

Original Research

Assessment of self medication for Acne in Medical students

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ABSTRACT:

Background: Acne vulgaris is one of the most common skin diseases with chronic inflammation of the pilosebaceous gland. The present study was conducted to assess self medication against Acne in medical students. **Materials & Methods:** 320 medical students having Acne were enrolled and information regarding the pattern of self-medication, knowledge about dose, reason for self medication, type of medication, mechanism of action, adverse effect, complication, precaution, and contraindication was obtained. **Results:** Out of 340 patients, males were 130 and females were 210. Reason for self medication was easy availability in 30%, lack of time in 25%, pharmacological knowledge in 40% and mildness of illness in 5%. The difference was significant ($P < 0.05$). Medications used were allopathic in 43%, Ayurvedic in 35%, homeopathic in 12% and cosmetic in 10%. The difference was significant ($P < 0.05$). **Conclusion:** Self medication for acne is common in medical students and use of allopathic Drugs. Awareness about the use of drugs, risk of adverse effects among medical students during their undergraduate medical training will help to reduce self-medication and subsequently it will also improve rational prescribing in their future career.

Key words: Acne vulgaris, Allopathic, self-medication

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INTRODUCTION

Acne vulgaris is one of the most common skin diseases with chronic inflammation of the pilosebaceous gland, clinically characterized by comedones, papules, pustules, nodules and in some cases, scarring. It affects 85% of the young population between 12 and 24 years of age because of hormonal changes in the majority of cases. The World Health Organization (WHO, 2000) define self-medication as use of medicinal products by the consumer to treat self-recognized disorders or symptoms or the intermittent or continued use of medication prescribed by a physician for chronic or recurring diseases or symptoms.

It affects 85% of the young population between 12 and 24 years of age. It is because of hormonal changes in the majority of cases. The social, psychological, and emotional impacts of acne result into more consciousness, especially in young individuals. Acne primarily affects areas of the skin with a relatively high number of oil glands, including the face, upper part of the chest, and back. Acne vulgaris develops earlier in females than in males. Occasionally, it may start at age 7 or 8 years, when it is severe acne. Acne waxes and wanes through adolescent years and early adult life. The most severe forms of acne vulgaris occur more frequently in males, but the disease tends to be more persistent in females. Severity of the disease varies

markedly depending upon the interplay of various factors involved in the development of acne vulgaris. Self-medication is a common practice in medical students because of pharmacological knowledge and easy availability of drugs from different sources, for example, medical representative, hospital pharmacy, wards or from senior students. The prevalence of self-medication practice among medical students is from 57.7% to 76%. The present study was conducted to assess self medication against Acne in medical students.

MATERIALS & METHODS

The present study comprised of 320 medical students having Acne of both genders. The enrolled subjects were made aware of the study and their written consent was obtained.

Data pertaining to subjects such as name, age, gender etc. was recorded. Information regarding the pattern of self-medication, knowledge about dose, reason for self medication, type of medication, mechanism of action, adverse effect, complication, precaution, and contraindication was obtained. Results thus obtained were compiled and assessed statistically. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution of subjects

Total- 340		
Gender	Males	Females
Number	130	210

Table I shows that out of 340 patients, males were 130 and females were 210.

Table II Reason for self medication

Reason	Number	P value
Easy availability	30%	0.05
Lack of time	25%	
Pharmacological knowledge	40%	
Mildness of illness	5%	

Table II, graph I shows that reason for self medication was easy availability in 30%, lack of time in 25%, pharmacological knowledge in 40% and mildness of illness in 5%. The difference was significant (P< 0.05).

