



# Quality of Communication Questionnaire for COPD patients receiving palliative care: translation and cross-cultural adaptation for use in Brazil

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## ABSTRACT

**Objective:** To translate the Quality of Communication Questionnaire (QOC) to Portuguese and adapt it for use in Brazil in COPD patients receiving palliative care.

**Methods:** After approval from the first author of the original QOC and the local research ethics committee, the original, 13-item version of the questionnaire was independently translated to Brazilian Portuguese by two Brazilian translators fluent in English. The two translations were analyzed by a bilingual physician and the two Brazilian translators, who reached a consensus and produced another Portuguese version of the QOC. That version was back-translated to English by two translators originally from English-speaking countries and fluent in Portuguese. In order to resolve any discrepancies, an expert panel compared the original version of the QOC with all five versions produced up to that point, the “prefinal” version of the QOC for use in Brazil being thus arrived at. A total of 32 patients admitted to any of three public hospital ICUs in the greater metropolitan area of Florianópolis, in southern Brazil, participated in the pretesting phase of the study, which was aimed at assessing the clarity and cultural acceptability of the prefinal version of the QOC for use in Brazil. **Results:** Mean patient age was  $48.5 \pm 18.8$  years. Most of the items were well understood and accepted, being rated 8 or higher. One item, regarding death, was considered difficult to understand by the participants in the pretesting phase. After analyzing the back-translated version of the QOC, the first author of the original questionnaire requested that the items “Caring about you as a human being” and “Talking about what death might be like” be changed to “Caring about you as a person” and “Talking about how dying might be”, respectively. The final version of the QOC for use in Brazil was thus arrived at. **Conclusions:** The QOC was successfully translated to Portuguese and adapted for use in Brazil.

**Keywords:** Pulmonary disease, chronic obstructive; Surveys and questionnaires; Communication; Intensive care units.

## INTRODUCTION

The importance of physician-patient communication is well established<sup>(1,2)</sup> and has been confirmed in several studies demonstrating its association with positive patient health outcomes,<sup>(3-5)</sup> including better treatment response, easier decision-making,<sup>(6)</sup> better patient emotional well-being, and, consequently, greater patient satisfaction with care.<sup>(7,8)</sup>

Studies have shown that the quality of physician-patient communication is currently low,<sup>(9)</sup> and that physicians are often unaware of the preferences of their patients.<sup>(9,10)</sup> In a study conducted in Germany<sup>(11)</sup> and involving patients with multiple sclerosis, as well as in a study conducted in Australia<sup>(12)</sup> and involving patients with ductal carcinoma in situ, it was found that many of the participating patients were dissatisfied with the communication process and felt that they needed more information on the progression of their disease.

In a study conducted in eight European countries<sup>(13)</sup> and investigating the views of ICU patients and their relatives of what makes a good intensivist, it was found that desirable characteristics included medical knowledge and skills, as well as communication skills.

In Brazil, most of the studies addressing the issue of communication between health professionals and patients have focused on nurse-patient communication.<sup>(14-17)</sup> We found only one study addressing the issue of communication with physicians.<sup>(18)</sup> The study in question was a descriptive study aimed at determining the views that relatives of terminal ICU patients held on patient choice in end-of-life decisions, patient preferences and satisfaction with communication with the medical team being examined. The study showed that 53.3% of the patients had discussed their end-of-life care wishes with their relatives, but not with their physicians.

In a qualitative study involving focus groups of AIDS patients and physicians specializing in AIDS care, Curtis

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et al.<sup>(19)</sup> developed the Quality of Communication Questionnaire (QOC), which is aimed at evaluating the quality of patient-physician communication in palliative care settings. In 1999, the QOC was validated in a cohort of AIDS patients and their physicians,<sup>(20)</sup> and, in 2002,<sup>(21)</sup> it was used in a qualitative study involving focus groups of patients with AIDS, cancer, or COPD. In a study conducted in 2006,<sup>(22)</sup> principal component analysis was performed, having revealed two subscales, namely general communication skills and communication about end-of-life care, both of which showed good internal consistency ( $\alpha = 0.91$  and  $\alpha = 0.79$ , respectively); the content validity of the QOC showed significant associations ( $p < 0.01$ ).

