

## Cross-cultural adaptation of the *Four Habits Coding Scheme* (4HCS) for teaching and assessing patient-centered communication skills in Brazil

Adaptação transcultural do *Four Habits Coding Scheme* (4HCS) para o ensino e avaliação de habilidades de comunicação centradas no paciente no Brasil

Adaptación transcultural del *Four Habits Coding Scheme* (4HCS) para la enseñanza y evaluación de habilidades de comunicación centradas en el paciente en Brasil

Renata Rodrigues Catani <sup>1</sup>  
Emiliana dos Santos Valadares <sup>1</sup>  
Julianni Bernardelli Lacombe <sup>1</sup>  
Tânia Maria da Silva Mendonça <sup>1</sup>  
Carlos Henrique Martins da Silva <sup>1</sup>  
Helena Borges Martins da Silva Paro <sup>1</sup>

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### Abstract

Brazilian educational guidelines reinforce patient-centered care communication skills as an important competence for medical students. The Four Habits Coding Scheme (4HCS) is an instrument used for teaching and assessing clinicians' communication skills in a person-centered care approach. We aimed to translate and culturally adapt the 4HCS into Brazilian Portuguese. The translation process was accomplished in seven stages: initial translation, reconciliation, back translation, review by the author, independent review, consensus version through Delphi technique, review by a language coordinator, and pretest. During pretest, three independent observers assessed four medical consultations, which were performed by medical students and residents, that had been recorded in a real healthcare scenario. Reviewers had difficulty in reaching consensus on expressions referring to understanding the person as a whole, such as "Engage in small talk", "Expansion of concerns", "Elicit full agenda", "Use patient's frame of reference", and "Explore plan acceptability". They also had difficulty in reaching consensus on the translation of the word "clinician", which was first translated as "physician". Historical and cultural issues in the physician-patient relationship may have influenced this result. The Brazilian 4HCS is a culturally, conceptually, semantically and operationally sound instrument. It may represent an important advance for strengthening the person-centered care model in Brazil.

Patient-centered Care; Health Communication; Medical Education; Educational Measurement; Cross-cultural Comparison

### Correspondence

R. R. Catani  
Faculdade de Medicina, Universidade Federal de Uberlândia.  
Av. Pará 1720, Bloco 2U, Sala 23, Uberlândia,  
MG 38400-902, Brasil.  
renata\_rcatani@hotmail.com

<sup>1</sup> Universidade Federal de Uberlândia, Uberlândia, Brasil.



## Introduction

In recent years, studies have reinforced patient-centered communication as one of the main reasons for reaching success, satisfaction and positive impacts on health care <sup>1,2,3,4</sup>. In response to these results, several medical education guidelines <sup>5,6,7,8,9</sup> point to the need of formalizing the teaching and the assessment of patient-centered care (PCC) communication skills <sup>10</sup>. Despite Brazilian guidelines reinforcing communication skills as an important competence for medical students <sup>9</sup>, formal communication skills training is less frequently reported among Brazilian medical schools in comparison to schools in the United States of America and United Kingdom <sup>11</sup>. The scarce literature among Brazilian medical schools <sup>12,13,14,15</sup> also signalizes difficulties in implementing formal communication skills teaching in the country. The absence of validated tools for teaching and assessing communication skills in Brazil may be one of the contributing factors for this reality.

In the international context, several PCC-based tools have been developed to teach and assess communication skills in clinical practice <sup>16,17</sup>. In comparison to the *SEGUE-Framework* <sup>16</sup> and the *Calgary-Cambridge Guide* <sup>18</sup>, the *Four Habits Coding Scheme* (4HCS) is a shorter tool, with 5-point Likert scale items that distinguish students and health professionals into five different levels of performance (behavior categories), rather than into dichotomous behaviors (satisfactory/unsatisfactory or yes/no). In the 4HCS, behaviors are coded according to categories defined under a conceptual model <sup>19</sup>. Besides, the 4HCS was originally designed for use among health professionals and students, not only physicians and medical students.

The 4HCS is a user-friendly instrument that requires no technology nor faculty development programs for use. It is a low-cost tool that organizes the teaching of communication skills and assesses both medical students and health professionals in real life situations on a formative and summative basis. It is a relatively new instrument that has been validated only in English <sup>19</sup> (with tests of internal consistency, inter-rater reliability and criterion validity) and German <sup>20</sup> (with tests of internal consistency, inter-rater reliability, construct and criterion validity).

