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NPP. 16081074

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Website   : lppm.unusa.ac.id
Email   : lppm@unusa.ac.id
Hotline   : 0838.5706.3867

Paper

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STIKES HANG TUAH SURABAYA

THE PROCEEDING BOOK
The 2nd International Nursing Conference

STIKES HANG TUAH SURABAYA

*"Developing Cross–Cultural Understanding
and Behavior in Nursing Care Services"*

The Proceeding Book 2nd International Nursing Conference
Developing Cross–Cultural Understanding and Behavior in Nursing Care Services

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AFFECTING FACTORS OF THE *ACNE VULGARIS* INCIDENCE IN BACHELOR STUDENT OF STIKES HANG TUAH SURABAYA

Nur Indah Rahmawaty[1], Qori'la S[2], Nisha Dharmayantir,[3],
STIKES Hang Tuah Surabaya
Surabaya, Indonesia
+6283830255650/indahrahmawaty1993@gmail.com ; +628179347597/qori_ht07@yahoo.com; +6282234855340/nishadr.shtsby@gmail.com

Abstract

Many factors can affect the incidence of acne vulgaris effect a lack of confidence to the sufferer. The aimed of the study was analyze the factors that affect the incidence of acne vulgaris in Bachelor Nursing Program's student in Stikes Hang Tuah Surabaya. Methods : Research design was a cross sectional with correlative analysis. Population was student who had acne vulgaris in Stikes Hang Tuah Surabaya. Sampling technique use nonprobality sampling with total sampling obtained 36 respondents. Research instrument use direct observation and questionnaire. Data were analyzed use the Regression Logistic with p <0.05 significance level. The results showed there was their influence of hormonal factors, the structure of the face skin ,and stress with the incidence of acne vulgaris. The result obtained p value In a row p=0,035, p=0,034, p=0,049 (p<0,05). The most dominant factors affecting the incidence of acne vulgaris is the structure of the face skin. Conclusion: The implications of this study that the factors structure of oily skin affect the incidence of acne vulgaris so that the future can be disseminated about how to washing and caring for oily skin in order to minimize the growth of acne vulgaris.

Keywords : Acne vulgaris, hormonal, the structure of face skin-stress

Introduction

Acne vulgaris or acne can be a daunting problem especially for teenagers who are very concerned about they appearance. The surveys show that women are more prone to having problems with the skin, especially oily skin and acne (Novel, 2014). Etiology of *acne vulgaris* is not certain that they need to do more research, but suspected that acne vulgaris is a multifactor diseasewith clinical manifestations are influenced by various factors such as hormonal factors, psychological stress, and the type of skin that is oily skin (Librianty, 2015). One important factor that causes acne in women is hormonal changes just before menstruation (Sutono and Mariasa, 2014).When in a state of physical and psychological stress, can increase sebum production resulting

in increased production bacteria *P.acnec* and cause acne (Mumpuni et al., 2010). Oily skin structure greatly affect the appearance of *acne* reason being active oil glands produce and secrete excess oil if there is bacteria, it will cause acne (Novel,2014).

Based on research conducted by Safitri in 2009 in the Division of Medical Cosmetics Health URJ Dermatology Hospital Dr. Soetomo obtained a population of 150 women suffering from *acne vulgaris* with an age range 11-25 years (Junia, 2010). Results of research conducted by Cindy et al 2014 regarding relations with the incidence of stress *acne vulgaris* on the students showed that of the 38 students who have a category of stress were 23 people with the classification of 65.2% suffer from *acne vulgaris*,and the percentage of respondents by sex female (3) dominate (Cindy, 2015). In a another study also found that acne most commonly found in the time before menstruation (41.7%) due to the menstrual period becomes more oily skin (Astuti, 2011). *Acne vulgaris* is a skin problem get through adolescence with a higher prevalence in women the age range of 20 years or more (Soedarmono, 2009).

The results of a preliminary study conducted by researchers at the beginning of the month in January 2016 to 10 Prodi SI Regular student who has *acne vulgaris* in STIKES Hang Tuah Surabaya. 9 (90%) students have oily skin and 1 (10%) students have normal skin. A total of 6 (60%) of students said that *acne vulgaris* arise when the state of psychological or physical stress while 4 (40%) of students said that *acne vulgaris* does not appear at this point. A total of 7 (70%) say student *acne vulgaris*

premenstrual arise while 3 (30%) of students said that *acne vulgaris* does not arise just before menstruation.

