# Experience of a dental clinical discipline for people living with HIV/Aids

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#### **ABSTRACT**

Considering the importance and need for integrated dental education and the dissemination of knowledge about care for patients living with HIV/Aids, the undergraduate course in Dentistry at the University of Montes Claros (Unimontes) has a specific discipline for the care of these patients, the Integrated Clinic IV. The objective of this paper is to report the history and experience of the Integrated Clinic IV discipline, since its implementation in the curriculum. The discipline has as its main objective to provide the academic with multidisciplinary knowledge and comprehensive patient planning. Clinical care is carried out based on a protocol created by the professors and constantly updated according to the literature. The dental evaluation of patients with HIV/Aids, at Clínica Integrada IV, includes an investigation of the history of opportunistic infections, tendency to hemorrhage, presence of cardiovascular diseases, diabetes and hepatitis, use of medications, in addition to the interpretation of a recent blood test. It is necessary to emphasize that the norms of biosafety in dental care are advocate equality for all individuals, however, there is still stigmatization of dental treatment for individuals with HIV/Aids. Thus, a discipline with care for patients known to be HIV positive provides the opportunity for students to have contact with this public during their graduation and to develop the knowledge necessary to provide specific and quality care.

**Descriptors:** Dental care. HIV. Acquired Immunodeficiency Syndrome.

#### 1 INTRODUCTION

(Aids), whose etiologic agent is the Human Acquired Immunodeficiency Syndrome Immunodeficiency Virus (HIV), was considered by the Centers for Disease Control (CDC) in 1981 as a transmissible infectious disease. As a retrovirus, HIV is transmitted by sex and blood, reproducing in the body through TCD 4+ lymphocytes, which leads to a progressive and chronic immune dysfunction and provides the emergence of so-called opportunistic diseases, characterizing the most advanced condition of infection, which is Aids<sup>1-3</sup>.

Since its discovery until today, the stigmatization generated around the virus and the disease, which was once considered a "death sentence", has negative impacts on the physical and mental health of people living with HIV, as they face it, in addition to fear of the disease, prejudice, discrimination and social isolation on the part of friends, family, and strangers<sup>4,5</sup>.

The HIV and Aids epidemic has become a global public health problem that, despite the drop in the number of new cases in some parts of the world, continues to rise. For example, in Brazil, in 2019, 41,909 new cases of HIV infection and 37,308 people with Aids were diagnosed. Attention should be paid to the importance of preventing this disease, which directly depends on behavioral protection measures at the collective and individual level<sup>6</sup>.

Its identification and transmissibility characteristics resulted in changes in infection control protocols in all areas of health, which led to an improvement in biosafety measures, including in Dentistry<sup>4,7</sup>.

It is necessary to emphasize that such dental care biosafety standards are equally recommended for all individuals, regardless of their serological status<sup>8</sup>. However, even if exposure to HIV during management is minimal and that, during practice, other microorganisms are more Communicable

diseases, such as hepatitis B, there is still stigmatization of dental treatment for individuals with HIV or Aids, which has caused fear and anxiety in dental surgeons and caused ethical precepts to be violated and assistance denied<sup>4,8</sup>. These behaviors reveal the lack of knowledge of dental professionals about HIV and Aids, which can compromise safe and quality clinical care<sup>2</sup>.

Thus, it is clear that there is a great need for the promulgation of knowledge that further enhances the judgment of professional dentists in the care of patients living with HIV<sup>9</sup>. It is up school clinics to teach future professionals in the treatment of patients with HIV/Aids, demystifying fears, since the contact of academics with these individuals, during graduation clinics, is associated with a provision of care during professional careers<sup>10</sup>. Under Resolution No. 3 of June 21, 2021<sup>11</sup>, graduation in dentistry must provide the formation of a professional who provides comprehensive, human, and ethical care, based on skills acquired during the course. The curriculum and the pedagogical project must provide the student with patient care, considering their health needs, as well as preparing them to care for individuals in health institutions and those with special needs.

Thus, the undergraduate course in Dentistry at the University of Montes Claros (Unimontes) has a specific discipline for the care of these patients, the Integrated Clinic IV, and the objective of this paper is to report the history and experience of this clinic since its beginning implementation in the curriculum.

