

## JS01-01 - NEW CLASSIFICATION OF PSYCHIATRIC MEDICATIONS: REPORT OF WORK IN PROGRESS

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The terminology used for drugs that alter brain process and treat psychiatric disorders is complex and unsatisfactory [Nutt 2010]. First there are multiple classification systems derived by different organisations such as the WHO through their ATC (Anatomical Therapeutic Chemical Classification System), the FDA and some treatment providers.

These often use different terms and concepts. For example in the current WHO classification system, antidepressants are in the class of Psychoanaleptics, a rarely used term. Moreover within that class the largest subclass of antidepressants is that named "other". This is clearly unsatisfactory and means that a great opportunity to provide useful pharmacological information is lost. Additionally labelling new innovative drugs as "other" carries an implicit assumption that they are not as well understood, or as well targeted, as those in specific classes (such as the SSRIs) and may have a negative impact on reimbursement as well as use.

Another significant problem is the unstructured way in which acronyms are developed and used. Again using the example of antidepressants the original acronyms of TCAs - for tricyclic antidepressants - and MAOIs - for monoamine oxidase inhibitors set the field off on the wrong foot. TCA refers to the chemical structure of a class of drugs such as imipramine and amitriptyline. It carries no pharmacological information and indeed would cover many other classes of drugs such as antihistamines and some neuroleptics e.g. chlorpromazine. In contrast the term MAOI refers to the mode of action of drugs such as phenelzine and tranylcypromine. These block the enzymes that degrade key monoamines such as noradrenaline and serotonin so the term does convey useful mechanistic information about the drugs.

The next antidepressants - the SSRIs were named on pharmacology; they selectively block the 5HT reuptake site, so are called Selective Serotonin Reuptake Inhibitors. This might lead logically to a similar terminology for a selective noradrenaline reuptake inhibitor, i.e. SNRI. However this term was appropriated by the company marketing venlafaxine using SNRI to mean Serotonin Noradrenaline Reuptake Inhibitor. This continually leads to confusion.

Subsequently we have seen terms such as NaSSA (Noradrenaline and Serotonin Specific Antagonist) for mirtazapine and NARI (NorAdrenaline/norepinephrine Reuptake Inhibitor) for reboxetine. Such randomness of terminology makes teaching psychopharmacology and clinical therapeutics much more difficult than it should be.

A further challenge is the development of new antidepressant agents that may have more than one pharmacological target such as agomelatine (a melatonin agonist and 5HT<sub>2C</sub> receptor antagonist) vilazodone (a serotonin reuptake blocker and a 5HT<sub>1A</sub> receptor agonist) and LU21004 (a serotonin reuptake blocker with significant antagonist actions at several 5HT receptors). We have elsewhere suggested that these drugs with more than one pharmacological site of action be called multi-modal agents (Nutt 2010).

My talk will discuss these issues in the light of recent consensus meetings between the ECNP, ACNP, CINP and AsCNP, plus the last ECNP with an audience of over 300, mostly psychiatrists.

Ref Nutt DJ. (2009) Beyond psychoanaleptics - can we improve antidepressant drug nomenclature? *J Psychopharmacol.* 23(4):343-5. Erratum in: *J Psychopharmacol.* 23(7):861.