

Illustrated instrument to assess older adults' knowledge about HIV/AIDS prevention: a methodological study

Instrumento ilustrado para avaliar o conhecimento de idosos sobre prevenção do HIV/Aids: estudo metodológico

Instrumento ilustrado para evaluar el conocimiento de los adultos mayores sobre la prevención del VIH/SIDA: estudio metodológico

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ABSTRACT

Objective: To elaborate and validate the content of an illustrated instrument to assess older adults' knowledge about HIV/AIDS prevention. **Method:** A methodological study carried out in three stages: literature review, elaboration, and content validation. Validation was performed according to Pasquali's model. **Results:** Elaboration of an instrument with two parts: characterization of the older adult and evaluation of the knowledge about HIV/AIDS prevention with 12 multiple-choice questions ("true", "false" and "I don't know"), illustrated with images of aged individuals in everyday situations. From the validation with 10 expert judges, a Content Validity Index of 0.90 was reached. **Conclusion:** The instrument elaborated was considered adequate by the judges and presents itself as an educational device to evaluate older adults' knowledge and, from this, it offers gains for health education interventions related to HIV/AIDS prevention.

Descriptors: HIV; Validation Study; Aged Individual; Nursing.

RESUMO

Objetivo: Construir e validar o conteúdo de um instrumento ilustrado para avaliar o conhecimento de pessoas idosas sobre a prevenção do HIV/Aids. **Método:** Estudo metodológico realizado em três etapas: revisão da literatura, construção e validação de conteúdo. A validação foi realizada de acordo com o modelo de Pasquali. **Resultados:** Da construção chegou-se a um instrumento com duas partes: caracterização da pessoa idosa e avaliação do conhecimento sobre a prevenção do HIV/Aids com 12 questões de múltipla escolha ("verdadeiro", "falso" e "não sei") ilustradas com imagens de idosos em situações cotidianas. Da validação com 10 juízes-especialistas atingiu-se o Índice de Validade de Conteúdo de 0,90. **Conclusão:** O instrumento construído foi considerado adequado pelos juízes e se apresenta como um dispositivo educacional para avaliar o conhecimento da pessoa idosa e, a partir disso, suscita ganhos para as intervenções de educação em saúde relativas à prevenção do HIV/Aids.

Descritores: HIV; Estudo de Validação; Idoso; Enfermagem.

RESUMEN

Objetivo: Elaborar y validar el contenido de un instrumento ilustrado para evaluar el conocimiento de los adultos mayores sobre la prevención del VIH/SIDA. **Método:** Estudio metodológico realizado en tres etapas: revisión de la literatura, elaboración y validación de contenido. La validación se realizó según el modelo de Pasquali. **Resultados:** A partir de la elaboración se llegó a un instrumento con dos partes: caracterización del adulto mayor y evaluación del conocimiento sobre la prevención del VIH/SIDA con 12 preguntas de opción múltiple ("verdadero", "falso" y "no sé") ilustrado con imágenes de personas mayores en situaciones cotidianas. La validación con 10 jueces expertos dio como resultado un índice de validez de contenido de 0,90. **Conclusión:** El instrumento elaborado fue considerado adecuado por los jueces y se presenta como un dispositivo educativo para evaluar el conocimiento de los adultos mayores y, por ende, favorece las intervenciones de educación para la salud relacionadas con la prevención del VIH/SIDA.

Descriptores: VIH; Estudio de Validación; Adulto Mayor; Enfermería.

INTRODUCTION

Prolongation of the active sexual life of aged individuals, due to the significant Brazilian demographic transition and to the advent of the pharmaceutical industry, has implied an increase in the prevalence of some diseases, including HIV infection⁽¹⁻²⁾. Data for the year 2020 from the United Nations Program on HIV/AIDS – UNAIDS – evidenced 38 million people living with HIV in the world. Of these, 1.7 million correspond to the total number of new infections⁽³⁾. In Brazil, there are records of 342,459 HIV infection cases in the advanced age group; in addition, there has been a 38.5% increase in the mortality of this population segment in the last ten years, which shows that this problem continues to be growing and is increasingly worrisome in the aged population⁽⁴⁾.

