“He is like the other patients”: perceptions of dentistry students in the HIV/AIDS clinic

Luiza Augusta Rosa Rossi-Barbosa(a)
Raquel Conceição Ferreira(b)
Cristina Andrade Sampaio(c)
Patrícia Neves Guimarães(d)

(a) Departamento de Odontologia, Centro de Ciências Biológicas (CCBS), Universidade Estadual de Montes Claros (Unimontes). Campus Universitário Darcy Ribeiro. Montes Claros, MG, Brasil. 39401-089. luiza.rossi@unimontes.br
(b) Departamento de Odontologia Social e Preventiva, Universidade Federal de Minas Gerais. Belo Horizonte, MG, Brasil. raquelcf@odont.ufmg.br
(c,d) Departamento de Saúde Mental e Saúde Coletiva, Unimontes. Montes Claros, MG, Brasil. cristina.sampaio@unimontes.br; patricia.guimaraes@mail.mcgill.ca

This study sought to ascertain the perceptions and expectations of dentistry students at the State University of Montes Claros, MG, Brazil, regarding care provided for HIV/AIDS patients. Participant observation and semi-structured interviews with nine students were used and three categories were identified: “Expectations from care provided at the HIV/AIDS clinic”, “Fear of becoming infection” and “Behavioral change”. It was seen that, before the students came into contact with patients, they constructed characterizations based on social stereotypes such as skinny individuals, male homosexuals and depressed appearance. Fear was observed through the tendency to overestimate the risks of transmission, with changes in behavior in relation to biosafety. Through using ethnographic methodology, the importance of dental clinical practice for students’ day-to-day routine could be seen, along with biosafety for breaking through paradigms and prejudice towards HIV/AIDS patients.

Keywords: Perception. HIV. Ethnography. Dentistry.

Introduction

The history of Acquired Immunodeficiency Syndrome (AIDS) in Brazil has been marked by sociocultural responses related to fear, prejudice and social injustice due to distorted conceptions or misunderstandings regarding the form of transmission and contagion of the Human
Immunodeficiency Virus (HIV), the etiologic agent of AIDS. The epidemics took shape in the means of communication, and before it had, in fact, affected the life of a significant number of people, the social response was panic and fear¹.

The evolution in the natural history of HIV infection, from the initial asymptomatic stages to the advanced stages (AIDS), is characterized by continuous and progressive immunological deficiency, which can be monitored and measured in terms of reduction in the counts of circulating T lymphocytes (CD4+). It was observed that zidovudine (AZT) reduced the amount of circulating HIV and increased the amount of organic defense cells, reducing opportunistic infections. In 1996, a new class of highly active drugs was discovered, which increased the survival of HIV-infected individuals².

At the beginning of the epidemics, only a few dentists assisted HIV-seropositive patients due to fear of the unknown. Subsequently, the number of professionals determined to assist such patients gradually increased, due to awareness-raising and to the adequacy of biosafety measures³, an efficient Dentistry protocol that advocates that every individual should be treated as potentially infected, as it is impossible to clinically differentiate infected asymptomatic patients from non-infected patients⁴.

In the undergraduate program, it is fundamental to provide explanations about the ethical posture of future dentists concerning HIV infection⁴, and the Universidade Estadual de Montes Claros (Unimontes – State University of Montes Claros) has been trying to meet the social and ethical demands of the users of oral health services. The university’s goal is the technical, professional and humanistic education of its students⁵. As it believes that the existence of a scenario of practice for professional education is important, and that changes in paradigms and in students’ attitudes are equally relevant, the Dentistry program of Unimontes offers a space that provides dental care for HIV/AIDS-seropositive patients. But what attitudes have the students been having?

Based on this presupposition, this study aimed to investigate the expectations and perceptions of the Dentistry students of Unimontes, regarding the assistance provided for patients living with HIV/AIDS.

