

Federal University of Rio de Janeiro State



Journal of Research Fundamental Care Online

ISSN 2175-5361
DOI: 10.9789/2175-5361

INTEGRATIVE REVIEW OF THE LITERATURE

A modalidade de educação à distância como estratégia na formação permanente do profissional da saúde

The distance-learning mode as a strategy in the health professionals' continuous improvement

La modalidad de educación a distancia como una estrategia para la formación continúa de los profesionales de la salud

Ana Amélia Nascimento da Silva Bones ¹, Silvio César Cazella ², Márcia Rosa da Costa ³

ABSTRACT

Objective: To discuss the development of a Learning Object to clinical reflection of the fast test for HIV and the need of the implementation of permanent learning. **Method:** applied nature research, the method constitutes a literature review and virtual learning community modeling. **Results:** before the research, the learning object on the users' approach with positive fast HIV testing in primary care was held. The eXeLearning software was prioritized due to reuse, interoperability and alignment of educational activities with the students' profile. The expectation is to map the pedagogical strategies and reflect on permanent education in public spaces together with the actors. **Conclusion:** The standardization of educational content in distance-learning provides update and overhaul of praxis opportunities. **Descriptors:** Distance-learning, HIV, Permanent education.

RESUMO

Objetivo: Discutir sobre o desenvolvimento de um Objeto de Aprendizagem para reflexão clínica da realização do teste rápido para HIV e sobre a necessidade da execução da educação permanente. **Método:** Pesquisa de natureza aplicada, onde o método constitui-se em revisão de literatura e modelagem de comunidade virtual de aprendizagem. **Resultados:** Em nota prévia, desenvolveu-se o objeto de aprendizagem sobre a abordagem dos usuários com o teste rápido positivo de HIV na atenção básica. O software eXeLearning foi priorizado devido à reutilização, à interoperabilidade e ao alinhamento da ação educacional com o perfil dos alunos. A expectativa é mapear as estratégias pedagógicas e refletir sobre a educação permanente em espaços coletivos de maneira articulada entre os atores. **Conclusão:** A padronização de conteúdos educacionais em EaD oportuniza atualização e reformulação da práxis. **Descritores:** Educação à distância, HIV, Educação continuada.

RESUMEN

Objetivo: Discutir sobre el desarrollo de un Objeto de Aprendizaje para reflexión clínica de la realización del test rápido para VIH y sobre la necesidad de la ejecución de la educación permanente. **Método:** Investigación de naturaleza aplicada, el método se constituye en revisión de literatura y modelaje de comunidad virtual de aprendizaje. **Resultados:** en nota previa, se desarrolló el objeto de aprendizaje sobre el enfoque de los usuarios con el test rápido positivo de VIH en la atención básica. El software eXeLearning fue priorizado debido a la reutilización, a la interoperación y al alineamiento de la acción educacional con el perfil de los alumnos. La expectativa es mapear las estrategias pedagógicas y reflejar sobre la educación permanente en espacios colectivos de manera articulada entre los atores. **Conclusión:** La estandarización de contenidos educacionales en Educación a distancia oportuna actualización y reformulación de las prácticas. **Descritores:** Educación a distancia, VIH, Educación continuada.

1 Master degree student of Health Education at the Federal University of Health Science of Porto Alegre and Doctor at the Family Health Strategy of Porto Alegre- RS. E-mail: anageriatra@hotmail.com 2 Ph.D. in Computer Science by the Federal University of Rio Grande do Sul and Associate Professor III of the Department of Exact and Applied Social Sciences of the Federal University of Health Science of Porto Alegre. 3 Ph.D. in Education by the Federal University of Rio Grande do Sul, Associate Professor of the Department of Education and Humanities of the Federal University of Health Science of Porto Alegre and Educational coordinator on the Specialization in Family Health, Project UNA-SUS/UFCSPA.

