**Psychological Problems among Adolescent with Acne**

**Vulgaris**

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(Psychiatric and Mental Health Nursing)

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**Psychological Problems among Adolescents**

**With Acne Vulgaris**

**Abstract**

Background: acne vulgaris is a chronic inflammatory skin disease impacts on patient’s physical and mental health. The aim of this study was to examine the psychological problems of adolescent related to acne vulgaris (depressive symptoms, body image and self-esteem). Descriptive correlational design was utilized to achieve the aim of this study. This study was conducted at the outpatient clinic of the Dermatological Hospital in Benha City. A convenience sample of 200 patients fulfilled the inclusion and exclusion criteria during the spring season were selected from the above setting. The study tools were composed of four Tools (1): Socio-Demographic and Clinical Data, Tool (2): Beck Depression Inventory Scale to measure depressive symptoms, Tools (3): Rosenberg Scale to assess self-esteem, Tool (4): Body Image Scale to measure body image. The results of the study revealed that Majority of the sample was female (85%) with mean age 15.4±2.08 years, nearly three quarter of the studied sample had depressive symptoms, around three- quartersof studied sample had moderate level of self-esteem, majority of the studied sample had negative body image, there was a statistical significant relationship between acne vulgaris and both of depressive symptoms, body image and self-esteem. Based on the results of this study it was concluded that: Acne vulgaris influence negatively on patients’ psychological status. The study recommended that: Psychological counseling should be integrated as nursing intervention for acne patients to improve their mood, self-esteem and body image.

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**Key words:** Psychological Problems, Adolescents, and Acne Vulgaris

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**LIST OF Abbreviations**

|  |  |
| --- | --- |
| P | P- value |
| SPSS | Statistical Package for the Social Science |
| PC | Personal Computer |
| X² | Chi –Square test |
| & | And |
| CI | Confidence Interval |
| No. | Number |
| AV | Acne vulgaris |
| CBT | Cognitive behavior therapy |
| P. Acne | Propionibacterium acnes |
| BI | Body image |
| R | Correlation |
| % | Percent |
| \* | Significant |
| \*\* | Highly Statistical Significant |

**INTRODUCTION**

Acne is a common chronic skin disease involving blockage and inflammation of pilosebaceous units (hair follicles and their accompanying sebaceous gland. It is characterized by blackheads or whiteheads, pimples, oily skin, and possible scarring. It primarily affects areas of the skin with a relatively high number of oil glands, including the face, upper part of the chest, and back **(*Rao et al., 2018).***

Several factors are believed to contribute to the onset and development and aggravate of acne, the heritability of acne is almost 80% in first-degree relatives. Family history (genetic) is thought to be the primary cause of acne. Moreover, Acne may be caused by hormonal changes, drugs, diets, infections, life style as (smoking- stress, hygiene and skin care), clothing or sweat are risk factors and some disorders such as polycystic ovary syndrome, congenital adrenal hyperplasia, and Cushing syndrome may lead to the development of acne **(**[**Picardo**](https://www.ncbi.nlm.nih.gov/pubmed/?term=Picardo%20M%5BAuthor%5D&cauthor=true&cauthor_uid=28150107) **et al., 2017).**

Acne Vulgaris lesions predominate in exposed areas such as face and thorax. Facial appearance has an important role in self-perception, as well as in the interaction with others, face lesions cause a significant impact **(Kodra et al., 2018)**. The face is highly connected to one’s perception of body image. The presence of acneic lesions, therefore, leads to greater decrease in self-esteem and behavioral alterations. It is indisputable that the experience of acne can influence psychosocial disability (**Alebachew & Ashagrie, 2017)**. Psychiatric issues associated with acne include problems with self-esteem , self-confidence, body image, embarrassment or social withdrawal, depression, anxiety, anger, preoccupation with acne, frustration or confusion, limitations in lifestyle, pain, indisposition , and weakened ability to focus on work and school and problems in family relationships, poor body image, low self-esteem, and depression **(Hazarika & Archana, 2018).** Severe depression from acne has resulted in attempted suicide and, unfortunately, successful suicide (**Oakley et al., 2014).**

