Transcultural adaptation of the Amyotrophic Lateral Sclerosis Depression Inventory to Brazilian Portuguese

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Dear Editor

Depression symptoms in patients with Amyotrophic Lateral Sclerosis (ALS) has been investigated using instruments not specific and may interfere in results¹⁻³.

Given the evolution and physical impairment caused by ALS, the ALS Depression Inventory (ADI) was created in 2005 to assess depression symptoms in these individuals. Results have shown a reduction in 12 items also providing accurate measures of depression symptoms in severely paralyzed patients^{4,5}. In light of the instrument's accuracy in detecting depression symptoms at any stage of ALS, and since it has yet to be used in Brazil, it was necessary to translate and transculturally adapt the ADI-12 to Brazilian Portuguese.

There are formal stages for translating and adapting instruments. Attention to linguistics must be given during translation, due to the different semantics between languages. The method proposed by Beaton *et al.*⁶ was used as a model. The pre-final version was applied to 15 patients diagnosed with ALS in accordance with El Escorial-R

at the Neuromuscular Disease Outpatient Clinic of Oswaldo Cruz University Hospital (HUOC) of University of Pernambuco (UPE). Participants were questioned to determine whether the responses actually corresponded to what the individuals understood and if changes needed to be made to the document. All subjects were aged 18 years and older, of both sexes and gave their informed consent.

The study was conducted between December 2013 and November 2014, after approval was obtained from the Research Ethics Committee of University of Pernambuco/PROPEGE (CAAE: 25749413.2.0000.5207).

Table 1 shows the results of the versions of the ADI-12 according to the stages of transcultural adaptation. A number of subtle changes were made to conform with Brazilian Portuguese. For example the term "consists of" is translated as "consta de", but we preferred to translate it as "consiste em", more commonly used in our language and therefore easier for the subjects to understand.

Table 1. Original version (English), synthesis of the translation and final version of the ADI-12 in Portuguese

Question	Original version (English)	Synthesis of the translation	Final version (Portuguese)
Enunciation	This questionnaire consists of 12 statements with	Este questionário consiste em 12 afirmações com	Este questionário consiste em 12 declarações
	4 possible answers: "I fully agree", "I agree", "I don't agree" and "I do not agree at all". Please	4 respostas possíveis: "Eu concordo plenamente", "Eu concordo", "Eu não concordo" e "Eu não	com 4 respostas possíveis: "Eu concordo totalmente", "Eu concordo", "Eu não concordo"
	read every statement precisely and think about	concordo de forma alguma". Por favor, leia cada	e "Eu não concordo de forma alguma". Por favor,
	to what extent the statement is applicable to you	afirmativa com atenção e pense em até que ponto	leia cada declaração com atenção e pense em
	in the last two weeks including today. Please	a afirmação se aplica a você nas duas últimas	até que ponto a declaração se aplica a você nas
	mark (tick) the right answer for you. Please cross	semanas, incluindo hoje. Por favor, marque (faça	últimas duas semanas, incluindo hoje. Por favor,
	only one answer at a time and do not leave any	um X) a resposta correta para você. Por favor,	marque um X na resposta correta para você. Por
	statements open	marque apenas uma resposta por vez e não deixe nenhuma afirmativa em aberto	favor, marque apenas uma resposta por vez e não deixe nenhuma declaração em aberto
1	I am happy and I smile often	Eu estou feliz e sorrio frequentemente	Eu estou feliz e sorrio frequentemente
2	I can appreciate life despite my circumstances	Eu consigo apreciar a vida apesar das minhas circunstâncias	Eu consigo apreciar a vida apesar das minhas limitações
3	I can get away from it all and I am often relaxed	Eu consigo me desligar de tudo e me sinto frenquentemente relaxado(a)	Eu consigo me desligar de tudo e me sinto frequentemente relaxado(a)
4	I feel alive and vital	Eu me sinto vivo(a) e com muita energia	Eu me sinto vivo(a) e com muita energia
5	More often than not I am sad	Geralmente, eu me sinto triste	Com muita frequência, eu me sinto triste
6	I have lost all interest in family and friends	Eu perdi todo o interesse na família e nos amigos	Eu perdi todo o interesse na família e nos amigos
7	Most often I feel empty	Na maioria das vezes eu me sinto vazio(a)	Frequentemente eu me sinto vazio(a)
8	There is nothing that I look forward to or that I can enjoy	Não existe nada pelo que eu anseie ou que eu possa apreciar	Não existe nada que eu me interesse ou que eu possa apreciar
9	I often feel lost and abandoned and don't know how to carry on	Eu costumo me sentir perdido(a) e abandonado(a) e não sei como seguir em frente	Eu geralmente me sinto perdido(a) e abandonado(a) e não sei como seguir em frente
10	I look forward to every new day	Eu fico ansioso(a) por cada novo dia	Eu fico ansioso(a) por cada novo dia
11	I often wish I were dead	Eu desejo estar morto(a) com frequência	Eu frequentemente desejo estar morto(a)
12	I feel like I have lost all of my energy	Eu me sinto como se tivesse perdido toda minha energia	Sinto como se tivesse perdido toda a minha energia

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In the clause "I can appreciate life", the verb "can" means ability and not permission; therefore the clause was translated as "eu consigo apreciar a vida" instead of "eu posso apreciar a vida". The term "get away from it" is best translated as "se desligar"; thus the clause "I can get away from it all" was translated as "eu consigo me desligar de tudo" instead of "eu consigo me livrar de tudo" or "eu consigo lidar com tudo". The remaining questions required less adaptation since their literal translation expressed their real intention and did not compromise the intended meaning.

In this cultural adaptation process the patients encountered no difficulty during the application of any of the questions. Therefore, the ADI-12 was considered equivalent to the original English version in terms of semantics and expression of concepts, without requiring subsequent adjustments.

Translation of the ADI-12 to Brazilian Portuguese and its adaptation to the socioeconomic and cultural conditions of our people makes this instrument a useful additional parameter to help identify depression symptoms in patients with ALS, thereby improving the care provided to these individuals. A study with a larger sample size is needed to validate the instrument.

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