INTRODUCTION

AIDS (Acquired Immunodeficiency Syndrome), or AIDS in Portuguese (Síndrome da imunodeficiência adquirida) is a disease that affects the immune system due to destruction of white blood cells.¹ This disease was first identified in Brazil in 1981. At the end of 2012, approximately 9.7 million people were treated with antiretroviral therapy in the world. Due to its epidemic potential and the mortality outcome, this infection has become a focus of numerous international and national research, as it is the subject of concern of scientific conclaves and the Brazilian government. Health professionals have been sensitized to address this infection in order to reach the goal of zero new cases, zero discrimination and zero death by the human immunodeficiency virus (HIV), according to the United Nations Political Declaration, called Treatment in 2015 by Unaid.¹

Achieving this goal requires commitment, innovation, sound scientific basis and strategies focused on community education for the practice of social change in health.¹ The social practice can be understood as an action that is built from the necessity or individual or community importance through knowledge and relationships, becoming a concrete reality. Nursing as a social practice, in which the changes are continuous because of reflections on their actions, problems and new issues, extending the critical view of the organization and implementation of permanent learning, bringing the scientific academy to health workers linked to the System Unified Health (SUS). In the context of the facts with their multiple determinants, the health team can enlarge the competence to plan the activities in its territory, through the development of perception and understanding of the real reflection of the need within their area of expertise.^{2,3}

In this case, the observation of the concrete dimension of community diagnosis to HIV/AIDS becomes crucial to create resolving strategies to combat this problem. Knowing that the services not linked to testing centers and treatment of HIV have more difficulties to achieve these goals, there is a need for new approaches and developments to support this public policy.¹ In Brazil, the implementing regulation of the fast testing for HIV as a diagnosis, and not anymore the screening test in primary care, is approved by Ordinance Number 77 of January 12, 2012, amended by Ordinance Number 3275 of December 26, 2013 being an answer to this demand. This change in the ordinance states that the fast tests should be performed by trained health professionals in attendance or through face-to-face or online teaching courses, for carrying out the method in accordance with the guidelines established by the Department of STD, AIDS and Viral Hepatitis.⁴ The adoption of this test has been integrated gradually throughout the country over the last two years, considering the high level professionals, backed in Technical Standard, such as nurses, dentists and doctors. Upon

completion of specific courses for the use of this diagnostic tool, these professionals can perform the full implementation of the test: the collection of capillary blood with small puncture in the digital pulp, test application according to specific guidelines lab kit, reporting the result of the fast test diagnostic for HIV and pre and post-test only in one single consultation.

To enhance their abilities, among many others, the health professional requires permanent education, and the use of Online Education (EaD) can be effective in this training. In the broad universe of possibilities, health education is appropriating information and communication technologies (TIC's) to contemplate the demands of early and permanent learning, in order to train flexible and dynamic professionals with the possibility of technical and scientific progress, socialized or individualized. The educational approach in online education is reflected in the elected instructional material and the educational model is implicit in the way the appropriation of TIC's proposed in the educational project to be selected.⁵

This article shows the discussion about Learning Object (OA) developed for clinical reflection of the fast testing for HIV in health centers and the need for implementation of permanent education to SUS professionals to develop skills, and online education as an option. The aforementioned educational intervention seeks to be dialogical and uses the Questioning Methodology and the teacher, although not in the same physical environment, plays the role of mediator, helping the students actively build their knowledge appropriate to their care practice. Thus, the pedagogical proposal seeks to stop being merely informative and transmissive and tries to engage and stimulate, improving skills and strengthening labor attitudes, without the expense of uninterrupted service that the students provide to the community.⁵ According to the proposal, the aim of this study is to discuss the development of an OA for clinical reflection of the fast testing for HIV and the need of the implementation of permanent education. Throughout the research, aspects that respond to the central question were sought: What knowledge are related to the modality of online education as a pedagogical strategy in the ongoing training of health professionals linked to SUS?

METHOD

This article is an ongoing study, with the partial results of the author of the dissertation in the Professional Master's program in Health Education promoted by UFCSPA co-authored with its advisors. The study was designed by educational intervention care and the construction of the flow chart of care for patients with reagents to the fast test for HIV in Primary Care Health Units.

The research as a whole is nature applied and according to the objective, it can be understood as an exploratory, non-randomized study, with a qualitative and quantitative approach. Before the research, the process for modeling of proposed intervention in the

virtual community of UNA-SUS/UFCSPA was performed. Its development was in various stages, because besides the selection of the content, it is necessary to adopt a methodology to guide learning to generate a reflection on the practice of care.

