

# Ayurvedic Management of *Mukhadushika* (Acne Vulgaris): A Case Report

SAKSHI YASHWANT KHAPRE<sup>1</sup>, ANITA SANTOSHRAO WANJARI<sup>2</sup>, KIRTI NAHARWAL<sup>3</sup>

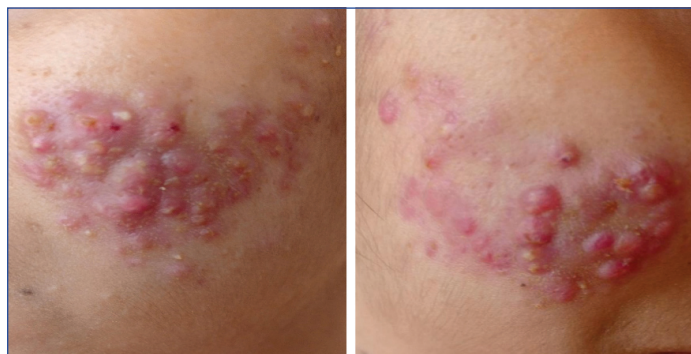
## ABSTRACT

Acne vulgaris, also known as *Mukhadushika*; described under *Kshudraroga* (minor diseases) in *Ayurveda* is a common skin condition that can have serious psychological and physical effects, especially among adolescents. The present study set out to evaluate the efficacy of Ayurvedic medicines for treating *Mukhadushika* (Acne vulgaris). A 24-year-old female patient presented with Acne (facial), papules with burning sensation and pain on both cheeks. Her symptoms significantly improved after receiving medicine for both internal and external application. The treatment approach, including the use of Herbo-mineral drugs like *Ras manikya*, *Gandhaka rasayana*, *Kamdudha Ras*, *Khadiraristha* and *Varnya gana lepa*. The papules resolved and the discharge, pain and burning sensation disappeared.

**Keywords:** Herbo-mineral drugs, *Kshudraroga* (minor diseases), Papules

## CASE REPORT

A 24-year-old female patient presented at the Outpatient Department (OPD) of *kayachikitsa* with the complaint of painful papules on her face (B/L cheeks) along with itching and redness over the past six months [Table/Fig-1]. The patient was normal seven-month-ago. The patient had lesions all over bilateral cheeks for which she consulted dermatologist. She was treated with allopathic medicines (Adapalene+Clindamycin cream and Tab. Doxycycline) for about six months, but she experienced no improvement. She was not willing for further allopathic treatment and she sought Ayurvedic management from this department. Clinical examination was done based on Ayurvedic parameters.



[Table/Fig-1]: Lesion over B/L cheeks (Before treatment).

**Personal history:** The patient has no significant family history, has regular menstrual history.

Diet was vegetarian but the patient complained of irregular appetite.

The patient has no sleep disturbances. Bowel movements and micturation were normal.

**Examination: Ashtavidha Pariksha (eight-fold of examination):**

*Nadi* (pulse rate)- 78/min

*Sparsha* (touch)- *Samsheetoshna* (normal)

*Mala* (bowel)- *Samyak* (normal)

*Mutra* (frequency of micturition)- 4-5 times per day

*Shabda* (speech)- *Spastha* (clear)

*Drik* (vision)- Normal

*Jivha* (tongue)- *Saama* (coated)

*Aakriti* (body built)- *Madhyam* (medium)

**Dashavidha Pariksha (ten-fold of examination):**

*Prakriti* (constitution of the patient): *Vata-Pitta* (humour constitution of body)

*Vikriti* (pathological variations): *Pitta, Kapha, Rasa, Rakta, Meda* (humour constitution of body and blood tissues)

*Sara* (quality of tissues): *Asthisara* (quality of bone tissue)

*Samhanana* (built of body): *Madhyam* (average)

*Pramana* (anthropometric measurements): *Madhyam* (average)

*Satmya* (adaptability): *Amla* (sour), *Lavana* (savoury) *Rasa* (taste)

*Satva* (mental strength): *Madhyam* (average)

*Vyayamashakti* (exercise capacity): *Madhyam* (average)

*Aharashakti* (food and digestion capacity): *Madhyam* (average)

*Vaya* (age): 24 years

**Systemic examination:**

Respiratory system- Chest is bilaterally symmetrical, with no abnormal sounds heard.