Methodology

This is an ethnographic study that employed the techniques of participant observation and semi-structured interviews. It was conducted with the Dentistry students of Unimontes enrolled in the discipline Integrated Clinic IV, offered in the ninth semester of the program. The clinic offers dental care to HIV/AIDS-seropositive patients referred by the Centro Ambulatorial de Especialidades Médicas Presidente Tancredo Neves (CAETAN – Outpatient Center of Medical Specialties) and by the Centro de Testagem e Aconselhamento do Alto São João (CTA – Testing and Counseling Center).
Initially, a pre-observation was performed: the first contact with all the 22 students during a discussion group that was held in the discipline, whose theme “Ethical aspects in dental care provided for HIV/AIDS patients” was discussed by all. The participant observation carried out by one of the researchers occurred during the second semester of 2011, on the days in which dental care was offered to HIV/AIDS-seropositive patients. This is provided by students at a dental clinic of Unimontes every Tuesday - the scenario of this study. Each pair of students assists approximately two patients in a period of four hours, under the supervision of three professors from the discipline. The observation was registered in a notebook used as a field diary, in which everything that was experienced was registered.

Receiving the individual in the natural research environment (health settings) is a fundamental element to mobilize the interviewer’s interest when s/he observes the details of verbal and non-verbal language. Because it studies subjects within the settings, ethnography can be a very powerful tool to the understanding of these intense and complex dialogs that are the practices. In this sense, the method based on field research enabled to conduct the study face-to-face with the participants, interacting with them during a period of time, while they performed their routines.

At the end of the semester, after the observation process, the same researcher conducted semi-structured interviews with nine Dentistry students who were randomly chosen, six women and three men. The ages varied from 21 to 34 years. This number of students depended on data recurrence, which refers to the sensation of saturation evaluated by the researcher. Sample size depends on the characteristics of the group that is being studied. If the population is diversified, the number of interviewees must be sufficient to provide a general view of different elements. In a purely homogeneous group, one single person can be considered a legitimate sample.

The ethnographic interview is interactive and open-ended, and it is also possible to conduct it in a semi-structured way. It is an in-depth interview, that is, “it aims to delve into meanings, to explore nuances” (p.62). The “questions should not be trapped into a list; rather, they should serve as a script to the main subjects of the conversation” (p.62).

The script used to conduct the interviews was constructed based on the situations that had been observed in the daily routine of the clinic for HIV/AIDS-seropositive patients, such as: preparing the materials, approaching patients at the waiting room, approaching them during the anamnesis, posture during clinical assistance, cleaning the materials.

The interviews, conducted at a private room, were recorded upon the informants’ proper authorization and transcribed simultaneously. Data analysis consisted of the detailed reading of all the transcribed material, as well as the identification of the meanings shared by the informants and observed in the repetition of subjects. In the analysis, the data obtained from the field diary were added to the data provided by the interviews, in order to identify the empirical categories of this study.
The participants were identified by letter E, followed by the number of the order of the interview, letter M for male or F for female, and the age. Data collection was carried out in compliance with ethical and legal aspects, according to Resolution no. 196, released in 1996 by the National Health Council, which regulates research with human beings. The research was approved by the Ethics Committee of the Universidade Estadual de Montes Claros under no. 3054/2011.

Results and discussion

The students’ expectations and perceptions were observed and three main categories emerged: “Expectations concerning assistance at the HIV/AIDS clinic”, “The fear of being infected”, and “Behavioral change”.

During the participant observation, it was possible to verify the students’ anxiety regarding the patient and his/her physical appearance. This expectation concerning the new situation revealed manifestations of fear. When they were preparing themselves to the first assistance, one of the students put a protection on the nails because he had cut them and commented that he had “a little exposure”. One female student reported that she had already had the opportunity of assisting a patient and that she was surprised when he said that “he’s an AIDS patient because he’s a strong person”. In addition, it was possible to notice a male student’s resistance regarding the assistance. At the end of the clinical activity, another female student mentioned that she was admired to witness the patients’ motivation to live.

It was also noticed that a pair of students used a surgical cloth and surgical gowns to extract a child’s deciduous tooth. In the Child Clinic of the seventh semester, an identical procedure performed in children of the same age is not conducted with this apparatus, which revealed a different attitude of the students when the patient is known to be infected. The protocol for the extraction of deciduous teeth in the Child Clinic and also in the assistance provided for children with HIV/AIDS does not include the use of surgical cloths, as it generates fear and anxiety in the children. Standard biosafety norms are utilized.