Some embarrassed acne patients avoid eye contact and some acne sufferers grow their hair long to cover the face. Girls tend to wear heavy make-up to disguise the pimples, even though they know that this sometimes aggravates their acne. Boys often comment: "Acne is not such a problem for girls because they can wear make-up". Acne can reduce participation in sport such as swimming or rugby because of the need to disrobe in public changing rooms (**Oakley et al., 2014).**

The nurse should provide patient and family with psychological support, information about acne, advise them that heat, humidity, and perspiration exacerbate acne. Instruct the patient to wash his face gently (do not scrub) with mild soap twice daily, not to squeeze blackheads, not to prop hands on or rub the face, to wash hair daily and keep it off the face, and to use cosmetics cautiously because some may exacerbate acne. In other hand the nurse should advise adolescent about the importance of balanced diet, adequate fluids, exercise and adequate rest, avoid sunburn because, these things promote healthy skin. Explain that it will take four to six weeks of compliance with the treatment regimen to obtain results (**Lawton, 2018).**

**Significance of the study:**

Acne is a very common worldwide skin problem. Prevalence of acne in adolescents in Egypt ranging from 28.9% to 91.3%. During adolescence, acne tends to be more common in boys than in girls. It reportedly occurs among 95% to 100% of boys 16 to 17 years old and 83% to 85% of girls in the same age group ***(*Allayali *et al.,* 2017*).*** The disease can also persist into adulthood, affecting 20-40% of all individuals. Strikingly! (**Aslan et al., 2017**).

[Acne](https://www.verywellhealth.com/acne-4014767) can influence the entire life in very real ways. Acne can be particularly distressing for adolescents because develop often significant physical and psychological morbidity as poor body image, low self-esteem and depression. Patients with acne are at increased risk for psychological problems including anxiety and depression that impact on person’s life compared to the normal population. Depression was two to three times more prevalent in acne patients than in the general population, in addition to depression as psychological problems, AV can have a major influence on self-esteem and body image (**Jagtiani et al, 2017**).

Thus, it is of considerable importance to assess the effect of acne vulgaris in adolescent with particular influence on depressive symptoms, body image and self-esteem.

**Theoretical and operational definition of terms:**

Psychological problems theoretically defined,as psychological dysfunction, a behavior or mental pattern that may cause suffering or poor ability to function in life (**World Health Organization, 2016).** Psychological problem refers to the cessation of purposeful functioning of cognition, emotions or behavior (**Cherry, 2018)**.

In the present study, psychological problems operationally mean the mean score of depression, self-esteem and body image.

The mean score of depressive symptoms as loss of interest in activities that were once interesting or enjoyable, loss of appetite, with weight loss, or overeating, with weight gain, loss of emotional expression (flat affect), feeling of hopelessness, pessimism, guilt, worthlessness, or helplessness measured by **(Beck, 1966)**.

The mean score of body image scale Which includes how the person perceive his appearance when he\she looks in the mirror and how he\she feels about his body measured by (**Gamal, 2016)**.

The mean score of self-esteem which reflects a person's overall subjective emotional evaluation of his or her own worth, judgment of one self as well as an attitude toward the self or [beliefs](https://en.wikipedia.org/wiki/Beliefs) about oneself measured by **(Rosenberg, 1965)**.

**AIM OF THE STUDY**

**This study aimed to:**

To examine the psychological problems of adolescent related to acne vulgaris (depressive symptoms, body image and self-esteem) through-

1. Assess the presence of depressive symptoms in patients with acne vulgaris.
2. Assess the perceived body image in patients with acne vulgaris.
3. Assess the self-esteem in patients with acne vulgaris.
4. Examine the relation between degree of acne with the severity of depressive symptoms, self-esteem and body image perception in acne vulgaris patients.