Cardiovascular system- S1S2 normal.

Musculoskeletal system- Superficial and deep reflexes are intact.

Gastrointestinal system- Soft, non tender, non palpable.

**Local examination:** There are comedones, macules, papules and pustular nodules on the face. Their size ranges from 1 to 4 mm. Despite the absence of discharge, the lesions are sensitive to the touch.

**Nidana (Aetiology):** The patient consumes oily, spicy and sour food and having indigestion, hyperacidity, exposure to sunlight.

**Samprapti (Pathogenesis):** Due to improper eating habits and lifestyle, predominantly *pitta tridosha* get aggravated which causes *rasa, rakta, meda* and *swedavaha strotodushti* and cause the disease like *Mukhadushika* (acne vulgaris).

**Samprapti Ghataka (Pathogenic factors):**

*Dosha* (regulatory functional factors of body): *Pitta pradhana tridosha* (humour constitution of body)

*Dushya* (vitiation of functional factors of body): *Rasa* (plasma), *Rakta* (blood), *Meda* (fat), *Sweda* (sweat)

*Agni* (metabolic factor): *Dhatwagni* (tissue metabolism), *Jataragni* (digestive fire)

*Ama* (Toxin): *Jataragni mandhya* (undigested food toxins in digestive fire)

*Strotasa* (channels): *Rasavaha* (channels carrying plasma), *Raktavaha* (channels carrying blood), *Medovaha* (channels carrying fat)  
*Rogamarga* (pathway of disease): *Abhyantara* (internal)  
*Udbhavasthana* (place of origin): *Amashaya* (stomach)  
*Vyaktasthana* (manifestation site): *Mukha* (face)  
*Swabhava* (nature): *Chirkari* (chronic)

**Diagnosis:** (*Mukhadushika*) *Acne vulgaris* (Grade III)

**Treatment plan:** When the patient visited OPD, only *Shamana chikitsa* (palliative management) [Table/Fig-2] was planned.

Drug	Dose	Duration
<i>Ras manikya</i>	60 mg BD with honey after meal	3 days
<i>Kamdudha rasa</i>	250 mg BD before meal	15 days
<i>Gandhaka rasayana</i>	500 mg BD with rock sugar after meal	15 days
<i>Khadirarishtha</i>	20 mL BD with lukewarm water after meal	15 days

[Table/Fig-2]: *Shamana chikitsa* (palliative management).

After 15 days; during first follow-up. The texture and size of the lesion got reduced, along with the reduction in burning pain. *Shamana chikitsa* (palliative management) along with *lepa* (anointment) [Table/Fig-3] was planned. *Pathya-apathya* (wholesome and unwholesome) were explained [Table/Fig-4]. These medications are indicated in skin diseases [Table/Fig-5,6].

Drug	Dose	Duration
<i>Kamdudha rasa</i>	250 mg BD before meal	30 days
<i>Gandhaka rasayana</i>	500 mg BD with sugar after meal	30 days
<i>Khadirarishtha</i>	20 mL BD with lukewarm water after meal	30 days
<i>Varnya gana lepa</i>	Local application with rose water OD	30 days

[Table/Fig-3]: *Shamana chikitsa* (palliative management) (Follow-up).

Pathya	Apathya
<ul style="list-style-type: none"> <li>Maintain proper hygiene.</li> <li>Intake of lukewarm water.</li> <li>While exposure to dust and smoky areas, cover the face with cloth.</li> </ul>	<ul style="list-style-type: none"> <li>Avoid fast food, bakery products, spicy food, fermented food, any artificial additive items.</li> <li>Avoid tea and coffee.</li> </ul>

[Table/Fig-4]: *Pathya-apathya* (wholesome and unwholesome).

