Original article

Cultural adaptation of the Factors Influencing Adherence to Standard Precautions Scale into Brazilian Portuguese

Adaptação cultural da *Factors Influencing Adherence to Standard Precautions Scale* para o português do Brasil

Adaptación cultural al portugués brasileño de la Escala de Factores que Influyen en la Adherencia a las Precauciones Estándar

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Abstract

Abstract: Objective: to adapt the Factors Influencing Adherence to Standard Precautions Scale into Brazilian Portuguese. **Method**: methodological study, comprising the translation, consensus versions, committee of judges, back-translation, obtaining the Portuguese version, semantic analysis and pre-test. Nurses composed the committee of judges in the content validation stage; for the semantic validity of the instrument and pre-test, the sample consisted of nurses and nursing technicians. It was conducted between December 2020 and March 2021. For analysis, the Content Validity Index was adopted. **Results**: Content Validity Index scores ranged from 0.77 to 1, while the total score was 0.95. In the semantic analysis, no professional showed uncertainty about the scale. **Conclusion**: the items of the instrument were considered representative and relevant to clinical practice, requiring the continuity of the research with the achievement of psychometric properties.
Descriptors: Validation Study; Universal Precautions; Nursing, Team; Occupational Risks; Patient Care

Resumo

Resumo: Objetivo: adaptar a escala *Factors Influencing Adherence to Standard Precautions Scale* para o português do Brasil. **Método:** estudo metodológico, compreendendo a tradução, consenso das versões, comitê de juízes, retrotradução, obtenção da versão em português, análise semântica e pré-teste. Enfermeiros compuseram o comitê de juízes na etapa de validação

de conteúdo; para a validade semântica do instrumento e pré-teste, a amostra foi composta por enfermeiros e técnicos de enfermagem. Realizado entre dezembro de 2020 e março de 2021. Para análise adotou-se o Índice de validade de conteúdo. **Resultados**: as pontuações do Índice de validade de conteúdo variaram de 0,77 a 1, enquanto a pontuação total foi de 0,95. Na análise semântica, nenhum profissional apresentou incerteza quanto a escala. **Conclusão:** os itens do instrumento foram considerados representativos e relevantes para a prática clínica, necessitando a continuidade da pesquisa com a realização das propriedades psicométricas.
Descritores: Estudos de Validação; Precauções Universais; Equipe de Enfermagem; Riscos Ocupacionais; Assistência ao Paciente

Resumen

Resumen: Objetivo: adaptar la escala Factores que Influyen en la Adherencia a las Precauciones Estándar al portugués brasileño. **Método**: estudio metodológico, que comprende la traducción, el consenso de las versiones, el comité de jueces, la retranscripción, la obtención de la versión en portugués, el análisis semántico y el ensayo. Los enfermeros componen el comité de jueces en la etapa de validación del conteo; para la validación semántica del instrumento y la prueba previa, la muestra fue compuesta por enfermeros y técnicos de enfermería. Se llevó a cabo entre diciembre de 2020 y marzo de 2021. Para el análisis, se adoptó el Índice de Validez de Contenido. **Resultados**: las puntuaciones del índice de validez del contenido oscilaron entre 0,77 y 1, mientras que la puntuación total fue de 0,95. En el análisis semántico, ningún profesional presentó incertidumbre sobre la escala. **Conclusión**: Los ítems del instrumento fueron considerados representativos y relevantes para la práctica clínica, requiriendo la continuidad de la investigación con la realización de propiedades psicométricas.
Descriptores: Estudio de Validación; Precauciones Universales; Grupo de Enfermería; Riesgos Laborales; Atención al Paciente

Introduction

The nursing team is constantly exposed to occupational risks involving biological material, both in the hospital environment and in other health care settings.[1-2] In an attempt to minimize biological risks, the Centers for Disease Control and Prevention (CDC) established the Standard Precautions (SP), which represent a set of measures that must be applied to all patients, regardless of suspected or confirmed diagnosis of infectious diseases.[3-4] These measures include the use of Personal Protective Equipment (PPE), the correct disposal of perforating materials, hand hygiene, cough etiquette, environmental disinfection and cleaning measures, and safe injection practices.[1,3-5]

