Psychiatric disorders represent a major social problem worldwide, given their negative impact on both the individual and society. Even though there is a growing public awareness of the need for specialized treatments and a growing demand for them, targeted and personalized therapeutic approaches are not always readily available to meet this demand. Indeed, there is still a broad gap between basic research and the rapid transfer of data to the clinical practice and the bedside. Although rather improved in the last decades, the pharmacological management of psychiatric disorders is still rather empirical and based upon drugs based on the “enrichment” of the original biological hypothesis. However, it is true that there is a unanimous consensus that psychiatric disorders are complex conditions deriving from the intertwining of multiple factors encompassing individual, developmental and environmental variables. The current pharmaceuticals are significantly safer and have less adverse effects than the first psychotropic drugs discovered in the middle of the 20th century, but psychiatrists and psychopharmacologists are aware that they are unfocused in their mode of action.

As a result, there is an urgent need for novel biomarkers that might guide the development of more specific drugs.

This special issue will be, thus, devoted to reviewing the impact of some promising biological markers in terms of both pathophysiology of different psychiatric disorders and innovative psychotropic drugs.

The first paper of this issue “The role of neurophysiological biomarkers in obsessive-compulsive disorder” deals with the possible use of some neurophysiological parameters in obsessive-compulsive disorder, a quite common psychiatric condition.

In the paper entitled “Sleep markers in psychiatry: do insomnia and disturbed sleep play as markers of disrupted neuroplasticity in mood disorders?”, the authors propose the possible use of altered sleep patterns as an index of possible deranged neuroplasticity.

Given the complexity of the clinical pictures, the use of polypharmacy is a common clinical practice in psychiatry with pros and cons that are clearly reviewed in the paper “Polypharmacy- Purpose, benefits and limitations”.

The special issue is closed by a comprehensive review “Oxytocin: An old hormone, a novel psychotropic drug and its possible use in treating psychiatric disorders” on the role of oxytocin, a nonapeptide synthesized in the hypothalamus and present in both the brain and peripheral organs, in different physiological processes promoting a sense of safety and health. As such, oxytocin, and its modulators, might represent one of the most innovative “natural” psychotropic drugs of the future

REFERENCES


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