

Children at risk for Sleep Disordered Breathing in a national Romanian study

March 2018, Amsterdam

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Objectives

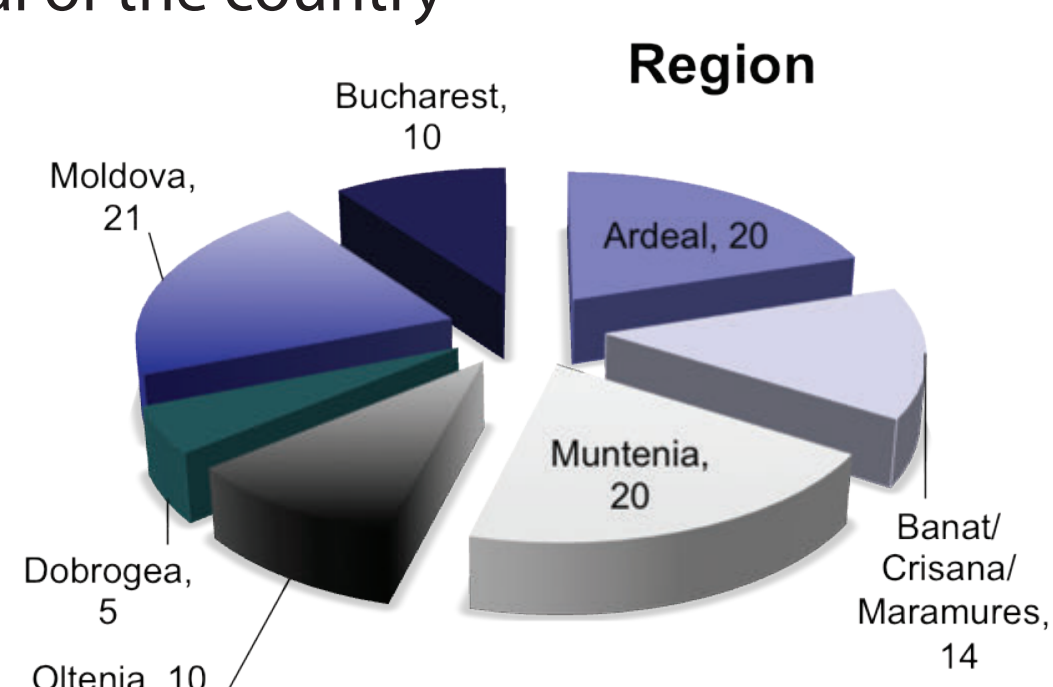
- Since 1990s, a large number of epidemiological studies have been conducted in different countries, which added new data about recognition, treatment and clinical outcomes among adult patients with sleep related breathing disorder (SRBD) and various comorbidities.
- Many of the clinical characteristics of pediatric obstructive sleep apnea (OSA) and the determinants of its epidemiology differ from those of adult OSA. Pediatric OSA is a cause for significant morbidity among children.
- Although the first Romanian sleep laboratory for adult patients was opened in 1996, paucity in pediatric sleep disorder research in Romania has left room for a need to recognize and report on the condition.
- The present quantitative research has a two-tailed focus: determine the percentage of Romanian children who are at risk for a paediatric sleep-related breathing disorder and the development and questionnaire scales validation

Methods and materials

- We conducted a study to determine the percentage of Romanian children who are at risk for a pediatric sleep-related breathing disorder
- The research endeavor used the Pediatric Sleep Questionnaire (PSQ), the SRBD Scale, a 22 UMPSQ item developed by the University of Michigan
- The Romanian version of SRBD Scale was translated and cross-culturally adapted through a multistep approach. As novelty for the Romanian pediatric sleep disorder research setting, the questionnaire was applied for the first time, as part of the current research.

The whole sample size was of **1272 households**, representative for the Romanian population

- A total coverage of the country
- 38% of the overall sample was addressed in the rural area, while 10% in Bucharest, the capital of the country



Profile

Demographic Profile

For the exclusive purpose of the present research, further selection was necessary

156 sampling points

Multistage sampling, nationally representative

Household selection	Household with children	First birthday rule
Every fourth household has been included	Only HH who had at least one child over 18 months were included	The respondent whose birthday comes first was selected

% all respondents (N=1272)