Considering the COVID-19 scenario, protective measures, including PP, have been constantly updated and are available on the World Health Organization (WHO) website, as they are fundamental measures to minimize the risks of virus transmission.[1,3,5-6]

Although these measures are recommended in all health facilities, the correct application of all of them still lacks attention, especially during the pandemic.[7] In this

regard, a systematic review evaluated the barriers and facilitating strategies for adherence to SP by health care workers. The results of this investigation showed that management support, training, work culture, physical space, communication, confidence in the use of PPE and the desire to provide quality care to patients contributed to adherence to the SP.[6]

The literature points out that several scales were developed and validated to assess health workers' compliance and adherence to SP, including nurses.[8-10] Three instruments were validated for Brazilian Portuguese;[11-13] however, they assess compliance with SP with emphasis on the use of PPE or factors that influence adherence to SP.[10] When identifying the need for a scale that could explain the reasons why nursing does not follow SP as expected, Australian researchers recognized the importance of building the "Factors Influencing Adherence to Standard Precautions Scale (FIASPS)",[14] which encompasses concepts about leadership, justification, culture/practice, contextual suggestion and judgment, being considered by the authors as a complete assessment tool.

The scale proposes to understand the factors that influence non-adherence to the SP and therefore, this research is relevant for Brazil, especially considering the context of the COVID-19 pandemic, in which the protection of health workers is essential.[3,7] The FIASPS is suitable for use with nurses and its validation with other health professionals and trainees is important to adapt effective interventions to promote adherence to SP.

Considering that, the scale addresses aspects of leadership and management of health services, having a validated scale for the local culture will allow to understand the factors that influence non-compliance, as well as guide safety programs and accident prevention. Therefore, the objective of this research was to adapt the Factors Influencing Adherence to Standard Precautions Scale to Brazilian Portuguese.

Method

Methodological study of cultural adaptation to Brazilian Portuguese, with the following steps: translation, consensus of versions, committee of judges, back-translation, obtaining the Portuguese version and comparison with the original one, semantic analysis and pre-test.[15] It is justified the insertion of the back translation after the evaluation of the committee of judges for the fact that they can add contributions in the instrument, aiming to contemplate cultural issues (terms and expressions) not

considered during the translation, reflecting thus in the application of the construct for the whole collective.[16] Initially, the researchers performed a literature review in the following databases: *Crochrame Colaboration, Medical Literature Analysis and Retrieval System Online* (Medline)*, Excerpta Medica dataBase* (EMBASE)*, SciVerse Scopus* (Scopus), and Cumulative Index to Nursing & Allied Health Literature (CINAHL), referring to the period from 1980 to 2020, in order to identify the scales developed for the evaluation of SP. As this was not the objective of the study, the results of this review were not described in this article. After identifying the FIASPS, the researchers contacted the authors and were authorized for cultural adaptation and validation of the psychometric properties to Brazilian Portuguese.

FIASPS is a Likert-type scale (five response options), with responses ranging from zero (strongly disagree) to four (strongly agree). It originally consists of 29 items distributed in five dimensions: judgment (five items), leadership (six items), culture/practice (five items), suggestions/tips (six items) and justification (seven items).[14] This scale makes it possible to perform evaluations with specific approaches at the individual and organizational level for the nursing team professional, aiming at improving the quality of work and adherence to compliance measures.[14]

This research was carried out in a public teaching hospital located in Minas Gerais, from May 2020 to March 2021. For the instrument translation stage, two translators performed the translation into Brazilian Portuguese (Translated Versions 1 and 2) ; then, in order to obtain a translated version closer to the language, a third translator analyzed the consensus of the two previous versions and prepared, together with the responsible researcher, the Consensual Version 1.

The committee of judges was composed of nine nurses, namely: four masters and five doctors. Inclusion criteria were being a nurse and researcher, with more than five years of experience in the subject. The judges individually performed the scale analysis remotely, through access to a Google Forms form. After reading the Consensual Version 1, the participants evaluated the instrument in terms of content, considering the relevant equivalences (Consensual Version 2).

