CULTURAL ADAPTATION OF DATA COLLECTION INSTRUMENTS FOR ALCOHOL AND DRUGS MEASUREMENT

Heloísa Garcia Claro1; Márcia Aparecida Ferreira de Oliveira2; Marília Mastrocolla de Almeida3; Divane de Vargas4; Heloísa Barboza Plaglione5

Alcohol and drugs use measurement provides prevention and treatment actions, and also information for research on this topic. Through a literature review, we found information about the applications of these tools, characteristics of these instruments and challenges in the adaptation process. It was found that appropriate tools have to consider individual needs and the biopsychosocial aspect of drugs use. The adopted references about cultural adaptation should be standardized and the methods used in the process should be made explicit in published studies.

Descriptors: Alcohol-Related Disorders; Psychotropic Drugs; Validation Studies.

1 RN, Master’s Student in Nursing, Escola de Enfermagem, Universidade de São Paulo, SP, Brazil. E-mail: heloisa.claro@usp.br.
2 RN, Free Lecturer, Associate Professor, Escola de Enfermagem, Universidade de São Paulo, SP, Brazil. E-mail: marciaap@usp.br.
3 Occupational Therapist, Doctoral Student in Nursing, Escola de Enfermagem, Universidade de São Paulo, SP, Brazil.
4 RN, Ph.D. in Nursing, Professor, Escola de Enfermagem, Universidade de São Paulo, SP, Brazil.
5 Undergraduate student in Nursing, Escola de Enfermagem, Universidade de São Paulo, SP, Brasil.
ADAPTAÇÃO CULTURAL DE INSTRUMENTOS DE COLETA DE DADOS PARA MENSURAÇÃO EM ÁLCOOL E DROGAS

A mensuração em álcool e drogas subsidia ações de prevenção e tratamento, e fornece informações para pesquisas nessa temática. Por meio de revisão bibliográfica, foram encontradas informações sobre as aplicações de instrumentos de coletas de dados, características desses instrumentos e desafios no processo de adaptação. Encontrou-se que os instrumentos adaptados devem considerar as necessidades do indivíduo e o uso da droga em seu aspecto biopsicossocial. Os referenciais adotados de adaptação cultural devem ser padronizados, e os métodos utilizados no processo precisam estar explícitos nos estudos publicados.

Descritores: Transtornos Relacionados ao Uso de Álcool; Psicotrópicos; Estudos de Validação.

Introduction

The use of alcohol and other drugs (AOD) is considered a public healthcare problem, and demands the creation and maintenance of prevention programs and policies and articulated assistance, besides the need for the permanent formation of healthcare professionals(3,4).

With the increase in the search for treatment in this field, the importance of assistance improvement is highlighted. The assistance to the AOD user is enabled by the use of resources for the production of differential diagnosis and treatment planning. These can be obtained with clear and precise information on the individual needs of the patient, once the problems related to AOD use reach each individual differently, being of key importance to consider each psycho-social context(5).

The intervention in initial stages of treatment to the AOD user improves the prognosis, therefore, the need for detection strategies, measurement and early interventions. Studies have documented the need for fast assessment and good accuracy for the disorders related to substance abuse. For that, an appropriate tool is needed, capable to detect the use, and it must be valid, reliable and low cost(3-4).

It is understood that the “measurement of alcohol and other drugs” as the action of measuring and assessing the aspects related to the use of substances. The collection and measurement of this data, as long as made with quality instruments, provide information that aid in the diagnostic of the abusive use, characterize the aspects related to using (environment, quantity, social network, type of
with the objective of providing methodological basis for the actualization of this process.

Methods

The bibliographical review was made in the data bases, PubMed, LILACS and SciELO and defined, as limits, the articles published over the last 10 years (1999 to 2009), crossing the following descriptors: in the PubMed base - alcohol and cultural adaptation (return of 33 results); drugs and cultural adaptation (return of 29 results); descriptors alcohol and cultural adaptation (return of 0 results); in the LILACS base – drugs and cultural adaptation (return of 0 results); in the SciELO data base, with the descriptors drugs and alcohol cultural adaptation (return of 1 result).

From a total of 63 articles, 47 were excluded from the sample, for not having the theme of the cultural adaptation of the data collection tools for in AOD, or for being studied indexed more than one time in the different data bases, or yet, for being unavailable articles. The final sample of articles, therefore, was comprised of 16 articles. These articles were analyzed and the relevant information, was extracted from each one, then separated into files. After compiling the files, 4 empirical categories were taken from the information: applications of the tool, important characteristics of the tool, challenges in the process of adaptation of the tools and process of adaptation of data collection tools.

