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Study on Efficacy of Unani Formulation on Acne Vulgaris



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ABSTRACT

Acne vulgaris is a widespread skin disorder that affects 9.4% of the world's population, with teenagers being the most affected. In all ethnic groupings, it affects over 90% of men and 80% of females. Acne vulgaris has a significant impact on a person's emotional and psychological well-being, and it has been likened to other severe disease states in terms of its detrimental impact on quality of life. The comedone, which can be closed (whitehead) or open (blackhead), erythematous papules and pustules, and nodules, is the clinical hallmark of acne vulgaris. It's one of the most prevalent dermatoses among teenagers. It is largely made up of teenagers and young adults who are self-contained. The present study was conducted on a sample size of 50 subjects in the age group of 18 -25 years. The protocol therapy lasted 30 days, including follow-up on the 0th and 30th days. It was concluded that the Unani formulation was found to be affected in cases of acne vulgaris.



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INTRODUCTION:

Acne vulgaris is a common skin condition that affects around 9.4% of the world's population, with teens having the highest frequency. It affects over 90 percent of males and 80 percent of females in all ethnic groups. Acne vulgaris affects ~85 percent of young adults aged 12–25 years, according to the Global Burden of Disease (GBD) report^{1,2}.

In terms of pathogenesis as well as influence on everyday functioning and quality of life, facial acne is a complex illness³.

Active acne has severe psychological consequences for certain people, which do not always correlate to the doctor's obvious visual deformity⁴.

Acne vulgaris has a substantial influence on the emotional and psychological well-being of the affected individual and has been compared to other severe disease states in terms of negative impact on quality of life^{5,6}.

The clinical hallmark of acne vulgaris is the comedone, which may be closed (whitehead) or open (blackhead)⁷, erythematous papules and pustules^{8,9,10} and nodules. It is one of the most common dermatoses that affect the adolescent population⁸. It is primarily a self-limited group of adolescents and young adults^{10,11}. It is an extremely common condition, with the highest prevalence in teenagers^{12,13}.

Sabit Bin Quarrah (836 – 901 AD) identified various formulations for the Funsi (small swelling) treatment over the face.

Zakaria Razi (850 – 923 AD) listed Busoore Labaniya treatment that appears over the face and nose.

The clinical analysis of Busoore Labaniya was specifically quoted by Akbar Arzani (1772 AD) in his texts Mizanut Tib, Tribe Akbar, and Akseer Azam.

METHODOLOGY:

Ingredients of Unani formulation (Ghazal Husn afza)^{14,15}: Poast narangi (Orange peel), Tukhm baqla muqqashar (Phaseolus vulgaris), Tukhm muli (Raphanus sativus), Turmu (Lupinus albus), Jau (Hordeum vulgare), Dalchana muqqashar (Cicerarietinum), Adas mussalam muqqashar (Lens esculenta), Katira (Cochlospermum religiosum), Matar (Pisum

sativum), *Maghz tukhm kharbuza (Cucumis melo)*, *Nishasta (Starch)*, *Khushbue Gulab (Rosaessence)*.

Study Design: An open intervention trial of Unani formulation in acne vulgaris comparison before and after local application. After considering the inclusive and exclusive criteria, a sample size of 50 subjects was finalized.

Patients having a combination of comedones, papules, pustules, nodules, and cysts in a characteristic distribution were selected as study subjects.

Patients of either gender and in the age group of 18-25 years were considered cooks Grading Scale was used to assess the lesion.

The duration of Protocol treatment was 30 days with follow-ups on 0 & 30th days.

The ingredient of this formulation had the desired properties of Emollient, Removing warts, Skin softeners, and Skin brighteners.

RESULT AND DISCUSSION:

Table number – 1: Age-wise distribution of the patient with acne vulgaris.

Age	Number of Patients	Percentage
18-20	24	48
21-23	18	36
24-26	8	16
Total	50	100
Mean ± SD	22.7±3.63	

Fifty patients included in the present study belonged age group of 18-26 years (Table number 1.); mean (\pm SD) age was observed as 22.7 \pm 3.63 years, in which the majority of patients belonged to 18-20 years 24(48.0%), 18(36.0%) patients belonged to 21-23 years, 8(16.0%) patients of 24-26 years.

According to the Global Burden of Disease (GBD) study, acne vulgaris affects ~85% of young adults aged 12–25 years^{1,2}.

70%-80% of patients affected by this problem belong to the 11-25 years old group. This shows concordance with our study¹⁶.

