60 - VALIDATION OF THE WORLD HEALTH ORGANIZATION INSTRUMENT TO ASSES QUALITY OF LIFE BRIEF ON RENAL PATIENTS

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INTRODUCTION

Quality of Life (QOL) is related to manners and styles, ideas, sustainable development, human ecology, development of human and social rights, and in the field of health is related to the collective construction of comfort and tolerance that each society establishes for itself (MINAYO; HARTZ; BUSS, 2000).

That said, chronic diseases, by default, constitute a significant public health problem both to the person with health aggravation as well as to relatives and the State. Because they are long-term and irreversible, they have negative repercussions on all aspects of QOL (MENDONÇA, 2006).

For that reason, no matter how far technology has advanced since the beginning of the century, it still hasn't been able to find the cure or treatment for some of these pathologies. In face of such circumstances, the subject tends to have his/her QOL negatively affected (BITTENCOUNT, 2004).

Shifting this focus to chronic renal patients, Dyniewicz; Zanella and Kobus (2004) state that these people's QOL is affected by several stressful situations triggered by physical, psychological and social limitations. These are evidenced by self-image concerns, relationship with the team, family support, attempts at finding new meaning to life, of feeling useful while keeping hope that life can happen after the renal transplantation.

Lima; Gualda (2000); Cesarino and Casagrande (1998) state that the use of advanced technological resources is not enough; it's essential to try and recover the patient's value as a person, with a singular way of thinking, acting, and feeling.

In this perspective, nursing professionals, which deals daily with health promotion and protection initiatives, is much closer to the relevant aspects, such as each society's material, social, political and cultural conditions and individual subjectivity for the promotion of its clients' QOL (CESARINO; CASAGRANDE, 1998).

Zimmermann; Carvalho; Mari (2004) agree with this position and state the challenge in relation to these chronic disease victims is now to comprehend the association between psycho-social factors and their evolution through treatment, adjustment, social and family support that contribute in a positive way and are associated with better living. Therein lies the importance of knowing QOL in their perspective.

There are a few ways of measuring the chronic renal patient's QOL and in order to reach this objective, Velarde-Jurado; Ávila-Figueiroa (2002); Fayers; Machin (2000) state this could be measured both through generic as well as specific instruments, since these can offer different information and be employed simultaneously. The generic can be used to study both ill and healthy people. In the case of chronically ill patients, these can contribute as they evaluate and compare QOL of specific groups among each other or with those considered healthy, inserted into diverse social and cultural contexts.

Even though we are aware of specific questionnaires for the study of QOL on dialysis patients such as “Kidney Disease Quality of Life Questionnaire” (KDQOL), we chose to use WHOQOL-bref, due to it being generic, short, easily applied and understood, in the form of 26 questions. This instrument was translated, validated and culturally adapted to the Brazilian population according to an internationally-recognized methodology, endorsed by the World Health Organization (WHO)'s multi-centric studies group in Brazil (FLEK et al., 2000). It's been used to study chronic renal patient populations in dialytic therapies in China, having been considered reliable and valid for patients undergoing hemodialysis (YANG et al., 2005).

Because it's being applied on a different culture from which the instrument was designed for and because we know cultural changes can affect the results, we found it pertinent to validate it for use in a population of chronic renal patients attended to in the nephrology room in Hospital Universitário Onofre Lopes (HUOL), in the city of Natal, Rio Grande do Norte.

In face of the exposed facts, we constructed the following objective: to apply the WHOQOL-bref instrument and to measure its validity and reliability on a population of renal patients undergoing hemodialysis and after renal transplantation.

METHODOLOGY

This study refers to a prospective study meant to evaluate a generic quality of life questionnaire (QHOQOL-BREF) on its validity and reliability.

According to Polit; Beck; Hungler (2004), validity is the degree to which the instrument measures what it's supposed to measure. A quantitative measure's reliability is the main criteria for investigation on its quality and refers to the consistence with which the instrument measures an attribute.

