E-Mental health interventions for the treatment of gambling

G. Dom [1,*], L. Snippe [2], R. Willemen [3], R. Wiers [2], M. Boffo [2]
[1] *Antwerp University UA and Hospital UZA, Collaborative Psychiatric Research Institute, Boechout, Belgium*
[2] *Universiteit van Amsterdam, Psychology, Amsterdam, The Netherlands*
[3] *CAD Limburg, CAD Limburg, Hasselt, Belgium*
* *Corresponding author.*

Gambling Disorder (GD) is a complex psychopathological phenomenon, characterized by the interaction of multiple etiological factors and a very heterogeneous symptomatological expression. Currently many questions remain concerning the best way of treating GD. Indeed, the traditional used (cognitive) behavioral interventions have at best a modest effect size. In addiction, there remains a large treatment gap, i.e. less than 10% of pathological gamblers ever seek help and enter treatment. E-health interventions could potentially help to close this gap. Cognitive bias modification (CBM) refers to a class of cognitive training paradigms that target specific automatic attentional, behavioral or evaluative biases triggered by addiction-related cues. These biases have repeatedly been shown to play an important role in addiction. Recently a number of studies have shown that modifying these biases has been effective in the treatment of different types of addictions, e.g. alcohol use disorders. An online Approach Bias Modification program, testing both Attention Bias Modification (ABM) and Approach Bias Modification (AppBM), is currently tested with Belgian and Dutch problem and disordered gamblers. Personalized motivational feedback has been added to the training program, to increase training adherence and prevent dropout. The same research group is also launching a second web-based study combining online AppBM with an online standard, protocoled, cognitive behavioral Therapy (CBT) program with guidance of a trained therapist. Participants receive nine CBT sessions through online chat with the therapist and, concurrently, nine sessions of AppBM. Preliminary results will be discussed.

Disclosure of interest   Member Advisory board Lundbeck-Belgium.

Received grant from LOTTO- Belgium to conduct behavioural study that will be discussed in presentation

E-Mental health in health care systems–a global perspective

J. Wise
CNWL, London, United Kingdom

eMental Health is the use of information technology (ICT) to support and improve mental health; it includes online resources, social media and smartphone applications, as well as videotelephony.

It used to be the new frontier, ungoverned but time has led to a maturity such that the novel is now commonplace and what was once Tomorrow's World is here today. From the experience of the networked Scandinavian countries, to the populations that novel techniques are reaching out to; QR codes in the UK, teens in Australia; from determining levels of Internet Addiction in Poland, to the use of that medium to treat anxiety disorders.

An innovation from Law Enforcement has massive implications for patients recording consultations. Other experiments with risk management led to the failure of 'Radar', but paved the way for social care providers to develop safer systems that can care for large populations with few therapists.

It is this use of Artificial Intelligence that may be the most challenging. Over 90 companies are developing the use of AI in diagnostics and related fields, with 14 US and Canadian hospitals involved with IBM's Watson. Will Drs become unnecessary? However the most innovative aspect of ICT in medicine is in research whether to greatly accelerate the process, or to ensure that educational tools genuinely answer patients' questions.

eHealth is an expanding field, that holds new promise, and opens question about who we are, what is our role, who do we care for and how; that today, 'No man is an Island', everyone should be connected.

Disclosure of interest   The author declares that he has no competing interest.

Symposium: European Perspective on Challenges and Opportunities of the Transition from Child & Adolescent to Adult Psychiatric Services

Developing Joint Approaches to Transition Strategy Between Child and Adolescent Psychiatrists and Adult Psychiatrists in the UK

B. Jacobs
United Kingdom

Transition for young people from Child and Adolescent Mental Health Services (CAMHS) to Adult Mental Health Services often creates considerable disquiet for young people and their families in the United Kingdom. There are examples of good services. However, this is a longstanding problem. Professionals know what to do but solutions have been difficult to implement. There is no single solution because services differ across the country. The question becomes how to understand the difficulties of establishing good transition services. What needs to change to achieve this? This presentation will try to address some of these issues.

Disclosure of interest   The author declares that he has no competing interest.

Symposium: Dissecting heterogeneity in psychiatric disorders using imaging and genetic markers

Association of inter-individual differences in imaging markers with schizophrenia phenotypes

G. Pergola [1,*], T. Quarto [1], M. Papalino [1], P. Di Carlo [1], P. Selvaggi [1,2], B. Gelao [1], G. Blasi [1,3], A. Bertolino [1,3]
[1] *Institute of Psychiatry, Basic Medical Science- Neuroscience and Sense Organs, Bari, Italy*
[2] *Institute of Psychiatry- Psychology- and Neuroscience, Department of Neuroimaging, London, United Kingdom*
[3] *Institute of Psychiatry, Department of Neuroscience- Sense Organs- and Locomotive System, Bari, Italy*
* *Corresponding author.*

Introduction   Neuroimaging studies have identified several candidate biomarkers of schizophrenia. However, it is unclear whether

the considerable variability in these neurobiological correlates between patients can be translated into the clinical setting.

Objectives We aimed to identify neuroimaging predictors of clinical course in patients with schizophrenia. Combined with the identification of genetically determined markers of schizophrenia risk, our studies aimed to elucidate the biological basis and the clinical relevance of inter-individual variability between patients.

