

The prevalence of sleep problems in children with acute lymphoblastic leukemia.

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Background

- Sleep is an important determinant of Quality of Life (QoL) in children with Acute Lymphoblastic Leukemia (ALL).
- Management of sleep problems may be an important tool to improve QoL in children with ALL.
- To design effective intervention studies insight is needed in the extent, nature and risk factors of sleep problems.

Aim

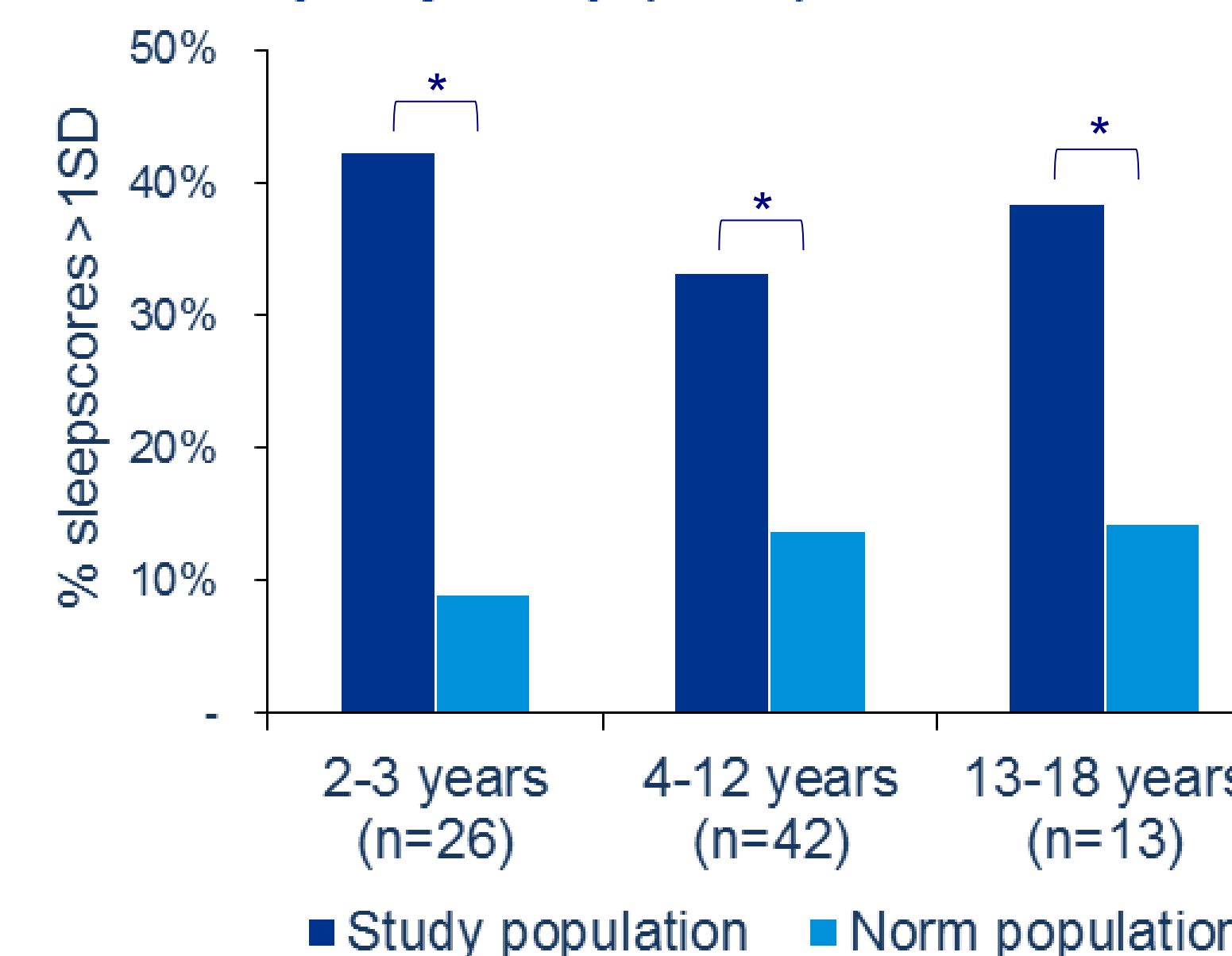
- To describe the prevalence of sleep problems in children with ALL after induction therapy as compared to norm populations.

