

Background Children with autism spectrum disorder (ASD) have a myriad of associated health problems which affect their overall quality of life. These include sleep disturbances, which may have been under-recognised previously. Recent research have indicated that children with ASD have more sleep problems compared to their typically-developing peers. However, there is limited information regarding the prevalence of sleep problems among preschool children with ASD. The Sleep Disturbance Scale for Children (SDSC) was originally validated on a sample of healthy children 6–16 years old, but it has been proven to have a good level of internal consistency (Cronbach's alpha: 0.83) for preschool children between the ages of 3–6 years old. This questionnaire has also been validated in the Malaysian children population in previous studies.

Objectives This study aims to determine the prevalence of sleep problems and associated factors in a group of Malaysian preschool children between the age 3 and 6 years old, with autistic spectrum disorder (ASD) diagnosed as per DSM-5.

Methods Patients who fulfilled the inclusion criteria were recruited from the Child Development Clinic, Universiti Kebangsaan Malaysia Medical Centre (UKMMC). Demographic data was obtained and the Sleep Disturbances Scale for Children (SDSC) questionnaire was completed by the main caregiver. Logistic regression analysis was used to determine factors related to higher total SDSC scores.

Results A total of 56 preschool children were recruited (48 boys) with a median age of 5 years (IQR = 9 months). Twenty-one of them (37.5%) obtained a pathological score for at least one subtype of sleep disturbances on the SDSC with eleven children (19.6%) scoring high for overall sleep disturbances. For each sleep disturbance subtype: DIMS 23 (41.1%), PAR 10 (18%), SBD 2 (3.6%), DOES 17 (30.4%), DA 8 (14.3%), NRS 6 (10.7) while no participants achieved pathological score for SHY. Majority of them had insufficient night sleep duration of less than 8 hours (35.7%) and prolonged sleep latency beyond 30 minutes after bedtime (46.4%). A significant proportion of the preschoolers with ASD had co-morbidities (39.3%) in which more than a quarter (26.8%) had attention-deficit hyperactivity disorder (ADHD). The practice of co-sleeping was common in a majority of the households (94.6%). Using logistic regression analysis, four factors were significantly associated with higher total SDSC scores; female gender ($p = 0.032$), insufficient sleep length ($p < 0.001$), prolonged sleep latency ($p = 0.021$) and the practice of co-sleeping ($p < 0.001$).

Conclusions Sleep disturbances are prevalent in Malaysian preschool children with ASD, especially DIMS. Female gender, insufficient sleep length, prolonged sleep latency and household practice of co-sleeping were found to be significant factors associated with sleep disturbances. Evaluation of sleep problems should form part of the comprehensive care of preschool children with ASD. Individuals at risk for sleep problems could then be directed to appropriate avenues for support and therapy.

Abbreviations: DA, disorders of arousal; DIMS, disorders of initiating and maintaining sleep; DOES, disorders of excessive somnolence; NRS, nonrestorative sleep; PAR, parasomnias; SBD, sleep breathing disorders; SDSC, Sleep Disturbance Scale for Children; SHY, sleep hyperhidrosis.

Young People's Health Special Interest Group

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BRINGING OUR HEEADSSS TOGETHER - PRIORITISING THE VOICES OF CHILDREN AND YOUNG PEOPLE

Paediatric Research Across the Midlands (PRAM) Network.

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Background Children and young people (CYP) are increasingly attending acute paediatric services due to mental health difficulties. 50% of all mental health problems are established by 14 years of age and 75% by 24 years. Underinvestment in mental health has been a longstanding concern, amplified by the COVID-19 pandemic through extra stress caused by prolonged school closures, social isolation and a lack of access to usual support services.

In 2020, the Royal College of Paediatrics and Child Health highlighted that suicide is now the leading cause of death in England and Wales for children aged 5–19 years, emphasising the need to prioritise and improve mental health. Paediatricians must develop the knowledge and skills to identify, support and make appropriate referrals for common mental health problems. HEEADSSS is a well-known psychosocial screening tool with eight domains, used to identify potential or actual harm.

Objectives Establish whether CYP within the West Midlands, UK are receiving adequate psychosocial assessments on hospital admission and whether healthcare professionals are signposting to relevant services.

The primary outcome was the percentage of CYP with documented evidence of being offered a HEEADSSS assessment.

Methods A regional prospective audit across nine hospitals was performed for three days per week from 4st -31st January 2021. A standardised proforma was used to gather information from medical records of all CYP aged ≥ 12 years admitted to paediatric wards. Pooled data were analysed using Microsoft Excel.

Results 231 patients were included. The median age was 14 years old (range 12–17 years). 163(71%) were female. 202 (87%) had no known communication difficulties. 53(23%) were known to CAMHS and 43(19%) to social care. 78/231 (34%) were admitted with mental health as the presenting complaint.

35/231(15%) were documented to be given the opportunity to be spoken to alone; 29(82%) accepted.

No department had a psychosocial screening tool embedded in the admission document.

