

Professional self-protection and nursing care for HIV patients: both party representation*

Auto-proteção profissional e cuidado de enfermagem ao paciente soropositivo ao HIV: duas facetas de uma representação

Auto-protección profesional y cuidados de enfermería prestado al paciente soropositivo al VIH: dos facetas de una representación

Gláucia Alexandre Formozo¹, Denize Cristina de Oliveira²

ABSTRACT

Objective: To identify and describe the approaches for professional self-protection in the social context of the nursing care for HIV patients. **Methods:** This was a qualitative descriptive study. A sample of 40 professional nurses from a university hospital in Rio de Janeiro participated in the study. Data were collected through interviews and analyzed with ALCESTE 4.7 software. **Results:** Professional self-protection is an important element of nursing care for HIV patients. Self-protection included the use of personal protection equipment, the handling and disposal of sharp materials, and type of exposures and precautions. **Conclusions:** Professional self-protection in providing care for HIV patients are the same as those recommended for universal precautions.

Keywords: Self care; Acquired immunodeficiency syndrome; HIV; Nursing care; Precaution

RESUMO

Objetivos: Identificar e analisar os conteúdos relativos à auto-proteção profissional presentes na representação social da equipe de enfermagem acerca do cuidado de enfermagem prestado aos pacientes soropositivos ao HIV. **Métodos:** Estudo qualitativo, exploratório-descritivo. O cenário foi um hospital universitário do Rio de Janeiro e os sujeitos 40 profissionais de enfermagem que cuidam ou já cuidaram da clientela em questão. Os dados foram coletados por entrevistas e analisados através do *software* ALCESTE 4.7. **Resultados:** Observou-se que a auto-proteção profissional figura como importante elemento do cuidado, abrangendo: a utilização de equipamentos de proteção individual; a manipulação e descarte de materiais perfuro-cortantes; a exposição profissional no cuidado prestado; e as formas de precaução. **Conclusão:** Os conteúdos relacionados à auto-proteção profissional são construídos em torno da utilização da precaução padrão, diferente de quando se trata de outras clientelas, quando esta não se faz fortemente presente.

Descritores: Autocuidado; Síndrome de imunodeficiência adquirida; HIV; Cuidados de enfermagem; Precaução

RESUMEN

Objetivos: Identificar y analizar los contenidos relativos a la autoprotección profesional presentes en la representación social del equipo de enfermería acerca del cuidado de enfermería prestado a los pacientes seropositivos al VIH. **Métodos:** Se trata de un estudio cualitativo, exploratorio-descritivo que tuvo como escenario un hospital universitario de Río de Janeiro y como sujetos participantes a 40 profesionales de enfermería que cuidan o ya cuidaron de la clientela en cuestión. Los datos fueron recolectados por entrevistas y analizados a través del *software* ALCESTE 4.7. **Resultados:** Se observó que la autoprotección profesional figura como un importante elemento del cuidado, abarcando: la utilización de equipos de protección individual; la manipulación y descarte de materiales punzo-cortantes; la exposición profesional en el cuidado prestado; y las formas de precaución. **Conclusión:** Los contenidos relacionados a la autoprotección profesional son construídos alrededor de la utilización de la precaución patrón, diferente de cuando se trata de otras clientelas, cuando ésta no se hace fuertemente presente.

Descriptores: Autocuidado; Síndrome de inmunodeficiencia adquirida; VIH; Atención de enfermería; Precaución

* Research study made at the Nursing Post-Graduation course of Universidade Estadual do Rio de Janeiro, through the CAPES masters sponsorship program.

¹ Graduate student (PhD), specializing in Social Psychology at Universidade Estadual do Rio de Janeiro – UERJ – Rio de Janeiro (RJ), Brazil. Public Server's Nurse for the State Hospital (RJ).

² PhD in Public Health, Titular Professor of the Nursing College of Universidade Estadual do Rio de Janeiro – UERJ – Rio de Janeiro (RJ), Brazil.

INTRODUCTION

This article consists of a snip from the dissertation “Social representations of nursing individuals living with HIV/AIDS, from the nursing team’s perspective”, developed at the PhD Nursing Program of Universidade Estadual do Rio de Janeiro.

