were inability to perform moderate physical activity, pregnancy and breastfeeding and impaired cognitive functions.
Results: 401 patients were recruited and randomly assigned to receive the experimental intervention (LIFESTYLE) or a behavioural control intervention. About 57% of the sample were female, with a mean age of 45.8±11.8, and BMI of 32.5±5.5. All of them were receiving almost one psychotropic drug. At one year, we observed a reduction in HOMA-IR index (from 4.3 ± 5.5 to 3.1 ± 2.9, p<0.01) and triglycerides (from 162.5 ± 78.1 mg/dL to 131.4 ± 76.0 mg/dL, p<0.001), as well as an increase in HDL (from 46.2± 14.6 mg/dL to 50.9±26.7 mg/dL, p<0.05). Moreover, a reduction in the values of BPRS "Affectivity" (from 8.7±3.0 to 7.2±2.5, p<0.001), "Activity" (from 4.7±1.9 to 4.2±1.3, p<0.01) and "Negative Symptoms" subscale (from 7.7±3.1 to 7.0±2.7, p<0.001) was also observed, along with an improvement in perceived quality of life (MANSA total score from 4.0 ± 1.0 to 5.3 ± 0.8, p<0.01).
Conclusions: The results support the evidence that the LIFESTYLE intervention has long-lasting positive effects on physical and mental health of people with mental disorders. More efforts need to be done in order to increase the availability of these treatments in routine clinical settings.

Disclosure of Interest: None Declared

O0025

Sport-based psychosocial interventions for people suffering from severe mental disorders: EASMH pilot actions from 4 European Countries

M. Di Vincenzo[1]*, G. Sampogna[1], M. Borgi[2,3], B. Collacchi[2], F. Cirulli[2,3], S. Cerino[3], S. Rullo[3], M. Luciano[1], V. Di Tommaso[3], S. Moliterni[3], A. Bichi[4], J. Garside[5], S. Kivistö[6], A. Iarion[7], M. Walker[8] and A. Fiorillo[1]

[1]Department of Psychiatry, University of Campania "Luigi Vanvitelli", Naples; [2]Center for Behavioral Sciences and Mental Health, National Institute of Health; [3]European Culture and Sport Organization, Rome, Italy; [4]The European Platform for Sport Innovation, Brussels, Belgium; [5]Everton in the Community Ltd, Liverpool, United Kingdom; [6]Finnish Sport Federation, Tempere, Finland; [7]Faculty of Physical Education and Sport, University of Costanta, Costanta, Romania and [8]European Psychiatric Association, Strasbourg, France
*Corresponding author.
doi: 10.1192/j.eurpsy.2024.160

Introduction: The *European Alliance for Sport and Mental Health* (EASMH) is a partnership of scientific institutions, charity associations and sport organizations, funded by EU-Erasmus+. It aimed at developing good clinical practice in psychiatric rehabilitation through sport-based interventions as an integration of pharmacological and psychological therapies. Within the framework of the EASMH projects, several actions have been promoted including an assessment of the dissemination of sport-based interventions, a training course for specialized coaches and the implementation of pilot actions in four European Countries.
Objectives: To briefly describe EASMH pilot actions performed in Finland, Italy, Romania and United Kingdom, where trained coaches delivered sport-based interventions to patients with severe mental disorders.
Methods: After completing pilot actions, charity associations and sport organizations belonging to EASMH network described general and specific aims, sport activities, composition of staff, timing and tools for assessing the outcomes.
Results: In Italy, "Crazy for Rugby", including adolescents and young patients, and "Not only headshots", a football project for adults with severe mental disorders were performed. In UK, a football-based activity called "Imagine Your Goal" and a walking-football program for participants aged more than 40 were delivered. In Romania, two courses including gymnastics, yoga and pilates called "Get fit!" were provided. Different team sport-based activities were implemented in Finland, where "Multiple Sport Group" and "Rehabilitating Sports" aimed at increasing patients' autonomy. Assessment of psychopathological, social, cognitive and sport/fitness outcomes confirmed the overall beneficial effects of sport on mental health.
Conclusions: Pilot actions represent the final step of EASMH project, which showed improvement of mental health outcomes by also delivering sport-based rehabilitation to patients with severe mental disorders. Institutions and stakeholders are now called to promote the implementation of such initiatives on a broader scale.

Disclosure of Interest: None Declared

Research Methodology

O0026

Geographical variation in compulsory mental health care: cause for concern and source of causal inference

T. Hofstad

Haukeland University Hospital, Bergen, Norway
doi: 10.1192/j.eurpsy.2024.161

Introduction: Compulsory mental health care remains a controversial practice. The many difficulties in performing Randomised Controlled Trials (RCT) on the topic means there is limited evidence to support its effectiveness. For ethical and legal reasons, compulsory mental health care should only be used when necessary. Yet, geographical variations, which can indicate both overuse and underuse, have been observed. In the funded research project "Controversies in Psychiatry" we intend to use this variation as a source of knowledge production. We propose that this naturally occurring variation mimics randomisation, and can therefore permit causal inference from registry data.
Objectives: We will estimate the causal effect of compulsory inpatient mental health care on a range of outcomes, including injuries, self-harm, and all-cause mortality; violent crime; employment vs benefit allowance; rehospitalisation and outpatient commitment.
Methods: Observed variation in register data on all episodes of compulsory inpatient mental health care in Norway between 2015-2016 (N ≈ 300 000), will serve as a source of as-random variation. Provider-preference for compulsion usage will be used as an instrumental variable (IV).
Results: Outcomes will be observed from 2017-2025. If assumptions underlying IV-analysis do not hold, the project will still provide important and complete descriptive data on long-term outcomes for a whole population.