**Research Question*:***

What are psychological problems of adolescent related to acne vulgaris?

**Review of Literature**

**Overview of Adolescents and acne vulgaris:**

Adolescence is the period of age ranging from 10 to 19 years, and is one of the critical transitions in the lifespan that occurs after childhood and before adulthood. This stage is accompanied with different changes in psychological, physiological social and cognitive domains, psychosocial problems, such as behavioral, emotional, and educational problems are highly prevalent among adolescents. Adolescents are vulnerable to psychosocial dysfunction when they suffer from physical injuries, psychological trauma, or major changes in their environments especially in the absent of strong support system. Adolescence period is critical times for developing good mental health. Mentally healthy adolescents enjoy a positive quality of life, are free of symptoms of psychopathology, and function well at home, in school, and in their communities ***(Timalsina et al., 2018)***.

Adolescence is an important period for both identity and social development; therefore, adolescents with acne lesions may experience behavioral and emotional problems during this sensitive period. Researches have been reported that individuals with acne experience dissatisfaction and shame due to their appearance and a decrease in self-confidence **(*Eyüboglu et al., 2017*).** Acne vulgaris (Av) is a chronic inflammatory disease that occurs when [hair follicles](https://en.wikipedia.org/wiki/Hair_follicle) are clogged with [dead skin cells](https://en.wikipedia.org/wiki/Keratinocytes) and [oil from the skin](https://en.wikipedia.org/wiki/Sebum). It is characterized by [blackheads or comedones papules, pustules, cysts, nodules, and occasionally scars. Whiteheads](https://en.wikipedia.org/wiki/Comedo), [pimples](https://en.wikipedia.org/wiki/Pimple), oily skin, and possible [scarring](https://en.wikipedia.org/wiki/Scar) occur most prominently at skin sites with a high density of sebaceous glands ***(Vary & Jr, 2015).***

Acne is commonly classified by severity as mild, moderate or severe. Based on the number, age of onset, type of lesions and the amount of skin. This type of categorization can be an important factor in determining the appropriate treatment regimen. Mild acne is classically defined as open (blackheads) and closed comedones (white heads) without inflammatory lesions limited to the face with occasional inflammatory lesions. Acne may be considered to be of moderate severity when a higher number of inflammatory papules and pustules occur on the face compared to mild cases of acne and acne lesions also occur on the trunk of the body. Severe acne is said to occur when nodules and cysts are the characteristics facial lesions and involvement of the trunk is extensive. Large nodules were previously referred to as cysts, and the term nodulocystic has been used in the medical literature to describe severe cases of inflammatory acne **(*Dessinioti et al., 2014).***

Moreover,AV is divided into non inflammatory and inflammatory lesions. Non inflammatory AV is characterized by presence of open comedones (black heads) or closed comedones (white heads) which begin as invisible microcomedones that proceed all other acne lesions. In contrast, inflammatory lesions consist of papules, which are raised erythematous lesions measuring less than 0.5 cm and pustules, which are papules with a visible collection of white pus at the surface. These lesions often enlarge. Becoming firm or indurated, and are termed nodules ***(Bhate &Wiliam, 2013)***. The onset of acne is observed over whelming in adolescence. Acne is more common in boys than girls during adolescence, but the incidence is higher in women during adulthood. Nodulocystic acne has an increased prevalence in white people compared with black people ***(Darren et al., 2016).***

According to epidemiological studies, acne vulgaris (AV) is a quite common condition, affecting approximately 80% of adolescents between 12 and 18 years of age ***(Vilar, 2015)***. It is estimated that virtually all adolescents will be affected by acne at some point in their life, with 15-20% suffering moderate-to-severe forms of the condition. The disease can also persist into adulthood, affecting 20-40% of all individuals ***(Aslan et al., 2017).***