Therefore, it can be considered excess of zeal, as the procedure consisted of the extraction of a deciduous anterior tooth with mobility, which could be performed in a very quick and safe way using standard procedures. In view of the apparatus, what would be a quick procedure became a lengthy one, as the child became scared and fearful, disappearing under the surgical cloth. The professors had to intervene, removing the surgical cloth and tranquilizing the child; only after the intervention could the deciduous tooth be extracted.

In relation to the interviews, when the researcher initiated them by asking each student about the meaning of AIDS, she expected answers loaded with feelings; however, the students described it using scientific terms, as can be confirmed by the examples of the discourses of E3, E4 and E8, as they probably reproduced the knowledge they had acquired about “Etiopathology of
the HIV infection”, which had been discussed during the moments of theoretical classes in the Integrated Clinic IV - HIV/AIDS, which happen before the practical activities.

To me, AIDS is a patient with a weakened immune system. CD4+ below 200. (E3, F, 34 years old)

AIDS is the acquired immunodeficiency syndrome, which affects the individual’s immunological system. It is caused by the HIV virus and it has no cure. The individual who is affected remains a seropositive carrier of this virus forever. (E4, F, 22 years old).

AIDS is already a disease [...] manifesting those signs and symptoms of this syndrome, it is when the patient is already at the symptomatic stage. (E8, F, 23 years old).

**Expectations concerning assistance at the HIV/AIDS clinic**

Although the students know the difference between HIV and AIDS, as they had theoretical classes about “Cross-infection control” and “Etiopathogenesis of HIV infection”, it can be noticed that all of them idealized an image about the disease concerning the future patients. Through the answers, it is possible to notice that they believed that they would assist low-income male homosexual youths, and they would be pale and thin, downcast, depressed.

I expected that I would assist debilitated patients. [...] I imagined that they would be depressed, thin. (E3, F, 34 years old)

The profile I expected was patients with compromised bodies. An emaciated patient, a thin patient, someone introverted and who doesn’t talk much, a private person. (E4, F, 22 years old)

I think that everybody [referring to the class] had some prejudice because we always think that we’re going to look at the patient’s face and we’ll know that he’s ill, that a characteristic of the person who has the disease is that he is debilitated, thinner, sadder. (E6, F, 23 years old).
A study carried out with a population of migrants from the cities of Fortaleza and Teresina (Northeastern Brazil) showed that there is a direct connection between AIDS and physical appearance, that is, the belief that a beautiful body is healthy and impenetrable to the HIV\textsuperscript{10}.

At different historical moments and in different societies, HIV infection presented similar cultural characterizations in the collectivity, such as prejudice, discrimination and stigma related to the individual affected by the epidemics\textsuperscript{11}. The disease has presented four preexistent sources of stigmatization: sexuality; gender; race; poverty\textsuperscript{12}.

I expected to assist more male patients, aged around 20 years […] because it’s a group that is said to be more favorable. (E2, F, 23 years old)

I expected to assist many homosexuals. […] single; humble, simple, low-income people. (E8, F, 23 years old)

Papers published in the 1980s approached young homosexual men who were inexplicably contracting rare diseases for people of their age group, diseases that debilitated them; they were dying due to some diseases that would normally not kill healthy people\textsuperscript{13}. A study conducted with adolescents has shown that they still believe that dangerous situations occur when the female partner is recognizably a high-risk partner, an unknown person or prostitute, and in male homosexual relations\textsuperscript{14}.

I expected low-income people […] I thought that it would be as the literature cites and the TV shows, debilitated, thin people. (E7, M, 22 years old)

It can be seen in E7’s discourse that the media has a strong influence on the formulation of an image. The notions that most of laypeople have are not provided by scientific production, but by the narratives broadcast by the media, which reproduces scientific discourse in a simplified way\textsuperscript{13}. The media has strengthened the initial characterization of AIDS, configured by death, contagion and sex. This characterization holds emotional components that are deeply rooted in culture, causing an impact on the symbolic level\textsuperscript{15}. When individuals interpret organic phenomena, they are supported by concepts, symbols and structures of references internalized according to the social and cultural groups in which they are included\textsuperscript{16}.