The nursing service is inserted within all phases of the HIV/AIDS epidemic, given the goal of taking care of all individuals and social groups, from a supposedly healthy condition to an emergency of serious illnesses⁽¹⁾. However, it is important to remember that during the professional practice, with regard to HIV/AIDS, the contamination risk has to be taken into consideration – given the possibility of accidents with biological material – as well as dealing with the consequences of the illness, which result in a type of social representation of AIDS and the infected population, as well as specific practices of protection.

Thus, nursing professionals treating positive HIV test patients, confront with specific aspects such as fear of the exposition /contamination by the virus⁽²⁾. In that context, professional protection practices consist of an important factor to be considered when referring to nursing positive HIV test patients. Furthermore, protection is found amidst the main components of social representation of nursing professionals, regarding positive HIV test patients⁽³⁾.

It is important to observe that social representation is “a form of knowledge, socially elaborated and shared, which has a practical objective and concur for the construction of a reality, common to a social set”⁽⁴⁾.

Looking forward, the interest of this article lays on the professional self-protection within the social representation of nursing care dedicated to the positive HIV test/AIDS patients, elaborated by the nursing team members. The objective of this study therefore was to identify and analyze the professional self-protection related contents found in the nursing team social representation around nursing positive HIV test/AIDS patients.

This study is justified for perceiving that the nursing care involves, among other things, the environment, values and the form of a determined symbolization space. Moreover, it comprehends it is through social representation that the existing symbolic reality can be captured, which many times, although not noticed, seems to have a strong power at mobilizing and explaining reality, and guiding the actions of social groups.

METHODS

This is an exploratory-descriptive study, founded on a qualitative approach. The Social Representation Theory process approach was adopted, once it emphasizes the

representations constitution process, while also affirms the importance of its product as well, i.e., its contents⁽⁵⁾.

The study scenario was a university hospital, located in the city of Rio de Janeiro/RJ, which has an HIV/AIDS Specialized Service Center. Understanding that the proximity with the object is an element that increases the possibility of its social representation existence, for a larger focus and the sake of pressure regarding inference, the sample of individuals selected were professionals from the nursing sectors with higher number of individuals infected by AIDS, which included: parasite-infectious illnesses, medical clinic, lungs diseases, and Intensive Care Unit.

The targeted individuals were 20 nursing assistants and 20 nurses that have or are currently assisting patients infected by AIDS. It is convenient to highlight that the activities considered direct care were those characterized by the physical contact. The aspects of the Resolution nº 196/96 from the Conselho Nacional de Saúde (National Health Department) were also taken into consideration, and the project was approved by an ethics committee, process code number 1575.

Data collection was done through interviews, and the help of other two tools: a structured characterization questionnaire of the individuals selected (age, sex, marital status, professional category, time in the job, length of experience treating HIV patients); and a semi-structured guide with themes to be approached during the interviews, such as the HIV/AIDS and the professional practice and the perception of persons infected by the Syndrome. These interviews were registered in audiotapes to allow capturing all statements integrally.

The lexical technique was used for data analysis, through the software ALCESTE (Lexical Analysis by Context of a Text Segments Set) 4.7, idealized by Max Reinert, in 1979. This application identifies contents of a set of texts through a textual statistics tool. Thus, it divides the body of analysis (product of all material to be analyzed, in this case, the 40-interviews set) into categories, according to the proximity within their reduced forms, i.e., their contents. That proximity is perceived through the χ^2 , which is calculated matching either the presence or absence of a word in an Elementary Context Unit (ECU) and the link of such word to the respective category.

It is convenient to define ECU as elements from the body which have different sizes, dimensioned by the application according to the total size of the body, and respecting the punctuation and matching average in the text.

As previously mentioned, this article consists of a snip from a dissertation, and for that, it selected the category analysis comprising the higher percentage of the analyzed body by the application, which is, 33.5%, corresponding to 470 out of the total 1.402 ECUs analyzed.

RESULTS

The category to be discussed presents the largest statistical association with male individuals ($x^2=5.40$), ranging from 35 to 44 years of age ($x^2=5.53$), monthly income above R\$ 6 000.00 ($x^2=15.54$) having worked in the nursing sector for around 10 to 20 years ($x^2=4.05$).

In that category, each ECU has an average of 17.57 words analyzed. Yet, in the 470 ECUs 99 reduced forms were selected, representing statistical association with the category ($x^2 e'' 4.77$).

