A. Basic Sleep Science Poster Presentations

P042

FIVE-YEAR REVIEW OF A TERTIARY PAEDIATRIC SLEEP SERVICE FOR COMPLEX PATIENTS

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Introduction: Our paediatric sleep unit commenced service for children with complex medical problems in July 2015. Service capacity includes 12 inpatient level 1 studies (two neonates) and one home study per week. FTE includes senior scientists 2.6, sleep technologists 1.7, administration 1.0, nursing 0.7 and medical 1.2. The primary aim of this study was to evaluate activity during the first 5-years. The secondary aim was to document the impact of the COVID-19 pandemic.

Methods: Sleep unit operational & diagnostic data were collected from sleep booking sheets, sleep study reports, electronic medical records. Descriptive statistics are presented.

Results: A total of 2186 sleep studies were performed (July 2015 to June 2020) with a range of 368–472 studies per annum. Overall, 61.7% were diagnostic studies, 20.8% titration studies (CPAP, oxygen, bi-level or invasive ventilation), 10% neonatal and 7.5% home studies. Between 2016–2020, the average waiting time (days) for a neonatal study was 16, a titration study was 106, a diagnostic study was 110 and a home study was 76. Further delays were caused by the COVID19 pandemic. Mean waiting time rose 229% from 108 days (Feb 2020) to 355 days (Feb 2021). Referrals for sleep studies have exceeded bed capacity since the beginning of the pandemic.

Discussion: This audit describes activity in a tertiary complex paediatric sleep service during the first 5 years. The service has struggled on current FTE and bed capacity to manage waiting times, exacerbated further by the COVID-19 pandemic. A new business and clinical model are warranted.

P043

TELEHEALTH-SUPPORTED LEVEL 2 PAEDIATRIC HOME POLYSOMNOGRAPHY

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Introduction: The gold standard for diagnosis of paediatric obstructive sleep apnoea (OSA) is attended in-laboratory level 1 polysomnography (PSG). In our service, we select some children for unattended home level 2 PSG (HPSG) with telehealth support. We audited our HPSG service from 2013 to 2020.

Methods: We retrospectively audited level 2 home PSG reports in children aged 5–18 years referred for suspected OSA between 2013 and 2020. Tests were performed with the Compumedics Somte PSG acquisition device. The primary outcome was % of studies achieving a technically adequate diagnosis. Secondary outcomes included sleep duration, sleep efficiency and parental acceptance by non-validated service-specific questionnaire. Data was analysed using descriptive & inferential statistics. χ^2 tests were used for categorical variables.

Results: There were 235 (140 male, 59.6%) patients studied between 2013 and 2020 (7 years). The mean age was 10.8 (SD 3.6) years. 69 patients (29.4%) had co-morbidities. Repeat studies were indicated in 10.2% (24/235) due to technical failure. There was no

significant difference between failed studies set up by HITH nurses compared with Sleep scientists (p=0.1). A technically acceptable diagnosis was made in 87% (205/235) patients, with no reason for under-estimation in 74.9%, and potential under-estimation in 17.9%. No diagnosis was achieved in 7.2%. 6 hrs or more sleep was obtained in 83%. Parental questionnaires revealed 89% perceived high-level care, 91% perceived increased convenience and 76% good/excellent telehealth support.

Discussion: Telehealth-supported paediatric HPSG achieves a technically adequate diagnosis in 87%, with 83% achieving ≥6 hrs sleep duration, and excellent family acceptability.

P044

PRIMARY CARE MANAGEMENT OF CHRONIC INSOMNIA BY GENERAL PRACTITIONERS: AN AUSTRALIAN PERSPECTIVE

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Introduction: Chronic insomnia is a common sleep disorder, with an estimated 15% of Australian adults reporting symptoms of insomnia. Australian general practitioner (GP) guidelines recommend cognitive behavioural therapy for insomnia (CBTi) as first-line treatment for insomnia however research suggests that GPs instead rely heavily on sleep hygiene and pharmacotherapy. GPs commonly provide treatment for insomnia; however, little is known about the experiences of Australian GPs and their interest when managing patients with insomnia. This study was conducted to explore the perspectives of GPs towards insomnia management and to identify factors that could influence the implementation of new models of insomnia care within general practice.

Methods: A pragmatic, inductive qualitative study. Purposive sampling was used to recruit 28 Australian GPs varying in age, experience, and distance from specialist sleep services. Semi-structured interviews were conducted, and data were analysed using thematic analysis.

Results: Three themes were identified: 1) Responsibility for insomnia care; 2) Complexities in managing insomnia; and 3) Navigating treatment pathways. Whilst GPs accepted insomnia care as part of their role, they often found it difficult to provide evidence-based care within the time and funding limitations of general practice. Co-morbidity of mental health conditions and insomnia, and long-term use of benzodiazepines presented challenges for GPs. GPs' knowledge and experience of CBTi and access to specialised referral pathways for insomnia was limited.

Discussion: Insomnia presents complexities for GPs. Education about insomnia treatments, funding that enables recommended treatment, and pathways to specialist services would support insomnia management within general practice.