RESEARCH | PESQUISA

Construction and validity of an instrument for sociological and behavioral assessment associated with HIV infection in young people[a]

Construção e validação de instrumento socioestrutural e comportamental associado à infecção pelo HIV em jovens

Construcción y validación de un instrumento de evaluación sociológica y comportamental asociado con la infección por VIH en jóvenes

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ABSTRACT

Objective: to construct and validate the content of an instrument for sociostructural and behavioral assessment associated with HIV infection in young people. **Method:** a methodological study developed in two steps: instrument elaboration; and content validity. The items that made up the instrument were selected through a literary review using the Modified Social Ecological Model multilevel domains as a reference, categorized into sociostructural and behavioral components. Content was assessed by experts in two rounds conducted using the Delphi technique, assuming an agreement rate of at least 80%. **Results:** the first version of the instrument contained 52 items, distributed across three domains. In the first round, 19 items (36.5%) had a Content Validity Index lower than 0.80, two items were excluded and the rest were reformulated. In the second round, 2 items were excluded and 3 were incorporated as subitems, totaling 45 items. The Instrument Content Validity Index was 95%. **Conclusion and implications for practice:** experts' recommendations contributed qualifying the Sociostructural and Behavioral Assessment-HIV instrument, enabling content reorganization. The instrument is valid for identifying socio-structural and behavioral factors associated with HIV infection in young people, with the potential to constitute preventive care planning.

Keywords: Adolescent; Multilevel Analysis; HIV; HIV Infections; Vulnerable Populations.

RESUMO

Objetivo: construir e validar conteúdo de instrumento para avaliação socioestrutural e comportamental associado à infecção pelo HIV em jovens. **Método**: estudo metodológico, desenvolvido em duas etapas: elaboração do instrumento; e validação de conteúdo. Os itens que compuseram o instrumento foram selecionados através de revisão literária, tendo como referencial os domínios multiníveis do Modelo Social Ecológico Modificado, categorizados em componentes socioestruturais e comportamentais. O conteúdo foi avaliado por especialistas em duas rodadas conduzidas pela técnica Delphi, admitindo-se um índice de concordância de, no mínimo, 80%. **Resultados:** a primeira versão do instrumento continha 52 itens, distribuídos em três domínios. Na primeira rodada, 19 itens (36,5%) obtiveram Índice de Validade de Conteúdo inferior a 0,80, dois itens foram excluídos e os demais foram reformulados. Na segunda rodada, 2 itens foram excluídos e 3 foram incorporados como subitem, totalizando 45 itens. O Índice de Validade de Conteúdo do Instrumento foi de 95%. **Conclusão e implicações para a prática:** as recomendações dos especialistas contribuíram para a qualificação do instrumento Avaliação Socioestrutural e Comportamental-HIV, possibilitando a reorganização do conteúdo. O instrumento é válido para a identificação de fatores socioestruturais e comportamentais associados à infecção pelo HIV em jovens, com potencial para constituir planejamento de cuidados preventivos.

Palavras-chave: Adolescente; Análise Multinível; HIV; Infecções por HIV; Populações Vulneráveis.

RESUMEN

Objetivo: construir y validar el contenido de un instrumento de evaluación socioestructural y conductual asociada a la infección por VIH en jóvenes. **Método:** estudio metodológico, desarrollado en dos etapas: elaboración del instrumento; y validación de contenido. Los ítems que conformaron el instrumento fueron seleccionados a través de una revisión literaria, tomando como referencia los dominios multinivel del Modelo Ecológico Social Modificado, categorizados en componentes socioestructurales y conductuales. El contenido fue evaluado por expertos en dos rondas realizadas mediante la técnica Delphi, suponiendo una tasa de acuerdo de al menos el 80%. **Resultados:** la primera versión del instrumento contuvo 52 ítems, distribuidos en tres dominios. En la primera ronda, 19 ítems (36,5%) tuvieron un Índice de Validez de Contenido inferior a 0,80, dos ítems fueron excluidos y el resto fueron reformulados. En la segunda ronda, se excluyeron 2 ítems y se incorporaron 3 como subítems, totalizando 45 ítems. El Índice de Validez de Contenido del Instrumento fue del 95%. **Conclusión e implicaciones para la práctica:** las recomendaciones de los expertos contribuyeron para la calificación del instrumento Evaluación Socioestructural y del Comportamiento-VIH, permitiendo la reorganización del contenido. El instrumento es válido para identificar factores socioestructurales y conductuales asociados a la infección por VIH en jóvenes, con potencial para constituir una planificación de atención preventiva.

