Pregabalin Abuse: an Area of Concern in Nepal

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Pregabalin is a structural analogue of naturally occurring transmitter GABA (gamma-amino butyric acid) but is unrelated to it functionally. It is a potent ligand for the alpha-2-delta subunit of voltage-gated calcium channels in the central nervous system. It is approved for use in epilepsy, neuropathic pain, generalized anxiety disorder (GAD), fibromyalgia, postherpetic neuralgia and neuropathic pain following spinal cord injury or diabetes.2 There have been other substantial off-label use has such as hypnotic-dependent insomnia³ withdrawal of benzodiazepines and alcohol dependence. From 2007 to 2017, the rate of patients newly treated increased from 128 to 379 per 100 000 persons per year for pregabalin (RR= 2.96 [95% CI, 2.87-3.05]) in primary care setup of United Kingdom.⁶ In similar way the trend of use of pregabalin in clinical setup has been increased at a significant rate in other countries including Nepal as well.^{7,8} With the increasing use of this molecule preclinical, clinical and epidemiological studies have raised major concern about its abuse potential. This concern is further supported by many case reports about pregabalin being used in doses that exceed normal therapeutic dosages. Euphoria is a frequent side effect of treatment with pregabalin which was reported in about 5 % of all patients in a meta-analysis of pregabalin adverse events based on 38 clinical trials 10 and this may be of special importance to the abuse potential of pregabalin. It has also been observed that pregabalin is commonly offered for sale by illegal websites, often without a prescription. Usually, the reported dosages were significantly higher than those recommended in clinical practice and idiosyncratic methods of intake of the drug (e.g. rectal, intranasal) are described.11 Several pharmacovigilance-databases have warned for potential abuse liabilities and overdose fatalities in association with pregabalin however, there is another possibility that they could be simple innocent bystanders of other more powerful substance use disorders. ¹² As seen in Figure 1 there is rising trend on the publication of scientific research about "Pregabalin Abuse".

Year

Figure 1: Number of publication on search term "Pregabalin Abuse" in PubMed

Pregabalin can produce desirable effects alone but are often used concomitantly with other drugs. It has been seen that opioid use disorder is the greatest risk factor for pregabalin abuse. The most concerning effect of this recent trend of pregabalin abuse has been increased evidence of associated patient harm, increased hospital utilization and opioid-related overdose mortality risk.¹³

In our clinical practice in Nepal too, we encounter a lot of patient with pregabalin abuse and is mostly as a comorbidity with other substances especially opioids. The major concern in our part of the world is easy availability of this molecule as an over the counter medicine in most of the pharmacies. As this molecule has multiple uses it is prescribed by clinicians from many disciplines. There are data regarding use of pregabalin as a recreational agent among adolescents from other counties¹⁴, same has been seen in clinical practice in Nepal too. Hence, it is a duty of us psychiatrists to educate about this emerging problem not only to the general public but also to the clinicians, pharmacists and other medical professionals.

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