A Brazilian version equivalent to the original instrument may help boosting the communication skills teaching and research in Brazil as well as contribute to comparisons of communication skills outcomes among studies using the 4HCS in other countries. To this end, this study aims to translate and culturally adapt the 4HCS into Brazilian Portuguese.

## Methods

This is a cross-cultural adaptation study, approved by the local research ethics committee, held after permission by E. Krupat, the author of the instrument. Students, residents and patients signed an informed consent form allowing recordings in the pretest stage.

### Instrument

The 4HCS consists of 23 items rated on a 5-point Likert scale, with examinees being rated into 5 levels of performance (behavior categories). Higher scores indicate greater patient-centered communication skills <sup>12</sup>. The items are divided into four domains that describe and measure medical behaviors based on previous experiences with the *Four Habits Model* <sup>14</sup>. The *Four Habits Model* presents an organized way of thinking and acting in a clinical encounter in a PCC-based approach: (1) Invest in the beginning (6 items); (2) Elicit patient's perspective (3 items); (3) Demonstrate empathy (4 items); (4) Invest in the end (10 items).

### Procedure

Cross-cultural adaptation was performed according to international guidelines <sup>21,22</sup> (Figure 1). In the first stage – forward translation – two bilingual translators native of Brazilian Portuguese produced two independent translations of the instrument from English into Brazilian Portuguese. In the second stage, a bilingual healthcare professional native of Brazilian Portuguese performed the reconciliation

of the previous translations. In the third stage – back translation – an American translator fluent in Portuguese translated the reconciled version back into the original language. In the fourth stage, the author of the instrument made comments on the back translated version.

In the fifth stage, items, behavior categories, expressions, sentences or words identified as lacking semantic, idiomatic, experimental or conceptual equivalences in any stage of the translation process were sent to review. Five bilingual reviewers native of Brazilian Portuguese (two professional translators and three physicians with experience in the translation process of outcome measures) assessed all previous stages to choose the best translated option for the instrument. The modified Delphi technique<sup>23,24</sup> was used to reach consensus among reviewers in iterative electronic rounds organized by two research coordinators in semi-structured questionnaires on the Delphi Decision Aid website (<http://armstrong.wharton.upenn.edu/delphi2/>).

After each round, independent reviewers received feedback on the statistical analysis of responses. They also received suggestions made by other reviewers in each round. Questionnaires answered by the independent reviewers comprised the entire process of translation and were available to the reviewers during the entire process, which totaled four rounds. The process was completed after meeting at least 80% of consensus among participants<sup>23,24</sup>.

After adjustments made by the language coordinator (stage six), the instrument was sent to its author to produce the pre-final version. Three professors experienced in teaching communication skills, who did not participate in the previous stages, pretested the pre-final version (stage seven). They assessed four videos of real consultations provided by medical students and residents. After observing the videos, professors answered to a cognitive and retrospective interview aimed at assessing comprehension, applicability and relevance of items and behavior categories<sup>25</sup>. They also provided suggestions for improvement of the instrument<sup>26</sup>. The final Brazilian version of the 4HCS was produced after the pretest (Figure 1). See final version of the Brazilian 4HCS in the Supplementary Material ([http://cadernos.ensp.fiocruz.br/csp/public\\_site/arquivo/suplementar\\_2178.pdf](http://cadernos.ensp.fiocruz.br/csp/public_site/arquivo/suplementar_2178.pdf)).

