Professional training for ethical and comprehensive care of patients living with HIV/AIDS

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**Abstract**

**Introduction:** Caring for people living with HIV is complex and requires ethical and skilled professionals able to offer humanized and comprehensive care at the different levels of the health system.

**Objective:** Determine whether the academic training of health professionals at a university in Northeastern Brazil develops the skills and competencies to care for people living with HIV.

**Methodology:** This is a qualitative study, conducted in two stages: (1) documental analysis of curricular methods, contents and activities performed in Nursing, Medicine and Dentistry courses and (2) focus groups composed of undergraduates and professors from the three courses. Data analysis was conducted according to Bardin.

**Results:** Documental analysis identified few curricular components in the three courses specifically related to HIV. Focus group analysis showed that the issue is superficially and sporadically addressed, with few hours spent on the subject and methodologies that do not satisfactorily develop the skills and competencies required to care for HIV-infected patients.

**Conclusion:** The current training model for health professionals is limited to technical-scientific knowledge of HIV/AIDS, with little practical experience.

**Keywords:** Medical education research, Curriculum infrastructure, Ethics/attitudes, Learning outcomes
The ethical questions involved in caring for people with HIV are related to the discrimination to which they are subjected because of their seropositivity (Monteiro & Figueiredo, 2009), given that prejudice reflects the outdated viewpoint that AIDS is linked to promiscuity, drug use and prostitution, and remains a societal challenge (Scanavino, Resende, & Abdo, 2000).

It is known that health professionals' care of their patients occurs within a social context (Crandall, George, Marion, & Davis, 2003), and the care provided is often characterized by unpreparedness, disorientation and the complex questions of affective and subjective issues involved in this type of relationship (Stott, 2013). Negative attitudes and stigmatization of these professionals in terms of patient care persist (Senna, 2005). As a result, there is a delay in the early diagnosis of HIV infection and patients find it difficult to adhere to treatment, feeling humiliated and segregated when access to care is denied (Bonvicini & Perlin, 2003; Discacciati & Vilaça, 2001; Ministério da Saúde, 2015; UNAIDS, 2016).

Every professional committed to quality care and driven by the perspective of comprehensive care must understand the vulnerabilities of each person seeking such care, that is, understand the situations that debilitate them and predispose them to illness. This becomes even more important when the issue is HIV/AIDS, since considerable attention has been given to risk behavior, when there are other conditions that make individuals vulnerable to disease, namely aspects of private and collective life, socio-environmental conditions and the actions of public and social institutions. Addressing the issue of vulnerabilities during the training of these professionals broadens their involvement in health and contributes to formulating new policies aimed at eradicating this epidemic (Aultman, 2006; Borges, Sampaio, & Gurgel, 2012; Senna, 2005). It is important to strive for quality care, using comprehensive care as the guiding principle. However, to put this into practice, it is essential to understand that these actions often go beyond the health field and technical skills, and demand a broader, holistic view to learn the needs of the population and meet the biological, social and subjective demands of each patient in a humanized and effective manner (Gonze & Silva, 2011; Mattos & Pinheiro, 2001).

As such, the educational process is a key tool in establishing this approach, consisting of measures aimed at comprehensive and multiprofessional care, resulting in teams able to self-assess their attitudes and conceptions (Borges et al., 2012; Oliveira, Landroni, Kurokawa, & Ayres, 2005; Senna, 2005).

Brazilian curricular guidelines applied to the courses of Medicine, Nursing and Dentistry emphasize the need for academic training that develops skills aimed at providing comprehensive health care to individuals. The curriculum should contain specific learning objectives to qualify professionals to deal with situations of vulnerability and diversity present in care settings (Nogueira, 2009). This is because there is a legitimacy crisis in health care, primarily with respect to patients with HIV/AIDS (Ayres, 2004).

Shortcomings in training to address aspects related to sexuality, vulnerability and people living with HIV and their families have also been reported in American schools. Studies reveal lack of training and confidence in students with respect to this population, while those that are well trained in the issues of vulnerability and encouraged to overcome paradigms that extrapolate purely clinical and pathological aspects of HIV seropositivity are able to offer better care to their patients and develop positive attitudes (Haist et al., 2004; Sanchez, Rabatin, Sanchez, Hubbard, & Kalet, 2006; Shindel, Baazeem, Eardley, & Coleman, 2016; Wittenberg & Gerber, 2009).

As such, a combined effort is needed to create measures that promote changes and improvements in medical schools in order to ensure that future professionals are able to offer quality care (Garcia & Koyama, 2008). This can be
achieved by educating new doctors, nurses and dentists using a revised curricular structure to reconstruct paradigms and better guide ethical practices and the care of individuals in its multiple dimensions.

