

Original Research Article

A cross sectional study of self-medication for acne among undergraduate medical students

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ABSTRACT

Background: Acne is one of the most common inflammatory chronic skin diseases that affect teenagers and continues into adulthood. Self-medication is common among medical students. Hence this present study was undertaken to study the knowledge, attitude and practice of self-medication for acne among medical students.

Methods: This 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.

Results: Self-medication for acne was seen in 240 (77.4%) students out of 310 students. Mild nature of illness was the most common reason for self-medication for acne followed by privacy. Most common source of information was seniors/friends/family members. Most of the students felt that self-medication is part of self-care (48%). Clindamycin was the most common drug self-medicated for acne.

Conclusions: Self-medication for acne is quite high among medical students. Self-medication is part of self-care so it should be encouraged for minor illness. But should be based on thorough knowledge and restricted to over the counter drugs.

Keywords: Acne, Self-medication, Medical students

INTRODUCTION

Acne is one of the most common inflammatory chronic skin diseases that affect teenagers and continues into adulthood.¹ It affects 85% of the young population between 12 and 24 years of age because of hormonal changes in the majority of cases.² The social, psychological and emotional impacts of acne, make it a disease to be taken far more seriously than just a cosmetic disability.^{3,4}

According to WHO self-medication is defined 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.”⁵ Self-medication helps in the prevention and treatment of minor diseases at an affordable cost.⁶ On the other hand, inappropriate and un-controlled self-medication results in increased resistance of pathogens, wastage of resources, and serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence.⁷

Self-medication practice is common in medical students also because of pharmacological knowledge and easy availability of drugs from different sources. Medical

students self-medicate for acne also, hence this present study was undertaken to study the knowledge, attitude and practice of self-medication for acne among medical students.

METHODS

This cross-sectional study was undertaken by department of dermatology, at KBN medical college, Kalaburagi, Karnataka, India. Medical students of the second phase and final phase (Part I and Part II) were included in the study which was conducted from November 2017 to December 2017. Written informed consent was taken from the participants. The participants were informed about the nature of the study, and a pretested questionnaire was given to them. Prior Institutional Ethics Committee approval was obtained. The questionnaire included questions on knowledge about dose, mechanism of action, adverse effect, and contraindication. Each question carried one mark. Mean and standard deviation (SD) for knowledge based questions was calculated. Attitude and practice questions data was analysed and presented as counts and percentages.

Total 352 students were taken. Out of which 319 suffered from acne. 9 incomplete questionnaires were excluded and 310 were analysed. Any event of use of over the

counter (OTC) or prescription medicines without consulting a doctor will be considered as self-medication.

RESULTS

Self-medication for acne was seen in 240 (77.4%) students out of 310 students. The mean age of students was 20.4±1.04 (Mean±SD). Self-medication was more common in female students (83.6%) than in male students. Mild nature of illness was the most common reason for self-medication for acne followed by privacy (Figure 1). Most common source of information was seniors/friends/family members (Figure 2).

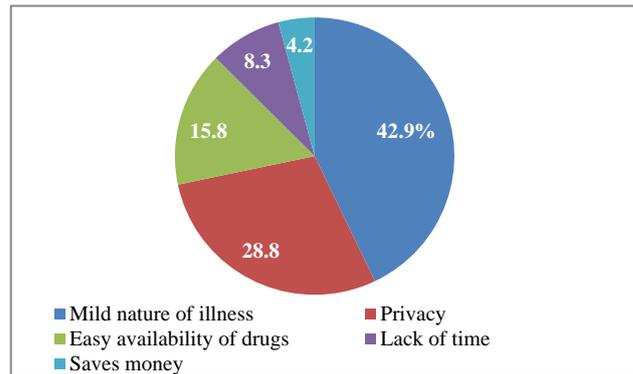


Figure 1: Reasons of self-medication for acne.