## Results

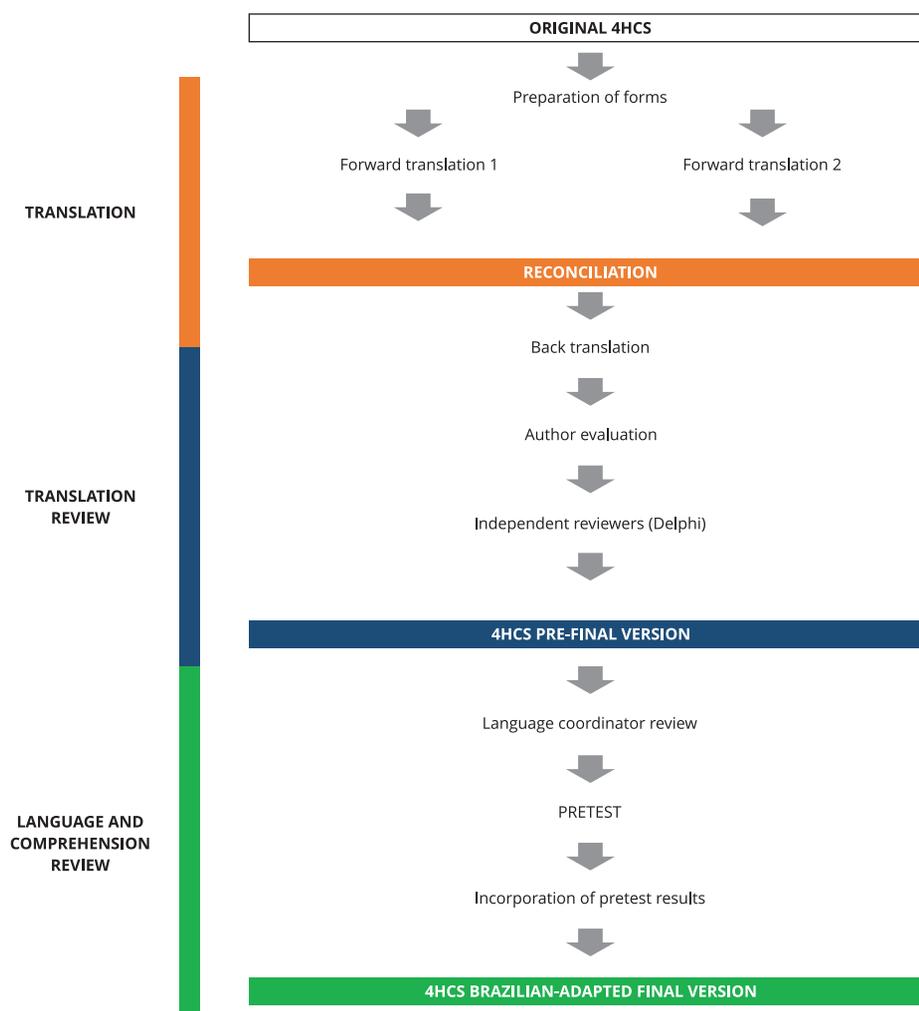
The items that assess healthcare professionals' patient-centered behaviors during the clinical encounter required many rounds to achieve consensus in the Delphi technique. Only one item achieved consensus in the first round. To achieve the pre-final version, 62.5% of the items required at least three rounds. The items that posed the most difficulties were "Engage in small talk", "Expansion of concerns", "Elicit full agenda", "Use patient's frame of reference", and "Explore plan acceptability" (Table 1).

Some words in the category behavior were discrepant in the versions of the first three translation stages. Such discrepancies were solved either by applying the Delphi technique (Table 2) or by following the language coordinator's guidance (pre-final version). Consensus was reached in the first round in 80% of the words for which Delphi technique was necessary. The word "clinician", found in 91.3% of the category behavior, was translated and back translated as "physician". In the second round, even after been exposed to the dictionary definitions of the words "clinician", "physician", "*clínico*" and "*médico*", the independent reviewers' consensus was that its translation should remain as "physician" ("*médico*"). The language coordinator adjusted this word to "clinician" [healthcare professional], with the agreement of the author of the instrument, who stated that the target population of the 4HCS are health professionals, that is physicians, psychologists, nurses, or whoever is directly involved in patient care.

All participants in the pretest stage considered all items and behavior categories relevant and easy to understand. The three observers considered the instrument easy to use, although two of them pointed out that it takes long to complete the assessment. To solve this time issue, one of the observers suggested that the habits should be assessed separately. Another observer suggested that the item "Greet warmly" should be placed before the item "Show familiarity" in Habit 1. This suggestion was incorporated to the final version and aimed to facilitate the assessment by respecting the logical sequence of events in a clinical encounter (Supplementary Material: [http://cadernos.ensp.fiocruz.br/csp/public\\_site/arquivo/suplementar\\_2178.pdf](http://cadernos.ensp.fiocruz.br/csp/public_site/arquivo/suplementar_2178.pdf)).

**Figura 1**

Translation and cultural adaptation of the *Four Habits Coding Scheme* (4HCS).



Fourteen items required adjustments after pretest to ensure better understanding among respondents and equivalence with the original version (Table 3). Among such changes, there is the inclusion of the meaning of the concept “staccato style” in one of the behavior categories of the item “Question style” of Habit 1.

## Discussion

In Brazil, the PCC approach has been introduced in recent years, especially in the family practice scenario<sup>3,27</sup>. However, to the best of our knowledge, this is the first study carried out in Brazil that aims to translate and culturally adapt an instrument for teaching and assessing clinician’s communication in real scenarios as a strategy to improve patient care.

**Table 1**

Process to solve discrepant translations of items through Delphi technique.

