ORIGINAL ARTICLE

Cultural adaptation of Infant Feeding Intentions Scale (IFI) for pregnant women in Brazil

Adaptação cultural da Infant Feeding Intentions Scale (IFI) para gestantes no Brasil

Adaptación cultural de Infant Feeding Intentions Scale (IFI) para mujeres embarazadas en Brasil

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ABSTRACT

Objectives: to translate and culturally adapt the Infant Feeding Intentions Scale for pregnant women in Brazil. **Methods:** methodological study that included stages of translation, synthesis, face and content validation, back translation and semantic assessment. In the face and content and semantic validation stages, we used the Content Validity Index for individual items and for the overall scale for clarity and representativeness. **Results:** nine (100.0%) experts participated in face and content validation, and the average index obtained was 85.0% for representativeness. In the semantic assessment, performed with 31 (100.0%) pregnant women, the tool was considered clear, obtaining an average index of 91.0%. **Conclusions:** the Brazilian version of the scale was considered representative and clear. After assessing psychometric properties, the scale is expected to be valid and reliable to assess maternal intention to breastfeed exclusively until the infant's six months of life in different Brazilian settings.
Descriptors: Intention; Pregnant Women; Infant Nutrition; Validation Studies; Breastfeeding.

RESUMO

Objetivos: traduzir e adaptar culturalmente a *Infant Feeding Intentions Scale* para gestantes no Brasil. **Métodos:** estudo metodológico que incluiu etapas de tradução, síntese, validação de face e conteúdo, retrotradução e avaliação semântica. Nas etapas de validação de face e conteúdo e semântica, utilizou-se o Índice de Validade de Conteúdo para itens individuais e para a escala em geral quanto à clareza e à representatividade. **Resultados:** na validação de face e conteúdo participaram nove (100,0%) especialistas, e o índice médio obtido foi de 85,0% para representatividade. Na avaliação semântica, realizada com 31 (100,0%) gestantes, o instrumento foi considerado claro, obtendo-se índice médio de 91,0%. **Conclusões:** a versão brasileira da escala foi considerada representativa e clara. Espera-se que após avaliação das propriedades psicométricas, a mesma seja válida e confiável, para avaliar a intenção materna de amamentar exclusivamente até os seis meses de vida do lactente em diferentes cenários brasileiros.
Descritores: Intenção; Gestantes; Nutrição Infantil; Estudos de Validação; Aleitamento Materno.

RESUMEN

Objetivos: traducir y adaptar culturalmente el Infant Feeding Intentions Scale para mujeres embarazadas en Brasil. **Métodos:** estudio metodológico que incluyó etapas de traducción, síntesis, validación de cara y contenido, traducción inversa y evaluación semántica. En los pasos de validación semántica y de contenido, utilizamos el Índice de Validez de Contenido para elementos individuales y para la escala general para mayor claridad y representatividad. **Resultados:** nueve (100.0%) expertos participaron en la validación facial y de contenido, y el promedio de índice obtenido fue de 85.0% para la representatividad. En la evaluación semántica, realizada con 31 (100.0%) mujeres embarazadas, el instrumento se consideró claro, obteniendo un índice promedio de 91.0%. **Conclusiones:** la versión brasileña de la escala se consideró representativa y clara. Después de evaluar las propiedades psicométricas, se espera que la misma sea válida y confiable para evaluar la intención materna de amamantar exclusivamente hasta los seis meses de vida del bebé en diferentes entornos brasileños.
Descriptores: Intención; Mujeres Embarazadas; Nutrición del Lactante; Estudios de Validación; Lactancia Materna.

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INTRODUCTION

Breastfeeding is a natural strategy of bonding, affection, protection and nutrition for the child. It is the most sensitive, cost-effective and effective intervention to reduce child morbidity and mortality, especially caused by infectious diseases, and it has numerous short- and long-term health benefits for children and mothers[1].

Among the benefits to the child, improvements in nutritional and immune status stand out. There is a reduction in the risk of obesity, type 2 diabetes and infections, as well as the bond between mother and child, as well as the positive impact on growth and cognitive and emotional development in childhood, which have significant repercussions for adulthood. Advantages to maternal health include accelerated postpartum weight loss, decreased risk of breast and ovarian cancer, as well as reduced risk of postpartum depression and osteoporosis during menopause[1-5].