All judges signed the Free and Informed Consent Term (ICF) using a Google Forms form and responded to the data collection instrument, which included the Consensual

Version 1. After the evaluation by the judges, the Consensual Version 2 was back-translated into the original language of the scale by a translator, and this version (Consensual English Version) was accepted by the authors of the original instrument.

The semantic validity was performed by nurses and nursing technicians, since the FIASPS was created for this audience, and should therefore be adapted for the same population.[17] As inclusion criteria, professionals who worked in the care of the chosen institution were considered. the study. Exclusion criteria were those who, at the time of data collection, were in leadership positions or administrative activities.

To this end, they responded, using Google Forms, the ICF, an instrument with sociodemographic variables (Name, date of birth and gender) and professionals (Professional category, sector of work, time of experience in the current function), the Consensual Version 2 of the FIASPS (29 items) and a questionnaire built by the study authors to assess the scale items regarding their relevance and understanding. The instrument consisted of questions that addressed whether the scale was relevant to clinical practice, whether the professional had difficulty understanding the question, whether the response options were clear and consistent, how the participant would speak/express this item, and whether the professional can say, in his own words, what this matter meant to him.

To compose the pre-test, 36 professionals from the nursing team were invited, being 19 nurses and 17 nursing technicians who worked in the care of the institution participating in the study. They responded via Google Forms, the ICF, the instrument with sociodemographic variables built for semantic validity and the Consensual Version 2 of the FIASPS. According to the literature, it is recommended that this step involves approximately 30 to 40 participants, and its performance is important to provide useful information on how the individual interprets the scale and their understanding regarding the items of the instrument.[18]

The data were double-entered into an Excel® 2016 spreadsheet, being later analyzed in the program *Statistical Package for the Social Sciences*(IBM® SPSS) version 20.0. The results were then analyzed using descriptive statistics, with measures of

central tendency (mean) and dispersion (standard deviation). The modifications suggested by the Committee of Judges were accepted with an agreement equal to or greater than 80.0%, that is, when eight judges or more attributed suggestions for modifying the item in question[19] and through the calculation of the Content Validity Index (CVI-I) of each item and the overall mean of the instrument. [20]

This index measures the proportion of judges who obtained agreement related to the items of the instrument and is calculated by adding the number of judges who scored 3 (item needs minor revision to be representative) or 4 (relevant or representative item), divided by the total of participants who responded to that item. Items that score 1 (not relevant or not representative) or 2 (item needs major revision to be representative) should be excluded or revised.[20]

For analysis purposes, the following classification was considered according to the CVI score: results <0.00 correspond to lack of agreement; from 0.00 to 0.40 low agreement; from 0.41 to 0.70 considerable agreement; from 0.71 to 0.90 high agreement and >0.90 full agreement. Thus, the present study determined a total CVI >0.71 to indicate stability and valid equivalence.[20]

The study was approved by the Research Ethics Committee of the co-participating institution on December 9, 2020, under Opinion No. 4,449,638, respecting all the rules of Resolution 466/2012, which provides for research involving human beings. Authorization was also granted to the authors of the FIASP for the adaptation of the instrument.

Results

The findings were presented according to the stages of the proposed cultural adaptation process. Thus, in Chart 1, the translated items of the scale and the changes suggested by the Committee of Judges were described, with items 9, 10, 14, 15 and 28 not being changed and in 22 items there were changes, mainly related to the addition of the personal pronoun "I" at the beginning of the sentence and the standardization of the word SP.

