

patients showing higher motor activity than HC at 4:00, 6:00, 15:00 and 16:00.

Conclusions: ADHD patients present a significantly worse sleep quality compared to HC, while groups show comparable sleep duration. The circadian pattern of motor activity of ADHD patients seems to be characterized by the lack of the typical post-lunch dip.

Disclosure: Nothing to disclose.

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Relationships between morning salivary Alpha-Amylase (sAA), sleep and anxiety in adults with and without Autism Spectrum Disorder (ASD)

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Objectives: sAA release occurs in response to psychological stress, is an indicator of arousal, and is linked with anxiety and sleep quality. Our aim was to examine relationships between morning sAA, sleep and anxiety in adults with and without ASD.

Methods: Thirty-three healthy adults, 14 adults with ASD (ASD-Only) and 13 adults with ASD medicated for anxiety or depression (ASD-Med), aged 21–44 years, IQ > 80, completed 14-days actigraphy, and questions on trait anxiety (Spielberger State-Trait Anxiety Questionnaire), pre-sleep arousal (Sleep Anticipatory Anxiety questionnaire), and depression (Patient Health Questionnaire-8). Saliva was collected immediately on waking and 30 minutes post-waking on one day of the study. sAA was measured via kinetic enzyme immunoassay (Salimetrics).

Results: Preliminary analyses controlling for SoL (sleep onset latency), psychopathology and bedtime cortisol, showed controls had higher waking sAA than the ASD-Only group ($P = 0.005$), but not the ASD-Med group. In the ASD-Only group, SoL ($P = 0.003$) was significantly negatively associated with waking sAA while pre-sleep arousal (somatic) ($P < 0.001$) and anxiety ($P = 0.024$) were significantly positively associated with waking sAA. Thus shorter SoL was associated with increased sAA, and increased anxiety and pre-sleep arousal were associated with higher sAA in ASD.

Conclusions: Associations between sAA, trait anxiety and pre-sleep arousal are consistent with reported sAA association with anxiety in other populations. Future research will need to explore the inter-relationship between sAA and other indices of arousal and autonomic nervous system activity as underlying mechanisms behind anxiety and sleep problems in individuals with ASD.

Disclosure: Nothing to disclose.

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ADHD, sleep and health

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Objectives: ADHD in children and adults is often accompanied by sleep problems and sleep disorders. Sleep problems generally lead to sleepiness during the day and may further impair attentiveness. Sleep problems may also be part of, or induce mood disorders. Sleep debt in the long term is associated with general health problems like obesity, diabetes, cardiovascular disease and cancer.

Methods: During this presentation, an overview of the literature on sleep in ADHD will be discussed, as well as recent research on the

delayed sleep phase syndrome in ADHD and its consequences for health in this population.

Results: ADHD is comorbid with sleep problems and disorders in the majority of children and adults, like restless legs syndrome, sleep apnea, delayed sleep phase syndrome. In 75% the sleep phase is delayed, as has been shown using objective measures (dim light melatonin onset in saliva, actigraphy). Also body core temperature is delayed and slightly decreased. A late sleep pattern is often genetically driven, starts early, and may have several consequences for health in general in the long term. Available evidence for treatment with sleep hygiene, melatonin at night and bright light therapy in the morning will be discussed.

Conclusions: ADHD and circadian based sleep disorders seem intertwined in the majority of cases. This may have significant health consequences in the long term due to phase delay and short sleep duration. Prevention may be possible identifying effective treatments in patients with ADHD.

Disclosure: Nothing to disclose.

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Sleep quality and burnout levels in people working with severe disability patients

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Objectives: To examine the association between Sleep Quality and Burnout among staff working in a community-based service for people with severe disability.

Methods: A questionnaire including, inter alia, the Pittsburgh Sleep Quality Index (PSQI)(Buysse et al, 1989), the Maslach Burnout Inventory (MBI)(Maslach et al., 1997), and several psychosocial factors at work was filled out by 115 (79 Female, 36 Males) health and social professionals, aged between 23 and 63.

Results: The 29.56% of the sample displays a PSQI total score above 5 (Mean score = 4.43 ± 4.43). The PSQI total score is positively correlated with the Emotional Exhaustion and Depersonalization MBI subscales ($Rho = 0.608$, $P < 0.001$; $Rho = 0.263$, $P < 0.005$). Professionals reporting overtime (vs. not) show an higher PSQI total score ($t = 1.13$; $P < 0.05$, $df = 113$). Work stress sources, such as working time and physical-mental work-load, are positively correlated with the PSQI total score ($Rho = 0.359$, $P < 0.001$; $Rho = 0.387$, $P < 0.001$). PSQI total score does not differ in relation to the gender, the work contract type (i.e. fixed-term vs. open-ended), and the night-work.

Conclusions: Inappropriate behaviors might occur in case of high level of burnout among health and social professionals working in residences for the disabled people. In our sample Emotional Exhaustion and Depersonalization were related to a poor sleep quality. Overtime, working time and physical-mental work-load were also associated to poorer sleep. A better managing of these factors at work can improve sleep quality, and consequently, could play a role in preventing burnout.

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