Results and discussion

From the 16 articles found by means of bibliographical search in the data bases, PubMed, LILACS and SciELO, 12 (75%) were in English, 2 (12.5%) in Portuguese and (12.5%) in Spanish. As for the country of origin of the articles, 5 (31%) were made by researchers in the United States, 4 (25%) were made by researchers in Brazil, 2 (12.5%) were made by Spanish researchers and 1 article was made in each one of these countries: Finland, Scotland, Portugal, Taiwan and Sri-Lanka (6.25% each). As for the year of publication, all of the articles were produced starting from the year 2001. Figure 1 shows, according to the studies found, the tools that were adapted(1-4,9-22).

<table>
<thead>
<tr>
<th>Authors</th>
<th>Adapted Tool</th>
<th>Year</th>
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<tbody>
<tr>
<td>Brown et al.</td>
<td>Conjoint Screen for Alcohol and Other Drug Problem</td>
<td>2001</td>
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<tr>
<td>Siegel et al.</td>
<td>Interview Assessment of Adolescents</td>
<td>2001</td>
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<tr>
<td>Dalla-Déa et al.</td>
<td>DUSI-R (Drug Use Screening Inventory)</td>
<td>2003</td>
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<td>Henrique et al.</td>
<td>Trial Test of the Involvement with Alcohol, Tobacco and other Substances</td>
<td>2004</td>
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<td>Lintonen et al.</td>
<td>Self-Report Drinking</td>
<td>2004</td>
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<tr>
<td>Carvalho et al.</td>
<td>Social Representation Scale of Alcohol and Drug Consumption in Teenagers</td>
<td>2006</td>
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<tr>
<td>Gan et al.</td>
<td>Scale on the Desire to Drink (Escala sobre el Deseo de Beber)</td>
<td>2006</td>
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<td>Fabbri et al.</td>
<td>T-ACE (Tolerance, Annoyed, Cut down and Eye-opener)</td>
<td>2007</td>
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<tr>
<td>Frank et al.</td>
<td>AUDIT-C (Alcohol Use Disorders Identification Test)</td>
<td>2008</td>
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<tr>
<td>Kahler et al.</td>
<td>Brief Young Adults Consequences Questionnaire</td>
<td>2008</td>
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<td>Silva et al.</td>
<td>AUDIT</td>
<td>2008</td>
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<tr>
<td>Vargas et al.</td>
<td>Scale of Attitudes Towards Alcohol, Alcoholism and Alcoholics</td>
<td>2008</td>
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With the information collected in the articles, it was possible to identify the following aspects related to the data collection tools in the area of AOD: applications of the instrument, important characteristics of the tools, challenges in the process of adaptation of the tools and process of adaptation of the data collection tools. These categories are presented and discussed below.

**Applications of data collection tools in alcohol and drugs**

The selected articles presented several applications and potentialities of the data collection tools in AOD. The detection of the consumption patterns is important, since the abusive use of alcohol is inserted in a spectrum of consumption of risk, abuse and dependency. The tests that detect these patterns of use are important in the secondary prevention of users from small quantities of drugs, so that they do not involve themselves in abusive consumption or dependency. It is also needed to differentiate with criteria the individuals that have a problematic use, but did not reach abuse or dependency, which can be made by a clearer and precise data collection\(^\text{20-22}\).

The contribution of these tools in the definition of the diagnosis was also identified. Some studies mention that the commonly used tools provide scores for the measurement of the severity. This data is important for the correct medical history and adequate clinical exploration to come up with the diagnosis, being of great help when complementary assessments of relevant pathology aspects\(^\text{9-10,14,16,22}\).

These aspects aid the professional to establish individualized therapeutic strategies, enabling that the user decreases the consumption of drugs, or even keep abstinent. However, the tools with enough quantity of this data can be very extensive for an initial identification, only applying them when results of consumption identification by shorter identification tool are positive\(^\text{9-10,14,22}\).

**Important Characteristics of the tools**

The authors identified a set of characteristics considered as relevant so that a data collection tool, in the area of alcohol and drugs, can be effective. The first is related to the capacity of the tool to enable the standard use classification, making the procedures of intervention or forwarding easier. The use of triage tools, in the routine of the primary and secondary care units, can also be useful in the identification of the main problems of a certain community, aiding the planning of healthcare policies. Still within this discussion, it was found that although the qualified clinical professionals are needed to apply the instruments, they do not have enough knowledge to assess the use of psychoactive risk substances; therefore, it is of extreme importance that the assessment material of the consumption play this role, with the objective of identifying risk cases\(^\text{9,10}\).