The starting point was the experience of the author in her Family Health Strategy team performing 562 fast tests on users during 30 months, diagnosing infection by the HIV virus in 52 individuals, which raises awareness of the need to deepen the theme as a permanent education.⁶ With this justification, the first step to build the learning object is an extensive review of literature on current consolidated guidelines on the approach of users with positive fast HIV test and its possibilities in health care.

The method is literature integrative review in which were followed: identification of the problem (it was clearly defined the purpose of the review), defining the objective and lesson plan, searching for literature (with the definition of keywords, databases and application of criteria for the selection of articles, gray literature, repositories, videos and protocols), the evaluation and analysis of found resources. The theoretical foundation strategy is constituted by the bibliographic search of current literature on the subject, through keywords, and educational repositories maintained by consortia of universities that offer online educational resources such as libraries, on the discussion of this practice before the steps of graphical representation, textual and project authorship.⁷

Resources used in OA were diversified, as reporters, comics, animation, PowerPoint, textual guidelines, supporting materials such as reporting forms, laws, additional tests records models and articles with reports of experiences in other countries. To validate this instrument, summative activities through hotpotatos program and asynchronous debates as forums were held to enable the confrontation reality of discussion to HIV each professional experiences in his center and the possibilities for composition of a flow management to patients under professional's view in primary health care. With the possibility of analyzing the results of activities, it is estimated able to observe the influence of intervention in learning.

Despite the content playing a key role and showing traces of determining pedagogical model, the integration of content and different activities proposed in their educational architecture enabled the successful development of educational intervention. Thus, the Questioning Methodology was chosen as the Arch of Magueres methodology, whose main theoretical reference is Neusi Berbel author. This methodology has five steps, which the student develops reflective and purposeful activities from the reality.⁸ Thus, to organize the didactic sequence of activities, the domain on the chosen methodology is necessary. It is essential to increase the student's ability, changing their posture of social transformation and participatory agent to identify the real problems and seek for them original and creative solutions. The reality of this methodology is defined as a problem that has not a ready answer.⁹ The five methodological steps of the Questioning Methodology (Figure 1) are reality observation, survey of key points, theorization, solution hypotheses and application to reality.^{8,9}

a. Figure 1- Arch of Maguerez.⁸

In this OA, the problem situation materialized in a story in comics contextualized in a fictional town in the south of Brazil is developed from the cut of the reality.

- The first step, Reality Observation, it is recommended to the student performing the reading of the comic book about an assistance to a user which the fast test for the HIV virus came back positive, and that the student is already contact to the fictional reality of the territory already presented in other previous regular modules in the Specialization Family course UNA-SUS/UFCSPA. The discussion forum proposed following by a question guide, invites students to participate by writing their perception of the clinical case and referring to their current professional reality in the implementation of fast tests within their team and city;

- The second step called Key points has been planned with a game to build a list of predetermined issues as graduation priorities. In order to contemplate the possibility of a problem not listed, there will be a blank box available to fill another problem identified by the student;
- The third step, the theorization, is preceded by activity in the crossword model. The intention is to assess the knowledge involving the practice of the fast test. A theoretical reference to repositories of an animation on viral replication, a textual publication of the World Health Organization and a PowerPoint presentation provided by Cegonha Network on the social practice of the rapid test has been organized;

The use of OA to compose a larger object that is the intervention module is according to the educational resources prioritizing the development of reuse quality, interoperability and alignment of educational action with the profile of students enrolled in the UNA-SUS. In order to contemplate the key points, there is still the possibility of the student explore the potential of his professional center and show theorizing bringing the possible flows of support network to user's care.¹⁰ Following the activity in the third step, the student should answer questions relevant to the proposed content.