The severity of the inflammatory reaction and the subsequent AV symptoms vary considerably in the affected subjects, in part because of individual genetic susceptibility. Acne vulgaris characterized by Local symptoms of acne vulgaris may include pain, tenderness, or erythema. Systemic symptoms are most often absent in acne vulgaris. In rare but severe cases, acne vulgaris could lead to acne conglobata, with highly inflammatory nodulocystic acne and interconnected abscesses. Acne fulminans is even more severe than acne conglobata, with systemic symptoms such as fever, joint pain, and general malaise. Acne produces symptoms familiar to all people. Cystic acne is even more visible because it is the most severe form and produces cysts and nodules alongside inflammatory papules and pustules. Acne can also cause visible scarring. Additionally, acne vulgaris may have a psychological impact on any patient, regardless of the severity or the grade of the disease ***(Tasuola et al., 2012)***.

All forms of acne can affect self-esteem and mood, but the risk of psychological distress is higher for cystic acne as it typically has a greater impact on the appearance of the face and disproportionately affects young adults who may be more socially sensitive. Most people with acne do not usually experience physical symptoms, but the skin's appearance can cause emotional distress. In cystic acne, however, the distress may be greater, and the cysts may be painful ***(MacGill, 2017)***.

Acne often causing severe psychosocial impairment. Patients with acne have been found to have lower self-esteem, low self-respect, depression, anxiety, feelings of social isolation, impaired relationships with others, social phobia, pain, indisposition , and weakened ability to focus on work and school ***(Darji et al., 2017).*** Since acne may affect quality of life as much as other systemic diseases and cause significant psychosocial difficulties in adolescents and especially in sensitive individuals, such negative effects are not surprising ***(Eyüboglu et al., 2017)***.

**Risk Factors:**

Acne may be caused by hormonal changes, family history(genetic), drugs, diets, infections, life style as (smoking, stress, hygiene and skin care), and clothing or sweat are risk factor, Conditions such as polycystic ovary syndrome, congenital adrenal hyperplasia, and Cushing syndrome may lead to the development of acne. These factors may aggravate or develop acne ***(Lavers, 2014).***

The hormonal changes are the biggest factor causing acne in adolescent teenage years. During puberty, levels of circulating androgen hormones increase dramatically, which causes an increase in sebum production; skin cells also begin to grow quicker. Other factors involved, include hormonal changes related to the menstrual cycle, pregnancy, birth control, the use of hormone therapy ***(MacGill, 2017).***

Hormonal activity during puberty, an increase in androgen causes the follicular glands to grow larger and make more sebum ***(Benner and sammons, 2013).*** A similar increase in androgens occurs during pregnancy, also leading to increased sebum production, people who lack androgenic hormones or are insensitive to the effects of androgens rarely have acne ***(kong and tey, 2013).*** True AV in adult women may be due to pregnancy or polycystic ovary syndrome ***(Housman and Reynolds, 2014).***

The premenstrual acne flare is well recognized. The pilosebaceous duct become smaller between days 15 and 20 of the menstrual cycle and the blockage leads to premenstrual acne. However, the mechanism for this blockage is not known. Certain physiological factors such as the menstrual cycle are thought to modify acne. 60-70 percent notices a deterioration of their acne in the week before menstruation. The lesions remaining more prominent for next 7-10days ***(Danby & William, 2015).***

Hormonal activity, such as occurs during menstrual cycles and puberty, may contribute to the formation of acne. During puberty, an increase in sex hormones called androgens causes the skin follicle glands to grow larger and make oilier sebum. Several hormones have been linked to acne, including the androgens testosterone, dihydrotestosterone (DHT), and dehydroepiandrosterone (DHEA); high levels of growth hormone (GH) and insulin-like growth factor 1 (IGF-1) have also been associated with worsened acne. Medical conditions that commonly cause a high-androgen state, such as polycystic ovary syndrome, congenital adrenal hyperplasia, and androgen-secreting tumors, can cause acne in affected individuals. Conversely, people who lack androgenic hormones or are insensitive to the effects of androgens rarely have acne. An increase in androgen and oily sebum synthesis may be seen during pregnancy ***(Housman & Reynolds, 2014).***