158/231(69%) had less than half of the eight domains completed. The median was 1.5 (range 0–8). Home and education/employment were most frequently asked (37–42%). Eating/exercise, drugs, safety, sexual activity and other activities were the least frequently asked (14–27%). The proportion of those with a concern identified when asked ranged from 18%–39%.

However, in self-harm, depression and suicide, only 85/231 (37%) were asked, with concern identified in 87%.

78 patients were admitted for mental health; 28(39%) had less than half the domains completed (median 5, range 0–8). Drug use 46/78(59%), safety and sexual activity (both 38/78 (49%)) were inconsistently documented in this group, with concerns identified in 20–26% of those asked.

90/231(39%) were referred to CAMHS, social care, counselling, online or other support services. 16/77(21%) patients with a concern documented in at least one domain were not referred onwards.

Conclusions This study demonstrates poor implementation of the HEEADSSS tool on admission, across a wide geographical area. Increased utilisation of a psychosocial screening tool would provide more opportunities to CYP to discuss their psychosocial health and receive appropriate support, in line with national guidance standards. Further work is underway addressing barriers to using HEEADSSS, considering electronic or embedded tools and signposting to relevant services.

British Association of General Paediatrics

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SLEEP DISTURBANCES IN SCHOOL-GOING CHILDREN WITH AUTISM SPECTRUM DISORDER AT A MALAYSIAN TERTIARY HOSPITAL

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Background Children with autism spectrum disorder (ASD) have a variety of co-morbid medical problems, including sleep disturbances. Prevalence of sleep disorders has been reported to be higher in this group as compared to the general population. Identifying sleep problems in children with ASD may help increase awareness and improve the overall quality of care for them.

Objectives The aim of this study was to determine the prevalence of sleep problems and associated factors in a group of Malaysian children aged 6 to 16 years, with ASD.

Methods This is a cross-sectional study at the Child Development Centre of UKM Medical Centre (UKM MC) on ASD children aged 6–16 years. Demographic data was obtained and the Sleep Disturbances Scale for Children (SDSC) questionnaire was completed by the main caregiver. Logistic regression analysis was used to determine factors related to higher total SDSC scores.

Results A total of 128 patients were recruited (111 boys) with a median age of 8 years 3 months (IQR: 2 years 10 months). Forty-seven (36.7%) of them obtained total SDSC scores in the pathological range with 19 (14.8%) scoring high for

overall disturbances and 28 (21.9%) for at least one subtype of sleep disorders: 25 (19.5%) DIMS, 18 (14.1%) SBD, 10 (7.8%) DOES, 5 (3.9%) DOA, 6 (4.7%) SWTD, and 3 (2.3%) SHY. More than half of the children (57.8%) were reported to have sufficient sleep duration of 8–11 hours, but longer sleep latency of at least 15 minutes (82.8%). Half of the ASD children also had co-morbidities in which one-third (34.4%) had attention-deficit hyperactivity disorder (ADHD). Using logistic regression analysis, four factors were significantly associated with higher total SDSC scores; female gender ($p = 0.016$), older age group (11–16 years old) ($p = 0.039$), shorter sleep length ($p = 0.043$) and longer sleep latency ($p < 0.001$).

Conclusions The prevalence of sleep disturbances is high among Malaysian children with ASD, especially DIMS. Female gender, older age group, shorter sleep length and longer sleep latency were found to be associated with the sleep disturbances. Evaluation of sleep problems should form part of the comprehensive care of children with ASD.

Abbreviations: DA, disorders of arousal; DIMS, disorders of initiating and maintaining sleep; DOES, disorders of excessive somnolence; SBD, sleep breathing disorders; SDSC, Sleep Disturbance Scale for Children; SHY, sleep hyperhidrosis; SWTD, sleep-wake transition disorders.

British Association of Perinatal Medicine and Neonatal Society

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NON-OCCLUSIVE MESENTERIC ISCHAEMIA (NOMI) IN NEONATES: A DEVASTATING DISEASE

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Background NOMI is an acute mesenteric circulatory disorder characterized by non-organic occlusion of blood vessels. It is an acute neonatal surgical emergency associated with high mortality.

Methods To describe three cases of neonates with NOMI requiring laparotomy and surgical intervention.

Results Three neonates with NOMI are described, all requiring laparotomy and bowel resection for extensive bowel ischaemia. Baby A was a 1900g 34 weeks infant with Trisomy 21, a large patent ductus arteriosus and duodenal stenosis which was surgically corrected on day 2. He developed abdominal distension on day 11 and underwent emergency laparotomy. Baby B was a 3600g term male infant with transposition of great arteries requiring an early balloon atrial septostomy with prostaglandin infusion while awaiting corrective surgery. He developed abdominal distension on day 11 and had extensive bowel ischaemia requiring resection. Both babies A and B developed multiple complications post-operatively and succumbed on day 38 and 66 respectively. Baby C was a 3200g term male infant with Tetralogy of Fallot and severe pulmonary stenosis requiring prostaglandin infusion. He developed abdominal distension on day 8 requiring surgical resection for extensive bowel ischaemia and stoma creation. The stoma was successfully closed following feeding establishment. He remains well at this time of writing.