Reduced forms with values larger than x^2 and which appoint to the meaning found in the category are: *caution* ($x^2=264.94$); *gloves* ($x^2=228.58$); *mask* ($x^2=92.93$); *utilize* ($x^2=87.93$); *routine* ($x^2=82.38$); *procedures* ($x^2=77.72$); *nursing care* ($x^2=65.26$); *presence* ($x^2=65.07$); *alteration* ($x^2=56.91$); and *blood* ($x^2=51.67$). From these data, the presence of contents related to concepts and knowledge built by the group around the self-protection procedures adopted while taking care of a HIV/AIDS test positive patient and about its finalities was evidenced.

This category is sub-segmented into two: "Adoption of a Preventive Standard" and "Occupational Exposition". The first comprises the sub-categories "Utilizing equipments of individual protection and the AIDS infected patient care" and "Dealing with and disposing needles and related material within the context of being precautions". Yet, the second category embraces the sub-categories of "Professional exposition at nursing" and "Precaution Formats".

Category 1- Adoption of a Preventive Standard

Sub-category 1.1 – Utilization of equipment for individual protection while rendering assistance to the HIV/AIDS patient

Members of the team interviewed recognized that dealing with body fluids while nursing a patient requires systematic precaution, very important standard in view of the high risk of contamination. Moreover, emphasis was given to the fact that preventive standards should be applied for overall patients, regardless of the illness carried. That is due mainly to the fact of stereotype has changed for clients with HIV/AIDS, due to the advent of the anti-retroviral therapy, which makes it impossible to identify a person with HIV/AIDS among others.

Mostly, the precaution in question was restricted to the gloves usage during the technical procedures for the patient. However, some members of the team remembered the importance of also using additional individual protection equipments (IPE), such as protection glasses.

Despite of this sub-category initially technical characteristic, quotations regarding prejudice were also observed, which sometimes assumes the role of self-

protection.

"It is no longer important because no nursing professional [...] punctures, performs invasive procedures, curatives, administer medications, disconnects circuits or any other procedures on a patient without wearing gloves and a mask"

(Nurse, treating HIV/AIDS patients for >15 years)

"[...] Prejudice exists for a nursing professional whose knowledge on HIV/Aids is very limited." (Nursing Assistant, treating HIV/AIDS patients for >15 years)

With regard to the caution at disposing biological waste, members of the nursing team mentioned the gloves and protection glasses usage while performing such procedures. Moreover, emphasis was given to preventive actions, when the client is known to be infected by AIDS, are doubled, using in some cases IPE, which is not applied to other types of client, as it occurs with protection glasses.

"When disposing diuresis I am more careful than I would normally be with other patients. With the HIV/AIDS patient I care about wearing protection glasses while making tracheal aspiration" (Nurse, treating HIV/AIDS patients for <15 years)

Understanding that preventive standards are essential while dealing with any patient was a subject mentioned by the interviewed team, either they know if the patient is HIV/AIDS infected or not. Moreover, the team even states that they should nurse patients keeping in mind all of them can potentially be HIV/AIDS carriers.

However, the team mentioned the diagnosis of test-positive for HIV alters the type of care the patient will receive, once members of the team have shown, in this case, higher level of concern regarding occupational exposition. Thus, when nursing positive HIV test patients, preventive actions are more focused on preventing health specialists from professional contamination than while dealing with the other clients. Therefore, they understand the difference there is to treat HIV/AIDS patients and to treat other clients. The team also understands that nursing the HIV/AIDS patient is different, for it requires more precaution related to occupational exposition.

"[...] The awareness of prevention should be applied to any patient, but with the diagnosis of test-positive for HIV, we have noticed that health professionals are more cautious due to the fact they are afraid of contamination" (Nurse, treating HIV/AIDS patients for <15 years).

Going further on the application of IEP, several members of the team affirmed its disuse, justified by one out of 4 reasons. The first consists of believing

they are not necessary, stating the precautions taken while on technical procedures are sufficient to be protected from any occupational contamination. The second consists of technical difficulties to apply the IEP. The third refers to forgetfulness, caused by the emergence need of a given procedure. And, the fourth refers to the unavailability of such materials in the venue.

