Age-related changes in physiology in individuals with lifetime bipolar disorder

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Aims. Individuals with bipolar disorder have reduced life expectancy and may experience accelerated biological ageing. In individuals with lifetime bipolar disorder and healthy controls, we examined differences in age-related changes in physiology.

Method. The UK Biobank study recruited >500,000 participants, aged 37–73 years, between 2006–2010. Generalised additive models were used to examine associations between age and grip strength, cardiovascular function, body composition, lung function and bone mineral density. Analyses were conducted separately in males and females with bipolar disorder compared to healthy controls.

Result. Analytical samples included up to 272,462 adults (mean age = 56.04 years, SD = 8.15; 49.51% females). We found statistically significant differences between bipolar disorder cases and controls for grip strength, blood pressure, pulse rate and body composition, with standardised mean differences of up to -0.238 (95% CI -0.282 to -0.193). There was limited evidence of differences in lung function, heel bone mineral density or arterial stiffness. Case-control differences were most evident for age-related changes in cardiovascular function (in both sexes) and body composition (in females). These differences did not uniformly narrow or widen with age and differed by sex. For example, the difference in systolic blood pressure between male cases and controls was -1.3 mmHg at age 50 and widened to -4.7 mmHg at age 65. Diastolic blood pressure in female cases was 1.2 mmHg higher at age 40 and -1.2 mmHg lower at age 65. Conclusion. Differences in ageing trajectories between bipolar disorder cases and healthy controls were most evident for cardiovascular and body composition measures and differed by sex.

The role of animal-assisted therapy in the management of people with dementia: a systematic literature review

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Aims. The aim of this systematic literature review was to determine the evidence-based effectiveness of animal assisted interventions and to look at the factors that limit implementation of this intervention. **Background.** Dementia is a major health issue worldwide impacting not only on the people diagnosed with dementia, but also on their families and caregivers, and the healthcare professionals. The symptoms of dementia include cognitive impairment that can range from mild to severe, and behavioural and psychological symptoms which have debilitating effects on functional capacity and quality of life. A number of non-pharmacological interventions are being developed to help people with dementia. Animal assisted therapy is one of those interventions that has demonstrated positive effects on various aspects of dementia (Filan and Llewellyn-Jones, 2006). However, there are limitations to its use and feasibility of animal assisted therapy programmes is unclear.

Method. Only randomised-controlled trials (RCTs) were to be included to evaluate high quality evidence. A systematic literature search was carried out to find using the PubMed and Cochrane databases and a search of the NICE website. Literature was screened according to inclusion and exclusion criteria. Eight randomised-controlled trials were selected to be used in this systematic review to assess the effectiveness of animal-assisted therapy.

Result. The results regarding the effectiveness of animal assisted therapy were variable. There was some improvement demonstrated in symptoms of depression, agitation, behaviour and cognitive impairment. Quality of life and activities of daily living also demonstrated positive outcomes. There was a reduction in the risk of falls in people with dementia. However, the studies conducted demonstrated limited methodologies. The factors limiting the use of animal assisted therapy were found to be concerns around adverse events to animals, issues of animal welfare and economic feasibility of animal assisted therapy programmes.

Conclusion. Further research needs to be done using properly conducted randomised controlled trials with larger sample sizes to formally assess people's perceptions regarding therapy animals and develop clear guidelines and protocols for integrating these interventions in healthcare.

The effects of the first wave of the COVID-19 pandemic on the presentation of adolescents to acute mental health services in NHS Lanarkshire

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Aims. This project aimed to assess the effects of COVID-19 on the mental health of adolescents, reflected through their presentations to A&E departments in NHS Lanarkshire.

Method. The psychiatry liaison database was searched for referrals of 17 year olds and under from April until August 2020.

All referrals to all acute hospital sites in Lanarkshire received from any source were included. The only exclusion criteria applied were age over 17 and unavailable assessment information.

The sources searched for information were: patient's electronic notes, Mental Health Assessment forms, Mental Health Risk Assessment forms and electronic letters. The following information was gathered:

- patient's age
- date, source and reason for referral
- hospital site of assessment
- outcome of assessment

Result.

- Between April and August 2020, the number of CAMHS A&E referrals increased every month except in July.
- The age range of CAMHS patients presenting to A&E were 12-17 years, with 17 being the most common age seen.
- 87% of referrals were from A&E.
- The two most common reasons for referrals were drug overdose and suicidal ideation.
- The most common outcome of assessment was a CAMHS referral.
- COVID-19 was a trigger for an adolescent's presentation to A&E in 31% of cases, the most common cause being struggling with the lockdown/restrictions.