



Validation of assistive technologies on sexually transmitted infections for the blind: methodological study

Andressa Kaline Ferreira Araújo Jales¹, Helena Rangel Alves de Sousa¹, Lahelya Carla de Andrade Oliveira¹, Olga Alice Alencar Moreira¹, Thatiane Monick de Souza Costa¹, Richardson Augusto Rosendo da Silva¹

¹Federal University of Rio Grande do Norte

ABSTRACT

Aim: validate Braille booklet and sound media on prevention and transmission of sexually transmitted infections (STIs) and acquired immunodeficiency syndrome (AIDS). **Method:** this is a descriptive and methodological study using a quantitative approach. The research will be developed in Mossoró/RN and Natal/RN, through three stages: identification of blind people's knowledge on STI/AIDS prevention and transmission; development of a Braille booklet and sound media on STI/AIDS; and validation of assistive technologies (AT), adopting population census or non-probabilistic sampling for convenience, depending on the specificities of each stage of the study. The collected data will be processed and analyzed using descriptive and analytical statistics. **Expected results:** the research will allow the validation of a booklet in Braille and sound media for blind people on STI/AIDS. These ATs may serve as strategies for health education by nurses and may promote greater access to STI/AIDS information for blind people.

Descriptors: Visually Impaired Persons; Sexually Transmitted Diseases; Health Education; Self-Help Devices; Self Care.

⁶⁸

JalesAKFA, SousaHRA, OliveiraLCA, MoreiraOAA, CostaTMS, SilvaRAR.Validation of assistive technologies on sexually transmitted infections for the blind: methodological study. Online Braz j Nurs [internet]. 2018 Dec [cited year month day]; spe.: 68-70. Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/6147

INTRODUCTION

People with visual impairment, especially those with blindness, experience several attitudinal barriers in accessing information about their health, since health education actions mostly use vision as a learning tool. Such situation can have a strong impact on the autonomy, health and quality of life of these people, as they cause difficulties in the knowledge about their health, in particular on sexual and reproductive health⁽¹⁾.

Despite the increase in actions aimed at promoting health for blind people about sexual practices, especially the prevention of sexually transmitted infections (STIs) and acquired immunodeficiency syndrome (AIDS), this segment of the population still has limited dominance on the subject due to the failure of the communication channels, since the health services do not have materials accessible to this public⁽²⁾.

Thus, it is urgent to develop instruments that facilitate access to information on sexual health to blind people. From this perspective, the nurse is inserted as a trained professional to promote care and, in the context of sexual health, health education, using tools adapted and accessible to this public (assistive technologies - AT), which are presented as resources capable of corroborating with effective health care, facilitating the process of social inclusion⁽¹⁾.

Thus, this research is relevant because it aims to implement health education on the prevention and transmission of STI/AIDS through the development of assistive technologies and, together with the dialogue between the facilitator and the blind, can raise awareness of the target audience and thus reduce risk behaviors.

AIM

Carry out the validation of a booklet in Braille and sound media on IST/Aids prevention and transmission.

METHOD

This is a methodological study to be developed at the Center for Support to the Visual Impaired of Mossoró (*Centro de Apoio ao Deficiente Visual de Mossoró* – CADV) and the Institute of Education and Rehabilitation of the Blind of Rio Grande do Norte (*Instituto de Educação e Reabilitação de Cegos do Rio Grande do Norte* – IERC), through three stages: identification of blind people's knowledge on STI/AIDS prevention and transmission; development of a Braille booklet and sound media on the research topic; and validation of AT, following the theoretical, empirical and analytical procedures⁽³⁾.

