



## MANAGEMENT OF ACNE; ARE DOCTORS DOING JUSTICE?

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**ABSTRACT...Objective:** To highlight the errors in the management of acne by GPs, qualified dermatologists having minor degrees or fellowship and those who do not have any qualification and practicing as dermatologists. **Study design:** Observational case series study. **Setting:** Dermatology department, Allied and D.H.Q hospitals, Faisalabad and at private setup. **Period:** From September 2012 to September 2013. **Material & Methods:** 100 patients with acne were divided in four groups. Those treated by general practitioners, those treated by dermatologists with minor degrees and diplomas, those with fellowship and those who practice as dermatologists but they don't have any qualifications. **Results:** None of the patients was assessed properly for severity of acne and none of them was being treated according to the current recommendations. **Conclusion:** General practitioners and dermatologists still need extensive education regarding the treatment of this common skin disease.

**Key words:** Acne vulgaris, dermatology, scarring, general practitioner.

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## INTRODUCTION

Acne vulgaris is a very common skin disease experienced by nearly all adolescents.<sup>1</sup> It is a self-limited disorder of pilosebaceous unit which present with a pleomorphic variety of lesions consisting of comedones, papules, pustules and nodules. The pathogenesis of acne is multifaceted. Four basic steps have been identified i.e. follicular epidermal hyperproliferation, excess sebum production, inflammation and presence and activity of propionibacterium acnes.<sup>1,2</sup> All types of acne lesions have the potential to resolve with sequelae. Almost all acne lesions leave a transient macular erythema after resolution. In darker skin types, post inflammatory hyperpigmentation may persists months after resolution of acne lesions. In some individuals acne lesions may result in permanent scarring.<sup>2</sup>

Even though acne may seem trivial, the psychosocial consequences can be profound<sup>3</sup> and severe disease can leave permanent physical scarring.<sup>4,5</sup> Early and effective acne treatment can prevent or minimize such complications.<sup>6</sup>

It has been observed in our clinical practice many young people with acne come with permanent scarring on face despite effective treatment is available. Many current recommendations are set for the management of acne. When the patients were investigated for the treatment they took, it was observed that most of them were not graded into mild, moderate and severe. They were not given medications according to the grades of acne and were not prescribed medications according to current recommendations. Acne patients were not counseled properly regarding the etiology and duration of the disease. So we design a study to know that either the errors were made by GPs, dermatologists with minor degrees, dermatologists with fellowship or those who practice as dermatologists without any qualifications.

## MATERIALS & METHODS

This observational case series descriptive study was conducted during the period of September 2012 to September 2013 in the Dermatology department, Allied and D.H.Q hospitals, Faisalabad and at private setup.

A total of 100 patients of 15-25 years of age both males and females with acne vulgaris were included for the study. The patients were grouped into 4 categories based on the physician they consulted for their disease.

#### Group A

Included patients treated by dermatologists having fellowship.

#### Group B

Included patients treated by dermatologists having minor degrees and diplomas.

#### Group C

Included patients treated by general practitioners.

#### Group D

Included patients treated by doctors who practice as dermatologists but they don't have any qualifications.

The diagnosis was made on the basis of detailed history and clinical examination. Acne severity was determined by examining the lesion types and asking about the number of lesion type from the patient before starting previous treatments.<sup>1,2</sup> Treatment given by different doctors was assessed according to the severity of acne lesions and compared with the current recommendations available for management of acne.<sup>1,7</sup>

SPSS V-17 was used for statistical analysis. Descriptive analysis was applied on the data. Frequency and percentage was calculated for all qualitative variables. Mean and standard deviation was calculated for quantitative variables.

## RESULTS

Out of 100 patients 80 (80%) were females and 20 (20%) were males. Age of the patients ranged from 14-25 years with a mean  $19.53 \pm 3.62$  years. The duration of disease was ranging from 1 month to 10 years with a mean  $70.37 \pm 29.15$  months.

There were 29 (29%) patients in group A treated by dermatologists having fellowship.

| Variable                               | n (%)             |
|--|-------------------|
| <b>Gender</b>                          |                   |
| Male                                   | 20 (20%)          |
| Female                                 | 80 (80%)          |
| <b>Age of the patients</b> (in years)  | $19.53 \pm 3.62$  |
| <b>Duration of disease</b> (in months) | $70.37 \pm 29.15$ |

**Table-I Demographic profile of patients (n=100).**

Maximum number of patients of acne 32 (32%) was in group B treated by dermatologists having minor degrees and diplomas. 10 (10%) patients were in group C treated by general practitioners and 29 (29%) patients were in group D treated by doctors who practice as dermatologists but they don't have any qualifications.