Broadly speaking, the factors cause *acne vulgaris* method divided into two, namely internal factors and external factors. Internal factors are factors originating from within such as oil levels, genetic and hormonal while external factors are factors that come from outside such as dus., dirt, cosmetics, stress, food intake and bacterial infections. Oily skin structure has a chance of 3 to 4 times greater cause *acne vulgaris* than its and normal to dry skin. Hormonal be one factor cause *acne vulgaris*,especially during menstruation (Novel, 2014). Another factor is the time of occurrence of psychological stress that can trigger the activity of oil glands, either directly or through the stimulation of the pituitary gland (Juanda, 2009). The impact of the onset of *acne vulgaris* can lower their self esteem and regarded as the main enemy on the skin for each person and cause scars reddish or brownish (Novel, 2014).

In general, a lot of teens and young adults who have problems with Generally many teenagers and adults the young who have problems with *acne vulgaris*,for their *acne vulgaris* is psychological torment. Best principle in the treatment of disease is a major cause cure the disease, not the symptom. It is advisable to avoid stress due to hormones produced by the body during stress can trigger *acne vulgaris* on the face (Mumpuni et al. 2010). For those who have oily skin should maintain cleanliness to minimize the growth of *acne vulgaris* of the face. Research shows that the average intensity of facial cleansing is best to 3 times a day. The use of

materials that contain oil should be avoided. Use cosmetic ingredients that are free of oil (oil free) because the existing oil may increase the risk penyumbatab pores which can cause acne vulgaris (Winarno and Amalom, 2014).

Based on the above researchers want to do research on what factors that could affect the incidence of acne vulgaris in Prodi S1 Reguler student STIKes Hang TuahSurabaya.

Methodology

Design research useobservational analytic research with cross sectional approach. In this study, researchers conducted observations of the factors that affect the incidence of acne vulgaris on the students. As observed is a hormonal factor, the factor structure of the skin and stress factors. The population in this study is a student STIKes Hang Tuah Surabaya Prodi S1 Reguler who have acne vulgaris in the month of April 2016 as many as 66 people and the sample size of 56 respondents. The instrument used in this study was the observation sheet, and questionnaire presented in the form of a closed question. Data analysis was performed useunivariate (shown in the form of frequency distributions), bivariate (chi square test) and multivariate (binarylogisticregression).

Result and Discussion

General Data

1. **Characteristics of Respondents by Age**
   There are 56 respondents aged21-25years as many as 29 people (51.8%), and age 15 - 20 years as many as 27 people (48.1%).

2. **Characteristics of respondents Based Acne Family History**
   From 56 respondents who do not havehistory of acne a family there are 30 people (53.6%) and who havehistory of acne a familyas many as 26 people (46.4%).

3. **Characteristics of Respondents Based Powder Usage**
   From 56 respondents who did not use solid powder as many as 37 people (66.1%), and were wearing solid powder as many as 19 people (33.9%).

4. **Characteristics of Respondents by High Consumption of Fat Content**
   From 56 respondents who say that acne arises after consuming a high fat content as much as 29 people (51.8%), and that did not arise after consuming the high fat content of as many as 27 people (48.2%).

5. **Characteristics of Respondents Based Cleaning RoutinesFace**
   From the 56 respondents who clean your face regularly as many as 42 people (75.0%) and who do not routinely clean your face as many as 14 people (25.0%).

6. **Characteristics of Respondents According factors Research Variables**
   The hormonal factors that affect as many as 41 respondents (73.2%), hormonal factors do not affect the 15 respondents (26.8%). Factor structure of the skin of the face as many as 34 respondents (60.7%) have very oily skin, and as many as 22 respondents (39.3%) had a slightly oily skin. The stress factor as many as 19 respondents (33.9%) had moderate levels of stress, as many as 18 respondents (32.1%) had mild levels

of stress, as many as 10 respondents (17.9%) had normal levels of stress, and as many as 9 respondents (16.1%) have high levels of stress.

7. **Characteristics of Respondents According to Degrees of *Acne Vulgaris*** From 56 respondents who were suffering from moderate acne as many as 35 people (62.5%) and mild as many as 21 people (37.5%).

