

Pregabalin Misuse and Abuse in Jordan

Dr. Maxim A. Obiesat, Dr. Muath F. Marashdeh, Dr. Arafat K Al-Zoubi, Dr. Malik M. Al-Alwan,*

Dr. Raya T. Al-Odat

MD, Psychiatry, Jordanian Royal Medical Services,
MD, Psychiatry, Jordanian Royal Medical Services,
MD, Psychiatry, Jordanian Royal Medical Services,
MD, Psychiatry, Jordanian Royal Medical Services,
Pharmacist, Jordanian Royal Medical Services

Abstract:

Pregabalin are widely used in neurology, psychiatry and primary healthcare for a range of clinical conditions but are increasingly being reported as possessing a potential for misuse. In fact, increasing levels of both prescriptions and related fatalities, together with an anecdotally growing black market, have been reported in Jordan.

Objectives:

The aim of the study was to identify and assess cases of Pregabalin misuse or dependence as reported to the Jordanian Mental health care clinics database, to identify the magnitude of this problem and the characteristics of these reactions and reviews the current evidence base of this potential, in an attempt to answer the question of whether there is cause for concern about this drug.

Methods:

All spontaneous reports of Pregabalin - (2016-2017) related misuse/abuse/dependence were retrieved. A descriptive analysis by source, sex, age, and type of report was performed.

Introduction:

Potent binding of pregabalin at the calcium channel results in a reduction in the release of excitatory molecules. Furthermore, gabapentinoids are thought to possess GABA-mimetic properties whilst possibly presenting with direct/indirect effects on the dopaminergic 'reward' system. Overall, pregabalin is characterized by higher potency, quicker absorption rates and greater bioavailability levels than other gabapentinoids. Although at therapeutic dosages gabapentinoids may present with low addictive liability levels, misusers perceptions for these molecules to constitute a valid substitute for most common illicit drugs may be a reason of concern. Gabapentinoid experimenters are profiled here as individuals with a history of recreational polydrug misuse, who self-administer with dosages clearly in excess (e.g. up to 3-20 times) of those that are clinically advisable. Physicians considering prescribing gabapentinoids for neurological/psychiatric disorders should carefully evaluate a possible previous history of drug abuse, whilst being able to promptly identify signs of pregabalin misuse and provide possible assistance in tapering off the medication.

Results:

From the Jordanian Mental health care clinics database 7639 (6.6 % of a total of 115,616) and 4301 (4.8 % of 90,166) adverse drug reaction reports of misuse/abuse/dependence were, respectively, associated with pregabalin, with an overall reporting frequency increasing over time. For both molecules, subjects typically involved were female adults. A total of 27 and 86 fatalities, respectively, associated with pregabalin, and mostly in combination with other drugs, were identified. Analysis of proportional reporting ratios for drug

abuse/dependence/intentional product misuse values seem to indicate that these adverse drug reactions were more frequently reported for pregabalin (1.25, 1.39, and 1.58, respectively) compared with other gabapentinoids.

Discussion:

The study provides us with a deeper overview about the problem of pregabalin misuse/abuse in Jordan from the perspectives of those affected by abuse and dependence. Users reported boosting the effect of pregabalin by combining it with other drugs and various sweet drinks. Different factors (e.g., lack of pharmacist awareness about pregabalin abuse and prospect for economic gain to income) complicate the role of medical staff in Jordanian communities. The lack of detection in urine screening additionally facilitates abusers to continue on pregabalin. The lack of detection might be due to the variability of urinary detection times of abused drugs, and differentiating new drug use from residual drug excretion could be difficult, especially after repeated or chronic drug usage.

Conclusions:

Despite data collection/methodological approach limitations, the present data seem to suggest that pregabalin misuse may be a cause for concern, especially in patients with a history of substance misuse. Hence, healthcare professionals should be vigilant when prescribing these molecules.

To consider prescribing gabapentinoids for neurological/psychiatric disorders only and should be only by neurologist or psychiatrist with medical report showing indications, duration of expected management plan and regularly evaluate a possible misuse and provide possible assistance in tapering off the medication.

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