations are organized around a central core, which is part, simultaneously, of their internal meanings and their organization. This central core is a subset of representation, and is formed by elements that, when absent, would disrupt the representation itself. The structural line of SR, using a four-quadrant table, seeks to apprehend the cognitive elements that a certain population shares, be they normative or counter-normative (mute zone), which gives meaning to the object under study, allowing its organization in a central core and its peripheral zone[11]. To ensure the methodological rigor of the study, the Consolidated Criteria for Reporting Qualitative Research (COREQ)[12] was used as a supporting tool.

Data was produced from October to December 2020, in three SHSs for Sexually Transmitted Infections (STIs)/HIV/AIDS, which follow up on PLHIV in the metropolitan region of a capital in the Brazilian northeast.

The study included 59 health workers from three SHS STI/HIV/AIDS. They were chosen via convenience sampling. Inclusion criteria considered health workers from multiprofessional health team of these services, which are formed by nurses, nursing technicians, physicians (infectious disease physicians, general practitioners, or gynecologists), social workers, pharmacists, psychologists, local coordinators/managers of the SAE and, coordinators/managers of the IST/HIV/AIDS program at the municipal and state levels.

Exclusion criteria considered workers who were absent from the service due to vacations, medical licenses, or personal interests; anyone who did not answer after three attempts of contact; and those who worked in more than one SHS unit selected for the study and had already been interviewed. Considering these criteria, 7 workers were excluded, leading to a final sample of 51 participants. It is worth noting that one professional in particular refused to participate in the study, stating they were not interested.

Data was produced by the first author, an MS student and the main researcher of this study, using semistructured, in-person interviews. The instruments used in the interview were printed forms with questions for personal and professional characterization, as well as open questions, whose goal was accessing the SR of the participants through the Free Word Association Technique (FWAT), in addition to the explanations for each word associated by the participants. At the end of the form, there was a space to register field notes during the interviews, such as non-verbal expressions, interruptions, and others.

The researcher was trained for data collection beforehand, in addition to having had classes related to Social Representation Theory. There was a previous interaction between the researcher and the participants, as the researcher paid them a visit to get to know the service and the professionals, and to explain to them the motivation and objectives of the research.

The form was applied to three health workers as a test to check whether its content could be understood. These were professionals in the field of STIs/HIV who were not part of the SHS being investigated, meaning they were not eligible subjects for the present study. After the test, there were no suggestions for changing the instrument.

There was a single interview per participant, varying from 14 to 58 minutes. Initially, the researcher would explain the purpose and motivations of the research to the interviewees, who would then sign the Informed Consent Form. To employ the FWAT in the interview, each participant was asked to list the first five words or expressions that came to mind from the sentence "If I say 'HIV serodifference', what do you think other health workers think?". Then, interviewees were asked to justify or give a brief explanation of each utterance said after this. Since the content of the interviews included words and brief excerpts, all information was registered in the instrument by the researcher. Thus, the interviews were not recorded in audio. It is worth noting that, at the end of each interview, the utterances and justifications were read by the researcher, so the participant could validate the information registered.

The interviews took place individually, in the presence of only the researcher and the interviewee, in the private room where each professional worked. This is a good environment, that favored the reflexive process required by the FWAT. To maintain the anonymity of participants, each professional was referred to by a pseudonym generated by combining the letter "P", for "professional" and a number that was in accordance with the order of the interviews. Since data was gathered during the pandemic, it is worth noting that all necessary preventive steps were taken by the researcher.

To analyze the data, the main researcher built a database in Microsoft Word®, including the transcripts of the utterances and their explanation, to prepare the analysis matrix. At first, utterances were submitted to lemmatization (only word radicals were kept) and categorized (words with similar meanings, according to the definitions the participants themselves gave them, were grouped)[13].

After this process, these utterances were used to generate analysis matrix in the LibreOffice® software. Later, it was processed with the aid of the software *Interface de R pourles Analyses Multidimensionelles de Textes et de Questionaires*(IRAMUTEQ)®, version 7 alpha 2[14].

A similitude analysis and a prototypical analysis were used to understand the structure of the MZs of the SR elaborated by the participants of the study. A prototypical analysis is based on the evocations that stand out according to frequency (how often the utterance was mentioned by individuals) and Average Order of Utterances (OME) (which is the mean position in which each utterance appeared in the classification of the order of utterances)[13]. Utterances whose frequency was < 3 were excluded (a criteria chosen by the researcher), and, regarding the OME, utterances with OME ≤ 2 were found to be low, and those with OME ≥ 3 were found to be high[13].

