Substantiating the Use of *Gul e Surkh* as an Effective *Badal* (Substitute) for *Gul e Gauzaban* in Terms of the Similarities in their Botanical and Chemical Properties

M.I.F. Risny, M.S.M. Nasmeer

Faculty of Indigenous Medicine, University of Colombo, Sri Lanka

The Unani system of medicine is one of the indigenous medical traditions in Sri Lanka. It orginated in Greece based on the teaching of Hippocrates (460BC) and Galan (151-201AD). The Unani medical system was later introduced to countries such as India, Pakistan, Bangladesh, and Sri Lanka by the Arab traders. Though the Unani concept of remedial substitution holds immense practical value, it has not been adequately explored by most Unani scholars, with the exception of Razi (Rhazes 865-925 AD), who adopted the concept and outlines rules for prescribing substitute drug when the preferred drugs were unavaialable. The Unani concept of remedial substitution is based on similarities in the actions, temperaments, and physical properties of drugs, primarily botanical, which have already been well-established. However, chemical composition has not been considered a basis for substitution. The objective of this study was to compare the botanical descriptions, morphological characteristics, and chemical components of two plants, and to evaluate the scientific validation of selecting Gul-e-Surkh as a potential substitute for Gul-e-Gauzaban, with reference to its effects on the heart (Qalb) through the Unani concept. The study also explored literary research on effective methods for preparing Unani compound formulations. Unani classical texts, textbooks, reference books, review articles, and relevant papers were reviewed, along with botany books and computer database searches, including PubMed and Google. The study found a similarity between the main and substitute botanicals, with only minor differences. A direct relationship between the physical properties, actions, temperaments, and chemical constituents of the primary and substitute botanicals was observed. While the study appeared to validate the concept based on these factors, further pharmacological studies focusing on properties and activities, pharmacogenetic studies, and clinical trials are needed to strengthen the concept further.

Keywords: Badal, Substitution, Gul e Surkh, Gul e Gauzaban, Unani Concept