



ISSN : 2347-2251

**Indo-American Journal of
Pharma and Bio Sciences**



www.iajpb.com

iajpb.editor@gmail.com
editor@iajpb.com



Implications of Homoeopathic Remedies for Acne vulgaris in Young Adults with Acne-QOL Scale

Dr. Simanchala Narhari Panigrahi

ABSTRACT

An experimental, open-label, non-randomized and non-comparative study was conducted at Homoeopathy University in India to evaluate the potential benefits of personalized Homoeopathy for adult acne sufferers. The purpose of this research was to examine the efficacy of homoeopathic remedies for acne vulgaris in adult patients. Forty people participated. At baseline and three months following therapy, the Acne-QoL Questionnaire and Global Acne Grading Scale (GAGS) were used as outcome measures. Homoeopathic principles were applied while prescribing medicines. The dependent observations were compared using a paired t test. Final tally: 36 participants finished the experiment, with 4 people withdrawing. Nearly all participants saw a notable improvement, with 24 instances (66.7%) demonstrating a rise of more than 75 percent in GAGS score (mean difference = 19.778, $t(35) = 17.616$, $p < .001$). Each of the four ACNE-QoL domains showed a significant improvement in the majority of participants ($p < .001$). These included self-perception (mean difference = 10.917, $t(35) = 13.798$, $p < .001$), role-social (mean difference = 8.444, $t(35) = 14.085$, $p < .001$), role-emotional (mean difference = 10.556, $t(35) = 12.77$, $p < .001$), and acne symptoms (mean difference = 9.917, $t(35) = 12.830$, $p < .001$). Calcarea carbonica (5, 13.8% of cases) and Natrium muriaticum (17, 47.2% of cases) were the most often recommended medicines. The most common underlying miasm was shown to be Psora.

Key word- Acne vulgaris, Homoeopathy, ACNE-QoL, GAGS

INTRODUCTION

The pilosebaceous follicles are the targets of the chronic inflammatory skin condition known as acne vulgaris. Comedones, increased sebum production, Propionibacterium acnes bacterium growth,

and perifollicular irritation are all outcomes of a changed keratinization pattern.¹ Acne is the eighth most common illness in the world, affecting an estimated 9.4 percent of the population.² It impacts fifteen-hundredths of the youth population.

Professor

Homoeopathic Medical College & Hospital, Jalgaon

As they transition into their young adult responsibilities, the value of one's physical appearance increases in late adolescence (after the age of 16).³ Acne affects an estimated 90% of people between the ages of 10 and 30, regardless of gender. Acne vulgaris is around 38% common in Rajasthan, and there are an estimated 200-300 million acne patients in the nation overall. In rural western Rajasthan, acne is more common in men than in women.⁵ Greater psychological load is connected with acne. The functional and emotional consequences on acne patients are similar to those on eczema or psoriasis patients, and they also have the same or higher levels of social, Mental and emotional health issues are common in those who suffer from long-term, debilitating physical conditions such as asthma, epilepsy, diabetes, chronic back pain, or arthritis. In order to better identify patients that need particular care, it is important to have a better knowledge of the variables that impact acne vulgaris.^{7,8} Acne significantly impacts patients' quality of life (QoL), according to many global research.⁹⁻¹⁶

The majority of cases of acne are long-lasting and stubbornly resistant to therapy. Additionally, it goes through exacerbation periods when no therapy is applied. The primarystay of therapy in allopathy is the use of topical medicines, such as benzoyl peroxide, antibiotics,

retinoids, etc., which may be used alone or in combination. Isotretinoin, hormone therapy, and oral antibiotics are all part of systemic treatment. Irritating dermatitis, bacterial resistance and cross-resistance, upper respiratory tract infections, effects on the musculoskeletal, mucocutaneous, and ocular systems, headaches, and CNS adverse effects are all known to occur as a result of this medication.¹⁷ The focus of homoeopathy is on the whole person, rather than on a particular illness. The symptoms may be completely eliminated and the organism can recover its healthy condition with the aid of an individualized homoeopathic cure. According to the research, homoeopathic remedies work well for acne vulgaris.^{pages 18–22} A safer and more effective therapy for Acne Vulgaris might be constitutional medicines that work deeply and are based on the whole spectrum of symptoms. This research aimed to evaluate the efficacy of homoeopathic remedies for acne vulgaris when recommended based on the whole spectrum of symptoms. Furthermore, the research evaluated the impact on acne-related quality of life (QoL) and the prevalence of miasma in vulgaris acne patients.