After processing, the four-quadrant table of the representation could be visualized. Each quadrant houses utterances that emerged from the structure of the social representations of the 51 participants. In the separation of each quadrant, we find the central core (CC), formed by utterances with the highest frequency and lowest OME, that is, those that

were evoked first[11]. The other quadrants are the peripheral zone, with elements between the CC and the contrast zone (those that were evoked less often and have low OME)[11].

To reiterate the centrality of the CC in the four-quadrant table, we carried out a similitude analysis, which, through the analysis of co-occurrence and vicinity of utterances, made it possible to visualize the similarity of the terms and how the semantic categories generated behaved[15].

The results were analyzed in the light of the TNC and the ZM of RS, ideas championed by the theoretician Jean Claude Abric[11]. The justifications and definitions given by participants in each evocation were transcribed and used to better understand and substantiate discussions and the understanding of the structures discussed.

This research followed the ethical parameters of the National Health Council and of Resolution 466/2012, which regulates studies involving human beings. It was authorized by the Research Ethics Committee of the Universidade Federal do Rio Grande do Norte under opinion number 4.005.590 and Certificate of Submission to Ethical Appreciation (CAAE) 30794020.6.0000.5537. Participant anonymity was ensured by using the codes "P1", "P2", and so on, according to the total number of participants.

RESULTS

51 health workers participated in the study, 11 (21.5%) had technical education (nursing technicians) and 40 (78.4%), higher education. Of them, there were 15 (37.5%) physicians, seven (17.5%) pharmacists, six (15%) nurses, three (7.5%) psychologists, three (7.5%) social workers, and six (15%) were SHS managers. Most participants were female, 42 (82.3%) aged from 28 to 70 years, mostly from 41 years to 54 years (45.1%). Only 31 (60.7%) said they had specific training/qualification or specialization to work in areas such as infectious diseases, obstetrics, and mental health. Regarding time working in the field, it varied from 1 year and 10 months to 46 years. Regarding the time working in the SHS, it varied from 9 days to 27 years.

Regarding the prototypical analysis, the application of the FWAT led to 255 utterances, 156 distinct ones. After lemmatization and categorization of the terms, 51 different expressions were found, since any utterances whose frequency was below three were excluded, as previously established. This led to a utilization of 43.13% (n=22).

The four-quadrant table was constructed using the calculation and the combined analysis of OME[11], represented on the vertical axis. It generated around 2.95 positions in a ranking from 1 to 5. The average frequency of words, on the horizontal axis, was around 9.95. Chart 1 shows the distribution of terms in the quadrants, which allowed analyzing the structure and the content of the representation formed by the CC, the 1st and 2nd peripheries, and by the contrast zone.

Caption: f: frequency; OME: Average Order of Evocations.

The elements that formed the CC, as they presented a higher index of frequency and a lower OME, were the utterances prejudice (the most common one), followed by ignorance (the most readily uttered), fear, insanity, and love. Below, some of the explanations and definitions the participants gave regarding the elements in this quadrant.

> *Prejudice is the product of the conservative profile of professionals that, in my opinion, professionals have. Most couples are homosexual, and even among heterosexuals, they don't see a healthy person as worthy because they are in a relationship with someone who is sick. P30*
>
> *In the case with health workers, prejudice is more painful, especially from the SHS, it creates embarrassing situations when it comes to serodiscordant couples. P21*
>
> *Professionals are afraid of dealing with this type of situation, especially considering the diagnosis and their inability to deal with the couple. P16*
>
> *Health workers are afraid of being infected with (HIV) from the patients. If today there is a stigma involving covid-19, with HIV it was much worse and still lasts to this day. P40*
>
> *More training is necessary, a better understanding of the network, and of internalization. It is really difficult and necessary to work with knowledge, especially regarding sexuality. P29*

The elements in the second and third quadrants are considered to be peripheral representations of the central core[11]. The elements that presented higher frequencies and a medium OME, were in the second quadrant, which shows the elements assistance, welcoming, and partnership.

