



Al-Salam University
Faculty of Pharmacy

Herbal Medicinal Products in the
Treatment of Osteoarthritis

Project Submitted for Partial Fulfilment of Requirement of B.
Pharm Degree

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Abstract

Osteoarthritis (OA) is the most common form of arthritis, which represents a substantial economic burden for society and significantly affects patients' quality of life. Current conventional treatments of OA may be insufficiently effective and unsafe. In an attempt to overcome these limitations, many patients use herbal medicinal products (HMPs) and dietary supplements. A considerable number of herbal drugs and preparations (e.g., willow bark, *Salicis cortex*; devil's claw root, *Harpagophyti radix*; blackcurrant leaf, *Ribis nigri folium*; nettle leaf/herb, *Urticae folium/herba*; meadowsweet/meadowsweet flower, *Filipendulae ulmariae herba/flos*; rosemary leaf/oil, *Rosmarini folium/aetheroleum*; and juniper oil, *Juniperi aetheroleum*) are traditionally employed to relieve minor articular pain. Active constituents (e.g., sesquiterpene lactones, triterpenic acids, diarylheptanoids, iridoid glycosides, phenolic glycosides, procyanidins, and alkaloids) are not often fully known. Experimental studies suggest that herbal extracts/compounds are able to suppress inflammation, inhibit catabolic processes, and stimulate anabolic processes relevant to OA. Therapeutic benefit of most HMPs is expected solely from the experience of their long-standing traditional use. Efficacy and safety of several HMPs were assessed in clinical trials. The growing body of preclinical and clinical evidence provides rationale for the use of herbal products in the treatment of OA. However, at present, they cannot be recommended to patients with confidence.

