

# INCIDENCE OF ACNE IN GENERAL POPULATION

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## Summary

*This research study aims to analyze the incidence of acne in the general population, its causes, types, as well as its psychological, social, and emotional impact. Although rarely severe, acne affects a significant portion of the population. The psychological impact of chronic dermatological conditions can be substantial and must always be considered, including the effect on work capacity, school, recreational activities, or personal relationships.*

**Keywords:** *acne incidence, psychosocial impact, scarring, self-esteem.*

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## Introduction

Seborrhea represents an increased sebaceous flow, a condition that occurs in both sexes starting from puberty and primarily affects anatomical regions rich in sebaceous glands: the face, shoulders, chest, and back. The most common form is oily seborrhea, where the skin appears shiny.

Acne is the most frequent complication of seborrheic syndrome, considered a common dermatological condition affecting approximately 9.4% of the global population [1] and about 85% of individuals aged 12-24 years [2]. The essential condition for acne development is excessive sebaceous secretion. Gradual changes leading to acne lesions include seborrhea, accumulation of sebum in glandular ducts, comedone formation (whiteheads and blackheads), bacterial inflammation (most commonly involving *Propionibacterium acnes*), and the development of papules and pustules due to purulent secretions caused by microbial agents. In severe

cases, papules and pustules can transform into cysts, which may later merge into nodules.

There are internal and external causes of acne formation:

Internal causes: Hormonal imbalances (more frequent acne lesions in women during the menstrual cycle), weakened immunity, and chronic diseases. Genetic predisposition also plays an important role.

External causes:

- Interaction of the skin with comedogenic substances, such as oil-based cosmetic products, which obstruct sebaceous gland ducts and lead to sebum accumulation.
- Repetitive physical trauma to the skin, most often in athletes. Intense physical activity generates heat and friction between sweaty skin and clothing, especially when wearing heavy or bulky protective gear.
- Insufficient personal hygiene.
- Prolonged hormonal treatments.
- Frequent stress.

Acne can occur at any age: in newborns (due to maternal hormones), in children (as a result of

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hormonal imbalances or neonatal acne), in adolescents (most commonly), and in adults. The clinical classification of acne by severity is:

- a) Mild acne: Characterized by comedones (whiteheads and blackheads).
- b) Moderate acne: Includes red, elevated "papules" that may cause pain, and "pustules" resulting from local inflammation,

appearing yellow and purulent (commonly known as "pimples").

- c) Severe acne: Involves cysts and nodules, with a painful evolution, always healing with scars that can have significant psychological consequences.

Treatment varies based on severity: topical treatment (applied directly to the skin) or systemic treatment. Topical retinoids are recommended as the first-line treatment, while antibiotics are considered second-line therapy, often used in combination with topical retinoids [3]. Additionally, a specific skincare routine tailored to acne-prone skin is recommended.

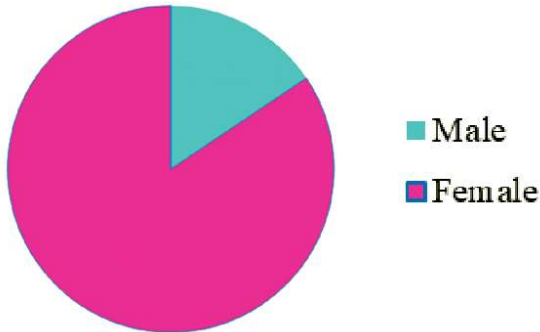


Chart 1. Sex distribution

### Materials and Methods

To demonstrate the importance of this condition and determine its incidence in the general population, we created an online questionnaire completed by 450 individuals (380 women and 70 men) aged between 14 and 60 years. The study encountered some limitations, such as the inabil-

