

# Current scenario and future prospects of adverse drug reactions (ADRs) monitoring and reporting mechanisms in the rural areas of the India

Shalini Shukla<sup>1</sup>, Priyanka Sharma<sup>1</sup>, Priya Gupta<sup>1</sup>, Shikha Pandey<sup>1</sup>, Reshu Agrawal<sup>1</sup>, Deepak Rathour<sup>1</sup>, Dharmendra Kewat<sup>1</sup>, Ramu Singh<sup>1</sup>, Sunil Thakur<sup>2</sup>, Rishi Paliwal<sup>1</sup>, and KUNJBIHARI SULAKHIYA<sup>1</sup>

<sup>1</sup>Indira Gandhi National Tribal University

<sup>2</sup>PharmEasy

October 8, 2020

## Abstract

Pharmacovigilance (PV) deals with the detection, collection, assessment, understanding and prevention of adverse effects associated with the drugs. The objective of PV is to ensure safety of the medicines and patients by monitoring and reporting of all adverse drug reactions (ADRs) associated with prescribed medicine usage. Findings have indicated that about 0.2-24% of hospitalization cases are due to ADRs out of which 3.7% of patients have lethal ADRs. The reasons includes number of prescribing drugs, increased new drugs in the market, and inadequate PV system for ADRs monitoring, lack of awareness and knowledge about ADRs reporting. Serious ADRs leads to enhanced hospital stay, increased treatment cost, risk of death, and many medical and economic consequences. Therefore, ADR reporting at its first instance is important to avoid further harmful effects of the prescribed drugs. In India, the rate of ADR reporting is less than 1% whereas worldwide it is 5% due to lack of awareness about PV and ADR monitoring among healthcare providers and patients. Spontaneous reporting is the most commonly used PV method to report ADRs in both urban and rural areas of India. Evidences revealed that there is not any effective ADR reporting mechanisms developed in rural areas causing underreporting of ADR thus increasing threat to the rural population. Hence, PV and ADR reporting awareness among healthcare professionals and patients, telecommunication, telemedicine, use of social media and electronic medical records, and artificial intelligence are the potential approaches for prevention, monitoring and reporting of ADR in rural areas.

## Hosted file

Manuscript.pdf available at <https://authorea.com/users/365362/articles/485488-current-scenario-and-future-prospects-of-adverse-drug-reactions-adrs-monitoring-and-reporting-mechanisms-in-the-rural-areas-of-the-india>