S56 Accepted posters

Aims. Individuals with intellectual disability (ID) exhibit elevated health needs when compared with the general population. There is a higher vulnerability to long-term conditions. A scoping review identified that individuals with ID exhibit a distinct pattern of multiple long-term conditions (MLTC) that is different to the general population. Findings highlight health challenges faced by individuals with ID, emphasising the need for targeted and early interventions to address their unique healthcare needs.

This study utilises a professional advisory panel (PAP) and patient and public involvement (PPI) group to form a consensus on relevant long-term conditions for people with ID. Machine learning algorithms are employed to identify long-term conditions in a large, population-based data repository covering the whole of Wales revealing a comprehensive range and prevalence of long-term conditions in a sample of 13,361 adults with ID.

**Methods.** A consensus on relevant long-term conditions for people with ID was formulated through iterative review followed by revision by PAP and PPI group. PAP comprised a multidisciplinary team with relevant expertise including General Practitioners, a Consultant Psychiatrist, nurses, pharmacists, and data analysts. The PAP worked in collaboration with a PPI group, comprising three groups of experts by experience: people with ID, family or informal carers of people with ID, and professional carers of people with ID.

This study utilises machine learning algorithms in the Secure Anonymised Information Linkage (SAIL) databank to identify the range and prevalence of long-term conditions in ID. SAIL is an anonymised, population-based data repository, comprising billions of anonymised records across Wales. This study included 13,361 ID adult patients.

**Results.** Following iterative review and revision by the PAP and PPI group, a consensus of 40 long-term conditions relevant for people with ID was identified. Prevalence rates for each condition were calculated. Ten most prevalent conditions were recorded as mental illness, reflux disorders, epilepsy, chronic airway diseases, hypertension, thyroid disorders, chronic arthritis, chronic kidney disease, diabetes, and anaemia.

Conclusion. Consensus on relevant long-term conditions for the general population developed through previous studies is not relevant for the ID population. This is the first effort at creating a full range of long-term conditions for individuals with ID, utilising a population-based data repository. It is possible to do this in partnership with PAP and PPI groups. Along with prevalence, impact of ageing and gender, and hospitalisation as outcome data, this study describes challenges associated with interpreting data captured by Read Codes and ICD–10 codes.

Abstracts were reviewed by the RCPsych Academic Faculty rather than by the standard *BJPsych Open* peer review process and should not be quoted as peer-reviewed by *BJPsych Open* in any subsequent publication.

## Neural Correlates of Disgust Processing in Childhood Maltreatment and Peer Victimisation

Dr Lena Lim\*

SICS, ASTAR, Singapore, Singapore. IoPPN, King's College London, London, United Kingdom

\*Presenting author.

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**Aims.** Childhood maltreatment (CM) and peer victimisation (PV) are common sources of early-life interpersonal stress. CM

is associated with atypical fronto-limbic emotion processing and regulation, and increased vulnerability for self-harm/suicide. However, few studies have compared the neurofunctional correlates between caregiver-inflicted versus peer-inflicted mistreatment. We compared the alterations of neurofunctional correlates of facial emotion processing in young people exposed to CM or PV and explored their associations with self-harm.

**Methods.** fMRI data were collected from 114 age- and gender-matched youths (39 CM, 37 PV and 38 controls) during an emotion discrimination task. Region-of-interest (amygdala, insula) and whole-brain analyses were conducted.

Results. Groups differed significantly during processing of disgust only. Both CM and PV groups had lower activation in right amygdala and bilateral posterior insula than controls, where the left insular underactivation was furthermore related to increased self-harm in maltreated youths. At the whole-brain level, both CM and PV groups also had underactivation compared with controls in a cluster of bilateral limbic-thalamic-striatal, precuneus/posterior cingulate, temporal, fusiform/lingual and cerebellar regions, which was negatively associated with emotional problems in controls, as well as a cluster of somatosensory regions associated with increased self-harm in maltreated youths.

**Conclusion.** Early-life interpersonal stress from caregivers or peers is associated with common underactivation of limbic-thalamic-striatal, precuneus/posterior cingulate and somatosensory regions during disgust processing. The hypoactivation of key emotion and sensory processing and self-referential brain regions could be a potential suppressive mechanism to cope with the aversive emotion; however, it may also entail increased risk of affective psychopathology in seemingly healthy youths.

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## Risk Factors for Burnout Among Doctors in a Tertiary General Hospital

Assoc Professor Leslie Lim<sup>1\*</sup>, Dr Louis Loh<sup>1</sup>, Dr Yiong-Huak Chan<sup>2</sup>, Dr Leonard Eng<sup>1</sup> and Assoc Professor Johnson Fam<sup>1</sup>

<sup>1</sup>Singapore General Hospital, Singapore, Singapore and <sup>2</sup>National University of Singapore L University, Singapore, Singapore \*Presenting author.

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Aims. To study the risk factors for burnout among doctors in a tertiary general hospital in Singapore. We hypothesized that burnout would be associated with singles, young age, females, foreign born staff who had recently moved to this country unaccompanied by family, and those showing less resilience. We hypothesised perceived support and satisfaction with leisure would mitigate against burnout.

Methods. An anonymised survey was carried out, with questionnaires sent to all staff via email. Survey instruments included the Oldenburg Burnout Inventory, Connor Davidson Resilience Scale, Brief Form of Perceived Social Support Questionnaire, Patient Health Questionnaire-4 items (PHQ-4), Leisure Time Satisfaction Survey and the Demand Control Support Questionnaire (DCSQ). Descriptive statistics for normally-distributed numerical variables were presented as mean (SD or standard deviation), and for categorical variables, median and n (%). One-way ANOVA was performed to determine differences in total burnout scores across BJPsych Open S57

categorical variables and simple linear regression was used to assess for binary and numerical outcomes in terms of resilience, PHQ, DSCQ, satisfaction with leisure time and perceived social support, with significance set as p < 0.05.