In the USA, the QOC has been used in COPD patients receiving palliative care<sup>(21,22)</sup> and in studies involving a variety of patients with different clinical conditions. In Germany, the QOC has been used in order to assess the quality of communication between physicians and patients with multiple sclerosis.<sup>(11)</sup> In the USA<sup>(23-25)</sup> and in Canada,<sup>(26)</sup> the QOC has been used in order to assess the quality of communication between physicians and severely ill patients with a  $\geq 50\%$  chance of mortality. In the Netherlands, the QOC has been used in end-stage renal disease patients on dialysis,<sup>(27)</sup> as well as in patients with advanced COPD, chronic heart failure, or chronic kidney disease.<sup>(28)</sup>

Given the lack of studies evaluating physician-patient communication in Brazil with the use of a valid and reliable instrument in patients receiving palliative care, in terminally ill patients, and in ICU patients, we contacted the first author of the original QOC to ask whether it would be possible to translate it to Portuguese and adapt it for use in ICU patients in Brazil. After having received permission from the original author, we conducted the present study, the objective of which was to translate the QOC to Portuguese and adapt it for use in Brazil.

## METHODS

The present study was aimed at translating the QOC to Portuguese and adapting it for use in Brazil. The QOC is an instrument that can be used in order to evaluate the quality of communication between physicians and COPD patients receiving palliative care.

The QOC consists of 13 items divided into two domains: general communication skills (items 1 through 6) and communication skills about end-of-life care (items 7 through 13), with scores ranging from 0 (the very worst I could imagine) to 10 (the very best I could imagine). Patients are offered two additional response options: "my doctor did not do this" (allowing patients to leave the item unrated when it does not occur); and "don't know" (indicating that they are unsure of how to rate their doctor on a particular skill).

Permission to translate the QOC to Portuguese and adapt it and validate it for use in Brazil was granted by the first author of the original instrument via

email. The study project was approved by the Human Research Ethics Committee of the Federal University of Santa Catarina (Protocol no. 938.326), and the study was performed in accordance with established ethical standards.

The QOC was translated to Portuguese and adapted for use in Brazil in accordance with the method proposed by Beaton et al.<sup>(29)</sup> Initially, the original version of the QOC was independently translated to Portuguese by two Brazilian translators fluent in English. One of the translators was familiar with the QOC, whereas the other was not, having had no training in health care. The translated versions of the QOC were designated T1 and T2. Subsequently, the two translators and a bilingual physician compared T1 and T2 with the original version of the QOC, resolved all discrepancies, and, after reaching a consensus, produced a synthesis of T1 and T2, which was designated T12.

Two translators originally from English-speaking countries, fluent in Portuguese, with no training in health care, and unfamiliar with the original QOC, independently back-translated T12 to English. The back-translated versions of the QOC were designated BT1 and BT2. In order to achieve semantic, idiomatic, conceptual, and cultural equivalence among all five versions produced up to that point (i.e., T1, T2, T12, BT1, and BT2), an expert panel comprising two bilingual intensivists, two translators (the one who produced T1 and the one who produced BT1), a teacher of Portuguese, and a professor of methodology reviewed each item on the translated QOC, the "prefinal" version of the QOC for use in Brazil being thus arrived at. That was the version that was used in the pretesting phase of the study.

According to Beaton et al.,<sup>(29)</sup> the pretesting phase should include 30-40 participants. A convenience sample of ICU patients was used in the present study. The inclusion criteria were as follows: having been in the ICU for more than 24 h; being over 18 years of age; and being awake and lucid. The exclusion criteria were as follows: being in a coma; having a neurological or psychiatric disorder; presenting with hearing loss or any other condition affecting communication; and using medications that can alter the level of consciousness.

Data were collected between October and December of 2015 at times scheduled by the heads of the ICUs. The decision to study patients who were not terminally ill was based on the fact that this would open an avenue for further studies involving severely ill patients receiving intensive care. The first author of the original QOC gave us permission to study such patients.

After having received information regarding the objectives of the study and its ethical principles, participants were asked to evaluate the clarity and cultural appropriateness of the QOC. All participants gave written informed consent. A total of 32 patients admitted to any of three public hospital ICUs in the greater metropolitan area of Florianópolis, in southern Brazil, participated in the study.

The clarity and cultural appropriateness of all of the QOC components (i.e., instructions, items, and response options) were rated in accordance with the criteria proposed by Melo<sup>(30)</sup> on a scale ranging from 1 (not clear/appropriate at all) to 10 (completely clear/appropriate), items rated 8 or higher being considered satisfactory. Participants were asked for suggestions on how to improve the clarity and cultural appropriateness of items that were rated as being unclear or culturally inappropriate.

