Role of nanoparticles in the drug delivery system

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Herbal medicines have been widely used all over the world since ancient times and have been recognized by physicians and patients for their better therapeutic value as they have fewer adverse effects as compared with modern medicines. Phytotherapeutics need a scientific approach to deliver the components in a sustained manner to increase patient compliance and avoid repeated administration. This can be achieved by designing novel drug delivery systems (NDDS) for herbal constituents. NDDSs not only reduce the repeated administration to overcome non-compliance, but also help to increase the therapeutic value by reducing toxicity and increasing the bioavailability. One such novel approach is nanotechnology. Nano-sized drug delivery systems of herbal drugs have a potential future for enhancing the activity and overcoming problems associated with plant medicines. Hence, integration of the nanocarriers as a NDDS in the traditional medicine system is essential to conflict more chronic diseases like asthma, diabetes, cancer, and others.

The present study deals with nanoparticle and its role in the drug delivery system.

Key Words: Nanoparticles, Herbal Medicine, and NDDS

Biography

Pramod Kumar Patel is M.D. Scholar, Rasashastra & B.K., National Institute of Ayurveda, Jaipur, working on different dosage form of medicaments. He participated in many national and international conferences and presented papers.

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