There are multiple factors for the increase in HIV/AIDS case in this population segment, with the following among them: the content of the campaigns to neglect dissemination of information to the main vulnerable groups, such as aged individuals; low schooling; immunosenescence; and lack of knowledge about its prevention means and about the disease itself, which leads to carelessness in the use of condoms and to other risk behaviors⁽⁵⁻⁶⁾.

These factors support the idea of offering more expressiveness and visibility to the debate on the sexual health of aged people, such as HIV prevention; in addition to raising awareness about the importance of offering knowledge to older adults about how to live without stigma and prejudice with the HIV/AIDS phenomenon, in addition to emphasizing the idea that aged individuals have the right to live their sexuality in a responsible and informed manner, prioritizing the theme as an object of public policies, in order to contribute to the extinction of the stereotype that older adults are asexual⁽⁵⁾.

Given this situation, and considering that care for the aged person is a global priority, together with the multidisciplinary team, nurses need to be aware of the epidemiological reality and, consequently, they must act as promoters of preventive care through the implementation of health education actions⁽⁷⁾. In this context, intervention and methodological studies aimed at the production of Educational Technologies (ETs) stand out. A modality to be highlighted are the instruments, tools used to measure indicators and assign numerical values to abstract questions that can be measurable. When applied,

they can contribute to the improvement of the health praxis⁽⁸⁾.

One of the definitions used for ETs is “Body of knowledge that promotes the preparation, application and monitoring of the educational process”. These technologies instrumentalize health education moments through mediation between the educator and education, so that it is possible to build knowledge⁽⁹⁾. A systematic review on the elaboration of ETs that assist in the approach of Sexually Transmitted Infections (STIs) in the context of HIV/AIDS showed that technologies have been increasingly produced due to their ease of use, access and acceptance by the population⁽¹⁰⁾.

The choice of elaborating and validating an ET of the illustrated instrument type on the prevention of HIV/AIDS for older adults is justified, in addition to all the aspects listed above, by the need to address this issue in a clearer and more elucidative way, through images that favor identification of aged individuals with their everyday activities. The illustrated instrument can also make the professional’s approach to the sexual health of the aged person more empathetic and free from taboos, as it will favor a closer approximation of the professional with the target audience. In addition to that, the figures maximize the cognitive process, which favors the older adult’s understanding and, consequently, a more assertive response.

The illustrated educational resources can be used individually or in a complementary way to other strategies and are useful to assess knowledge in health education actions or, based on this evaluation, to support the implementation of educational actions. Thus, they are devices that facilitate the teaching-learning process, which can contribute to the clarity and elucidation of diverse health information; however, before being disseminated in the scientific field, they need to be adapted to be applied to their target audience. Therefore, validation is a key process⁽⁹⁾.

The instrument elaborated and validated by this study will not only allow for an illustrative research, but will also make the educational process more engaging and playful. Collection of information through this illustrated instrument will favor better planning of actions that meet the real needs of the target audience. In this sense, the objective was to elaborate and validate the content of an illustrated instrument to assess older adults’ knowledge about HIV/AIDS prevention.

METHOD

A methodological study developed from June 2020 to January 2021, in three stages: literature review, elaboration and content validation. Pasquali's model was defined as the theoretical-methodological framework, based on the theoretical, empirical and analytical poles. The theoretical pole was contemplated with the narrative literature review entitled "Tools for assessing older adults' knowledge about HIV/AIDS prevention"; the empirical pole, with content validation; and the analytical pole, with the application of statistical tests⁽¹¹⁾.

In the first stage, the narrative review took place in June 2020, by resorting to the following databases: *Literatura Latino-Americana e do Caribe em Ciências da Saúde* (LILACS), Scopus (Elsevier) and Cumulative Index to Nursing & Allied Health Literature (CINAHL), guided by the following research question: Which are the assessment tools available in the scientific literature to assess older adult's knowledge about HIV/AIDS prevention? Among the instruments retrieved in the review, the Questionnaire about HIV in Advanced Age (*Questionário de HIV na Terceira Idade*, QHIV3I)⁽¹²⁾ stood out.

