

are thought to work by increasing bias to positive emotional cues and decreasing bias to negative ones.

Conclusion. These data suggest that intake of Bio-Kult® Advanced has an effect on mood and that this is achieved in ways distinct from the effects of pharmacological antidepressants. While more research is needed, these results suggest that certain probiotics could form part of an ‘early intervention’ strategy for people experiencing low mood. A second randomised controlled trial (currently recruiting) will provide data on this intervention in patients with a formal diagnosis of depression undergoing concurrent pharmacological treatment.

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Psychiatric, Neurophysical and Neurocognitive Sequelae of Post-Acute COVID-19 Syndrome: A Systematic Review

Dr Arun Vincent^{1*}, Dr Oghenefejiro Ofove¹,
Mr Manfred Gschwandtner², Professor Sukhi Shergill^{1,2}
and Professor Rafeq Faruqi^{1,2}

¹Kent & Medway NHS & Social Care Partnership Trust, Kent, United Kingdom and ²Kent and Medway Medical School, Kent, United Kingdom

*Presenting author.

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Aims. COVID-19 causes cognitive, neurophysical and psychiatric sequelae that persist beyond the acute illness. These appear to be independent of the direct impact on respiratory function although the impact of multiorgan, especially brain pathology, may be a contributory factor – as may psycho-social effects of the disease. We performed a systematic review of literature to assess the sequelae of post-acute COVID-19 syndrome to better understand the need for dedicated interventions to improve functioning.

Methods. We conducted a systematic review of reports included in MEDLINE, PsycINFO, and EMBASE. We searched for cohort studies exploring psychiatric and neuro-cognitive sequelae of post-acute COVID-19 in adults with a sample size of at least 100. The search was conducted on 4 February 2022. Findings are reported in line with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). Two authors independently assessed the included studies’ methodological quality using The National Institute of Health (NIH) quality assessment tool for observational cohort and cross-sectional studies and all records were rated as good or fair.

Results. Our search identified 66 records and 14 met protocol requirements. The studies varied in sample size ranging from 100 to 3762 participants. Time to follow-up ranged from 1–12 months. Main symptoms identified by a majority of the studies were; Fatigue (25% to 85%) and Sleep problems (20% to 79%). Psychiatric symptoms; Anxiety (19% to 56%), Depression (11% to 47%), PTSD (6% to 43%) and altered sense of reality (3% to 15%). Neuro-cognitive symptoms; Cognitive dysfunction (25% to 85%), brain fog (12% to 81%), memory problems (24% to 73%), concentration difficulties (25% to 54%), and attention deficit (27%).

Female sex, advanced age, pre-morbid asthma or COPD, increased disease severity, high BMI and new neurological complications during hospitalisation were some of the identified risk factors for persistent symptoms in post-acute COVID-19. One study identified male sex as a risk factor for moderate to severe PTSD. Current evidence suggests that symptoms decrease over time.

Conclusion. There is clear evidence of neuro-physical, psychiatric and neurocognitive sequelae in post-acute COVID-19 syndrome. Differences in assessing and reporting findings makes it difficult

to synthesize meaningful information. Identifying and formulating standardised assessments for outcome measures and reporting systems would be useful in future research. Further research into symptoms of post-acute COVID-19, to understand the pathophysiology will better enable us to raise public awareness, introduce preventative measures and incorporate appropriate treatment strategies for rehabilitation.

Frequency of Diagnostic Classification Systems’ Usage by Mental Health Professionals in Day-to-Day Clinical Practice

Dr Eleni Vrigkou^{1*}, Dr Robert Stamatakis²
and Dr Katja Umla-Runge¹

¹Centre for Medical Education, Cardiff University, United Kingdom and ²The Caswell Clinic, Swansea Bay, United Kingdom

*Presenting author.

