LETTER TO EDITOR: BRAIN INJURY REHABILITATION

Dear Editor:

This letter is in response to a recently published article in Oct-Dec 2017 issue of JPMI by Hassan et al regarding traumatic brain injury (TBI) at a teaching hospital in Khyber Pakhtunkhwa[1]. The article included 1338 patients with brain injury secondary to trauma over a period of one year. It reflects a considerable turnout of patients with TBI; however, it is interesting to note that one of the outcomes of TBI included in the study was Glasgow Coma Scale (GCS) at discharge. GCS is a measure of consciousness and is an important marker in determining the prognosis in TBI, but it is not a reliable marker for determining the prognosis at discharge from the hospital. Additionally, the details of Glasgow Outcome Scale (GOS) after three months of injury was probably the most significant element in this study in terms of outcomes; however, a detailed analysis of GOS scores could have further highlighted the impact of TBI on outcomes. There was neither any discussion of outcome findings in the discussion, nor there were any details of how GOS was measured.

The outcome measures after TBI are usually determined by functional outcomes or quality of life measures. The outcomes in various neurological impairments in Pakistan are usually limited to neurological measures. This may be due to the fact that the concept of rehabilitation is usually perceived as a non-clinical intervention and the idea of rehabilitation is generally limited to physical therapy only. It is unfortunate that the roles of interdisciplinary rehabilitation, neurological rehabilitation and rehabilitation medicine are poorly understood and least emphasized among health care providers. Even in medical or surgical fields of neurological sciences, these subjects are rarely focused in undergraduate or postgraduate medical education, training, practice or research. The biopsychosocial impact of TBI is huge and is often overlooked in the country. Consequently, the acute care physicians in Pakistan nearly remain blinded to the functional outcomes, rehabilitation needs and quality of life care while dealing with TBI.

Disability resulting from TBI is not limited to sensory-motor impairment, but includes cognitive communicative deficits, emotional disorders, behavioral and personality changes, neuroendocrine problems, swallowing disorders, epilepsy, loss of bladder control and various systemic effects[2]. Subsequently, TBI patient's participation in society can be limited which in turn lowers their quality of life[3,4]. The holistic care is best provided by rehabilitation team which mainly includes an interdisciplinary approach. The rehabilitation team is led by a physiatrist (physical medicine and rehabilitation specialist) and include physical therapist, occupational therapists, speech-language pathologists, audiologist, neuropsychologists, clinical psychologists, recreational therapists, art therapist, social workers, rehabilitation nurses, orthotist, assistive technologist, rehabilitation nursing, spiritual therapist, social worker and vocational experts. Given the subtle effects of concussion, it is very important to screen mild TBI. All patients with moderate to severe TBI should be referred to an interdisciplinary TBI team[5]. Cognitive rehabilitation and prevention of complications remains main focus of acute TBI rehabilitation[6].

Although trauma care is improving in Pakistan and new trauma centers are developing but focus on rehabilitation services is still lacking. Considering the burden of trauma care in the country, there is a dire need for brain injury rehabilitation services which can be best provided by experts trained in neuro-rehabilitation.

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REPLY OF THE AUTHOR

Dear Editor,

This is in response to the "Letter to Editor" to our original article, "etiology, clinical presentation and outcome of traumatic brain injury patients presenting to a teaching hospital of Khyber Pakhtunkhwa", published in your Journal in Volume 31 No. 4, 2017 issue. We took two variables (GCS and GOS) to evaluate the outcome of TBI. Of these two, undoubtedly GOS is the best variable for determination of outcome. But in the literature some of the studies mentioned solely the GCS as outcome variable. Yes, it would have been better if we had thrown light on GOS in details, but it was not possible due to health management system here in our setup. The system is in infancy stages and detailed GOS parameters were not possible. Secondly, the huge burden of the patients (1338 in just 1 year), is the main reason behind this deficiency in our study.

Regarding physical medicine and rehabilitation (PMR), the specialty, expertise in the field and widespread use as desire by the TBI patients, is only possible when there are enough number of consultants in the field. The only FCPS "Physical Medicine and Rehabilitation" (postgraduate diploma) awarding institute in the country is College of Physicians and Surgeons Pakistan (CPSP). Furthermore, till date there are only 30 FCPS in PMR and of those only 5 belong to our province and in those only 1 is from Peshawar, who get FCPS in 2017. The evidence can be viewed online[1].

The specialty of PMR was started by the CPSP in mid nineties, since then it is getting momentum year by year and is evident from the fact that in last 10 years more than half of the fellows got their FCPS. Having said that, with the passage of time, more and more people are and will come in the specialty and will take important role in improving the neuro-rehabilitation of TBI patients. Finally, and most importantly, it's just a preliminary study regarding TBI, to get an initial insight into the silent epidemic and this has laid down the foundation stone for future research in the field in our setup.

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