

Kesarwani A, Yadav AK, Singh S, Gautam H, Singh HN, Sharma A, Yadav C. Theoretical aspects of transdermal drug delivery system. *Bull. Pharm. Res.* 2013;3(2):78-89.

**Abstract:** Transdermal patch is a medicated adhesive patch that is placed on the skin to deliver the drug through the skin in order to achieve systemic absorption of drug at a predetermined rate over a prolonged period of time. Its main advantages includes controlled drug release with minimum side effects, improved bioavailability, bypass first pass metabolism and many more. There are factors such as physiochemical as well as biological which affect the bioavailability of transdermal medicament. Due to technological advancement, many new techniques which have attained attention are iontophoresis, phonophoresis, electroporation micro needles etc. Different types of transdermal patches can be prepared by varying methods. Transdermal patches can be evaluated by interaction studies, folding endurance, thickness of the patch, weight uniformity, drug content and *in vitro* studies. This review covers general aspects like advantages, methods of preparation of transdermal patches, evaluation, basic components of transdermal drug delivery system.

**Key words:** Transdermal delivery, Skin, Controlled release, Transdermal patch, Franz diffusion cell.

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