Thus, the present study aimed to determine whether the academic training of health professionals (doctors, nurses and dentists) at a university in Northeastern Brazil develops skills to care for people with HIV/AIDS, establishing comprehensive, ethical and humanized care that legitimates quality.

**Methodology**

This is a qualitative study conducted in the medical, nursing and dental courses at the Federal University of Rio Grande do Norte (UFRN) - Brazil. The research was divided into 2 stages: (1) documental analysis of the curricular design and the methods, content and activities performed in the disciplines of the aforementioned courses and (2) focus groups with undergraduates and professors from the medical, dental and nursing courses.

The pedagogical projects of these three courses were analyzed. The programs were evaluated using a search in UFRN's Integrated Academic Activity Management System of all disciplines in order to identify the content, methods, and teaching-learning procedures aimed at developing the skills needed to help individuals with HIV. The disciplines that contain the following terms or equivalent were selected: HIV/AIDS, humanization, comprehensiveness and patient care, and the ethical aspects involved, explicitly explained in teaching plans. These data were employed to guide focus group discussions and establish the scenario for future comparisons and analyses between what was recommended in theory for the projects and what actually occurred.

Two 90-minute focus group sessions were held at different moments, in accordance with Debus (1997) and Fitzinger & Barbour (1999), the first composed of undergraduate students of medicine, dentistry and nursing at UFRN and the second of professors from the aforementioned courses.

The student researchers of this study were responsible for data collection in both focus groups. They were previously trained and calibrated and performed the following functions: one controlled time, another made audio recordings and the third took field notes. The groups were directed by the most experienced researcher, who was familiar with the issue, aims of the study and focus groups, in addition to exhibiting clearness of expression, flexibility and the ability to listen.

The participants selected had to be employed by the university as professors or be nursing, medical or dental students. Students were in the final year of the course in the obligatory curricular stage and/or enrolled in an internship program and had passed in all subjects. Invitations to take part in the focus groups were sent by email and/or telephone contact. The professors were suggested by the course coordinators and taught clinical subjects with theoretical and practical content.

The first nine professors that responded by email were selected, three from each course. Similarly, the first 15 students that accepted were selected, five from each course.

The focus groups were held in an air-conditioned university classroom, with the presence of only the researchers and participants selected. The sample from the first focus group consisted of three fifth-year dental students, three sixth-year medical students and five nursing students, two from the fourth year and three from the fifth. Two medical students failed to appear, for reasons unknown. The sample of the second focus group consisted of nine professors, three from each course.
The participants gave their informed consent to take part and have the sessions recorded. A single line of discussion was developed and validated by the researchers, composed of four open questions to encourage free discussion. When an issue was exhausted, a new topic was introduced. The discussions were recorded using a professional recording device placed in the center of the focus group.

The transcripts of the focus groups were analyzed using content analysis by Bardin (2009), adapted by Minayo (2004). The analysis was conducted in three stages: pre-analysis, in which the material was organized in order to systematize the initial ideas and create analysis categories; exploitation of the material, where expressions and/or words that represent the central meaning of the discourses were categorized; and the treatment phase of the results obtained and their interpretation, in which categories were organized, relating them with each other and the aims of the research.

The project was approved by the Research Ethics Committee of the university, under protocol number 662.140.

**Results and Discussion**

At the end of documental analysis in the courses of Nursing, Medicine and Dentistry, 17, 18 and 7 disciplines respectively, discussed issues relevant to this study to a certain degree. However, only two, four and one of these dealt specifically with HIV/AIDS.

**Analysis of curricular structure**

Several curricular components of Nursing, Dentistry and Medicine in different school semesters discuss ethical or humanized conduct or comprehensive patient care, to provide the students with these skills for their future practice. However, few of them involve specific learning contextualized with the reality of patients with HIV/AIDS or how to present this approach (Table 1).

<table>
<thead>
<tr>
<th>COURSE</th>
<th>DISCIPLINES</th>
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<tbody>
<tr>
<td>Nursing</td>
<td>Microbiology</td>
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<tr>
<td></td>
<td>Comprehensive health care II</td>
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<tr>
<td>Dentistry</td>
<td>Special oral health topics*</td>
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<tr>
<td>Medicine</td>
<td>Infectious diseases</td>
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<td>Supervised internship in Infectology</td>
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<td></td>
<td>Integrated internship in Mother-Child Health</td>
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<td></td>
<td>Reproductive Health*</td>
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* Elective discipline: not part of the required curriculum.
This reveals a small curricular course load concerning issues that could impart the skills needed to deal with HIV-infected people and their families, in addition to topics related to vulnerabilities. Although sporadic contact with these patients is possible during supervised internships and in other disciplines, it is not officially scheduled in the curriculum, with no established course load or in-depth study. Thus, not all the students would have the same opportunities to be in contact with HIV-infected patients and their families, which may be related to the discourses emphasized by the students, declaring they did not feel confident, prepared or able to treat patients with this disorder.