We need to improve the service regarding training, physical structures, and medication, so assistance is the best possible. P26

> *Health workers need to try to become specialists in regard to this type of problem, so they can be monitored by someone who really understands it. P14*
>
> *I see that when it's a couple, you must get closer, much more carefully. Sometimes the person who doesn't have the virus even wants to get contaminated. So we have to see if this couple knows the methods of prevention and prophylaxis. P13*

Chart 1 – Structure of the SR of health professionals regarding the expression – "If I say 'HIV serodifference', what do you think other health workers think?". Natal, Rio Grande do Norte, Brazil, 2023

	OME ≤ 2.95			**OME > 2.95**		
	Central Core			**1st Periphery**		
		f	**OME**		***f***	**OME**
f ≥ 9.95	Prejudice	24	2.5	Health care	28	3.5
	Ignorance	21	2.1	Welcoming	13	3.2
	Fear	16	2.8	Partnership	13	3.5
	Insanity	10	2.4			
	Love	10	2.5			
***f* < 9.95**	**Contrast zone**			**2nd Periphery**		
		f	**OME**		***f***	**OME**
	Courage	9	2.6	Prevention	9	3.8
	Difficulties	9	2.6	Risk	8	3.0
	Doubts	6	2.2	Promiscuity	6	3.5
	Normal life	6	2.8	Pity	6	3.7
	Selfishness	4	2.2	Treatment	6	4.2
	Impossibility	3	2.0	Exams	5	4.0
				Ethics	5	3.0
				Training	4	3.2

Source: Authors, 2023.

I see professionals that are committed in the way they embrace and help. P10

In the third quadrant, there are utterances with low frequency and high OME[11], the terms prevention, risk, promiscuity, pity, treatment, exams ethics, ethics, and training.

The first thing to do regarding serodiscordance is prevention. It must be involved, both for the partner who is infected and for the one who isn't. P17

When the treatment is done well, the viral load is zero. Today, things are different. These couples lead a normal life. Today we know that, when the viral load is zero, they practically don't transmit. P24

I see that the professionals are committed to acting well. Teamwork can work because of the ethics involved. P10

When you mention that a patient is HIV-positive, some professionals think of someone with many partners, who hangs out with criminals, that thing from the beginning

of this epidemic that still persists. I have a patient who contracted HIV from the only partner she ever had. P19

Pity is a terrible feeling, they don't see them as people who want to fight, they think they are doing charity. They don't look at them as human beings, they pity them, look with pity. P12

Training is essential to know how to manage the situation of these couples. P7

The contrast zone is represented by the fourth quadrant[11]. Its elements were the utterances courage, difficulties, doubts, normal life, selfishness, and impossibility. Despite being less important elements for the participants, as their frequency was low, they had low OME (were promptly evoked).

Courage is a feeling that professionals imagine, a reflex of what they think when they are in front of these people who live in serodiscordance, especially the HIV-negative partner. P36

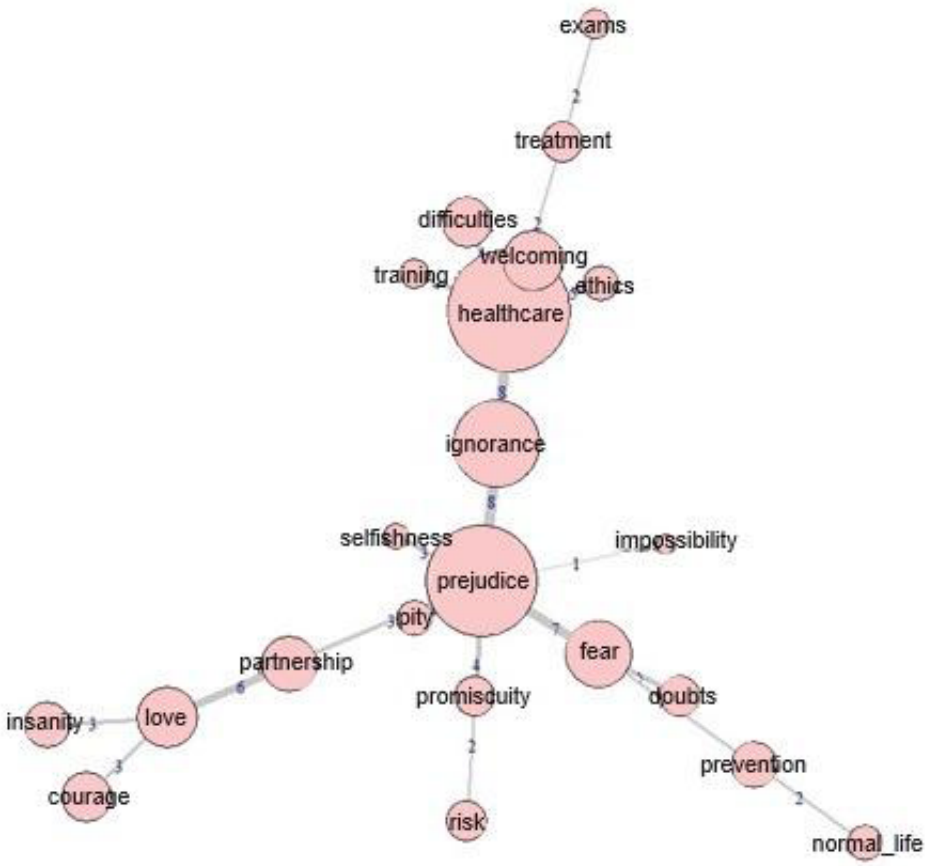
Professionals really see these people with a lot of doubt, about forms of infection, how to live with that. How to get pregnant [...]. *P51*