Before proposing strategies, it is necessary to know the aspects related to health beliefs, myths and stereotypes, and to the knowledge of each one, among other aspects\textsuperscript{17}; after all, the phenomena concerning health, disease and care are not isolated events restricted to the organic and physical dimension: they tend to express other dimensions of the social and cultural life\textsuperscript{18}. 

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Being surprised by the HIV-seropositive patient

Antiretroviral therapy, mainly after 1996, with the Highly Active Antiretroviral Therapy – HAART, has enabled to transform a syndrome that used to be culturally perceived as synonymous with death\textsuperscript{11}. For this reason, the patients’ healthy appearance and good psychological status surprised the students and this fact emerges in the interviewees’ discourse.

[...]

the stereotype is not that profile that we always imagine. We are surprised when we arrive at the clinic. The type of patient that goes to the HIV/AIDS clinic at Unimontes varies [...]. patients who are apparently healthy; if I saw them on the street, I’d never say that they’re affected. (E1, M, 21 years old)

However, to the naked eye, he’s a person who’s apparently healthy, you don’t notice anything. (E5, M, 27 years old)

[...]

many have a very good appearance, and even their psychological status is very good. Some are in high spirits, even better than us, who are not ill. They attempt to live each day more and better. (E3, F, 34 years old)

I had two patients who were the opposite of each other. One was extremely happy, laughed all the time and was thin, and the other was extremely strong and her humor was black concerning the disease, it was quite funny, really. (E6, F, 23 years old)

But what we see, at least with those who attended the clinic, is that they undergo a treatment, so their health has been improved and they have a reasonable quality of life. (E7, M, 22 years old)

At the beginning of the semester, during the group discussion that preceded the clinical assistance, the students answered the professors’ questions based on the papers they had previously read. To one of the students, the HIV patient should be assisted at the end of the day. This attitude revealed lack of ethics and of knowledge regarding the difference between HIV-seropositive and the person’s appearance. How will they know who has been and who has not been infected?

[...]

because it’s not written on the patient’s face that he has the virus. He is like the other patients. (E9, F, 22 years old)
HIV/AIDS infection produces numerous responses concerning human behavior, and it is necessary to offer a discipline to stimulate, in the students, this knowledge about human nature\textsuperscript{19}.

**The fear of being infected**

Emotions are the result of the emotional representations of the disease that have occurred historically, but which, to this day, still circulate in the scientific environment, in the means of mass communication and in popular thinking.

In the assistance provided by the dental clinic of Unimontes, it is possible to observe a difference in the students’ attitudes: greater care regarding biosafety. When they were interviewed, some of them revealed that they feel afraid:

-I think that everybody is afraid of doing a test someday and finding out that they’re ill. (E6, F, 23 years old)
-I’m afraid of being contaminated. (E4, F, 22 years old)
-I have fear, [...] I’m afraid of assisting children, because they jump, scream and move a lot, so you can cut them with anything. (E3, F, 34 years)

Others commented that they do not have fear, but this feeling is veiled, as shown by E1’s sentence: “It’s not that you work with fear, it’s not that, but you wear gowns”, and by E9’s sentence: “… when you get to know that the patient is HIV-infected, you watch your movements more closely”.

To tell you the truth, before I came to the clinic I was afraid, but as you experience the clinical practice, this gradually disappears. I’m not afraid, I don’t have fear. It’s obvious that, when it has been proven that the patient has HIV or AIDS, your assistance is enhanced. **It’s not that you work with fear, it’s not that, but you wear gowns.** We also use them with the other patients, but you make a dental impression without the goggles, or you perform a clinical examination without the goggles… many times, without the mask… and in the case of the HIV/AIDS patient, you don’t do this. (E1, M, 21 years old)

No [referring to not being afraid of contamination]. You must take care, something that we don’t do much with the other patients. I know that
there shouldn’t be any differences, but whether you want it or not, when you get to know that the patient is HIV-infected, you watch your movements more closely. (E9, F, 22 years old)

Fear of contagion is the main source of anxiety concerning HIV-infected patients. The meaning that the disease has no cure and that it generates prejudice seems to interfere in the assistance practice. Although the risk of transmission is low, the consequences can be serious and stressful. After all, although the dentist has scientific knowledge, s/he also has personal conflicts and human limitations.

