

## TRENDS OF SELF MEDICATION IN PATIENTS WITH ACNE VULGARIS

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### ABSTRACT

#### Back ground:

Self medication is a norm in our country. One factor probably contributing to this phenomenon is over the counter sale of almost all medication without any regulation. In our dermatology practice, we frequently encounter patients with acne vulgaris deteriorated by topical use of self medication. However, there is very little data to support this in our set up.

#### Objective:

To determine the percentage of acne patients using self medication in our population.

#### Design:

A cross-sectional survey.

#### Patients and methods:

One hundred and fifty patients, of any age and either sex, presenting at outpatient dermatology clinics (Madina Teaching Hospital and Faisal Hospital, Faisalabad), from June to September 2009, for the treatment of acne vulgaris were included. An in-person interview using a questionnaire was conducted. They were asked about the use of self medication for their disease. Details of type of medication, its effects on disease and the source of advice were also noted. Objective assessment of acne grade was done by trained dermatology personnel. Data was analyzed using micro software SPSS version 17.

#### Results:

Show that 115(77%) patients had used self medication. Potent topical steroids were used by 72(48%) patients. Majority of the patients received the advice about self medication from their friends (31%) or relatives (27%). Temporary improvement was noticed by 47% of those who used self medication.

#### Conclusion:

A significantly high percentage of patients (77%) in our population use self medication for acne vulgaris.

**Keywords:** Self medication, acne vulgaris, topical steroids

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### INTRODUCTION

Acne vulgaris is one of the most common disorders encountered in dermatology practice.<sup>1,2</sup> It is well established as a disfiguring disease state with significant

esteem, social embarrassment, social withdrawal and depression.<sup>3</sup> Quality of life is negatively affected in many patients.<sup>4</sup> The social, psychological and emotional impacts of acne, make it a disease to be taken far more seriously than just a cosmetic disability.<sup>1,4</sup>

The term self-medication can be defined as the use of nonprescription medicines under an individual's own initiative.<sup>5</sup> It generally refers to use of nonprescription medicines, usually over-the-counter (OTC) drugs, to treat certain 'minor' ailments, by patients themselves

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psychosocial burden, as manifested by low self

without consulting a medical practitioner and without any medical supervision. Self medication is a norm in our country. One factor probably contributing to this phenomenon is over the counter sale of almost all medication without any regulation. In our dermatology practice, we frequently encounter patients with acne vulgaris deteriorated by topical use of self medication. However there is very little data to support this in our set up. This study was planned to determine the incidence of self medication in patients with acne vulgaris in our set up.

### PATIENTS AND METHODS

The sample comprised of 150 consecutive patients, of either sex, aged 13-35 years, presenting at an outpatient dermatology clinic for the treatment of acne vulgaris. They were recruited from one of the two settings: outpatient dermatology clinic at Madina Teaching Hospital (a tertiary care referral centre); and dermatology outpatient clinic at Faisal Hospital, Faisalabad (a private hospital in community setting). An in-person interview using a questionnaire was conducted, after taking an informed consent. They were asked about the use of self medication for their disease. Details of type of medication, its effects on disease and the source of advice were also noted. Objective assessment of acne grade was done by trained dermatology personnel using Leeds revised acne grading system.<sup>6</sup> Patients unwilling to participate in the study and those with concomitant medical or dermatological illness were excluded. Operational definition of self medication was taken as any topical or systemic preparation (allopathic, herbal or cosmetic) that the patient has used or is still using, not prescribed by a doctor for the treatment of acne.

### RESULTS

Out of 150 patients that were interviewed, there were 106 (71%) females and 44 (29%) males. Age ranged from 13 to 35 years with an average of 20 years. Majority of the patients (45%) had moderate grade acne. Duration of disease varied from 6 months to 9 years (Table 1).

Self medication was used by 115 (77%) patients,  $p < .001$ . All of them had used some topical medication (Table 1), whereas 17 (15%) had used topical as well as systemic medicine. Sixty two percent of those who used self medication used potent topical steroids either alone or in combination with other topical medication (Table 2).