Often brought by an increase in hormones such as testosterone. Endocrine abnormalities such as those found during pregnancy or in polycystic ovarian syndrome in women of reproductive age may also lead to acne, regardless of medical history. One of the clinical characteristics of polycystic ovarian syndrome is hyperandrogenism, which increases sebum production and subsequent acne formation. These patients often have acne lesions not only on their faces, but also on their neck, chest, and upper back, where sebaceous glands are also prevalent. Sebaceous glands also respond to other hormones such as the corticotrophin-releasing hormone, which increases as a result of stress ***(Nast et al., 2012).***

Genetics is thought to be the primary cause of acne. The heritability of acne is almost 80% in first-degree relatives. As well as a frequent factor is excessive growth of the bacterium Propionibacterium acnes, this is normally present on the skin ***(Rao et al., 2017)***. Genetics are thought to play an important role, as the number and size of sebaceous glands and their activity is inherited. Twin studies show that the concordance rate for the prevalence and severity of acne is extremely high ***(Jorgensen et al., 2018)***. Several twin studies have assessed the heritability of acne and indicated a substantial genetic influence on familial clustering. However, the individual genes responsible for this high heritability remain unclear. Candidate gene-based studies have identified a few genetic variants associated with acne ***(Zhang et al., 2014).***

The predisposition to acne for specific individuals is likely explained by a genetic component, a theory which is supported by studies examining the rates of acne among twins and first-degree relatives. Severe acne may be associated with XYY syndrome. Acne susceptibility is likely due to the influence of multiple genes. Some genetic syndromes, such as Apert syndrome, are also associated with acne. SAPHO syndrome (synovitis, acne, pustulosis, hyperostosis, and osteitis) may be seen when acne and a variety of inflammatory bone disorders coexist ***(Banki et al, 2016).***

The overall prevalence of acne was associated with parent’s positive history of acne especially in both parents and the mother alone. Familial acne was more common in patients with moderate /severe acne than in those with mild acne, more severe forms of acne on the face were found in children whose mothers had a history of acne, indicating that mothers, acne is the most important factor that increase the risk of moderate/severe acne in children ***(karciauskiene et al., 2013).***

Acne may be caused by Certain drugs such as corticosteroids, bromides, lithium, antiepileptic, medications containing iodide and anticancer drugs may produce monomorphic acne and acneiform eruptions (dermatoses that resemble AV).The use of anabolic drugs induce severe forms of acne. Dioxin exposure can result in severe comedonal acne ***(kam, 2011).***

Dietary factors particularly high glycemic load diets as well as higher frequency of milk and ice cream have potentiating effects on serum insulin, which in turn, stimulate the production of sex hormones, thereby promoting the development of acne. Chocolate contain a varying amount of sugar that can lead to a high glycemic load and it can be with or without milk. There may be a relationship between acne and insulin metabolism and one trial found a relationship between acne and obesity. Vitamin b12 may trigger acneiform eruptions or exacerbate existing acne when taken in doses exceeding the recommended daily intake ***(Brescoll and Daveluy, 2015).*** Western diet, characterized by high glycemic load and high dairy protein consumption, has been suggested to be a fundamental nutritional factor promoting the acne epidemic ***(Melink and Zouboulis, 2013).***