Many professionals know that this is a possibility, considering the advancement of treatments and other ways of preventing. P16

They (the workers) think about themselves, because they think "I didn't come here to see this type of patient, I don't need to see them". P12

The similitude analysis is shown in Figure 1. Its structure shows the relationships established among the representation elements, showing that the two major organizing axes of the structure are the utterances prejudice and assistance, since they were the most frequently mentioned by the

Figure 1 – Similitude dendrogram of the inducing term "If I say 'HIV serodifference', what do you think other health workers think?". Natal, Rio Grande do Norte, Brazil, 2023



Source: Research Data, 2023.

participants (represented by larger circles). They were more connected to the utterances related to ignorance and fear, represented by the strength of the edges.

The central elements of the four-quadrant table (CC and 1st periphery) were also seen as the elements that formed the organizing axes of the similitude dendrogram, showing that prejudice is still the central feeling regarding serodifference representation. The professionals themselves recognized it as a mark of the ignorance about these relationships, which clearly interferes in the assistance, which was also strongly evoked, as Chart 1 and Figure 1 show.

DISCUSSION

Conceptually reflecting about the MZ hypothesis allows us to infer that the contra-normative SR identified are projections of true representations of the participants in the words of another subject[11]. Thus, the main SR in the MZ is based on the terms prejudice, ignorance, fear, love, and insanity.

The elements prejudice, fear, and insanity can suggest judgments based on beliefs and generalizations visualized in statements, attitudes, and actions in the setting of health services. Although there have been significant evolutions in regard to biological aspects of HIV infections, in the social context, subjects in HIV-serodifferent relationships still experience obstacles, such as being singled out as having an unhealthy relationship, believing on the contamination of the HIV-negative partner, on the impossibility of family planning, or on that of a safe conception[7,10]. Additionally, the prejudice against serodifferent relationships can be related to the stigma according to which these relationships are formed by specific populational groups, such as LGBTQIA+ (Lesbians, Gays, Bisexuals, Transvestites, Transsexuals, Queer, Intersex, Asexual, and other sexual orientations) and/or people with promiscuous sexual conduct, in addition to those who are unfaithful in their relationships[16].

The similitude analysis shows a strong relationship between the term prejudice and the terms ignorance and fear. This analysis allowed reflecting on the fact that health workers have little knowledge pertaining to the specific aspects of HIV infections, and, more specifically, of the biopsychosocial aspects that involve serodifferent couples. As a result, they can reproduce prejudices from a culture where stigmas have been socially and historically established, which would explain the fear of dealing with PLHIV in these services[10].

Academic education should be an ally of change, helping in the fight against prejudice and fear, since university is an environment amenable to debates that involve HIV serodifference, since there are subjects discussed in the syllabi of health courses that deal with topics such as sexual health and STIs. However, such subjects do not always find space in the syllabi of these courses or are only superficially discussed, which is not enough to clarify doubts and eliminate prejudice[17].

Around the world, the improvement of knowledge regarding how to prevent HIV infections has been remarkable. This includes strategies such as adherence to antiretroviral therapies to reach an undetectable viral load, since I = I (undetectable = non-transmissible). Professionals also must understand that pre-exposure prophylaxis (PrEP) is available, since many seem to believe that the only way to prevent exposure is by wearing condoms [18–19].

