

CHAPTER 1

INTRODUCTION

1.1 Background

Acne or acne vulgaris, commonly called acne, is a chronic obstructive and inflammatory skin disease in pilosebaceous (Movita, 2013). Acne predilection places are on the face, shoulders, chest, back, neck, and arms (Wasitaatmadja, 2011). Study in the dermatology department of medical faculty in North Carolina, USA in 2007 with a sample of 14-15 year old high school students in Singapore, mentioned in high stress conditions a significant acne attack was 95% in male students and 92% in female students (Yosipovitch, et al., 2007).

In Indonesia about 95-100% of men and 83-85% of women who is in 16-17 years suffer from acne. The prevalence of acne in adult females is about 12% and in adult males 3%. In another study found that acne is a skin problem through adolescence with a higher prevalence of women than men in the age range of 20 years or more (Sudharmono, 2009).

In this study, it is important to know whether the psychic of the medical students can affect the stress levels and the severity appearances of acne vulgaris on the skin. And to find out whether there is a relationship, the higher level of stress will induced and affect of the more severe acne appears, especially in medical students. The appearance of acne vulgaris could raise complications or effects, those are comedonal acne, papulo-pustular acne, conglobata acne, cyst acne, red scars and other severe acne lesions (Murtiastutik, 2009). Acne sufferers also caused from higher production of androgen hormone levels and higher sebum levels than normal people, even though androgen hormone levels of acne sufferers are still within normal limits it still could lead to the appearances of acne vulgaris (Movita, 2013).

For the medical students, stress represents an important challenge, especially during the first year of medical school, caused by the absence of a learning strategy, the sleepless night before the exam and also an unhealthy food intake during the exams (Golnick, 2003).

A causative link between emotional stress and acne has long been postulated. There is mounting evidence that the molecular mechanism underlying this observation is related to the expression of receptors for several neuroendocrine mediators by the sebaceous gland. Stress can induce acne with a mechanism of elevation of glucocorticoids and adrenal androgens. Both hormones are released during periods of emotional stress and are known to aggravate acne, and may induce sebaceous hyperplasia. Corticotropin releasing hormone (CRH), the coordinator of the stress response in the human body, is also found to increase sebaceous lipogenesis and also increases the change of sebocytes from androgen precursors to testosterone (Isard O, 2009).

Based on the background that has been described, I was interested to examine the extent to which "Relationship stress levels with acne vulgaris stage on 2016th students faculty of medicine Universitas Airlangga".

1.2 Problem Analysis

1. Is there any relationship between stress levels and acne vulgaris stage in 2016th Faculty of Medicine Universitas Airlangga students?

1.3 Research Objectives

1.3.1 General Objective

Analyzed the correlation of stress levels with complaints of acne vulgaris stage among students of Faculty of Medicine Universitas Airlangga.

1.3.2 Specific Objectives

1. To determine prevalence of acne vulgaris stage on medical faculty.
2. To determine prevalence stress levels on medical faculty.
3. To correlate the correlation between acne vulgaris stage and stress levels.
4. To determine the prevalence of other risk factor that can induced of acne vulgaris stage.

1.4 Research Benefits

1.4.1 For the researcher

Can be used as database or preliminary data for further studies in relevant topics at the Faculty of Medicine.

1.4.2 For the scientific

Can be used as a source or reference to explore research with a further level and can increase knowledge, especially about the relationship of stress levels with complaints of acne vulgaris stage.

1.4.3 For students

The result of the study are expected to provide input as self awareness on each respondents and suggested to consult if the result on the questionnaire was severe on either acne stage or stress scale students can consult to the psychiatrist or dermatologist.