Cultural adaptation of the version of the withdrawal assessment tool (wat - 1) for portuguese language spoken in Brazil

Descritores: Enfermagem pediátrica; Estudo de validação; Sedação profunda; Síndrome de abstinência a substâncias; UTI pediátrica.

ABSTRACT | Objective: To adapt the Withdrawal Assessment Tool Version (WAT - 1) to the Portuguese language of Brazil. Methods: Methodological research, carried out in the city of São Paulo/SP from March 2017 to April 2019. The process of cultural adaptation followed the ten stages defined according to the Report of the ISPOR Task Force for Translation and Cultural Adaptation: authorization; translation, reconciliation, backtranslation; back-translation review; harmonization, with the evaluation of semantic, idiomatic, conceptual and cultural equivalences carried out by a committee of nine judges; evaluation of the comprehensibility of the instrument by 30 specialists in Pediatric Intensive Care TIP; review of the comprehensibility assessment; final translation review; final report. Results: The adapted instrument was divided into 35 sentences, being evaluated by nine judges regarding their equivalences. The agreement among the judges in the analysis of equivalences proved to be excellent, with an average score of 96.9% in these cond round. There was a need for two rounds, as some items did not show 80% agreement in the first stage. In the comprehensibility assessment, 100% of the specialists’ understanding was obtained. Conclusion: The translation and cultural adaptation of the wat-1 instrument to the Portuguese language spoken in Brazil were considered satisfactory.

RESUMEN | Objetivo: Adaptar la Versión de la Herramienta de Evaluación de Retiros (WAT - 1) al idioma portugués de Brasil. Métodos: Investigación metodológica, realizada en la ciudad de São Paulo/SP de marzo de 2017 a abril de 2019. Cuyo proceso de adaptación cultural siguió las diez etapas definidas según el Informe del Grupo de Trabajo ISPOR para la Traducción y Adaptación Cultural: autorización; traducción, reconciliación, retrotraducción; revisión de la retrotraducción; armonización, con la evaluación de equivalencias semánticas, idiomáticas, conceptuales y culturales realizada por un comité de nueve jueces; evaluación de la comprensibilidad del instrumento por 30 especialistas en Cuidados Intensivos Pediátricos TIP; revisión de la evaluación de comprensibilidad; revisión final de la traducción; informe final. Resultados: El instrumento adaptado se dividió en 35 frases, siendo evaluadas por nueve jueces en cuanto a sus equivalencias. La concordancia entre los jueces en el análisis de equivalencias resultó excelente, con una puntuación media de 96,9% en la segunda vuelta. Hubo necesidad de dos rondas, ya que algunos ítems no mostraron un 80% de acuerdo en la primera etapa. En la etapa de la evaluación de comprensibilidad, se obtuvo el 100% de la comprensión de los especialistas. Conclusión: La traducción y adaptación cultural del instrumento wat-1 al idioma portugués hablado en Brasil fue considerada satisfactoria.
INTRODUCTION

Sedation in the Pediatric Intensive Care Unit (PICU) is an important ally in the analgesia of critically ill patients, to alleviate the suffering and pain in the face of invasive procedures, necessary in this environment, often even causing deep sedation. However, the prolonged use of these drugs causes extensive complications for children who use them continuously or intermittently. (1-2) Therefore, it is important that professionals working at the PICU monitor the individual level of sedation of each child, and that weaning from this sedation is carried out efficiently and coherently, in order to avoid the appearance of the withdrawal syndrome. This contributes to an improvement in the patient’s prognosis, making his recovery faster. (1)

The correct identification of manifestations indicative of substance withdrawal syndrome in children is essential for nurses to effectively intervene in the prevention of complications, as we know that critically ill patients who are exposed to sedation and analgesia therapy for prolonged periods have greater chances of development of withdrawal syndrome. However, this knowledge is still little disseminated, due to the scarcity of studies on the subject in the pediatric area, which generates frustration in the team, which does not feel prepared to act promptly. (3)

Withdrawal syndrome can be triggered by several factors, such as duration of use and pharmacological class, as well as the prescribed dosage, the child's age and the beginning of weaning. Therefore, it is important, and of paramount importance, that professionals are aligned with the conducts carried out, knowing the effects that these sedatives can trigger and the period necessary to properly perform weaning. Literature reports that the chance of triggering the withdrawal syndrome increases with the days of sedation use. (1-5)

Franck and Curley (2008) created a scale, called Withdrawal Assessment Tool - Version 1 (WAT-1), which addresses the concepts related to the detection of withdrawal syndrome in pediatrics, to identify the iatrogenic withdrawal syndrome. This scale scores the criteria divided into four categories and analyzes information from the patient’s last 12 hours. (1)

The criteria evaluated in the first category concern symptoms related to the central nervous system. The second category is related to behavioral state, the third category is related to the autonomic nervous system, and the fourth refers to gastrointestinal symptoms. The scale score is divided into: 0 = no abstinence; 1-3 = possibly in abstinence; > or equal to 4 = in abstinence.