Formulation	Ingredients	Indications and mode of action
<i>Ras manikya</i>	<i>Shuddha hartala</i> (Orpiment), <i>Abhraka</i> (Mica)	Reduces <i>Vata-kapha</i> , removes <i>Ama dosha</i> , <i>Rakta shodhak</i> (blood purifier), <i>Kushthahar</i> (heals skin ailments).
<i>Kamdudha rasa</i>	<i>Guduchi satwa</i> ( <i>Tinospora cordifolia</i> ), <i>Suwarna gairik</i> (hematite), <i>Abhrak bhasma</i> (Mica).	Reduces <i>Pitta dosha</i> , <i>Raktstambhak</i> (haemostatic).
<i>Gandhaka rasayana</i>	<i>Gandhaka</i> (Sulphur), <i>Sharkara</i> ( <i>Saccharum officinarum</i> ) <i>Bhavana Dravya</i> : <i>Godugdha</i> (cow milk), <i>Dalchini</i> ( <i>Cinnamomum verum</i> ), <i>Ela</i> ( <i>Elettaria cardamomum</i> ), <i>Twakpatra</i> ( <i>Cinnamomum tamala</i> ), <i>Nagkeshar</i> ( <i>Mesua ferrea</i> ), <i>Guduchi</i> ( <i>Tinospora cordifolia</i> ), <i>Haritaki</i> ( <i>Terminalia chebula</i> ), <i>Bibhitaki</i> ( <i>Terminalia bellirica</i> ), <i>Amalaki</i> ( <i>Phyllanthus emblica</i> ), <i>Shunthi</i> ( <i>Zingiber officinale</i> ), <i>Ardraka</i> ( <i>Zingiber officinale</i> ), <i>Bringraj</i> ( <i>Eclipta prostrata</i> )	Removes <i>Ama dosha</i> , <i>Vishahara</i> (detoxicant), <i>Krumighna</i> (anthelmintic), <i>Dahanashaka</i> (anti-inflammatory), <i>Rasayana</i> (rejuvenator).
<i>Khadir arishtha</i>	<i>Khadira</i> ( <i>acacia catechu</i> ), <i>Devdaru</i> ( <i>Cedrus deodara</i> ), <i>Bakuchi</i> ( <i>Psoralea corylifolia</i> ), <i>Daruharidra</i> ( <i>Berberis aristata</i> ), <i>Triphala</i>	<i>Kushtaghna</i> (heals skin ailments), <i>Krumighna</i> (anthelmintic), <i>Dushta vrana shodhana</i> (infected wound cleanser), <i>kandughna</i> (antipruritic), <i>twachya</i> , <i>Dahashamana</i> (anti-inflammatory).
<i>Varnya gana lepa</i>	<i>Chandana</i> ( <i>Santalum album</i> ), <i>Usheera</i> ( <i>Vetiveria zizanioides</i> ), <i>Vacha</i> ( <i>Acrocs calamus</i> ), <i>Daruharidra</i> ( <i>Berberis aristata</i> ), <i>Manjishtha</i> ( <i>Rubia cordifolia</i> ), <i>Sariva</i> ( <i>Hemidesmus indicus</i> ), <i>Musta</i> ( <i>Cyperus rotundus</i> ), <i>Lodhra</i> ( <i>Symplocos racemosa</i> )	<i>Dahashamana</i> (anti-inflammatory), <i>Kandughna</i> (antipruritic), <i>Kushtaghna</i> (heals skin ailments), <i>Rakta shodhaka</i> (blood purifier), <i>Varnya</i> (complexion enhancer).

[Table/Fig-5]: Medications with ingredients and their actions.

The gradation and score [1] are mentioned in [Table/Fig-7].

Observation of patient after each follow-up are mentioned in [Table/Fig-8].

After 15 days; during first follow-up. The texture and size of the lesion got reduced, along with the reduction in burning pain [Table/Fig-9].

On 45<sup>th</sup> day of treatment, papules and comedones were not present. Completely relieved from itching and pain [Table/Fig-10]. Since the patient was almost relieved from the disease, the patient was satisfied.



[Table/Fig-6]: *Varnya gana lepa*.

Grade-I	Mild acne Predominance of comedones	Comedone <30, Papules <10, No scarring
Grade-II	Moderate acne Predominance of papules	Comedone- any number, Papules > 10, Mild scarring ±
Grade-III	Severe acne Predominance of nodules/cysts	Comedone- any number, Papules- any number, Nodules/Cysts > 3, Extensive scarring

[Table/Fig-7]: Gradation of acne [1].

Day 1	Day 15 (1 <sup>st</sup> follow-up)	Day 45 (2 <sup>nd</sup> follow-up)
Grade-III	Grade-II	Grade-I

[Table/Fig-8]: Observation after each follow-up.