In the second stage, QHIV3I was used as a reference for the structural organization of the illustrated instrument. The instrument was elaborated with two parts: the first on socioeconomic aspects; and the second with multiple choice questions with the following alternatives: "true", "false" and "I don't know". It aims at assessing knowledge about HIV/AIDS prevention. To calculate the instrument's score⁽¹³⁾, the experience of one of the researchers as a specialist in Gerontological Nursing was considered, as well as the consultation of complementary sources on the theme in question. The instrument contains brief and objective questions about everyday situations involving the aged population and the risk of HIV infection, and was illustrated with images of older adults performing usual actions.

In the third stage, content validation was performed. This stage had expert judges selected through resources from the Lattes Platform of the National Council for Scientific and Technological Development (CNPq), using the "curriculum search" and "advanced search" tools, with the following specifiers: Sexually Transmitted Infections; HIV; Nurses; Gerontology; Validation and Brazilians. After being directed to the curriculum, the inclusion criteria were verified: having at least

three years of clinical-assistance experience with the target population; having papers published in journals and/or events on the topic; having papers published in journals and/or events on the elaboration and validation of Educational Care Technology (ECT) in the area; and being a specialist (*lato sensu*) and member of a Scientific Society in the area⁽⁹⁾. Judges who did not answer the invitation letter were excluded. The number of judges followed Pasquali's recommendation⁽¹⁴⁾: from six to 10.

Validation took place *online* in August 2020, considering the COVID-19 pandemic context. Each judge was emailed an invitation letter to participate in the content validation of the ET. Upon acceptance, another email message was sent with the Free and Informed Consent Form (FICF) for signature and the Google Forms link to answer the instrument with questions about content validation of instruments, in addition to the illustrated instrument itself in Portable Document Format (PDF).

For data collection with the expert judges, a validated instrument consisting of two parts⁽¹⁵⁾ was used: the first with identification data and the second with specific questions for the validation of printed instruments. The aforementioned instrument arranges the questions into three blocks, namely: block I - Objectives, with five questions; block II - Structure and Presentation, with 11 questions; and block III - Relevance, with five questions. The questions are answered using a Likert scale, with values varying from 1 to 4: 1 for Totally Adequate (TA), 2 for Adequate (A), 3 for Partially Adequate (PA), and 4 for Inadequate (I).

The data were organized and stored in an *Excel* spreadsheet. Descriptive statistics were used for the analysis and absolute and relative frequencies were determined. The Content Validity Index (CVI) was considered valid for the items that presented an agreement level $\geq 80\%$ in the TA and A options⁽⁹⁾.

In order to better structure and report this study, the guidelines set forth in the Revised Standards for Quality Improvement Reporting Excellence (SQUIRE 2.0) guide were followed.

This research was approved by the Research Ethics Committee of the Federal University of Pernambuco, under protocol number 4,258,634.

RESULTS

In the first stage, a narrative review was carried out. From it, suggestions for evaluation instruments available in the literature emerged

to analyze older adults' knowledge about HIV/AIDS prevention. For not meeting some requirements desired by the researchers (they did not contain images and some specific issues of the aged person's everyday life related to HIV/AIDS prevention), they were only adopted as a basis for the elaboration of the instrument referred to in this study.

In the second stage, elaboration of the instrument took place. The instrument consisted of two parts: for the characterization of the aged person, it contains topics on schooling, socioeconomic level, occupational status, religion, having or not having children, and aspects related to life habits; for the characterization of knowledge about HIV/AIDS prevention, it contains 12 illustrated questions.

The illustrated instrument is self-explanatory; however, it is recommended that a health area professional applies it. The questions have multiple-choice answers with the following options: "true", "false" and "I don't know". Respecting QHIV3I, the result of the illustrated instrument

must be analyzed quantitatively⁽¹³⁾, namely: nine or more correct answers indicate that the older adult knows about the disease, and results other than this reveal little knowledge of the older adult about HIV infection and AIDS. It is noteworthy that the "I don't know" answer is classified as incorrect, that is, it shows insufficient knowledge on the subject matter in question.