This scale consists of 11 items containing 12 points, and its application should be started on the first day of weaning in children who received opioids or benzodiazepines, by infusion or regular administration for prolonged intermittent periods greater than or equal to five days or even use of continuous sedation for a period of 24 hours. It is applied twice a day, 12 hours apart, until 72 hours after the last dose is administered.

Prior to this study, the WAT-1 had, in Brazil, only free translations, without any methodological rigor, carried out by a large pharmaceutical industry, at the request of the author of the scale, who wanted the scale to be used worldwide.

Thus, the present study aimed to adapt the Withdrawal Assessment Tool Version (WAT – 1) instrument to Brazilian Portuguese.

METHOD

This is a methodological research, cultural adaptation of a measurement instrument, giving rise to the thesis entitled “Cultural Adaptation of the
Withdrawal Assessment Tool Version (WAT-1) for the Portuguese language spoken in Brazil. The study began in March 2017 and ended in April 2019. The steps of this study followed those proposed by the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) Task Force for Translation and Cultural Adaptation, in order to preserve equivalence in cultural adaptations, which will be described below.

Step 1 – authorization for translation and adaptation of the instrument, obtained through electronic contact with the author of the original instrument.

Step 2 - translation of the original instrument from English to Portuguese, carried out by two researchers with experience and fluency in both languages, independently.

Step 3 - reconciliation, performed by the key person, who was a specialist nurse in the field of pediatrics with experience in an intensive care unit, experience in adapting instruments and fluent in English; she compared the two translations and reconciled with the researcher, who is the project manager.

Step 4 - back-translation, in which the obtained version was translated into English by two different teachers, natives of the instrument’s country of origin, who did not participate in the previous steps.

Step 5 - review of the back-translation, in which the two back-translated versions of the instrument into English were compared, by the researcher and the main author of the instrument.

Step 6 - Harmonization - as there were no other versions of the WAT-1 in other languages, it was decided to carry out the evaluation of the semantic, idiomatic, conceptual and cultural equivalences of the versions by a committee composed of nine judges.

Once the committee was formed, the judges analyzed the sentences according to the established criteria (0 = undecided, 1 = equivalent and -1 = not equivalent) for the technical review and evaluation of the semantic, idiomatic, conceptual and cultural equivalence of the versions. Item evaluation was performed using the equivalence scale.

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RESULTS

Initially considering the characteristics of the study participants, in relation to the profile of the judges, the mean age was 39 years, ranging between 29 and 60 years. All had a lato-senso postgraduate degree, and 55.6% of them also had a stricto-senso postgraduate degree.

As for the profile of the 30 nurses who participated in the pre-test stage, the average age was 32 years, ranging
from 25 to 57 years. All had a lato-sen-
su graduate degree, and only 6.7% of
them had a stricto-senсу graduate de-
gree.

Now approaching the instrument
translation process, when comparing
the original version and the translated
versions, some divergences were iden-
tified, which were resolved by consen-
sus.

Each judge performed 140 evalua-
tions, considering the 35 sentences,
according to each of the four domains
or equivalences, obtaining an average
score of 96.9% in the second round,
due to an agreement of 80% in the first
stage.

In the understandability assessment
stage, the results indicated that no
adaptation to the content of the adap-
ted instrument was necessary, as all
components were fully understood by
nurses with answers between 4 and 5,
indicating 100% understanding by the
experts.

DISCUSSION

This study was prepared through
an extensive and rigorous process of
translation and cultural adaptation,
following the international standards
of the Report of the ISPOR Task Force
for Translation and Cultural Adaptation
(ISPOR), to ensure the quality and reli-
bility of the study. (6)

The translation and adaptation of
the instrument was carried out ac-
cording to all reliable criteria, step by step,
until the final version of the instrument
was prepared. It is important to use spe-
cific methods in carrying out the entire
process of cultural adaptation, so that
there is agreement and respect between
existing cultural diversities. (7-9)

When the instrument is merely
translated, without following any spe-
cific method with criteria to be followed
and a correct operation, the instru-
ment’s reliability is impaired, making
it impossible to effectively adapt to the

desired language. In this way, it com-
promises its understanding by the target
population, impacting the use of the
tool by professionals in their practice.
(7-12)