The World Health Organization (WHO), the American Academy of Pediatrics (AAP) and the Brazilian Ministry of Health (MoH) recommend the exclusive practice of breastfeeding up to six months of life, supplemented by two years and above[2,6-7]. However, despite the recommendations, in low and middle income countries, only 37% of children under six months are exclusively breastfed. It is emphasized that the duration of breastfeeding is even shorter in high income countries[2].

In Brazil, studies on breastfeeding indicators in the last three decades indicated an upward trend, especially between 1986 and 2006. This was the period in which there was a significant increase in the prevalence of exclusive breastfeeding in children under six months, of 4.7%. to 37.1% respectively. On the other hand, there was relative stabilization in 2013, with a reduction of 0.3% of this type of breastfeeding among infants from zero to two months of age, and of 15.1% among those from three to five months of age[8]. However, it should be noted that the World Health Assembly set in 2012, as one of the global nutrition goals for 2025, to increase the rate of exclusive breastfeeding to at least 50%[9].

A meta-analysis of Brazilian epidemiological studies highlighted that maternal variables (under 20 years of age, low education, primiparity, postpartum maternal work and low family income) and neonatal variables (low birth weight, female sex, and pacifier use) are associated with interruption of breastfeeding until the child's sixth month of life. However, most of these factors can be modified through public policies, with actions aimed at promoting this practice, especially during prenatal care[10].

The decision-making process of women about exclusive breastfeeding is a multidimensional phenomenon, as there are not only biological, but social, cultural and emotional challenges. Therefore, the intention to breastfeed is the result of a complex and progressively constructed behavior since the gestational period[11]. Furthermore, studies indicate that there is a relationship between knowledge of benefits and personal beliefs, built on women's life trajectories, with the motivation to breastfeed[5,12].

In this context, maternal intention to breastfeed is considered one of the most significant modifiable factors associated with this practice because the stronger the mother's intention to breastfeed, the more likely she is to breastfeed and for an extended period[4,13-14]. This relationship can be explained by considering that the practice of breastfeeding is predetermined by intention, which is influenced by attitude, knowledge, exposure and perceived behavior[4,15].

Therefore, the assessment of the intention and the factors that determine the mother's decisions regarding infant feeding is therefore crucial for the development of specific health education policies, programs and interventions for the promotion and prolongation of breastfeeding, having as its objective consequent reduction in early weaning[15-16].

Based on the above, it is necessary to use valid and reliable tools that measure maternal intention to breastfeed, for use in clinical practice and research. The Infant Feeding Intentions Scale (IFI) consists precisely of a constructed and validated scale, both in English and Spanish, with Cronbach's alpha coefficient of 0.90. It was developed by Laurie Nommsen-Rivers and Kathryn Dewey in 2009 in a California hospital in the United States of America, among low-income primiparous women from different ethnic groups. The tool simply, quantitatively and reliably measures maternal intentions to start and continue exclusive breastfeeding until 1, 3 or 6 months of the child's life or use of the formula[13].

The answer options are based on a five-option Likert scale, individually scored from 0 to 4, and the total score is calculated by averaging the score of the first two items plus items 3 to 5. The score ranges from 0 to 16, with 0 representing a very strong intention not to breastfeed and 16 representing a very strong intention to breastfeed as the sole source of milk until six months of age[4,13-14].

Other tools based on behavioral theories, such as the Rational Choice Theory and the Transtheoretical Model, served as the basis for the development of the original IFI, such as the Manstead and Smart force of intent to initiate breastfeeding in 1983; and what assesses Humphreys, Thompson and Miner infant feeding plans in 1998 through five alternatives that represent different stages of changing behavior regarding breastfeeding, including pre-contemplation, contemplation, preparation, action and maintenance[13]. This last tool, which, in addition to these five items, has 20 statements that assess the processes of change for exclusive breastfeeding, was cross-culturally adapted in Brazil in 2016[17].

However, IFI has made advances in these tools as it incorporates the two-dimensional nature of breastfeeding intent. In other words, this scale encompasses both strength and duration of intentions to exclusively breastfeed up to six months of age[13]. It has already been widely used in other international surveys measuring this construct in the US itself[5,14,18-19] and in different countries such as Lebanon and Syria[15], Australia[20], Jordan[7], Indonesia[21] and Puerto Rico[5]. However, no studies regarding the Brazilian reality using the Infant Feeding Intentions Scale (IFI) were found, despite its internationally proven relevance.

OBJECTIVES

To translate and culturally adapt the Infant Feeding Intentions Scale (IFI) for pregnant women in Brazil.