The relationship between the elements love, insanity, and prejudice in the similitude analysis suggests that, despite the fact that the term "love" is in the center of the MZ, the term insanity can be related with prejudice, since even health workers who value feelings that explain the formation of a relationship still seem perplex when they see relationships of this kind in practice. When asked about HIV serodifference in a normative context, that is, without the use of the mute zone, the terms insanity and prejudice did not appear, which reiterates the importance of using the mute zone[10].

In literature, these representations of fear and prejudice were found among health workers when asked what they thought about HIV/AIDS[20]. These elements were in the CC of the representation, supporting the hypothesis that is a social thought, fed by these two significants, which are anchored in the idea of plague and death that was related with the context of AIDS for a long time[20–21]. The results of this study reiterate that these dilemmas also involve health services, suggesting that they need to reorient perspectives developed from ignorance and prejudice.

It stands out that the participants of this study were submitted to the FWAT in a normative context about HIV serodifference, and that the results in the CC were the terms partnership, love, and fear[10], terms that are difference than those found in the MS. This shows that it is paramount to unmask negative feelings which may support said prejudice, which is still a strong force with regard to HIV serodifference.

A study in Nigeria showed encouragement to the continuous improvement of health workers regarding safer conception when there is serodifference, which was seen as an essential process to overcome ignorance, in addition to preparing the professional to attend these partners in their reproductive needs[22]. Furthermore, the term "ignorance"

showed a strong relationship with the terms "prejudice" and "health care" in the similitude dendrogram. This may be in accordance with the aforementioned Nigerian study, which indicated the need for constant training in health as a way to overcome stigmas found in the health care settings when it comes to serodifference[22].

To strengthen and complement the meanings found in the CC, the second quadrant of the four-quadrant table[11] shows, through the terms "health care", "welcoming", and "partnership", functional content that relate health practices in daily life as procedures that must meet the demands of serodifferent partnerships, be it during consultations, in waiting rooms, or through individual or collective educational activities.

In the similitude dendrogram, the terms "welcoming" and "health care" showed a strong relationship with the CC "ignorance", as well as with the terms "partnership" and "prejudice". These relationships suggest that the lack of knowledge may be central, a factor capable of increasing prejudice when confronted with this type of partnership. These relations between meanings have direct implications for reception and health care practices, which are attitudes essential for the formation of a bond between couples and the service[22,21].

The third quadrant, involving elements with a low frequency and a high OME, interferes less than the other representation zones. The elements in this quadrant refer to the SRs that imply that professional practice (as confirmed in the similitude analysis) should be the focus in prevention and risk.

Another representation in this quadrant that reiterated the CC content was the word "pity" and the feelings associated, regarding a relationship based on disease, death, and promiscuity. Unfaithful behavior and homosexuality are attributed to these people and frowned upon by society, being, thus, a stigmatizing condition. This is clear in countries such as Brazil and Indonesia [16,20,21]. This reiterates the idea that prejudice is what hinders the ability of building a bond between serodifferent couples and SHSs.

In the third quadrant, it was also found that participants needed professional training to strengthen and update specific knowledge, so they can attend people living with HIV serodifference[6,22]. Additionally, beyond a biological aspect, they also mentioned the need for training regarding ethical and social precepts associated with HIV/AIDS, which are considered essential, as these workers are dealing with intimate aspects of these couples. This is an important element of care management that has been discussed in literature[8].

The contrast zone showed SRs that, despite lacking a significant consensus among professionals, show were the least evoked, being different from the SRs as are the peripheries[11]. The elements courage, doubts, and difficulties characterized the word "partnership" (second quadrant), since professionals understood that serodifferent couples were brave, considering the difficulties in these relationships. Doubts, thus, would be usual when one considers serodifference.

Regarding the term "normal life", it can have positive connotations, suggesting that the professionals are closer to the context of HIV serodifference and do not see these relationships as strange; or negative connotations, according to which serodifference would be akin to selfishness and impossibility, ideas which are barriers to the care to individuals due to professionals whose prejudice and stigma existed before professional ethics and the duty to care and understand the possibilities that enable an HIV serodifferent relationship[22].

The MZ aims to validate meanings found in normality or show latent content in the replacement of roles, as postulated by Abric[11]. This strategy was useful and essential to understand the meanings in the minds of professionals, since it allows accessing content that was hardly perceivable in the normal performance of roles, unveiling considerable shortcomings in the work of these professionals that arised from prejudice and ignorance. These can be present at the SHS, as well as in the different services of the health care network that provide complementary follow up to the PLHIV.