Sub-category 1.2- Dealing and disposing needles and related material within the context of being precautions

The interviewed individuals emphasized the concern about specific recommendation that should be followed during the procedures performance, which involves the handling of needles and related material. The individuals reminded the adoption of preventive measures while handling and disposing such materials should become a routine in nursing.

The need of having maximum attention towards preventing potential accidents while performing procedures was mentioned, either for clients, healthcare professionals or other staff members, among which, the Cleaning Staff. Such preventions range from the material preparation to perform procedures, to the disposal of such material. Special attention shall be put on not forgetting needles or related material on inappropriate locations, like on a patient's bed, for example.

Further, the importance of appropriate recipients availability for such materials disposal was also highlighted by nursing team interviewed members. Besides that, the team also talked about positioning recipients preferably close to the patient bed to prevent longer moving routes carrying such material, during which labor accidents may happen

"I am cautious and wear mask, protection glasses, and gloves consistently. Regarding needles and related material, I systematically reach for a "descarpack" near the patient's bed to prevent walking around with a needle. There must be caution towards the body fluids of test-positive HIV patients and physical contact. (Nursing Assistant, treating HIV/AIDS patients for >15 years).

They stated the existence of appropriate recipients is not enough, it is also important that they are used correctly not to become focus of accidents. An example of that situation is seen at the defined volume capacity of a recipient for needles and related material, which needs to be respected, otherwise, accidents may happen to the healthcare team members.

Moreover, the non-adoption of recipients by the overall nursing team was mentioned, either due to forgetfulness or lack of importance given to it. In that sense, team members' guidance and awareness to

accomplish such rules are necessary, so that all staff respect them.

"The nursing professional is cautious while pulling out needles and related material and disposing them into the descarpack. Not all nursing professionals use it, but I think it depends also on the nursing professional to be aware of the procedure. (Nursing Assistant, treating HIV/AIDS patients for <15 years).

Category 2- Occupation Exposition

Sub-category 2.1- Professional exposition at nursing

Members of the interviewed team pointed out several procedures in which the occupational exposition is perceived. Among such procedures are the curatives, vein puncture, skin injury contact, intravenous medication administration and tracheal aspiration.

Furthermore, the team observed that in many occasions the process of diagnosing illnesses such as TB and Meningitis takes time. For that reason, before the diagnosis is communicated to the team, they are exposed to contact with these clients without the required IEP utilization.

"Patients with TB, for example, [...], the health professional is communicated about the diagnosis long after the patient was admitted, after talking and puncturing him/ her. There are positive HIV test patients with more evident injuries and others have a smooth skin and get physically close to the healthcare professional". (Nursing Assistant, treating HIV/AIDS patients for <15 years)

"The manipulation we use the most is intravenous medication administration, curative performance and aspiration because the majority of Intensive Care patients are intubated or with tracheostomies." (Nursing Assistant, treating HIV/AIDS patients for <15 years)

In that context, interviewees mentioned the concern towards the occupational exposition not only to HIV but to other illnesses like Hepatitis B and C. Interviewees observed a greater concern towards contamination by the Hepatitis than by HIV, given Hepatitis higher degree of contamination when compared to HIV. Besides that, interviewees believe it is possible to identify HIV infected persons given their physical fit and present clinical signs.

"I am afraid of patients with Hepatitis. Not HIV patients. They are regular patients, if they are stabilized. There is no problem. The problem lays on me "putting on all the garments" for the HIV patient. But referring to prejudice, there is nothing of the sort. It is the same work with that patient." (Nursing Assistant, treating HIV/AIDS patients for >15 years)

"The HIV patient is recognized by the appearance, the lips, the grayish skin color, the thinness, the consecutive diarrhea. We

stay alert. The HIV patient presents typical signs that the Hepatitis patient does not." (Nursing Assistant, treating HIV/AIDS patients for >15 years)

Concerning, specifically, the positive HIV test patient, it was possible to observe the team members concern regarding informing their colleagues about such patient's presence in the sector, meaning they perceive the risk attached to the situation. Such concern does not exist regarding other diagnosis patients, such as, for instance, the hepatitis diagnosed patient.

"However, if the patient is test-positive for HIV, it is possible to notice an extra concern that does not exist when dealing with the hepatitis or cirrhosis patients, which is wrong." (Nurse, treating HIV/AIDS patients for >15 years)

The interviewees recognized that many work accidents occur with nursing and other healthcare professionals' team members. Such accidents were justified by the heavy workload and intense rhythm professionals cope with, by the lack of technical abilities, by the lack of care when dealing with and disposing needles and related material, besides the lack of IPE usage.