The research was developed in the nephrology room in the HUOL university hospital associated with Universidade Federal do Rio Grande do Norte (UFRN). The population consisted of 62 patients undergoing hemodialysis and 58 who had received renal transplants, totaling 120 patients.

Data collection was performed in the HUOL nephrology room, from February 03 to March 27, 2006. WHOQOL-bref is a questionnaire with closed questions on QOL in the following domains: physical, psychological, social relations and environment. This questionnaire is the abbreviated version of the WHO's QOL evaluation instrument, WHOQOL-100, translated to the Portuguese language, in Brazil, as well as to twenty other languages. This process took place after the approval by the ethics committee from Universidade Federal do Rio Grande do Norte, evaluation # 171/05, complying with the legal requirements from resolution 196/96 which regulates research on human beings (BRASIL, 2000).

In order to verify whether there was a significant difference between the two independent samples, we used Mann-Whitney's U test, which compares whether two independent groups (x and y) were extracted from a same population, comparing x's observations with y's. It is, however, first needed to establish the significance level, indicated by the greek letter (alpha).

RESULTS

In order to analyze the QOL scale measured by WHOQOL-bref, we followed the steps defined by the WHO (WHOQOL GROUP, 1995).

We checked whether each of the 26 questions had answers between 1-5; inverted values of questions 3, 4 and 26, since they're negatively-oriented (1=5), (2=4), (3=3), (4=2), (5=1); calculated scores for the domains and questions on general quality of

life in a scale of 4 to 20 points, so as: 1 = 4; 2 = 8; 3 = 12; 4 = 16; 5 = 20.

In order to measure reliability, that is, the instrument's internal consistence of homogeneity, we used Cronbach's Alpha, and on validity we used factorial analysis.

Through the determination of Cronbach's Alpha, that is, homogeneity rates estimates, we analyzed correlations between items and domains, to which end items belonging to the same domain were grouped and their correlations calculated. No negative correlations, suggesting internal inconsistency, were identified, so all items were kept.

TABLE 01 Cronbach's Alpha reliability coeficient rates by domain components in WHOQOL-bref. HUOL-Natal/RN, 2006.

WHOQOL-bref Domains (Cronbach's Alpha)	Itens
Domain 01 (Physical) (α = 0,8388)	03, 04,10, 15, 16, 17, 18
Domain 02 (Psychological) (α = 0,5527)	05, 06, 07, 11, 19, 26
Domain 03 (Social Relationships) (α = 0,7164)	20, 21, 22
Domain 04 (Environment) (α = 0,6283)	08, 09, 12, 13, 14, 23, 24, 25
Scale's Total Alpha = 0,8816	

The values for Cronbach's Alpha vary from 0 to 01, and the closer to 01 the coefficient is, the more acceptable the instrument will be. An adequate Alpha for a well-developed instrument should be higher than 0.80, which is the case of WHOQOL-bref (NUNNALY apud LINO, 1999).

In our study the scale's total Cronbach's Alpha was equal to 0.8816, meaning there's a small error variation, thus certifying the instrument's good internal consistency.

CONCLUSION

We can conclude that the WHOQOL-bref reliability analysis through Cronbach's Alpha had a total value of 0.8816, attesting the instrument's good reliability in evaluation QOL on renal patients undergoing hemodialysis and post-renal transplantation.

KEYWORDS: Quality of Life; Reliability and Validity; Renal Insufficience.

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VALIDATION OF THE WORLD HEALTH ORGANIZATION INSTRUMENT TO ASSES QUALITY OF LIFE BRIEF ON RENAL PATIENTS