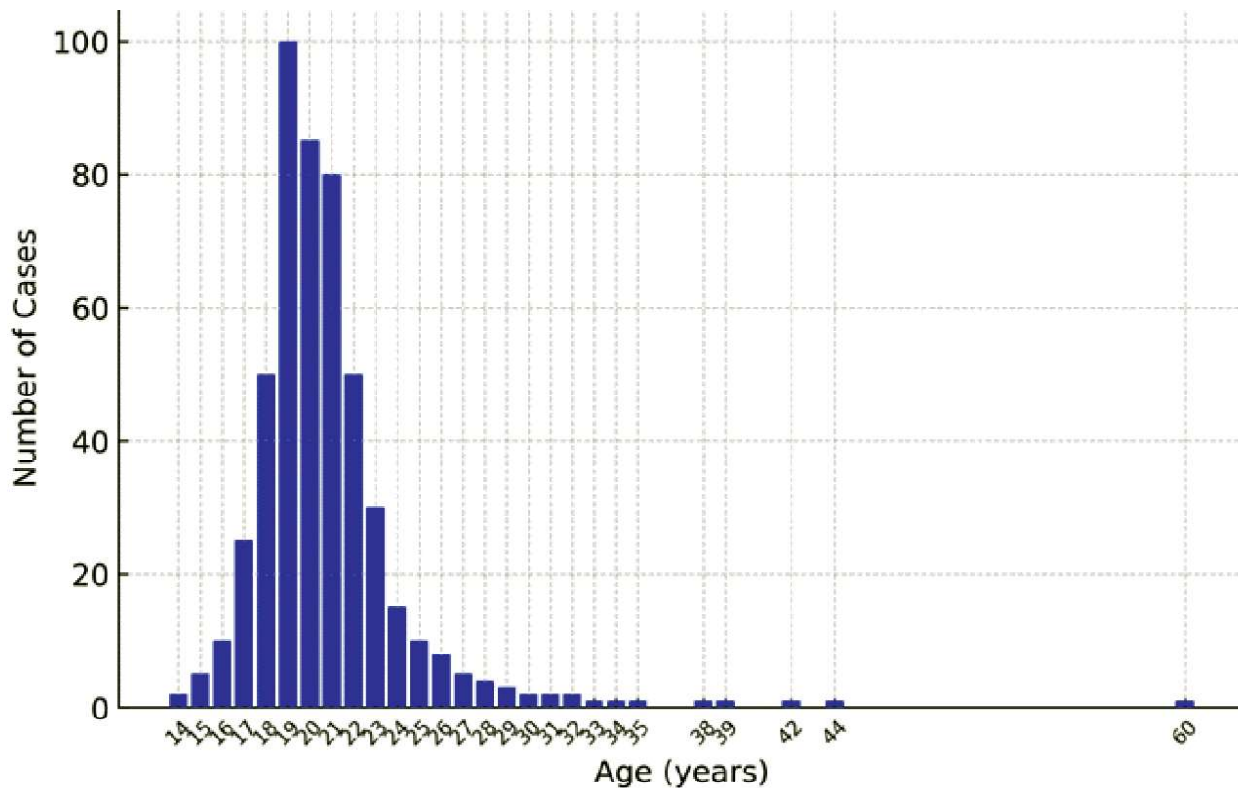


Chart 2. Incidence of Acne by Age in the General Population.

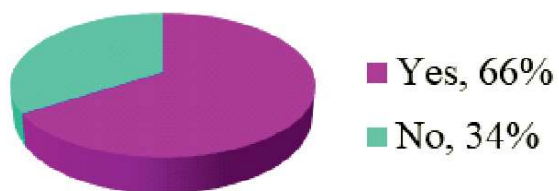


Chart 3. Have you had a dermatological check-up before?

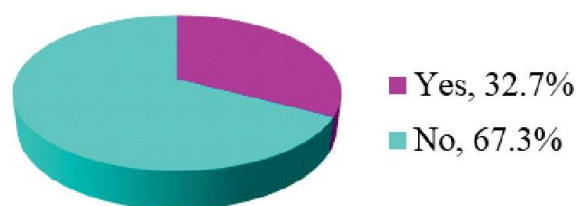


Chart 4. Have you taken antibiotics to treat acne?