Graph I Reason for self medication

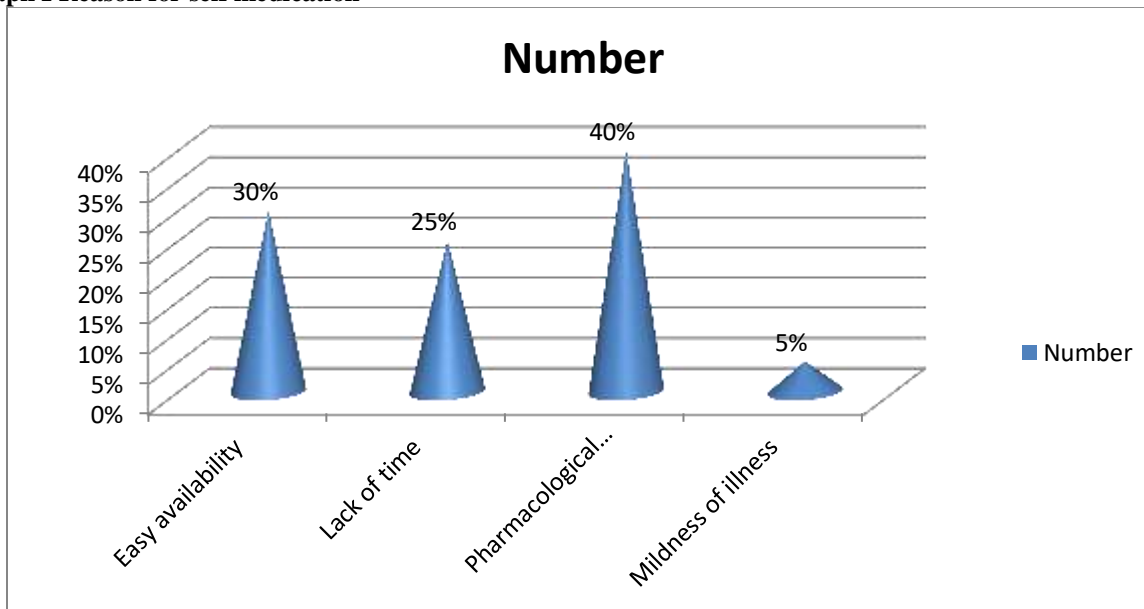
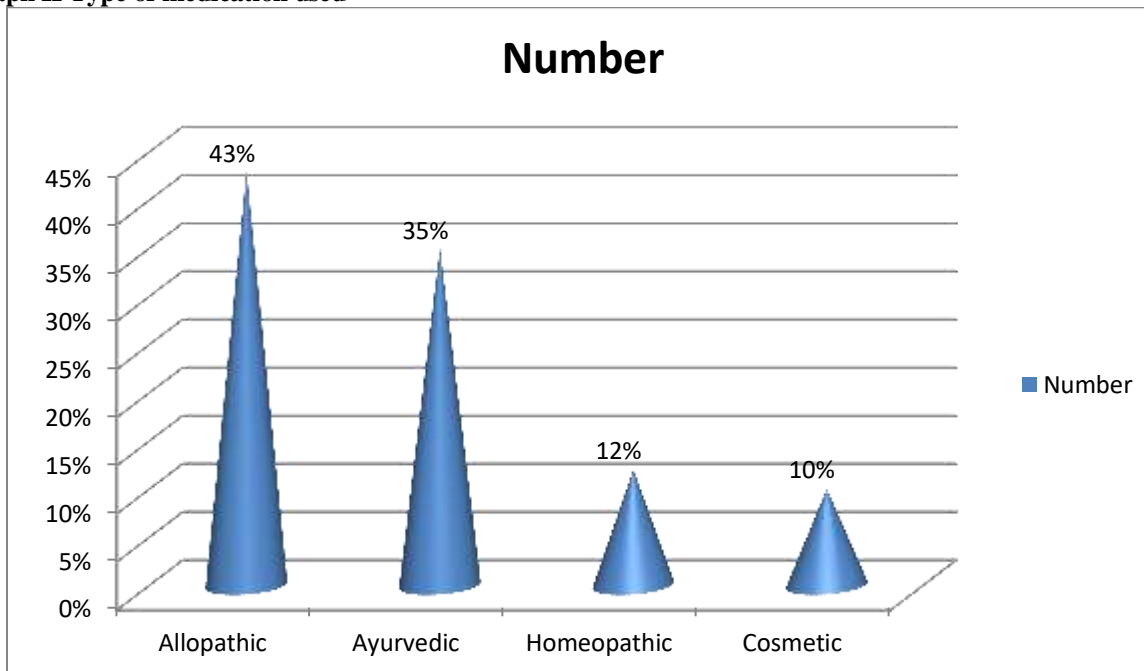


Table III Type of medication used

Medications	Number	P value
Allopathic	43%	0.04
Ayurvedic	35%	
Homeopathic	12%	
Cosmetic	10%	

Table III, graph II shows that medications used was allopathic in 43%, Ayurvedic in 35%, homeopathic in 12% and cosmetic in 10%. The difference was significant ($P < 0.05$).