Original item		Translations	Number of rounds to reach consensus	Percentage of consensus
Show familiarity	T1	<i>Mostrar familiaridade</i>	2	100
	T2	<i>Demonstrar familiaridade</i>		
	REC	<i>Demonstrar familiaridade</i>		
	BT	To demonstrate familiarity		
	Final	<b><i>Demonstra familiaridade</i></b>		
Greet warmly	T1	<i>Cumprimentar calorosamente</i>	2	100
	T2	<i>Cumprimentar afetuosamente</i>		
	REC	<i>Cumprimentar calorosamente</i>		
	BT	A warm greeting		
	Final	<b><i>Cumprimenta cordialmente</i></b>		
Engage in small talk	T1	<i>Estabelecer diálogo</i>	3	80
	T2	<i>Estabelecer-se em uma conversa</i>		
	REC	<i>Envolver-se no diálogo</i>		
	BT	Involvement in a dialogue		
	Final	<b><i>Envolve-se em conversas sobre assuntos gerais</i></b>		
Expansion of concerns	T1	<i>Expansão das preocupações</i>	4	80
	T2	<i>Aumento das preocupações</i>		
	REC	<i>Obtendo as queixas</i>		
	BT	Receiving complaints		
	Final	<b><i>Aborda outras queixas (além da principal)</i></b>		
Elicit full agenda	T1	<i>Obter cronograma completo</i>	3	80
	T2	<i>Obter agenda cheia</i>		
	REC	<i>Obter cronograma completo</i>		
	BT	Obtaining the complete chronogram		
	Final	<b><i>Obtém a agenda completa (queixas, preocupações, sentimentos e expectativas)</i></b>		
Use patient's frame of reference	T1	<i>Usar o quadro de referência do paciente</i>	3	80
	T2	<i>Quadro de referência de uso do paciente</i>		
	REC	<i>Utilizar o quadro do paciente como referência</i>		
	BT	Use of the patient's file reference		
	Final	<b><i>Utiliza as vivências e percepções do paciente como referência para o compartilhamento de informações</i></b>		
Offer rationale for tests	T1	<i>Oferecer lógica para os exames</i>	1	80
	T2	<i>Oferecer uma explicação para os testes</i>		
	REC	<i>Oferecer uma explicação para os exames</i>		
	BT	Explanation of test results		
	Final	<b><i>Oferece uma explicação para os exames</i></b>		
Explore plan acceptability	T1	<i>Explorar a aceitabilidade do plano</i>	3	100
	T2	<i>Explorar a aceitabilidade do método</i>		
	REC	<i>Oferecer uma explicação para os exames</i>		
	BT	Acceptance of treatment		
	Final	<b><i>Explora a aceitabilidade do plano terapêutico</i></b>		

BT: back translation; REC: reconciliation; T1: forward translation 1; T2: forward translation 2.

**Table 2**

Process to solve discrepant translations of items in the category behavior through Delphi technique.

Words	Translations	Number of rounds to reach consensus	Percentage of consensus	
Clinician	T1	<i>Médico</i>	2	100
	T2	<i>Clínico</i>		
	REC	<i>Médico</i>		
	BT	Physician		
	Final	<b><i>Profissional de saúde</i></b>		
Chart	T1	<i>Prontuário</i>	1	80
	T2	<i>Ficha</i>		
	REC	<i>Prontuário</i>		
	BT	File		
	Final	<b><i>Prontuário</i></b>		
Visits	T1	<i>Visita</i>	1	100
	T2	<i>Consulta</i>		
	REC	<i>Visita</i>		
	BT	Visits		
	Final	<b><i>Consulta</i></b>		
Labeling	T1	<i>Nomeação</i>	1	80
	T2	<i>Classificação</i>		
	REC	<i>Nomeação</i>		
	BT	Speak of		
	Final	<b><i>Nomeando</i></b>		
Cursory	T1	<i>Superficial</i>	1	80
	T2	<i>Apressada</i>		
	REC	<i>Apressada</i>		
	BT	Quickly		
	Final	<b><i>Rápida/Superficial</i></b>		

BT: back translation; REC: reconciliation; T1: forward translation 1; T2: forward translation 2.

Although the national curriculum guidelines<sup>9</sup> place good communication as one of medical students' core competences, no valid instrument is available to systematize the teaching of healthcare communication skills in Brazil. It is interesting to notice that Brazilian public health policies have been reinforcing the importance of communication in building one's autonomy and empowerment for over ten years<sup>28,29</sup>.