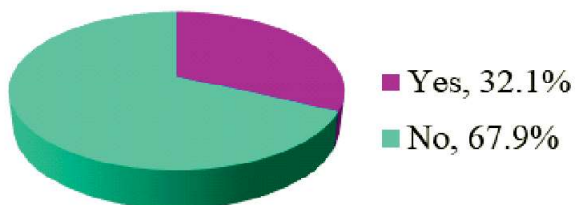


Chart 5. If so, were you also prescribed probiotics?

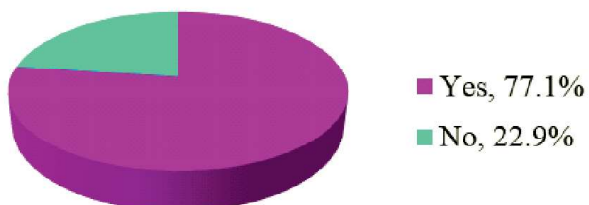


Chart 6. Have you ever bought anti-acne products without a dermatologist's recommendation?

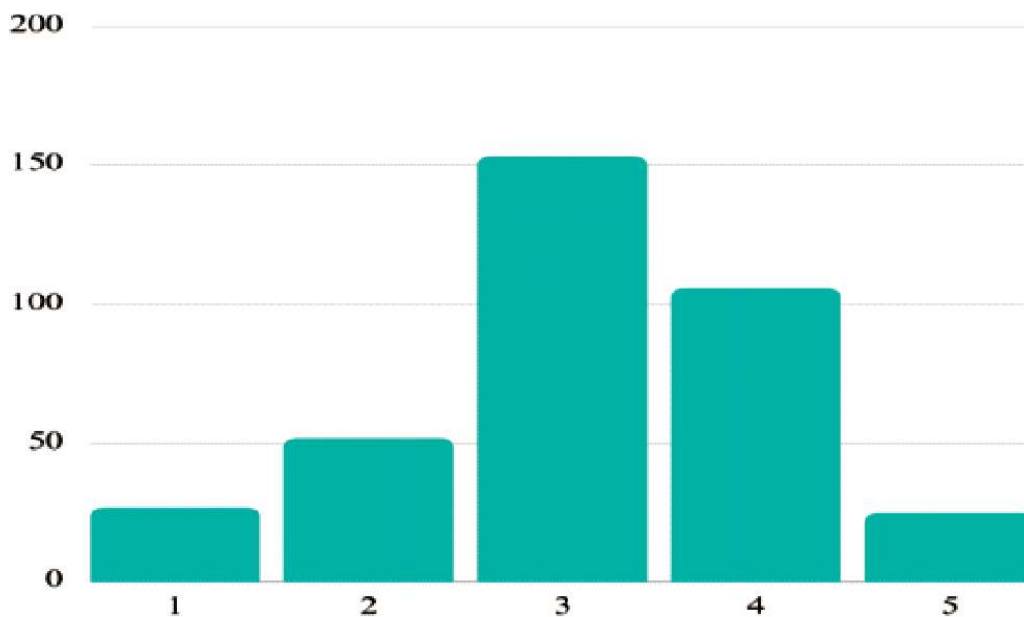


Chart 7. If so, to what extent did they work?