#### 2 EXPERIENCE REPORT

The Integrated Clinic IV, present in the curriculum of the Dentistry course at the State University of Montes Claros (Unimontes), in Montes Claros (MG), started its activities in

August 2001 and, since its inception, has been carried out by approximately 780 academics that assist the population of the municipality of Montes Claros and cities in the north of Minas Gerais. Mandatory in nature, the discipline is part of the curricular matrix of the Unimontes course, duly inserted in the Pedagogical Political Project, with the main objective of providing academics, in the ninth period of graduation, with multidisciplinary knowledge and comprehensive patient planning.

With a semester workload of 120 hours, the subject is divided into two different moments, with care for patients living with HIV/Aids (the target audience of this report) individuals and for living neuropsychomotor disabilities. And in the last three years, the discipline has also started to assist cancer patients, having an interface with the University's extension projects, which involve these individuals. The part of the discipline, which only attends patients with HIV/Aids, is composed of 33 hours of theoretical activities, through classes with multimedia resources, discussion groups of articles relevant to the discipline, integrated seminars, and a term work; and 32 practical hours in patient care clinics. As evaluation criteria the application of a semester test. As evaluation criteria the application of a semester test, the effective participation of teachers in the proposed clinical and classroom activities, in addition to the production of educational health products, such as booklets and lectures on health education.

Clinical care for this audience is carried out based on a protocol created by the professors and debated every semester with the academics, constantly being updated according to the scientific literature. The patients treated are referred from reference centers in the region: Clemente de Farias University Hospital

(HUCF), Alto São João Polyclinic, and the Support Group for the Prevention of Aids Patients (Grappa). The management of these patients takes into account the steps of comprehensive planning since everyone is entitled to receive a treatment plan, with pain relief/urgency procedures, assessment of soft tissue injuries, adequacy of the environment (from the restoration of oral health and comfort), rehabilitation, maintenance of oral health and health education. The treatment plan is prepared by the students, the effective participation of the professors in the proposed clinical and classroom activities, in addition to the production of educational health products such as instructional booklets and lectures on health education.

The dental evaluation of patients with HIV/Aids, at Integrated Clinic IV, includes an investigation of the history of opportunistic infections, tendency to hemorrhage, presence of cardiovascular diseases, diabetes and hepatitis, use of medications, in addition to the interpretation of a recent blood test. These important behaviors are to know individual's general condition, as well as the stage of the disease and the immunological status, because, given this information, the student can establish a plan that suits the patient's situation, as changes in dental treatment may be necessary, based on general health conditions throughout the care sessions.

The Integrated Clinic works as an object of integration and the axis of the discipline's structure would be the "health care system", in which the areas of knowledge and dental practice come together. The integration of clinics is beneficial to both the patient and the academic, who has their learning and skills improved. Students get used to observing the patient globally, planning and executing the necessary clinical procedures, obtaining

permanent control over the evolution and completion of treatments<sup>12</sup>.

# **Experiences felt and perceived**

The discipline of Integrated Clinic IV in its exercise offers academics, through lectures, theoretical knowledge about the natural history, etiopathogenesis, and oral manifestations of HIV infection, care, particularities, and guidance regarding dental care to patients, as well as It also seeks to hear from them their expectations, fears and dispositions for care through discussion groups conducted employing articles about the social representation of the disease. The patients treated, for the most part, receive the necessary following the comprehensive dental care planning, and continuous given the semester practical workload. Some patients return and receive sequential care with a lot of receptiveness and cooperation, aiming to improve their quality of life.

In the integrated clinic IV, the gain of academics is explicitly perceived, both in the execution of clinical practice, the acquired maturity, and in the safety of care for patients living with HIV/Aids, resulting from theoretical before the clinical moment. discussions individualized, carried out between the pairs of academics and their teachers, and by the experience generated, of caring for the patient living with HIV. It is also observed that the academic is surprised to identify that there is no typical facies or physical characteristic that specifies the HIV patient from other health conditions and he realizes that the condition is found in a variety of healthy-looking people of different ages living together well with the condition. They are very predominant between users.

