Figure 1. Meyer N et al.

Abstract P029 Figure 1

dysregulation may therefore be implicated in the pathophysiology of relapse, and serve as a predictive marker of impending deterioration.

P030 **EXPLORING ONLINE FORUMS TO UNDERSTAND PARENTS' AND FAMILIES' VIEWS ABOUT SOURCES OF SUPPORT AND RESOURCES FOR MANAGING CHILDREN'S SLEEP PROBLEMS IN THE COMMUNITY AND PRIMARY CARE**

[1]Samantha Hornsey*, [1,2]Catherine Hill, [1]Ingrid Muller, [1]Beth Stuart, [1]Hazel Everitt. [1]University of Southampton, Southampton, UK; [2]University Hospital Southampton NHS Foundation Trust, Southampton, UK

Introduction Behavioural insomnia (BI) is the commonest sleep disorder in children (Hill, 2011) and primary care provides opportunity to prevent or address sleep problems early. However, limited research in this area suggests that it is not often discussed in consultations (Honaker and Meltzer, 2016). Parents or carers of children with sleep problems access the internet, for information regarding children's sleep problems (Hatton and Gardani, 2018). To date, there is no published research into online discussion forums exploring parent's perceptions of the management of children's sleep in primary care.

This qualitative study aims to explore:

1. What parents express in online forums regarding their concerns and expectations about children's sleep problems.
2. What resources parents are aware of either online, in the community and through primary care to help them manage children's sleep problems.
3. How parents and families perceive that their children's sleep problems are currently addressed during GP consultations in Primary Care.

Methods A qualitative analysis of public posts about children's sleep problems in primary care or the community, posted by parents/carers in online discussion forums. Searches will be conducted in three active online discussion forums using terms such as 'sleep', 'doctor' and 'health visitor'. Data will be collected by viewing and downloading the first 300 relevant discussion threads and analysed based on inductive thematic analysis in Nvivo, by reading and rereading the data, by creating and revising a coding schedule and by refining the emerging themes and subthemes.

Results Data collection is on-going. Results will be presented at the conference.

Discussion This study will provide a valuable insight into parents' and carers' perceptions of the available support for children's sleep problems in primary care and the community. This will help direct future research, to address areas for improvement and develop suitable support tools for Primary Care providers and families.

P031 **MANAGEMENT OF PAEDIATRIC SLEEP PROBLEMS IN PRIMARY CARE: A SYSTEMATIC REVIEW**

[1]Samantha Hornsey*, [1,2]Catherine Hill, [1]Beth Stuart, [1]Ingrid Muller, [1]Hazel Everitt. [1]University of Southampton, Southampton, UK; [2]University Hospital Southampton NHS Foundation Trust, Southampton, UK

Introduction Sufficient sleep is important for healthy child development.[1] Behavioural Insomnia (BI) is common[1] and can be treated with behavioural and sleep hygiene interventions.[2][3] As a first point of contact for families, primary care offers opportunities to prevent or identify and address sleep problems at an early stage. A US review[4] suggested that professionals lack training and sleep is rarely discussed. Our review further explores primary care

professionals' (PCP) knowledge of BI, perceptions of their role and current practice.

Methods Six databases were searched (MEDLINE, EMBASE, PsycINFO, CINAHL, Cochrane Library CENTRAL, Web of Science), using terms for 'sleep', 'child/paediatric', 'primary health care', 'general practitioner' and 'health visitor'. Selection criteria included qualitative and/or quantitative studies of PCPs seeing parents or children presenting with paediatric sleep problems or parents/carers of children presenting in primary care. The focus is PCP attitudes, knowledge, understanding and practice regarding paediatric sleep management in primary care. SH is leading paper screening and data extraction. A second reviewer BS screened 20% of initial titles/abstracts, will screen 20% of full texts and will check data extraction. The mixed methods appraisal tool will be used for quality appraisal. A mixed-methods synthesis will include a thematic synthesis of qualitative papers and a narrative synthesis of quantitative papers.

Results Database searches resulted in 7578 results, de-duplicated to approximately 5500. Approximately 400 papers were included from title/abstract screening for potential eligibility. Full texts are currently being screened for full eligibility and data is being extracted. Results will be presented at the conference.

Discussion A greater understanding of PCP knowledge of BI, perceptions of their role and current practice will identify key areas to inform research to improve the management of paediatric sleep problems in primary care.