The time gap between the national curricular guidelines and the emergence of one of first instruments translated and adapted into Brazilian Portuguese reflects a complex reality in our country. Medical training often neglects the public health policies debate in Brazil<sup>28</sup>. The divergence between public education and health policies derives from a disease-based model and a "complaint-action" orientation widespread in our society<sup>28</sup>. In this model, the physician usually has the knowledge and the power to decide upon both patient and staff; thus, the physician-patient relationship is often considered an "activity-passivity" or "guidance-cooperation" one<sup>30</sup>. This type of relationship is usually asymmetrical and paternalist<sup>31</sup>.

This asymmetry in the physician-patient interaction is not exclusive to Brazil. Countries that have undergone curriculum reforms in medical education over forty years ago and have included scientific evidence-based strategies in communication skills training<sup>32,33</sup> have also faced difficulties in establishing less asymmetric relationships in healthcare<sup>34</sup>. The persistence of this phenomenon lays on dominance and power issues inherent to the social function of medical practice. Patients' deference to physician authority seems to be common in the asymmetric physician-patient relationship<sup>34</sup>. In a PCC approach, the necessary changes in health care and in physicians' attitudes and behavior

**Table 3**Pre-final version, pretest suggestions and final version of the *Four Habits Coding Scheme* (4HCS).

Pre-final version	Pretest suggestions	Final item
<b>Brevemente; breve</b> (...) ( <b>estilo staccato</b> ).	<b>Rapidamente; rápido</b> (...) ( <i>estilo staccato – de forma rápida e com interrupções bruscas</i> ).	<b>Rapidamente; rápido</b> (...) ( <b>estilo staccato – de forma rápida e com interrupções bruscas</b> ).
(...) ( <i>emite sinais verbais e não verbais de que está tudo bem...</i> )	(...) ( <i>emite sinais verbais e não verbais (contato visual, tom de voz, ...) de que está tudo bem...</i> )	(...) ( <b>emite sinais verbais e não verbais de que está tudo bem...</b> )
(...) <i>dando a ele/ela pouca ou nenhuma explicação sobre eles</i> .	(...) <i>dando a ele/ela pouca ou nenhuma explicação</i> .	(...) <b>dando a ele/ela pouca ou nenhuma explicação sobre eles</b> .
(...) <i>avalia brevemente ou de forma ineficaz</i> (...) <b>claramente</b> <i>incentiva e convida o(a) paciente</i>	(...) <i>avalia rapidamente, de forma ineficaz</i> (...) <b>incentiva claramente</b> <i>e convida o(a) paciente</i>	(...) <b>avalia rapidamente ou de forma ineficaz</b> (...) <b>incentiva claramente e convida o(a) paciente</b>
<i>Explora a <b>aceitabilidade</b> do plano terapêutico</i>	<i>Explora a <b>concordância com</b> o plano terapêutico</i>	<b>Explora a aceitabilidade do plano terapêutico</b>
(...) <b>implementação</b> <i>do plano terapêutico</i> .	(...) <b>adesão</b> <i>ao plano terapêutico</i> .	(...) <b>adesão ao plano terapêutico</b> .
(...) <i>faz planos <b>facilmente</b> compreensíveis e específicos</i>	(...) <i>faz planos compreensíveis e específicos</i>	(...) <b>faz planos compreensíveis e específicos</b>

engender psychological, political and sociological conflicts that certainly pose difficulties in such a paradigm shift. In addition to the difficulties in establishing a patient-centered communication, there seems to be remnants of a social structure and a relationship historically controlled by the physician and influenced by patriarchy and capitalism<sup>35</sup>.

This complex framework may have influenced the results of the translation stages of the 4HCS. The reality experienced by health professionals and translators seems to hamper consensus regarding expressions and words that refer to an active engagement of the patient and even to the physician-patient partnership in a holistic approach to the person. In our study, medical specialists and translators had difficulty in reaching consensus on expressions that refer to the understanding the whole person, which one of the PCC core principles<sup>3</sup>.

The translation of the word “clinician” is the most typical example of the difficulty in incorporating PCC principles into Brazilian medical practice. We believe that the difficulty in translating the word “clinician” and reaching consensus through the Delphi technique may be related to historical and political issues surrounding the medical profession. Even when provided with the definition of “clinician”, both physicians and translators could not come to terms with it appropriately. In our opinion, the historically dominant physician behavior and the idea that the physician is the one responsible for establishing communication<sup>34</sup> may have influenced this result, eventually requiring the author’s intervention. Difficulties in implementing PCC may be even higher in the context of clinical practice. Rhetoric-practice gaps have been identified among institutions that have embraced PCC in their overall mission, primarily due to difficulties in changing the “mindset” of health professionals<sup>36</sup>.