It is important to emphasize that the biosafety used in clinical practices follows the norms established by the Biosafety and Infrastructure Commission of the Clinics and Laboratories of the Unimontes **Dentistry** Course<sup>13</sup>, based on a careful analysis of the literature, laws, ordinances, and technical standards and that during the time of pandemic caused by Covid-19 had to be modified<sup>14</sup>. In addition to the adoption of the judicious use of more personal protective equipment (PPE), disinfection protocols, among other requirements to perform care at the school clinic, due to the pandemic moment, another measure to minimize the contagion and spread of the new coronavirus, chosen by the Integrated Clinic IV, was the reduction of two to one patient, by a pair of academics.

# Clinical care for patients with HIV/Aids

Dental surgeons, along with their entire work team, are exposed to a wide variety of microorganisms present in the blood and saliva of the patient. Therefore, every dental professional must, by obligation, adopt norms for the prevention of cross-infection, thus containing the spread of diseases in the office. However, despite the possibility of contagion by numerous other microorganisms, it is noted that there is fear and prejudice related to HIV/Aids infection, which unpreparedness reflects in the of these professionals to support these patients<sup>4,15,16</sup>.

The unpreparedness of dental surgeons to care for people living with HIV/Aids is closely related to their lack of knowledge about the means of contagion of the disease. Trezena *et al.* (2020)<sup>17</sup> when investigating the factors that most contribute to the occurrence of accidents during dental care, they obtained the lack of training and qualification as the most reported factor. It is known that in occupational accidents, during dental practice, with contact with blood and/or saliva, the percentage of HIV infection is 0.30%, a much lower rate when compared to hepatitis viruses (from 06 to 30%)<sup>18</sup>.

It is known that there is a difficulty in identifying patients living with HIV, mainly asymptomatic ones, therefore they end up not knowing their serological status. Professionals are advised to take safety measures when treating any patient, acting as if they all had an infectious, contagious disease 14,16.

Many professionals refuse to promote the treatment of these patients or create situations that make it impossible for them to perform them, thus causing, from an ethical and legal point of view, ethical infractions following the Code of Ethics in Dentistry, since the patient is being discriminated against due to its systemic condition. Therefore, higher education institutions must offer academics technical knowledge and a foundation based on scientific foundations, so that they feel safe while performing dental procedures in patients living with HIV/Aids<sup>4,19</sup>.

In the same university where the Integrated Clinic IV takes place, Costa et al.15, in 2009, analyzed the view of students from medical, physical education, and dentistry courses on the care of HIV/Aids patients, with 98.52% of the students would not fail to assist the patient with this condition, thus suggesting that felt able to perform the service<sup>2</sup>. On the other hand, in the study by Senna, Guimarães, and Pordeus (2005)<sup>20</sup>, carried out with 140 dentists managed by the Department Municipal Health Horizonte/MG, there was a prevalence of 55% of professionals who were willing to care for patients with HIV/Aids. The lower positive reception from professionals to these patients can be associated with the lack of knowledge or even lack of preparation of dental surgeons during their training.

However, the acceptance of dental care for patients with HIV/Aids, by dental students, in international studies, presents varied results, with percentages below 29%, depending on the procedure to be performed<sup>21</sup>. And even in studies

in which academics had satisfactory knowledge about the transmission of HIV/Aids, they still had discomfort with care. Such information reinforces the importance of the contribution of higher education institutions in providing detailed and adequate knowledge on the subject<sup>22,23</sup>. Therefore, dentists must have contact during graduation with individuals living with HIV/Aids<sup>10</sup>.

From the point of view of the patient living with HIV/Aids, in a survey conducted at a dental school clinic in 2019, the phenomenological analysis revealed that for the person with HIV/Aids, the meaning of health is related to daily care, to the perception about their treatment, their experience with religion and the stigma of this illness<sup>24</sup>. Subjects with HIV/Aids still report episodes of discrimination during dental care due to their serological conditions, with this, very often, the patient ends up omitting his diagnosis. The main reason given in 88% of a sample of patients for omitting the information was embarrassment due to their condition<sup>2</sup>.