"In spite of the protection, work accidents and contamination happen because long routines are executed during the twelve hour shifts [...]" (Nurse, treating HIV/AIDS patients for >15 years)

"Doctors have had frequent accidents when puncturing patients because of their lack of ability manipulating the material and because they do not want to use protection glasses." (Nurse, treating HIV/AIDS patients for >15 years)

Sub-category 2.2. Precaution forms

The nursing team members pointed out that, when providing care to clients with other diseases, they try to perform different precaution methods, according to the client's need and the ways their disease is transmitted. The precautions taken are divided into three types: contact, breathing, and reverse, each one requiring different IPE utilization.

"[...] The nursing professional will define the sector planning, the individual protection, and the collective protection based on the transmission ways." (Nurse, treating HIV/AIDS patients for >15 years)

The interviewees stated they took contact precautions when dealing with clients admitted with septicemia, for instance. When taking this precaution, they reported using IPE not so often used, such as the protective coat, gloves, mask, and protection glasses.

"Almost all patients, when admitted to the ICC (Intensive Care Center) with suspected septicemia, are maintained isolated from contact and the healthcare professionals use protective coats, masks, and, when performing tracheal aspiration or punctures, protective glasses." (Nurse, treating HIV/AIDS patients for >15 years)

With regard to respiratory precautions, the interviewees recognized its importance when treating clients with airborne diseases. Among these, tuberculosis was emphasized as being the most demanding for this type of precaution in the hospital routine. Concerning the IPE used in these cases, the mask N95 was the most remarkably mentioned.

The subjects mentioned the existence of a great amount of positive HIV test inpatients infected by *M. tuberculosis*. This fact is due to the immunodepression inherent to the clients who already developed AIDS and, because of it, have an intense predisposition to developing opportunist infections, that is, infections that develop in persons with a weakened system, and among those is tuberculosis⁽⁶⁻⁸⁾.

"Most of the test-positive HIV patients get here with the tuberculosis bacillus, and the nursing professionals utilize respiratory and contact isolation with no alterations." (Nurse assistant, treating HIV/AIDS patients for >15 years)

Regarding the reverse precaution, according to the interviewees, it is applied to a great amount of positive HIV test patients who present an aggravated clinical picture, and have already developed AIDS, thus, they are immunocompromised. Therefore, the nursing team members perceived the importance of utilizing IPE, such as gloves, mask, protective coat, so as to protect such clients, once their immune system is depressed and more susceptible to opportunist infections.

"The nursing care does not change much regarding other types of patients, once caution is always present. Normally, gloves are used to protect both the professional and the positive HIV test patient, as well as the coat, mask, because these patients are immunodepressed." (Nurse, treating HIV/AIDS patients for >15 years)

Some interviewees admitted that the precautions taken sometimes alter the nursing care provided, once they demand physical distance between the professional and the patient. It is important to highlight that the interviewees justify such distance as a caution measure.

"The issue is not a positive HIV test patient, but the care provided changes due to the contact isolation, the coat usage, the increased caution regarding everything related to it." (Nurse, treating HIV/AIDS patients for >15 years)

"[...] Sometimes, the care provided to a positive HIV test patient is not different from others. When the patient has tuberculosis, or is in contact isolation, the nursing professional has to be more cautious and distant." (Nurse assistant, treating HIV/AIDS patients for <15 years)

It is important to remark that such precautions exist so as to protect not only the client and the healthcare professionals involved in the care process, but also other clients that may also be inpatients.

DISCUSSION

The nursing professionals interviewed represent the standard precaution as the one that should be used with when providing care to any patient, however, they demonstrate a higher concern when dealing with a positive HIV test patient: this contradiction may be strongly related to the social representation of AIDS, once it is still deeply permeated by negative elements, such as death and the absence of cure, which may guide the care process due to the fear of contamination felt by the professionals⁽⁹⁾.

Therefore, providing care to a positive HIV test patient is said to be the same as providing care to any other client, nevertheless it is differentiated by the necessity of protection against contamination⁽¹⁰⁾. This occurs due to the fact the client is just like any other, however different due to his fatal and transmissible disease.

