Turkish reliability of the patient health questionnaire-9.

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Abstract

Objective: Our aim was to adapt for Turkish and perform the reliability study of The Patient Health Questionnaire-9 (PHQ-9).

Material and methods: PHQ-9 was translated to Turkish by three researchers and a consensus meeting was held after the translation process. Turkish text on which the researchers agreed was translated into English by an independent professional translator. As a result of this process, the researchers obtained the final version on which they agreed and the accuracy of which was proved by back translation.

Results: The questionnaire was administered to patients above 18 years presenting to Family Medicine clinic. Total of 96 patients (42 male 54 female, with an average age of 37.63 ± 11.66 years) took part in this study. Turkish version of the questionnaire was found to be quite reliable. (Cronbach's alpha 0.842)

Conclusion: Turkish version of The Patient Health Questionnaire-9 is quite reliable. We believe that this questionnaire may be used for objective assessment of diagnosing depression, evaluating its severity and its follow-up in clinical practice.

Introduction

Depression is one of the most common and treatable mental disorders. Within mental disorders, depression has been becoming more common in daily life and its prevalence has risen as a life energy consuming problem [1]. This increase in depression's prevalence affects all the society due to economic and social casualties [2]. Depressive mood, lack of energy and loss of pleasure or attention are basic features of depression. Decreased concentration, lack of self-confidence, guilty feelings, pessimism, suicidal thoughts, sleeping disorders, loss of appetite and libido decrease are also common symptoms. Social and vocational functions deteriorate. For diagnosis of depression, according to DSM-IV (Diagnostic and Statistical Manual of Mental Disorders-IV) criteria, main criteria are loss of attention or loss of pleasure which affects the person's all activities all day and almost every day and symptoms must be reported by the patient itself or patient's depressive mood must be observed by others [3].

The severity of depression attacks can vary. Number, type, and intensity of the symptoms can define the severity of the depression [4]. Health service providers like psychologists, primary care physicians, surgical and non-surgical doctors may encounter depression patients. Many tests were developed to evaluate the severity of depression. The Patient Health Questionnaire is a diagnostic tool to identify commonly encountered mental disorders like depression in primary care.

The Patient Health Questionnaire-9 (PHQ-9) is a measurement which questions 9 symptoms based on The Patient Health Questionnaire and diagnoses depression according to DSM-IV criteria [5]. It is validated by Kurt Kroenke et al. and published in JGIM in 2001. The questionnaire's reliability wasn't performed in Turkish.

Our aim was to perform reliability study of The Patient Health Questionnaire-9's Turkish version.

Materials and Methods

The patient health questionnaire-9 (phq-9)

PHQ-9 is a measurement based on The Patient Health Questionnaire and questions 9 symptoms of depression according to DSM-IV criteria. It is about half the length of the other depression scales and has a reasonable sensitivity and specificity. Differential, the feature of PHQ-9 from other two staged depression scales which need additional questions when the score comes up high, is that diagnoses depression with these 9 questions and define its severity.

The questionnaire includes 9 questions and each question gets scored between 0 (not at all) and 3 (nearly every day). Points are summed up for every question. Points between 1-4 are rated as minimal, 5-9 mild, 10-14 moderate, 15-19 moderately severe and 20-27 severe depression according to the scoring

system of the original questionnaire. Besides the nine diagnostic questions, the test includes one more question like "If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?". But this question doesn't add up to scoring [5]. The questionnaire was administered to voluntary patients above 18 years presenting to periodic health examination in Eskisehir Osmangazi University Medical Practice and Research Hospital Family Medicine Clinic. Before the survey, the socio-demographic questionnaire was performed.

Translation process

PHQ-9 was translated into Turkish by three researchers, and a consensus meeting was held after the translation process. The Turkish text on which the researchers agreed was translated into English by an independent professional translator. After the researchers compared the English text, a product of back translation, and the source text in terms of meaning and comprehensibility, they decided that there were no differences between the two texts. As a result of this process, the researchers obtained the final version on which they agreed and the accuracy of which was proved by back translation.

In order to test the reliability of the questionnaire form, Cronbach's alpha coefficient was calculated for each question. In the case that Cronbach's alpha coefficient was minimum 0.70, it was considered that the questions were consistent with each other [6].

Patient collection

This study was conducted in the clinic of Eskisehir Osmangazi University Medical Practice and Research Hospital Family Medicine between 1 and 31 of July 2016. The questionnaire was administered to the voluntary patients above 18 years that presented to the clinic. Ethical approval was received from Eskisehir Osmangazi University non-interventional clinical studies ethical committee to carry out this study.

Results

Total of 96 patients (42 male 54 female, an average age of 37.63 ± 11.66 years) took part in this study. The mean score was 8.84 ± 5.23. According to questionnaire results, 22 of patients had minimal, 40 mild, 21 moderate, 8 moderately severe, 5 severe depression. Cronbach's alpha coefficient was calculated as 0.842 for 9 questions. When coefficient was calculated for each question separately, it was found to be minimum 0.813 and 0.838 at most. This outcome shows that Turkish version of the questionnaire is quite reliable. Distribution of Cronbach's alpha values of questions was shown in Table 1.

Table 1: Distribution of Cronbach's alpha values of questions.

Questions	Cronbach's Alpha
Question-1	0.83
Question-2	0.813
Question-3	0.833
Question-4	0.826
Question-5	0.823
Question-6	0.814
Question-7	0.838
Question-8	0.823
Question-9	0.828

Discussion

PHQ-9 is a scale to diagnose depression by questioning 9 diagnosis criteria included in DSM-IV and to determine the severity of depression [5]. It is an important advantage that the questions are short and easily applied.

It is important to know depression and start treatment in primary care but most of the time efforts remain inadequate. It is also important to follow-up the response to treatment but it is shown in many studies that this follow-up is insufficient due to mistakes the physicians make while appointing drug incompatibility, increasing anti-depressant dosage, changing drug therapy or adding psychotherapy when necessary [7,8]. The physician can evaluate depression and its severity according to DSM-IV thanks to this easily applied questionnaire.

This study shows that the Turkish version of The Patient Health Questionnaire-9 is quite reliable. We believe that this questionnaire may be used for objective assessment of diagnosing depression, evaluating its severity and its follow-up in clinical practice.

Questionnaire: *Turkish version of Patient Health Questionnaire-9.*

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