Palabras clave: Adolescente; Análisis Multinivel; VIH; Infecciones por VIH; Poblaciones Vulnerables.

INTRODUCTION

In recent decades, the global scenario has shown progress in terms of confronting the HIV epidemic. Although the overall trend of infection has been decreasing, the reduction in incidence is limited among certain populations, such as young people in key populations. It is estimated, globally, that, of the total of 1.57 million new HIV infections that occurred in 2020, 27% are in the age group between 15 and 24 years old.[1,2] Between 2007 and June 2022, in Brazil, a total of 102,869 (23.7%) cases of HIV were observed among young people aged 15 to 24. In 2021, 40,880 new cases of HIV infections were registered, 23.4% of which were concentrated in the age group between 15 and 24 years old. Furthermore, in the last 10 years, 52,513 young people aged 15 to 24, of both sexes and living with HIV, developed AIDS.[3]

This situation motivated the proposal of coping strategies by the Joint United Nations Programme on HIV/AIDS (UNAIDS), which includes, among others, the expansion of universal access to serological testing, treatment and care for HIV, the implementation of actions access to Fast-Track and focus on groups disproportionately affected by the epidemic.[1] From this perspective, initiatives that enable the identification of vulnerability indicators that increase the risk of HIV infection among young people are pertinent, such as the following structural factors already recognized in the literature, such as gender-based inequalities and violence, cultural and community norms, economic factors, stigma and discrimination.[4]

Among those under 18, in particular, it is recognized that there are political and legal barriers related to age that hinder access to services, including HIV testing and counseling, harm reduction and other necessary services, especially for key populations. Such barriers limit adolescents' ability to exercise their right to make independent decisions. In this context, the resistance of adolescents and young people in the search for health services stands out, fearing discrimination and/or possible legal consequences, remaining hidden in intervention spaces and excluded from essential health care.[1,5]

Therefore, it is a challenge to introduce approaches that consider and enable interventions on multiple factors that influence and outline the pattern of vulnerability of young people to HIV. Studies indicate that infection prevention and control actions are still mostly directed towards biomedical and behavioral approaches, and are out of context with social, cultural, economic and political variations.[6] It is also understood that interventions, in the individual aspect, have limited resources to change social structures, whose vulnerabilities are difficult to overcome, especially because they are (re)produced and perpetuated over generations.[5,6]

Given the gap mentioned in the context of care planning for the population in focus, considering vulnerability to HIV infection, this study proposed the construction and validity of an instrument, using the Modified Social Ecological Model (MSEM) as a theoretical framework to enable understanding on social, structural and behavioral factors, presented in a multilevel analysis, whose elements interact and affect the risk of vulnerable populations acquiring HIV infection. This model is made up of five levels: individual; social and sexual network; community; public policy; and epidemic stage.[7]

Originally used in the fields of psychology and human development, MSEM has undergone some changes for its use in public health. In this area of knowledge, MSEM is considered a theoretical approach that highlights the importance of understanding the influence of social and regulatory environments on individual behavior, above all, highlighting the dynamics of relationships among people, environments and other social influences that modulate behaviors, health-disease patterns and adaptive responses throughout life.[6-8]

Stemming from the fields of psychology and human development, MSEM has been adapted to the field of public health as a theoretical approach that emphasizes the importance of understanding social and regulatory environments in predicting individual health behavior. It is a model that, when used in healthcare, highlights the dynamics of interactions and relationships that exist among people, environments and other social influences that shape behaviors, disease patterns as well as responses to them throughout the life cycle.[6-8]

In addition to predicting which factors at each level are associated with risk or protective factors, there is clarity on how multilevel can overlap with the process of enhancing or mitigating virus transmission. In this regard, instruments guiding professional health care based on the model may contribute to improving practices and building opportunities to overcome gaps in the fields of prevention.[8]

Considering the above, this study aimed to construct and validate the content of an instrument for socio-structural and behavioral assessment associated with HIV infection in young people.