Analysis of focus groups

After analysis using Bardin’s method, modified by Minayo (2004), 2 central themes were obtained, each containing 2 categories. The theme "Competencies and Skills" encompasses the categories "Preparation to assist people living with HIV" and "Peculiarities of the infected individual", the latter describing the particular aspects of the infection that interfere in the management of these patients, while the former refers to how prepared the professional/student feels to deal with patients. The second theme, "HIV/AIDS Education", includes the categories "Curricular activities" and "Extracurricular activities", both referring to the methodologies used to deal with HIV/AIDS, the former focused on curricular activities and the latter extracurricular activities.

"Competencies and skills"

The category "Peculiarities of the infected individual" showed that participants believe there are peculiarities in individuals with HIV, related not only to symptomatological manifestations and different associated opportunistic syndromes, but also ethical aspects, legal issues, social representations of the disease and an important emotional component linked to the challenges of living with HIV/AIDS (Aultman, 2006; Galvão & Paiva, 2011). However, only the biological aspects of the disease are discussed in undergraduate courses, showing a gap in competencies and skills that go beyond purely pathological and technical questions related to people with HIV, and essential for providing adequate and comprehensive care.

We do not study the ethical and humanistic element of HIV infection, only questions related to the virus and the manifestations it causes. Afterwards, we have no contact whatsoever with the disease. (Nursing student)

With respect to care, I consider myself prepared, since I follow the biosafety protocols for all patients. However, in relation to humanization, and talking to and comforting the patient, the undergraduate course is insufficient. (Dental student)

I agree that the physiopathological question is more emphasized in class and that the social aspects of AIDS are more difficult to address. (Professor of Dentistry)

The above statements reveal that undergraduate students acquire primarily technical-scientific knowledge about HIV/AIDS, in line with the Flexner teaching model (Araújo & Miranda, 2007), which directly reflects in their daily practice as a health professional (Nogueira, 2009).

In the category "Preparation to assist people living with HIV" only biological knowledge of the disease, devoid of the individual’s subjectivity, leaves professionals unprepared to provide effective care to individuals with HIV. This is because comprehensive care, as conceptualized by Ayres (2004), is considerably more than merely controlling the
infection, and results from contact between the technical and non-technical. This integration helps professionals care for their patients, establishing individualized and effective care (Monteiro & Figueiredo, 2009).

To that end, students need to be encouraged to develop an integrated, broad and human approach in their work process starting in the undergraduate course (Ceccim & Feuerwerker, 2004; Gonze & Silva, 2011), recognizing that this comprehensiveness requires skills and competencies such as the ability to discuss with HIV-infected patients their peculiarities, anxieties, fears and expectations; understand the context involved; develop and offer effective solutions to the health problems that arise; in other words, have a better understanding of the needs of individuals and their community (Mattos, 2004).

However, as shown in the focus group, discourses and curricular analysis, this primarily technical and fragmented model causes a lack of confidence among professionals in terms of providing sound psychological support and treating patients with HIV in a humanized and comprehensive manner, since they are unable to satisfactorily apply the knowledge acquired to improve their quality of life (Wingfield, Herbert & Ustianowski, 2012).

“We are not at all equipped to use a humanized approach and provide patients with psychological support.
(Nursing student)

“To be honest, I do not feel that I have the competencies and skills to deal with HIV-infected patients. (Dental student)

"HIV/AIDS Education"

According to the category "Teaching strategies", the courses analyzed largely used traditional methods, such as theoretical classes or seminars and clinical case discussions. According to the participants, there is a clear need for innovative methods aimed primarily at practical aspects that extrapolate classroom dimensions and overcome the superficiality of simplistic, partial approaches unsuited to the complexity of a patients with infection, whose outcome is directly influenced by a number of subjective and emotional factors (Katz et al., 2013; Monteiro, Villel, & Knauth, 2012).