Rossi-Barbosa et al.<sup>25</sup>, sought to know the expectations and perceptions of dentistry students at the State University of Montes Claros about the care provided to patients with HIV/AIDS, where there was an overestimation of the risk of transmission, changing their behavior about biosafety, for fear of contamination. It is necessary to emphasize that social stigmatizations bring with them prejudices, which can cause changes in the way in which users of health services, who are living with HIV, are welcomed or treated<sup>5</sup>. It is essential to reinforce the importance of public policies and the knowledge of health professionals concerning HIV, as the open approach to the subject is related to the prevention of new cases, the early detection of serological status, and the reduction of prejudice towards people with HIV/Aids<sup>26,27</sup>.

It is noted, then, that the clinical practice present in the daily life of academic dentistry, associated with biosafety, is important, as it promotes the breaking of paradigms and prejudices that involve the care of HIV/Aids patients, thus allowing the patient to receive the appropriate intervention and is treated with respect, understanding, attention, and solidarity<sup>25</sup>.

Health promotion and guidance generate lifestyle changes and contribute to physical and emotional well-being. Thus, the dentist must have adequate knowledge about the care of patients with HIV/Aids, since this will result in the level of education, recommendation, motivation, and advice that will be transmitted to the patient. A positive attitude towards assistance to this public to more successful treatments prevention strategies. In addition, it remains necessary to carry out and broadcast regular and massive public education campaigns, as well as actions in health and continuing education, to improve awareness of the disease, which has a growing number of cases in some countries<sup>6,28,29</sup>.

Furthermore, it is essential to have an open dialogue with the patient, so that they do not feel discriminated against and know that the information collected about them is confidential, protected by ethical principles, but necessary for diagnosis, treatment and research.

#### **3 FINAL CONSIDERATIONS**

A discipline with care for patients known to be HIV/Aids seropositive provides the opportunity for academics to have contact with this public during their graduation and to develop the knowledge necessary to provide specific and quality care. In this context, the Integrated Clinic IV appears with an important role, integrating teaching-service-community. Despite the past decades of Aids being considered as a communicable infectious disease, there is still stigmatization of people living with the virus. Therefore, it is up to undergraduates in Dentistry to train professionals who are aware of the reality

of the community to which they belong and fully serve the population, free from prejudice and discrimination.

This report glimpses the awakening of higher education institutions in the adoption of curricula that can include the theme of patients living with HIV/Aids, training professionals without prejudice, being open to care, and being aware of the reality of care for this public.

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#### **RESUMO**

# Experiência de uma disciplina clínica odontológica para pessoas que vivem com HIV/Aids

Considerando-se a importância e necessidade de ensino odontológico integrado propagação do conhecimento sobre a assistência a pacientes que vivem com o HIV/Aids, o curso de graduação em Odontologia da Universidade de Montes Claros (Unimontes) dispõe de uma disciplina específica para o atendimento desses pacientes, a Clínica Integrada IV. O objetivo deste trabalho é relatar a história e a experiência da disciplina Clínica Integrada IV, desde a sua implantação na grade curricular. A disciplina apresenta como objetivo principal propiciar ao acadêmico o conhecimento multidisciplinar e de um planejamento integral do paciente. atendimento clínico é realizado a partir de um protocolo idealizado pelos professores e constantemente atualizado conforme a literatura. A avaliação odontológica do paciente com HIV/Aids, na Clínica Integrada IV, inclui a investigação da história de infecções oportunistas, de à hemorragia, tendência presença de doenças cardiovasculares, diabetes e hepatites, uso de medicamentos, além da interpretação de exame de sangue recente. É necessário frisar que as normas de biossegurança do atendimento odontológico são preconizadas igualmente para todos os indivíduos, entretanto ainda há uma estigmatização do tratamento odontológico dos indivíduos com o HIV/Aids. Desta forma, uma disciplina com atendimento a pacientes sabidamente soropositivos oportuniza o acadêmico a ter o contato com esse público durante a sua graduação e a desenvolver o conhecimento necessário para se prestar uma assistência específica e com qualidade.

**Descriptors:** Dental Care. HIV. Acquired Immunodeficiency Syndrome.

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