**The association of sedentary behaviour and mental wellbeing in the workplace**

Abolanle Gbadamosi¹, Malcolm Granat¹, Christopher Pickford¹, Alexandra Clarke-Cornwell¹

¹University of Salford

**Background:** Sedentary behaviour (SB) is highly prevalent in workplaces and this behaviour can be detrimental to health; however, little is known about SB and its association with mental wellbeing (MW). Therefore, the main aim of this pilot study was to examine the impact of SB on MW using the work environment as a case study.

**Methods:** A convenience sample of staff, (females (52.4%); median age 33.0 (IQR 28.5-44.0)) and postgraduate students (n=21) from the University of Salford were grouped into those with sit-stand desks (n=9) and those without sit-stand desks (n=12). Data were collected for a 7-day period using the activPAL, a daily activity diary, and a questionnaire that included the validated Warwick Edinburgh Mental Wellbeing Scale. Statistical analysis was carried out to test for differences in sitting times between both groups and correlation tests were used to examine associations between sitting at work and MW.

**Results:** Baseline characteristics showed no difference in gender, BMI, or education level; however, there was a significant difference in median age for those who had desks (45.0) and those without (30.5) (p=0.015). Median daily waking sedentary time was 9.55 hours (8.72- 10.71) for those with sit-stand desks and 9.56 (8.90-10.51) for those without sit-stand desks; however, this was not statistically significant (p=0.808). The group without sit-stand desks spent more time sitting at work than the group with sit-stand desks (73.6% vs. 64.1%); however, this was not statistically significant (p=0.219). There was an inverse association between time spent sitting and MW scores, but this was not significant (p=0.825).

**Conclusions:** There were no differences in sitting times between the groups despite the use of sit-stand desks in one of the groups. Prolonged SB in the workplace may be inversely associated with MW; however, more research is needed in a larger cohort that would enable adjustment for confounders to be made.