METHOD

This methodological study is part of a project entitled "*HIV na população jovem: subsídios para o enfrentamento da epidemia a partir da análise de fatores socioestruturais e comportamentais*", and was funded by the Paraíba Research Support Foundation (FAPESQ - *Fundação de Apoio à Pesquisa da Paraíba)/*PPSUS-TO: 12/2021. This phase of research was developed in João Pessoa, capital of the state of Paraíba, from October 2020 to February 2021, through the following steps: theoretical procedures (definition of items and instrument construction); empirical procedures (instrument content validity, submission to experts and instrument reliability verification by analyzing agreement among experts); and analytical procedures (instrument internal consistency).[9]

The instrument construction process initially consisted of defining the items that made up the instrument, through an integrative literature review, whose analysis was guided by MSEM,[7] in addition to global political guidelines for combating HIV and AIDS.[1] Based on the results from the literature review, the main items were selected to compose the instrument.

The initial instrument construction was carried out by the researchers themselves, who had theoretical and practical experience with the topic. Initially, 52 items were prepared, distributed into three thematic blocks, such as sociodemographic, sociostructural and behavioral, to be submitted for assessment.

Sequentially, the instrument was submitted to content assessment by expert judges, selected based on pre-defined criteria, such as professional or academic experience with caring for people with HIV and AIDS and a minimum master's degree. The recommendation to appoint at least six experts,[9] and the Delphi technique, which recommends at least two rounds of content assessment, were adopted.[10]

From a search on the Lattes Platform on the Brazilian National Council for Scientific and Technological Development (CNPq - *Conselho Nacional de Desenvolvimento Científico e Tecnológico*) website, and through indication or recommendation from other researchers (snowball technique), 19 experts were eligible.[9,10] The invitation to participants in this phase was sent electronically, containing a succinct presentation of research objectives and description in the body of the email. Those with a master's or doctorate degree and scientific and clinical experience in HIV and AIDS met the criteria. For the content validity step, the Informed Consent Form (ICF), the questionnaire with expert characterization and the initial instrument version were inserted on the Google platform (https://docs.google.com).

Each item was assessed for its relevance, considering a Likert-type scale, structured into five propositions: "totally disagree"; "partially disagree"; "no opinion"; "partially agree"; and "completely agree". At the end of each item, object of assessment, there was a specific field for open answers, in which expert judges could justify their answers and/or describe suggestions that contributed to instrument relevance.

A period of 15 days was established so that participants could respond to the invitation and carry out the assessment, which took place from November 13th to December 31st, 2020. So that the proposed instrument could generate valid and reliable results, we sought to relate theoretical concepts and measurable indicators (items), as well as assess the extent and dimension of each item in relation to the object of study, enabling judgment on item relevance and suitability to confer applicability to the instrument.[9,10]

To assess the instrument's internal consistency (analytical procedures), the Content Validity Index (CVI), Domain Reliability Index (DRI) and Instrument Validity Index (IVI) were measured,[10] considering the simple frequency of experts' responses. Therefore, only items whose percentage agreement values were equal to or greater than 80% (0.80).[9,11]

Considering that the present study is part of the aforementioned project, this research was approved under Opinion 3,935,713/2020 by the Research Ethics Committee of the Health Sciences Center of the *Universidade Federal da Paraíba* (REC/HSC/UFPB). It was conducted according to normative research guidelines, complying with Resolution 466/2012 of the Brazilian National Health Council, which regulates research with human beings in Brazil.

RESULTS

Initially, 19 experts were invited to participate in the research, however 14 of them agreed to participate. Of these, 12 (85.7%) were female, 9 (64.3%) were between the ages of 29 and 40, 12 (85.7%) were nurses, 8 (42.9%) had doctoral degree, 4 (28.6%) worked in teaching, 7 (41.2%) were linked to public universities and 10 (71.4%) came from the northeast.

The validity process took place in two rounds of assessment. The instrument constructed contained 52 items in its preliminary version, distributed in 3 domains, being: domain I - sociodemographic (7 items); domain II - behavioral (19 items); domain III – sociostructural (26 items). In the first round of assessment, using the Delphi technique, 19 (36.5%) obtained a CVI below 0.80. Two items were excluded (items 10 and 11), and the others were reformulated, following suggestions from experts. In general, inclusion of response categories and modifications to the text were recommended to make the items more understandable.

As MSEM is little used on the national scene,[4-7] it was found that some items of the instrument, notably in the socio-structural domain, were not properly understood by the experts due to the lack of approach to the topic. Thus, in the second round, each item was explained with a view to offering greater grounds for experts' judgment (Figure 1).

