

# Abuse of Topical Glucocorticoids among Patients Visiting Community Pharmacy in Basrah-Iraq

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## Abstract

**Introduction:** Topical glucocorticoids have been the mainstay for the treatment of many skin conditions since their introduction due to their anti-inflammatory, anti-proliferative vasoconstrictive and immunosuppressive properties. Availability of topical glucocorticoids in different potencies as over the counter medication in Iraq encourages their use for non-labeled indications, thus increasing the side effect of such drugs.

**Objectives:** The aim of this study was to evaluate the use, knowledge of the patients and patient education of topical glucocorticoids.

**Methodology:** A cross sectional community pharmacy based survey was conducted throughout Basrah city. Inclusion criteria were customers visiting the community pharmacies asking for topical corticosteroids without prescription, aged 15 years and older and willing to participate in the study. 600 questionnaire forms for topical corticosteroids were distributed in the center and the districts of Basrah city. 254 forms out of 600 were returned out of which 212 were completed. Incomplete forms were excluded.

**Result:** 106 (50%) participants out of 212 misused topical glucocorticoids. As a single product, Betamethasone valerate and Clobetasol propionate was majorly used by the participants which are potent and ultra-high potent topical steroid respectively. The major source of topical steroid prescription was relatives. 49.8% participants didn't recognize any side effect of topical glucocorticoids while hypopigmentation was the most side effect identified by the participants (21.8%). Only 35% of the participants, whom topical steroid prescription source by physicians and pharmacists, was educated about the use of topical glucocorticoids.

**Conclusion:** Topical glucocorticoids are commonly abused in Basrah city and probably other cities of Iraq. Looking fair and improving face appearance is a common cultural belief in Iraq that pushes people to seek topical glucocorticoids from community pharmacies for skin lightening in addition to other unapproved indications without prescription.

**Key words:** topical corticosteroids, abuse of topical corticoids, misuse of topical corticoids.

## Introduction

Topical glucocorticoids possess various properties which make them very effective to be used for different

non-infectious dermatological conditions<sup>(1)</sup>. These properties are anti-inflammatory, anti-proliferative, vasoconstrictive and immunosuppressive properties<sup>(2)</sup>. Hydrocortisone was the first introduced then with various structural modifications others, such as betamethasone, mometasone, clobetasol, dexamethasone and triamcinolone, was produced<sup>(3)</sup>. Due to their usefulness and effectiveness they have been used widely for treating inflammatory dermatologic diseases which

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