The process of translating and cul-
turally adapting an instrument requires

Through this study, there is now the
possibility of a safe and assertive
use of the adapted scale with all
methodological rigor, since free
translations do not
suit the cultural reality of each
country, often generating an impossibility of use

with different cultures, without losing
the context faithful to the original
instrument. (6)

WAT-1 is known worldwide and it
can also be applied to adolescents. The
other scales that exist have age limi-
tations, and some are indicated only for
neonates, while others are also limited
to restricted age groups, not covering
the entire pediatric clientele. (1)

Through this study, there is now the
possibility of a safe and assertive use
of the adapted scale with all methodo-
logical rigor, since free translations do
not suit the cultural reality of each
country, often generating an impossibility of use. (8)

Therefore, the present study is re-
levant, having a positive impact on its
future use by the Brazilian population,
due to the benefits that this scale will
bring, due to its ease of use and prac-
ticality in its applicability for children
who used sedatives in the pediatric in-
tensive care.

In the process of adapting the WAT-
1 to Portuguese, the first stage was
completed quickly, given the author’s
prompt response, authorizing the study.
Then, the second stage of translating
the original version into the Portuguese
version was performed, carried out by
two different translators. After that, we
proceeded to the version reconciliation
step between the project researcher
and the key person.

In the reconciliation phase, it was
necessary to adjust the two translated
versions and reach a consensus to ob-
tain a single Portuguese version. The
greatest difficulty encountered at this
stage was to reach a consensus on the
best version through a rigorous verifi-
cation of each item of the instrument
with the key person, as some terms did
not match the cultural reality of our
language.

In the fourth step of back-trans-
lation, the original author of the sca-
le contributed with a suggestion and
made corrections that she deemed ne-
cessary, giving a final guarantee for us to proceed with the next steps.

In the sixth stage, it was not possible to harmonize the translated instrument with other versions in different languages, since there are no versions of the WAT-1 adapted by methodological criteria, constituting a limitation in this phase of the study.

When we choose to adapt an instrument from another culture, it is essential to assess its relevance through semantic equivalence measurements with well-defined criteria in order to maintain the completeness of the original instrument. (15)

After this phase, an assessment of the comprehensiveness of the instrument, adapted by 30 specialist nurses with experience in the PICU, was carried out, in order to ensure that the version obtained by the committee of judges was fully understandable for its use in clinical practice.

The nurses who participated in the study also expressed the desire to readily use the scale in their clinical practice. This fact reflects a long-standing concern on the part of health professionals with the withdrawal syndrome in children, since currently there are not many scales used to assess patients in this situation.

Withdrawal syndrome is still a difficult approach in the pediatric field, since in pediatrics there is no general rule for this population, each sedative and analgesia administered to the pediatric public is individualized by age group, weight, drug dosage and particularities of each pathology, the pediatric intensive care nurse can make a difference in the outcome of weaning from sedation since he is daily monitoring the evolution of this child, this professional can assertively contribute to the monitoring of sedative weaning in a correct way, easing the signs and symptoms of the withdrawal crisis, as well as a decrease in the time of using these drugs. (12)

In the comprehensiveness assessment stage, the results indicated that no adaptation to the content of the adapted instrument was necessary, as all components were fully understood by the nurses. This can be justified by the methodological rigor, faithfully followed from the beginning of the cultural adaptation process, ensuring that, the universe is immense and broad, with a diversification that includes many variables in its environment and requires above all obedience to the method of choice and demands from the researcher a detailed attention to all the issues involved during all the steps to be followed. (17-19)

Moving forward in the ISPOR adaptation process, in the ninth stage called revision, a final evaluation of the translation was carried out, and there was no need for any correction of spelling errors, thus completing the final translation of the WAT-1 instrument into the Brazilian Portuguese language.

In the last step of the methodological suggested by ISPOR, a final report was prepared on the entire process, allowing the researcher to review and understand item by item, each step and respective decision-making.

CONCLUSION

The challenge of carrying out this study was broad and extensive, since there was a need to seek a methodology that included all eligibility criteria for adapting the instrument and the final result was as assertive as possible.

The nurse plays a fundamental role in the assessment and early diagnosis of the withdrawal syndrome, as its essence, through a holistic view, allows each child to be seen in a unique and individualized way.

The translation and cultural adaptation of the WAT-1 instrument into the Portuguese language spoken in Brazil were considered satisfactory. The study has limitations, as despite having completed the adaptation process, the instrument must still be evaluated in the future in terms of its psychometric properties, so that evidence of reliability and validity of the Brazilian version can be investigated.
References