Methods

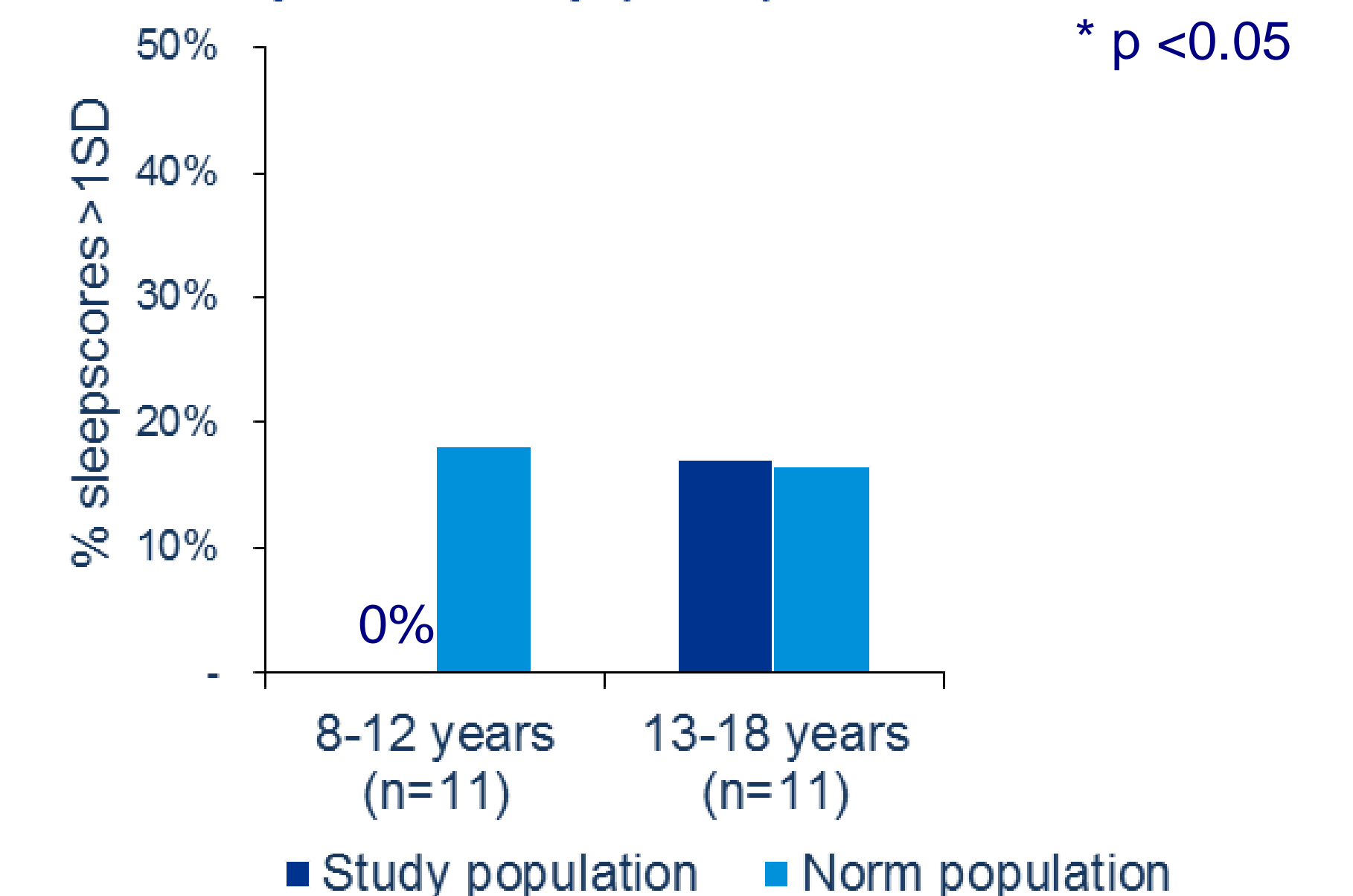
- Patients aged 2-18 years, treated according to the Dutch Childhood Oncology Group ALL-11 treatment protocol, were included after induction therapy.
- Sleep was assessed with parent-proxy and self-report (≥ 8 years) questionnaires (Children's Sleep Habits Questionnaire, Sleep Self Report and Adolescent Sleep Habits Questionnaire).
- Total questionnaire scores were compared to age-appropriate Dutch norms (T-tests or Mann-Whitney U tests).
- Scores more than one standard deviation (SD) above the norm were considered clinically relevant (Chi-square tests).

Results

Parent-proxy sleep (n=81)



Self-reported sleep (n=22)



- N=82, mean age 7.1 years.
- Parents reported significantly higher total questionnaire scores (i.e. more sleep problems) compared to norms in all age categories ($p < 0.01$).
- Self-reported (n=11) scores were not statistically different from norms in both age groups.

Conclusion

- Parents and children report differently about sleep.
- Parent reported sleep problems were most prevalent in toddlers but were common among all ages.
- In a larger sample, sub-analyses will allow to describe risk factors for sleep problems in children with ALL.