- In the fourth step, named Solution Hypothesis, after the reflection of the three previous steps, students must answer dissertation semi-structured question on possible solutions to the key points listed by mobilizing other members of their team and the support network for health services. At this time, the OA modeling team designed a space that there might be a chance for the students to expose their creative and innovative potential of the solution hypotheses;

- The final step, fifth step of the arch is the Application to Reality. At this time, the student will be asked to build a flowchart predicting the chances of the patient when receiving the fast test integrated service reagent for the HIV virus within the Primary Health Care. The creative thinking of students is encouraged at every stage of the process. Although the arch structure remains constant, its application is flexible and can adapt to circumstances as in online education. The interaction of the student with the intervention is high in all stages of the Arch of Maguerez, favoring a compromised even with the transformation of reality.⁸

The exelearning software was prioritized due to reuse, interoperability and alignment of educational activities with the profile of the students of UNA-SUS/UFCSPA. The proposal is to allow discussion on the need for continuing education and the possibility of digital educational resource as an alternative, by designing the OA that converges to education and health through a virtual learning environment.

The object conception arises from the perception of lack of protocols for the flow of service to users who receive a diagnosis of being a carrier of the HIV virus in basic health units, and the profile of the student is the professional of primary care that performs the test such as nurses, dentists and doctors. Thus, before the diagnosis of the need to achieve sound and efficient training of professionals in this context, the proposal of this educational intervention was formulated as permanent health education.

RESULTS AND DISCUSSION

The OA was projected and developed from the perspective of being an instrument of support to the ongoing process of education of nurses, dentists and doctors who apply fast tests in health care, predicting that the student, who is an assistant professional can answer questions and organize and reflect their practice within their service unit and territory. These objectives deepens theoretical and practical aspects involved in the handling of the delicate situation of counseling the patient and give diagnosis that carries the HIV virus. These objectives were clear from the planning of this virtual educational resource, as shown in the literature, which favored in decisions involving theme issues to be addressed, the target audience and the pedagogical approach used to expand the reflection to the service to users diagnosed with HIV.¹¹

It is expected to form a picture of pedagogical strategies in this standard in distance-education communities, relating to the literature that emphasizes permanent education as a goal to improve training in collective spaces and in coordination between actors, strengthening the SUS.¹⁰ There is the assumption that a course based on the suggested teaching model effectively contribute to building the necessary skills for the performance of these professionals in continuing education to improve the art of caring. This educational

resource highlights the need of the student to present as a behavior, among others, the pathogenesis of infection with HIV and the flow of support possibilities of support network, ensuring an interdisciplinary care for the patient.¹¹

The encouragement for the care responsible to reflect and enhance their practice and that of other members of their team through the permanent learning process is shown as a public policy. For example, the publication of Ordinance Number 278 of February 27, 2014, under the Ministry of Health, establishing guidelines for the implementation of the Permanent Education policy in health. In article 4 of Part III, there are guidelines to promote meaningful learning by adopting active and critical methodologies.¹² With the design of the pedagogy of this transformation of education and the theoretical framework being proposed in this guidelines, it was opted for the choice Questioning Methodology for teaching architecture of OA. This methodology is a type of Active Methodology, being active because the correlation of theory and practice permeates the whole process in a dynamic of action-reflection-action, resulting in a transformative action. The experience and learning built through questioning tend to enable the development of skills by establishing relationships with reality, reflection and preparation of actions in each of the five steps of the process.⁹ Any intervention plan developed provides the student be aware of the complexity of social phenomena involved in the study, mobilizing them to social, political and ethical learning, which enables the redefinition of the actions of health professionals.

Using distance education includes the possibility of standardization of educational content offered by universities and educational organizations, allowing its distances projection, using the same approach and reference, thus contributing to spread of the reflection of a re-qualified performance in health based on evidence in a methodical way, preventing the loss and distortion of the content.¹³ A major difficulty described is the alignment of educational resource to be built and the need for student learning, and the skills of students and the distance education team should be considered to work with the object.¹⁰ Teaching can be online without the physical presence of the teacher, but having him as mediator, allowing a democratization of knowing and doing. This strategy allows a real socialization of cultural and technical knowledge in its multiplicity of technological resources.¹⁴ In this way, as well as primary health care extends throughout the national territory, continuing education in health should not be located only in major centers, and distance education is an option to do so.