10 expert judges participated in the third stage. As for the profile, 10 (100%) were female, 6 (60%) had a PhD degree, 3 (30%) had a master's degree and 1 (10%) had a *lato sensu* specialization, all with more than 10 years of training and experience in participation in at least one educational technology validation process.

In the "Objectives" domain, 43 answers were obtained for TA (86%), 6 (12%) for A, 1 (2%) for PA and 0 (0%) for I. There were no suggestions for this domain. The TA and A scores totaled 50 answers, representing 100% of the valid responses. The overall CVI of the "Objectives" domain was 1.00 (Table 1).

Table 1 - Judges' answers regarding the "Objectives" domain of the validation process corresponding to the illustrated instrument (n=10). Recife, PE, Brazil, 2021

Objectives	Validation				CVI*
	TA 1	A 2	PA 3	I 4	
1.1 The diverse information/ contents of the pre- and post-test instruments are coherent with the daily needs of the target audience.	8	2	0	0	1.00
1.2 The diverse information/ contents of the pre- and post-test instruments are important for the quality of life of the target audience.	9	1	0	0	1.00
1.3 The pre- and post-test instruments invite and/or encourage changes in behavior, habits and attitudes.	8	2	0	0	1.00
1.4. The pre- and post-test instruments can circulate in the scientific environment of the health area.	10	0	0	0	1.00
1.5 The pre- and post-test instruments meet the objective that it proposes to achieve with the older adults. (Objective: To measure the aged person's knowledge score about HIV/AIDS prevention before the educational intervention with the Risk Wall game and after the educational intervention with the same game).	9	1	0	0	1.00
Score	43	6	1	0	50
Percentage	86.00%	12.00%	2.00%	0%	100%
Global CVI†	1.00				

Source: Prepared by the authors, 2021.

Note: 1. TA=Totally Adequate; 2. A=Adequate; 3. PA=Partially Adequate; 4. I=Inadequate.

In the "Structure and Presentation" domain, 86 answers were obtained for TA (77.48%), 18 (16.22%) for A, 5 (0.45%) for PA and 2 (0.18%) for I. The suggestions were as follows: restructuring the text and the sequence of the questions and changing the dimensions of the images to favor visualization and projection of the aged person in everyday situations.

The TA and A scores totaled 104 answers, representing to 93.69% of valid responses. The overall CVI was 0.95, which represented validation of the content regarding the objective proposed (Table 2).

In the "Relevance" domain, 45 answers were obtained for TA (90%), 5 (10%) for A, 0 (0%) for PA, and 0 (0%) for I. There were no suggestions for this domain. According to the judges' evaluation, TA and A together totaled 50 answers, representing 100% of the valid responses. The block's CVI was 0.96, which represented validation of the content regarding the objective proposed (Table 3).

The judges' suggestions were analyzed and, when relevant, accepted. Regarding the adjustments in the structure and presentation, the following stand out: in the first part, questions related to the socioeconomic aspect (income,

Table 2 - Judges' answers regarding the "Structure and Presentation" domain of the validation process corresponding to the illustrated instrument (n=10). Recife, PE, Brazil, 2021

Structure and Presentation	Validation				CVI*
	TA 1	A 2	PA 3	I 4	
2.1 The pre- and post-test instruments are appropriate for use with the aged population.	7	2	1	0	0.90
2.2 The language of the pre- and post-test instruments is clear and objective.	9	1	0	0	1.00
2.3 The diverse information presented in the instruments is scientifically correct.	8	2	0	0	1.00
2.4 The pre- and post-test instruments are appropriate to the sociocultural level of the target audience (aged people).	8	2	0	0	1.00
2.5 There is a logical sequence of the content proposed in the pre- and post-test instruments.	7	2	1	0	0.90
2.6 The diverse information is well-structured in concordance and spelling.	9	1	0	0	1.00
2.7 The writing style corresponds to the knowledge level of the target audience (aged people).	7	2	1	0	1.00
2.8 Presentation of the pre- and post-test instruments is suitable for aged people.	10	0	0	0	1.00
2.9 The size of the titles and topics is adequate.	8	2	0	0	1.00
2.10 The illustrations are expressive and sufficient in number. *The instrument will be used by the researcher to investigate the aged person's knowledge about HIV prevention.	6	2	1	1	0.80
2.11 The length of the pre- and post-test instruments (number of pages) is suitable for use with aged people.	6	2	1	1	0.80
Score	86	18	5	2	111
Percentage	77.48%	16.22%	0.45%	0.18%	100%
Global CVI†					0.95

Source: Prepared by the authors, 2021.