Thus, in parallel to the existing concerns towards the preconized standard precautions, some nursing team members demonstrated being afraid of the contact with positive HIV test patients, for perceiving them as potential contamination sources. Therefore, such members establish, particularly and with no scientific support, extra precaution actions. An example is using two pairs of gloves when providing care to positive HIV test patients.

It is possible to notice that, many times, the interviewees' representations are close to what is recommended with regard to IPE usage when providing care. The nursing professionals demonstrated understanding that such equipment should be used with all clients when manipulating blood, body fluids, and injured skin mucosae so as to reduce the professional exposition.

The four reasons previously mentioned and used by the professionals as justifications for the non-usage of IPE, namely: enough caution for the procedure; technical difficulties using IPE; forgetfulness; and IPE unavailability at the work site, meet the results brought by a research developed to verify the professionals' adherence to universal precautions, demonstrating resistance from the subjects to adopt the protection measures⁽¹¹⁾.

Furthermore, studies on the AIDS impact to the nursing practice detected that 76% of the nurses and 82% of the nursing assistants interviewed referred to some alteration to the professional practice after the AIDS outbreak⁽¹²⁻¹³⁾.

It is possible to notice that the interviewees understand the high occupational exposition level to which nursing team members are exposed for working in admission sectors. Among such expositions, the occupational accidents are highlighted, and among this type, the accidents caused by needles and related material represent the largest amount of which⁽¹⁴⁾.

Additionally, the fact nursing team members spend the majority of time with patients, either to perform some procedure or assist on it, should be considered. Thus, these professionals are exposed to a higher probability of undesirable events during the care.

The majority of accidents with material contaminated by HIV occurred among nursing team members and, among these, nursing assistants were the most subjected ones⁽¹⁵⁾. In 2002, two researches published verified similar results, for they conclude the nursing category remains being the most exposed to needles and related material accidents^(14,16). Therefore, even ten years after the publications, the tendency of accidents related to needles and related material remains.

With regard to accidents with needles and related material, studies results go along with the representations exposed by the nursing professionals interviewed when they point out that a great part of the accidents occur because material is left in inappropriate sites⁽¹⁴⁾. Among such sites are the client's bed, the beside table, the medication tray, the floor and the common garbage bin. Therefore, although the nursing team members know the bio-safety measures, they do not correctly employ them, which results in risks of accidents with biological material⁽¹⁷⁾.

In this context, the needles and related material disposal in inappropriate sites represents the main source of perforation risk⁽¹⁶⁾. The needles and related material disposal is an important source of occupational accident risks, not only to the team members that are directly involved with the care, but also to those who are indirectly involved, such as the cleaning team members^(14,16).

CONCLUSION

It is possible to verify that the care representation exposed refers mainly to self-protection, and not protection regarding the others, making it possible to envision that the protection notion spans the individual dimension (me) and the collective dimension (them).

Upon the contents presented, it is possible to conclude

that the nursing team members socially represent the nursing care provided to positive HIV test patients, essentially, based on elements that concern professional self-protection. To do so, they comprise contents regarding the standard precautions and the disease exposition ways when providing care.

Moreover, they point out that the antiretroviral therapy adoption brings to the care scenario, many times, positive HIV test patients that do not present the stereotype outlined by signs like excessive slimming, Kaposi's sarcoma, diarrhea, paleness, as in the beginning of the epidemic, impeding the identification. Thus, such invisibility determines the need to adopt a standard precaution, once the care provided has to be the same to all clients, regardless of the diagnosis presented.

However, in parallel to the existing concerns regarding the preconized standard precautions, some nursing team members demonstrated being afraid of having contact with positive HIV test patients and establishing extra precaution actions.

Therefore, a contradiction can be verified in this representation, once the positive HIV test patient care is said to be the same as any other patient's, however

different due to the need of protection regarding contamination. This is due to the fact that patients are considered the same way, however, the positive HIV test patients are different because of their transmissible and fatal disease. Thus, the additional precautions taken determine the care provided to positive HIV test patients, showing that, in spite of the disease chronification and the ill persons invisibility, the disease (and the virus) are still represented as common.

With regard to IPE availability in the healthcare institutions, claims should be filed in the appropriate organs so that solutions for this issue can be provided. It is unacceptable that team members have to provide care without the proper protection conditions.