Graph II Type of medication used



DISCUSSION

Self-medication can be intermittent or continued use of medication prescribed by a physician for chronic or recurring diseases or symptoms. Self-medication is a common practice in medical students because of pharmacological knowledge and easy availability of drugs from different sources.⁸ Self-medication helps in the prevention and treatment of minor diseases at an affordable cost.⁹ Inappropriate and un-controlled self-medication results in increased resistance of pathogens, wastage of resources, and serious health hazards. The hazards are adverse drug reactions, prolonged suffering and drug dependence. Acne is a disease which leads to low self-esteem, social embarrassment, social withdrawal, and depression. The social, psychological, and emotional impacts of acne result into more consciousness, especially in young individuals. The present study was conducted to assess self medication against Acne in medical students.

In present study, out of 340 patients, males were 130 and females were 210. We observed that reason for self medication was easy availability in 30%, lack of time in

25%, pharmacological knowledge in 40% and mildness of illness in 5%. Karamata et al evaluated the knowledge and pattern of self-medication for acne among undergraduate medical students at a tertiary care teaching hospital. This cross-sectional study was conducted in II MBBS (Group A), III MBBS Part I (Group B), and III MBBS Part II (Group C) students. Prevalidated questionnaire about knowledge, attitude, and practice of self-medication were administered to participants. Out of 582 students who responded to questionnaire, 518 suffered from acne. Self-medication practice was observed in 59.2% students. Significantly higher number of female students practiced self-medication ($P < 0.0001$). Most common source of information was seniors/friends/family members (34.2%). The mildness of illness (42.3%) was the most common reason of self-medication. A total mean score of knowledge was significantly higher in Group C as compared to Group A ($P < 0.001$) and Group B ($P < 0.05$). Allopathic medication was preferred by 69.8% students. Seventy-five percentage students read

leaflet/package insert/label instruction and expiry date of the medicines.

We found that medications used were allopathic in 43%, Ayurvedic in 35%, homeopathic in 12% and cosmetic in 10%. Upadhye et al evaluated the knowledge, reason, perception and pattern of self-medication for acne among undergraduate medical students. Methods: A cross-sectional study included medical students of the second phase and final phase (part I and part II). A pretested questionnaire was given to them which included questions on knowledge, attitude and practice about self-medication for acne. In present study, out of 200 girls, 142 (71%) girls were affected with acne while 58 (29%) were not affected by acne. A112 (56%) girls were using allopathic medicines, 32 (16%) girls were using homeopathic medicines, 28 (14%) girls were using ayurvedic medicines while 28 (14%) girls were using other non-specific things. clindamycin was used by 104 (52%) girls, adapalene + benzoyl peroxide gel was used by 26 (13%) girls, clindamycin + nicotinamide gel was used by 12 (6%) girls, toothpaste was used by 42 (24%) girls while Aloe vera gel was used by 76 (38%) of girls. The reason for self-medication was mild nature of illness in 130 (65%) of girls, 96 (48%) girls did it to save the time, over the counter availability of medicines was the cause in 88 (44%) of girls, getting medicines from their previous prescription was seen in 52 (26%) of girls, 64 (32%) of girls did it to save the cost of consultation, 44 (22%) did it after getting knowledge from pharmacology book while 30 (15%) of girls felt embarrassed to tell their own symptoms.

CONCLUSION

From the study we concluded that self medication for acne is common in medical students and use of allopathic Drugs. Awareness about the use of drugs, risk of adverse effects among medical students during their undergraduate medical training will help to reduce self-medication and subsequently it will also improve rational prescribing in their future career.

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