Culture provides the individual with the limits within which the interpretations related to corporal phenomena are operated, especially disease and its symptoms. People are supported by concepts, symbols and structures of references which are internalized according to the social and cultural groups in which they are included. Before scientific research provided grounds, “theories” were developed based on data related to carriers and vectors. Strange social objects produce fear because they threaten people’s sense of order.

**Biosafety**

With the emergence of AIDS, the dental team’s concern about biosafety has increased. With the adoption of universal biosafety norms, it has become possible to prevent the transmission of all the infectious agents inside the clinical environment, including HIV, which, in fact, has a very low infectivity and does not represent a high risk to the professional. Scientific evidences have shown that the risk of HIV transmission is 0.2 (0.5%) in accidental percutaneous injuries, lower than the risk of infection for hepatitis B (HBV), which is 5 (40%), and for hepatitis C (HCV), which is 3 (10%). Despite the reports about fear, the discourses mentioned that there is safety to perform the dental procedures. The fact that they say they are safe only shows a reproduction of scientific evidence, but their attitudes show that they overprotect themselves in relation to biosafety:

I don’t feel that I’m at risk, provided that I follow the entire biosafety protocol. (E2, F, 23 years old)

We know that we can be contaminated by blood, saliva or other secretions. So, we try to protect ourselves in every possible way: wearing goggles, masks, washing the materials […] we try to protect ourselves from everything. And this should be done in every clinic. (E6, F, 23 years old)
I think that everybody is exposed, but if the biosafety norms are correctly followed, we’ll be protected. (E9, F, 22 years old)

An ambiguity of feelings can be observed and this is clear both in the discourses reproduced above and in E7’s and E3’s reports, in which fear makes them be more rigorous in relation to biosafety when they know that the patient is seropositive. E7’s discourse also shows that, up to that moment, they had had a stereotyped image.

People treat biosafety differently, because sometimes, when the person doesn’t have this notion of carrier patient, and thinks that he doesn’t have HIV or other contagious diseases, some norms are neglected [...] And when they know that the patient has HIV they are more careful. I’ve always used the complete PPE. Sometimes, in relation to the material, washing and sterilization time, sometimes I’m more rigorous when I know that the patient has the virus. (E7, M, 22 years old)

[...] when I assisted other children I didn’t use surgical cloths [referring to assistance provided at other clinics and the use of surgical cloth and surgical gown to extract a deciduous tooth]. [...] I used the surgical cloth to fully protect me, because I knew it was a child and he could struggle [...] The professor even told me that it wasn’t necessary, but I don’t agree with this, I think that it’s necessary. We learn that children don’t sit still. But I think it was a Freudian slip when I put it on [...] I only stopped to think about it later. But if it happened again, I’d do the same, I’d put the surgical cloth. But then we contradict ourselves, right? What about the other children? Who guarantees that they weren’t infected? (E3, F, 34 years old)

A research carried out at the city of Natal (Northeastern Brazil) has revealed that some dentists would not assist AIDS patients because they do not feel prepared and the reasons were: lack of information on this subject, lack of psychological conditions, and lack of biosafety conditions at the workplace. In addition, they stated that the seropositive patient must be assisted at a specialized place, and their prejudice concerning the patient was revealed. Among those who said that they would assist seropositive patients, the majority answered that they would use special procedures in the treatment.

The dentist, instead of being afraid of AIDS, must adopt the universal biosafety norms and consider that every patient is a potential carrier of some infectious disease. However, it is very
difficult to change prejudices, stigmas and beliefs. The feelings go beyond knowledge and science, because human weaknesses and moral conflicts are reflected on the professional as an individual.

One of the concerns refers to needlesticks, and needles are the objects that cause most of the accidents. Percutaneous injuries occur when the professional is recapping the needle. For this reason, the students revealed fear of handling needlesticks:

"We’re afraid of recapping the syringe and piercing the finger." (E3, F, 34 years old)

"We, dentists, deal with needlesticks a lot and we run the risk of contaminating ourselves all the time. I’m a bit clumsy and I’m afraid of piercing myself with some contaminated material." (E6, F, 23 years old)

The probability of contamination exists. [...] the personal protective equipment protocol is followed [...] but there’s the needlestick probability. (E1, M, 21 years old)

**Behavioral change**

To understand the importance of biosafety, the theory learned in previous semesters was not enough. It was perceived that the scientific evidence did not guarantee a safe assistance. Staliano and Coêlho have reported that knowledge alone does not make people have favorable attitudes.