In order to prevent and minimize accidents with needles and related material, the continuous education of healthcare professionals should be part of the routine, aiming the standard precautions application already mentioned and discussed. In this context, the permanent education is a must, mainly for the nursing team, concerning work accidents with needles and related material, besides searching for alternatives that bring more safety to the procedures performed.

REFERENCES

- 1- Fox RC, Aiken LH, Messikomer CM. The culture of caring: AIDS and the nursing profession. *Milbank Q.* 1990;68(Suppl 2):226-56.
- 2- Miquelim JDL, Carvalho CBO, Gir E, Pelá NTR. Estresse nos profissionais de enfermagem que atuam em uma unidade de pacientes portadores de HIV-AIDS. *DST J Bras Doenças Sex Transm.* 2004;16(3):24-31.
- 3- Costa TL. As representações sociais acerca das pessoas com HIV/AIDS entre enfermeiros: um estudo de zona muda [dissertação]. Rio de Janeiro: Faculdade de Enfermagem da Universidade do Estado do Rio de Janeiro; 2007.
- 4- Jodelet D. Representações sociais: um domínio em expansão. In: Jodelet D, organizadora. *As representações sociais.* Rio de Janeiro: EdUERJ; 2001. p. 17-44.
- 5- Sá CP. A construção do objeto de pesquisa em representações sociais. Rio de Janeiro: EdUERJ; 1998.
- 6- Gabriel R, Barbosa DA, Viana LAC. Perfil epidemiológico dos clientes com HIV/AIDS da unidade ambulatorial de hospital escola de grande porte: município de São Paulo. *Rev Latinoam Enferm.* 2005;13(4):509-13.
- 7- Carvalho LGM, Buani AZ, Zöllner MSAC, Scherma AP. Co-infecção por *Mycobacterium tuberculosis* e vírus da imunodeficiência humana: uma análise epidemiológica em Taubaté (SP). *J Bras Pneumol.* 2006;32(5):424-9.
- 8- Muniz JN, Ruffino-Netto A, Villa TCS, Yamamura M, Arcencio R, Cardozo-Gonzales RI. Aspectos epidemiológicos da co-infecção tuberculose e vírus da imunodeficiência humana em Ribeirão Preto (SP), de 1998 a 2003. *J Bras Pneumol.* 2006;32(6):529-34.
- 9- Silva GA. Da aparência à essência: o cuidado no cotidiano do portador do HIV. Juiz de Fora (MG): Editora UFJF; 2004.
- 10- Sadala MLA. *Cuidar de pacientes com Aids: o olhar fenomenológico.* São Paulo: Editora UNESP; 2000.
- 11- Brevidegli MM, Assayag RE, Turcato Júnior G. Adesão às precauções universais: uma análise do comportamento de equipe de enfermagem. *Rev Bras Enferm.* 1995;48(3):218-32.
- 12- Gir E, Silva AM, Costa FPP, Hayashida M. Alterações na prática profissional de enfermeiros de um hospital de ensino do interior paulista, em consequência ao surgimento do HIV/AIDS. *Rev Gaúch Enferm.* 2000;21(2):37-54.
- 13- Gir E, Prado MA, Canini SRMS, Hayashida M. O impacto da AIDS na prática de enfermagem: um problema de saúde pública. *DST J Bras Doenças Sex Transm.* 2005;17(1):39-43.
- 14- Canini SRMS, Gir E, Hayashida M, Machado AA. Acidentes perfurocortantes entre trabalhadores de enfermagem de um hospital universitário do interior paulista. *Rev Latinoam Enferm.* 2002;10(2):172-8.
- 15- Machado AA, Costa JC, Gir E, Murakawa Moriya T, Figueiredo JFC. Risco de infecção pelo vírus da imunodeficiência humana (HIV) em profissionais da saúde. *Rev Saúde Pública.* 1992;26(1):54-6.
- 16- Brevidegli MM, Cianciarullo TI. Análise dos acidentes com agulhas em um hospital universitário: situações de ocorrência e tendências. *Rev Latinoam Enferm.* 2002;10(6):780-6.
- 17- Rodrigues AB, Magalhães MBB, Sales SMM. A questão do vírus da imunodeficiência humana e a autoproteção no trabalho. *Rev Bras Enferm.* 1995;48(3):272-85.