MATERIALS AND METHODS

Study Design- This open-label, prospective, experimental, non-controlled clinical trial of pre–post comparison

Study Setting- Participants were selected from the Outpatient departments of the Dr. Madan Pratap Khunteta Homoeopathic Medical College, Hospital & Research Centre, Saipura, Sanganer, Jaipur, Rajasthan, and, Collaborated Outpatient Department of Dermatology, CCRH, RRI, Sindhi Camp, Jaipur. **Participants-** Inclusion criteria were male and female subjects suffering from acne vulgaris, aged between 18 and 35 years and willing to participate in the study by giving written consent.

People who were not eligible to participate included those with drug-induced secondary acne, polycystic ovarian disease, thyroid problems, pregnant women, and nursing mothers. The research did not include patients who were taking steroids orally or topically, as well as those who declined to participate. As an intervention, we intended to provide the recommended homoeopathic medications in potencies ranging from 6C to CM and in dosages determined specifically for each patient, in accordance with the recommendations made in the 5th edition of the Organon of Medicine. Dosage was to be taken orally by the patient while the tongue was kept clean. Three months was the length of this treatment. The pharmaceuticals were sourced from Indian companies that had achieved certification in good manufacturing practice. At each visit, a unique medication was prescribed after carefully considering the patient's symptoms, medical history, constitution,

miasmatic expressions, and any necessary repertorization using the RADAR® software (version 10.0.028 (ck), Archibel 2007, Belgium). consultation with Medica Pharma. Next, prescriptions were made in accordance with Kent's discoveries and Hering's laws.

Sample Size- To see the Homoeopathic medicines on Quality of Life in cases of Acne Vulgaris in young adults, considering standardized effect size

0.7 at 90% power (using Table III), 40 patients were included in the study (including dropped out).²³

General Management - All the participants were given general guidelines for proper cleansing-wash the affected part with clean water, to avoid use of cosmetics, picking of pimples to avoid scarring, to avoid constipation-take diet rich in salads and fruits and plenty of water. To practice relaxation. . They were advised to be present for regular follow-ups.

Outcomes- The outcomes were assessed as the percentage change in Global Acne Grading System (GAGS) score from baseline in 3 months and change in Acne specific Quality of Life questionnaire (Acne QoL) score at the end of 3 months.

Global Acne Grading System: In brief, intensity of acne was graded using validated GAGS. This system divides the face, chest and back into six areas and assigns an area factor of 1, 2 or 3 (Forehead, Right cheek & Left cheek 2; Nose & Chin-1; Chest and upper back-3). Each type of lesion is given a value

from 0–4 (no lesions = 0, comedones = 1, papules = 2, pustules = 3 and nodules = 4). Area score/Local score is the product of the most severe lesion in that area multiplied by the area factor [Local score = (Factor)(Grade 0-4)]. The area added to give the total GAGS score [Global Score = \sum (Local score)].

A Global score of 1-18 is considered mild; 19-30, moderate; 31-38, severe; and >39, very severe.²⁴

Acne QOL questionnaire: The Acne-QOL is a patient completed questionnaire with a 1-week recall period composed of 19 items in four subscales: Self-Perception, Role-Emotional, Role-Social, and Acne Symptoms.

Instrument scoring is accomplished by summing the responses within the subscales to yield four overall domain scores, where higher scores indicate more favourable quality of life.

Responses are numbered starting with „0“ in ascending order up to „6“. Coding begins on the left with 0, and that „not at all“ is actually coded as a 6; The response options for all but three domains (Self-Perception, Role-Emotional, Role-Social) include: extremely, very much, quite a bit, a good bit, somewhat, a little bit, and not at

all. For acne symptoms responses include: extensive, a whole lot, a lot, a moderate amount, some, very few, and none.²⁵⁻²⁷

Statistical Methods - Paired sample t-test was conducted to compare pre and post GAGS score and domain scores of Acne-QOL questionnaire of Acne vulgaris treated with Homoeopathic medicines. SPSS®-IBM® version 20 (IBM Corp., IBM SPSS Statistics for Windows, Armonk, NY: USA) for Windows was used for the analysis of data.