As for the format, experts suggested reversing the orders of domains II (behavioral) and III (sociostructural) to enhance the relationship established between interviewer and research subject, especially on issues related to sexuality. Thus, the instrument was arranged in the following order: domain I – sociodemographic; domain II – sociostructural; and domain III – behavioral. After the review and readjustment phase was completed, the second instrument version had 50 items. Still in this first round, domains I, II and III achieved DRI of 0.84, 0.85 and 0.84, sequentially. As for IVI, the instrument scored 0.83.

In the second round, the instrument was sent back to the 14 experts who participated in the first round of the Delphi technique, of which 10 contributed with validity. After experts returned the instrument, all suggestions were considered and the responses were treated and analyzed quantitatively, as already described (Figure 1).

At this stage, only two items (15 and 20) were assessed with scores lower than 0.80, and both comprised the sociostructural domain. After review and discussion by the researchers, a consensus was reached that they should be excluded from the instrument. Three more items (25, 27 and 29) underwent adjustments and were considered as sub-items and, therefore, the total number of items in the instrument was reduced (Figure 1).

Based on the results obtained, the content validity process was completed, giving rise to the instrument entitled Sociostructural and Behavioral Assessment Instrument – ASECOMP-HIV (*Instrumento de Avaliação Socioestrutural e Comportamental*), composed of 45 items and an IVI of 0.95. The instrument, in its final version, as well as the CVI of each item and the DRI of the domains, is presented in Chart 1.
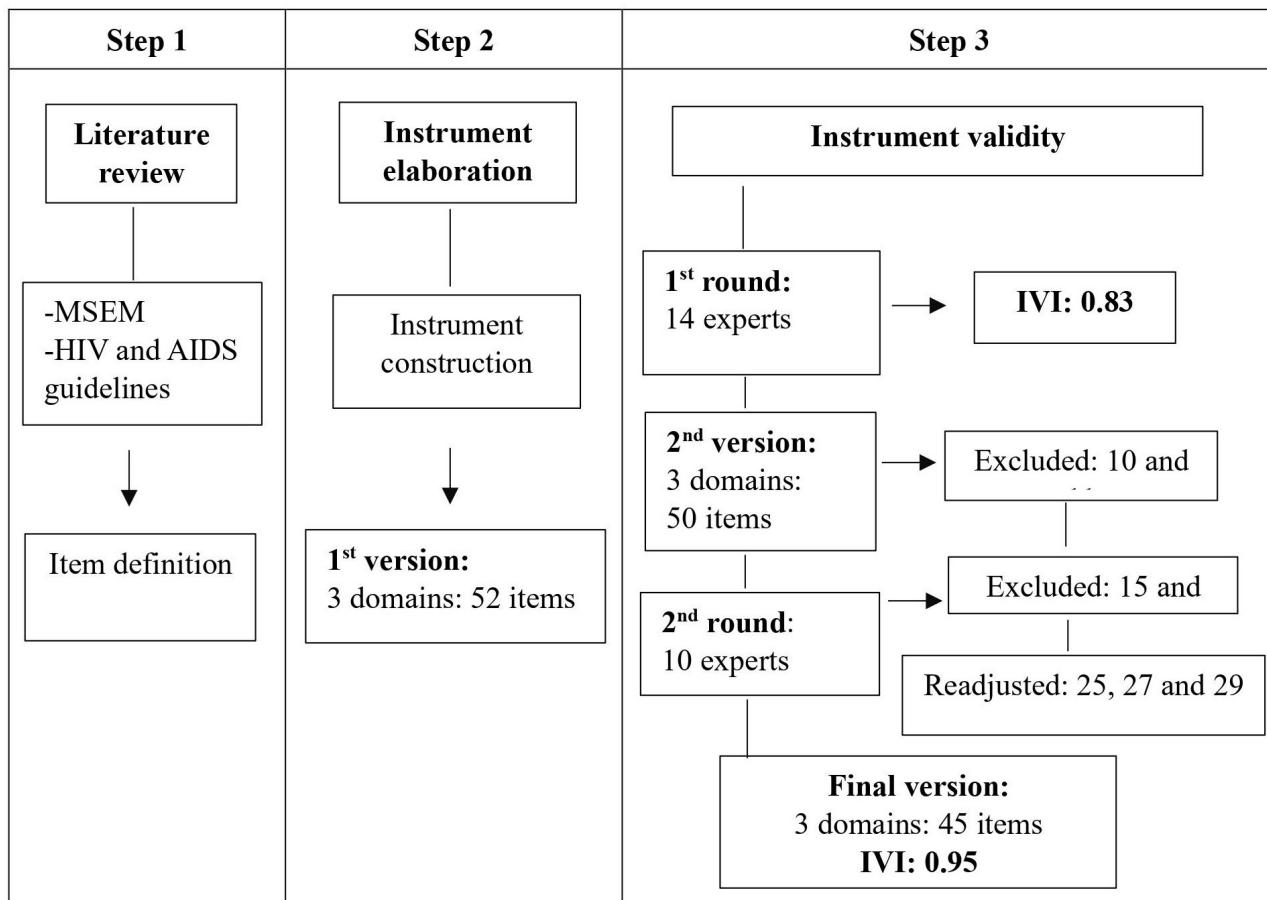
Figure 1. Flowchart of elaboration and validity steps of Sociostructural and Behavioral Assessment Instrument (*Instrumento de Avaliação Socioestrutural e Comportamental*).
Source: the authors, 2022.