Linguistics barriers in translation were also found. Upon author’s approval, the language coordinator also modified the pre-final version of the instrument to meet grammatical and stylistic conventions in Brazilian Portuguese and to provide comprehension and terminological standardization. Such adjustments were necessary to overcome collocation inadequacies and literal translation, found in the pre-final version. Studies have reported the importance of cultural adaptation in the expressions used in the instruments. They have also suggested that culture inadequacies and imperfections in this stage of the translation process may lead to failures in the instruments’ validation process<sup>37,38</sup>.

A pretest with retrospective and cognitive interviews targeted the respondents’ comprehension of the translated items<sup>22</sup> and ensured that the translated instrument was both equivalent to the original and culturally adapted to Brazil. One example of adaptation is the introduction of an explanation for

the term “staccato style”, which had already been pointed out by the author of the instrument, as it may be an unknown expression among health care providers.

The use of rigorous translation and adaptation techniques with the participation of a group of qualified experts and language coordinators has resulted in a sound instrument. The Brazilian version of the 4HCS is an instrument that is culturally, conceptually, semantically and operationally equivalent to the original instrument<sup>38</sup>.

Our study has some limitations. Although the 4HCS has been designed for direct observation of students and health professionals without the requirement of technology, we used video recordings for pretesting the instrument. This approach may have influenced our results. Nevertheless, video recordings have also been used in previous adaptation and validation studies of the 4HCS<sup>19,20</sup>. Also, we did not perform factor analysis of the 4HCS. Therefore, we encourage future validation studies to test structural validity of the 4HCS and to evaluate the suggestion of assessing the habits separately, as time constraints may pose difficulties in implementing the 4HCS in educational and clinical practice.

## Conclusion

The translation of the 4HCS resulted in an instrument adapted to the Brazilian culture, which can be used as an instrument for teaching and assessing communication skills in Brazilian medical schools. Future instrument validation studies should assess the psychometric properties of the items, especially of those that posed difficulty in the translation process. The Brazilian version of the 4HCS may represent an important advance for strengthening of the person-centered care model in Brazil.

## Contributors

R. R. Catani and H. B. M. S. Paro contributed to the study design, data analysis and interpretation, and writing of the manuscript. E. S. Valadares contributed to the study design, data analysis and interpretation, and revision of manuscript. J. B. Lacombe contributed to data collection, data analysis, and revision of manuscript. T. M. S. Mendonça evaluated the data analysis and contributed to the writing of the article. C. H. M. Silva contributed to the study design, data analysis, and writing of the article.

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## References

1. Pendleton D, editor. *The consultation: an approach to learning and teaching*. New York: Oxford University Press; 1984. (Oxford General Practice Series).
2. Stewart MA. What is a successful doctor-patient interview? A study of interactions and outcomes. *Soc Sci Med* 1984; 19:167-75.
3. Stewart M, editor. *Patient-centered medicine: transforming the clinical method*. 3<sup>rd</sup> Ed. London: Radcliffe Publishing; 2014.
4. Stewart M, Brown JB, Donner A, McWhinney IR, Oates J, Weston WW, et al. The impact of patient-centered care on outcomes. *J Fam Pract* 2000; 49:796-804.
5. Association of American Medical Colleges. *Core entrustable professional activities for entering residency – curriculum developers’ guide*. Washington DC: Association of American Medical Colleges; 2014.
6. General Medical Council. *Tomorrow’s doctors*. London: General Medical Council; 2009.
7. Royal College of Physicians. *Doctors in society: medical professionalism in a changing world: report of a working party* December 2005. London: Royal College of Physicians; 2005.
8. World Federation for Medical Education. *WFME global standards for quality improvement*. Copenhagen: WFME Office/University of Copenhagen; 2003.
9. Câmara de Educação Superior. Resolução nº 3, de 20 de junho de 2014. Institui Diretrizes Curriculares Nacionais do Curso de Graduação em Medicina e dá outras providências. *Diário Oficial da União* 2014; 23 jun.