RESULTS

Participant flow-chart- As per the pre-specified inclusion and exclusion criteria, 50 female subjects suffering from acne vulgaris were screened; 10 were excluded on account of various reasons; 40 met the eligibility criteria and were enrolled into the trial. Following that, baseline socio-demographic and outcome data were obtained. After 3 months of intervention, outcome data were recorded again. During the course of treatment, four dropped out; 36 completed the trial [Figure 1]. **Recruitment-**

The total period of interventional treatment was of one year duration starting from July 2017 up to June 2018, out of which cases was registered in first 9 months and each case was followed up for a period of minimum 3 months.

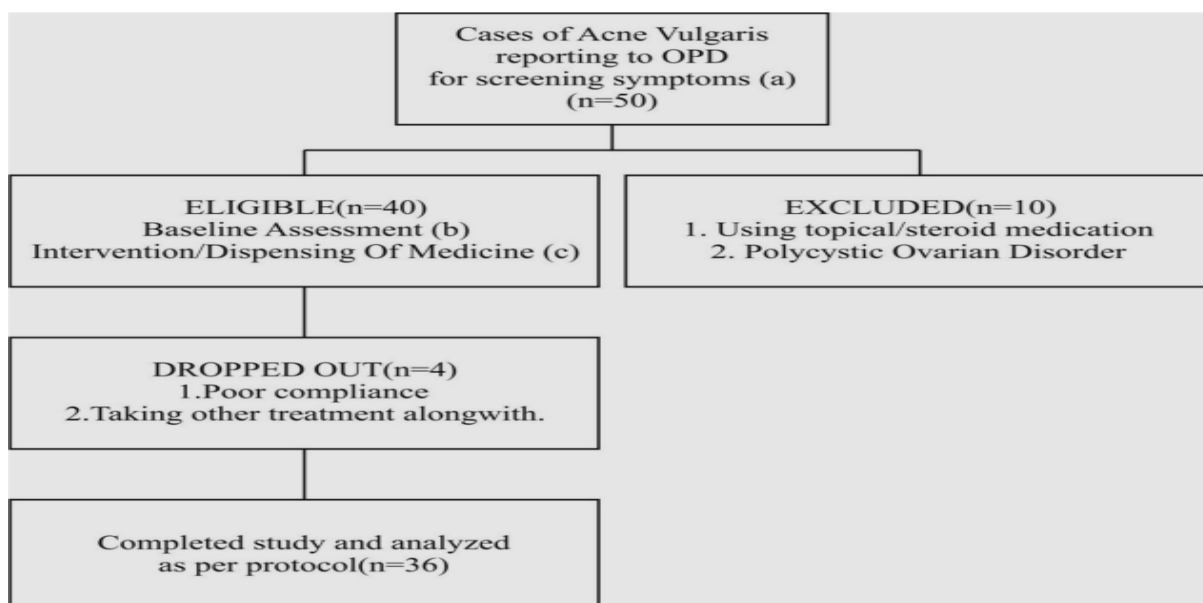


Fig.1. Study flow diagram

Baseline Data

Seven variables were studied for the baseline socio-demographic features of the subjects – age, gender, residence, socioeconomic status, family history of acne vulgaris, location of acne lesions and acne grading [Table 1].

Table 1. Baseline Characteristics

Characteristics	Number(n=36)	%
Age		
18-23	28	77.78
24-29	6	16.67
30-35	2	5.56
Sex		
Male	15	41.67
Female	21	58.33
Area of Residence		
Urban	24	66.67

Rural	12	33.33
Socioeconomic Status		
Upper class	0	0
Middle class	33	91.67
Lower class	3	8.33
Family history of acne vulgaris		
Present	6	16.66
Absent	30	83.33
Location of Lesions		
Face	35	97.22
Chest + Face	2	5.55
Back + Face	1	2.7
Acne Grading		
Mild	4	11.1
Moderate	20	55.5
Severe	11	30.5
Very severe	1	2.9