Conclusions: Geographical variation is a cause for concern if people are treated differently depending on area of residence. But it also presents an opportunity to use differences in service provider's preference for using compulsory care as an instrumental variable to estimate the causal effect of compulsory care on multiple short and long-term outcomes. This approach can help resolve controversies that are difficult or even impossible to investigate through RCTs. After presenting the project plan we invite to a discussion of the feasibility of using an instrument variable approach to explore if relatively low versus high rates of compulsory care produce favorable outcomes for patients.

Disclosure of Interest: None Declared

O0027

What influence mothers' mental health and health care seeking behaviors for their malnourished children in Nepal: building evidence for a broader perspective

K. Le Roch[1]*, B. Tonon[2] and O. Acharya[3]

[1]Mental Health and Psychosocial Support; [2]Nutrition and Health, Action contre la Faim, Montreuil, France and [3]Nutrition and Health, Action contre la Faim, Kathmandu, Nepal
*Corresponding author.
doi: 10.1192/j.eurpsy.2024.162

Introduction: Implementing research projects on community-based health care interventions in low-ressource settings is feasible with specific methods and applications. In order to critically understand all ins and outs of influencing factors involved in health care pathways for children and their mothers, we must consider to implement more than one research in the same context.
Objectives: The objective of this presentation is to showcase the continuum of research projects starting from the assessment of the effectiveness of a combined nutrition and psychosocial intervention and its economic evaluation, and how that led to exploring social representations of malnutrition in order to better understand the link with health care seeking behaviours.
Methods: The FUSAM cluster randomized control trial included 427 were severe acutely malnourished (SAM) children and their mothers. They were divided in two groups receiving the standard nutrition treatment while the intervention group benefited from five psychosocial sessions. A battery of tests for child development and maternal mental health was administered pre and post intervention. For the economic evaluation, a data collection was conducted with 98 community members and District Public Health Office personnel in Saptari and 17 Action contre la Faim and government personnel in Kathmandu. Finally, a mixed-method study comparing social representations of malnutrition included 376 adults in Saptari and Nuwakot district. Data analysis was performed according to the study design: a multivariate model analysis for the CRCT, a micro-costing methodology to cost data collection and analysis was favored. For the mixed-method analysis, descriptive and inductive analysis were performed.
Results: Regarding the child development, children in the intervention group showed higher scores than children in the control group at all time points. And the economic evaluation showed that the costs of adding psychosocial counselling to an existing CMAM program was approximately EUR 28,788 for 6 centers per year. However, referrals of children through the community-based screening were not optimal. The findings related to health seeking behaviors showed that different meaning categories were simultaneously resorted to by community members leading to different representations of SAM children and that relevant health advises were neither systematically nor uniquely associated to medical categories but are linked to different meaning categories depending on the cultural context.
Conclusions: Multiplying research projects is crucial to mitigate the limitations of the studies often facing numerous contextual challenges and ultimately to leverage further opportunities.

Disclosure of Interest: None Declared

Prevention of Mental Disorders

O0028

Does the association between short-chain fatty acids and depressive symptoms vary with age? A large population-based study

R. Okubo[1]*, R. Yamamura[2], S. Ishikawa[1], T. Kimura[3], S. Ukawa[3,4], K. Nakamura[3,5] and A. Tamakoshi[3]

[1]Department of Psychiatry; [2]Division of Biomedical Oncology; [3]Department of Public Health, Hokkaido University, Sapporo; [4]Research Unit of Advanced Interdisciplinary Care Science, Osaka City University, Osaka and [5]Department of Public Health and Hygiene, University of the Ryukyus, Nishihara, Japan
*Corresponding author.
doi: 10.1192/j.eurpsy.2024.163

Introduction: Fat plays an important role in brain function; 60% of the brain's dry weight is fat. Among fats, omega-3 fatty acids, which are long-chain fatty acids, have been reported to reduce depressive symptoms. On the other hand, there are few studies on short-chain fatty acids (SCFAs), and those that do exist are mostly animal studies, with only a few human studies (about 100 cases). This is the first study to examine the association between fecal short-chain fatty acids and depressive symptoms on a large scale in the general population.
Objectives: We examined the association of fecal SCFAs with depressive symptoms. In addition, we analyzed the associations stratified by age and examined differences in the associations.
Methods: This study was conducted using data from the Dynamics of Lifestyle and Neighborhood Community on Health Study (DOSANCO Health Study). The target population was all residents of the city of Suttu, Hokkaido, Japan, excluding residents of special nursing homes (n=2638). 579 individuals (22% of the target population) aged 18 years and older who were able to measure fecal SCFA participated in this study with written informed consent. Approval was obtained from the Ethics Committee of Hokkaido University School of Medicine (15-002 and 15-045). Fecal SCFA was measured by high-performance liquid chromatography. We examined the association of fecal concentrations of SCFA subtypes (i.e., acetate, butyrate, and propionate) and total SCFA concentrations (mg/g wet weight as a continuous variable) with total Patient Health Questionnaire-9 (PHQ-9) scores using multiple regression analysis. We adjusted for age, sex, habitual exercise, total energy intake, and total dietary fiber intake. We performed additional

https://doi.org/10.1192/j.eurpsy.2024.161 Published online by Cambridge University Press