10. Silverman J, Kurtz SM, Draper J. Skills for communicating with patients. 3<sup>rd</sup> Ed. London: Radcliffe Publishing; 2013.
11. Liberali R, Novack D, Duke P, Grosseman S. Communication skills teaching in Brazilian medical schools: what lessons can be learned? *Patient Educ Couns* 2018; 101:1496-9.
12. Turini B, Martins Neto D, Tavares MS, Nunes SOV, Silva VLM, Thomson Z. Comunicação no ensino médico: estruturação, experiência e desafios em novos currículos médicos. *Rev Bras Educ Méd* 2008; 32:264-70.
13. Marco MAD, Vessoni AL, Capelo A, Dias CC. Laboratório de comunicação: ampliando as habilidades do estudante de medicina para a prática da entrevista. *Interface Comun Saúde Educ* 2010; 14:217-27.
14. Jucá NBH, Gomes AMA, Mendes LS, Gomes DM, Martins BVL, Silva CMGC, et al. A comunicação do diagnóstico "sombrio" na relação médico-paciente entre estudantes de Medicina: uma experiência de dramatização na educação médica. *Rev Bras Educ Méd* 2010; 34:57-64.
15. Stelet BP, Castiel LD, Moraes DR. *Anomalia* e o ensino da comunicação clínica na prática médica. *Cad Saúde Pública* 2017; 33:e00154016.
16. Makoul G. The SEGUE Framework for teaching and assessing communication skills. *Patient Educ Couns* 2001; 45:23-34.
17. Zill JM, Chrastalle E, Müller E, Härter M, Dirmaier J, Scholl I. Measurement of physician-patient communication: a systematic review. *PLoS One* 2014; 9:e112637.
18. Kurtz SM, Silverman JD. The Calgary-Cambridge Referenced Observation Guides: an aid to defining the curriculum and organizing the teaching in communication training programmes. *Med Educ* 1996; 30:83-9.
19. Krupat E, Frankel R, Stein T, Irish J. The Four Habits Coding Scheme: validation of an instrument to assess clinicians' communication behavior. *Patient Educ Couns* 2006; 62:38-45.
20. Scholl I, Nicolai J, Pahlke S, Kriston L, Krupat E, Härter M. The German version of the Four Habits Coding Scheme – association between physicians' communication and shared decision making skills in the medical encounter. *Patient Educ Couns* 2014; 94:224-9.
21. Wild D, Grove A, Martin M, Eremenco S, McElroy S, Verjee-Lorenz A, et al. Principles of good practice for the translation and cultural adaptation process for patient-reported outcomes (PRO) measures: report of the ISPOR Task Force for Translation and Cultural Adaptation. *Value Health* 2005; 8:94-104.
22. Eremenco SL, Cella D, Arnold BJ. A comprehensive method for the translation and cross-cultural validation of health status questionnaires. *Eval Health Prof* 2005; 28:212-32.
23. Hasson F, Keeney S, McKenna H. Research guidelines for the Delphi survey technique. *J Adv Nurs* 2000; 32:1008-15.
24. Hsu C-C, Sandford B. The Delphi technique: making sense of consensus. *Practical Assessment, Research & Evaluation* 2007; 12:1-8.
25. Willis GB. Cognitive interviewing: a tool for improving questionnaire design. Thousand Oaks: Sage Publications; 2005.
26. Ruperto N, Ravelli A, Pistorio A, Malattia C, Cavuto S, Gado-West L, et al. Cross-cultural adaptation and psychometric evaluation of the Childhood Health Assessment Questionnaire (CHAQ) and the Child Health Questionnaire (CHQ) in 32 countries. Review of the general methodology. *Clin Exp Rheumatol* 2001; 19(4 Suppl 23):S1-9.
27. Ruben R, Oliveira ACD, Savassi LCM, Souza LC, Dias RB. Abordagem centrada nas pessoas. *Rev Bras Med Fam Comunidade* 2009; 4:245-59.
28. Núcleo Técnico da Política Nacional de Humanização, Secretaria-Executiva, Ministério da Saúde. HumanizaSUS – Política Nacional de Humanização. A humanização como eixo norteador das práticas de atenção e gestão em todas as instâncias do SUS. Brasília: Ministério da Saúde; 2004.
29. Ministério da Saúde. Cadernos HumanizaSUS. Brasília: Ministério da Saúde; 2012. (Série B: Textos Básicos de Saúde).
30. Szasz TS, Hollender MH. A contribution to the philosophy of medicine: the basic models of the doctor-patient relationship. *AMA Arch Intern Med* 1956; 97:585-92.
31. Kaba R, Sooriakumaran P. The evolution of the doctor-patient relationship. *Int J Surg* 2007; 5:57-65.
32. Dwamena F, Holmes-Rovner M, Gauden CM, Jorgenson S, Sadigh G, Sikorskii A, et al. Interventions for providers to promote a patient-centred approach in clinical consultations. *Cochrane Database Syst Rev* 2012; (12):CD003267.
33. Lewin SA, Skea ZC, Entwistle V, Zwarenstein M, Dick J. Interventions for providers to promote a patient-centred approach in clinical consultations. *Cochrane Database Syst Rev* 2001;(4):CD003267.
34. Pilnick A, Dingwall R. On the remarkable persistence of asymmetry in doctor/patient interaction: a critical review. *Soc Sci Med* 2011; 72:1374-82.
35. Boden D, Zimmerman DH, editors. Talk and social structure: studies in ethnomethodology and conversation analysis. Berkeley: University of California Press; 1991.
36. Nelson WA, Forcino RC, Elwyn G. Patient-centered organizational statements: merely rhetoric? A survey of health care leaders. *Health Care Manag (Frederick)* 2017; 36:342-6.
37. Gjersing L, Caplehorn JR, Clausen T. Cross-cultural adaptation of research instruments: language, setting, time and statistical considerations. *BMC Med Res Methodol* 2010; 10:13.
38. Reichenheim ME, Moraes CL. Operationalizing the cross-cultural adaptation of epidemiological measurement instruments. *Rev Saúde Pública* 2007; 41:665-73.