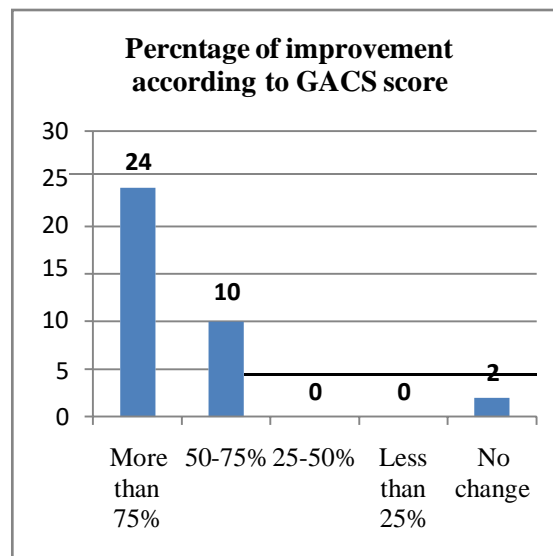
Numbers analysed - Outcomes from 36 subjects were complete and therefore all these subjects (n=36) entered into the final analyses.

Outcomes and Estimation - Statistically significant reductions were achieved on GAGS score ($P < 0.001$) and improvement on four individual domains of Acne-QOL questionnaire score ($P < 0.001$). Maximum

Fig 2 Improvement in GAGS score after treatment

Medicines Used

more than 75% improvement in GAGS score after treatment. (Fig.2)



Twelve different individualised medicines were prescribed in the study – Natrium muriaticum (n=17, 47.2%), Calcarea carbonica (n=5, 13.8%), Pulsatilla and Sulphur (n=4, 11.1%), Silicea (n=3, 8.3%), Belladonna and Hepar sulphuricum (n=2 each, 5.5%), Lycopodium Clavatum, Kalium Bromatum, Nux Vomica, Sepia officinalis and Staphysagria (n=1, 2.7%).

DISCUSSION & CONCLUSION

This is an open experimental clinical trial

found statistically significant improvement in both the outcomes after homoeopathic treatment, suggesting Homoeopathy as a promising treatment

studies to investigate the role of Homoeopathic medicines using Randomized controlled trials with longer duration to further enhance the impact of study in scientific medicinal field.

Strengths of the study

This study reiterates that patients of acne suffer from significant impairment in quality of life and Homoeopathic medicines along with assurance can help in alleviating symptoms of the diseases as well as improve the quality of life of the patients. These findings confirm the utility of the Acne-QOL for demonstrating the role of Homoeopathic medications in the treatment of acne. Psora was found as the predominant miasm lying in the background in the patients suffering from acne vulgaris.

Maximum number of cases i.e. 24(66.7%) showed more than 75% improvement in GAGS score after treatment. Statistically significant difference ($P < 0.001$) has been seen in pre and post treatment scores of GAGS and Acne-QOL questionnaire domains scores with Homoeopathic medicines. The most indicated medicine

REFERENCES

Channa S, Sharma J, and Klotz J first. What lies behind the surface of acne vulgaris? "Dermatology Online" was published in 2003 and was last accessed on May 18, 2017. This information may be accessed at:

number of cases i.e. 24(66.7%) showed option for young adults suffering from acne vulgaris and suggesting further

7

was Natrium muriaticum followed by Calcarea carbonica.

Our study used individualized medicines („classical homoeopathy“) based on “law of similia” broadly covering the totality of symptoms from homoeopathic point of view.

Weaknesses of the Study

The lack of a control group and, by extension, randomization, is the primary shortcoming of the study that raises doubts about its generalizability. Second constraint was that sample size being too small. Results would have been different if the study had used a bigger sample size. Given the prevalence and diversity of individuals impacted by acne vulgaris, a larger sample would allow for a more comprehensive understanding of the disease, its management, treatment options, and prognosis. Third restriction was time constraint being short to validate the improvements in quality of life and to insure its improvement. Fourth limitation was multiple associated dermatological disorders with acne vulgaris such as alopecia, melasma etc. Fifth limitation was decimal and 50-millesimal potencies were not used in the present study so the role of different scales of potentiation was not explored. Randomized controlled trials with longer durations should be used to further investigate the role of homoeopathic medicines. This will further enhance the impact of studies in the scientific medicinal field.

<https://www.ncbi.nlm.nih.gov/pubmed/12952755>

.