“Most of the content is given in theoretical classes, followed by clinical case discussions with the students. At the end of the discipline there is a seminar that is not specifically about HIV/AIDS, but the issue may be discussed.
(Professor of Dentistry)

“This may be the best time to include a different active methodology regarding HIV/AIDS. (Professor of Medicine)

The implementation of new active models for health education, including everything from practical settings to simulating clinical cases, makes it possible to integrate knowledge of the disease with the subjective aspects of HIV-infected individuals and rectify the teaching-learning process (Chew et al 2012; Nogueira, 2009). Furthermore, professionals are better equipped to provide adequate care when they have already experienced a similar situation, primarily during the academic training period (Senna, 2005).

In regard to "Other learning methods", the data obtained from focus group discussions showed the existence of different extracurricular methods experienced by the students: research and extension projects, educational campaigns, extracurricular internships and optional disciplines. These methodologies are valuable alternatives for students and professors to develop competencies and skills based on experiences that help deal with the disease from
a different perspective (Sui & Pereira, 2008; Chew et al., 2012).

However, these strategies have limitations, primarily related to the fact that they are extracurricular and therefore not compulsory, reaching only students who show genuine interest in pursuing them. Moreover, the number of places available for these activities in dental, nursing and medical courses is insufficient for the number of students enrolled (Chew et al., 2012).

*These research and extension projects are sporadic and poorly attended by the students. So, I believe that there is not a representative sample of students in extracurricular activities involving HIV/AIDS.* (Professor of Dentistry)

*I developed a project with adolescents and young adults on the prevention of STD/AIDS, but only one nursing scholarship student out of 43 students took part.* (Professor of Nursing)

The need to implement changes in the current educational model was recognized, in terms of providing training capable of giving students the competencies and skills required when treating HIV-infected patients, helping them understand patients and meet all their needs (Aultman, 2006; Ciccarone, Coffin, & Preer, 2004).

*We need to qualify all health professionals. [...] To transform the current model we need to change the training provided. [...] We have to convince students to stop thinking that HIV/Aids is somebody else's disease, because in the health professional's mind it still is.* (Professor of Medicine)

**Conclusion**

This study identified deficiencies in the current undergraduate medical student training model, which is unable to develop the competencies and skills required by future professionals to care for HIV-infected patients.

Students and professors recognize that the curricula contain few opportunities to deal systematically with the ethical and comprehensive care of people living with HIV and their vulnerabilities, proving to be insufficient in providing new professionals with the required competencies and skills. The subject is addressed sporadically and superficially, with few effective hours and using teaching-learning methodologies that allow students minimal contact with HIV-infected patients in their daily practice and fail to stimulate ethical attitudes in the treatment of socially discriminated and stigmatized individuals.

Furthermore, the view that extracurricular activities could overcome curricular deficiencies should be discussed, since not all students have the same contact opportunities with HIV/AIDS patients and their families in internship settings, research, extension activities or disciplines that are not mandatory.

All of these elements are directly related to the data of the present study, in that students did not deem themselves competent enough to treat patients with HIV/AIDS. This corroborates the clear need for changes in the current training model of the three professions, aimed at including teaching and assessment methodologies that can be carried out in training, simulated case studies, and real case experiences, among others offered to students in the curriculum.

Enhancing the educational process is the key to providing society with professionals that understand and assist people infected with HIV comprehensively and holistically, resulting in quality care that is not limited to the purely biological aspects of the infection, but considers the individual as a complex and multidimensional being endowed with peculiarities and subjectivities. As such, this requires students to acquire a wide range of skills and
competencies that ensure comprehensive quality care for HIV patients.

As such, this study reveals a modest panorama regarding professional training to deal with HIV-infected individuals at a university in Northeastern Brazil, by analyzing the construction of skills and competencies during the undergraduate course in Nursing, Medicine and Dentistry, from the standpoint of students and professors, through documental assessment of the curricula, focus groups and systematic searches in the literature, in order to promote critical reflection and a revision of current health education practices.

The fact that few studies address this issue presented a challenge in conducting this research, suggesting the need for further investigation to complement the scenario presented here, and broaden the perspective and attitudes of professional training to provide ethical and comprehensive care to people living with HIV.

**Take Home Messages**

1. People with HIV need more skilled professionals able to deal with questions of gender, prejudice and vulnerability.

2. Medical, dental and nursing students feel unprepared to deal with people living with HIV.

3. Professors and students recognize the need to use active methodologies with an emphasis on teaching to provide the skills and competencies to care for HIV-infected patients.

4. The training of health professionals is deficient in dealing with aspects of sexuality and vulnerability.

**Notes On Contributors**

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Ricardo Douglas Santos de Freitas: Medical student at the Federal University of Rio Grande do Norte. Collected and analyzed data and helped write the text.
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Appendices

Declarations

The author has declared that there are no conflicts of interest.

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