

Original Research Article

Knowledge, attitude and behaviour towards the role of diet in acne vulgaris among students

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ABSTRACT

Background: Acne is one of the most common chronic inflammatory conditions reported on daily basis in a skin clinic. It's pathology lies at the level of pilosebaceous apparatus and is influenced by various factors like hormones, certain foods, drug intake and so on. There are several discrepancies surrounding the role of diet in acne. The aim of the study was to explore the knowledge, attitude and behaviour towards the role of diet in acne vulgaris among students.

Methods: This was a cross sectional study conducted in Sree Balaji Medical College and Hospital, Chennai during January 2021 to May 2021. 107 random medical students with acne were enrolled in the study. Students with acne vulgaris not willing to participate in the study and students with acneiform eruptions were excluded. Data was collected using a standard, semi-structured questionnaire. Questionnaire was presented in English through a google form. The questionnaire comprised of socio-demographic data like age and gender. Data was entered in Microsoft word and represented in frequency and percentage.

Results: Among the 107 students enrolled in the study, 37 were males and 70 were females. 56 students were in 17-20 age group and remaining 51 were in 21-24 years age group. Our study showed that 64.5% (69) agreed that there was an association between diet and acne vulgaris, while 9.3% (10) denied it and 26.2% (28) were unsure about the association between the two. Majority of them encountered acne localized to face mainly involving cheeks, only 2 people reported acne over trunk. Out of 97 students who opined of the association of diet with acne, only 13 students consulted a dermatologist and opted for medication. Out of 13, only 7 reported to have a positive outcome with combination of advised medication and stoppage of triggered foods. Out of 97 students who opined of the association of diet with acne, only 13 students consulted a dermatologist and opted for medication.

Conclusions: The understanding of the disease and the ways adopted by these students look decent enough but mandate few changes in their attitude and behaviour.

Keywords: KAB, Diet, Association, Acne

INTRODUCTION

Acne is one of the most common chronic inflammatory conditions reported on daily basis in a skin clinic. It's pathology lies at the level of pilosebaceous apparatus and is influenced by various factors like hormones, certain foods, drug intake and so on. There are several discrepancies surrounding the role of diet in acne. The

prime purpose of the study is to bring into limelight the knowledge, attitude and behaviour of the medical students towards the role of diet in acne vulgaris. From this study we infer that most of the medical students were aware and watchful of the foods they were consuming and their further effect in causation and aggravation of acne. Thereby accepting the fact that diet does play a role in the aggravation of acne.

Acne, characterized by polymorphic lesions is the commonest disorder in adolescent age group, with earlier age of onset in females, but with increased severity in males.¹ Recent studies have shown the need for dietary modifications, as food with high glycemic index can be related to the pathogenesis of acne.² Hence, we did this study to assess the role of diet among the students with acne.

METHODS

This was a cross sectional study conducted in Sree Balaji Medical College and Hospital, Chennai during March 2021 to August 2021. 107 random medical students with acne were enrolled in the study. Students with acne vulgaris not willing to participate in the study and students with acneiform eruptions were excluded. The study protocol was presented to the Institutional Ethical and Research ethical committee in the month of March and the same was approved. Data was collected using a standard, semi-structured questionnaire. Questionnaire was presented in English through a google form. The questionnaire comprised of socio-demographic data like age, gender and leading questions regarding the role of foods in aggravating the acne. The attitude and behaviour of students was also assessed through questions like, willingness of students to reach out to dermatologist, attitude pertaining to the avoidance of the triggering foods. The data collected was entered in Microsoft Excel and analysed using appropriate statistical tests in Statistical package for social sciences (SPSS) version 21. The results were expressed appropriately.

RESULTS

Among the 107 students enrolled in the study, 37 were males and 70 were females. 56 students were in 17-20 age group and remaining 51 were in 21-24 years age group. Majority of them encountered acne localized to face mainly involving cheeks, only 2 people reported acne over trunk.

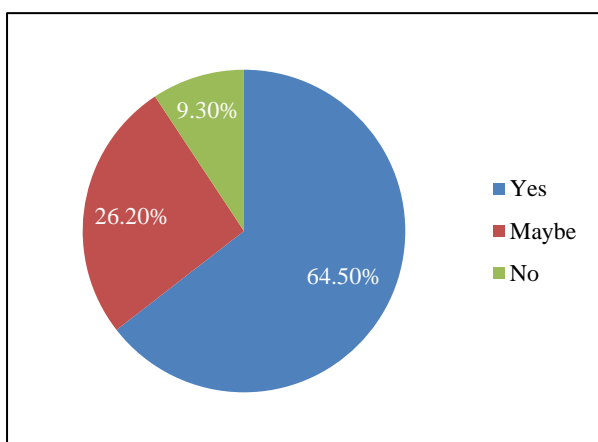


Figure 1: A pie chart depicting the association between acne vulgaris and diet (as per the opinion of students in the study).

