

For ODI2%, 3% and 4%, bias (95% limits of agreement) values were -0.75 events/hr (9.99 to -11.49 events/hr), -0.74 events/hr (10.00 - -11.49 events/hr) and -0.20 events/hr (8.45 - -8.86 events/hr) respectively. There was no significant difference between measurements except for the mean sleep SpO2 values,  $p < .001$ .

Although no bias found between measurements, there was poor agreement between the algorithms as demonstrated by the wide 95% limits of agreement suggesting that the two oximeter devices are not interchangeable.

### P036

#### TRAJECTORIES OF EMOTIONAL AND BEHAVIOURAL PROBLEMS IN ABORIGINAL AND TORRES STRAIT ISLANDER CHILDREN: ROLE OF SLEEP AND CULTURAL ATTACHMENT

*Fatima Y<sup>1,2,3</sup>, Bucks R<sup>4</sup>, King S<sup>2</sup>, Solomon S<sup>2</sup>, Skinner T<sup>5,6</sup>*

<sup>1</sup>Institute for Social Science Research, University of Queensland, Brisbane, Australia, <sup>2</sup>Centre for Rural and Remote Health, James Cook University, Mount Isa, Australia, <sup>3</sup>ARC Centre of Excellence for Children and Families over the Life Course, University of Queensland, Brisbane, Australia, <sup>4</sup>School of Psychological Science, University of Western Australia, Perth, Australia, <sup>5</sup>Institut for Psykologi, Center for Sundhed of Samfund, Københavns Universitet, Øster Farimagsgade, København K, Denmark, <sup>6</sup>University Department of Rural Health, La Trobe University, Bendigo, Australia

**Purpose:** This study explored the link between sleep and emotional and behavioural problems and assessed whether cultural attachment reduces the risk of emotional and behavioural problems in Aboriginal and Torres Strait Islander (Indigenous) children.

**Methods:** The data from wave 5 to wave 10 of the Footprints in Time cohort were used. Multi-trajectory modelling was used to identify sleep trajectories using weekday sleep duration, weekday bedtimes, wake times, and sleep problems (waves 5, 7 & 10). Trajectories of emotional and behavioural problems were derived from the Strengths and Difficulties Questionnaire (SDQ) data (waves 6, 8 & 10). Cultural attachment assessment included the knowledge of Indigenous language, clan, people, family stories/history and other cultural practice. Multivariable logistic regression models were used to assess the link between sleep and emotional and behavioural problems.

**Results:** Analysis of sleep data from 1270 Indigenous children (50.6% females, mean age 6.3 years ( $\pm 1.5$ )) identified four distinct trajectories: early sleepers/early risers (19.3%); early/long sleepers (22.1%), normative sleepers (47.8%), and late sleepers (10.8%). Three emotional and behavioural problem trajectories emerged: low stable (49.1%), high decreasing (40.5%), and high stable (10.4%). Early sleepers/early risers (OR: 0.48, 95% CI: 0.28–0.82) and children with strong cultural attachment (OR: 0.47, 95% CI: 0.27–0.82) had lower odds of being in the high emotional and behavioural problem trajectory group.

**Conclusions:** Early bedtime in children may reduce the risk of future emotional and behavioural problems. The protective effect of cultural attachment further highlights the need for strengths-based approaches to reduce mental health issues in Indigenous children.

### P037

#### INDIGENOUS AUSTRALIANS' CONCEPTUALISATION OF SLEEP HEALTH DIFFERS FROM WESTERN INTERPRETATIONS

*Fatima Y<sup>1,2,3</sup>, King S<sup>2</sup>, Solomon S<sup>2</sup>, Bucks R<sup>4</sup>, Skinner T<sup>5,6</sup>*

<sup>1</sup>Institute for Social Science Research, University Of Queensland, Brisbane, Australia, <sup>2</sup>Centre for Rural and Remote Health, James Cook University, Mount Isa, Australia, <sup>3</sup>ARC Centre of Excellence for Children and Families over the Life Course, University of Queensland, Brisbane, Australia, <sup>4</sup>School of Psychological Science, University of Western Australia, Perth, Australia, <sup>5</sup>Institut for Psykologi, Center for Sundhed of Samfund, Københavns Universitet, Øster Farimagsgade, Denmark, København K, Denmark, <sup>6</sup>University Department of Rural Health, La Trobe University, Bendigo, Australia

**Purpose:** Despite a significant burden of poor sleep, Aboriginal and Torres Strait Islander peoples' (Indigenous Australians) conceptualisation of sleep health is poorly understood. This research explored Indigenous Australians' understanding and interpretation of sleep health and how that affects their health.

**Methods:** Indigenous people from remote Queensland were invited to participate in focus group discussions exploring their understanding of sleep health, the link between dreaming and sleep, and perceived implications of poor sleep. Participants were also asked to complete an adapted pictorial Epworth Sleepiness Scale (ESS). Descriptive statistics were used to summarise ESS data and participants' demographic data. Thematic analysis was used to analyse focus group data.

**Results:** A total of 29 Indigenous Australians (82% females), median age 39 years (Interquartile range 26–51 years) from various geographical areas within North West Queensland participated in focus group discussions (n=6). The following themes emerged from the data: interconnection among sleep, emotional and physical health; challenges and successes in obtaining healthy sleep; the impact of dreams on waking life; and lack of support from health services in managing sleep issues. Scores from the modified pictorial scale indicate 24% of the participants had excessive daytime sleepiness (ESS score > 10 points).

**Conclusion:** Indigenous Australians' conceptualisation of sleep health is different from the western interpretation of sleep health. In particular, the connection between dreams and sleep is not adequately captured in current tools and resources to promote sleep health. This will limit effective prevention and management of sleep issues in Indigenous communities.

### P038

#### INSOMNIA - GOING BACKWARD TO GO FORWARD

*Fothergill T<sup>1,2</sup>, Cunningham D<sup>1</sup>*

<sup>1</sup>Melbourne Sleep Disorders Centre, East Melbourne, Australia,

<sup>2</sup>Western Hospital, Footscray, Australia

**Background:** Although there are common features in people with insomnia, for each individual there are possible different contributing factors and pathophysiological processes; each needing specific tailoring of treatment. We aim to understand treatments undertaken prior to specialist referral, common features on presentation and contributing factors in individual cases identified as part of their assessment.

**Methods:** We will undertake a retrospective audit of consecutive patients presenting with insomnia to a single private practice with a high insomnia case-load. We are collecting demographic data, details of prior and current treatments, clinical characteristics at presentation, outcomes of investigations and classification insomnia sub-type using the International Classification of Sleep Disorders-2 (ICSD-2). Data will be descriptive to allow understanding of the type and nature of patients presenting with