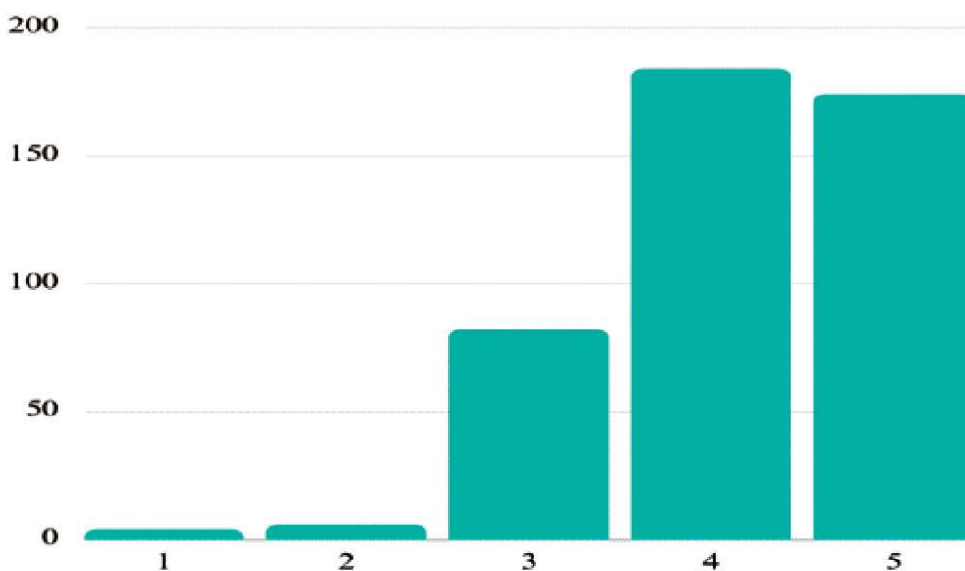


Chart 8. How important is physical appearance to you?

ity to determine the exact geographic location of affected individuals, as the questionnaire could be completed from any internet-accessible area. Statistical analysis suggests that acne affects women more than men, but this may be due to a higher number of female respondents, indicating greater concern among women about this issue.

### Results

When asked “At what age did you start experiencing acne?”, responses ranged from 10 to 25 years, confirming that acne can appear in children and adults, not just adolescents. 66% of respondents had visited a dermatologist, while 34% had never sought medical consultation. One reason why teenagers do not consult a doctor is their parents’ belief that acne is a temporary issue that resolves spontaneously.

Among those who visited a dermatologist, only 41.6% reported that their condition improved with treatment. Given that acne is a chronic condition, treatment is also long-term, and patient adherence can be challenging. 32.7% of affected individuals underwent antibiotic treatment, but only 32.1% took probiotics beforehand. The lack of probiotics can cause adverse effects such as abdominal cramps and

diarrhea due to intestinal flora imbalance, leading 1 in 5 patients to discontinue antibiotic treatment prematurely.

Another challenge in acne management is media influence. Various dermatocosmetic products are marketed as “revolutionary,” but they should be adapted to each skin type, acne stage, and combined with prescribed treatments, not used as replacements. 77.1% of respondents purchased anti-acne products without medical advice due to celebrity endorsements, advertisements, or recommendations from friends. 42% rated these products’ effectiveness as 3 out of 5 (on a scale from 1 to 5). Even if marketed as “safe,” these products may not be suitable for everyone. Improper treatments can be ineffective or even worsen acne, causing additional break-outs.

When asked “How important is physical appearance to you?”, 40.8% rated it as 4, while 38.8% gave the maximum score of 5. With such importance placed on appearance, acne sufferers may be excluded from social circles, leading to emotional distress and self-esteem issues. 39% of respondents reported limiting social activities due to skin imperfections. Acne can contribute to inferiority complexes, loss of self-confidence, social isolation, stress, and even depression.

Additionally, 66.8% reported permanent scars or hyperpigmentation, and 30% experienced bullying due to acne.

## Conclusion

This study aimed to analyze the incidence and psycho-emotional impact of acne in the general population. We conclude that this condition deserves significant attention due to the large number of affected individuals of both

sexes. 300 out of 450 respondents reported having unaesthetic scars. Acne thus transitions from a temporary medical condition to a recurring issue that affects both mental well-being and social life. Most participants emphasized the importance of physical appearance, but only 14.9% were satisfied with their current look. Even with adequate dermatological treatment, more than half did not fully recover, and 39.2% reported a significant psychological impact that limited their social life.

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Conflict of interest  
NONE DECLARED

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