Custom Data

1. **Hormonal Factors**
   The respondents didn't influence who is suffering from *acne mild* as much as 9 respondents (60.0%) and suffering from *acne moderate* as much as 6 respondents (40.0%). In an influential respondents who are suffering from *acne mild* as much as 12 respondents (29.3%) and the degree of being as much as 29

respondents (70.7%). Based on the test results *chi-square* show the value of $p = 0.035$ (p value <0.05), we conclude there is a significant relationship between hormonal factors with the onset of *acne vulgaris*.

2. **Structure Skin Face Factors**
   That respondents had a slightly oily skin who are suffering from *acne mild* as much as 12 respondents (54.5%), while 10 respondents (45.5%) suffered from *acne* moderate respondents who have very oily skin who are suffering from *acne* mild as much as 9 respondents (26.5%), while 25 respondents (73.5%) suffered from *acne* moderate. Test results *Chi-square* show the value of $p = 0.034$ (p value <0.05), we conclude there is a significant relationship between the factor structure of the skin with the onset of acne vulgaris.

Table 1. Relationships Hormonal Factors Affecting Incidence of *Acne Vulgaris* in Bachelor student STIKes Hang Tuah Surabaya period April 2016 in 56.

Hormonal Factors	Degrees Acne Vulgaris				Total		P value
	Mild		Moderate				
	(f)	%	(f)	%	(f)	%	
Influencing	9	60	6	40	15	100	0,035
Not Influencing	12	29,3	29	70,7	41	100	
Total	21	37,5	35	62,5	56	100	

3. **Stress Factors**
   From respondents who have high levels of stress were the suffering from *acne vulgaris* moderate as many as 11 respondents (57.9%), 8 respondents (42.1%) suffered from *of acne* a mild degree *vulgaris*. The respondents who

have mild stress levels of 18 respondents 10 respondents (55.6%) who were suffering from *acne moderate vulgaris*, 8 respondents (44.4%) suffered from *of acne* a mild degree *vulgaris*. Respondents who have high levels of stress and suffering from *acne vulgaris*

Table 2. Relationship Factor Structure of Skin Face Affecting Incidence of AcneVulgaris in Bachelor student in STIKes Hang Tuah Surabaya period 2016 April (n – 56)

Structure Skin Face Factors	Degrees Acne Vulgaris				Total		p value
	Mild		Moderate				
	(f)	%	(f)	%	(f)	%	
Influencing	12	54.5	10	45.5	22	100	0.034
Not Influencing	9	26.5	25	73.5	34	100	
Total	21	37.5	36	62.5	56	100	

moderatewere 9 respondents (100%). While the respondents who had normal stress levels are suffering from *acne vulgaris* moderateand lightweight respectively of five respondents (50%).

4. Dominant Factors

The obtained results of the test *logistic regression Binary* conducted with methods *Backward*, which means there are some step or steps to arrive at the end result is the variable that is left on the last step and that has a value of Exp (B) most to assess the strength or odds ratio (OR) of each variable tested. The above table shows that the variables of the last remaining in step 2a is a variable factor structure of the skin face p value

0.046 <of a (0.05), meaning that H0 is rejected, it can be concluded that there is significant influence between the factor structure of the skin face and the onse. of *acne vulgaris* at STIKes Hang Tuah Surabaya. The strength of the connections can be seen from the OR (Exp (B)) most large 3, meaning that respondents who have very oily skin would be likely to cause acne vulgaris three times higher than among respondents who don't have very oily skin.

Discussion and Recommendation

1. Hormonal Factors Influencing Incidence of Acne Vulgaris

Based on the results that the data obtained from 56 respondents influential and moderate acne suffer as much as 29 respondents (70.7%), 12 respondents (29.3%) with the influence and suffered from mild acne, 9 respondents (60%) had no effect and suffering from mild acne, 6 respondents (40%) had no effect suffered from moderate acne. Based on thetest results *chi-square* showed that the p value – 0.036(a <0.05), so H acceptable means there is a relationship between hormonal factors with the onset of *acnevulgaris*.

Hormonal factors into one factor that plays a major role in the formation of *acne*.At puberty, the oil glands become more active and can produce excessive oil. The oil is usually dries, peel, and bacteria being assembled inside the pores of the skin, cause blockage of the flow of oil from the follicle pores that trigger the formation of blackheads. In addition, hormonal changes such as menstrual periods can

lead to acne the appearance of ranging from small red spots that stand head and white. (Sutono and Marissa, 2014).

