Effectiveness of Digital Interventions That Are Available for Healthcare Professionals Who Experience Psychological Trauma: A Systematic Literature Review

Dr Antigoni Elisseou[1], Dr Athanasios Hassoulas[1] and Dr Roshelle Ramkisson[2,3]

[1]Cardiff University, Cardiff, United Kingdom; [2]Manchester University NHS Foundation Trust, Manchester, United Kingdom and [3]University of Central Lancashire, Lancashire, United Kingdom

doi: 10.1192/bjo.2025.10124

Aims: Historically, healthcare professionals were prone to experiencing turmoil of emotions prominent to psychological trauma due to the nature of their work. The healthcare professionals were subjected to elevated risks of psychological elements, leading to mental health implications due to the aftermath of the COVID-19 pandemic. By extension, these mental health repercussions can highly affect the patients' care as they profoundly affect the healthcare professionals from offering the best quality of care. Different types of digitalised psychological interventions exist and seem to be making an increased trend into being added into the medical field. They are becoming increasingly popular for mental health improvements due to their cost-effectiveness, their scalability, their ability to offer greater anonymity and stigma reduction compared with traditional interventions. Randomised controlled studies (RCTs) were systematically reviewed to explore the effectiveness of digital interventions which are available for healthcare professionals who experience psychological trauma.

Methods: A comprehensive search was conducted across four electronic databases, Pubmed, Medline Ovid, Embase Ovid, PsychINFO Ovid, resulting in a total of six RCTs that met inclusion criteria. Assessment of study quality and risk of bias were conducted using the Jadad scale and Cochrane Risk of Bias Tool respectively. Whilst the RCTs included in the review investigated the efficacy of interventions on healthcare professionals' wellbeing, the modalities of the interventions varied. Interventions included smartphone-based stress management modules, resilience training, smartphone applications focusing on emotional skills, cognitive-behavioural therapy exercises and psychoeducation, as well as computerised Eye Movement Desensitisation and Reprocessing (EMDR) intervention and internet intervention enhancing self-efficacy. As a result, a meta-analysis was not applicable to be carried out.

Results: Based on the findings, digital interventions had positive impacts on reducing the mental strain experienced by healthcare professionals. Some studies proved that the improvements were of statistical significance. The results of the RCTs in this review looked promising for the future of digital interventions targeting the mental wellbeing of healthcare professionals. In particular, the computerised EMDR intervention and the self-guided internet intervention targeting self-efficacy or social support, illustrated the potential benefits in its results. However, other studies indicated the need for further research before definitive conclusions can be drawn. The majority of the studies used a smartphone-based intervention. However, there was no correlation between the efficacy of these RCTs and this feature of their modality.

Conclusion: The scarce literature available in relation to this topic displayed promising evidence that digital interventions helped healthcare professionals experiencing psychological trauma.

The Y-Health Prospective Study of Physical Health in Young People in Mental Health Inpatient Units

Dr Rebekah Carney, Dr Shermin Imran and Dr Olorunleke Erunkulu

Greater Manchester Mental Health NHS Foundation Trust, Greater Manchester, United Kingdom

doi: 10.1192/bjo.2025.10125

Aims: To explore the physical health of YP admitted to adolescent inpatient mental health units and reflect on any differences over the following 6 months.

Research Questions: 1. To assess physical health of young people upon admission to adolescent inpatient services (cardiovascular risk factors e.g. BMI, blood pressure, blood glucose and lipids). 2. To assess current lifestyle behaviours of young people upon admission to adolescent inpatient wards (e.g. physical activity, diet, smoking rates). 3. To assess changes in physical health/lifestyle 3 months and 6 months post-admission. 4. To understand the impact of inpatient care environment on lifestyle behaviours and physical health of adolescents admitted to inpatient units. 5. To understand the experiences and beliefs about physical health in adolescents admitted to inpatient units. 6. To establish the feasibility of monitoring physical health in a cohort of young people upon admission to an adolescent inpatient unit.

Methods: We aimed to recruit young people aged 14+ from each participating site within 6 weeks of admission to the unit. The young person needed to be able to give informed consent and be well enough to take part (severe anorexia/eating disorder excluded). Physical and mental health assessments were completed by a researcher in conjunction with the clinical team. Assessments completed at three time points: Baseline on admission; 3 months post admission; 6 months post admission. Participants given £10 voucher at each timepoint as a thank you (total £30).

Measures collected included: Demographic information, e.g. age, gender, ethnicity, education, diagnoses, previous admissions, medication, length of admission; Physical Health Outcomes, e.g. BMI (centiles), BP, routinely collected blood tests (random glucose, lipids, etc), ECG; Behavioural Outcomes, e.g. physical activity levels, smoking status, diet, physical fitness (six-minute walk & questionnaire), substance use, comorbid physical health disorders and concurrent treatments; Mental Health Outcomes, e.g. Health of the Nation Outcome Scales for Children and Adolescents (HONOSCA), World Health Organization Wellbeing Index (WHO-WI).

Results: Physical health outcome (Weight): Baseline – 64.5. 3 months – 67.7. 6 months – 69.3. Behavioural outcome: Low levels of physical activity (average 20 mins sport and 1 hour walking per day); High levels of sedentary behaviour; Most common substances used were alcohol (n=11, 44%), tobacco (n=10, 40%) and cannabis (n=6, 25%); Most YP self-reported average fitness levels; Consumed on average 1.8 meals per day (ranged from 1–5).

HONOSCA outcome: 80% lack of concentration (68% severe); 75% self-harmed; 56% difficulties with relationships at home (30% severe); 88% anxious or low mood (44% severe); 64% impairments with educational ability; 64% stopped attending education.

Qualitative interviews (thematic analysis): Outcomes on Young peoples knowledge, Autonomy, environment, sources of support, independence and facilitators.

Conclusion: Young people on CAMHS inpatient units have multiple factors affecting their physical health; Already showing some signs of compromised physical health, likely to worsen; Observed lots of challenges with transitory care and barriers to following people up