An Pediatr (Barc). 2018;89(4):230–237

analesdepediatría

www.analesdepediatria.org

ORIGINAL ARTICLE

Adaptation and study of the measurement properties of a sleep questionnaire for infants and pre-school children☆,☆☆

Pia Cassanello[a], Ana Díez-Izquierdo[a,b], Nuria Gorina[a,b], Nuria Matilla-Santander[b], Jose M. Martínez-Sanchez[b], Albert Balaguer[a,b,*]

[a] *Hospital Universitari General de Catalunya, Sant Cugat del Vallès, Barcelona, Spain*
[b] *Universitat Internacional de Catalunya, Sant Cugat del Vallès, Barcelona, Spain*

Received 14 September 2017; accepted 7 December 2017
Available online 6 September 2018

KEYWORDS
Child;
Pre-school;
Infant;
Sleep/physiology;
Sleep wake disorders/diagnosis;
Surveys and questionnaires;
Validation studies

Abstract
Introduction: Although sleep disturbances in infants and toddlers are common, there is no suitable validated tool in Spanish to evaluate sleep disorders. The Brief Infant Sleep Questionnaire (BISQ) is a well-established multidimensional questionnaire widely used internationally.
Objectives: To adapt the BISQ questionnaire to Spanish and analyse its reliability and validity. To explore its feasibility, both in the clinical context, and in epidemiological research.
Methods: Participants were parents of children between 3 and 30 months of age. The adaptation to Spanish (BISQ-E) was achieved by using both back translation and consensus, following the international guidelines.Reliability was determined by means of test–retest and measurement of agreement (Kappa value) between 2 forms of administration of the questionnaire (self-administration and clinical interview). Construct validity was established by analysing its correlation with a sleep diary.
Results: A total of 87 families/children participated. The test–retest reliability undertaken in 60 subjects was $r = 0.848$ ($P < .001$). The kappa value was 0.939 (95% CI: 0.858–1.00, $P < .001$).The agreement between BISQ-E and the sleep diary was analysed in 27 families/children, with statistically significant values being obtained for the following variables: bedtime ($r = 0.731$), hours of night sleep ($r = 0.726$), hours of daytime sleep ($r = 0.867$), and number of nocturnal awakenings ($r = 0.888$) ($P < .001$).

☆ Please cite this article as: Cassanello P, Díez-Izquierdo A, Gorina N, Matilla-Santander N, Martínez-Sanchez JM, Balaguer A. Adaptación y estudio de propiedades métricas de un cuestionario de valoración del sueño para lactantes y preescolares. An Pediatr (Barc). 2018;89:230–237.

☆☆ *Previous presentation*: Parts of this study were presented as an oral communication at the 65th Congress of Sociedad Española de Pediatría; June 1–3, 2017; Santiago de Compostela, Spain.

* Corresponding author.
E-mail address: abalaguer@uic.es (A. Balaguer).

2341-2879/© 2017 Asociación Española de Pediatría. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Conclusions: The Spanish adaptation of the BISQ shows overall adequate validity and reliability for the evaluation of sleep in infants and pre-school children. Its use as a clinical tool, or for clinical-epidemiological research studies, is feasible.
© 2017 Asociación Española de Pediatría. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

PALABRAS CLAVE
Niño;
Preescolar;
Lactante;
Sueño/fisiología;
Trastornos del sueño/diagnóstico;
Encuestas y cuestionarios;
Estudios de validación

Adaptación y estudio de propiedades métricas de un cuestionario de valoración del sueño para lactantes y preescolares

Resumen
Introducción: Aunque las alteraciones del sueño en lactantes y preescolares son comunes, no se dispone de un instrumento en español adecuadamente validado para su estudio. El *Brief Infant Sleep Questionnaire* (BISQ) es un cuestionario multidimensional bien establecido con este fin en el ámbito internacional.
Objetivos: Adaptar el BISQ al español y analizar su fiabilidad y validez. Explorar su viabilidad en el contexto asistencial y de investigación.
Participantes y métodos: Se incluyeron niños de 3 a 30 meses de edad. La adaptación al español (BISQ-E) se efectuó mediante técnica bilingüe de retrotraducción y consenso, siguiendo las recomendaciones internacionales. Se evaluó la fiabilidad mediante análisis de los resultados del test–retest del BISQ-E y de la concordancia de las respuestas a 2 formas de administración (autoadministración y entrevista clínica). La validez de constructo se estableció analizando su correlación con un diario de sueño.
Resultados: Participaron un total de 87 familias/niños. La correlación global test–retest en 60 sujetos fue de r = 0,848 (p < 0,001). El índice de kappa entre las 2 formas de administración fue de 0,939 (IC 95%: 0,858–1,00; p < 0,001).La correlación BISQ-E-diario de sueño se analizó en 27 familias/niños y fue estadísticamente significativa para las variables estudiadas: hora de acostarse (r = 0,731), horas de sueño nocturno (r = 0,726), horas de sueño diurno r = 0,867) y número de despertares nocturnos (r = 0,888) (p < 0,001).
Conclusiones: La adaptación española del BISQ presenta unas características de validez y fiabilidad adecuadas para la evaluación del sueño en lactantes y preescolares. Su utilización como instrumento clínico o para estudios de investigación clínico-epidemiológica resulta factible.
© 2017 Asociación Española de Pediatría. Publicado por Elsevier España, S.L.U. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Introduction

Sleep disturbances in children are among the most frequent reasons for consultation in paediatric clinical practice.[1,2] Previous studies report that between 25% and 46% of the paediatric population may experience some type of sleep disturbance during childhood or adolescence.[3,4] The prevalence reported in the literature for children aged less than 3 years ranges between 11% and 40%.[5,6] Many sleep disturbances are behavioural in nature (difficulty falling asleep, difficulty staying asleep or poor sleep hygiene),[7] so their prevention and management should start as early as possible and should be pursued from the field of primary care.

Current sleep recommendations and guidelines are mainly based on expert opinion and consensus, as there is little experimental evidence in this field.[2,8] Notwithstanding, the available literature evinces a growing interest in the essential link between sleep and adequate physical, cognitive and psychosocial development, including its impact on family dynamics.[9–11] The sleep-onset time and the total duration of sleep in the first years of life are considered predictors for features of anxiety (separation anxiety, introversion)[12,13] and have been associated with an adequate acquisition of healthy eating habits[14] and increased inactivity and obesity in toddlers.[15]

In light of their importance, routine screening of sleep disturbances would be helpful for their early detection, which would allow appropriate intervention and thus improvement of psychosocial and cognitive outcomes in the paediatric population.[16]

The multidimensional nature of sleep poses challenges to its evaluation. Polysomnography and actigraphy contribute relevant data,[11,17] but their usefulness is limited due to their low feasibility in large-scale population-based studies. Furthermore, they offer little towards the assessment of some behavioural factors that play important roles in sleep.[1] This is why it is important to develop questionnaires that can assess subjective variables such as the restorative quality of sleep and the potential impact on the family.

The Brief Infant Sleep Questionnaire (BISQ) is one of the most widely used questionnaires currently available for the assessment of sleep in early childhood (Table 1).[18] It was

Download English Version:

https://daneshyari.com/en/article/11016907

Download Persian Version:

https://daneshyari.com/article/11016907

Daneshyari.com