Table 1- Modifications proposed by the judges' committee of translated items from the Factors Influencing Adherence to Standard Precautions Scale. Uberaba, MG, Brazil, 2020-2021

Item	Translation of original items	Suggested change
1	I use situations of non-adherence to other people's Standard Precaution measures as an opportunity to promote educational actions.	I use situations of non-adherence to the Standard Precaution measures of other professionals as an opportunity to promote educational actions.
2	I use examples of conduct to increase the use of Standard Precaution by others.	I use examples of conduct to encourage the use of Standard Precautions by other professionals.
3	I feel free to correct people who do not use the Standard Precaution measures	I feel free to correct professionals who do not use the Standard Precaution measures.
4	Responsibility encourages others to protect themselves.	I feel responsible to encourage other professionals to protect themselves at work.
5	I confront people who don't adhere to standard precautionary measures.	I question professionals who do not adhere to Standard Precautionary measures.
6	If people see me using Standard Precaution measures, they will do the same.	If professionals see me using Standard Precautions, they will do the same.
7	I don't wear gloves as I cannot feel the veins.	I don't wear gloves as I cannot feel the patients' veins.
8	I'm more clumsy with gloves.	I feel awkward when wearing gloves.
9	Only I am at risk for not wearing gloves.	Without changes.
10	Iam less likely to wear gloves as I learned without them.	Without changes.
11	Gloves make it difficult to palpate the veins.	Gloves make it difficult to palpate patients' veins.
12	Do not need gloves to perform the venipuncture, because I have practice.	I don't need gloves to perform the venipuncture, because I have practice.
13	I learned without using personal protective equipment and I still don't.	I learned procedures and techniques without using personal protective equipment and I still don't.
14	Most doctors follow the Standard Precaution measures.	Without changes.
15	Most nursing professionals follow the Standard Precaution measures.	Without changes.
16	People interpret standard precaution measures differently.	Practitioners interpret Standard Precaution in different ways.
17	In some workplaces it is normal not to follow the Standard Precaution measures.	In some workplaces it is common not to follow the Standard Precaution measures.
	The institution's culture allows people	The institution's culture allows

18	not to follow Standard Precaution measures.	professionals not to follow the Standard Precaution measures.
19	I wear personal protective equipment if I see my colleagues using it.	I wear personal protective equipment when I see my colleagues wearing it.
20	A potential exposure will increase my adherence to the Standard Precaution measures.	A potential exposure will increase my adherence to the use of Standard Precaution.
21	I follow more standard precaution measures if you are handling sharp materials	I follow more standard precautionary standards if I am handling cutting materials.
22	I am more careful with a patient because I am wearing personal protective equipment.	I am more careful with a patient because I am wearing personal protective equipment.
23	I follow the Standard Precaution measures more if I am handling needles.	I follow the Standard Precaution measures more when handling needles.
24	I'm more likely to wear personal protective equipment if I have patients around.	I am more likely to wear personal protective equipment when patients are nearby.
25	I am able to decide if I should use the Standard Precaution measures.	I am able to decide if I should use the Standard Precaution measures.
26	I am able to decide whether to use Standard Precaution measures based on the risks I am exposed to.	I am able to decide on the use of Standard Precaution measures based on the risks to which I am exposed.
27	Educational actions allow us to assess the pros and cons of Standard Precaution measures.	Educational actions allow us to assess the pros and cons of Standard Precaution measures.
28	I assess patients before applying Standard Precaution measures.	Without changes.
29	Experience allows us to decide on the use of Standard Precaution measures.	My experience allows me to decide on the use of Standard Precaution measures.

The CVI-I was calculated (Table 1) to vverify the judges' level of agreement for each item of the instrument, and the score, which ranged from 0.77 to 1. In relation to the total average CVI-I of the scale items, this corresponded to 0.97. It was also presented, (Table 2), the score attributed by each judge for each of the items of the instrument.

Table 1- Content validity index (CVI-I) for face and content validation performed by the judges. Uberaba, MG, Brazil, 2020-2021

Item	CVI-I	Item	CVI-I	Item	CVI-I	Item	CVI-I
01	0.77	02	1	03	1	04	0.88
05	1	06	1	07	0.77	08	1
09	1	10	1	11	1	12	1
13	0.88	14	1	15	1	16	1
17	1	18	0.88	19	1	20	1
21	1	22	1	23	1	24	1
25	1	26	1	27	1	28	1
29	1						

Table 2 -Score (1 to 4) assigned by the judges for each item of the instrument. Uberaba, MG, Brazil, 2020-2021.