It is widely suspected that the anaerobic bacterial species Propionibacterium acnes (P. acnes) contributes to the development of acne, but its exact role is not well understood. There are specific sub-strains of P. acnes associated with normal skin, and moderate or severe inflammatory acne. It is unclear whether these undesirable strains evolve on-site or are acquired, or possibly both depending on the person. These strains have the capability of changing, perpetuating, or adapting to the abnormal cycle of inflammation, oil production, and inadequate sloughing of dead skin cells from acne pores. Infection with the parasitic mite Demodex is associated with the development of acne; it is unclear whether eradication of the mite improves acne ***(Bhate & William, 2014).***

Cigarette smoking is known to increase the risk of developing acne. Although, the role of smoking in acne development is unclear. Several studies have documented positive correlation between smoking, the number of cigarettes consumed daily and acne development, whereas other studies showed no correlation or even a protective role of smoking. A potential mechanism by which smoking could induce acne is by increasing oxidative stress that results in a subsequent accumulation of lipid peroxide in comedones and an induction of phospholipaseA2-dependent inflammation signaling cascades ***(Yang et al., 2014).***

Hygiene does play a role in it. Acne is caused when pores are plugged up, which leads to accumulation of keratin, oil, and bacteria called P. Acne. Routine skin care regimen, like washing the face, changing pillow covers, removing makeup before going to bed, etc. Will reduce the likelihood of the pores on the skin being plugged up, thus leading to less acne on the face. There is no evidence to suggest an association between facial cleanliness and acne. While numerous facial cleansing regimens for acne patients are marketed, the efficacy for most of these products is unclear. Frequent face washing will also remove sebum from the skin surface, leading to skin dryness and irritation. Dermatologists have suggested that irritation from frequent washing may even lead to non-adherence to topical acne treatment, resulting in a poorer clinical outcome ***(Shing, 2017).***

**Relationship between psychological problems and acne:**

Stress, the key pathogenic element in the development of numerous der -matoses, remains the essential factor inducing or exacerbating preexisting acne. Immune system is affect by stress via neuropeptide receptors and release cytokines that affect central nervous system ***(Su et al., 2015)***. Stress induces the release of neuropeptides and hormones that are able to activate cells involved in acne pathogenesis response to physical or psychological stressors, the hypothalamus and pituitary gland release neuropeptides inducing the release of catecholamine and cortisone through the adrenal gland. Skin is able to related peptide, in response to stress ***(Misery et al., 2015).***

The activity of sebaceous glands is regulated by a multitude of hormonal and nerve factors. Chronic psychological stress increases adrenal androgen secretion, stimulates cytokine production, causes growth and increases activity of the sebaceous glands, thus exacerbating acne. This chronic skin disorder induces negative psychological and social effects such as anxiety, decreased self-esteem, depression, suicidal ideation and reduction in social functioning. It negatively affects body image and the psychological consequences of the disease are usually present for many years ***(Waluch et al., 2016).***

Stress may play a role in exacerbation of AV, and AV itself induces stress. Picking of the lesions will aggravate the appearance, which can be a particular problem in young adolescent female patients who present with acne excoriee. Stress severity strongly correlated with an increase in acne severity, and suggested that stress likely has an important role in the pathogenesis of acne ***(***[***Maleki***](https://www.ncbi.nlm.nih.gov/pubmed/?term=Maleki%20A%5BAuthor%5D&cauthor=true&cauthor_uid=29697695)***and*** [***Khalid***](https://www.ncbi.nlm.nih.gov/pubmed/?term=Khalid%20N%5BAuthor%5D&cauthor=true&cauthor_uid=29697695)***, 2018).*** Acne often causing severe psychosocial impairment. Patients with acne have been found to have lower self-esteem, low self-respect, depression, anxiety, feelings of social isolation, impaired relationships with others, social phobia, pain, indisposition , and weakened ability to focus on work and school ***(Darji et al., 2017).***