Based on observations obtained from 56 respondents were 42 respondents that affect hormonal factors. Researchers assume that the above proves acne is influenced by hormones. Effect of hormone on body seemed to run by itself without conscious control. Hormones directly related to the onset of acne is hormone progesterone. The hormone progesterone tends to make the face more oily because these hormones work to produce excess sebum, especially on the eve of menstruation. Where the severity of *acne* in women clearly related to the menstrual cycle. This is consistent with the literature and Cunclifie Simpson (2004), which suggests that the hormone progesterone is thought to be responsible for stimulating the activity of sebaceous glands in women. In the menstrual period is more oily skin and can cause acne, premenstrual.

On the other hand there are still a lot of 12 respondents said that does not affect the hormonal factor but still suffer from acne vulgaris mild or moderate. Researchers had assumed the appearance of *acne* does not only occur due to hormonal changes internally that is due to an imbalance between the hormones estrogen and progesterone. Some of the consequences are often the visible, due to hormonal changes in the body of the teenagers is a tendency to be more sensitive to even tend to be more irritable, easily stressed

up even in the mild stage. Thus stress, ab hormones that will work actively to produce excess oil from the sebaceous glands, it aligned with the opinion of Mumpuni e. al (2011) who said that when under stress can produce the hormone androgen and cortisol, which stimulates the production of excess sebum.

2. Structural of Skin Face Factors Affecting Incidence of Acne Vulgaris

Based on the results that respondents had a somewhat oily skin who are suffering from *acne* mild as much as 12 respondents (54.5%), while 10 respondents (45.5%) suffered from acne degrees being. At respondents who have very oily skin who are suffering from *acne* mild as much as 9 respondents (26.5%), while 25 respondents (73.5%) suffered from *acne*. moderate Based on the test results *chi-square* showed that the p value = $0.034 (p < 0.05)$, so the HI acceptable means no correlation between the structure of the skin with the onset of *acne vulgaris*.

Based on the above data indicate that skin structure greatly affect the appearance of acne. Observations researchers found as many as 34 respondents have very oily skin types. This is evidenced by the number of respondents who characterize the structure of their skin as oily skin types. At respondents who have very oily skin tend to have large pores and often blocked by dirt, dust and pollutants to form blackheads, the skin is thick and oily on the T or on the forehead and nose. Indifferent attitude of respondents

to state their skin makes a problem. On this kind of oily skin, excessive oil that is left will be a good medium for bacterial growth and the skin will become dull and problems experienced by many one of which is the presence of blackheads which would later become acne.

This is because the oil content in the pores face will accumulate cause blackheads and acne. the results of observations of the respondents researchers often overlook about the cleanliness of their faces, and more concerned with personal activities. When outdoor activities, perspiration and sebum excretion increases plus exposure to dust, dirt and pollution cause the skin to become dirty and greasy. This is in accordance with Novel's (2014) research, which says that oily skin does have a chance of 3 to 4 times greater cause acne than dry and normal skin, the reason being active oil glands produce and secrete oils that are not able to control the amount that must be spent. This is because the sebaceous glands in the skin oily which is usually located in the dermis layer, easily triggered to work more actively. The data are also consistent with research data Rahmawati (2012) found that of all 64 respondents 43 of them have oily skin and are in a state of acne. Excess oil condition cause blockage of hair follicles and skin pores. More and more oil being produced, the greater the possible channels of hair follicles and skin pores are clogged, if there is bacteria, it will cause acne. But rather than just excess oil production, it turns

out the dead skin cells that clog the skin pores and hair follicles channel will also menimbulka acne.

3. Stress Factors Affecting Incidence of Acne Vulgaris

The results in respondent data show that levels of stress were suffering from *acne vulgaris* moderateas many as 11 respondents (57.9%), 8 respondents (42.1%) suffered from *acne vulgaris* mild. The respondents who have mild stress levels of 18 respondents 10 respondents (55.6%) who were suffering from *acne* moderatevulgaris,8 respondents (44.4%) suffered from of *acne* a mild degreevulgaris. Respondents who have high levels of stress and suffering from *acne vulgaris* moderatewere 9 respondents (100%). While the respondents who had normal stress levels are suffering from *acne vulgaris* moderateand lightweight respectively of five respondents (50%). After the data is tested use test *Spearman's rho* values obtained $p = 0.049$ ($\alpha < 0.05$), it can be concluded that there is a relationship between stress factors with the onset of *acne vulgaris*.