Chart 1. Sociostructural and Behavioral Assessment Instrument – ASECOMP-HIV (*Instrumento de Avaliação Socioestrutural e Comportamental*).

Sociostructural and Behavioral Assessment Instrument – ASECOMP-HIV		
Domain I- Sociodemographic	CVI	DRI
1. Age (years)	1.00	
2. Sex (biological) ( ) Male ( ) Female ( ) Intersex	1.00	
3. Gender identity ( ) Man ( ) Woman ( ) Trans man ( ) Trans woman ( ) Non-binary ( ) Other	0.80	
4. Sexual orientation ( ) Heterosexual ( ) Homosexual ( ) Bisexual ( ) Asexual ( ) Pansexual ( ) Other	0.90	**0.96**
5. Self-declared race/color ( ) White ( ) Brown ( ) Black ( ) Yellow ( ) Indigenous	1.00	
6. Education: (Years of study)	1.00	
7. Municipality of residence/neighborhood:	1.00	

Chart 1. Continued...

Sociostructural and Behavioral Assessment Instrument – ASECOMP-HIV		
Domain II- Sociostructural		
8. Current occupation ( ) Student ( ) Formal work ( ) Informal work ( ) Self-employed ( ) Unemployed ( ) Others	1.00	
9. Current relationship status ( ) Fixed relationship ( ) Casual relationship ( ) Relationship with more than one partner ( ) No relationship ( ) Others	1.00	
10. Parental status ( ) Living parents ( ) Orphan of mother ( ) Orphan of father ( ) Orphan of both parents ( ) Do not know	0.80	
11. Who do you currently share your home with (multiple choice) ( ) Mother ( ) Father ( ) Partner ( ) Siblings ( ) Children ( ) Grandparents ( ) Relatives ( ) Friends ( ) Alone	1.00	
12. How many people live in the house:_____	0.90	
13. Monthly family income ( ) ≤ 1 minimum wage ( ) > 1 and ≤ 3 minimum wage ( ) > 3 minimum wage	1.00	
14. Financial or material support: ( ) Yes ( ) No If yes, which?_____	1.00	
15. House where you live: ( ) Own paid off ( ) Own paid off in progress ( ) Rented ( ) Assigned ( ) Other	1.00	
16. Cellphone ( ) Yes ( ) No	1.00	
17. Access to the internet at home ( ) Yes ( ) No	1.00	
18. In the last month, was the amount of food in your home sufficient? ( ) Yes ( ) No	0.90	
19. Have you ever been arrested or institutionalized? ( ) Yes ( ) No ( ) Would rather not answer	0.90	
20. History of psychiatric treatment ( ) Yes ( ) No ( ) Would rather not answer	0.90	**0.95**
21. Sexual relationships in exchange for benefits ( ) Yes ( ) No ( ) Would rather not answer	0.80	
22. Suffered discrimination based on gender identity ( ) Yes ( ) No ( ) Would rather not answer If yes, where (multiple choice): ( ) In the family ( ) In health services ( ) At work ( ) At university/school ( ) Others: _____	0.90	
23. Suffered discrimination based on sexual orientation ( ) Yes ( ) No ( ) Would rather not answer If yes, where (multiple choice): ( ) In the family ( ) In health services ( ) At work ( ) At university/school ( ) Others: _____	1.00	
24. Suffered some type of sexual violence/abuse ( ) Yes ( ) No ( ) Would rather not answer If yes, from whom (multiple choice): ( ) Partner ( ) Relative ( ) Unknown ( ) Other ( ) Would rather not answer	0.90	
25. First service you turn to when your health situation requires care ( ) FHS ( ) ECU ( ) Public hospitals ( ) Private services ( ) Others	1.00	
26. Received guidance on HIV prevention ( ) Yes ( ) No If yes, where (multiple choice): ( ) Health services ( ) School/university ( ) Work ( ) Television/media ( ) Family ( ) Others	1.00	
27. Difficulty acquiring condoms ( ) Yes ( ) No If yes, what difficulty(ies):	1.00	
28. Difficulty performing rapid HIV test: ( ) Yes ( ) No If yes, what difficulty(ies):	1.00	
29. Difficulty accessing the Testing and Counseling Center ( ) Yes ( ) No If yes, what difficulty(ies):	0.90	
30. How satisfied were you with the service you received at CTA ( ) Satisfied ( ) Not very satisfied ( ) Not at all satisfied	0.90	