Note: 1. TA=Totally Adequate; 2. A=Adequate; 3. PA=Partially adequate; 4. I=Inadequate.

Table 3 - Judges' answers regarding the "Relevance" domain of the validation process corresponding to the illustrated instrument (n=10). Recife, PE, Brazil, 2021

Relevance	Validation				CVI*
	TA 1	A 2	PA 3	I 4	
3.1 The themes brought up by the pre- and post-test instruments portray key aspects that must be reinforced in relation to HIV prevention by the older adults.	10	0	0	0	1.00
3.2 The educational material allows learning about HIV/AIDS prevention in different contexts.	7	2	1	0	0.90
3.3 The pre- and post-test instruments propose the construction of knowledge about HIV/AIDS prevention.	7	2	1	0	0.90
3.4 The pre- and post-test instruments address the subject matters necessary for the prevention of HIV/AIDS by the aged individuals.	9	1	0	0	1.00
3.5 The pre- and post-test instruments are suitable for use by health professionals with aged people.	10	0	0	0	1.00
Score	45	5	0	0	50
Percentage	90.00%	10.00%	0%	0	100%
Global CVI†			0.96		

Source: Prepared by the author, 2021.

Note: (1) TA=Fully Adequate; (2) A=Adequate; (3) PA=Partially adequate; (4) I=Inadequate.

number of children, occupational status and aspects related to life habits and health behaviors) were added; in the second part, adjustments were made in the logical sequence of the content proposed, the images in questions 5 and 11 were revised and images that portrayed the older adults' reality were inserted, such as: water aerobics practice and aged people interacting with a sex worker.

After incorporating the judges' suggestions, the final version of the instrument had three pages: page 1 with questions related to the characterization of the older adults; and pages 2 and 3 with 12 illustrative questions alluding to HIV/AIDS prevention, measuring 10 x 10 cm, so as not to compromise the older adult's understanding. The game board images were designed together with aged people through a health education action on the theme and were later graphically reproduced by a designer. During the creative process of designing and adjusting the images, the judges and the authors analyzed the aged people's perception about HIV prevention, as well as they sought to clarify everyday situations which referred to the risk of HIV/AIDS infection in the most playful way possible, according to the reality experienced by the aged person. Below are the three pages of the illustrated instrument (Figure 1).

DISCUSSION

The product of this study is a technological innovation of the instrument type that assesses, through a score, the older adults' knowledge about HIV/AIDS prevention based on objective sentences, associated with illustrations of the aged individuals in everyday situations that may or may not involve risk of HIV/AIDS infection, all semantically validated⁽¹⁶⁾. Assessing the older adults' knowledge is fundamental to identify their reality and, based on that, implement health education actions. The aforementioned ET, related to the older adults' sexual health care, can be used in the clinical practice of nurses who carry out educational interventions in health with this population at the primary, secondary and tertiary health care levels, such as Long-Term Institutions for Older Adults (*Instituições de Longa Permanência para Idosos*, ILPIs), sociocultural interventions, interventions in a family context and interventions in formal education contexts for aged individuals, as well as in the academic environment.

However, it is the validation that confirms adequacy of the ET so that it can be widely used in different academic and care contexts. Planning and organization of a printed instrument requires significant attention with regard to the textual constitution, imagery, color harmony, spacing

Instrument to assess older adults' knowledge

• FIRST PART (Characterization of the older adult)

1. IDENTIFICATION DATA:

Identification number: _____

Date of birth: _____

Name initials: _____

Pre-test date: _____

2. SOCIODEMOGRAPHIC DATA:

2.1 Gender: Male Female

2.2 Age: _____

2.3 Origin: _____

2.4 Marital status: Married Single Divorced Widower Stable union

2.5. Religion: 1. Catholic 2. Evangelical 3. Spiritist 4. No religion

5. Others: _____

2.6 Adding up the income of the people living with you, which is the approximate monthly family income?

Amount: _____

2.7 Do you receive any benefit from the government? Ongoing Provision Benefit (*Benefício de Prestação Continuada*, BPC) 25% add-on in retirement payment