## Resumo

As diretrizes brasileiras para a educação enfatizam as habilidades de comunicação centradas no paciente enquanto importante competência para os estudantes de medicina. O Four Habits Coding Scheme (4HCS) é um instrumento utilizado no ensino e avaliação das habilidades de comunicação do clínico em uma abordagem de cuidado centrado na pessoa. O nosso objetivo foi traduzir e realizar a adaptação transcultural do 4HCS para o português do Brasil. O processo de tradução foi realizado em sete estágios: tradução independente, reconciliação, retro-tradução, revisão pelo autor, revisão independente – consenso através da técnica Delphi –, revisão por um coordenador linguístico e pré-teste. Durante o pré-teste, três observadores independentes avaliaram quatro consultas médicas realizadas por estudantes e residentes de medicina que foram gravadas em um cenário de atendimento real. Os revisores tiveram dificuldade em chegar a um consenso sobre expressões referentes à compreensão da pessoa como um todo, tais como “engage in small talk”, “expansion of concerns”, “elicit full agenda”, “use patient’s frame of reference” e “explore plan acceptability”. Também tiveram dificuldade em chegar a um consenso sobre a tradução da palavra “clinician”, que fora traduzida primeiro como “médico”. Questões históricas e culturais na relação médico-paciente podem ter influenciado o resultado. A versão brasileira do 4HCS é um instrumento válido no sentido cultural, conceitual, semântico e operacional. Pode representar um avanço importante no fortalecimento do modelo de cuidado centrado no paciente no Brasil.

*Assistência Centrada no Paciente; Comunicação em Saúde; Educação Médica; Avaliação Educacional; Comparação Transcultural*

## Resumen

Las directrices brasileñas para la educación enfatizan las habilidades de comunicación centradas al paciente, por considerarla una importante competencia para los estudiantes de medicina. El Four Habits Coding Scheme (4HCS) es un instrumento utilizado en la enseñanza y evaluación de las habilidades de comunicación dentro del ámbito clínico, desde una perspectiva de cuidado centrado en la persona. El objetivo fue traducir y realizar la adaptación transcultural del 4HCS al portugués de Brasil. El proceso de traducción se realizó en siete fases: traducción independiente, conciliación, retro-traducción, revisión por parte del autor, revisión independiente -consenso a través de la técnica Delphi-, revisión por parte de un coordinador lingüístico y prueba previa. Durante la prueba previa, tres observadores independientes evaluaron cuatro consultas médicas, que fueron realizadas por estudiantes y residentes de medicina que se grabaron en un escenario de atención real. Los revisores tuvieron dificultades para llegar a un consenso sobre expresiones referidas a la comprensión de la persona como un todo, tales como “engage in small talk”, “expansion of concerns”, “elicit full agenda”, “use patient’s frame of reference” y “explore plan acceptability”. También tuvieron dificultades para llegar a un consenso sobre la traducción de la palabra “clinician”, que se tradujo en primera instancia como “médico”. Las cuestiones históricas y culturales en la relación médico-paciente pueden haber influenciado el resultado. La versión brasileña del 4HCS es un instrumento válido, en el sentido cultural, conceptual, semántico y operacional. Puede representar un avance importante en el fortalecimiento del modelo de cuidado centrado en el paciente en Brasil.

*Atención Dirigida al Paciente; Comunicación en Salud; Educación Médica; Evaluación Educacional; Comparación Transcultural*

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