

PANDORA'S BOX

Pandora searches the world literature for evidence, news and other sources on matters of interest (doesn't shy away from controversy) to bring to the reader. She welcomes comments and suggestions (via ip@rcpsych.ac.uk)



Drug classification

Do you get frustrated trying to explain to patients or trainees the differences between first- and second-generation drugs or classical and atypical antipsychotics? How often have you found yourself trying to explain to a puzzled patient that, although it is an antipsychotic (e.g. quetiapine), the drug you are prescribing is the right choice for their bipolar depression; or that you are right in giving them a high-dose antidepressant for their obsessive-compulsive disorder? This may soon be a problem of the past. The first phase of a new psychotropic drug classification was launched at the 27th European College of Neuropsychopharmacology (ECNP) Congress in October 2014. This is the product of a 5-year collaboration between the ECNP and the American College of Neuropsychopharmacology (ACNP), the International College of Neuropsychopharmacology (CINP), the International Union of Basic and Clinical Pharmacology (IUPHAR) and the Asian College of Neuropsychopharmacology (AsCNP). The new Nomenclature Project, which uses terminology based on the pharmacology of the drugs rather than the symptoms they treat, aims to replace the outdated symptom-based classifications developed in the 1960s. The new classification consists of four axes: Axis 1 describes the pharmacological action (the target and mode of action), Axis 2 the indication, Axis 3 the efficacy and major side-effects and Axis 4 the neurobiology. In this first phase of implementation, a booklet, *Neuroscience-Based Nomenclature*, and a beta version app were released at the 27th ECNP Congress. These are available in English only at present, but there are plans to release them in other languages, including French, German, Spanish, Portuguese, Japanese and Chinese. Meetings are planned with key organisations such as the World Health Organization, the US Food and Drug Administration, the American Psychiatric Association and others. Is this going to make a difference in clinical practice? Does this appeal? Will it help improve clinical practice? More information is available and comments can be placed on the ECNP website.

Presentation at the 27th European Neuropsychopharmacology (ECNP) Congress, 19 October 2014; see also <http://www.ecnp.eu/projects-initiatives/nomenclature.aspx>

Age and neuroplasticity

We now live longer and are required to stay in employment for longer, but can our ageing brains cope? Do we have the same capacity to learn and do our neurons retain the flexibility to change? Is neuroplasticity still possible? It is established that our cerebral ventricular system enlarges with age, the grey matter shrinks and its capacity for plasticity decreases. But all is not lost! A study published in *Nature Communications*, a collaboration between scientists from Taiwan and the USA, compared the ability to learn and perform, using an abstract visual perception task over a period of a week, between a group of volunteers aged 65–80 and a younger group aged 19–32. They also

scanned the subjects' brains during the test, using magnetic resonance imaging (to examine plasticity in the cortex) and diffusion tensor imaging (to examine plasticity in the white matter). The older group performed as well as the younger group on the test but while the young brain images showed more changes in the cortex, as expected, the older group's performance was associated with changes in the white brain matter. The conclusion is that although the ageing brain's plasticity in the cortex is impaired, older people are still able to learn (at least as far as this visual test demonstrates) because the brain capacity for plasticity shifts from the grey matter to the white matter, possibly by making neuronal signal transmission more efficient.

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Stigma as a barrier

Did you think that stigma is a problem of less affluent and less informed societies? Some 60 million Americans experience mental illness in any given year but 40% of these will not receive care, according to a new report published in *Psychological Science in the Public Interest*, a journal of the Association for Psychological Science. The report specifically examines stigma as a significant barrier in seeking and receiving care. Without ignoring the role of public stigma, the authors go further in their analysis, implicating the institutional and public health systems' responsibility. They bring to attention the fact that both mental healthcare and mental health research are less well funded than physical medical care and medical research, an observation that also applies to the UK. The Carter Center Mental Health Program in the USA attaches a positive and optimistic statement to this report:

Together, we can create robust systems and services all along the path of recovery and encourage early intervention and access to treatments without fear of labels or diminished opportunities. When that is achieved, we will know that our tireless efforts to eradicate stigma have been successful.

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Declaration on mental health in Africa

From the USA to the rest of the world and in particular Africa, where mental disorders, which account for a huge part of the burden of disease and disability, are allocated less than 1% of the meagre health budgets. In 2014, the 194 member states of the World Health Organization, including representatives from African countries, adopted the Comprehensive Mental Health Action Plan (MHAP) with the objective of advancing the mental health agenda in the world. African representatives, recognising this as a historic opportunity to improve the mental health and well-being of the continent's citizens, pledged to adopt this roadmap, to aim for parity of mental and physical health and to address stigma and the violation of human rights. They advocate the inclusion of mental