## DISCUSSION

Adolescents with acne vulgaris have pilosebaceous follicles that produce comedones, papules, nodules, cysts, pustules and scars mostly on the face and neck [2]. Blocked oil ducts can trap sebum,

hormonal changes in adolescence increase its production. Bacteria can infiltrate these glands, leading to pus, swelling and redness [3].

The early irregularities associated with acne are:

- Formation of comedone.
- Increased sebum production, which causes seborrhoea.

*Mukhadushika* is closely related to Acne vulgaris, sharing pathogenesis, clinical features and treatment. It is classified as *Kshudraroga* (minor ailments) in *Ayurveda*, caused by *Kapha*, *Vata* and *Rakta* imbalance, forming painful facial lesions called *Shalmalikantakavat Pidaka* (thorn-like eruptions) [4]. *Samhitas*

[Table/Fig-9]: 1<sup>st</sup> follow-up lesions after 15 days of treatment.[Table/Fig-10]: 2<sup>nd</sup> follow-up lesions after 45 days of treatment.

identified *vata*, *rakta* and *kapha* as the disease's primary causes. While *Bhavaprakasha* mentioned *svabhav* (nature) [5], *Sharangadhara Samhita* mentions *vakrasnigdhatu* and *pidika* as being attributable to *Shukradhatumala* [6].

*Mukhadushika* is the term for the *Shalmali* throne-like thick or hard painful eruptions on the face that are impregnated with *meda* [7].

Due to indulgence in etiological causes, *Vata-Kapha dosha* worsens, disturbing *Ras-Rakta dhatus*. As a result, *medagni*; resulting in profuse sweating, *sweda* (sweat) is *medodhatu mala* [8], which in turn blocks hair follicles, resulting in *sanga* type *srotodusti* [9].

Similar studies have consistently shown that oral medicines, external applications and panchakarma procedures play a major role in treating *Mukhadushika* (Acne vulgaris) [Table/Fig-11] [10-12].

In the present case, herbo-mineral drugs, particularly *Ras manikya* was selected for *Shamana Chikitsa*. *Ras manikya* functions as a *Vata-Kapha shamaka* and *Amahara* (reduce toxins), quickly reducing pustular nodules. It also acts as *Kushthahar*, alleviating acne. Its calming and soothing attributes help relieve discomfort, itchiness and burning sensations. *Ras manikya* imparts immunosuppressant effects, prevent skin infection [13]. *Kamdudha ras* treats all *pittaj vyadhi*. *Suvarna gairik* is *pittashamak*, *raktstambhak*, *raktaprasadak* and *kshobhnashak*. *Guduchi satwa* is also *pittashamak* and *dahprashamana*. *Abhrak bhasma* is *tridosha shamak* [14]. *Gandhak rasayana* has properties like *Amanashaka*, *Vishahara*, *Krumighna*, *Shodaka*, *Dahanashaka*, *Rasayana* [15]. *Khadirarishtha* is *Kushtaghna*, *Krumighna*, *Dushta vrana shodhaka*, *kandughna*, *twachya*, *Dahashamana*. It is used in symptoms like itching, rashes [16,17]. All the ingredients in the *Varnya gana lepa* possess *varnyakara*, *raktashodhaka* and *twakdoshhara* properties, acting on *Bhrajaka pitta*. *Chandana* enhances blood circulation, improving skin complexion. Both *Chandana* and *Manjishtha* primarily influence *Bhrajaka pitta*. *Lodhra* offers cleansing and soothing effects, while *Salireposides* combat acne-causing bacteria. *Varnya gana* drugs, mostly with *Kashaya rasa*, enhance skin tone, rendering it lustrous [18].

In the present case study, a comprehensive dermatological examination was conducted to identify the *Nidana*, *Dosha* and *Dhatus* involved in the pathogenesis. *Rasaushadhi* (herbo-mineral drugs) was chosen for its swift action, particularly effective in chronic conditions, aiming to disrupt the pathogenesis and eliminate the disease. Previous literature often employed both *Shamana* (palliative) and *Shodhana chikitsa* (purificatory procedures) for treating *Mukhadushika*, but in this case, *Rasaushadhi* was administered to address the root cause.

## CONCLUSION(S)

*Mukhadushika* is a *Pitta-Kapha pradhan Rakta dushtjanya vyadhi*. This is associated with acne vulgaris.