ABSTRACT

INTRODUCTION: WHOQOL-bref is a generic instrument developed by the World Health Organization's Quality of Life Group. It evaluates Quality of Life (QOL), general and health-related, on four domains: physical, psychological, social relationships and environment. This instrument is based on the presupposition that QOL is a subjective construction obtained through an individual's perception, which is multidimensional and composed of positive and negative dimensions. Measuring a quantitative measure's reliability is the main criteria for evaluation its quality, with Cronbach's Alpha as the most sophisticated and exact way of

computing it. The values for CA vary from 0 to 1, and the closes to 1, the more acceptable the instrument is. **OBJECTIVE:** to measure the WHOQOL-bref reliability. **METHODOLOGY:** quantitative study performed to measure the instrument's reliability or internal consistency, obtained through the SPSS 13.0 software, on 120 renal patients. The same domain items were grouped and the correlations were calculated. The QOL items from WHOQOL-bref were kept, and when excluding one question from each domain, no alterations to the results were observed. **RESULTS:** the AC yields high values for the domains, at 0.8388 in the Physical, 0.5527 in the Psychological, 0.7164 on Social Relationships and 0.6283 on Environment, showing the instrument's good internal consistency. **CONCLUSION:** we obtained a total scale AC equal to 0.8816, a low error variation, which leads us to conclude the evaluation instrument possesses satisfactory internal consistency characteristics, attesting the instrument's good reliability in evaluatin QOL on renal patients. We remind that the choice and use of an appropriate instrument are essential for the results to be valid and clinically significant.

KEYWORDS: Quality of Life; Reliability and Validity; Renal Insufficience.

VALIDATION D´UN INSTRUMENT POUR MESURER LA QUALITÉ DE VIE DE PATIENTS RÉNAUX - WHOQOL-bref

RÉSUMÉ

INTRODUCTION: le WHOQOL-bref est un instrument générique développé par le Groupe de Qualité de Vie de l´Organisation Mondiale de la Santé. Cet instrument évalue la Qualité de Vie (QV), générale et de santé, sur quatre domaines: physique, psychologique, relations sociales et environnement. Il s´appuie sur la présupposition selon laquelle la QV est un concept subjectif émanant de la perception de l´individu, multidimensionnel et composé de dimensions positives et négatives. Mesurer la fiabilité d´une mesure quantitative constitue le principal critère pour l´analyse de sa qualité; en ce sens, on considère que l´Alfa de Cronbach (AC) est une méthode sophistiquée et exacte pour cette mesure. Les valeurs du AC varient de 0 à 1: plus l´instrument se rapproche de la valeur 1, plus il est acceptable. **OBJECTIF**: mesurer la fiabilité du WHOQOL-bref. **MÉTHODOLOGIE**: étude quantitative au but de mesurer la fiabilité ou la consistance interne de l´instrument, à l´aide du logiciel SPSS 13.0, avec la participation de 120 patients rénaux. Les éléments furent groupés par appartenance au même domaine et ensuite on procéda au calcul des corrélations. Les éléments de la QV du WHOQOL-bref furent maintenus et il n´y eut point d´altération des résultats en excluant une question de chaque domaine. **RÉSULTATS:** l´AC révéla des valeurs élevées pour chaque domaine: 0,8388 pour le Domaine Physique, 0,5527 pour le Domaine Psychologique, 0,7164 pour les Relations Sociales et 0,6283 pour l´Environnement, exposant ainsi une bonne consistance interne de l´instrument. **CONCLUSION**: nous avons obtenu un AC total équivalent à 0,8816, avec une marge d´erreur réduite, ce qui nous mène à conclure que l´instrument d´évaluation possède des caractéristiques de consistance interne satisfaisantes et une bonne fiabilité pour évaluer la QV de patients rénaux, sachant de l´importance du choix et de l´utilisation d´un instrument approprié pour que les résultats soient valables et cliniquement significatifs.

MOTS-CLÉ: Qualité de Vie; Fiabilité et Validité; Insuffisance Rénale.

EVALUACION DE UN INSTRUMENTO PARA MEDIR CALIDAD DE VIDA EN PACIENTES RENALES WHOQOL-bref

RESUMEN

INTRODUCCIÓN: el WHOQOL-bref es un instrumento genérico desarrollado por el grupo de Calidad de Vida de la Organización Mundial de Salud. Evalua la Calidad de Vida (CV), general y de salud, en cuatro dominios: físico, psicológico, relaciones sociales y medio ambiente.