Item	Judge No. 1	Judge No. 2	Judge No. 3	Judge No. 4	Judge No. 5	Judge No. 6	Judge No. 7	Judge No. 8	Judge No. 9	Total CVI
1	2	3	3	4	2	3	3	3	3	0.77
2	3	3	3	4	4	3	4	3	4	1
3	3	4	4	4	4	4	3	3	3	1
4	3	3	3	3	4	4	2	3	3	0.88
5	4	4	3	3	3	4	3	4	3	1
6	3	3	3	3	3	3	3	3	3	1
7	4	3	4	4	3	3	3	2	2	0.77
8	4	4	3	3	4	3	3	3	3	1
9	3	3	3	3	3	4	3	3	4	1
10	3	4	4	4	4	4	3	3	3	1
11	3	3	3	3	3	3	4	3	3	1
12	4	4	3	3	3	4	4	4	3	1
13	2	3	3	3	4	3	4	3	3	0.88
14	4	4	4	4	3	3	3	4	3	1
15	3	3	3	3	3	4	4	3	3	1
16	3	4	3	4	3	4	3	3	4	1
17	3	3	3	3	3	3	3	3	3	1
18	3	2	3	3	3	3	3	3	3	0.88
19	4	4	4	4	3	3	3	3	3	1
20	4	3	3	3	4	3	4	3	4	1
21	4	4	3	3	3	3	4	3	4	1
22	4	4	4	4	4	4	4	4	4	1
23	3	3	3	3	4	3	3	3	3	1
24	4	4	3	3	3	4	4	4	3	1
25	3	3	3	4	3	4	3	4	3	1
26	4	3	4	3	4	4	3	3	4	1
27	3	3	4	4	3	3	3	3	3	1
28	4	3	4	3	3	3	3	3	4	1
29	3	3	3	3	4	3	4	3	4	1

In the semantic analysis, 13 (81.3%) nursing technicians and three (18.8%) nurses participated, of which 11 (68.8%) were female. Regarding age, the mean was 36.6 (SD±8.3), with a minimum of 25 and a maximum of 55 years.

Regarding the time of professional experience, nine (56.3%) had worked in care for 11 years or more, a minimum of two and a maximum of 22 years. With regard to obtaining SP knowledge, the participants declare that the acquisition took place during professional training or at the work institution itself; 12 (75%) also responded that they had participated in some type of training. Regarding the professionals who worked in care and organizational sectors, 9 (56.3) worked in wards.

In view of the general analysis of the scale, a questionnaire was constructed for the general assessment of the instrument, in which eight (50%) of the professionals judged it as excellent and the others as good. Regarding the contribution and relevance of the scale to clinical practice, all of them judged the items positively. Finally, space was opened for them to explain possible doubts; however, no professional exposed uncertainties.

In reference to the suggestions made to item 1, in the place that reads on the scale "I use situations of non-adherence to the SP standards of other professionals as an opportunity to promote educational actions" iit was suggested by a technical nursing professional that the previous sentence be replaced by "I would use the safety standards even if others do not".

For questions 9, 10 and 11, two professionals proposed that the items be described in an interrogative form to facilitate the participant's understanding. Regarding question 21, which reads "I follow the SP measures if I am handling cutting materials", a nurse asked if the professional follows the SP only when handling cutting materials and not for other situations. In item 22, the same participant mentioned doubt, asking if the person is more careful with the patient only when they are wearing their vestments.

Regarding question 24 in the item that reads "I am more likely to wear personal protective equipment when patients are nearby", a nurse asked if the question referred to the fact of using SP only when someone is observing the co-worker .

In question 25, which reads "I am able to decide if I should use the Standard Precaution measures", a nurse asked if this item refers to the professional knowing

which PPE to use in certain procedures, or if he knows that SP should be adopted for all patients, regardless of the activity performed.

Question 29 brings that "My experience allows me to decide on the use of Standard Precaution measures" being asked by a nurse if he meant that the professional's experience would allow evaluating the patient and defining the type and number of PPE needed for such a situation.

