Objects 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.