METHODS

Ethical aspects

Authorization was granted by the creator of the original tool for cultural adaptation and scale validation. The Research Ethics

Committee of *Escola de Enfermagem Anna Nery* at *Universidade Federal do Rio de Janeiro* approved the study, with CAAE (*Certificado de Apresentação para Apreciação Ética* - Certificate of Presentation for Ethical Consideration) 80711517.8.1001.5238 and Opinion 2.507.525, according to the recommendations of Resolution 466/2012 of the Brazilian National Health Board (*Conselho Nacional de Saúde*)[22]. All participants signed the Informed Consent Form (ICF). It should be noted that this study is linked to the multicenter project entitled "*Aleitamento materno exclusivo: determinantes socioculturais no Brasil*" (freely translated as Exclusive breastfeeding: sociocultural determinants in Brazil).

Design, place of study and period

This is a methodological study aimed at the translation and cultural adaptation of the Infant Feeding Intentions Scale (IFI). The methodological framework used was the one proposed by Beaton, Bombardier, Guillemin and Ferraz, respecting the following stages: initial translation, translation synthesis, face and content validation by the judges committee, back translation and semantic validation[23]. For the description of the research, the guidelines for observational studies were adopted (STROBE)[24].

The whole process of translation and cultural adaptation of the tool in question took place within one year. Initial translation and synthesis of translations took place from November 2017 to March 2018. Face and content validation took place via e-mail from March to April 2018. Back translation was performed in May 2018, while validation semantics, in three Family Health Strategy units in the city of Macaé, Rio de Janeiro, Brazil, from May to November 2018.

Sample, and inclusion and exclusion criteria

In the face and content validation phase of the tool, the committee of judges was composed of nine specialists, these five nurses, one doctor, one pregnant woman, one teacher of Portuguese language and one researcher of the method.

In the semantic validation stage, the sample consisted of 31 pregnant women, over 18 years old, who attended prenatal consultations in the Family Health Strategy units and agreed to participate in the research. Pregnant women with psychiatric and/or neurological problems and/or hearing impairment were excluded due to communication-related limitations, since no member of the research team dominated sign language, besides pregnant women who had clinical complications on the day of data collection. To this end, a previous survey was conducted with the health teams of the units of pregnant women who met the study criteria.

All pregnant women in the area covered by health units, regardless of gestational age and previous breastfeeding experiences, were potentially eligible to participate in the study, considering the inclusion and exclusion criteria. Maternal intention to breastfeed is a multidimensional phenomenon built throughout life. This process is mediated, for example, by biological, ethnic, cultural, socioeconomic, demographic and family factors, so it does not depend exclusively on previous experiences with breastfeeding practice[11]. It is noteworthy that the interest of the study was not to measure the intention to breastfeed in a specific group of pregnant women, but to culturally adapt the tool to a diverse sample.

Study protocol

The process of cultural adaptation was performed in order to produce semantic, idiomatic, cultural and conceptual equivalence between the original and the adapted tool, from the following stages[23]:

Stages 1 and 2: initial translation and synthesis of translations

Two certified translators with Spanish language skills and knowledge independently translated the tool from Spanish to Brazilian Portuguese. From the two translated versions, a synthesis was carried out, culminating in the elaboration of the first consensual version (version 1).

Stage 3: review by a committee of judges

Version 1 was assigned to the judges' committee for face and content validation. It was verified whether the analyzed scale is capable of accurately measuring the phenomenon to be studied. For this, two attributes were judged, the clarity, to verify the proper wording of the items. In other words, if they have been written coherently and concisely, so that the idea is understandable, and adequately expresses what one expects to measure; and representativeness, to assess whether the items reflect the concepts involved and whether they are relevant and appropriate to achieve the proposed objectives[25].

Implementation of the assessment by the committee, soon after the first consensus version has been established, is a recommended strategy to avoid translation errors at the back translation stage[26]. The judges received the original Spanish version of the scale, the first consensual version, the explanatory script attached to the assessment tool and the IC via e-mail. The semantic, idiomatic, cultural and conceptual equivalences[23] were assessed and, after this phase, the second consensual version (version 2) of the back-translation tool was established.

Stage 4: back translation

Version 2 has been back-translated into the original languages, Spanish and English, in order to verify the quality between the original and the translated versions. It is noteworthy that back-translation into English was also necessary as the original scale was constructed in both languages. The versions were sent to the original author for consideration and review, obtaining their approval without change.

Stage 5: target audience validation

In the semantic validation stage, it was verified the quality of the translation and the comprehension of the items, version 2, of the scale by the pregnant women (target audience), as to the meaning of the words and interpretation of the utterances.