In the first stage of the research, the population census of the blind people enrolled in the CADV will be carried out. The construction of AT will be based on a review of the literature on STI/AIDS, to detect specific scientific production gaps and to identify knowledge deficits of the blind about this subject. Regarding the validation of the Braille booklet and the sound media, non-probabilistic sampling will be used for convenience - for construct analysis, seven judges will be selected for each evaluation group (specialists in the specific area or related to sexual and reproductive health and special education) and that meet at least three of the criteria defined in the survey. For semantic analysis, persons with bilateral blindness, of both sexes, who are 18 years of age or older and who are enrolled in the IERC will be eligible. In the application/testing phase of the AT, part of the validation process, a population census of blind people enrolled in the CADV and that meet the inclusion criteria will be performed. Blind people with multiple disabilities will be excluded from the study, considering that it is the focus of the research development of instruments accessible only to blind people.

JalesAKFA, SousaHRA, OliveiraLCA, MoreiraOAA, CostaTMS, SilvaRAR.Validation of assistive technologies on sexually transmitted infections for the blind: methodological study. Online Braz j Nurs [internet]. 2018 Dec [cited year month day]; spe.: 68-70. Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/6147 The data collected from the questionnaires used in this study will be compiled in an electronic database. Afterwards, they will be processed and analyzed through the statistical program The SAS System 9.0, using statistical tests specific to each stage of the study – descriptive statistics, Chi-square, concordance index, and Student t test. Finally, the results will be presented in tables and charts.

The accomplishment of this research project was approved by the Research Ethics Committee Involving Human Beings of the Federal University of Rio Grande do Norte, by means of Opinion No. 2.886.008, following the ethical aspects recommended by Resolution 466/2012 of the National Health Council.

EXPECTED RESULTS

The research will allow the validation of a booklet in Braille and sound media for blind people on STI/AIDS. It is believed that these technologies could serve as strategies for health education actions by health professionals, especially nurses, and may promote greater access to STI/AIDS information for blind people, favoring the adoption of better health practices by this public, as well as being able to assist blind people in the development of self-care.

REFERENCES

70

- Barbosa GOL, Wanderley LD, Rebouças CBA, Oliveira PMP, Pagliuca LMF. Desenvolvimento de tecnologia assistiva para o deficiente visual: utilização do preservativo feminino. Rev Esc Enferm USP. 2013; 47(5): 1163-9.
- Chintende GN, Sitali D, Michelo C, Mweemba O. Situacional analysis of communication of HIV and AIDS information to persons with visual im-

pairment: a case of Kang'onga Production Centre in Ndola, Zambia. BMC Res Notes. 2017; 10:150.

 Oliveira PMP, Pagliuca LMF, Cezario KG, Almeida PC, Beserra GL. Breastfeeding: validation of assistive áudio technology for the visually impaired individual. Acta Paul Enferm. 2017; 30(2): 122-8.

Andressa Kaline Ferreira Araújo Jales participated in the preparation of the manuscript, the critical revision of the intellectual content and the approval of the version submitted. Helena Rangel Alves de Sousa, Lahelya Carla de Andrade Oliveira, Olga Alice Alencar Moreira and Thatiane Monick de Souza Costa and Richardson Augusto Rosendo da Silva participated in the critical review of the intellectual content and the approval of the version submitted.

All authors participated in the phases of this publication in one or more of the following steps, in according to the recommendations of the International Committee of Medical Journal Editors (ICMJE, 2013): (a) substantial involvement in the planning or preparation of the manuscript or in the collection, analysis or interpretation of data; (b) preparation of the manuscript or conducting critical revision of intellectual content; (c) approval of the version submitted of this manuscript. All authors declare for the appropriate purposes that the responsibilities related to all aspects of the manuscript submitted to OBJN are yours. They ensure that issues related to the accuracy or integrity of any part of the article were properly investigated and resolved. Therefore, they exempt the OBJN of any participation whatsoever in any imbroglios concerning the content under consideration. All authors declare that they have no conflict of interest of financial or personal nature concerning this manuscript which may influence the writing and/or interpretation of the findings. This statement has been digitally signed by all authors as recommended by the ICMJE, whose model is available in http://www. objnursing.uff.br/normas/DUDE_eng_13-06-2013.pdf

Received: 09/13/2018 Revised: 09/20/2018 Approved: 09/20/2018