



Review

Scientific appraisal of Unani concept of islah-e-advia (rectification/purification of drugs) and its importance

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ABSTRACT

Ethnopharmacological relevance: Unani system of medicine uses drugs from plants, minerals and animals (*Mawaleed-e-salasa*) origin. Most of the drugs used are believed to be safe, but some drugs may have toxins and produce harmful effects, so it is very important to remove the toxins or to minimize their harmful effects before using, so as to increase their therapeutic values and make easy for use.

Aim of the study: To explore the concept, aims and objectives of *islah-e-advia* (rectification/purification of drugs) in Unani system of medicine.

Materials and methods: A through literature survey was undertaken using the various online bibliographic databases like Pub Med, Google Scholar, Science Direct, Web of Science and Scopus. Classical Unani literature books which are translated in Urdu by CCRUM were used for Unani references. The keywords used for the search included “*Tadbeer-e-Advia*”, “*Islah-e-advia*”, *Mudabbar process*, detoxification and purification of drug.

Results: The ancient Unani physicians were well aware of toxicity of the drugs and have divided drugs into four degrees (1°, 2°, 3° and 4°) according to the *Mizaj* (temperament) of drugs. The fourth degree drugs produce so strong effects that the physiological functions of the body get disturbed; such drugs are also considered to be poisonous drugs. Different methods of purification have been mentioned for drugs belonging to the third and fourth degree temperament and always recommended their use after subjecting them to certain *Tadbeer* (rectification/purification). Otherwise these drugs may destroy the physiological function of the body. After purification process the drugs become physically and chemically pure, therapeutically more effective and less toxic. Very few pharmacological and toxicity studies have been conducted.

Conclusion: Third and fourth degree drugs and its formulations have been claimed by Unani scholars to be useful in the management of various diseases of the body. After purification toxicity has been reduced in comparison crude drug. However, further elaborate and comprehensive studies are required to validate such claims.

1. Introduction

Botanicals have been used in India since ancient times and their use is increased worldwide as evidenced by rapidly growing global and national markets of these drugs (Aneesh et al., 2009). Natural organic or inorganic active ingredients of animals and minerals are also used as a medicine in some countries (Nikam et al., 2012). Approximately 7500 species of plants are used in the traditional medicines of India. Traditional healers using toxic remedies have devised methods of

detoxification or rectification of unwanted or toxic substances (Shahnavaqshan, 1997). The medicines used in Unani system of medicine are well documented in the traditional and scientific literature for their healing properties (Kapoor, 2010). Unani system of medicine uses plant, animal and mineral origin drugs (Makbul et al., 2019) some of which have constituents that are toxic in nature and even some of them are deadly poisonous. Therefore, these drugs are rectified to minimize their toxicity (Akbar et al., 2010). In Unani system of medicine drugs are classified according to their *Mizaj* (temperament): viz., *Motadil*

Abbreviations: TLC, Thin Layer and Column Chromatography; GC-MS, Gas Chromatography Mass Spectrometry; XRD, X-ray Diffraction; NIUM, National Institute of Unani Medicine; SEM, Scanning Electron Microscopy; EDAX, Energy Dispersive X-ray Spectroscopy; CCRUM, Central Council for Research in Unani Medicine; WHO, World Health Organisation; HPLC, high-performance liquid chromatography

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