

established to address unique challenges in terms of stress and sleep problems experienced by each group.

**Conflict of Interest:** No.

P918

Poster Session - Public Health - Day 2 (Poster)

### Impacts of night work and season on sleep duration in an Arctic work environment

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**Introduction:** Unique light and climate conditions of the Arctic regions, including phenomena like polar night and midnight sun, pose challenges to the circadian rhythms of workers at these latitudes. While associations between night work, disrupted sleep patterns and adverse health consequences are known, few studies explore the potential additional impacts of seasonal variation. The aim of this study was to investigate the interaction between seasonal changes and consecutive morning and night shifts on subjective and objective measures of sleep duration. **Method:** Sixty-two 3-shift process operators at an industrial plant situated at 70°N latitude volunteered to participate during both the summer and winter seasons. Their work schedule included seven consecutive morning shifts and seven consecutive night shifts, with occasional evening shifts and interspersed rest periods. Objective sleep duration was tracked by an Oura smart ring, whereas subjective measures were captured via daily sleep diaries. The data was analysed using multilevel mixed-effects regression models with summer versus winter and day versus night as fixed effects.

**Results:** Preliminary results indicate that subjective sleep duration after morning shifts during summer was estimated to 398.4 ± 61.4 min (mean ± standard deviation). Working night shifts shortened subjective sleep duration with 4.8 min and the winter season shortened subjective sleep duration with 6.6 min, but not significantly ( $p \geq 0.43$ ). Objective sleep duration after morning shifts during summer was 382.2 ± 6.6 min. Working night shifts shortened subjective sleep duration with 3.6 min and the winter season shortened subjective sleep duration with 0.7 min ( $p \geq 0.89$ ). No interactions between season and day/night were found. **Conclusion:** Preliminary results suggest that neither night shifts nor seasonal variations significantly impact the total sleep duration for these shift workers.

**Conflict of Interest:** No.

P919

Poster Session - Public Health - Day 2 (Poster)

### Insomnia and Sleep Apnea: Would Indoor Environment Change the Picture?

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**Introduction:** Sleep is essential for overall health and well-being, impacting several dimensions from cognitive impairment to cardiometabolic risk. Yet, many individuals struggle with sleep-related issues such as sleep apnea and insomnia, often without realizing that indoor environment may be a contributing factor. The present data concerns to the preliminary results from one of the tasks of the HypnosAir Study ([www.hypnosair.com](http://www.hypnosair.com)) and it aims to describe the prevalence of insomnia, obstructive sleep apnea (OSA) and self-perceived indoor air quality, in a sample of Portuguese adults.

**Method:** An online survey was publicized through email, direct contact, and social media. Insomnia was assessed through questions for its diagnosis according to ICSD-3. The risk of OSA was assumed by the Berlin Questionnaire (BQ) from where, more than 2 positive categories indicated a high risk. Patients with both insomnia and a high risk for OSA were assigned as COMISA. Self-perceived indoor environmental aspects (air quality, temperature and humidity, and ventilation) were assessed through individual questions. All data were analyzed through descriptive data.

**Results:** A total of 318 participants were included (39.9 ± 15.0 years and 64.5% female). A high risk for OSA was identified in 12.3% of the participants and 11.0% met the criteria for insomnia. This percentage increased for 40.2% when it was asked about the difficulties on sleep onset, sleep maintenance or waking up too early. Concerning the risk COMISA, this condition was found in 2% of the participants. From those who had high risk for OSA, 87.5% reported feeling affected by the indoor air quality, 50% considered the temperature and humidity bad or very bad, 45% sleep with the door closed and 35% wake up with a feeling of dry mouth. From those who met insomnia criteria, 14.3% reported feeling affected by the indoor air quality and 28.6% sleep with the door closed.

**Conclusion:** Preliminary results suggest that poor indoor environmental conditions are frequent among patients with insomnia and those with high risk for sleep apnea. Inadequate room ventilation seems to be a critical issue reflecting on the poor air quality. Whether such aspects may interact further deteriorating sleep physiology warrant future research and more consistent results.

**Conflict of Interest:** Yes- Funding: Fundação para a Ciência e a Tecnologia (PTDC/CTA-AMB/3263/2021)