Chart 1. Continued...

Sociostructural and Behavioral Assessment Instrument – ASECOMP-HIV	
Domain III- Behavioral	
31. First time seeking rapid HIV test ( ) Yes ( ) No If no: How many times did you perform the RT: _____ For how long held the last RT (in months):_____	1.00
32. Reason for taking the current test ( ) Sexual exposure ( ) Sharing of sharp objects ( ) Curiosity ( ) Periodic examination ( ) Infection/comorbidity ( ) Pregnancy ( ) Other:	1.00
33. Age at first sexual intercourse (years):_____	0.80
34. First consensual sexual intercourse ( ) Yes ( ) No ( ) Do not know	1.00
35. Diagnosis of Sexually Transmitted Infection (STI)? ( ) Yes ( ) No ( ) Do not know If yes, which STI?_____	1.00
36. Use of medication to reduce the risk of HIV infection (Post-Exposure Prophylaxis (PEP) ( ) Yes ( ) No If yes, for how long:_____	1.00
37. Preventive use of medications before exposure to the risk of acquiring HIV (PrEP) ( ) Yes ( ) No If yes, for how long:_____	0.90
38. Self-perceived risk of having acquired HIV ( ) Low ( ) Moderate ( ) High ( ) Do not know	0.90
39. During sexual intercourse, how often do you use a condom? ( ) Always ( ) Sometimes ( ) Never If sometimes and/or never, justify: _____	1.00
40. Difficulty negotiating condom use with your partner ( ) Always ( ) Sometimes ( ) Never	1.00
41. Difficulty negotiating condom use with your partner (multiple choice): ( ) Vaginal ( ) Insertive anal ( ) Receptive anal ( ) Oral	0.90
42. History of a relationship with someone positive for HIV ( ) Yes ( ) No ( ) Do not know	0.90
43. Serological status of current partner: ( ) HIV-negative ( ) HIV-positive ( ) Do not know ( ) No relationship at the moment	0.90
44. Drink alcohol ( ) Yes ( ) No If yes, did you stop using condoms while under the influence of alcohol? ( ) Yes ( ) No ( ) Do not know	1.00
45. Use of illicit drugs ( ) Yes ( ) No If yes, did you stop using condoms while under the influence of alcohol? ( ) Yes ( ) No ( ) Do not know	1.00

0.95

DISCUSSION

The constructed and validated instrument reiterates the importance of special attention to young people, which has been highlighted through data on the HIV epidemic concentration in this population segment, mainly in young members of key populations.[1-3]

It is noteworthy that the limitation of specific public policy actions for this age group, reflected by current epidemiological trends, highlights how necessary it is to consider the behavioral and structural aspects associated with seroprevalence in this age group, in order to mitigate this gap in the ecological nature of young people, for effective health care from a preventive perspective.[12]

In the 1st instrument domain (sociodemographic), item 5, "race/color", was reformulated, considering the response categories of the Brazilian Institute of Geography and Statistics (IBGE - *Instituto Brasileiro de Geografia e Estatística*). Regarding this aspect, it is noteworthy that, in Brazil, race is an element of study and understanding of epidemiological trends of communicable and non-communicable diseases, composing the model proposed by MSEM. Historically, brown and low-educated individuals have restricted access to health services and education, with consequent limitation of information on forms of HIV prevention and transmission, thus interfering with young people's vulnerability, expressing themselves unequally.[13,14]

