

## CULTURAL ADAPTATION OF THE GAUDENZ QUESTIONNAIRE FOR THE DIAGNOSIS OF URINARY INCONTINENCE IN BRAZILIAN WOMEN

### Hypothesis / aims of study

The application of the Gaudenz questionnaire allows the establishment of an initial and differential diagnosis of female urinary incontinence (UI), without an urodynamic investigation, from which there can be derived a corresponding treatment, or yet the real need of the urodynamic exam [1]. The differential diagnosis achieved through the final score is simple and clinically effective, is not an invasive procedure, and can be used by health professionals tending caring for women suffering from urinary incontinuity [2].

With these considerations in mind, the objective of the present study is to describe the adaptation process of the Gaudenz Questionnaire for the Brazilian culture.

### Study design, materials and methods

The methodological process of cultural adaptation aims at the acquisition of an instrument true to the original, but adapted to the culture of the Country where this version will be applied.

In this study the researchers opted for the directives developed by the American Academy of Orthopedic Surgeons, which has as a goal the standardization of the method for cultural adaptation of measuring instruments related to health, corroborated by theoretical findings and by the systematic review of published studies regarding the aforementioned methodology. Thus, the steps followed in this process were: translation of the original instrument; synthesis of the translations; backward translation to the language of origin; assessment of the translation by a panel of specialists; and a pre-test [3].

In order to implement the present study the researchers got the formal authorization from Dr. Reto Gaudenz so they could proceed to the translation and cultural adaptation of the instrument.

The Gaudenz questionnaire is a specific and self-administered instrument, developed originally in the German language, made of 16 dichotomous items which allow for two final scores: the urge-score, which grades urge urinary incontinence (UUI); and the stress-score, which grades for stress urinary incontinence (SUI). Each item's grade varies between 0 and 3 for each of the UI types, and the sum of the final scores falls between 0 and 26 both for UUI and SUI. For an urge-score between 13 and 26, and for a stress-score between 0 and 6 the probability of an UUI result is 97%. For a stress-score between 13 and 26 and an urge-score between 0 and 6 is 87% [2].

### Results

The specialists individually produced considerations for each item in the instrument before they paneled up, and the agreement rate in their opinions was calculated based on their answers. After the specialists panel, which lasted for about three hours and fifteen minutes, the need to change six items (1, 3, 8, 10, 12 and 13) was pointed out, with a percentage of agreement between the specialists above 80%.

In the 16 questions that comprise the questionnaire the term "toilette" (equivalent to the English term toilet) was translated to "toaleta" (the Portuguese translation), with the purpose of preserving semantic equivalence. The specialists panel, however, suggested that the term was altered to "banheiro (the Portuguese term for "bathroom"), for "toaleta" is a word seldom used in the Brazilian culture and could be difficult to understand by the targeted population.

A characteristic of the Gaudenz Questionnaire is that it is self-administered and thus the researchers understood that in order to achieve cultural equivalence, six items would need to be changed, with the goal of making the instrument more easily understandable for the target audience.

Thirty-five women complaining of UI participated in the pre-test. Their ages varied from 31 to 87 years, with an average of 53.9 (SD = 13.1), with average schooling of 4.9 years (SD = 3.7).

The average time for filling out the questionnaire was 16 minutes, although five women (14%) took around 30 minutes. After answering the questionnaire the women were questioned about the clarity of the items and most of them (91.5%) reported that the instrument was easy to understand. Three women (8.5%) presented difficulty in understanding the meaning of the word "jato" ("stream" in English). Even though, none of the interviewees suggested any kind of change, when asked about it, about possible modifications relative to the instrument.

### Interpretation of results

The use of two translations allowed for small corrections of referential and generic meaning, which in turn elicited an adequate synthesis of the translations. Added to that there is the fact that the third translator, responsible for the synthesis, is a healthcare professional, and has had professional experience in healthcare in Germany.

The specialists' panel, although long, elicited the final understanding of the instrument. The connection that came from the healthcare and linguistics professionals was enriched and facilitated by the presence of the representative of the target population (woman with UI).

An attribute of the German technical and scientific language is the "nominal style", when there occurs the agglutination of several morphic elements in a single word, displaying the unique characteristics, both of vocabulary and of terminology, pertaining to the German language. In the intercultural analysis of discourse there is a tendency of German to produce long sentences and heavier syntax when compared to Portuguese.

The six change items—with agreement rate superior to 80% among the specialists—happened as a result of the need to adapt the cultural equivalencies between the original German questionnaire and the final version in Portuguese, for the application of the pre-test among Brazilian women.

In the fifth and last step the researchers noted that the instrument had full acceptance by the group of interviewed women, although some barriers were identified regarding the understanding of the term “jato” by a minority of women. When these women were questioned about a possible substitute term, there were no suggestions. The question was taken back to the specialists as per their opinion there doesn’t exist a simpler term or one of more common usage among women, the researchers opted for keeping the term and in case it wasn’t understood in the future by the field subjects, the interviewer should explain the meaning of it.

The researchers noted that the predominant occurrence of subjects with low to medium schooling restricted, in part, the understanding of the instrument. Thus, although the original instrument is self-administered, in the Brazilian version that will not always be the case.

Because this is a simple instrument, the researchers believe that it can be administered by different types of healthcare professionals, in different scenarios of practice, thus promoting multidisciplinary action in women’s healthcare.

#### Concluding message

The adaptation of the Gaudenz Questionnaire to the Brazilian culture was adequately accomplished, and the use of a minutely defined methodology endorsed and elicited a Portuguese version that is true to the original in German.

#### References

1. Gaudenz R. Der Inkontinenz-Fragebogen mit dem neuem Urge-Score und Stress-Score. Geburtsh U Frauenheilk 1979; 39: 784-92.
2. Ishiko O, Hirai K, Sumi T, Nishimura S, Ogita S. The urinary incontinence score in the diagnosis of female urinary incontinence. Int J Gynecol Obstet. 2000; 68: 131-7.
3. Beaton D, Bombardier C, Guillemin F, Ferraz MB. Recommendations for the Cross-Cultural Adaptation of Health Status Measures. American Academy of Orthopaedic Surgeons and Institute for Work & Health. Revised in March/2002. Available at <http://www.dash.iwh.on.ca>. Accessed in Dec,29 2008.

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