Although some participants made suggestions for rewording the sentences and modifying the sentence to interrogative format, none of these questions were modified since their changes would alter the meaning of the item and all participants responded that they understood the question presented.

As for the pre-test, 19 (52.8%) nurses and 17 (49.2%) nursing technicians participated in this stage, of which 30 (83.3%) were female and aged between 31 and 40 years (61 ,1%). As for the time of professional experience, 17 (47.2%) worked in care between 11 and 20 years, the majority 23 (63.9%) in high complexity units, followed by wards 8 (22.2%) and other places 5(13.9%). Regarding training for the use of SP, 32 (88.9%) responded that they had received training.

Table 3 shows the professionals' responses to the items of the instrument.

Table 3 - Answers of health professionals regarding the scale items, in the pre-test phase of the instrument. Uberaba, MG, Brazil, 2020- 2021

Item	I totally agree		I agree		Neutral		I disagree		Strongly Disagree	
	n	%	n	%	n	%	n	%	n	%
1	10	27,8	16	44,4	3	8,3	2	5,6	5	13,9
2	20	55,6	15	41,7	1	2,8	-	-	-	-
3	3	8,3	18	50	9	25	6	16,7	-	-
4	14	38,9	17	47,2	4	11,1	1	2,8	-	-
5	7	19,4	12	33,3	13	36,1	4	11,1	-	-
6	8	22,2	19	52,8	4	11,1	5	13,9	-	-
7	-	-	-	-	-	-	14	38,9	22	61,1
8	-	-	-	-	-	-	16	44,4	20	55,6
9	-	-	3	8,3	1	2,8	5	13,9	27	75
10	-	-	-	-	-	-	8	22,2	28	77,8
11	1	2,8	11	30,6	3	8,3	9	25	12	33,3
12	-	-	1	2,8	-	-	8	22,2	27	75
13	-	-	-	-	-	-	6	16,7	30	83,3
14	1	2,8	4	11,1	2	5,6	22	61,1	7	19,4
15	3	8,3	19	52,8	4	11,1	8	22,2	2	5,6
16	5	13,9	20	55,6	6	16,7	4	11,1	1	2,8

17	1	2,8	16	44,4	7	19,4	10	27,8	2	5,6
18	2	5,6	13	36,1	3	8,3	10	27,8	8	22,2
19	3	8,3	9	25	7	19,4	9	25	8	22,2
20	11	30,6	17	47,2	1	2,8	6	16,7	1	2,8
21	22	61,1	10	27,8	1	2,8	2	5,6	1	2,8
22	13	36,1	15	41,7	4	11,1	4	11,1	-	-
23	11	30,6	13	36,1	5	13,9	4	11,1	3	8,3
24	2	5,6	9	25	6	16,7	16	44,4	3	8,3
25	16	44,4	15	41,7	1	2,8	3	8,3	1	2,8
26	16	44,4	16	44,4	3	8,3	-	-	1	2,8
27	15	41,7	17	47,2	4	11,1	-	-	-	-
28	6	16,7	11	30,6	4	11,1	12	33,3	3	8,3
29	8	22,2	17	47,2	3	8,3	7	19,4	1	2,8

Discussion

In the evaluation carried out by the committee of judges, the items were analyzed taking into account the semantic, conceptual and idiomatic equivalence. The CVI obtained, both for the items and for the scale as a whole, showed that the FIASPS is very representative.[17] A study indicates that a CVI ≥ 0.75 is considered excellent.[20] Thus, with the values found from the CVI analysis, in which the value obtained greater than 0.90 indicates "total agreement" between the judges, the present study obtained a percentage of approximately 82.7% (N=24), indicating reliability among most items.

This method used allows analyzing each item individually and the instrument as a whole, and the values must be greater than 0.90.[20] In this study, the values found are above the recommended for this evaluation.

