



Abstract #149

Arabic validation of TANGO questionnaire for nocturia: translation into the Arabian Peninsula dialect.

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Abstract

Background:

TANGO (Targeting the Aetiology of Nocturia to Guide Outcomes) is a validated English language tool developed to identify underlying factors leading to nocturia. We provide a culturally correct Arabic version of the TANGO questionnaire in Saudi Arabia.

Methods:

We conducted a forward and backward translation of the English version, consensus meetings to choose best translations according to a Likert score. The final version was tested in patient by self administration or interview and further translation corrections were added.

Results:

Fourteen translators worked with 22 questions. The mean agreement Likert score for all questions was 4.2 (84.4%) SD 0.2, range 3.9-4.6 (77.5-92.5). Fifty-seven patients answered the questionnaire. Of the participants, 54 (94.7%) reported that the questions were clear enough to understand, while three stated that they felt they needed a medical staff member to help interpret some of the questions.

Conclusion:

The Arabic language translation of TANGO questionnaire is a valid tool in the dialect of the Arabian Peninsula.

Introduction

Nocturia has become increasingly recognized as a significant lower urinary tract symptom and a major cause of bothersomeness among patient. TANGO (Targeting the Aetiology of Nocturia to Guide Outcomes) is a validated English language tool that was recently developed to identify underlying factors leading to nocturia (1). Culturally validated Arabic language translation is needed for utilization in the Arabian Peninsula. We set out to provide a culturally correct Arabic version of the TANGO questionnaire in our country.

Methods and Materials

The project was approved by the institution's IRB. The original English version was forwarded translated into Arabic by native Arabic speaking translators with English as a second language. A first consensus meeting was held to select the most appropriate Arabic translation. Arabic questions with the highest tally score were selected. Those questions with a tie were resubmitted for another voting. The final questions were given to two native English-speaking translators with Arabic as their second language. The translators were blinded to the nature of the questionnaire or its source. A second consensus meeting was held to vote on the agreement between the original and back-translated English versions using a five-point Likert scale. An agreement score was computed for each question. Questions with agreement less than 75% were destined for retranslation. The final version was given to native Arabic speaking patients subsequently presenting in three urology clinics in two days. The patients were asked to fill the questionnaire on their own to assess the ease of comprehension and completeness of answering. Each individual was asked at the end yes or no questions: 1. Were the questions clear for you? 2. Did you feel that you needed help from a nurse or doctor to understand the questions? Age, sex, weight, height, residence and the presenting symptoms were recorded.

	n	Mean	Min	SD	Max
Age (years)	57	51.5	18.9	19	88
Weight (kg)	57	85.9	27.0	42.2	173
Hight (cm)	57	166.0	13.9	83.5	185
Number of nocturia events/night	56	1.6	1.8	0	10
	n		%		
Sex					
Female	11		19.3		
Male	46		80.7		
Complaint					
Infertility	13		22.8		
Erectile dysfunction	5		8.8		
LUTS	22		38.6		
Renal stones	5		8.8		
Renal tumors	4		7.0		
No genitourinary symptoms	7		12.3		

Table 1. Demographics of patients.

Results

A total of 22 questions were translated by 14 translators, who included two professional translators, medical students, nurses, a general physician, urology residents, and urologists. Ten questions passed the first consensus meeting while 12 were submitted for re-voting. Back translation showed that only one question was misinterpreted, and the Arabic phrasing was changed to modify the confusing word. The mean agreement Likert score for all questions was 4.2 (84.4%) SD 0.2, range 3.9-4.6 (77.5-92.5). Fifty-seven patients answered the questionnaire. Thirty-five participants (61.4%) were local residents while the rest were referred from remote regions in the country. Demographics of the participants are shown in table 1. A total of 46 (80.7%) patients filled the questionnaire on their own, while 11 (19.3%) required assistance because of vision problems (n=3), illiteracy (n=6) or unclarity of the questions (n=2). Of the participants, 54 (94.7%) reported that the questions were clear enough to understand, while three stated that they felt they needed a medical staff member to help interpret some of the questions.

Discussion

Interpretation of results:

The Arabic translation of TANGO resulted in an Arabic version with a high agreement of the Original and Backward translations. Testing the questionnaire in urology patients was easily comprehended and completed. As TANGO is not a screening tool, only 57 consecutive patients were included to demonstrate the ease of comprehension and completing the questionnaire. Patients represented a wide range of age and BMI. As a tertiary care referral center, all regions of the country were represented. Measuring the detection rate of nocturia in two groups of patients with an established diagnosis of nocturia and those without the condition is needed in a larger number of patients with more diverse symptomology.