**Results.** A total of 129 doctors responded to the survey. Over half were male, and nearly 70% were married. Nearly half were below age 40 and only about 5% had no immediate family living in Singapore.

Burnout was associated with young age (p < 0.004) and those with anxiety 2.39 (2.13 to 2.64) p = 0.038, and depressive symptoms 2.71 (2.44 to 2.97) p < 0.001. Psychological demand was positively associated with burnout (1.52 (1.32 to 1.71) p < 0.001; whereas decision latitude -0.69 (-0.85 to -0.52), social support at work -1.35 (-1.49 to -1.21), and high resilience -0.56 (-0.63 to -0.48), were negatively associated (all p < 0.001).

Satisfaction with leisure time was negatively correlated with burnout (p < 0.001). Contrary to hypothesis, singlehood, gender, overseas staff recently joined with no accompanying family were not associated with burnout (p > 0.05). In addition, perceived social support from outside work did not mitigate against burnout (p > 0.05).

Conclusion. Young age, anxiety and depression, and psychological demands were risk factors, whereas resilience, decision latitude, satisfaction with leisure, and social support at work were protective factors against burnout. Reducing workload, improving work schedules, promoting self-management, teaching physical, mental, and emotional self-care, and other stress management activities are among the effective techniques shown to reduce burnout. Interventions should be made available for all staff, but specifically focusing on those at greatest risk.

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## **Examining Social Touch in Early-Life Stress**

Dr Lena Lim\*

ASTAR, Singapore, Singapore \*Presenting author.

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Aims. Social contact is crucial for both immediate and later development of adaptive social and emotional behaviour. Tactile experiences during childhood influence the development of the social brain and frequent affectionate touch is associated with secure attachment style. Social touch is an important form of social interaction and plays a significant role in the formation and maintenance of relationships in humans across development, where the hedonic properties of touch are involved in improving the quality of life. However, relatively less research attention has focused on social touch experiences in individuals with a history of early-life interpersonal stress, particularly childhood maltreatment.

**Methods.** Social touch pleasantness ratings using a newly developed Social Touch task and attitudes about a variety of social touch behaviours using the Social Touch Questionnaire (STQ) were examined in 40 age- and gender-matched young adults (23 childhood maltreatment, 17 controls).

**Results.** The childhood maltreatment group had significantly lower STQ score than the control group, where lower STQ score was furthermore correlated with higher severity of maltreatment, particularly physical neglect. For the social touch task, females who experienced childhood maltreatment had

significantly lower mean pleasantness ratings for positive social touch than their male counterparts, and these differences were mainly in response to touch given by stranger and friend of opposite gender.

**Conclusion.** These preliminary results show that early-life interpersonal stress from caregivers may potentially influence touch processing and pleasantness, particularly for females, and there is a need to further explore the effects of different touch giver role (e.g. friend, stranger, partner).

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## Associations Between Adiposity Measures and Depression and Well-Being Scores: A Cross-Sectional Analysis of Middle- to Older-Aged Adults

Dr Caoimhe Lonergan<sup>1,2\*</sup>, Dr Seán Millar<sup>2</sup> and Dr Zubair Kabir<sup>2</sup>
<sup>1</sup>Cork University Hospital, Cork, Ireland and <sup>2</sup>University College Cork, Cork, Ireland
\*Presenting author.

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Aims. Obesity and mental health are significant global health concerns. Evidence has linked increased adiposity with depression and well-being; however, there is limited documented evidence in Ireland. Research also suggests that lifestyle factors and disease conditions are related to mental health. These may modulate relationships between adiposity and depression and well-being. The aim of this study was to examine associations between mental health scores and adiposity defined using body mass index (BMI) and waist-height ratio, and subsequently determine whether significant relationships persist following adjustment for lifestyle factors and common disease conditions.

Methods. This was a cross-sectional study of 1,821 men and women aged 46-73 years, randomly selected from a large primary care centre. Depression and well-being were assessed using the 20-item Centre for Epidemiologic Studies Depression Scale (CES-D) and the World Health Organization-Five (WHO-5) Well-Being Index. Linear regression analyses were performed to examine relationships between mental health scores (dependent variable) and adiposity defined using BMI and waist-height ratio (independent variable), while adjusting for demographic characteristics, lifestyle factors and disease conditions. These demographic, lifestyle and disease factors included gender, age, education, smoking status, alcohol intake, physical activity levels, dietary quality, type 2 diabetes, cardiovascular disease and cancer. Results. BMI and waist-height ratio had a significant positive association with depression scores and a significant inverse association with well-being scores in males and females. These associations were maintained following adjustment for demographic variables and lifestyle factors. In final models where disease conditions were adjusted for, BMI ( $\beta = 0.743$ , p <0.001) and waistheight ratio ( $\beta$  = 0.719, p <0.001) associations with the CES-D score remained significant. In stratified analyses, relationships between measures of adiposity and depression were found to be stronger in females (BMI:  $\beta = 0.806$ , p = 0.007; waist-height ratio:  $\beta = 0.768$ , p = 0.01) than males (BMI:  $\beta = 0.573$ , p = 0.049; waist-height ratio:  $\beta = 0.593$ , p = 0.044) but no effect modification was identified.

**Conclusion.** This study demonstrates a significant association between increased adiposity and poorer mental health in a middle- to older-aged population, which is in agreement with