Data were collected through the interview technique, using the following tools: a) socioeconomic characterization form and clinical aspects of pregnancy and; b) IFI version 2 semantic analysis questionnaire. The number of participants in this stage was in line with the recommendations in the literature (minimum 30 to 40 subjects)[23].

Analysis of results and statistics

Data were typed, organized and analyzed using Microsoft Excel° 2016 software. Aiming to characterize the group studied, descriptive analyzes of simple frequency (categorical variables), central tendency (mean and median) and dispersion (standard deviation) were performed.

In the stages of face and content validation and semantics we used the Content Validity Index (CVI) for each item and for the scale in general. The aim was to analyze the degree of agreement between the judges and the pregnant women regarding the clarity and representativeness of the IFI, with answers obtained by a Likert scale and a score ranging from one to four[25].

CVI was calculated from the sum of the answers classified as three and four, divided by the total number of answers. Answers 3 and 4 include those considered clear and very clear or representative and very representative. A minimum index of 0.78 was considered acceptable, both for the assessment of each item and for the tool's overall assessment, because according to the literature recommendation, it is necessary to consider the number of judges to determine the agreement rate between them. In studies with six or more raters, a rate of not less than 78% is recommended[25].

RESULTS

IFI was translated by two certified translators, assessed for content, especially for its clarity and representativeness by judges and pregnant women and back-translated into the source languages.

Regarding face and content validity, the committee agreed on the items and the scale in general, ensuring their semantic, idiomatic, cultural and conceptual equivalence. Thus, IFI version 1

items have undergone few modifications related to the written form. All changes made as well as the suggested suggestions are shown in Chart 1.

When assessed separately by the judges, the items on the scale were considered representative or very representative, ranging from 0.78 (78.0%) to 0.89 (89.0%) (Table 1). In the analysis of the global average CVI of the scale, 0.85 (85.0%).

By the suggestions proposed by the judges regarding version 1 of the tool, the most recurrent ones were listed. Thus, the word "*fórmula*" has been replaced by one of simple language with the same semantic meaning, in this case, "*leite artificial*", and the term "*ao seio*" has been added after "*amamentação*". Changes were carried out to the scale statement replacing "*vou ler para você*" for "*as frases abaixo são sobre a amamentação do seu bebê*".

After this phase, back translation of the consensual version of the scale (version 2) was then performed, with its subsequent referral to the original author and respective approval, considering that there were no suggestions for alteration.

Chart 1 – Comparison of the original Spanish version, the translations, the synthesis of the translations and the final Brazilian Portuguese version, Macaé, Rio de Janeiro, Brazil, 2018

Items	Original Spanish version	Translation 1	Translation 2	Synthesis of translations (version 1)	Brazilian version of scale
1	1. *Tengo planes de sólo alimentarle fórmula a mi bebé (no voy a amamantar)*	1. *Pretendo alimentar meu bebê apenas com fórmulas [infantis] (não vou amamentar)*	1. *Tenho planos de só alimentar o meu bebê com fórmula (não vou amamentar)*	1. *Tenho planos de só alimentar o meu bebê com fórmula (não vou amamentar)*	1. *Tenho planos de somente alimentar o meu bebê com leite artificial (não vou amamentar ao seio)*
2	2. *Tengo planes de por los menos intentar a amamantar*	2. *Pretendo amamentar meu bebê ou, pelo menos, tentar*	2. *Tenho planos de amamentar o meu bebê ou pelo menos tentar*	2. *Tenho planos de pelo menos tentar amamentar*	2. *Tenho planos de pelo menos tentar amamentar ao seio*
3	3. *Cuando mi bebé tenga un mes, le amamantaré sin usar ninguna fórmula infantil ni otra leche*	3. *Quando meu bebê tiver um mês de vida, vou amamentá-lo sem usar nenhuma fórmula infantil nem outro leite*	3. *Quando meu/minha bebê tiver um mês de nascido/a, vou amamentá-lo/la sem usar nenhuma fórmula infantil nem outro leite*	3. *Quando meu bebê tiver um mês de vida, vou amamentá-lo sem usar nenhuma fórmula nem outro leite*	3. *Quando meu bebê tiver um mês de vida, vou amamentá-lo somente ao seio sem usar nenhum outro leite artificial*
4	3. *Cuando mi bebé tenga 3 mes, le amamantaré sin usar ninguna fórmula infantil ni otra leche*	4. *Quando meu bebê tiver 3 meses de vida, vou amamentá-lo sem usar nenhuma fórmula infantil nem outro leite*	4. *Quando meu/minha bebê tiver 3 meses de nascido/a, vou amamentá-lo/la sem usar nenhuma fórmula infantil nem outro leite*	4. *Quando meu bebê tiver 3 meses de vida, vou amamentá-lo sem usar nenhuma fórmula nem outro leite*	4. *Quando meu bebê tiver três meses de vida, vou amamentá-lo somente ao seio sem usar nenhum outro leite artificial*
5	3. *Cuando mi bebé tenga 6 mes, le amamantaré sin usar ninguna fórmula infantil ni otra leche*	5. *Quando meu bebê tiver 6 meses de vida, vou amamentá-lo sem usar nenhuma fórmula infantil nem outro leite*	5. *Quando meu/minha bebê tive 6 meses de nascido/a, vou amamentá-lo/la sem usar nenhuma fórmula infantil nem outro leite*	5. *Quando meu bebê tiver 6 meses de vida, vou amamentá-lo sem usar nenhuma fórmula nem outro leite*	5. *Quando meu bebê tiver seis meses de vida, vou amamentá-lo somente ao seio sem usar nenhum outro leite artificial*