Conclusions

The Arabic language translation of TANGO questionnaire is a valid tool in the dialect of the Arabian Peninsula. It is valid among different ages and geographical locations of the region. It is a most needed tool for the assessment of patients with nocturia in this area.

استبيان سبب كثرة التبول أثناء الليل

العمر: _____ الجنس: _____ عدد المرات التي تسبقها خلال الليل للتبول _____

ضع علامة X بجانب كل عبارة لتوضيح ما إذا كان هذا صحيحاً أم لا بالنسبة لاحتالك

صحا	خطأ	العبارة
<input type="checkbox"/>	<input type="checkbox"/>	خلال اليوم تتورم (تنتفخ) ساقي أو قدمي أو كعبي
<input type="checkbox"/>	<input type="checkbox"/>	أستخدم حبوب منومة للتبول مثل (لازيكس)
<input type="checkbox"/>	<input type="checkbox"/>	أعاني من امراض الكلى
<input type="checkbox"/>	<input type="checkbox"/>	أتناول أدوية لعلاج ضغط الدم
<input type="checkbox"/>	<input type="checkbox"/>	عالمياً ما أشعر بالبوخة عند الوقوف
<input type="checkbox"/>	<input type="checkbox"/>	لدي ارتفاع في نسبة السكر في الدم أو مرض السكري.
<input type="checkbox"/>	<input type="checkbox"/>	أعاني من صعوبة التحكم في مستوى السكر في الدم
<input type="checkbox"/>	<input type="checkbox"/>	أنام خمس ساعات أو أقل في الليلة
<input type="checkbox"/>	<input type="checkbox"/>	يمكنني القول إن نومي سيء
<input type="checkbox"/>	<input type="checkbox"/>	استغرق أكثر من ?? دقيقة لأتمكن من النوم في الليل
<input type="checkbox"/>	<input type="checkbox"/>	أعاني من صعوبة الاستمرار في النوم ليلاً بسبب المشاة (الرغبة في التبول)
<input type="checkbox"/>	<input type="checkbox"/>	كثيراً أشعر بالألم في الليل
<input type="checkbox"/>	<input type="checkbox"/>	قبل لي باني أشعر بصوت حالي أثناء نومي أو أتوقف عن التنفس
<input type="checkbox"/>	<input type="checkbox"/>	أحتاج لاستيقاظ من النوم خلال الثلاث ساعات الأولى للتبول.
<input type="checkbox"/>	<input type="checkbox"/>	أشعر بالحاجة المفاجئة للتبول في معظم الأيام.
<input type="checkbox"/>	<input type="checkbox"/>	أعاني من الإحاح في التبول المؤدي الى التبول اللاإرادي مرة في الأسبوع أو أكثر
<input type="checkbox"/>	<input type="checkbox"/>	عالمياً ما أحتاج إلى الضغط أو النقع لبدء التبول.
<input type="checkbox"/>	<input type="checkbox"/>	لدي تضخم في البروستات (ذكور فقط)
<input type="checkbox"/>	<input type="checkbox"/>	بشكل عام، أستطيع القول بأن صحتي ليست جيدة
<input type="checkbox"/>	<input type="checkbox"/>	أعاني من النعاس أثناء القيادة أو الأكل أو أثناء الأنشطة الاجتماعية.
<input type="checkbox"/>	<input type="checkbox"/>	تعرضت للسقوط في الثلاث أشهر الماضية
<input type="checkbox"/>	<input type="checkbox"/>	لم أجد أسمع بالأنبياء كما اعتدت أو كما كنت في السابق.
<input type="checkbox"/>	<input type="checkbox"/>	هل كنت الأسئلة واضحة بالنسبة لك؟
<input type="checkbox"/>	<input type="checkbox"/>	هل شعرت أنك بحاجة إلى مساعدة من ممرضة أو طبيب لفهم الأسئلة؟

Fig1. Arabic version of TANGO questionnaire. This translation is with permission from the English version (1).

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References

1. Bower WF, Rose GE, Ervin CF, Goldin J, Wishaw DM, Khan F. TANGO - a screening tool to identify comorbidities on the causal pathway of nocturia. BJU Int. 2017 Jun;119(6):933-941.