In group A patients 6 (20.7%) were having mild acne. Patients having moderate acne were 11 (38%), moderate to severe acne were 5 (17.2%) and severe acne were 7 (24.1%). In group B patients 14 (43.75%) were having mild acne. Patients having moderate acne were 8 (25%), moderate to severe acne were 8 (25%) and patients having severe acne were 2 (6.25%). In group C out of 10 patients 5 (50%) were having mild and 5 (50%) patients were having moderate acne. In group D patients 14 (48.3%) were having mild acne.

Patients having moderate acne were 9 (31%) and moderate to severe acne were 6 (20.7%). Different treatment modalities prescribed by doctors for the treatment of acne are mentioned in the table.

## DISCUSSION

Acne vulgaris; a very common skin disease, very easy to diagnose and standard recommendations are available to assess the severity and treatment according to severity and treatment according to severity of the disease.<sup>1, 7</sup> Despite such recommendations available lots of errors are made in the judgment of severity and mistakes are made in the treatment of acne by the physicians.

A study conducted by Watson et al published in J Am Acad Dermatol 2013, showed errors made by dermatologists in the management of skin diseases.

| Group                               | Type of acne               | Treatment modality  | Frequency |
|-------------------------------------|----------------------------|---|-----------|
| Group A<br>(n=29)                   | Mild (n = 6)               | Oral Isotretinoin (short duration)  | 3         |
|                                     |                            | Multiple Oral & Topical Antibiotics   | 3         |
|                                     | Moderate (n = 11)          | Multiple Oral & Topical Antibiotics + Oral Isotretinoin (low dose)  | 6         |
|                                     |                            | Multiple Oral & Topical Antibiotics + Topical Retinoids   | 5         |
|                                     | Moderate to Severe (n = 5) | Oral Isotretinoin (short duration) + Topical Multiple Antibiotics (frequently changed) + Topical Retinoids                          | 5         |
|                                     | Severe (n = 7)             | Oral Isotretinoin (short duration)  | 6         |
|                                     |                            | Oral multiple Antibiotics + Topical treatment (Salicylic acid)  | 1         |
| Group B<br>(n=32)                   | Mild (n = 14)              | Oral Isotretinoin (short duration) + Topical Oral Antibiotics + Topical Retinoids + Face washes + Beauty creams                     | 8         |
|                                     |                            | Oral + Topical Antibiotics + Face washes + Beauty creams  | 6         |
|                                     | Moderate(n = 16)           | Oral Isotretinoin (short duration) + Multiple Face washes   | 16        |
|                                     | Moderate to Severe (n = 8) | Oral Isotretinoin (short duration) + Multiple Oral & Topical Antibiotics (frequently changed)                                       | 8         |
|                                     | Severe (n = 2)             | Multiple Oral & Topical Antibiotics (frequently changed) + Oral Isotretinoin (short duration) + Multiple Face washes+ Beauty creams | 2         |
| Group C<br>(n=10)                   | Mild (n = 5)               | Oral Antibiotics alone  | 4         |
|                                     |                            | Oral Isotretinoin (for 10 days)   | 1         |
|                                     | Moderate (n = 5)           | Inj. Decadron   | 1         |
|                                     |                            | Topical Retinoid  | 2         |
|                                     |                            | Topical Antibiotics   | 2         |
| Group D<br>(n=29)                   | Mild (n = 14)              | Multiple Topical Antibiotics + Oral Isotretinoin + Topical Retinoids + Face wash + Beauty creams                                    | 13        |
|                                     |                            | Topical Steroids  | 1         |
|                                     | Moderate (n = 9)           | Multiple Topical & Oral Antibiotics (frequently changed)+ Face washes + Beauty creams   | 6         |
|                                     |                            | Oral Isotretinoin(short duration) + Topical Antibiotics(frequently changed)   | 3         |
|                                     | Moderate to Severe (n = 6) | Oral Isotretinoin(short duration)   | 3         |
| Multiple Oral & Topical Antibiotics |                            | 3   |           |

Table-II. Treatment prescribed by doctors (n=100)

In our study we included only acne vulgaris which is the most common skin disease. In Group A patients (treated by dermatologists with fellowship) it has been observed that severity of acne was not properly evaluated and treatment given was not according to the standard criteria of management. The reasons could be casualness, overconfidence, not spending sufficient time to take history and examination to assess the severity, pressure of the pharmaceutical companies and uses of spurious medicines instead of genuine medicines. It has been observed that patients

were not properly counseled regarding the duration of disease and maintenance therapy was not given.