Table 1 - Content Validity Index Results by expert judges, Macaé, Rio de Janeiro, Brazil, 2018

Item	Not representative/ little representative	Representative/very representative	Content Validity Index
Item 1	2	7	0.78
Item 2	1	8	0.89
Item 3	2	7	0.78
Item 4	1	8	0.89
Item 5	1	8	0.89

Table 2 – Sociodemographic characterization of pregnant women, in the semantic validation phase, Macaé, Rio de Janeiro, Brazil, 2018

	n	%
Schooling		
Incomplete elementary school	04	12.9
Complete elementary school	03	9.7
Incomplete high school	10	32.3
Complete high school	13	41.9
Incomplete higher education	01	3.2
Family income*		
No income	01	3.2
Up to 1 minimum wage	08	25.8
1-2 minimum wages	13	41.9
From 2-3 minimum wages	04	12.9
3-4 minimum wages	02	6.5
Housing Type		
Masonry	31	100.0
Number of people residing at home		
1-3 people	19	61.3
From 4-6 people	11	35.5
Over 7	01	3.2
Legal drug use*		
Alcohol	06	19.4
Tobacco	02	6.5
Religion*		
Evangelical	15	48.4
Catholic	04	12.9
None	09	29.0
Gestational Age*		
Up to 22 weeks	08	25.8
From 23-36 weeks	12	38.7
Over 37 weeks	04	12.9
Previous gestation		
Yes	25	80.6
No	06	19.4

Note: * The item presented missing.

Table 3 – Results of Content Validity Indexes for semantic validity by pregnant women, Rio das Ostras, Rio de Janeiro, Brazil, 2018

Item	Unclear/ little clear	Clear/ very clear	Content Validity Index
Item 1	3	28	0.90
Item 2	1	30	0.96
Item 3	1	30	0.96
Item 4	2	29	0.93
Item 5	6	25	0.80

In the semantic validation phase, performed with 31 (100.0%) pregnant women, the average age was 25.2 years (SD=5.46), with a minimum age of 18 and a maximum of 35 years. Of this sample, the majority, 13 (41.9%), had completed high school (Table 2).

From the total of pregnant women who participated, 24 (77.4%) could tell exactly the weeks corresponding to their gestational age (GA), with a mean of 23.6 weeks (SD=10.7), with a minimum of 6 weeks and maximum of 39.

According to Table 2, 25 (80.6%) of the pregnant women had previous pregnancies, of which 23 (92.0%) breastfed their children, showing variation regarding the period. The minimum found was one month and the maximum four years and six months. In this context, the percentage of early weaning found was 38.7%.

From the analysis of IFI version 2, the items individually assessed, as well as the tool as a whole, were considered acceptable regarding clarity (Table 3). Individually, CVI ranged from 0.80 (80.0%) to 0.96 (96.0%) and the overall mean CVI was 0.91 (91.0%).

As there were no changes in the consensus version 2 after the assessment by pregnant women, it is configured in the Brazilian version of the IFI.

DISCUSSION

The cultural adaptation of the IFI was carried out systematically and followed all the recommended stages. The rigor in the process of adapting a previously existing measuring tool ensures quality to the adapted tool[23].

