Problem gambling – prevalence and mental health aspects in a psychiatric setting

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Background: Suicidal behaviour is the most serious outcome of an activity that is promoted as recreation (Productivity Commission 1999). Understanding of the prevalence of problem gambling and its risk factors in a population accessing mental health services has important implications for clinicians in these settings.

Method: Over 6 months, consecutive presentations of people who were seen either in the community by The Alfred's Crisis Assessment and Treatment Team or who were admitted to the emergency department of The Alfred and seen by The Alfred's Psychiatry Triage were screened for suicidal ideas or intent and problem gambling. Positive cases were invited to participate in a study to investigate the prevalence of problem gambling, suicide and other mental health issues.

Results: Preliminary data indicate high levels of problem gambling in the sample. There are gender differences found in those with suicidal ideas or behaviours and problem gambling. Results on a range of other biopsychosocial measures are compared with other populations.

Conclusions: The results of the project highlight characteristics that can be contrasted with international data to broaden the understanding of mental health issues in people for whom gambling is a problem or is a problem for someone who is close to them, or that gambling is the reason behind their contact with a mental health service. Further, it underscores the importance of including the identification of problem gambling as a factor for risk in clinical mental health assessment and the need for further research.

Obesity and metabolic syndrome in a psychiatric rehabilitation service

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Background: The high prevalence of metabolic syndrome in people on antipsychotic medication is related to increased morbidity and mortality. It adversely influences management of chronic mental disorders in a rehabilitation setting in several ways, including poor treatment adherence and impediment to work and independent functioning. **Methods:** A clinical audit of 216 patients with psychotic disorders in a rehabilitation unit was done to diagnose metabolic syndrome using the criteria International Diabetes Federation (2005).

Results: Overweight and obesity was identified in 89% and metabolic syndrome in 68% of the cohort. The risk for metabolic syndrome was 17 times more in obese people compared with normal-weight people. Polypharmacy was disproportionately associated with the syndrome. Case examples highlight that regular exercise, dietary control and GP consultation can reverse the adverse metabolic status without any change in antipsychotic drug regimen.

Conclusions: Management of metabolic syndrome should be an integral component of management of people on antipsychotic medication. A protocol for an active intervention program that needs to be initiated early and continued through the course of antipsychotic drug treatment is presented.

Judged effectiveness of treatments for depression: a web-based survey

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Background: Previous research has indicated that many self-help and complementary treatments for depression are commonly used and rated highly in terms of their perceived helpfulness. The aim of the current study was to examine the frequency of use, and judged effectiveness, of a range of both professionally implemented strategies (including antidepressants and psychological therapies) and self-help strategies, by those who have ever experienced a depressive episode.

Methods: Individuals accessing the Web site of the Black Dog Institute (www.blackdoginstitute.org.au) were invited – if they had ever received treatment for an episode of depression – to participate in an anonymous online survey. A total of 2692 participants were asked whether they had ever received any of a set of different treatments for depression, including a range of antidepressants, psychological therapies, electro-convulsive therapy and more alternative strategies. Respondents rated the effectiveness of each strategy trailed.

Results: 'Effectiveness' scores were computed for each of 31 strategies (including 15 antidepressant medications) that had been trailed by at least 100 participants. The rank order of the 10 highest rating strategies was as follows: venlafaxine, exercise, cognitive behavioural therapy, 'other psychotherapy', IPT, escitalopram, citalopram, yoga/meditation, sertraline and counseling. Ratings identified differential perceived effectiveness of different antidepressants. **Conclusions:** In addition to formal treatments for depression, self-help and alternative strategies are frequently used, and perceived as effective treatments. Consumers' perceptions of the helpfulness of such strategies could be helpful to both professionals and patients considering complementary treatments for depression.

The neuropsychological consequences of cannabis use in schizophrenia: a preliminary analysis

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Background: There has been considerable controversy regarding the possible causal role of cannabis use in the development of schizophrenia; there have also been contradictory findings concerning the impact of cannabis use on neuropsychological function in schizophrenia and in non-psychiatric samples. This paper presents preliminary data comparing neuropsychological task performances of people with a diagnosis of schizophrenia with and without cannabis use.

Methods: Participants included 17 individuals with a diagnosis of schizophrenia (10 without cannabis use, plus 3 with current cannabis use, combined with 4 for whom cannabis use was significant at onset but is no longer in use, to make the 7 members of the cannabisusing group). All participants were tested on neuropsychological measures covering a range of cognitive domains (executive functioning, memory, learning, attention and information processing speed). Psychopathological assessments (eg depression, symptom ratings) and detailed drug use measures were also conducted.

Results: The cannabis-using group was more symptomatic, had lower levels of current intelligence and showed greater impulsivity as indexed by the CPT, compared with the non-cannabis-using group. There were trends toward greater recognition memory deficits and arousal deficits as indexed by the CPT in the cannabis-using group.

Conclusions: Cannabis use in schizophrenia may be associated with greater symptom severity and increased deficits in impulse control and current intelligence. Although preliminary, these results are inconsistent with the self-medication hypothesis, as symptoms are exacerbated by cannabis.

Impaired connectivity in amygdala pathways may explain disorganization symptoms of patients with first-episode schizophrenia

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Background: Our integrative neuroscience model of first-episode schizophrenia (FES) highlights the lack of coordinated neural activity required for effective processing of salient signals of emotion. Aim of this study was to determine whether altered connectivity of frontolimbic networks underlies impairments in coordinated processing of emotion and associated clinical profile.

Methods: Functional magnetic resonance imaging (fMRI) scans were acquired in 14 patients with FES and 14 matched healthy control subjects during the pseudorandom presentation of fearful and neutral facial expression stimuli. Faces were presented under both overt (conscious) and covert (nonconscious) conditions shown to engage indirect cortical and direct brainstem pathways to the amygdala, respectively. A random-effects model with the following regions of interest (ROIs) was used: amygdala, brainstem, thalamus, visual cortex and the medial prefrontal cortex (MPFC). Following group comparisons, we used psychophysiological interaction analysis to examine coupling of amygdala with other ROIs. We used the effect size of differences in coupling in regression analyses to predict patients' clinical profile assessed with the PANSS.

Results: Patients with FES showed a differential pattern of amygdala interaction with the nodes of direct and indirect pathways and also with the MPFC compared with controls. A greater impairment in these couplings, particularly during conscious processing of fear faces, predicted a greater severity in the conceptual and behavioural disorganization measured by PANSS.

Conclusion: These findings indicate that break down in amygdala pathways may affect coordinated neural activity required for effective processing of salient signals of emotion and may lead to a disruption of the usual emotional and cognitive associations such as incongruent affect.