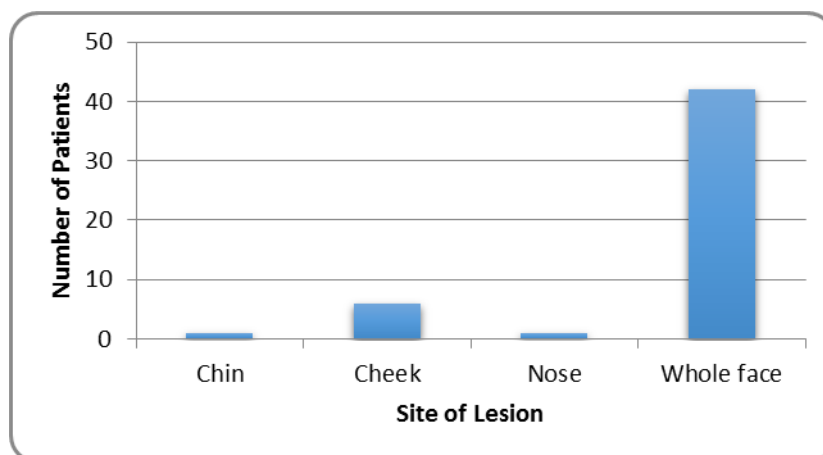


Figure number – 1: Distribution of the patient with acne vulgaris according to their site of lesion.

In the present study, a maximum number of 42(84.0%) patients had Busoore labaniyaon whole face, 6(12.0%) patients had a lesion on the cheeks, 1 patient had a lesion on the nose and 1 patient had busoore labaniya on chin, respectively (Figure number -1).

The face is the commonest site of involvement, but the back, shoulders, and upper chest may also be involved¹³.

According to Qarshi Busoore labaniya are mutaa'ddi disease in which small eruptions appear on face^{17, 18}.

Our data showed the occurrence of acne vulgaris on the face only because we have only chosen the face as a site of administration of Unani formulation because ancient Unani physicians had suggested the local application of Unani formulation face only^{14,15}.

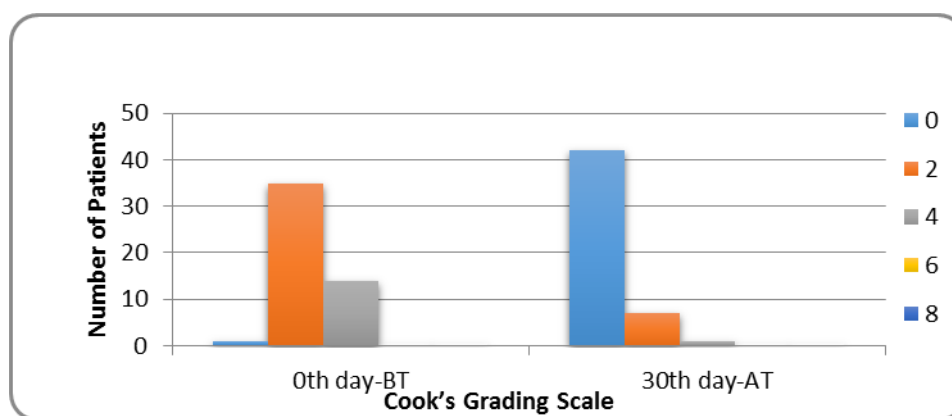


Figure number – 2: Intra-group efficacy assessment of Unani formulation on acne vulgaris according to Cook’s grading scale (based on the change in grade).

The objective parameter was measured by Cook’s grading scale for acne, and it involves the evaluation of the overall severity of acne on a 0-8 scale, anchored to photographic standards. All patients were clinically assessed on the 0th day and 30th day (Figure number – 2). In the present study, on the 0th day, 35(70.0%) patients had grade 2 severity of acne, 14(28.0%) patients had grade 4 severity, 1(2.0%) patient had grade 0 severity of busoore labaniya and no patient had grade 6 and grade 8 severities, respectively. On the 30th day, any variation (positive, negative, or no outcome) in the grade of severity was keenly observed and recorded for assessment. 42(82.0%) out of 50 patients had shown variation in the severity of the acne from grade 4 and 2 to grade 0, only 7(14.0%) patients remained in grade 2 and only 1(2.0%) patient remained in grade 4. Notably, 1 patient who belonged to grade 2 showed variation toward worsening of severity and shifted to grade 4.

At the end of treatment, there was a significant improvement ($P < 0.001$) in acne grading as depicted in the table no - 1.

Busoore labaniya was observed among MSME workers according to Cook’s grading scale which is the objective parameter for the severity and grading of acne. This grading scale has eight even number grades viz. 0, 2, 4, 6, and 8 which denote the severity of acne. Improvement in severity was assessed based on five-point responses to local applications or interventions. Improvement is considered on three basal grades of acne; Good response- improvement of two basal grades; Poor response - improvement of one basal grade only; No response - no change in basal grade at all and worse response as an increase in basal grade at the end of local application.

On completion of 4 weeks of local intervention, an Excellent response was not seen in any subject, a good response was seen in 14(28.0%) of subjects, the average response was seen in 28(56.0%) of subjects, no response was observed in 7(14.0%) of subjects and the worst response was in 1(2.0%) subjects.

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CONCLUSION:

In conclusion, the intervention drug has an encouraging effect in reducing acne vulgaris without any side effects. In the objective parameter, Cook's grading scale showed a significant improvement ($P < 0.001$). The survey employed observed several factors that made occupational workers at higher risk of acquiring acne vulgaris.

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