The psychological and social impacts of acne are a huge concern, especially because acne affects adolescents at a crucial period when they are developing their personalities ***(Oakley et al., 2014).*** The overall psychological impact resulting from acne can be similar to those resulting from other chronic disease. Acne causes a significant psychological and social morbidity, dissatisfaction with appearance, embarrassment, self-consciousness, lack of self-confidence, and social dysfunction such as reduced/avoidance of social interactions with peers and opposite sex, reduced employment opportunities leading to social isolation, bullying and stigmatization can occur. Acne can negatively influence the intension to participate in sports. Moreover, anger, preoccupation with acne, poor self-image, frustration or confusion, limitations in lifestyle, anxiety and depression are found to be more prevalent among acne patients ***(Kutlubay et al., 2017).*** Even suicidal ideation was found in 6–7% of acne patients ***(Hazarika & Archana, 2016).*** Teenagers with acne are more likely to become withdrawn and have conflicts with their friends and family ***(Knott, 2015).***

**Psychological problem among adolescents with acne vulgaris:**

The adolescent years are a time of significant physical, psychological, and social change. This is the period when the adolescent begins to form a sense of identity that is influenced by family, friends, and societal norms. Adolescence is a time of low self-esteem, high peer pressure, rebellion against authority, and struggles to establish independence. The young person who has concerns about appearance will frequently choose to miss school, work, or social events, thus increasing feelings of depression and isolation ***(Hosthota et al, 2016).***

Psychological problems are highly prevalent among patients with dermatological disorder. The frequency of psychiatric diseases in the patients presenting to dermatology clinics has been reported to be 25%–43%. Comorbidity of depression and dermatological disorders is around 30%. Rates of depression appears to be higher among those with acne, risk for depression (29.5%) were significantly higher in the patient group than those without. Depression was two to three times more prevalent in acne patients than in the general population ***(Jagtiani et al, 2017).***

Patients with acne are at increased risk for psychological problems including anxiety and depression that impact on person’s life compared to the normal population. Patients with acne feel loss of appetite, mild anhedonia, lethargy, pessimism, social withdrawal, and decreased compliance, mood disturbance, behavioral problems, wakefulness, spontaneous crying and feelings of unworthiness, or impaired school performance (lower grades or missed assignments), pains which have no identifiable physical cause, loss of interest in activities once favored. Severe depression from acne has resulted in attempted suicide and unfortunately, successful suicide ***(Mufaddel et al., 2017).***

Depression is state of low mood and aversion to activity that can affect a person’s thoughts, behavior, feelings and sense of wellbeing. People with depressed mood can feel sad, anxious, empty, hopeless, helpless, worthless, guilty, irritable, ashamed or restless guilt, hopelessness, and changes in appetite experience loss of appetite or overeating, sleep Insomnia, excessive sleeping and impact on daily functioning including work and school performance and social relationship. They may loss interest in activities that were once pleasurable, have problems concentrating, remembering details or making decisions, and may attempt or commit suicide, fatigue, aches, pains, digestive problems or reduced energy may also be present ***(Oakley et al., 2014).***This continues to affect psychopathological well-being in later life ***(Tuchayi et al., 2015).***

Girls with acne reported significantly higher levels of depressive symptoms, About 8.8%s of acne patients have shown symptoms that are sufficient to fulfill the criteria for the clinical diagnosis of depression, which is more commonly seen in female patients, the rate of depression was twice as high in women with acne than in men greater feelings of uselessness, and lower self-attitude, sense of pride, self-worth, and body satisfaction compared to girls without acne ***( Sorrell et al, 2016) and ( Danby& William, 2015).***

In addition to depression as psychological problems, AV can have a major impact on self-esteem and body image. Self-esteem is defined as “the reasonable or justifiable sense of one’s worth or importance”. As the evaluation that the individual makes and customarily maintains with regard to herself, it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes herself to be capable, significant and worthy. The development of self-esteem and personal identity is critical in young adults. A visible and potentially disfiguring skin disease can lead to interpersonal rejection and issues with social, vocational, and sexual competence, which in turn can have a negative impact on psychosocial status ***(***[***Gallitano***](https://www.sciencedirect.com/science/article/pii/S2352647517300849#!) ***&*** [***Berson,***](https://www.sciencedirect.com/science/article/pii/S2352647517300849#!) ***2018).***