Group B patients, treated by dermatologists with minor degrees and diplomas were mostly given oral isotretinoin for milder acne. It was prescribed for shorter duration and irregularly. Lots of expensive soaps, face washes and beauty creams were prescribed. The reasons might be unawareness from latest recommendations, lack of interest in CME, pressure from the

pharmaceutical companies and use of spurious medicines.

Those patients who were treated by GPs (Group C) were not given treatment according to the severity of acne. Lack of knowledge of the pathogenesis, grades of severity, duration of this common skin disease could be the causes of wrong treatment.

Some of the doctors who do not have any qualifications in the field of dermatology, they practice as dermatologists, have either done internship or observership in various dermatology departments.



Due to their superficial knowledge they do not assess the severity of acne and treat accordingly. Moreover, establishment of personal pharmacies in the premises of doctor's clinics might be the reason for prescribing lots of expensive drugs and cosmoceuticals for the treatment of mild acne.

## CONCLUSIONS

The doctors practicing as dermatologists should manage the acne according to the guidelines.

CME for GPs and dermatologists should be conducted by Pakistan Association of Dermatologists.



There should be a body consisting of senior dermatologists to check the sale of spurious drugs by honorable dermatologists.

Casual observership should be discouraged. Proper structured house job should be encouraged in every dermatology department.

Media campaign by non qualified persons should be discouraged by passing resolution to PEMRA.

If our honorable dermatologists think that current recommendations are not suitable for our patients then we should lay down our own recommendations.

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## REFERENCES

1. Cook D, Karassas G, Huang T. **Acne best practice management.** Aust Fam Physician. 2010;39:656-60.
2. Zaenglein AL, Graber EM, Thiboutot DM, Strauss JS. **Acne vulgaris and acniform eruptions.** In: Wolf K, Goldsmith LA, Katz SI, Gilchrist BA, Paaller AS, Leffell DJ, editors. Fitzpatrick's dermatology in general medicine. Vol. I. 7<sup>th</sup> ed. New York: McGraw-Hill; 2008.P690-702.
3. Chen CL, Kuppermann M, Caughey AB, Zane LT. **A community-based study of acne-related health preferences in adolescents.** Arch Dermatol. 2008;144:988-94.
4. Pearl A, Arroll B, Lello J, Birchall NM. **The impact of acne: a study of adolescents' attitudes, perception and knowledge.** N Z Med J. 1998;111:269-71.
5. Kilkeny M, Merlin K, Plunkett A, Marks R. **The prevalence of common skin conditions in Australian school students: 3. acne vulgaris.** Br J Dermatol. 1998;139:840-5.
6. Kligman AM. **An overview of acne.** J Invest Dermatol. 1974;62:268-87.
7. Nast A, Dreno B, Bettoli V, Degitz K, Erdmann R, Finlay AY et al. **European evidence-based (S3) guidelines for the treatment of acne.** J Eur Acad Dermatol Venerol. 2012;26 Suppl 1:1-29.
8. Watson AJ, Redbord K, Taylor JS, Shippy A, Kostecki J, Swerlick R. **Medical error in dermatology practice: development of a classification system to drive priority setting in patient safety efforts.** J Am Acad Dermatol. 2013;68:729-37.
9. Gandhi TK, Weingart SN, Seger AC, Borus J, Burdick E, Poon EG, et al. **Outpatient prescribing errors and the impact of computerized prescribing.** J Gen Intern Med. 2005;20:837-41.
10. Bettoli V, Borghi A, Zauli S, Toni G, Ricci M, Giari S, et al. **Maintenance therapy for acne vulgaris: efficacy of a 12-month treatment with adapalene-benzoyl peroxide after oral isotretinoin and a review of the literature.** Dermatology. 2013;227:97-102.
11. Babaeinejad SH Fouladi RF. **The efficacy, safety, and tolerability of adapalene versus benzoyl peroxide in the treatment of mild acne vulgaris: a randomized trial.** J Drugs Dermatol. 2012;790-4.