Thus, despite being a complex process, one must consider the linguistic and cultural aspects, aiming at the quality of the adapted tool, in order to adapt it to different populations. Therefore, the validation of tools is a fundamental aspect to make them complete, with greater scientific rigor and to guarantee their legitimacy, credibility and reliability, so that they are able to measure what is proposed[27].

Carrying out this process in this study stems from the need for a standardized tool that can safely measure maternal intention to breastfeed, exclusively in the Brazilian context, similar to international studies conducted in several countries, in which this construct was validated[4,7,14-15,20-21].

In Brazil, the face and content validation stage, which had a committee of judges, followed the recommendations. It was considered that the composition of the committee should be five to ten expert judges in the area of the tool[28], including at least methodologist, health professional and linguistic professional[23]. The participation of a member of the target population to whom the tool is intended is also recommended[29], as performed in the study. This committee provided feedback on the comprehensibility of the issues, so their contributions were essential in making the material clearer and more appropriate for the intended audience.

From the judges' perspective, the IFI was considered representative, since it reached CVI from 78%, as recommended by the literature[25]. They assessed the scale and its items as adequate and relevant to achieve the objective proposed by the tool.

Through the assessment of semantic, idiomatic, cultural and conceptual equivalences it was identified that between the original tool and its Brazilian version some items presented a greater divergence regarding semantic and idiomatic equivalence. Thus, some words were modified or added in order to improve the clarity of the tool and consequently facilitate the understanding of pregnant women. Studies point out that for an adequate translation, the analysis of such concepts is fundamental so that the terms used in the tool are coherent with the reality of the target population, within their cultural context, and are subject to modification when presented in opposite ways[23].

In this aspect, the orientation described at the beginning of the scale induced the conduction of an interview, so changes were made in the statement aiming to obtain the same meaning either for its use through an interview or in a self-applicable way.

In addition to expert validation, it is a critical attitude for the study to validate the material with audience representatives, as it is the moment to see what is really missing, what is not appropriate, and how information is understood[30].

The sample used in the semantic validation stage and the percentage used, considering education level, is consistent with the literature recommendation[31], which increases the representativeness of the sample. A good level of education allows better maternal assimilation of information received, while the less educated population may be more susceptible to misinterpretation of concepts[11,32]. This reinforces the importance of participants with different levels of education in studies of this nature.

Early weaning in Brazil, even evidenced among pregnant women in this study, is a serious public health problem. This requires health professionals, especially nurses in family health units, targeted and qualified assistance for the recognition of the intervening factors in the decision to breastfeed[33]. That said, it reinforces the need to use scales such as the IFI, which quantitatively measure maternal intentions to breastfeed and predict exclusive breastfeeding[4], being a starting point for investigating these factors.

The analysis performed with pregnant women regarding clarity also obtained acceptable CVI, that is, the items are adequately described, were written coherently and concisely and so that the idea is understandable.

Therefore, it is necessary to assess the psychometric properties of the Brazilian version of the IFI. In other research examining the validity of the original IFI construct in an intra-ethnic group and the comparability between ethnic groups in a triple sample (African American, Hispanic, and non-Hispanic white women), Cronbach's alpha variation was 0, 70 to 0.85 for initiation factor and 0.90 to 0.93 for breastfeeding continuation factor[14]. In the study that validated an Arabic version of the Lebanese women scale, the reliability of Cronbach's alpha internal consistency was 0.82[4]. Therefore, IFI's English, Spanish and Arabic versions have good levels of internal consistency.

Study limitations

As a limitation of the study, it is emphasized that the adaptation process of a measuring tool may be influenced by the context and characteristics of the population, so its psychometric properties need to be tested.

Contributions to nursing

The study is expected to contribute to the nursing field. The scale can be used as a tool by nurses during prenatal care to measure maternal intention to breastfeed and consequently identify possible barriers to exclusive breastfeeding that may lead to early weaning. Thus, it will be possible to establish an individualized care plan for pregnant women, aiming to motivate them for this practice, through educational interventions appropriate to each life context, making it possible to reduce the early weaning rate.

CONCLUSIONS

Upon completion of the cultural adaptation process of the Brazilian version of the IFI, semantic, idiomatic, cultural and conceptual equivalences were obtained between the translated version and the original version. The tool was assessed as clear and representative, based on the stages recommended by the literature. Therefore, the Brazilian version of IFI for pregnant women is culturally adapted to Brazil.

After assessing psychometric properties, the scale is expected to be valid and reliable to assess maternal intention to breastfeed exclusively until the infant's six months of life in different Brazilian settings.

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