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Aims. Diagnostic classification systems (DCSs) are medical models constructed by experts with the purpose of facilitating diagnostic processes. Specifically in psychiatry, DCSs serve as mental health professionals’ major diagnostic tool. Several studies, however, suggest that mental health professionals may not systematically apply the DCSs in day-to-day practice. The primary aim of this secondary research was to assess the actual frequency of DCSs’ application in psychiatric practice. All DCSs were considered. The secondary aims were to investigate the mode of DCSs’ application (e.g., assign diagnosis, inform treatment, administrative/billing or teaching purposes), and to assess if DCSs’ usage patterns vary depending on the clinicians’ specific occupation (e.g., psychiatrists, psychologists) and country of employment.

Methods. The bibliographic databases of MEDLINE Via Ovid, PsycInfo, Web of Science and Global Health were searched from 1/2000–12/2020. All primary studies assessing DCSs’ frequency of application by mental health professionals were eligible for inclusion. The search yielded nine eligible articles. The total number of participants from all included studies was 10,388. The study samples were diverse, including practitioners from a wide variety of geographical locations, languages, and income-level countries.

Results. The results of the study showed that 69% (95%CI = 58–80%) of the responders use DCSs “often, almost always or always” in day-to-day practice. Regarding the mode of DCSs’ application, responders stated that they use DCSs most frequently for administrative/billing purposes and assigning a diagnosis. The study’s results also showed that 68% (95%CI = 45–90%) of psychiatrists and 74% (95%CI = 43–100%) of psychologists use the DCSs “often, almost always or always”. Subgroup analysis based on responders’ country of employment suggest that the frequency of “often, almost always or always” DCSs’ usage (according to World Health Organization regions) were: for the Region of the Americas 75.3%, for the African Region 73.5%, for the Western Pacific Region 71.6%, for the European Region 69.4%, for the South-East Asia Region 66.8%, and for the Eastern Mediterranean Region 57.1%.

Conclusion. The study’s outcomes indicate that DCSs are integrated into the daily practices of mental health professionals worldwide. Further research is needed, however, in order to assess in more depth DCSs’ application practices (e.g., comparative usage of different DCSs, types of mental disorders, patients and settings where DCSs are more frequently applied). Such findings could be valuable, since they can be used to help appraise the quality of DCSs’ actual use, the impact of DCSs on clinical care

and public health, and also to aid design more effective mechanisms for DCSs' further implementation.

A Scoping Review on Barriers to Mental Healthcare in Canada as Identified by Healthcare Providers

Mr Jeffrey Wang^{1,2*}, Dr Stanislav Pasyk^{1,2},
Dr Claire Slavin-Stewart^{1,2} and Dr Andrew Olagunju^{1,2}

¹McMaster University, Hamilton, Canada and ²St Joseph's Healthcare Hamilton, Hamilton, Canada

*Presenting author.

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Aims. Mental illness is among the leading causes of disability globally, however the treatment gap is wide even for developed countries. The perspectives of patients and mental healthcare providers are critical to understanding barriers to adequate mental healthcare and developing scalable solutions that improve access and quality of services. However, the views of providers are relatively understudied, precipitating our review to collate and synthesize their perspectives on the barriers to mental healthcare in Canada.

Methods. We searched MEDLINE/PubMed and PsychINFO for studies with findings in Canada published in English from 2000–2021 with terms for mental health, psychiatry, barriers, and referrals. Included studies were evaluated with the National Institutes of Health Study Quality Assessment Tools and Critical Appraisal Skills Programme.

Results. 631 papers were screened, finding 20 eligible studies, including 13 qualitative, one cross-sectional, one retrospective, and five mixed-methods studies. Through inductive content analysis, five themes of barriers emerged: (1) patient accessibility (19% of studies), (2) health systems availability and complexity (31%), (3) training/education (25%), (4) work conditions (21%), and (5) cultural sensitivity (4%). Among barriers discussed, common challenges included a lack of resources for both patients and providers, gaps in continuing education for primary care providers, and health systems challenges such as difficulty securing referrals, unclear intake criteria, and confusion due to overload of contacts.

Conclusion. Health systems face a multi-faceted set of challenges to improving access to mental healthcare that will require solutions from various stakeholders. Understanding these barriers is critical in focusing initiatives to improve mental health care, both in Canada and in countries facing similar challenges.

