OBJECTIVE

Drugs curing a diseased condition in one part of body can also have an adverse effect on some other part of the body. For instance, most of the drugs available in the market have some or the other side effect associated with using them. The side effects encountered are mainly with the liver, heart, lung, kidney, etc. Some of the oral medications have an adverse effect on the gastrointestinal system; some make the patient feel drowsy, nauseated, and dizzy. Due to these reasons there has been increased interest and challenge in the delivery of an active ingredient through the skin.

Transdermal drug delivery systems are a class of novel drug delivery systems, which are gaining worldwide accolade, as evidenced by the numerous scientific documents being published. They have been used to administer the drug, which undergo first pass metabolism on oral administration, those which possesses a short biological half life, and undergo degradation on passage through gastrointestinal tract, or not well absorbed from gastrointestinal tract.

The transdermal route of drug administration is limited by the barrier properties of the skin. Only the most potent drug with low daily dose and appropriate physicochemical characteristics are candidates for drug delivery. So the permeation enhancers can be used that increases the permeability of the skin.

Hence present study intended towards the development of transdermal patch using hydrophilic polymers as solubiliser and hydrophobic polymers as release retardants and permeation enhancers to improve the permeability of drug. Also the attempt is to be made to study combination of polymers with other enhancement strategies to produce synergistic effects in the improvement of drug permeability.