"[...] this is taught also in the second semester about biosafety, and in the fourth semester it is also commented. In the prosthesis assistance clinic, for example, we’ve made impressions without goggles, and many times without the mask and everything else. I’m sure that this wouldn’t occur here [at the HIV/AIDS clinic]" (E1, M, 21 years old)

Knowledge does not necessarily imply change, for between knowing and doing there is a series of factors that influence behavior. Based on this principle, it has become relevant to develop skills that act directly on a change in attitudes.

Therefore, the importance of clinical practice with seropositive individuals was observed in order to lose “that image of the HIV patient” (E7), for them to give “importance, the need to protect yourself” (E1), that is, to verify that the biosafety protocol is “extremely necessary” (E2).

The protocol must be followed in all the assistances, with all the patients, as not every AIDS patient will tell you about it. The care I take has
improved with the HIV/AIDS clinic. In the course of the semester you gradually take more care, the importance, the need to protect yourself. The HIV/AIDS clinic teaches you this. The personal protection protocol must be followed. I’ve been protecting myself better. (E1, M, 21 years old)

With the HIV clinic, I could see the importance of following the biosafety criteria, something that I used to think that was unnecessary. Today, I think it’s extremely necessary. So, I think that I’ve opened myself more to this. (E2, F, 23 years old)

After I lost that image of the HIV patient as being a debilitated patient, quite characteristic, I realized that any patient can have HIV or hepatitis and they can be transmitted. Then I started to be more conscious of taking care of the materials, of following the biosafety norms with any patient. At the HIV clinic, more biosafety norms were transmitted to us, and also more forms of keeping the materials sterile and aseptic. (E7, M, 22 years old)

In fact, it is not that more norms were transmitted to the students; rather, they were reinforced, as they are in every semester, before the clinical practice starts. What was observed was that the students paid more attention to them due to the fear of being contaminated, as it is a clinic for HIV/AIDS-seropositive individuals.

Due to the transmissibility characteristics of AIDS, changes in the infection control procedures happened quickly, which years of education had not been able to achieve. The paradigmatic rupture occurs when there is a concrete space where teachers and students move, creating a learning context that contradicts the essential presuppositions of the old paradigm.

It is important to offer a discipline that aids the students “[...] in the articulation of feelings and beliefs, in their self-perception process, in the perception of the world’s alterity, in the perception of different human behaviors and potentialities [...]” (p.30) so as to educate individuals “[...] who are humanized, sensitive, prepared to deal with themselves and with their patients, a task that demands working with diverse values inserted in complex historical, cultural and social contexts” (p.30).

Final remarks

Students have stereotyped representations regarding their future HIV/AIDS patients. The characterizations still are social stereotypes like thin bodies, male homosexuals, people with a
depressed appearance. When they came into contact with the HIV/AIDS patients, their image of seropositive individuals changed. As the disease has no cure and generates prejudice, the clinical practice emphasized biosafety issues. Fear was observed through the tendency to overestimate the risks of HIV transmission, both in the students’ attitudes and in their discourses, as they were more careful when they assisted patients who were known to be infected – in the other clinics, the protocol was not followed in excess as it happened at the Integrated Clinic IV - HIV/AIDS.

Holding a discussion before clinical assistance, so that the students can expound aspects related to each one’s beliefs, myths and knowledge, seems to be a strategy that will help to break stereotypes.

Ethnography as a methodological path to study the perceptions of the Dentistry students of Unimontes during the clinic with HIV/AIDS individuals has shown that it is important to offer a space, in the assistance provided to this population during the undergraduate program, to break paradigms and ratify that the biosafety norms must be the same with all patients.

It is fundamental to educate professionals who have initiative, creativity and critical sense, and who are also ethical, humanized and have an amplified view of the world, so that they can understand it and act to transform it into a better society.

Collaborators
The author Rossi-Barbosa was responsible for the participant observation, the interviews with the students, the transcriptions and for writing the text; the co-authors Ferreira, Sampaio and Guimarães were responsible for the bibliographic review and for revising the text.

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