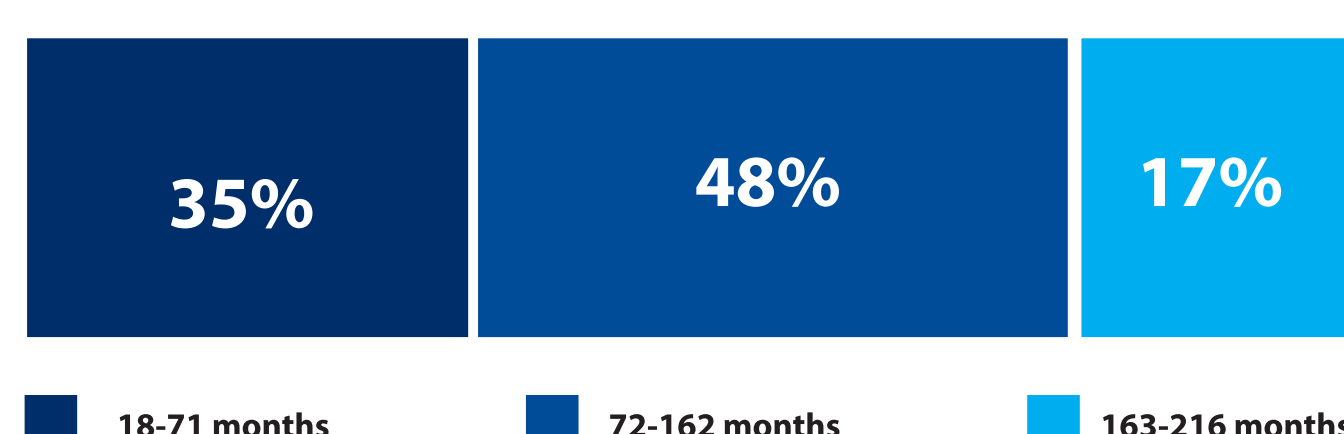
In the end **249 households with children**, , respectively individuals, have responded to the short 22 questionnaire-item; the maximum sampling of error is +/- 6.2% at 95% level of confidence.

Demographic profile of final respondents

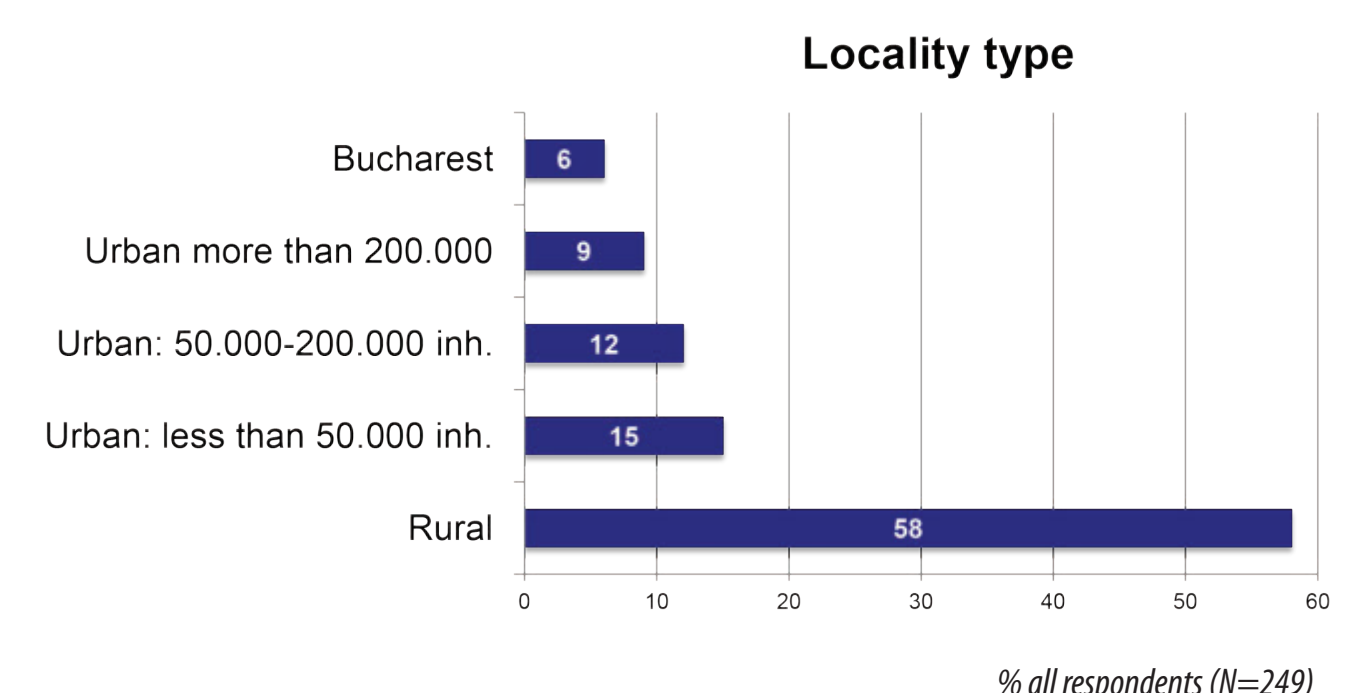
Region



Children's Age



In the rural areas, more households tend to care for children **whereas in the urban areas, the number of households with children is lower**