Another mentioned characteristic is regarding the shape of the tool; in this case, if anonymity should be considered or not, and how the questions should be applied and formatted. About the anonymity, studies show that the measurement and assessment of substance use have been made constantly by means of anonymous questionnaires. The measurement of anonymity is important, when the objective is to make the data collection easier, so that more valid data is obtained. However, a study compared teenagers that answered to questionnaires in anonymity, identified and partially identified, and it was seen that there was no statistical relevance in the differences of response, which shows that in regards to the drug issue, the users respond equally, in case they are identified or not\(^\text{21}\).

As for the form of application, the tools vary between self-applicable or applied by a trained professional. Besides, the questionnaire can be comprised of open questions or multiple choice to be chosen by the subject during the interview. It still can be made, in a complementary level, collect the information of material like a medical file, exams, family reports, among others. However, studies highlight the importance of an adequate number of closed questions with alternatives made directly to the patient; these seem to have a better statistical value and reliability\(^\text{12}\).

Another important characteristic is that this measuring tool be applied by any trained healthcare professional, which is very useful in locations where there are only a few professionals with the knowledge of alcohol and drugs. With this feature the instrument can also be an aid to the professional of a clinical practice, like the ones in units of basic healthcare and the other more sought out services by the population, so that they can track users that present risk behaviors and other problems related to the use of substances. The users will be able to, therefore, be sent to specialized institutions in this type of care, increasing the possibility of treatment for these individuals\(^\text{9,10}\).

Some studies have raised the issue on the content that should be approached, in the use of these tools. The information was found that there are many protocols and scales to document the use of alcohol; however, the scales needed are the ones capable of documenting, also, the use of other drugs. Besides, the material must be capable
of characterizing the use of substances and the severity degree of each user, in a clear and precise manner, and also, qualify the loss and social aspects of the patient\textsuperscript{12,18}.

Besides information that quantify and qualify its use, a good instrument must provide data on the social representation of the patient in the AOD, once there can be different representations on the same object, which are determined by different social-economic conditions and guidance systems\textsuperscript{13}.

The available materials, however, they currently can play several items in the aspects related to the uses that are very rare for the real population, and providing little information on common problems, less severe, that would be of greater importance for the clinical practice. Therefore, these tools must be constantly assessed\textsuperscript{17}.

\textit{Challenges in the adaptation process of data collection tools in AOD}

One of the challenges in the adaptation of measuring tools in alcohol and drugs is the verification of the relevance of the collected information. When an adaptation study is made with a parcel of the population, or with a very specific sample, the instrument cannot be generalized to be used with the global population. To avoid this limitation, it is extremely necessary that the elected sample includes a wide number of individuals, from those that does not consume any psychoactive substance, to those that have a high degree of dependency, in order to not underestimate the quality of the measurement tool.

There is, however an obstacle called “blind by social convenience”, of great relevance in these studies, since it knows that the dependency and the use of substances are things that the patients have the tendency to deny them. It is necessary to consider that the attended population in the healthcare services of the communities, at many times, omit the consumption of alcohol during an appointment, due to social stigma, of the concepts of immorality, aggressiveness, among others, commonly associated to this bio-psycho-social phenomenon. Therefore, a good measurement tool in alcohol and drugs must be capable of predicting this factor, since it can influence and interfere in the data obtained in the measurement\textsuperscript{14-15}.

When many question related to substance use/dependency are made, the patients tend to sub-notify their problems with the use, for the interviewer, it decreases the yield of diagnosis and the quality of the information. Therefore, it recommended that the question related to using be “camouflaged”, being presented together with the questions regarding the aspects of the interviewee’s lifestyle\textsuperscript{14,15}.

One of the greater challenges of the healthcare professional, regarding the use of alcohol and their patients, consist in the determination of thresholds, from which the use can be considered abusive. The construction of new data collection tools that approach this issue, once those more commonly used do not enable the identification of risk for abusive consumption or dependency, could subsidize quick interventions or other interventions in the healthcare services

\textit{Adaptation process of data collection tools}

According to the selected material, the cultural adaptation of a data collection tool, for use in a different language from the original, require a unique methodology so that the equivalence is obtained between the original source and the language of destination\textsuperscript{23}.

This trans-cultural adaptation comprise in a process that does not only work with the language, but also with the different culture of the country in which the tool is indented for validation. There are five situations to be considered in the application process of the material\textsuperscript{23-25}, shown below:

A. the tool will be used in a population with the same culture, language and origin of the source; B. the tool will be used in immigrants that speak the language and reside in the location of the source; C. the tool will be used in another country, although, with the same language of the source; D. the tool will be used in new immigrants, who do not speak the language, but reside in the country of source and E. the tool will be use in another country and with another language other than the source.