Our study showed that 64.5% (69) agreed that there was an association between diet and acne vulgaris, while 9.3% (10) denied it and 26.2% (28) were unsure about the association between the two (Figure 1). The commonest foods aggravating acne according to majority were oily foods (45%) followed by junk/processed foods (22%), dairy and spicy foods (20%) (Figure 2). 13 out of 107 people absolutely denied the role of diet in aggravating the acne vulgaris. Majority of them quoted face as the common site and the least common site being trunk.

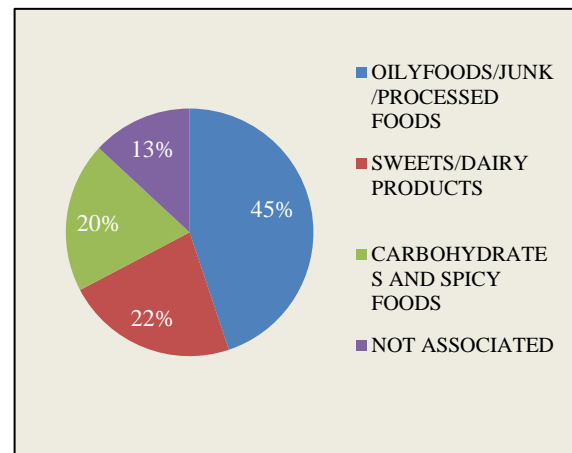


Figure 2: A pie chart depicting the type of foods aggravating acne.

Similarly results on the attitude and behaviour towards acne vulgaris among the students were tabulated. Out of 97 students who opined of the association of diet with acne ,only 13 students consulted a dermatologist and opted for medication. Out of 13, only 7 reported to have a positive outcome with combination of advised medication and stoppage of triggered foods.

A good number of students had reasonable idea about various foods aggravating acne and sorted to different ways like avoiding the foods under their own vigilance. Most of them reported improvement in their acne after stopping the triggering foods for a period of 1week to 1 month.

DISCUSSION

Acne is a multi-factorial condition, commonly seen in adolescents all over the world. Increased sebum excretion, colonization of the pilosebaceous duct with *Propionibacterium acnes* and resultant inflammation play a critical role in pathogenesis'.³ A lot of misconceptions with regards to acne as students' ideas are also influenced by peers, family and society'.⁴ The knowledge about the role of diet in acne is still lacking with incomplete knowledge and unfavourable attitude and wrong practices'.⁵

It becomes essential to know the foods involved in acne pathogenesis as food plays an important part in one's life.

It is imperative to know these students knowledge about acne as they are going to educate the public about the do's and don'ts to drive away their misconceptions.

Knowledge towards acne

Many studies, although quoted no direct causal relation to acne and diet. But in our study, majority of the medical students (64.5%) were aware of the fact that diet does play a role in aggravation of acne. Of about 45% have attributed oily foods/junk/processed foods intake, for the aggravation of their acne and 13 of the 107 students had a view of no association between acne and diet.

In a study by Gothandaramalingam et al medical students (76%) too believed that eating oily food and chocolates only caused acne, which is completely a false perception. Majority of the students included in our study encountered acne localized to face (64.48%) mainly involving cheeks, only 2 (1.86%) people reported acne over trunk and they were all correct about the common location of acne. Face, chest and back are sites prone for increased activity of sebum producing glands, making these places notorious to develop acne. In a study by Gothandaramalingam et al 88% of students had known that face was the common site but surprisingly only 18% had known that it also affects chest, arms and the back. Tan et al found that only 26% of his subjects knew that it is acne which usually affects face, neck and chest.

Attitude and practices towards acne

Majority of students (90.6%) opined positive association between acne and diet. Few students (12.14%) consulted dermatologists, besides avoiding the triggering foods. Poli et al, reported that 28% of students preferred to do nothing thinking it would resolve spontaneously. In a study by Gothandaramalingam et al 58% of students believed that visiting a dermatologist would solve their problem and nearly 56% of them had visited a dermatologist before.

Limitations

Ours is a prospective cross-sectional study. Hence the patients were examined at only one point of time. Therefore, no mention was made in this study regarding

the upgradation in knowledge, attitude and behaviour of students pertaining to the role of diet in acne vulgaris.

CONCLUSION

From this study, we infer that knowledge of diet is very essential besides medical management for better results and that wisdom on the foods aggravating acne certainly plays a key role in the quality of life. The understanding of the disease and the ways adopted by these students mandate changes in their attitude and behaviour and a better awareness is required on the association of diet with acne.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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