After analysis of all patient responses and suggestions, a review committee comprising three ICU physicians, two ICU nurses, and one ICU physical therapist made adjustments and prepared the final version of the QOC for use in Brazil, which was back-translated to English and sent to the first author of the original QOC. A flowchart of the process of translation and cross-cultural adaptation of the QOC is provided in Figure 1.

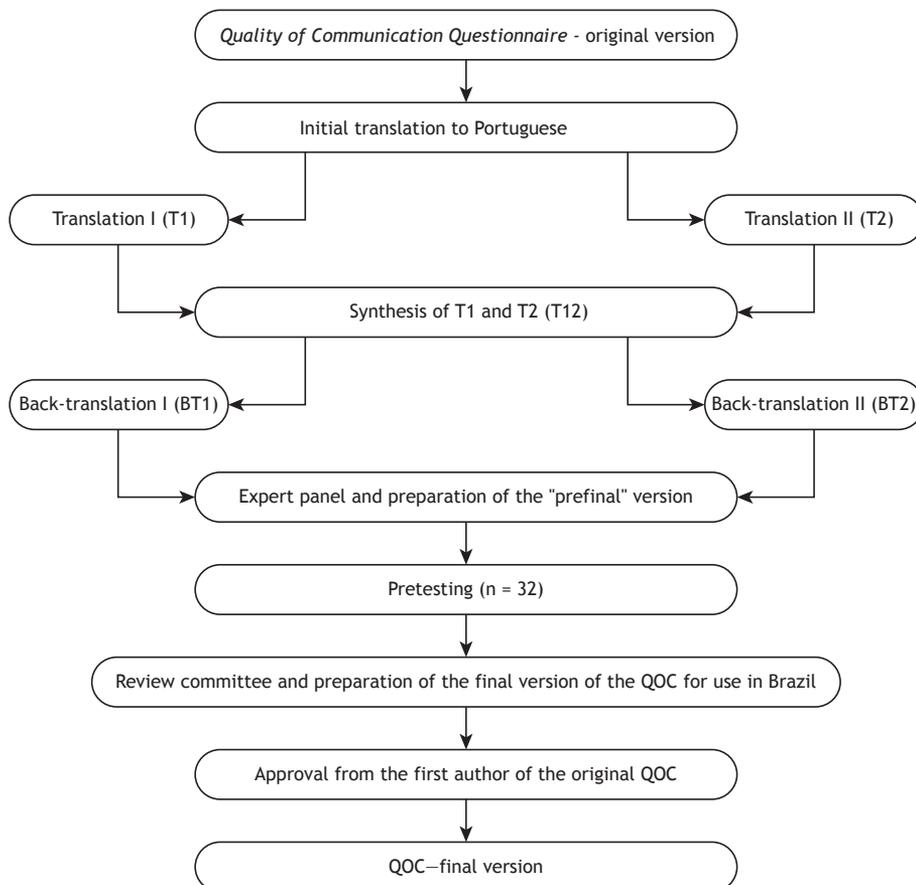
For statistical analysis, descriptive measures of frequency and central tendency were calculated. For between-group comparisons, the Student's t-test and the chi-square test were used for continuous and categorical variables, respectively. All statistical analyses were performed with the IBM SPSS Statistics

software package, version 19.0 (IBM Corporation, Armonk, NY, USA).

## RESULTS

Of the 32 participants, 21 were male (65.6%) and 11 were female (34.4%). Patient age ranged from 18 years to 82 years, the mean age being  $48.5 \pm 18.8$  years. With regard to patient level of education, 10 (31.3%) had had fewer than nine years of schooling, 5 (15.6%) had had nine years of schooling, 4 (12.5%) had not completed high school, and 11 (40.6%) had completed high school. The mean length of hospital stay was  $4.8 \pm 4.1$  days. Of the 32 patients, 16 (50%) had been admitted to the ICU for clinical reasons and 16 (50%) had been admitted to the ICU for surgical reasons (Table 1).

As can be seen in Table 2, item 10 was the only item that was rated as being unclear and culturally inappropriate (mean score,  $5.59 \pm 3.2$ ) and was therefore revised. Of the 32 patients who participated in the pretesting phase of the study, 62.5% rated that item 5 or lower, with no significant difference between males and females ( $p = 0.27$ ). The review committee considered the suggestions



**Figure 1.** Flowchart of the process of translation and cross-cultural adaptation of the Quality of Communication Questionnaire (QOC) for use in Brazil.

**Table 1.** Reasons for ICU admission in the individuals who participated in the process of translation and cross-cultural adaptation of the Quality of Communication Questionnaire for use in Brazil (N = 32), by gender.