Conclusions

- In this era of co-developing a drug with a diagnostic in order to create a stratified medicine, epidemiological data are still needed so that research is aimed at specific patient populations with specific phenotypes.
- These are the first Romanian data regarding pediatric SDB which open many other questions for future research with a possible impact through adult age.
- Our data are consistent with those from the literature, and support the need for increased awareness of the presence of sleep problems in children, as well as for an early recognition and treatment.
- The knowledge of the real dimension justifies future efforts for an overall advancement of pediatric sleep medicine in our country.

References

1. Stephen H. Sheldon et al. Principles and Practice of Pediatric Sleep Medicine. 2005 Elsevier, 27-33
2. Kerbl R. Sleep Medicine – an underprivileged field in Pediatrics. Romanian Journal of pediatric sleep medicine 2014, Nr.1,9-10.
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5. Chervin, Ronald D et al. Pediatric sleep questionnaire (PSQ): validity and reliability of scales for sleep-disordered breathing, snoring, sleepiness, and behavioral problems. Sleep Medicine, 2000, Volume 1, Issue 1, 21 – 32
6. Spruyt K, Gozal D. Pediatric Sleep Questionnaires as Diagnostic or Epidemiological Tools: A Review of Currently Available Instruments. Sleep Med Rev. 2011 February;15(1):19-32.
7. Sagheri D, Wiater A, Steffen P, Owens JA. Applying principles of good practice for translation and cross-cultural adaptation of sleep screening instruments in children. Behav Sleep Med. 2010;8(3):151-6.

Conflict of Interest Disclosure: The authors do not have a relevant financial relationship.

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Perspectives on feeding and sleep - from pregnancy to playground - March 2018, Amsterdam