This study contributes to the practice of different fields, especially that of nursing, as the responsibilities of the nurse include caring for serodifferent couples by welcoming, providing follow-up consultations, rapid testing, counseling, and educational activities. These contributions suggest that the knowledge of these health workers must be improved to deal with the dilemmas that the prejudice and the lack of knowledge generate within health services[23].

In addition to ensuring that health professionals are well trained, it is possible to implement and guide health projects that can embrace these couples and their specific needs in the SHS and the Primary Health Care, since these services are part of the care to the PLHIV. Furthermore, it should be noted that better trained professionals increase the odds that the partners in mixed serology relationships will become more conscious of their situation, incorporating their personal awareness into strategies of care[18–24].

Limitations of this study include the fact that the PHC was not evaluated together with the SHS as a context of this study, since the PLHIV finds health care and follow up in both the PHC and the SHS. Further research involving PHC professionals and managers should be conducted, in order to verify whether there are similarities with the reality found in this study.

FINAL CONSIDERATIONS

The unsaid of the social representations of health workers is anchored in prejudice, ignorance, fear, and insanity. This shows that the challenges faced by couples are not only the protection of the seronegative partner from contamination, or the dilemmas inherent in the couples' affective/sexual relationship, but also involve the environment of health services, which can compromise the inclusion and reception of people living with HIV and their partners.

The meanings attributed to the central core suggest that health workers in the health care network must be trained, so their care can be based in praxis, and they can fight against the pervasive stigma that affects serodifferent couples and push them away from health services.

Thus, we believe that the different aspects of the life of those with HIV, such as serodifference, involve stigmas and difficulties that culminate in a fragmentary health care, which is disassociated from biopsychosocial aspects of the individual. The dissemination and access to knowledge are relevant strategies to deal with and improve practices of health, considering HIV serodifference.

As a result, the relevance and the innovative nature of this study are noteworthy, since it enabled access to the mute zone of social representations. This allows identifying content that could not be visualized in its normative character, showing weaknesses and indicating the path for future conducts and policies of integral health care for people with HIV and their partners.

