Update from Scotland

Dr Prakash Shankar

Consultant Liaison Psychiatrist

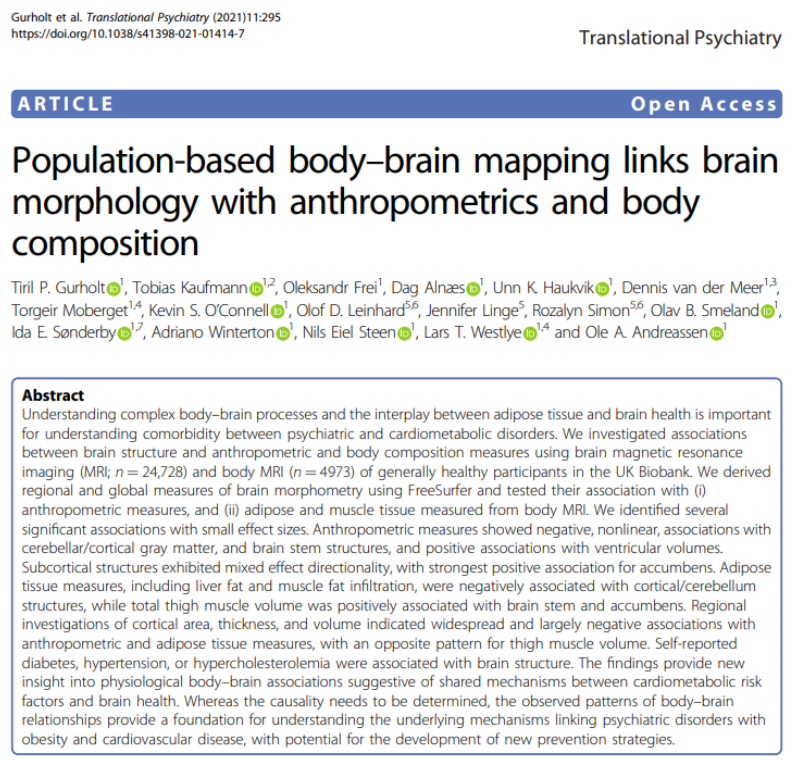
Clinical Director Unscheduled Services

Forth Valley Royal Hospital Larbert

Chair- Royal College of Psychiatrists Liaison Faculty Scotland

Joint working

- ***Liaison Survey***
- ***Accreditation work***
- ***Wellbeing Strategy***
- ***RCPsych response to RCEM***
- ***Liaison Psychiatry Strategy Day***
- ***CoMorMent-(The EU-H2020 funded project)***



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Population-based body–brain mapping links brain morphology with anthropometrics and body composition

Tiril P. Gurholt[1], Tobias Kaufmann[1,2], Oleksandr Frei[1], Dag Alnæs[1], Unn K. Haukvik[1], Dennis van der Meer[1,3], Torgeir Moberget[1,4], Kevin S. O'Connell[1], Olof D. Leinhard[5,6], Jennifer Linge[5], Rozalyn Simon[5,6], Olav B. Smeland[1], Ida E. Sønderby[1,7], Adriano Winterton[1], Nils Eiel Steen[1], Lars T. Westlye[1,4] and Ole A. Andreassen[1]

Abstract

Understanding complex body–brain processes and the interplay between adipose tissue and brain health is important for understanding comorbidity between psychiatric and cardiometabolic disorders. We investigated associations between brain structure and anthropometric and body composition measures using brain magnetic resonance imaging (MRI; $n = 24{,}728$) and body MRI ($n = 4973$) of generally healthy participants in the UK Biobank. We derived regional and global measures of brain morphometry using FreeSurfer and tested their association with (i) anthropometric measures, and (ii) adipose and muscle tissue measured from body MRI. We identified several significant associations with small effect sizes. Anthropometric measures showed negative, nonlinear, associations with cerebellar/cortical gray matter, and brain stem structures, and positive associations with ventricular volumes. Subcortical structures exhibited mixed effect directionality, with strongest positive association for accumbens. Adipose tissue measures, including liver fat and muscle fat infiltration, were negatively associated with cortical/cerebellum structures, while total thigh muscle volume was positively associated with brain stem and accumbens. Regional investigations of cortical area, thickness, and volume indicated widespread and largely negative associations with anthropometric and adipose tissue measures, with an opposite pattern for thigh muscle volume. Self-reported diabetes, hypertension, or hypercholesterolemia were associated with brain structure. The findings provide new insight into physiological body–brain associations suggestive of shared mechanisms between cardiometabolic risk factors and brain health. Whereas the causality needs to be determined, the observed patterns of body–brain relationships provide a foundation for understanding the underlying mechanisms linking psychiatric disorders with obesity and cardiovascular disease, with potential for the development of new prevention strategies.

National Consultations

- ***Scott Review***
- ***Assisted Dying Bill***
- ***Mental health strategy***
- ***Quality standards for adult secondary services***

Committee Representation

Equality Inclusion Trainee Rep

Patient representation

Curricula Revision Project and Liaison Credentialing for the GMC