REFERENCES

1. Hill C. Practitioner Review: Effective treatment of behavioural insomnia in children. *Journal of Child Psychology and Psychiatry* 2011;**52**(7):731–41.
2. Allen SL Howlett MD Coulombe JA, Corkum PV. ABCs of SLEEPING: A review of the evidence behind pediatric sleep practice recommendations. *Sleep Medicine Reviews* 2016;**29**:1–14.
3. Meltzer LJ, Mindell JA. Systematic Review and Meta-Analysis of Behavioral Interventions for Pediatric Insomnia. *Journal of Pediatric Psychology* 2014;**39**(8):932–48.
4. Honaker SM, Meltzer LJ. Sleep in pediatric primary care: A review of the literature. *Sleep Medicine Reviews* 2016;**25**:31–9.

P032   **DATA FROM THE BRAZILIAN BAEPENDI HEART STUDY COHORT YIELD NEW INSIGHTS INTO THE GENETIC EPIDEMIOLOGY OF INSOMNIA**

[1]Sabrina S Ahmed*, [2]Tâmara P Taporoski, [2]Luz M Gomez, [1]Francieli S Ruiz, [3]Felipe Beijamini, [2]Andréa RVR Horimoto, [2]André B Negrão, [4]Kristen L Knutson, [2]Alexandre C Pereira, [1]Annette Sterr, [1]Malcolm von Schantz. [1]*Faculty of Health and Medical Sciences, University of Surrey, Guildford, UK*; [2]*Incor, University of São Paulo School of Medicine, São Paulo, Brazil*; [3]*Federal University of Fronteira Sul, Realeza, Brazil*; [4]*Feinberg School of Medicine, Northwestern University, Chicago, USA*

Introduction Insomnia significantly impacts lifetime morbidity and thus has substantial socioeconomic costs. In developed, high-income countries insomnia prevalence is increasing. However, little is known about insomnia in less urbanised, lower-income populations. Baependi is a Brazilian rural town, which has been shown to maintain sleep cycles synchronised to natural daylight, in spite of electrification. We aimed to investigate the components of insomnia in the family-based Baependi Heart Study cohort, using the Insomnia Severity Index (ISI) questionnaire.

Methods and materials Descriptive analysis was performed on data collected from the Baependi population (n=1,202) using R software. Heritability analysis was calculated using polygenic mixed modelling. Genome-wide association analysis (GWAS) was subsequently performed on the Baependi data, in order to interrogate for associations with polymorphisms previously related with insomnia symptoms (n= 811).

Results Descriptive regression analysis categorised 7.6% of the participants as suffering from 'clinical insomnia' based on their ISI scores, with an average total score of 6.5 ± 5.0 (SD). Heritability of ISI score, based on the best-fit model adjusted for sex, age, education, and depression, was 19%. GWAS yielded four associations of genome-wide significance with single-nucleotide polymorphisms (SNP) rs869481, rs62037617 and rs3747579, which are located in the CORO7 gene, and rs3789038, located on the neighbouring HMOX2 gene on chromosome 16.

Conclusion This is one of the first studies of ISI score distribution in a general population. The heritability value observed is consistent with previously published literature, which have used different measures of insomnia symptoms. In addition, this is the first reported GWAS analysis for ISI score, identifying the first significant genome-wide genetic associations of ISI score. Thus, this study confirms the reliability and suitability of ISI as a measure for genetic studies in population.

P033   **THE FEASIBILITY OF REMOTE MONITORING IN PAEDIATRIC PATIENTS REQUIRING NON-INVASIVE POSITIVE AIRWAY PRESSURE THERAPY (NIPAPT)**

Ross Langley*, Alex Thomas, Sakina Dastagir, Ridma Jayarathna, Rishi Pabary. *Royal Brompton Hospital, London*

Introduction Non-invasive positive airway pressure therapy (NIPAPT), including bi-level and continuous airway pressure (CPAP), is used to treat children with multiple conditions including obstructive sleep apnea–hypopnea syndrome (OSAHS). Sustained improvement requires significant effort from the patient, their family and the clinical team. Increasingly, we have found that, despite inpatient establishment, adherence reduces and symptoms re-occur. Re-establishment requires further clinic reviews and admissions, often over several nights. In response, we undertook a pilot study in which 4G-modem equipped ventilators were used to enable remote monitoring of adherence in patients admitted for establishment/re-establishment of NIPAPT.

Methods From July 2019 all new/re-establishment patients requiring NIPAPT were offered and consented for remote monitoring. The secure monitoring system Airview© (Resmed) was used with the ventilator devices - Lumis 100 & 150 (Bi-Level) and Airsense S10 Elite (CPAP). Data collected included ventilator usage, AHI, leak and pressures. Data checks were carried out after one week of being established, and then regular intervals (up to 90 days).