Reasons for ICU admission	Gender		Total n (%)
	Male n (%)	Female n (%)	
<b>Clinical reasons (n = 16)</b>			
Stroke	2 (25.0)	-	2 (12.5)
Unstable angina	1 (12.5)	-	1 (6.3)
Acute myocardial infarction	-	1 (12.5)	1 (6.3)
COPD	1 (12.5)	1 (12.5)	2 (12.5)
Pulmonary embolism	-	1 (12.5)	1 (6.3)
Severe pneumonia	-	1 (12.5)	1 (6.3)
Liver cirrhosis	1 (12.5)	-	1 (6.3)
Pancreatitis	-	1 (12.5)	1 (6.3)
Sepsis	3 (37.5)	2 (25.0)	5 (31.3)
Severe allergic reaction	-	1 (12.5)	1 (6.3)
<b>Surgical reasons (n = 16)</b>			
Multiple trauma	1 (7.7)	-	1 (6.3)
Aortic valve replacement	2 (15.4)	-	2 (12.5)
Coronary artery bypass grafting	2 (15.4)	-	2 (12.5)
Lobectomy	-	1 (33.3)	1 (6.3)
Pneumonectomy	1 (7.7)	-	1 (6.3)
Partial colectomy	2 (15.4)	-	2 (12.5)
Hemicolectomy	1 (7.7)	-	1 (6.3)
Fournier's syndrome (necrotizing fasciitis)	1 (7.7)	-	1 (6.3)
Intestinal obstruction	1 (7.7)	-	1 (6.3)
Liver transplantation	1 (7.7)	-	1 (6.3)
Appendectomy	1 (7.7)	-	1 (6.3)
Placental abruption	-	1 (33.3)	1 (6.3)
Postpartum complications and hysterectomy	-	1 (33.3)	1 (6.3)

**Table 2.** Clarity and cultural appropriateness of each item on the Portuguese version of the Quality of Communication Questionnaire for use in Brazil, according to the 32 individuals who participated in the study.<sup>a</sup>

Number	Item	Clarity	Cultural appropriateness
1	<i>Usar palavras que você consiga compreender</i>	9.94 ± 0.25	9.94 ± 0.25
2	<i>Olhar em seus olhos</i>	9.88 ± 0.42	9.88 ± 0.42
3	<i>Responder a todas as suas dúvidas sobre sua doença</i>	9.81 ± 0.64	9.81 ± 0.64
4	<i>Ouvir o que você tem a dizer</i>	9.94 ± 0.25	9.94 ± 0.25
5	<i>Preocupar-se com você como ser humano</i>	9.91 ± 0.30	9.91 ± 0.30
6	<i>Dar atenção plena a você</i>	9.88 ± 0.42	9.88 ± 0.42
7	<i>Falar sobre os seus sentimentos se acaso você piorar</i>	9.72 ± 0.58	9.72 ± 0.58
8	<i>Falar sobre detalhes se acaso você piorar</i>	9.56 ± 1.01	9.56 ± 1.01
9	<i>Falar sobre quanto tempo você tem de vida</i>	9.78 ± 0.49	9.78 ± 0.49
10	<i>Falar sobre como pode ser o processo do morrer</i>	5.59 ± 3.16	5.59 ± 3.16
11	<i>Envolver você nas discussões do tratamento para seu cuidado</i>	9.34 ± 1.56	9.34 ± 1.56
12	<i>Perguntar sobre coisas importantes na sua vida</i>	9.75 ± 0.67	9.75 ± 0.67
13	<i>Perguntar sobre suas crenças espirituais ou religiosas</i>	9.69 ± 1.03	9.69 ± 1.03

<sup>a</sup>Values expressed as mean ± SD.

made by the participants and changed item 10 to read "Falar sobre como a morte pode ser."

The Portuguese version of the QOC produced by the review committee was back-translated to English and sent to the first author of the original questionnaire, who suggested that items "Caring about you as a

human being" and "Talking about what death might be like" be changed to "Caring about you as a person" and "Talking about how dying might be", respectively. The two items were then changed to "Preocupar-se com você como pessoa" and "Falar sobre como morrer poderia ser" in the Portuguese version of the QOC.

With the consent of the original author, the wording of the instructions was changed to increase the applicability of the QOC to a wider range of clinical conditions, the term "lung/respiratory problems" (*problemas respiratórios* in the translated version) being replaced by the term "health problems" (*problemas de saúde* in the translated version).