S. No.	Name of author and year of study	Case presentation	Treatment	Outcome
1.	Kumar S et al., 2022 [10]	A 23-year-old female patient presented with the complaints of papules and pustules on face and back, itching over lesions, burning sensation also present after itching. Redness of face and neck with dull skin for one year.	Lodhradi lepa mix with water for external use. Internal medicines also prescribed as a combination of <i>Suddha Gandhak</i> and <i>Panchnimba</i> churna with honey twice a day before meals, <i>Dashmoola Kwatha</i> twice a day and <i>Mahatikta Ghritam</i> twice a day with food.	Itching sensation, discolouration of back region and redness was relieved within 15 days. All other symptoms reduced in total duration of 45 days.
2.	Upadhyay A et al., 2021 [11]	A 26-year-old female presented with multiple facial eruptions, primarily on the cheeks, for 6 months. The condition began with a single pimple on her right cheek and spread rapidly. Symptoms included purulent discharge, mild to moderate pain, itching worsening at night and with dust or sunlight and post-inflammatory hyperpigmentation.	Two oral drugs <i>Kaishor Guggulu</i> and <i>Raktaprasadaka hima</i> and for local application powder of bark of Arjuna was prescribed.	The patient was assessed for one month with follow-up at the interval of 15 days. Significant improvement in all signs and symptoms was observed after Ayurvedic interventions. The patient did not develop new eruption of papules after intervention and had relief in pain and other symptoms after 15 days of treatment, whereas complete remission was achieved after 1 month of treatment.
3.	Garg I et al., 2023 [12]	A 20-year-old male patient reported with complaints of acne over cheeks B/L. Burning sensation, Itching, discolouration of skin etc. from last 1.5 year.	Patient was given 4 sittings of <i>Jalaukavacharan</i> on 7 days interval along with internal medicines like <i>Panchnimba</i> , <i>Mahamanjishthadi kwath</i> , <i>Haridra khand</i> , <i>Triphala churna</i> , <i>Kaishor Guggulu</i> , <i>Arogyavardhini vati</i> and local application of <i>Dashang Lepa</i> .	Improvement in the patient's symptoms began 15 days after treatment started. By the third visit, there was significant relief from burning, inflammation and new acne. After 1-2 sessions of <i>Jalaukavacharan</i> , itching, burning and discolouration improved dramatically. After 4 sessions of <i>Jalaukavacharan</i> and 4 months of internal medicine, the patient was completely cured.
4.	Present case	A 24-year-old female patient presented at the outpatient department of <i>kayachikitsa</i> with the complaint of painful papules on her face (B/L cheeks) along with itching and redness over the past 6 months.	Oral medicines like <i>Ras manikya</i> , <i>Kamdudha rasa</i> , <i>Gandhaka rasayana</i> and <i>Khadirarishtha</i> along with local application of <i>varnya gana lepa</i> was prescribed.	After 15 days; during first follow-up. The texture and size of the lesion got reduced, along with the reduction in burning pain. On 45 <sup>th</sup> day of treatment, papules and comedones were not present. Complete relieved from itching and pain. Since the patient was almost relieved from the disease after 45 days of treatment, the patient was satisfied.

[Table/Fig-11]: Comparative analysis of different case studies [10-12].

Ayurvedic treatment comprising *Ras manikya*, *Kamdudha ras*, *Gandhak rasayana*, *Khadirarishtha orally* and *Varnya gana lepa* externally provided significant relief from *Mukhadushika* manifestations. *Shamanoushadhi* effectively reduced signs and symptoms without any observed negative effects during follow-up, affirming *Ayurveda's* safety and efficacy in treating *Mukhadushika*.

The present case study may pave the way for larger-scale research on *Mukhadushika* management, guiding further exploration of treatment effectiveness and safety.