However, the design of instructional resources from the demands of care practice of students of professional master degrees, integrates education with practice, favoring the choice of issues that need continuing education, approaching the technological world. With the ability to value diversity and potential of all students, innovate in their strategies and teaching resources in interactive learning, it will culminate in action reflection through an attractive didactic approach, with digital educational content. For effective evolution of a work using the transforming active methodology and aimed at increasing the quality of care, it is essential to have harmony between the knowledge of the environment in general, staff and assisted community.^{3,15} In this context, considering the justification of Ordinance Number 77 of 12 January 2012 which includes the need to create alternatives to improve quality and expand access to diagnosis of HIV and syphilis, in compliance with the principles of equity

and complete assistance, as well as universal access to SUS health services, regulating fast test for HIV and other health problems in primary health care environment, noting that one of the goals is the elimination of vertical virus transmission .⁴

The logic of social education practice requires skills covering new understanding of reality modes and their complexity. The sciences of education, including pedagogy, are liable to promote these new modes. It can no longer educate, teach and train only with knowledge of the areas of knowledge and with knowledge of technic. It is paramount the contextualization of all actions, their multiple determinants, understanding the uniqueness of cases need of a multifaceted view with philosophical perspectives, sociological, psychological, historical, among others. In this situation, those perspectives composing what might be called the professional culture of action, that is, allowing clarify and give meaning to professional action.³ Appropriate with this understanding, we find in the training spaces, as in master courses, teachers undergraduate from several areas beyond health, as educators, economists, computer scientists, lawyers, psychologists, among others. With this intersectoral team together with the students who experience the weaknesses in the various steps of the assistance, modeling of educational resources is out of the contents of transposition to reformulate the dynamics of learning to practice in health care.

Using continuing education, qualification can provide better service to users. Thus, the primary care professional to be inserted into the continuous qualification process can generate a positive impact on the quality of health care in the workplace.¹⁶ The asynchronous courses systems require more structure, since they have more flexibility in access time interval, with the transfer of static and oriented storage expertise, allowing to navigate through links, listening to instructions, watch video clips, send messages and store information.⁵

Thus, comprehensive care as a training policy is lack of stimulating pedagogical proposals to consider health practice on their evaluation process as a tool that assists in recognition of their deficits, and then repair them, allowing the students to have a reflection on their actions. Understanding the evolution of learning should be seen as a process that encompasses both spaces for reflection of the reality of subjects as knowledge, skills and attitudes.¹⁷ From the point of view of health institutions, it is considered a concern for certifications, and fundamental norms, routines and protocols to guide the assistance of rational and updated form of care.

The analysis published in the professional master's degrees in nursing programs demonstrates a contribution to the transformation of professional practice, noting the reorganization of work processes and qualification management and health care. However, there may be difficulties in the implementation of the proposals, even relevant, from the graduation, stressing the importance of articulation with the health institutions, because without this agreement there is no chance to promote effectively changes.¹⁵

CONCLUSION

The epidemic of HIV is one of several pathogens that are the light of many researches and the health worker needs to be updated and constantly reflect their care practice with their peers. Permanent education is necessary in the work process, because it is accepted that the professional remain tight with the knowledge obtained during their graduation. In this context, the continuing education process enables contemplate scientific and organized manner of the various categories of health professionals across the country through the benefits of information and communication technologies since having internet access for online education as offered in the Moodle platform by UNA-SUS/UFCSPA in several states in Brazil.

Thus, the study provided a reflection on the distance education modality as a strategy in the continuing education of health professionals linked to SUS, with the possibility of improving the social practice by revising the way of learning and teaching. As for the final product produced learning object, this reflects the desire for lifelong learning to incorporate innovative practices for the training of professionals engaged in health services. One hopes that innovation by the inclusion of information technology in continuing education for professionals working in primary care will complement the practice of re-qualification process in primary care.

The professional master degree emerges as an opportunity to enhance the design of OAs aligned with the demands of the public health service. This preliminary report reflects an ability to create opportunities that primary care professionals assume their role as educator and researcher sensitive to their practice and territory.