Observations majority of 56 respondents researchers found as many as 19 respondents experiencing moderate stress. According to the assumptions of researchers stress on each person is different. It depends on the state of the person. Adolescence is a period that will be exposed in a wide variety of options and the purpose of life, if they can not choose the needs and purpose of life, then it will lead to conflict within themselves. This does

not rule out the possibility they will experience stress conditions so that many who suffer from acne vulgaris among adolescents. Currently the respondents are at a stage where the stress was longer this stress occurs between a few hours to a few days.

Stress can arise, such as when going through an exam / test. These stressors can cause symptoms of irritability and irritable and difficult to break coupled with acne. The stress is not managed properly can negatively impact is quite significant for someone. This is supported by research conducted by Kusumoningtyas (2012) In Surakarta stated that there is a relationship between stress and the onset of *acne vulgaris* in the third grade students of SMAN / Surakarta. Of the 32 students obtained stress as many as 24 people (75%), 15 of them experienced the onset of *acne vulgaris* and 9 (37.5%) the others do not experience the onset of acnevulgaris. According to the theory Mumpuni, et al. (2010) said that in the period of high emotion, such as the exam season learners experiencing growth of *acne*, unnatural The study also showed the appearance of *acne* is closely linked to anxiety and anger. Thus the above results is one of the studies that reinforce and prove that stress is one of the causes of acne.

In times of stress can affect indirectly to the increased secretion of the sebaceous gland via androgen hormones increase. As has been dijelaskan a literature review of psychological stress stimulates the hypothalamus to produce *Corticotropin Releasing Factor (CRF)*, which stimulates the anterior pituitary, resulting in increased levels of *Adenocorticotropin hormone* (ACTH). Terjdinya increase in ACTH in the blood will lead to increased activity of the adrenal cortex. One of the hormones produced by the adrenal cortex is the hormone androgen and cortisol. Increased cortical activity will lead to increased levels of androgen hormones that play an important role in the onset of *acne* (Guyton, 2008). One targets the androgen hormones are sebaceous glands or oil glands that produce sebum from under the skin. Simply put, the hormone androgen has two activities, namely increasing the production of sebum and increases keritinization of follicles to the point that is not normal (Amdecs, et al., 2014).

Psychological stress can aggravate acne. In a recent survey among 215 medical students, 67% of students identified stress as the cause of their acne. In addition, some studies have shown that psychological stress can alter the immune function of skin barrier function (Yosipovitch, 2007). Physical and psychological stress can increase the production of sebum that result can increase the production of bacteria *Bacne*(Mumpuni, et al,. 2011). Researchers assume that respondents experience stress, too many thoughts and emotional disorders are much more sensitive and aggravate acne exsaserbation arise. With the acne that arise, it will cause feelings of anxiety

of patients who push themselves to mechanically manipulate it as often pressed or touched with dirty hands will soon be contaminated by bacteria.

4. Dominant Factor Most Influencing Incidence of Acne Vulgaris

Based on the results multivariate analysis showed that the most dominant factor affecting the incidence of *acne vulgaris* is the factor structure of the skin is very oily (Exp (B)) 3. 1)) with p = 0.046 ≤a (0.05), this means the factor the structure of the skin respondent significant effect on the incidence of acnevulgaris. Where circumstances are very oily face of the respondents would make the quality of his poor hygiene, and vice versa. If the respondent's condition although oily but healthy and clean from dirt and dust, the quality of cleanliness will face either.

Observations in STIKes Hang Tuah Surabaya, the respondents always strive to maintain the cleanliness of oily dirt and dust, on the other hand there are also reluctant or rarely mebersihkan face with reason bustle around campus, especially among respondents who are often holding the gadge, or electronic cevice (notebook), but it can not be denied with such conditions make reluctant respondents to wash your hands so that when respondent accidentally or intentionally holding her face without them knowing bacteria and dirt left over diarea palms will stick to the face. The emergence of acne is not only due to internal factors alone but external factors also becomes a cause that is not less often overlooked by

teenagers. Several external factors that are often overlooked, potentially appear when the acne on the face in a state that is very greasy as lack of hand hygiene, lack of facial cleanliness is maintained, especially at bedtime, where the makeup with facial conditions were very greasy forget cleaned with a face so that pores pore face potentially covered by dust and traces of makeup so kemungkinann acne growth will be even greater.

In clinical acne or acne vary, from small ones without inflammation (blackheads), and papules, nodes, up to what is called cystic acne (big and loud). The severity of acne is mainly associated with the amount of production of oil glands in the skin. Those with severe acne problems generally have oil glands are large, very active, the mouth of the gland duct stood out (large pores), and the skin is very oily.