Genetic Polymorphisms Are Differentially Associated With Affective Outcomes in Adolescents With and Without ADHD

Ms Tünde É. Welker^{1,2*}, Dr Nóra Angyal³, Dr Zsófia Némóda³,
Dr Bea Pászthy⁴, Dr János Réthelyi⁵ and Dr Nora Bunford²

¹Doctoral School of Mental Health Sciences, Semmelweis University, Budapest, Hungary; ²Developmental and Translational Neuroscience Research Group, Institute of Cognitive Neuroscience and Psychology, Research Centre for Natural Sciences, Budapest, Hungary;

³Semmelweis University, Institute of Biochemistry and Molecular Biology, Department of Molecular Biology, Budapest, Hungary;

⁴Semmelweis University, 1st Department of Paediatrics, Budapest, Hungary and ⁵Semmelweis University, Department of Psychiatry and Psychotherapy, Budapest, Hungary

*Presenting author.

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Aims. Various genetic polymorphisms have been associated with attention-deficit/hyperactivity disorder (ADHD), and some of these have also been implicated in individual differences in affective processing. Yet, no studies to date have examined the complex interrelations across these genetic polymorphisms, ADHD, and affective processing. Several variables (e.g., age, ethnicity, sex) have been shown to affect whether a given genetic variant confers risk. Our aim was to examine whether relevant genetic variants differentially confer risk for negative affectivity (NA) and/or emotion dysregulation (ED), depending on ADHD status.

Methods. Participants were $n = 297$ adolescents ($M_{\text{age}} = 15.30$ years; $SD = 1.06$; 60.27% boys) with ($n = 83$) and without (DSM-5) ADHD. ADHD- and affective processing-related dopaminergic and serotonergic polymorphisms were genotyped (i.e., DRD2/ANKK1 TaqIA (rs1800497), dopamine receptor DRD4 exon-3 48 bp VNTR, and serotonin transporter linked polymorphic region 5-HTTLPR including the rs25531). Affectivity and ED were measured via parent- and/or self-report.

Results. We first calculated bivariate correlations between polymorphisms, affectivity, and ED then compared the obtained (Fisher's r to z -transformed) values between with and without ADHD groups. There were no correlations that were significant – but several differed – across groups. In youth without ADHD, carrying the DRD2 rs1800497 T-allele was negatively associated both with negative affectivity ($p_{\text{corr}} = .033$) and with self-rated ED ($p_{\text{corr}} = 0.039$). In youth with ADHD, carrying the DRD4 VNTR 7-repeat allele was positively associated with self-rated ED ($p_{\text{corr}} = 0.008$), and carrying the L'L' relative to the low-expression S' serotonergic allele was also positively associated with parent-rated ED ($p_{\text{corr}} = .042$).

Conclusion. Differences across with and without ADHD groups with regard to correlations between genetic polymorphisms – previously implicated in both ADHD and affective processing – and negative affectivity and emotion dysregulation indicate that certain genetic variants may differentially confer risk for affective outcomes, given ADHD status. These results have implications for targeted prevention of adolescent affective outcomes, which will be discussed during the presentation. That findings held across different indices of affective processing (dispositional affectivity and certain emotion dysregulation components) suggest these results may be robust.

Religiosity and Psychotic Experiences: A Large Community-Based Study From Qatar

Professor Peter Woodruff^{1*}, Associate Professor Salma Khaled²,
Dr Sanne Brederoo³, Dr Majid Alabdulla⁴
and Professor Iris Sommer³

¹University of Sheffield, Sheffield, United Kingdom; ²Qatar University, Doha, Qatar; ³University Medical Center Groningen, Groningen, Netherlands and ⁴Hamad Medical Corporation, Doha, Qatar

*Presenting author.

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Aims. We wished to explore associations between intrinsic religiosity, extrinsic (non-organizational (ENORG) and organizational (EORG)) religiosity and hallucinations phenomenology in a non-clinical Muslim population.

Methods. We selected full-time students at Qatar University using systematic random sampling and administered the Questionnaire of Psychotic Experiences online. We modelled the effects of socio-demographic variables, anxiety, depressive symptoms, and religiosity measures, delusions on hallucinations severity and distress/impact in the past week, using structural equation modelling.