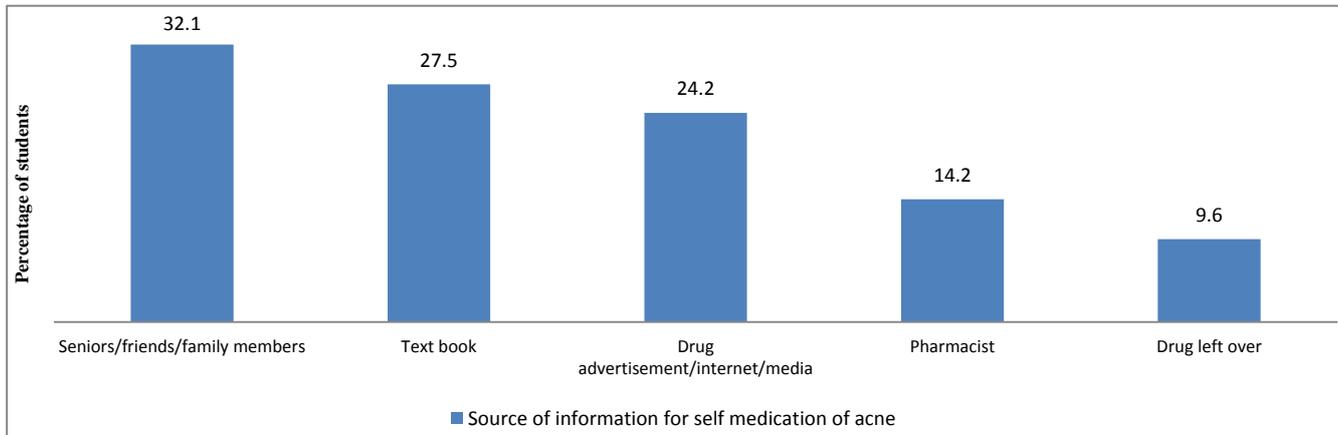


Figure 2: Source of information for self-medication of acne.

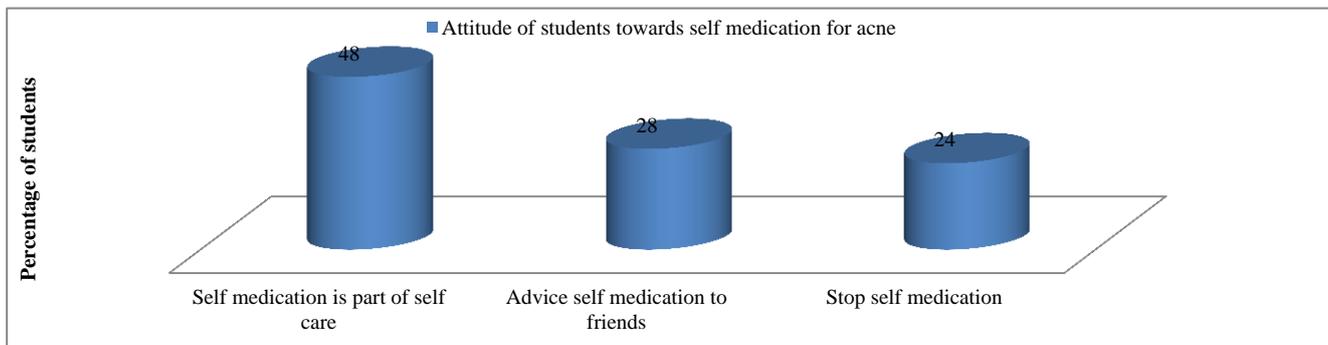


Figure 3: Attitude of students towards self-medication for acne.

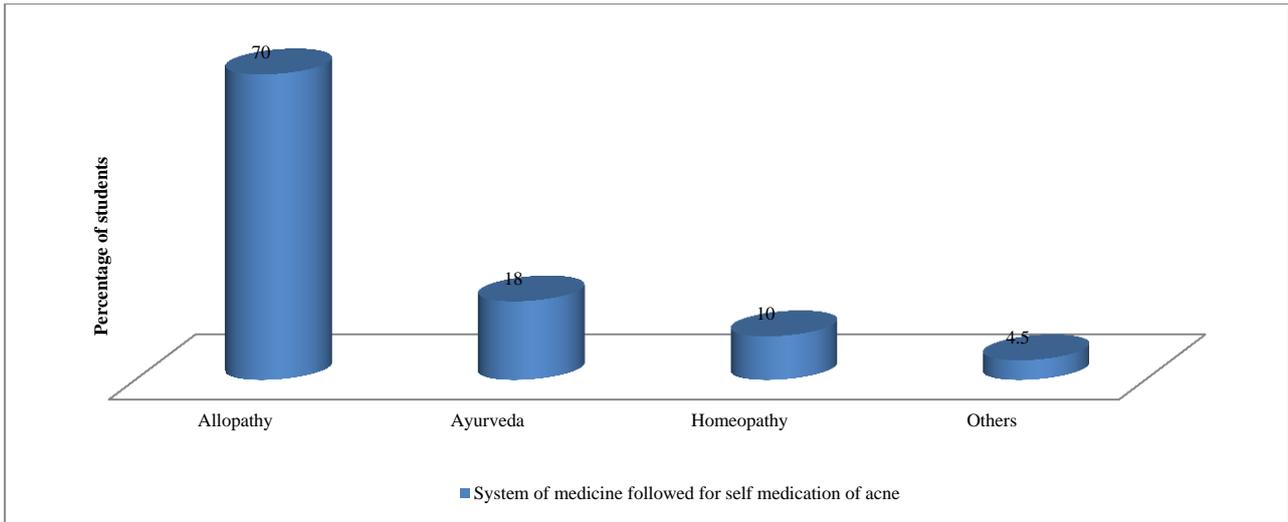


Figure 4: System of medicine followed for self-medication of acne.