Shankar J, Bhate K. Acne epidemiology from a global viewpoint. The article is from the British Journal of Dermatology and was published in 2015 (accessed on May 18, 2017). The source for

this information is
<https://www.ncbi.nlm.nih.gov/pubmed/25597339>.

3. The authors of the study are Tasoula E, Gregoriou S, Chalikias J, Lazarou D, Danopoulou I, Katsambas A, and their colleagues. The effects of acne vulgaris on the mental and emotional well-being of Greek youth. Findings from a survey of living people. [Internet] *An Bras Dermatol*; 2012[cited on 2017May20];87: 862-9. You may get this at: <https://www.ncbi.nlm.nih.gov/pubmed/23197205> and

Fourthly, Kubba et al. Management of Acne in India: Iaa Consensus document recommendations. Hello there! The article was published in 2009 and was mentioned on May 2, 2017, in the *Indian Journal of Dermatology, Venereology, and Leprology*. It was 75:1-2. Where can I get it? Where can I get it?

The given URL is:
<http://www.ijdvl.com/text.asp?2009/7/1/45469>.

5. Authors: Meghwal and Swarnkar. The Frequency of Acne vulgaris among Rural Rajasthani People. *International Journal of Dental Research*, Volume 4, Issue 2, Pages DT12–DT14, 2018 [cited on 2018Aug 2]. The article may be seen online at: http://www.aimdrjournal.com/pdf/vol4Issue2/DT3_OA_V4N2.

9. Gupta AK, Gupta MA. A look at antidepressants and their usage in skin care. The citation is from *J EADV* [Internet]; 2001, volume 15, pages 516–518. The article may be accessed at this link:
<https://www.deepdyve.com/lp/wiley/the-use-of-antidepressant-drugs-in-dermatology> [FANF4 Q 1916p].

7. Researchers Jones-Caballero, Chren, Soler, Pedrosa, and Peñas conducted the study. The

impact of clinical severity and treatment-related variables on quality of life in mild to severe acne patients. The article was published in 2007 and was mentioned on May 10, 2017, in the *Journal of the European Academy of Dermatology and Venereology*. It was paged 251-266. The publication may be accessed at:
<https://www.ncbi.nlm.nih.gov/pubmed/17243958>

Sources cited on page 65
This sentence is a citation for an article by Kubba et al. 8. Acne in India: IAA Acne Management Guidelines Iaa Consensus Document Genetics in problem skin Acne and well-being What causes acne? Native American The following information is retrieved from the internet: *Journal of Dermatology, Venereology, and Leprology*; 2009; 75: S4–5. The source for this information is:
<https://www.ncbi.nlm.nih.gov/pubmed/19282578>.

This is the ninth work by Mallon, Newton, Klassen, Stewart-Brown, Ryan, and Finlay. Using standard questionnaires, we compare the quality of life for those with acne to that of people with other illnesses. Published in 1999 and last accessed on May 20, 2017, the *British Journal of Dermatology* reported 140(4) pages 672-676. The paper "10. Aktan S, Ozmen E, Sanli B." is accessible at:
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2214020/>. Anxiety, depression, and nature of acne vulgaris in adolescents. Internet citation: *International Journal of Dermatology*, May 2000, 39(5): 354–357. Here is the link:
<https://www.ncbi.nlm.nih.gov/pubmed/10849125>

Klass AF, Newton JN, and Mallon E. published 11. Assessing the quality of life of individuals referred for acne specialist care: comparing general and disease-specific markers. The following information is derived from the *Journal of the American Academy of Dermatology*: [Internet]; 2000 Aug; 43(2 Pt 1): 229-233.

Accessible through:

10906643.

<https://www.ncbi.nlm.nih.gov/pubmed/> Jones-Caballero M, Chren MM, Soler B, Pedrosa E, and Peñas PF were the authors of it. In mild to severe acne, quality of life: correlation with clinical severity and variables impacting treatment-induced improvement. *J Eur Acad Journal of Dermatology and Venereology*[Online]; 2007 February [cited on 20 May 2017]; 21(2): 219-226. Accessible at: <https://www.ncbi.nlm.nih.gov/pubmed/17243958>.