## REFERENCES

- [1] Sant SS, Ahire A, Khunkar H. Mukhadushika—an ayurvedic and modern review. *International Journal*. 2014;2(4):14-18.
- [2] Lalla JK, Nandedkar SY, Paranjape MH, Talreja NB. Clinical trials of Ayurvedic formulations in the treatment of Acne vulgaris. *J Ethnopharmacol*. 2001;78:99-102.
- [3] Gevariya J, Kamaliya S, Vaghela DB. A case report: Management of mukhadushika (acne vulgaris) with Ayurveda. *International Journal of Ayurvedic Medicine*. 2021;12(1):148-52.
- [4] Mishra B. Bhavaprakasha Vidyotini Tika. *Madhya Khanda* 61/31. 11<sup>th</sup> ed. Varanasi: Chaukhambha Sanskrit Sansthan; 2004.
- [5] Pandit B, Mishra SB. Bhavaprakasha- Madhya khanda. Varanasi: Chaukhambha Sanskrit Sansthan. 2003; p. 587.
- [6] Tripathi B. Sharangdhar Samhita- Purvakhand. Varanasi: Chaukhambha surbharti Prakashan. 2008; p. 57.
- [7] Tripathi, B. Astanga Hrdayam Uttarthana. Delhi: Chaukhambha Sanskrit Pratishthan. 2009; p. 1115.
- [8] Shukala VV, Tripathi R. Charaka Samhita- Chikitsasthana. Varanasi: Chaukhambha Sanskrit Publication. 2009; p. 364.
- [9] Shukala VV, Tripathi R. Charaka Samhita- Vimansthana. Varanasi: Chaukhambha Sanskrit Publication. 2009; p. 588.
- [10] Kumar S, Rai KN, Thiyagraj K. Classical ayurvedic management of acne vulgaris: a case report. *International Journal of AYUSH Case Reports*. 2022;6(2):239-43.
- [11] Upadhyay A, Khanal H, Joshi RK. Ayurvedic management of acne vulgaris. *Journal of Ayurveda*. 2021;15(4):317-21.
- [12] Garg I, Sharma D, Yadav S. A case report: Management of Mukhadushika (Acne Vulgaris) with ayurveda. *International Journal of Health Sciences and Research*. 2023;13(8):152-58.
- [13] Shivhare V, Tiwari N. Ayurveda perspective of Rasamanikya and its role in skin disorders: A review. *Journal of Drug Delivery and Therapeutics*. 2019;9(6-s):267-69.
- [14] Hariprapannasharma VP. (n.d.). *Rasa Yoga Sagar*. The Late Pandit Hariprapanna Ayurvedic Charitable Trust.
- [15] Haritha MM, Jadar PG. A review on probable mode of action of Gandhaka Rasayana-An Ayurvedic herbo-mineral formulation with multifaceted action. *International Journal of Ayurveda and Pharma Research*. 2024;5(1):173-79.
- [16] Bhaishajya Ratnavali. 54:365-370. Varanasi: Chaukhambha Orientalia; 2008.
- [17] Sharangadhara Samhita (Madhyam Khanda, Chapter 10, Verses 60-65).
- [18] Kaur H, Agrawal SK. A randomized comparative clinical trial to assess the varnya effect of Raktachandanadi lepa and Yavadi lepa. 2019;9(1):1306-17.

### PARTICULARS OF CONTRIBUTORS:

1. Postgraduate Scholar, Department of Rasashastra and Bhaishajya Kalpana, Datta Meghe Institute of Higher Education and Research Centre (DMIHER), Wardha, Maharashtra, India.
2. Professor, Department of Rasashastra and Bhaishajya Kalpana, Datta Meghe Institute of Higher Education and Research Centre (DMIHER), Wardha, Maharashtra, India.
3. Postgraduate Scholar, Department of Rasashastra and Bhaishajya Kalpana, Datta Meghe Institute of Higher Education and Research Centre (DMIHER), Wardha, Maharashtra, India.

### NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Anita Santoshrao Wanjari,  
Professor, Department of Rasashastra and Bhaishajya Kalpana, Mahatma Gandhi Ayurved College Hospital and Research Centre, DMIHER, Wardha-442001, Maharashtra, India.  
E-mail: anitawanjari7@gmail.com

### PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: May 07, 2024
- Manual Googling: Aug 06, 2024
- iThenticate Software: Aug 08, 2024 (4%)

### ETYMOLOGY: Author Origin

EMENDATIONS: 6

### AUTHOR DECLARATION:

- Financial or Other Competing Interests: None
- Was informed consent obtained from the subjects involved in the study? Yes
- For any images presented appropriate consent has been obtained from the subjects. Yes

Date of Submission: **May 06, 2024**

Date of Peer Review: **Jun 29, 2024**

Date of Acceptance: **Aug 10, 2024**

Date of Publishing: **Dec 01, 2024**