REFERENCES

1. Unaid.org [homepage na Internet] Treatment 2015. [Acesso em 2014 Oct 31]. Disponível em: http://www.unaids.org/sites/default/files/en/media/unaids/contentassets/documents/unaidspublication/2013/JC2484_treatment-2015_en.pdf
2. Trezza MCAF, Santos RM, Leite JL. Nursing as social practice: an exercise of reflection. *Rev Bras Enferm.* 2008; 61(6):904-8.
3. Tavares CMM, Queiroz PP. The pedagogical training of students in professional master's degree programs. *J Res fundam care on.* 2014;6(4)1313-20.
4. BRASIL. Ministério da Saúde. Portaria N° 77, de 12 de janeiro de 2012. Modificada por: Portaria n° 3.275 de 26 de dezembro de 2013. Dispõe sobre a realização do testes rápidos, na atenção básica, para a detecção de HIV e sífilis. *Diário Oficial da União.* 2012 jan. 13; Seção II- p. 42-3.

5. Feijó EF, Tavares CMM. Long Distance Education: Estimated Theoretical-Methodological of the Nursing Education. Rev Enferm UFPE on line. 2010; 4(esp):1216-21.
6. Blind autor reference- Relato de Experiência da Implantação do Teste Rápido Anti-HIV em uma estratégia de Saúde da Família de Porto Alegre. Poster. In Anais de X Congresso da Sociedade Brasileira de doenças Sexualmente Transmissíveis e VI Congresso Brasileiro de Aids; 2015 mai 17-20; São Paulo (SP), Brasil, aguarda impressão.
7. Alvarez AG, Dal Sasso GTM. Virtual learning object for the simulated evaluation of acute pain in nursing students. Rev. Latino-Am Enfermagem. 2011 mar-abr; 19(2):1-9.
8. Berbel NA. A metodologia da problematização com o Arco de Maguerez: uma reflexão teórico-epistemológica. 2ª ed. Londrina (PR): EUEL; 2012.
- 9) Bordenave, JED. Alguns Fatores Pedagógicos. Texto adaptado do artigo: La transferencia de tecnologia apropiada al pequenô agricultor. Rev I Educ Adultos. 1983; 3(1-2):261-8.
10. Brasil LB, Skelton-Macedo C, Campos FE, Haddad AE. Objetos de aprendizagem, competências profissionais para profissionais de saúde e e-learning: estudos para desenvolvimento de uma taxonomia. J Bras Tele. 2013;2(1):75-80.
11. Corradi MI, Silva SH, Scabrin EE. Objetos virtuais para o apoio ao processo de ensino-aprendizagem do exame físico em enfermagem. Acta Paul Enferm. 2011; 24(3):348-53.
12. BRASIL. Ministério da Saúde. Portaria Nº 278, de 27 de fevereiro de 2014. Institui diretrizes para implementação da Política de Educação Permanente em Saúde, no âmbito do Ministério da Saúde . Diário Oficial da União. 2014 fev. 28; Seção I- p. 59-60.
13. Okagawa FS, Bohomol E, Cunha ICKO. Competências desenvolvidas em um curso de especialização em gestão em enfermagem à distância. Acta Paul Enferm. 2013; 26(3): 238-44.
- 14) Oliveira MAN. Distance Education as strategy for permanente education in health: possibilities and challenges. Rev Bras Enferm 2007 set-out; 60(5):585-9.
- 15) Munari DB, Parada CMGL, Gelbecke FL, Silvino ZR, Ribeiro LCM, Scochi GS. Professional Master's degree in Nursing: Knowledge production and challenges. Rev Latino-Am Enfermagem. 2014 mac-abr; 22(2):204-10.
16. Araújo RRM, Moura MEB, Nunes BMVT, Lago EC, Nery IS. Permanent nursing education in family health strategy. R. Pesq.: Cuid. Fundam. Online 2013 dez; 5(6):64-73.
17. Kloh D, Reibnitz KS, Boehs AE, Wosny AM, Lima MM. Princípio da integralidade do cuidado nos projetos político-pedagógicos dos cursos de Enfermagem. Rev Latino-Am. Enfermagem 2014 jul-ago; 22(4):693-700.

Received on: 30/05/2015
Required for review: No
Approved on: 04/08/2015
Published on: 01/10/2015

Contact of the corresponding author:
Ana Amélia Nascimento da Silva Bones
Rua Sarmento Leite, 245 - Centro Histórico, Porto Alegre - RS,
Cep:90050-170
E-mail: anageriatra@hotmail.com