The state of the skin that so often complained of being easy dirty and dull. Oil, dirt or dust, and sweet stick to the face can be shut down and clog the pores that facilitate the formation of *acne*, and certainly aggravate acne existing so it stands to reason, keep the face be one way to clean up the excess oil on the face. Cleaning the face regularly and correctly with proper cleaning is important, let alone who have oily skin and acne problems (Sulastomo, F, 2013).

Based on our research, can we conclude that:

1. There is a hormonal factor relationship with the onset of *acne vulgaris* in STIKes Hang Tuah Surabaya.

2. 2.There is a correlation between the structure of the skin with the onset of *acne vulgaris* in STIKes Hang Tuah Surabaya.

3. There is a relationship of stress factors with the onset of acne vulgaris in STIKes Hang Tuah Surabaya.

4. The most dominant factor is the factor structure of oily skin

For Respondents

1. It is hoped that student aware that hormonal factors at the time of undergoing menstruation can trigger the onset of *acne vulgaris*.

2. Expected student realized that the factor structure of the skin is very oily can lead to acne vulgaris and applying facial cleaning behavior appropriately and correctly.

3. Expected student realize that stress factors can trigger and exacerbate *acne vulgaris* and the need to avoid stress with stress management effective.

For the Profession of Nursing

Professionals in the field of nursing is needed in order to provide knowledge about acne vulgaris which is expected to increase knowledge in this respect can minimize the increase in incidence of the onset of *acne vulgaris*.

For Research

On further research is recommended to carry this title with the topic of other factors that affect the incidence of *acne vulgaris*

References

Astuti, Dipta W and Lewis. (2011).*Relationship Between Menstrual Acne Vulgaris By the Numbers Genesis Teen.* Articles Essay Diponegoro University Faculty of Medicine.

Cindy, Billy and Sefty. 2015. *Relationship Stress with Genesis Acne Vulgaris.* eJurnal nursing. Vol. 3. Number 1. PK Universitas Sam Ratulangi.

Juanda. Adhi. (2009). *"Dermatology And Sex. Fifth edition of the fourth Prints".* Faculty of Medicine, University of Indonesia.

Guyton.(2008). *Textbook of Medicine.*Jakarta: EGC, pp. 214.12.5.

Kusumaningtyas, Dyah Savitri. 2012. *Relationship Between Stress With the emergence of Acne Vulgaris Students In Class III SMAN 7 Surakarta.*Faculty of Medicine, of University Muhammadiyah

Librianty, Nurfanida. (2015). *"Thick Disease Self Guided".* South Jakarta: PT Limas Words Qualified. Yekti and Ari Welandari. (2010).*"Ways to Overcome Acne".* Yogyakarta: CV ANDI.

Novel, Sienta S. (2014). *"500 Secrets of Acne Free Natural Beauty".* Jakarta: GramediaWidiasarana Indonesia.

Rahmawati, Dewi. 2012. *"The relationship with the emergence of Facial Skin Care Acne Vulgaris".* Essay, FK Diponegoro University

Simpson, WJ Cuncliffe. 2004. *Disorders of Sebaceous Glands.*In: Burns T, Breethrach S, Cox N, Griffiths C, editors, Rook's Textbook of Dermatology, 7 th ed., Oxford: Blackwell publishing. p43.1–43.75.

Sucharmans A. 2008. *Laser Skin Resurfacing.* Seminar Perspective of Laser Dermatology. Surabaya.

Sulasomo S. 2013. *Kulit Cantik dan Sehat,* Mengenal dan Merawat Kulit. Jakarta: PT. Kompas Media Nusantara. 3.62.

Winarno, et al. (2014). "Jerawat; Yang Masih Perlu Anda Ketahui". Yogyakarta: Grahallmu

Yosipovitch, et al. 2007. *Study of Psychological Stress Sebum Production and Acne Vulgaris in Adolescence.* (http://www.ncbi.nlm.nih.gov/pubmed. 17340019). Diakses 28 Februari 2016.

Yustia, SkaSa Uti. 2010. *Quality of Life Profile Penederita Acne Vulgaris in Hospital Dr. Soetomo: Study Use Cardiff Acne Disability Index (CADI).* Faculty of Medicine, University of Airlangga / Regional General Hospital Dr. Soetomo.

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