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EDITORIAL

What was new, interesting and frequently cited in 2009?

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Last year, the European Archives of Psychiatry and Clinical Neurosciences have published nearly 80 articles. This editorial wants to summarize those articles of 2009 which have been cited most frequently and/or seem to be of some interest to the readers. Therefore, the selection of the articles is subjective and includes articles being of some interest to the reader or having been well cited already shortly after publishing.

Therapies

Recently, there has been some debate to what extent antidepressants seem to work. Therefore, it is interesting and important to have meta-analyses reviewing this issue. The paper of Bauer et al. [1] reviewed the effect of venlafaxine compared to other antidepressants and placebo in the treatment of major depression. In a meta-analysis they used all available trials of venlafaxin in the treatment of major depressive disorders including treatment-resistant depression and long-term relapse prevention. Trials were identified trough searches of Medline, Embase, Cochrane Library and trough assessing unpublished trials held by the manufacturer. Compared to all SSRIs venlafaxine was associated with a greater response (odds ratio 1.15) and remission (odds ratio 1.19). Compared to tricyclics, response to venlafaxine was not statistically significantly different using a full random effects method with an odds ratio of 1.22. Therefore, the meta-analysis provides evidence of the clinical efficacy of venlafaxine in achieving therapeutic response in remission in patients with major depression. It is more effective than SSRIs and at least as effective as tricyclics antidepressants but better tolerated. In addition, it seemed to be effective in reducing relapse when given long term after major depressive episodes.

This meta-analysis stresses the safe and well tolerated use of a more recent dual-acting substance in the treatment of major depression.

Remaining with severe forms of depression there are two articles dealing with the subject of deep brain stimulation, one by Juckel et al. [2] reviewing the literature on psychosurgery and deep brain stimulation as an ultima ratio treatment option in refractory depression. Covering the aspect of ethics, the second article by Kuhn et al. [3] summarizes the difficult history of psychosurgery in psychiatric illnesses and critically discusses pros and cons of deep brain stimulation. This is especially rolled out on the background of the question how ethical it is to suggest deep brain stimulation to a severely psychiatric ill patient. Proper diagnosis and expert neurosurgical knowledge are two important factors in this context.

With respect to depression an article needs to be mentioned finally dealing with the stigma of psychiatric treatment and help-seeking intentions in depressive disorders. In a large-scale representative population survey Schomerus et al. [4] found contrary to expectations, anticipated discrimination from others was unrelated to help-seeking intentions, while personal discriminatory attitudes seem to hinder help-seeking. This is most interesting to note as the survey comprised not only probands from the general population but also persons with current depressive syndromes. If these findings hold up, future anti-stigma campaigns need to improve self-stigmatization to the same extent as they are trying to reduce anticipated discrimination currently.

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The second topic covering a series of articles is dementia. There is an interesting article by Mendes et al. [5] demonstrating that lithium reduces Gsk3b mRNA levels in primary cultures of rat cortical and hippocampal neurons as well as peripheral leukocytes of adult rats treated with lithium in addition. As there is evidence of increased systemic expression of active Gsk3b in Alzheimer's disease patients being associated with the formation of senile plaques and neurofibrillary tangles, this might be an interesting promising target for further interventions. It is needless to say, that lithium is one promising neuroprotective substance showing an effect in restoring neuroplasticity in depression and other psychiatric disorders, so far.

Beside the potential impact of lithium on the progression in dementia, cholinesterase inhibitors are part of the state-of-the-art treatment regime. However, recently it has been under intense debate to what extent they are beneficial for subjects with Alzheimer's disease. In a recent meta-analysis Diniz et al. [6] found that the relative risk for progression from MCI to Alzheimer's disease/dementia is significantly reduced in the cholinesterase-treated compared to the placebo-treated group. The patients on the ChEI group had a significantly higher all-cause dropout risk but showed no significantly different relative risk for serious adverse events. Therefore, in summary, this meta-analysis demonstrates that the long-term use of ChEI in subjects with MCI may attenuate the risk of progression to AD/dementia.

One of the most controversial suggestions of current guidelines on treatment of schizophrenia is to stick to monotherapy. Contrary to this suggestion there is good evidence demonstrating 30–50% of all patients with schizophrenia are treated with more than one neuroleptic. One argument against polypharmacy is the increase of side effects. In a well controlled large-scale study Correll et al. [7] could show that polytherapy and monotherapy patients were similar with regard to QTc duration, QTc dispersion and proportion of patients with gender-adjusted QTc prolongation. The QTc duration had only a modest correlation with the total antipsychotic dose. The authors conclude the common practice of polytherapy with two atypical antipsychotics does not seem to lead to a significant QTc prolongation compared to monotherapy.

Etiology and pathogenesis

Looking at the molecular etiology of psychiatric illnesses especially psychoses, the genome-wide association studies (GWAS) are heading the discussion. Despite this, there is substantial work in progress to understand the function of important risk gene like NRG-1. In an interesting paper Kircher et al. [8] found correlates of the relevant ICE SNP of the NRG-1 in first episodes of schizophrenia with cerebral activation in fronto-temporal regions.

Using a prominent phenotype for the search of new risk genes Kishi et al. [9] looked for the association of the Clock gene, schizophrenia and mood disorders in the Japanese population. Although the disregulation of the circadian rhythms as well as the dopamine metabolism are central to this disorders, low association with the Clock gene was found, which was centrally involved in circadian rhythmicity.

Beside the genomic approach the analyses of the proteome seem to be another promising field of trying to find key players in the pathophysiology of psychiatric disorders. Using shotgun proteome analysis Martins-de-Souza et al. [10] analyzed postmortem tissue of schizophrenic patients. The analysis resulted in the identification of 1,261 proteins of which 84 showed statistically significant differential expression. Of those candidates involved in the immune system, calcium homeostasis, cytoskeleton assembly and energy metabolism seem to be of special interest.

Finally, looking at the context of etiology and pathogenesis gene–environment interaction seems to be of central interest currently. One of the key environmental factors being involved in the pathogenesis of psychotic illness seems to be cannabis. Therefore, an interesting overview of Lutz [11], one of the leading experts in this field, should be quoted here as well.

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