

## Temperament Theory in the Iranian Traditional Medicine and Variation in Therapeutic Responsiveness, Based on Pharmacogenetics

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### Abstract:

Genetics and physiopathology have shown that the incidence of a disease can arise from different etiologies including mutation in different genes and various molecular mechanisms. However, the clinical signs can be apparently common. Furthermore, the patients may be different in terms of drug absorbance, and effect, effectiveness, and side-effects of the drugs. Thus, along with following the therapeutic approaches, while prescribing a drug, physicians make use of their inference based on their personal experiences.

In modern pharmaceutical sciences, it is tried to find ways to produce more effective drugs on the basis of pharmacogenetics and not only disease mechanism or genetics. The objectives of this approach are to achieve maximal clinical response with the least side-effects and production of drugs for a particular individual or disease. Nevertheless, estimation of the effectiveness and probable side-effects of drugs are so complex, since they result from the interaction of many known and unknown factors with each other. Research institutes are seeking new research methodologies to achieve the simplest and the most cost-effective methods with the highest success rate.

In the Iranian traditional medicine, temperament is a key concept in defining health and illness of human. In this viewpoint, as the fingerprint of no one is similar to that of another person, temperament of no one is similar to that of others. Moreover, specific changes occur in the individual's temperament in many diseases, which can be differentiated according to a set of defined and classified concepts.

It is assumed that by categorizing patients according to their type of disease and considering the patients' temperament, the disease temperament, and the drugs' temperament, drug effectiveness or the probability of side-effects occurrence can be predicted more accurately. In other words, the way of accomplishing pharmacogenetic objectives can be shortened by considering the temperament phenotypes.

**Keywords:** Iranian traditional medicine, Temperament, Pharmacogenetics, Pharmacogenomics

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