REFERENCES

1. Mandu JBS, Teston EF, Andrade GKS, Marcon SS. Coping with the health condition from the perspective of people with HIV who abandoned treatment. Rev Bras Enferm. 2022;75:e20210958. https://doi.org/10.1590/0034-7167-2021-0958
2. Cunha CC. Maciel MA, Moreira MCN. Um ensaio sobre a cronicidade do viver com HIV/Aids na infância, adolescência e juventude. Saúde Debate. 2022;46(7):251-63. https://doi.org/10.1590/0103-11042022E718
3. Silva VGF, Silva BN, Serra MAAO, Andrade ASS, Pinto ESG, Souza NL. Desafios vivenciados na sorodiferença ao HIV: reflexões à luz da filosofia da vontade de Schopenhauer. Rev Enferm. Atual In Derme. 2022;96(37):e-021214. https://doi.org/10.31011/reaid-2022-v.96-n.37-art.1320
4. Rocha F, Melo E, Agostini R, Maia AC, Maksud I. A interface entre atenção primária e especializada em cenário de descentralização de cuidados em HIV/Aids. Saúde Debate. 2022;46(7):19-30. https://doi.org/10.1590/0103-11042022E701
5. Miranda MMF, Oliveira DR, Quirino GS, Oliveira CJ, Pereira MLD, Cavalcante EGR. Adherence to antiretroviral therapy by adults living with HIV/aids: a cross-sectional study. Rev Bras Enferm. 2022;75(2):e20210019. https://doi.org/10.1590/0034-7167-2021-0019
6. Cecato YA, Oliveira LL, Vieira LB. Concepção em casais heterossexuais sorodiscordantes para o Vírus da imunodeficiência humana: scoping review. REAS. 2021;13(2):e5225. https://doi.org/10.25248/reas.e5225.2021
7. Langendorf TF, Quadros JS, Paula CC, Padoin SMM, Souza IEO. Reproductive planning and pregnancy of HIV serodiscordant couples: a phenomenological study. Rev Gaúcha Enferm. 2022;43:e20220148. https://doi.org/10.1590/1983-1447.2022.20220148.en
8. Silva VGF, Serra MAAO, Lima MCRAA, Assis Silva CJ, Miranda FAN, Menezes RMP. Estigma e preconceito com casais sorodiferentes para o HIV. Revista Recien. 2021;11(34):59-67. https://doi.org/10.24276/rrecien2021.11.34.59-67
9. Souza D, Pereira C, Raxach J. Relatos sobre um livro com experiências de estigma/discriminação de Pessoas Vivendo com HIV/AIDS no Brasil. Saúde debate. 2022;46(spe7):264–76. https://doi.org/10.1590/0103-11042022E719
10. Silva VGF, Nogueira ILA, Elias TMN, Reis RK, Souza NL, Menezes RMP. HIV serodiscordant sexual partners: social representations of health care professionals. Rev Bras Enferm. 2022;75(6):e20210867. https://doi.org/10.1590/0034-7167-2021-0867pt
11. Abric JC. A zona muda das representações sociais. In: Oliveira DC, Campos PHF. Representações sociais: uma teoria sem fronteiras. Rio de Janeiro: Museu da República; 2005
12. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. Int J Qual Health Care [Internet]. 2007 [cited 2023 Jun 15];19(6):349-57. Available from: https://academic.oup.com/intqhc/article/19/6/349/1791966
13. Wachelke J, Wolter R. Critérios de construção e relato da análise prototípica para representações sociais. Psic Teor Pesq. 2011; 27(4):521-26. https://doi.org/10.1590/S0102-37722011000400017
14. Ratinaud P. IRAMUTEQ: Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires, 2009. Available from: http://www.iramuteq.org
15. Souza MAR, Wall ML, Thuler ACMC, Lowen IMV, Peres AM. O uso do software IRAMUTEQ na análise de dados em pesquisas qualitativas. Rev Esc Enferm USP. 2018;52:e03353. https://doi.org/10.1590/S1980-220X2017015003353
16. Agnes YLN, Songwathana P. Understanding stigma and coping strategies among HIVnegative Muslim wives in serodiscordant relationships in a Javanese community, Indonesia. Belitung Nurs J. 2021;7(5):409–17. https://doi.org/10.33546/bnj.1600
17. Martins AA, Honorato EJS, da Silva TA, Lemos SM, Ferreira DS, Reis MG. Percepções de graduandos em saúde sobre relacionamentos sorodiscordantes para o HIV/AIDS. Saúde Redes. 2018;4(2):71-84. https://doi.org/10.18310/2446-4813.2018v4n2p71-84
18. Silva LAV, Duarte FM, Lima M. Modelo matemático pra uma coisa que não é matemática: narrativas de médicos/as infectologistas sobre carga viral indetectável e intransmissibilidade do HIV. Physis. 2020;30(1):e300105. https://doi.org/10.1590/S0103-73312020300105
19. Calabrese SK, Mayer KH. Stigma impedes HIV prevention by stifling patient-provider communication about U=U. J Int AIDS Soc. 2020;23(7):e25559. https://doi.org/10.1002/jia2.25559
20. Machado YY, Nogueira VPF, Oliveira DC, Gomes AMT. Health personnel's social representations of HIV/AIDS: a structural analysis. Rev Enferm UERJ. 2016;24(1):e14463. https://doi.org/10.12957/reuerj.2016.14463
21. Santos FS, Suto CSS, Freitas TOB, Piva SGN, Nascimento RCD, Souza GS. Acolhimento à pessoa com o vírus da imunodeficiência humana: representações sociais de profissionais de saúde. Rev Baiana Enferm. 2019;33:e27769. https://doi.org/10.18471/rbe.v33.27769

22. Iliyasu Z, Galadanci HS, Zubairu AA, Amole TG, Sam-Agudu NA, Aliyu MH. Health workers' knowledge of safer conception and attitudes toward reproductive rights of HIV-infected couples in Kano, Nigeria. Int Health. 2019;11(6):536-44. https://doi.org/10.1093/inthealth/ihz016

23. Muniz CG, Brito C. O que representa o diagnóstico de HIV/Aids após quatro décadas de epidemia? Saúde Debate. 2022;46(135):1093-106. https://doi.org/10.1590/0103-1104202213510

24. Antonini M, Pontes PS, Melo ES, Alves RS, Gir E, Sorensen W, et al. Sorodiscordância entre casais no contexto do HIV: implicações para os cuidados de saúde. Braz J Infect Dis. 2022;26:(Suppl 1). https://doi.org/10.1016/j.bjid.2021.102156

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