



# PHARMACOVIGILANCE IN AYURVEDA

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**Abstract :** Ayurveda is the oldest system of medicines and drugs prescribed are all natural, herbal or from animal origin. Although every drug has its own efficacy and side effects, so the conventional term like Pharmacovigilance is widely used nowadays. Increasing market demand of herbal drugs and immense turnover in Ayurvedic system of medicine leads to think upon safety, efficacy and adverse drug reactions of drugs. A universal misconception leads onto people that Ayurvedic drugs or dosages, generally do not have any medication errors.<sup>4</sup>

Pharmacovigilance works as an important mechanism to meticulously analyze the efficacy and complexity of drugs. Despite the fact, Pharmacovigilance is a substantial way of ensuring safety among drugs. It also demands mindful and necessary observations over the methods and plans. A national Pharmacovigilance of ASU, [Ayurveda, Unani and Siddha] systems of medicine has been initiated in Gujarat in 2008.

**KeyWords** - Adverse drug reaction, drug safety, Pharmacovigilance, Evidence based medicine, Ayurveda.

## PURPOSE

There is a general misconception about Ayurvedic drugs being completely 100 percent safe, which is not the case.<sup>4</sup> Ancient scriptures also mention that misapplication, or inconsiderable use of drugs, would lead to adverse drug effects. However, these mistakes could be avoided if a formulation is prepared according to SOP [standard operational procedure].

Accounting up the assessment being done by a physician, of a disease and affected patient, the time of drug administration, place of affected area, ingestion, digestion, habituality, diet, mind and body regulation and body's exercise can help minimize adverse drug reaction in patients. Modern science would contribute great effect on managing ADR using Pharmacovigilance.

## HISTORY AND DEVELOPMENT OF AYURVEDIC MEDICINE

Ayurvedic system of medicine dates back up to 2 millennium BCE, the period of Vedic medicine lasted until about 800 BCE. Ayurveda is counted as one of the Traditional System of Medicine [TSM], acknowledging the relation between natural plant based medicines and human body constitution, has been core theme of Ayurvedic medicine.

Ayurveda lays its base of foundation by Vedas and Vedic schools, such as 'Vaisheshika' and 'Nyaya'. The Vaisheshika teaches about the perception and inferences ought to be found in the patients and to treat the underlying cause. Nyaya school endured the practitioners that, they should have vast knowledge of disease and its various treatments before examining the patients. The guidance and instructions about healing were mentioned in the 'Shlokas' in the form of poems. Four major Vedas of knowledge include Yajur Veda, Rigveda, Sam Veda and Atharva Veda. Rig Veda explains 67 plants and 1028 shlokas. Atharva Veda and Yajur Veda describe 231 and 81 medicinally useful plants respectively. 'Charakha Samitha' covers a large area constituting other Ayurvedic medicine. 'Shushruta Samhita' acknowledges about Science of Surgery.<sup>4</sup>

## PHARMACOVIGILANCE

Before any formulations are marketed in the country, they always undergo extensive risk assessment which incorporates clinical trials, some drugs after thorough clinical trials have side effects on patients, if prescribed with combination of one or more drugs together in order to expel such instances, Pharmacovigilance has made itself as an essential aspect in pharmaceutical world.

The 'World Health Organization' defines pharmacovigilance as the science and activities relating to the detection, assessment, understanding and prevention of adverse effect, or any other medicine related problems.

Pharmacovigilance pursues 4 general objectives, according to WHO,

1. Improved patient care and safety in relation to the use of medicines and all medical and paramedical interventions.
2. To improve public health and safety in relation to the use of medicines.
3. Contribute to the assessment of benefit, harm, effectiveness and risk of medicine and encouraging their safe, rational and more effective use.
4. Promote understanding, education and clinical training in Pharmacovigilance and its effective communication to the public.

## APPLICATIONS OF PHARMACOVIGILANCE IN AYURVEDA

The clinical decision of Ayurveda depends upon assessment and disease and determination of choice of the drug to treat the same. Ayurvedic treatment is solely accountable on decision making process with taking account on adverse drug effects, if practitioner fails to do such standard process, the drug could probably show adverse drug reaction. In such cases, pharmacovigilance can be taken under consideration as an objective tool to help analyze the drug and its trial, and also provide information of underlying cause of adverse drug reaction.