The Portuguese version of the QOC for use in Brazil, entitled *Questionário sobre a Qualidade da Comunicação* (Chart 1), was thus arrived at.

## DISCUSSION

The objective of the present study was to translate the QOC to Portuguese and adapt it for use in Brazil. All steps of the process of translation and cross-cultural adaptation were successfully completed, and the Portuguese version of the QOC will be ready for use after its validation.

In the present study, the QOC was found to be easy to understand, the exception being one item regarding

how dying might be. One of the possible reasons why that particular item was not well understood is that the prefinal version of the QOC for use in Brazil was administered to ICU patients. Another possible reason is that physicians in Brazil do not habitually talk with patients about the possibility of dying. These issues can only be clarified when studies aimed at validating the QOC in patients receiving intensive care and in terminally ill patients receiving palliative care are conducted.

The QOC was developed to evaluate the quality of communication between physicians and terminally ill patients receiving palliative care. Some studies have employed only one of its two domains or subscales (general communication skills and communication about end-of-life care). The general communication skills subscale has been used in a study conducted in the USA,<sup>(23)</sup> whereas the communication about end-of-life care subscale has been used in studies conducted in Germany<sup>(11)</sup> and the Netherlands.<sup>(28)</sup>

**Chart 1.** Portuguese version of the Quality of Communication Questionnaire for use in Brazil.

Questionário sobre a Qualidade da Comunicação Versão administrada pelo entrevistador													
Gostaríamos de saber, o mais detalhadamente possível, o quanto o médico que cuida dos seus problemas de saúde é bom em falar com você sobre a sua doença e os tipos de cuidados que você gostaria de receber se ficasse pior ou doente demais para responder por si mesmo. Sabemos que muitas pessoas têm grande admiração por seus médicos. Para nos ajudar a melhorar a comunicação entre médicos e pacientes, por favor, seja crítico(a). Usando a seguinte escala, em que "0" é o pior que você poderia imaginar e "10" o melhor que você poderia imaginar, por favor, circule o melhor número para cada questão.													
<i>Entrevistador: usar a resposta 888 quando o médico não fez Vire o cartão de escala de respostas e leia as opções de resposta</i>													
Ao falar com o(a) médico(a) _____ sobre questões importantes como você ficar muito doente, o quanto ele(a) é bom / boa em:													
	O pior que eu poderia imaginar					O melhor que eu poderia imaginar					Não fez	Não sabe	
1. Usar palavras que você consiga compreender.	0	1	2	3	4	5	6	7	8	9	10	888	999
2. Olhar em seus olhos.	0	1	2	3	4	5	6	7	8	9	10	888	999
3. Responder todas as dúvidas sobre sua doença.	0	1	2	3	4	5	6	7	8	9	10	888	999
4. Ouvir o que você tem a dizer.	0	1	2	3	4	5	6	7	8	9	10	888	999
5. Preocupar-se com você como pessoa.	0	1	2	3	4	5	6	7	8	9	10	888	999
6. Dar atenção plena a você.	0	1	2	3	4	5	6	7	8	9	10	888	999
7. Falar sobre seus sentimentos se acaso você piorar.	0	1	2	3	4	5	6	7	8	9	10	888	999
8. Dar detalhes da sua condição se acaso você piorar.	0	1	2	3	4	5	6	7	8	9	10	888	999
9. Falar sobre quanto tempo você tem de vida.	0	1	2	3	4	5	6	7	8	9	10	888	999
10. Falar sobre como o morrer poderia ser.	0	1	2	3	4	5	6	7	8	9	10	888	999
11. Envolver você nas discussões do tratamento para o seu cuidado.	0	1	2	3	4	5	6	7	8	9	10	888	999
12. Perguntar sobre coisas importantes em sua vida.	0	1	2	3	4	5	6	7	8	9	10	888	999
13. Perguntar sobre suas crenças espirituais ou religiosas.	0	1	2	3	4	5	6	7	8	9	10	888	999

We decided to translate the QOC to Portuguese and adapt it for use in Brazil because the questionnaire has consistent psychometric properties, which allow comparisons across studies conducted in different countries. We expect that, after its psychometric properties have been tested, the Portuguese version of the QOC for use in Brazil will be used in studies examining the quality of communication between physicians and patients receiving palliative care or severely ill patients in Brazil, thus allowing comparisons across studies conducted in different countries. The QOC was used in COPD patients in a study conducted

in 2002,<sup>(21)</sup> and the validation of the Portuguese version of the questionnaire will allow its use in COPD patients receiving palliative care in Brazil.

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