For each one of these situations there is an adequate process. For situations D and E is imperative that the translation and the trans-cultural adaptation of the tool are made. The cultural adaptation fo data collection tools consists, basically, of five stages: Stage 1 – translation; Stage 2 – synthesis; Stage 3 – back translation (retro-translation) translation of the version back to the original language); Phase 4 – evaluation by a group of referees; Stage 5 – pre-test of the tool\textsuperscript{23-26}.

For a dry run, the tool must be applied in individuals with the characteristics of the target-audience of the instrument. During the interview, the semantic analysis must be made. It can be made by inviting the interviewees to, during the questioning of the items, verbalize how they understand the content in the items of the tool, exposing their doubts and suggestions of reformulation in the item, for better understanding\textsuperscript{27-28}.

The data in this study show that an adequate and comprehensive assessment is fundamental, for the planning of the appropriate treatment, as well as for the development of research on problems related to psycho-active substances and that the effectiveness of the interventions be achieved. The use of adapted tools in other cultures can subsidize comparative studies among the countries, which will contribute to the development of the research and, consequently, of practices based on evidence\textsuperscript{29}.

In the specific area of alcohol and drugs, the data collection tool must take into consideration not only the aspects directly related to the use of substances, but also, other problems – since that use and abuse of drugs is a process that stands on a tripod: the biological, psychological and social aspects of the user. This is important to enable the establishment to set the short, medium and long term goals, adequate to the reality of each patient, seeking correspondence between the needs and available interventions\textsuperscript{29}.

The methods for the cultural adaptation of tools, however, mentioned in a measurement that values
individual needs, are scarce in Brazilian literature. The adaptations of tools has been made, in Brazil, as well as in other countries, by means of the translation of the original material, without the use of an adequate methodology, that would take into consideration the peculiarities of the target population. In order to have change, it is necessary that besides the translation, the local and regional peculiarities are considered\(^{30-31}\).

The World Health Organization – WHO have highlighted, since 1996, the importance of the cultural adaptation of tools for measuring alcohol and drugs, with the objective of establishing a “common language” in the issue of world concern. The WHO also proposes that a sole methodology be adopted for the adaptation of these tools, in order to better optimize the process and ensure the quality of the adapted tools. With these procedures in order, the information can be subsidized for comparative research in drug use at a global level. However, in analyzing the specialized literature, it is seen that the information on the cultural adaptation process of the tools are still very scarce, and the studies found do not present a detailed description of the methodology used in the process\(^{32}\).

Although the number of studies that have made the trans-cultural adaptation following the adequate methodology is still growing in the country, not all of the areas are being benefited. For the authors, there is a predominance of adaptations of tools in the mental healthcare area, in which scales and cognitive tests have been going through a rigorous adaptation process\(^{33}\).

When it is regarding tools in the area of alcohol and drugs, it is possible to see that those tools are scarce, in the research field, as well as clinical that can offer data on a good psychometric profile, for the assessment of individuals that use AOD and the several demands present in this population. By means of the bibliographic search made in this study, it was possible to verify this fact, since from all of the 63 previously selected articles, only 16 approached the issue of alcohol and drugs\(^{29}\).

The information found on data collection tools in this area was predominantly related to the characteristics of these tools, like, the need that they, among other aspects, not only provide clear and precise information regarding the pattern of drug using, by means of information extracted from the user, preferably in closed questions, as also, enabled compiling a score for a more systematic assessment in the use of substances and aspects related to the use.

It is worth mentioning that the material found is from 2001 to 2009, suggesting how recent the scientific publications are regarding this issue. In this sense, the information raised in the present study have shown that the discussion on the importance of the adaptation of a data collection tool in alcohol and drugs is relevant and recent, however, the description of the process of tool adaptation in this area is still something to be explored.

**Final considerations**

Measurement in alcohol in drugs is extremely important, which shows the need for a variety of reliable tools for use in clinical practice and scientific research. These instruments cannot only enable the detection of risk behaviors, abusive use, among other aspects related to the consumption of alcohol and drugs, but also, provide information for primary and secondary prevention strategies and individualized interventions. Although, it is important that the standardized references of cultural adaptation be adopted, and that methods used in the process are explicit, in the published studies. Besides, we must have the concern to search for tools that consider the bio-psycho-social context in the use and abuse of drugs, subsidizing interventions and research focused in the health of the population since such tools are the greatest resource for the social, economic and personal development, as well as they make an important dimension in the quality of life possible, since man and drug live in a constant process of inter-relation, in a dynamic and paradoxical phenomenon.

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