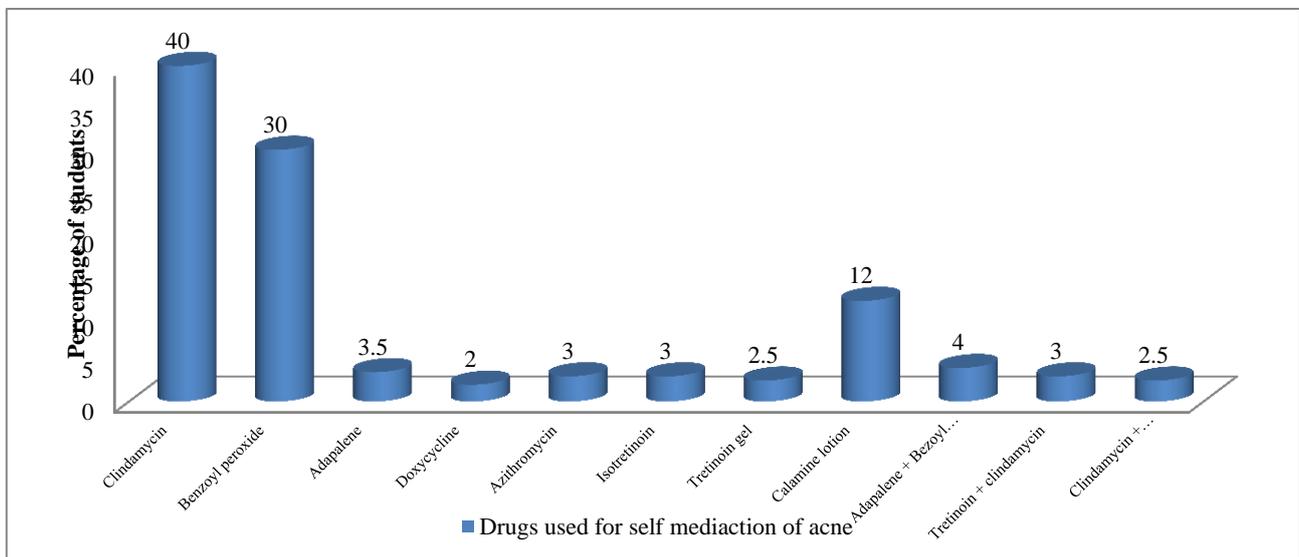


Figure 5: Drugs used for self-medication of acne.

Table 1: Mean score of knowledge for self-medication of acne.

Knowledge	Score
Dose of drug	0.32±0.4
Mechanism of action	0.22±0.4
Adverse effect	0.45±0.4
Contraindication for use	0.19±0.3
Total score	1.18±1.1

Knowledge

Knowledge about dose, mechanism of action, adverse effects, and contraindications of the medication was analyzed using score yes/no (maximum 4, minimum 0).

A total mean score for knowledge was 1.18±1.1 (Table 1).

Attitude

Most of the students felt that self-medication is part of self-care (48%). 28% students responded that they will advice self-medication to friends. 25% students were of the opinion to stop self-medication (Figure 3).

Practice

Majority of students followed allopathic system of medicine for self-medication of acne as shown in Figure 4. Clindamycin was the most common drug self-medicated for acne. Even fixed dose combination drugs

were self-medicated and among them Adapalene+ Benzoyl peroxide was most commonly used (Figure 5).

DISCUSSION

In our study the prevalence of self-medication for acne among medical students was 77.4% which was higher as compared to studies conducted by Karamata et al and Jyothi et al.^{8,9} In studies conducted in other countries, the prevalence of self-medication was between 25% to 55% but in these studies self-medication for all minor illnesses was considered rather than specific to acne.^{10,11} The mean age of students was 20.4±1.04 which was similar to previous studies.⁸ Self-medication was more common in females than males which was similar to a study conducted in Serbia but contrary to a study conducted in south india.^{12,13}

Most common reason for self-medication was mild nature of illness which was also reported by studies conducted in Ahmedabad and Bangalore.^{8,9} In country like India where there is scarcity of health care professionals and limited resources, it is a good practice. Even WHO recommends self-medication for minor illnesses. Source of information for most of the students was seniors/friends/family members (32.1%) which shows that students are taking responsibility about their health and discussing with seniors/friends/family members.

The mean score of knowledge was not more than 50% which indicates poor knowledge about the drugs used in acne. 48% students felt that self-medication is part of self-care which is in accordance to previous studies.^{8,9} Though self-medication is part of self-care, drugs should be self-medicated with thorough knowledge otherwise inappropriate self-medication will have harmful effects. Majority of students used clindamycin for self-medication of acne. Inappropriate use of antibiotics can lead to development of resistance. So use of prescription drugs for self-medication should be discouraged.

CONCLUSION

Self-medication for acne is quite high among medical students. Self-medication is part of self-care so it should be encouraged for minor illness. But should be based on thorough knowledge and restricted to over the counter drugs.

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Ethical approval: The study was approved by the institutional ethics committee

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