Other(s): _____

2.8 Children: Yes No If yes, how many? _____

2.9 Schooling (in years of study): _____

2.10 Employment status:

Employed

Unemployed

Self-employed. What type? _____

Retired

3. ASPECTS RELATED TO LIFE HABITS:

3.1 How do you perceive your health? Excellent Good Fair Bad

3.2 Active sex life: Yes No

3.3. Do you practice any physical activity? Once a week 2-3 times a week No physical activity

4. ASPECTS RELATED TO HEALTH BEHAVIORS:

4.1 Do you attend any health service? Yes No

4.2 Which health service do you attend?

4.3. How often do you attend health services?

• **SECOND PART (Assessment of the knowledge score about HIV/AIDS prevention)**

<p>1) A person who hugs someone infected by HIV can catch the disease.</p> <p><input type="checkbox"/> True</p> <p><input type="checkbox"/> False</p> <p><input type="checkbox"/> I don't know</p>	
<p>2) A person can catch HIV through coughing or sneezing.</p> <p><input type="checkbox"/> True</p> <p><input type="checkbox"/> False</p> <p><input type="checkbox"/> I don't know</p>	
<p>3) A person can catch HIV if they do unprotected (with no condom) anal sex with someone of the same or another gender that has HIV.</p> <p><input type="checkbox"/> True</p> <p><input type="checkbox"/> False</p> <p><input type="checkbox"/> I don't know</p>	
<p>4) A person can catch HIV through a mosquito bite.</p> <p><input type="checkbox"/> True</p> <p><input type="checkbox"/> False</p> <p><input type="checkbox"/> I don't know</p>	
<p>5) A person who has contact contact (through blood-stained sharps such as needles, scalpel, scissors, etc.) with the blood of another person contaminated by HIV can catch the disease.</p> <p><input type="checkbox"/> True</p> <p><input type="checkbox"/> False</p> <p><input type="checkbox"/> I don't know</p>	
<p>6) A person can catch HIV due to sitting on the same place where someone contaminated by HIV was sitting.</p> <p><input type="checkbox"/> True</p> <p><input type="checkbox"/> False</p> <p><input type="checkbox"/> I don't know</p>	

<p>7) A person can catch HIV by having unprotected (with no condom) sexual relations (genital, oral or anal) with a sex professional.</p> <p><input type="radio"/> True</p> <p><input type="radio"/> False</p> <p><input type="radio"/> I don't know</p>	
<p>8) A person who receives blood (transfusion) can catch HIV.</p> <p><input type="radio"/> True</p> <p><input type="radio"/> False</p> <p><input type="radio"/> I don't know</p>	
<p>9) A person can catch HIV through the pool's water.</p> <p><input type="radio"/> True</p> <p><input type="radio"/> False</p> <p><input type="radio"/> I don't know</p>	
<p>10) A person can catch HIV by placing their mouth on the genitals of someone who is infected by HIV (oral sex) without protection (with no condom).</p> <p><input type="radio"/> True</p> <p><input type="radio"/> False</p> <p><input type="radio"/> I don't know</p>	
<p>11) A person can catch HIV by having contact with the saliva (through mouth kiss, using the same glass or tableware) of someone infected by HIV. *Both people have a healthy mouth (with no wounds)</p> <p><input type="radio"/> True</p> <p><input type="radio"/> False</p> <p><input type="radio"/> I don't know</p>	
<p>12) A person can prevent HIV by not using condoms correctly in all sexual relations.</p> <p><input type="radio"/> True</p> <p><input type="radio"/> False</p> <p><input type="radio"/> I don't know</p>	

Figure 1 – Pages of the illustrated instrument to assess older adults' knowledge about HIV/AIDS prevention. Recife, PE, Brazil, 2021

Source: Prepared by the authors, 2021.

