Quality assurance of herbal medicinal products: Past, present & future

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Use of plants, parts of plants and isolated phytochemicals for prevention and treatment of various health ailments has been in practice since long. Generally it is believed that the risk associated with herbal drugs is very less, but reports on serious reactions are indicating the need for stringent government regulation which is crucially important to ensure the quality, efficacy and safety of herbal products. Traditional medicine practices have been developed in different cultures in different regions, but without the harmony which is essential for development of international standards and appropriate methods for their standardization. The dilemma starts with classification of herbal drugs, in some countries they are seen as ‘food supplements’ whilst in others they are deemed to be ‘medicines’. A general comparison of the pharmacopoeial standards reveals that there is a wide variation in plant specific parameters, quality standards such as permissible limits for heavy metal, pesticide and microbial contamination in different countries. Marker based standards are becoming popular for the identification/authentication of herbal drug components. However, as herbal drugs are plant extracts, the need for adoption of multi-marker system and effect of storage conditions are important points to be considered. Complex phytochemicals and inconsistent ingredients are major hurdles during drafting any quality control guidelines. The quality issues can be classified into three main aspects: cultivation, manufacturing, and circulation. Rigorous implementation of Good Agricultural and Collection Practices (GACP), provided by WHO, is a crucial step towards improving the quality of herbal medicines. The processing and/or manufacturing of herbal products should be in accordance with Good Manufacturing Practices (GMP) and marketing of herbal medicines should also comply with the Good Supply Practices (GSP). To be effective, the implementation of guidelines (GACP, GMP) needs to be legally enforced.

Biography

Gandhi had completed her Ph.D. in Pharmacology from L.M. College of Pharmacy. She is working as Principal of Anand Pharmacy College and serving as Dean of Gujarat Technological University, Gujarat. She has published more than sixty five papers in national and international journals and has guided six Ph.D. and Fifty Post graduate students of Pharmacy. She has to her credit fourteen state and national awards for best research publication and presentation and recently awarded Rajnibhai V.Patel Best Research Guide award.

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