Considering the scenario of the Covid-19 pandemic and the need for constant updates related to the subject, the number of health workers who do not comply with SP measures while providing care is still worrying, being exposed to potentially contaminated biological material.[3,7]

The factors that influence their adherence should be studied, since some research found in the literature identified individual factors of health professionals, gasps in terms of undergraduate training, organizational problems in institutions related to the provision of adequate materials and supplies and management of people and units, as preponderant for adherence to SP.[21-22]

In this way, in order to understand the factors that influence the conduct of these professionals, increase the use of SP and ensure a safer environment for both workers

and patients, the FIASPS was created with the objective of addressing five domains, which are distributed in 29 instrument items.[14]

The first domain (items 1 to 6) is related to leadership, which refers to the professional's ability to confront other colleagues who are not adhering to the SP and also to act as a trainer of good practices in the use of the guidelines. In this regard, a survey found that health workers attributed the figure of the leader as someone who should perform exemplary behavior for others, being consistent with their speeches and performing the role of guidance in the work environment.[23]

The researchers also pointed out that, in relation to the attitude of the person who exercises leadership, this should be based on a horizontal, democratic and trusting relationship, based on mutual respect and approaching all team members regarding decision-making. This task was described as a challenging process for health professionals.[23]

As for the second domain, the instrument addresses the justification (items 7 to 13), that is, it seeks to understand the reason why professionals do not adhere to SP. On this aspect, another investigation described that the lack of knowledge and training allows a low adherence to the SP measures.[24] Understanding the gaps in the knowledge of professionals is important so that doubts are elucidated and habits that expose them to the risk of occupational accident with biological material are modified.

Then, the organizational culture and practice were evaluated (items 14 to 18), which represent the third domain, and which are items related to issues of the institution itself and that make it difficult to use SP. Corroborating this information, a work conducted pointed out that nurses who participated in at least one training regarding the use of SP showed better adherence, compared to those who did not participate.[25] This finding highlights the need for health institutions to offer training programs for health workers, with the objective of increasing knowledge, promoting better skills and safer behaviors regarding the use of SP.[25]

In this context, research emphasizes the need for support and monitoring of health managers regarding the levels of compliance of SP among nurses, since this action aims to program and evaluate interventions necessary for health work,[26-27] and that in their clinical practice deviation from protocols established by the institution is common, which enhances self-contamination.[28]

The next domain is related to contextual tips (items 19 to 24), which represent suggestions in health facilities that can help in adherence to SP, for example, the proximity of PPE, which can be a suggestion for its use. In this context, some studies have shown better adherence of health workers, after signaling the work environment, for example, the use of reminders regarding the need to use PPE and greater accessibility and availability of these materials in health facilities.[29-30]

Finally, the items included in the judgment domain (items 25 to 29) are related to the professional's ability to decide whether or not to use SP based on the clinical risks for him. According to the CDC, these measures should be universally adopted for all patients, based on the assumption that all biological material is potentially contaminated.[3-4]

In this aspect, evaluating the individual factors that influence adherence to SP becomes relevant, as the professional's awareness, the perception of risk and the effectiveness of protection measures and beliefs and values were associated with the worker's feeling of invincibility and self-confidence.[22]

The limitation of this study was the fact that the research participants were from a single state in Brazil. However, its realization is necessary due to the care practice of health professionals, especially the nursing team, demanding strict attention regarding biosecurity measures and their correct management. Therefore, the FIASPS is an instrument that can contribute to the modification of habits and attitudes that lead the professional to low adherence to SP measures.

Conclusion

The evaluation of the committee of judges was important, as it brought a specific approach to the subject and, based on its composition, some changes in the scale were suggested and accepted in order to favor the reader's understanding. The CVI obtained for both the items and the instrument as a whole showed that the FIASPS is representative. The scale was considered excellent or good by all professionals, with contribution and relevance to clinical practice. Although some participants made suggestions regarding the re-elaboration of the sentences, none of them was modified, as they replied that they had understood the question and some recommendations

would change the meaning of the sentence. As for the pre-test, its performance showed that the individuals understood the adapted items.

In this context, in view of the aspects observed in the present study, the adaptation process of the FIASPS was carried out and concluded properly, requiring the continuity of the research, with the execution of the evaluation of its psychometric properties.

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