Este instrumento se basa en el supuesto que la CV es un constructivo subjetivo obtenido a partir de la percepción del individuo. Multidimensional compuesto por dimensiones positivas y negativas. Medir la confiabilidad de una medida cuantitativa es el principal criterio para investigación de su calidad. Siendo el Alfa de Conbrach (AC) considerado um método sofisticado y exacto de computarlo. Los valores para AC varían de 0a1, cuanto más próximo de 1, más aceptable es el instrumento. **OBJETIVO:** Medir la confiabilidad del WHOQOL-bref. **METODOLOGIA:** Estúdio cuantitativo realizado para medir la confiabilidad o consistencia interna del instrumento. Obtenido através del software SPSS 13,0 de 120 pacientes renales. Los items del mismo dominio fueron agrupados, y a seguir calculadas las correlaciones. Los items de la CV del WHOQOL-bref fueron mantenidos y al concluirse un asunto de cada dominio no se observó alteraciones en los resultados. **RESULTADOS:** Para los Dominios el AC muestra valores elevados, siendo en el Dominio Físico 0,8388, el Psicológico 0,5527, Relaciones Sociales 0, 7164.y Medio Ambiente 0,6283. Evidenciándose buena consistencia interna del instrumento. **CONCLUSIÓN:** Obtuvimos el AC total de la escala igual a 0,8816 siendo la variación de error pequeña, lo que nos lleva a concluir que el instrumento de evaluación posee características satisfactorias de consistencia interna. Certificando una buena confiabilidad del instrumento para evaluar la CV en renales. Recordamos que la elección y utilización del instrumento apropiado son fundamentales para que los resultados sean válidos y clínicamente significativos.

PALABRAS CLAVE: Calidad de Vida, Reproducibilidad de Resultados, Insuficiencia Renal

VALIDAÇÃO DO WORLD HEALTH ORGANIZATION INSTRUMENT TO ASSESS QUALITY OF LIFE BREF EM PACIENTES RENAIS

RESUMO

INTRODUÇÃO: o WHOQOL-bref é um instrumento genérico desenvolvido pelo Grupo de Qualidade de Vida da Organização Mundial de Saúde. Avalia a Qualidade de Vida (QV), geral e de saúde, em quatro domínios: físico, psicológico, relações sociais e meio ambiente. Este instrumento baseia-se no pressuposto que a QV é um construto subjetivo obtido a partir da percepção do indivíduo, multidimensional e composto por dimensões positivas e negativas. Medir a confiabilidade de uma medida quantitativa é o principal critério para investigação de sua qualidade, sendo o Alfa de Cronbach (AC) considerado um método sofisticado e exato de computá-lo. Os valores para o AC variam de 0 a 1, e quanto mais próximo de 1, mais aceitável é o instrumento. **OBJETIVO**: medir a confiabilidade do WHOQOL-bref. **METODOLOGIA**: estudo quantitativo realizado para medir a confiabilidade ou consistência interna do instrumento, obtido através do software SPSS 13.0, de 120 pacientes renais. Os itens do mesmo domínio foram agrupados, e a seguir calculadas as correlações. Os itens da QV do WHOQOL-bref foram mantidos, e, ao se excluir uma questão de cada domínio não se observou alterações nos resultados. **RESULTADOS:** para os domínios o AC mostra valores elevados, sendo no Domínio Físico 0,8388, no Psicológico 0,5527, Relações Sociais 0,7164, e Meio Ambiente 0,6283 evidenciando boa consistência interna do instrumento. **CONCLUSÃO**: obtivemos o AC total da escala igual a 0,8816 sendo a variação de erro pequena, o que nos leva a concluir que o instrumento de avaliação possui características satisfatórias de consistência interna, atestando uma boa confiabilidade do instrumento para avaliar a QV em renais. Lembramos que a escolha e utilização do instrumento apropriado são fundamentais para que os resultados sejam válidos e clinicamente significativos.

PALAVRAS-CHAVE: Qualidade de Vida; Reprodutibilidade dos Testes; Insuficiência Renal.