

# BRIDGING THE GAP BETWEEN NEUROLOGY AND PSYCHIATRY

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Philosophers have argued for and against the dualist approach that separates mind from matter right from the times of Aristotle, Avicenna and then Descartes. The Monists, led by French thinkers, attempted to explain the workings of the mind on laws of physics and the theory of structuralism. Wilhelm Wundt, and his student Edward Titchener, in the 19th and 20th centuries laid foundations of experimental psychology and attempted to study processes of mind through the use of scientific methods.<sup>1</sup> This highlights the ongoing need amongst students of human behavior to bridge the gap between mind represented by psychiatry and psychology and matter represented by brain. These theoretical underpinnings also form the basis of the existing gulf that separates practitioners of mind related behavior patterns, the psychiatrists, and those who focus on diseases affecting the nervous system represented by neurologists.

The clinical conditions that bring neurology and psychiatry closest in health care settings include geriatrics, alcoholism, substance abuse particularly the ever-increasing use of psychostimulants, delirium, dissociative and conversion disorders, epilepsy, somatization disorders, eating disorders, panic disorders, and depression. Such patients, and their families suffer inexplicably, and it would be hard to convince a community with a growing awareness of health issues about the rational basis of the existing gulf between the two disciplines. The traditional overlap of psychiatry with clinical psychology, and of neurology with internal medicine has been one explanation of the existing distance that persists to-date.<sup>2</sup> While an armchair stoic might not object to this explanation, it may be hard to use this argument in a court of law prosecuting a psychiatrist who missed a space-occupying lesion while treating fits in a case he thought was suffering from dissociative disorder. It may be equally disconcerting for a neurologist who erroneously starts a patient on memantine, misses depression in a case reporting memory lapses with borderline ventricular dilatations on MRI. These and many similar clinical scenarios truly reflect a failure in training of neurology and psychiatry.

In USA the American Board of Internal Medicine and the American Board of Psychiatry and Neurology offer dual certification in internal medicine and psychiatry. The residents are expected to undertake a combined residency that must include at least five years of training in the two disciplines. The United Kingdom (UK) however continues to offer separate streams of training in neurology and psychiatry.

In Pakistan we continue to follow the UK model and have

separate Fellowships in neurology and psychiatry. Each structured training programme however does offer a rotation in the other. While these rotations aim at bridging the existing gaps in the management of patients with neuropsychiatric overlaps, they fail to integrate the two disciplines that can eventually translate into efficient and seamless management of patients. These rotations also fail to bring about the much needed camaraderie amongst the neurologists and psychiatrists. To further add to this dilemma, just 170 neurologists exist for our population of 170 million, figures that necessitate action on the part of policy makers to increase the number of psychiatrists and neurologists.<sup>3</sup> Further steps to bridge the existing gap between these two vital disciplines of medicine are also required.

In line with the broader aim of bringing the two fraternities closer, the Journal of Pakistan Psychiatric Society (JPPS), and the Pakistan Journal of Neurological Society (PJNS) decided to initiate joint editorials. The Pakistan Journal of Neurological Sciences ([www.pkjns.com](http://www.pkjns.com)), a quarterly publication of the Pakistan Society of Neurologists, Pakistan Academy of Neurological Sciences and Pakistan International Neurosciences Society have already taken a lead in opening its doors to publications from Pakistani psychiatrists and mental health professionals. This editorial is the second in this series, after the first editorial by the authors appeared in PJNS.<sup>4</sup> The two editorial boards have also decided to collaborate in sharing of articles, reviewers, and research projects to serve as vanguards in our bid to bring neurology closer to psychiatry.

These humble beginnings are expected to eventually translate into better care of psychiatry patients who sometimes prefer to see a neurologist to escape the stigma of a psychiatric consultation. Their number may go as high as 40% of a neurologist's outpatient.<sup>5</sup> A similar situation exists when it comes to neurological disorders lurking in psychiatry outdoor and indoor settings. Moreover, joint efforts are needed to increase public awareness and advocacy.

We plan to further this collaborative spirit by publishing neurology and psychiatry guidelines and algorithms governing scientific diagnosis and treatment of patients with suspect neurology / psychiatry conditions. This is in a bid to improve prescription of psychotropics in the two disciplines and bridge an existing gap in the scientific understanding of these conditions by both professionals. In our respective journals we also plan to prioritize articles on neuropsychiatric disorders.

Another area that we will highlight in the JPPS will be to

inform our readers of the technological prowess from which neurology has benefitted over the years, and in which the mental health professionals can now follow suit. In return neurology can benefit from the pencil and paper tests which has been the forte of clinical psychology, and has been effectively used in psychiatry to diagnose organicity. The use of psychometrics in neuropsychiatry has the potential to provide cheap alternatives to expensive imaging and flow studies used in neurology at present. On the other hand the mental health professionals continue to appear ill at ease with their use of EEG, MRI, CT, PET, and angiography studies of brain. The use of these techniques in latent schizophrenia, early intervention research, dissociative disorders, eating, and stress related disorders, psychotrauma, psychosexual disorders and other challenging areas in psychiatry may open new vistas for psychiatry.

On the therapeutic front, psychiatry's ace cognitive behavioral therapy (CBT) has shown promise in post stroke depression, while deep brain magnetic stimulation, and transcranial magnetic stimulation are being increasingly used in resistant depression and intractable Parkinsonism alike.<sup>6</sup> Their use in psychosis is in infancy but is being actively investigated. These frontiers can be reached faster if the two disciplines can walk hand in hand, and take it as a joint voyage.

The authors have already proposed in their editorial in PJNS that joint efforts should be made to undertake the first ever National Survey of Neuropsychiatric Disorders. The Pakistan Psychiatric Society (PPS) has already shown its resolve for a National Mental Health Survey, while the Pakistan Society of Neurology (PSN) have already covered a fair distance in this regard. A joint action to ensure an early realization of this dream, can have long term implications in formulation of scientifically grounded policy making and rational resource allocations in the health budget of the Government of Pakistan as well as the provincial ministries of health.

A useful initiative by the two national societies i.e. PPS and PSN would be to consider holding joint international and national conferences. The organizers of the forthcoming International Conference of PPS can potentially take the first step in this direction by seeking such collaboration and inviting neurologists from around the world to bring an important new dimension to their academic activity. The PSN has also initiated training courses in Kabul. It is for the two professional bodies of psychiatrists and neurologists to now join hands and undertake joint initiatives in the fields of research, training, services, and policy in the field of neuropsychiatry. These measures are eventually expected to translate into tangible shifts in existing standards of patients suffering from neurological and psychiatric disorders.

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