and type of font used, among other aspects⁽¹⁷⁻¹⁸⁾. In this sense, the content validation process performed in this study enabled the identification of aspects for improvement in the content and structure of the illustrated instrument. Diverse evidence shows that conducting health

education interventions with the use of ETs has exerted a positive impact on the prevention and health promotion of older adults⁽¹⁾. Given the above, based on the benefits of technologies in health actions⁽¹⁹⁾ and from the understanding that health care for older adults permeates all

assistance levels and, therefore, they must comprehensively meet the inherent needs of this phase⁽²⁰⁾, the "Illustrated instrument about knowledge on HIV/AIDS prevention for aged individuals" was idealized. It is therefore confirmed that identification of the aged person's knowledge through this instrument is necessary to support health education strategies for this population segment, based on the identification of their level of knowledge and their own needs. It is believed that the diverse evidence generated by the use of the instrument can support the discussions on the theme in question and also address social, economic and cultural diversity through the information collected in the first part of the instrument.

The need to offer the community a resource capable of bringing nurses closer to the older adults' knowledge about HIV/AIDS prevention became the defining point for elaborating the instrument validated by this study. There was an evident absence of an instrument anchored in scientific evidence that addressed this prevention with the inclusion of illustrations that facilitated the older adults' understanding and brought them closer to the theme through everyday situations experienced by themselves, considering that the educational practices that use evidence-based ETs imply greater robustness in the results of preventive care⁽¹⁹⁾.

Health education actions using ETs can significantly favor the teaching-learning process, foster a healthier lifestyle and encourage preventive care. They also assist in the intermediary means of diverse information about AIDS, favoring reception. Thus, in order to favor the care practice, a number of studies are increasingly investing in the development of ETs in the Nursing area⁽²⁰⁾.

In addition, given the high HIV rates and the older adults' limited knowledge in relation to HIV prevention, the urgent need to pay attention to this population segment cannot be disregarded. In turn, health education actions significantly favor the educational process, as they offer diverse knowledge in a collaborative way and promote reflection and decision-making capacity with regard to issues involving health care⁽¹⁹⁻²⁰⁾. In this sense, it is believed that the validated instrument can help health professionals investigate the older adults' knowledge about HIV/AIDS prevention in a more playful way and that collection of information can support preventive and intervention measures, aimed at the sexual

health of these people in a more assertive way. It can also contribute to an increasingly welcoming, interactive, innovative and inclusive sexual health care.

Therefore, in order to favor engagement of the aged population with the health service, it is necessary to invest in the use of ETs that favor their approach, aiming at welcoming and actively listening to the real health demands of this population segment, such as the ET reported in this study. It is believed that from the collection of information on the older adults' knowledge about sexual health content, specifically on HIV/AIDS prevention, more effective, targeted and impactful educational actions can be planned and executed in the lives of these people, with repercussions in sexual self-care. The following is pointed out as a study limitation: failure to carry out semantic evaluation of the instrument, being necessary to conduct research studies for such purpose.

It is noteworthy that the content validation process conferred to the instrument the guarantee of suitability for use with older adults. This study aims at contributing to the advancement of scientific knowledge and at bringing about implications for the Gerontological Health and Nursing area, as it enables nurses and other health professionals to use the instrument in various care contexts, with a view to preventing HIV/AIDS in this population segment, which is highly vulnerable to STIs; in view of the importance of Nursing in this preventive context, especially through qualified listening and welcoming.

CONCLUSION

The illustrated instrument to evaluate older adults' knowledge about HIV/AIDS prevention was elaborated, and its content was considered valid by judges. This brings about a contribution to the scientific framework of the Nursing area, especially its Gerontological branch. Its applicability can permeate different contexts and realities in which aged individuals are inserted. It is a scientific production that evidences paths for applied science in Nursing at the national and international levels. In addition, it encourages the development of educational actions and other studies regarding elaboration, validation and application of instruments.

*Paper extracted from the doctoral dissertation "A efetividade de um jogo de tabuleiro sobre pre-

venção do HIV/aids no conhecimento de pessoas idosas em contexto escolar”, presented to Federal University of Pernambuco, Recife, PE, Brazil.

CONFLICT OF INTEREST

The authors have declared that there is no conflict of interest.

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