In the same domain, experts suggested the exclusion of item 7, "neighborhood of residence". However, it was decided to maintain the item, due to the possibility of carrying out georeferenced analyzes of young people, in addition to the possibility of obtaining data on contextual variations (behavior and structure) related to young people's geographic location, to better define epidemic patterns.[7,13]

Analyzing the 2nd domain, sociostructural, in the first instrument version, the relevance of the following items was questioned: "Have you ever been arrested or institutionalized?"; "What type of flooring does your house have?" However, from the perspective of the ecological model, the profile of housing conditions in youth is essential for understanding the barriers that may limit young people from accessing public policies.[1,3] Furthermore, regarding institutionalization, it is observed, with the variation among states in Brazil, that incarceration is associated with a higher seroprevalence of HIV and other STIs when compared to the general population. Such associations may be related to practices, habits and attitudes adopted more frequently during incarceration, such as the use of injectable drugs, sharing of needles and unprotected sexual practices.[15] In an investigation conducted in the United States of America (USA), the combination of structural and individual factors, such as substance use and history of incarceration in the lives of young black men who have sex with men, can affect their vulnerability to HIV, constituting a syndemic condition that increases the risk of transmission and acquisition of HIV.[14]

Considering the above, and in light of the theoretical model, the social importance of the items for understanding the phenomenon studied was considered, and both were kept in the instrument.

In the 3rd domain (behavioral), response categories were added in the items "Reason for taking the test" and "Have you ever had a relationship with someone positive for HIV". The item "Age at first sexual intercourse" was maintained, due to its relevance for assessment at the individual level, which can be represented by a Brazilian study on risk behavior, where, of the men who had sexual debut before the age of 15 (52.7%), 58.8% did not use a condom during their first sexual intercourse.[16] Furthermore, it is worth highlighting that young people's behavior when adopting safe sexual practices can be thought of as an element of late vulnerability to HIV, leaving prevention practices in the background, and this behavior can continue over the years.[17]

Of the domains presented, the socio-structural domain had a higher frequency of CVI below 0.80 (ten), when compared to the behavioral domain (seven) in the first round. Consequently, it was subjected to a greater number of changes, which may also represent that the risk levels in the socio-structural scope of MSEM are challenges from the perspective of the approach to the applicability of public policies, given that it is also observed that HIV infection is still historically associated with behavioral practices.[7,14]

Thus, professional interventions and public policies must be based on the needs and diversity and dynamism of the community's social context - demographic, economic and political conditions, education levels, provision of social services, geographic location, cultural beliefs and health-disease patterns. It should also be noted that the weakness in the implementation of prevention actions at any level inevitably compromises the effectiveness of strategies carried out in other population segments.[3,7,14]

Knowledge of a specific set of multiple structural and behavioral factors that influence the risk and vulnerability of population segments provides opportunities for the execution of actions to prevent HIV transmission with high coverage of combined strategies and strengthening of public policies aimed at young people. Considering these elements allows professional care, from the perspective of the multifaceted nature of the risk of HIV infection, to identify the influence of sociodemographic and sociostructural behavioral contexts on the young population's serological outcome.

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

Experts' recommendations contributed to qualifying ASECOMP-HIV, enabling content reorganization and technical and scientific quality of assessed items. The rates obtained in the ASECOMP-HIV content validity process presented evidence of reliability and validity to the instrument's internal structure, with the Delphi technique processed in two rounds and a final IVI reach of 0.95.

There were modifications to the instrument, obtaining validated support for the possible identification of vulnerability factors to HIV infection in young people. Experts' contributions added essential items to structure the questionnaire, constituting a strategic tool for joint responses to combat the epidemic.

Valid and reliable instruments are essential to verify the multiple dimensions of HIV risk. Furthermore, as an innovative feature, the instrument allowed establishing the association between demographic, socio-structural and behavioral elements, and the HIV serological outcome, since instruments focused solely on behavioral components are limited in explaining epidemic dynamics. Therefore, ASECOMP-HIV is a useful tool capable of guiding the obtaining of important information inherent to socio-structural and behavioral aspects.

It is noteworthy that the validated instrument can be used to subsidize/support the understanding and measurement of vulnerability situations that increase the risk of young people to HIV infection.

As limitations of this research, the list of few authors who structure MSEM in studies is listed. It is noteworthy that, with the use of the instrument in the service daily practice, new needs for modifications may arise that will require new validity studies in relation to the items presented.

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