The most common strong belief of people that Ayurvedic system of medicine is completely safe up to enormous extent, this lack of compound matter facilitates the allowance of use of pharmacovigilance among Ayurvedic practitioners. Pharmacovigilance could help to discover new methods to research drug related safety problems. For instance, a case where a patient often uses medicines from a different medicine system other than Ayurveda pharmacovigilance could help assess the problem, and ADR regarding drug-drug interactions.

Pharmacovigilance extends its length in detection of about new formulations invented by Ayurvedic practitioners, which may not be according to standard procedures prescribed in ancient Ayurvedic scripts and text.

## OBSTACLES / DISADVANTAGES

1. Very few reports of ADR in Ayurvedic System of Medicine.
2. The common false belief regarding the safety of plant based medicine.
3. Prescription of combination system of medicines together.
4. Inadequate or unconventional way of formulating drugs.
5. Irregular dose and intermixing dosage forms.
6. Ignorance of drug having expiry date.
7. Mis-identification of drugs in market i.e. not according to the Vedic scripture.
8. Informal marketing, mis-branded drugs and adulteration.
9. Unavailability of compendium of adverse drug reactions for Ayurvedic medicines
10. Bulk dispensation, prescription of higher dose than actually required to hasten of the treatment.

## ADVANTAGES

1. Patient care whilst consuming Ayurvedic medicines.
2. Safety and efficacy of drug in relation with human body.
3. Encouragement to assess, monitor, drugs and dosage form before usage.
4. Identification of quality problems in medicines resulting ADR.
5. Effective communication on aspects related to drug safety.
6. Beneficial in public health programs, national medicines policies and treatment guidelines

## REFERENCES / CITATIONS

1. Piyush Chaudhary, Neha Lamba , YK Sharma Assistant Professor, Department of Rasa Shastra, Dayanand Ayurvedic College, Jalandhar, India Research Scholar, Department of Kayachikitsa, RGGPGAC, Paprola, Kangra, Himachal Pradesh, India .Dean and Principal, RGGPGAC, Paprola, India
2. Michael Kaeding · Julia Schmäler Christoph Klika Pharmacovigilance in the European Union Practical Implementation across Member States.
3. Applied concept of pharmacovigilance in Unani system of medicine by Dr. Kaleem Ahmad, Ph D Scholar National institute of Unani medicine
4. IMPEDIMENTS IN IMPLEMENTATION OF PHARMACOVIGILENCE PROGRAMME FOR AYURVEDA DRUGS” By Vd. Mrunal R. Akre, PhD (Sch), Assi. Prof. Dept. of Davyaguna, Global Institute of Ayurveda, Rajkot.

5. Pharmacovigilance of ayurvedic medicines in India Urmila Thatte and Supriya Bhalerao Department of Clinical Pharmacology, TNMC & BYL Nair Ch. Hospital, Mumbai - 400 008, Maharashtra, India
6. Pharmacovigilance: Boon for the safety and efficacy of Ayurvedic formulations Anand Chaudhary, Neetu Singh, and Neeraj Kumar Regional Pharmacovigilance Centre for Ayurvedic Drugs, North Zone Department of Rasa Shastra, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India. Dr. Anand Chaudhary, Department of Rasa Shastra, Institute of Medical Sciences, Banaras Hindu University, Varanasi – 221 005, India.
7. Role of Pharmacovigilance in India: An overview Sanvidhan G Suke, Prabhat Kosta, and Harsh Negi. Department of Biotechnology, Priyadarshini Institute of Engineering and Technology, Nagpur-440 019, India Division of Pharmacovigilance, Accenture Services Pvt. Ltd. Bannerghatta main Road, Bangalore- 560 076, India. Clinical Research & Medical Services, Fresenius Kabi Oncology Ltd, Gurgaon- 122 001, India.
8. Why and how? Addressing to the two most pertinent questions about pharmacovigilance in Ayurveda Department of Kaya Chikitsa, State Ayurvedic College, Lucknow, Uttar Pradesh, India