Methods We included over 150 patients with schizophrenia and 279 healthy volunteers across five neuroimaging centers in the framework of the IMAGEMEND project [1]. We performed multiple studies on MRI scans using random forests and ROC curves to predict clinical course. Data from healthy controls served to normalize the data from the clinical population and to provide a benchmark for the findings.

Results We identified ensembles of neuroimaging markers and of genetic variants predictive of clinical course. Results highlight that (i) brain imaging carries significant clinical information, (ii) clinical information at baseline can considerably increase prediction accuracy.

Conclusion The methodological challenges and the results will be discussed in the context of recent findings from other multi-site studies. We conclude that brain imaging data on their own right are relevant to stratify patients in terms of clinical course; however, complementing these data with other modalities such as genetics and clinical information is necessary to further develop the field towards clinical application of the predictions.

Disclosure of interest Giulio Pergola is the academic supervisor of a Hoffmann-La Roche Collaboration grant that partially funds his salary.

Reference

[1] Frangou S, Schwarz E, et al. World Psychiatry 2016, doi: 10.1002/wps.20334.

http://dx.doi.org/10.1016/j.eurpsy.2017.01.193

S120

Neuroimaging findings in ADHD and the role of genetics

B. Franke
Radboud University Medical Center, Departments of Human Genetics and Psychiatry, Nijmegen, The Netherlands

ADHD is frequently diagnosed in children and adults. The disorder is highly heritable. However, the genetic architecture of ADHD is complex, with multiple genetic variants of individually small effect size contributing to disease in most patients.

In our own studies as well as in the large mega-analyses of the ENIGMA ADHD Working Group, we have investigated the brain substrates of ADHD. We find the disorder to be characterized by delayed sub–cortical and cortical growth of gray matter in childhood, which gradually normalizes in adulthood: sub–cortical volumes as well as cortical thickness and surface area are smaller in children with ADHD, but become indistinguishable from healthy individuals in adulthood. The situation looks different for white matter connectivity: both in childhood and adulthood, widespread differences in the major white matter tracts are found. The pattern of findings suggests that alterations in myelination might lie at the basis of such case-control differences. Since the disorder and many brain structural measures affected in ADHD are highly heritable, we investigated the overlap of genetic risk factors for ADHD with genetic factors involved in brain volume. This resulted in the identification of several genetic variants contributing to disease risk as well as ADHD-related brain phenotype.

In conclusion, we find ADHD to be a disorder of delayed brain maturation in terms of gray matter, but of persistently altered white matter connectivity across the lifespan. Genetic factors influencing both disease risk and brain measures might improve our understanding of disease etiology and persistence.

Disclosure of interest The author declares that he has no competing interest.

http://dx.doi.org/10.1016/j.eurpsy.2017.01.194

S121

Cortical and Sub–cortical volumetric abnormalities in bipolar disorder

O. Andreassen
University of Oslo, NORMENT Centre- Dept of Mental Illness and Addiction, Oslo, Norway

Previous MRI studies of bipolar disorder (BD) are often limited by small sample sizes and heterogeneity exists with regard to neuroimaging markers. To address these limitations, the ENIGMA Bipolar Disorder Working Group collected the largest BD neuroimaging data set ever studied ($n = 6,500$). Here, we review findings from sub–cortical volume and cortical thickness and area analyses.

ENIGMA harmonized analysis methods were applied to 28 international pooled study samples of MRI data and involved sub–cortical and cortical imaging analyses. We assessed differences between BD and healthy controls (HC) using both mega and meta–analytic multiple linear regression models, adjusting for standard covariates (age, sex, etc.), and correcting for multiple comparisons.

Sub–cortical volume analysis revealed we found consistent volumetric reductions in BD patients for hippocampus and thalamus and enlarged lateral ventricles in patients. In BD, cortical gray matter was thinner in frontal, temporal and parietal regions of both brain hemispheres. BD had large general effects on mean gray matter thickness in both left and right brain hemispheres. Further we found that psychopharmacological treatment showed significant associations with cortical thickness and surface area.

The ENIGMA pipeline allows for identification of brain MRI abnormalities in BD in the largest analysis ever conducted. The results suggest a pattern of brain structure abnormalities, which provide novel insight in pathophysiology of BD, and potential effects of mood stabilizing agents.

Disclosure of interest Received speaker's honorarium from Lundbeck, Lilly, Otsuka

http://dx.doi.org/10.1016/j.eurpsy.2017.01.195

Symposium: Schizophrenia and clinical psychopathology: From research to clinical practice

S122

Are deficits in social cognition differentiating between schizophrenia and affective disorders

G. Sachs[1,*], E. Maihofer[2], A. Erfurth[2]
[1] *Medical University of Vienna, Department of Psychiatry and Psychotherapy, Vienna, Austria*
[2] *Otto Wagner Spital, 6th Psychiatric Department, Vienna, Austria*
* *Corresponding author.*

Over the last decades, in matters of the assessment of psychopathology and its clinical consequences, there has been an increased interest in neurocognitive function including non-social and social cognition.

Classic psychopathology -as represented e.g. by the standardized AMDP system- focuses on pathognomonic signs for the categorization of syndromes [1] and differentiates between disturbances