13. Gupta, Gupta, Johnson, and Johnson, AM. Creating a reliable and valid Acne Quality of Life scale: its relationship to subjective acne severity in mild to moderate acne vulgaris, and its evolution. Publication date: November 1998; article accessed: May 2017; volume 78, issue 6, pages 451-456. That information is accessible at this URL:

<https://www.researchgate.net/publication/13453843>. Building a Reliable and Valid Acne Quality of Life Scale: How Severity Affects Patients with Mild to Moderate Acne Vulgaris Pearl, Arroll, Lello, and Birchall NM. (2014). Adolescents' perspectives, understanding, and attitudes about acne: a research study. *New Zealand Medical Journal* [Online]; 1998 Jul [cited on 12 May 2017]; 111(1070): 269-271. Accessible through:

The publication may be accessed at this URL: <https://www.ncbi.nlm.nih.gov/pubmed/>.

By Gupta MA and Gupta AK. Patients presenting to dermatologists with psoriasis, acne, alopecia areata, and atopic dermatitis may also be depressed and contemplating suicide. This information was retrieved from the *British Journal of Dermatology* online on 12 May 2017. You may get this article by Al Robaee AA at this link: <https://onlinelibrary.wiley.com/doi/abs/10.1046/j.13652133.1998.02511>.

13652133.1998.02511. Acne prevalence, understanding, attitudes, and psychological and social effects among Central Saudi Arabian university students. *Saudi Medical Journal* [Online]; 2005 Dec; 26(12): 1958-1961. The source for this information is: <https://www.ncbi.nlm.nih.gov/pubmed/16380781>.

17. Rashish K. Treatment of Acne Vulgaris: The Present Situation. [Internet] *Indian Journal of Dermatology*. 2011 May 11;56:7-13. Yours to peruse at this link: <http://www.eijd.org/text.asp?2011/56/1/7/77543>.

18. A research conducted by Miglani and Manchanda that looked at the effectiveness of *Arctium lappa* in treating acne vulgaris. In 2014, the journal *Homeopathy* published an article by Miglani A and Manchanda RK with the doi: 10.103:203-7. A randomised controlled trial of *Azadirachta indica* for the treatment of acne vulgaris

20. Chandra Das D, Sarma T. The use of homoeopathic remedies for acne vulgaris therapy. *Indian Journal of Respiratory Homoeopathy* 2014;8:218-23. (Vangani A, Kumar S. 2017). In the *International Journal of Science and Research*, volume 6, issue 4, pages 94. Randomized, single-blind trial testing the efficacy of Dr. C. Von Boenninghausen's homoeopathic systematized alphabetical repertory in the treatment of acne vulgaris. "The Scope of Homoeopathy in the Treatment of the Cases of Cystic Acne using Complete Repertory—A Prospective Study" (Vangani A, Singh R., 2017; 4:9111-20) in the *International Journal of Advanced Ayurveda, Yoga, Unani, Siddha, and Homeopathy*. Paper published in 2017 in the *International Journal of Advanced Ayurveda, Yoga, Unani, Siddha and Homeopathy*, volume 6, issue 1, pages 427-432.

23. Chan Y. The Magic Number: Randomized Controlled Trials (RCTs) and Sample Size. A

study published in the Singapore Medical Journal in 2003 found that—24. Doshi A, Zaheer A, and Stiller MJ. The present acne grading systems are compared, and a new approach is proposed. Girman CJ, Hartmaier S, Thiboudot D, Johnson J, Barber B, DeMuro- Mercon, and others published a study in the International Journal of Dermatology in 1997 as 37:416–8. self-administered questionnaire for clinical trials evaluating health-related quality of life in individuals with facial acne was developed by C, et al. Reference: Qual Life Res 1996; 5:481-90. 26.Joint authorship: AR Martin, A Lookingbill, J

Light, D Thiboudot, and CJ Girman. Quality of life in relation to health in individuals suffering from face acne: evaluation of a novel acne-specific questionnaire. Clinics in Experimental Dermatology, 2001; 26: 380–5. 27. This study was conducted by Fehnel SE, McLeod LD, Brandman J, Arbit DL, MC Laughlin- Miley CJ, Coombs JH, and others. How well the Acne-Specific Quality of Life Questionnaire (Acne-QoL) responds to therapy for acne vulgaris in clinical studies that used a placebo. The citation is from the journal "Qual Life Res" in 2002, volume 11, pages 809-9.