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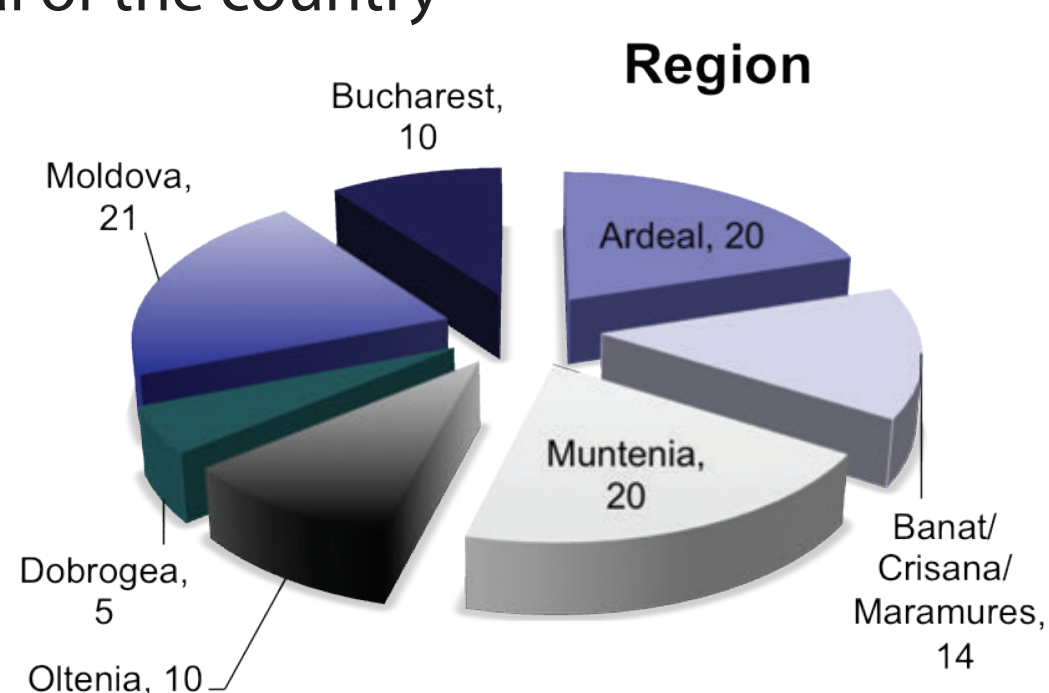
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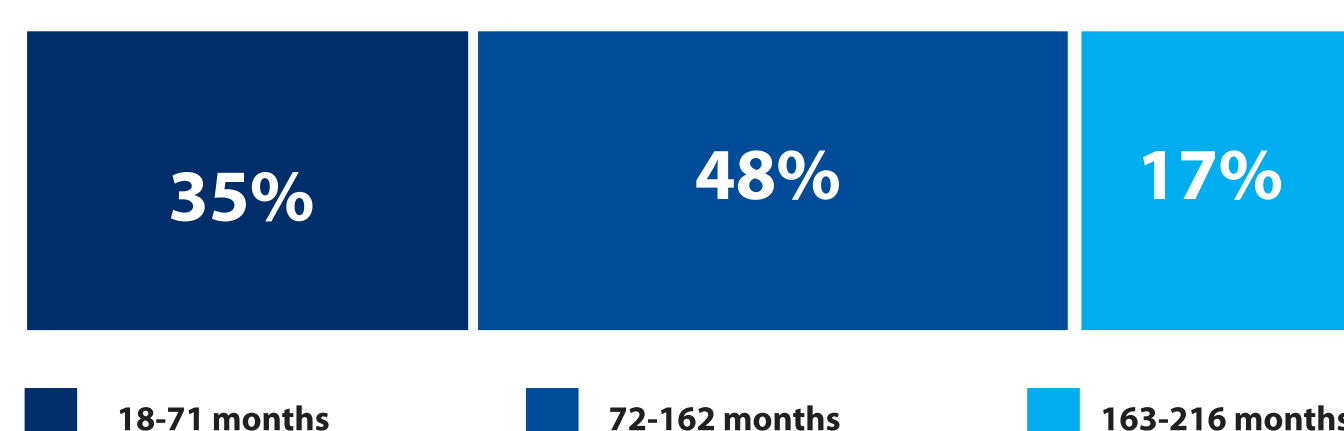
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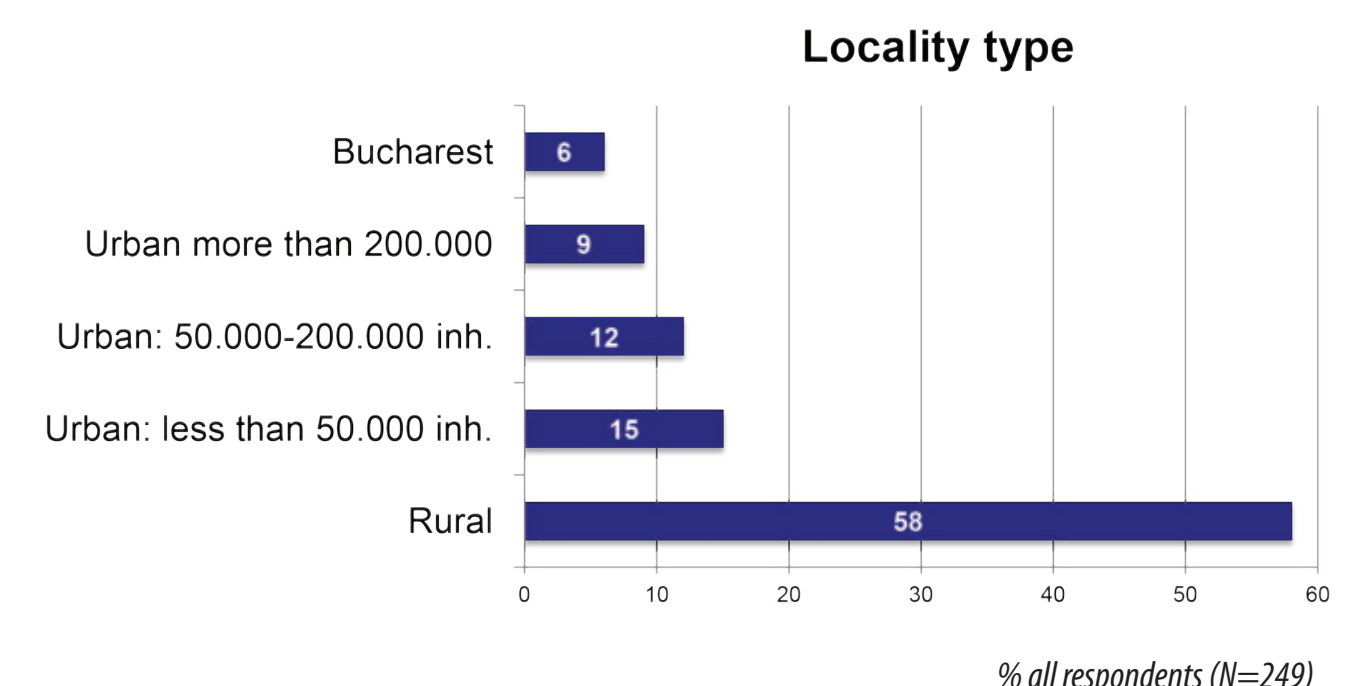
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