**Table 1. Demographic data of patients included in study**

Demographic variables	Number of patients (n= 150)	Percentage of patients
Age:		
≤ 20 years	93	62
> 20 years	57	38
Sex:		
Male	44	29
Female	106	71
Duration of disease:		
< 2 years	79	53
> 2 years	71	47
Severity of acne:		
Mild	59	39
Moderate	68	45
Moderately severe	16	11
Severe	7	5

**Table 2. Type of topical medication used by acne patients**

Topical medication used	No. of patients (n=115)
Steroids (potent & super potent)	72
Cosmetic creams	29
Herbal products	8
Acne creams	6

The sources of information about medication for patients using self medication were friends (31%), relatives (27%), medical store keepers (16%), beauticians (11%) and TV/print media (5%). Colleagues, neighbors, quacks and others were the source of information in case of 11% of patients.

Patients from rural background used self medication (88%) significantly more than those from an urban background (69%),  $p < .01$ .

Patients with moderate grade acne used self medication (86%) more than those with mild (64%) or severe (78%) acne,  $p < .025$ . Age,

gender, occupation, marital status and duration of disease did not affect self medication significantly in our study. Patients with primary and secondary level education, i.e. 1-10 years of formal education used self medication (86%) more than those with no formal education (79%) and those with more than 10 years of formal education (69%),  $p < .10$ .

## DISCUSSION

Increasing incidence of self medication has been documented throughout the world by large population based studies and national health surveys.<sup>7,8</sup> We have very little data if at all to document this trend in our population. This study was an attempt to throw some light on this problem in our setup. The results have shown an alarmingly high incidence of self medication in patients with acne vulgaris, i.e. 77%. This is much higher than 9.2%, reported in a similar study on acne patients in Germany.<sup>7</sup> A population based study in Spain revealed a 12.3% incidence of self medication for dermatologies.<sup>9</sup> This difference becomes even more disturbing by the fact that current study was conducted on patients visiting dermatology OPD, whereas the studies in comparison were carried out in non-institutionalized population. The likely explanation for this high incidence among acne patients in our study is probably the lack of regulation on over the counter sale of medication including potent topical steroids in our set up along with certain social factors that need exploration.

The results in our study revealed an alarmingly high incidence (62%) of patients who used potent topical steroids for treatment of acne. This is in sharp contrast to other studies where none of the patients using self medication for acne had used topical steroids.<sup>7</sup> This may be a reflection of lack of awareness about acne as a disease, indications of topical steroid use and their side effects. The prevalent myth that topical steroids can be used to treat any skin disease needs to be addressed as well.

Patients from rural background used self medication more than those from urban background. This may be due to lack of availability of health care services particularly dermatologists in rural areas.

Patients with secondary level education used more self medication. This can be explained with increased confidence in their own knowledge. A similar trend was noted in Spanish and Turkish studies.<sup>9,10</sup>

As for the source of information about the medication used, 31% patients were influenced by the advice of their friends and 27% by relatives. We believe in whom we love. This reflects the strong impact of our social bonds on our decisions about health. Sixteen percent patients consulted the person running a medical store, who is not usually a pharmacist in our set up. This is again in contrast with other studies where pharmacists were consulted the most for self medicated drugs.<sup>7,9</sup>

This study has unveiled the threatening trend of self medication, especially the use of potent topical steroids in patients with acne vulgaris. Much larger studies, preferably population based are required to determine the magnitude and underlying causes of this trend.

## CONCLUSION

The incidence of self medication is significantly high among acne vulgaris patients in our population. The most frequently used medication was potent topical steroids.

**Table 3. Type of topical steroids used by acne patients**

Topical steroids used	No. of patients (n=72)
Betamethasone alone	22
Betamethasone mixed with multiple cosmetic creams	27
Betamethasone alongwith other topical medication	17
Clobetasol propionate	6

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