Self-esteem plays a major role in this transition, both psychologically and socially. It is during this period of identity formation that positive or negative influences upon self-esteem can have long-term effects. One such negative influence with which adolescents are often faced is acne. Additionally, the age bracket of greatest incidence is adolescence and young adulthood, a period of identity formation and sexual maturation, frequently marked by lack of self-confidence and changes in social dynamics. The presence of acneic lesions, therefore, leads to greater decrease in self-esteem and behavioral alterations, for in this age bracket patients do not have the maturity to face the psychological impact caused by AV deforming lesions ***(Vilar et al., 2015).***

The skin is the largest organ of the body and serves as an important function in communicating with the world throughout the lifespan (***Datta et al., 2015) & (Tomas and Servando, 2016).*** The change in the skin’ s appearance may be complicated by a changed body image which may lead to psychological distress, anxiety, depression, anger, fear, shame, embarrassment, and bullying and stigmatization within peer groups. The influence of acne on body image is believed to be the main factor associated with psychological morbidity. As the face is almost always the site of involvement of acne, its presence can alter one's perception of body image ***(Mufaddel et al., 2017).***

Acne appeared predominantly affects face about 99% cases the face is the window that connects one’s consciousness with the outside world. The face is also an essential factor in how the outside world perceives an individual. More than any other part of the body, diseases that affect the appearance of the face can have severe emotional and psychological consequences. So, faced psychological problem such as dissatisfaction with appearance, embarrassment, self-consciousness, lack of self-confidence and social dysfunction such as reduced/avoidance of social interactions with peers and opposite gender, reduced employment opportunities have been documented. And also effect of disease lead to feeling guilt, shame, and social isolation and avoid eye contact ***(Chilicka et al., 2017).***

Skin diseases have had a negative impact on human beings, both in acceptance of their own image and self-esteem. Acne sufferers with low self-esteem may have some of these characteristics overly concerned with the image that other people see of them ***(Vilar et al., 2015).*** Body image is formed as a result of several factors such as social upbringing, community, culture, media, family and friends. Body image is one of the most important psychological factors that affects adolescents’ personality and behavior, because the adolescents view their body organs as separate parts, and each part plays a role in his/her personality. A positive self-concept may facilitate development of a positive evaluation of one’s body and serve as a buffer against events that threaten one’s BI. Conversely, poor self-esteem may heighten one’s BI vulnerability ***(Lama, 2016).***

Individuals who suffer from acne often feel ashamed of the lesions, and compensate in various ways. They may hide themselves by refusing to go out with others. Others may grow their hair long or hang it over their face to hide the lesions. Young males, who have acne over the shoulders, chest, or back, sometimes refuse to partake in sports like swimming because they have to change in public dressing rooms. Girls may opt for heavy makeup to hide current lesions or acne scars, without bothering about the possible flares the cosmetics might cause ***(Oakley et al., 2014).***

Acne is often un-aesthetic and can increase an individual’s self-consciousness and lead to social stigmatization, resulting in social withdrawal, underachievement at school or work, and even serious psychological problems. Teenagers are at high risk for BI impairments and the resulting loss of self-esteem ***(Lama, 2016).***

In addition to, body image involves perceptions, thoughts and behavior related to one's appearance. Perceived body image is influenced when individuals have a skin disease. Adolescent with acne suffer from Body image disturbance has been defined as “a persistent report of dissatisfaction, concern, and distress that is related to an aspect of appearance and some degree of impairment in social relations, social activities, or occupational functioning. The face is highly connected to one’s perception of body image; it is indisputable that the experience of acne can influence psychosocial disability ***(Alebachew & Ashagrie, 2017).***

People with body image disturbance perceive themselves as unattractive and they evaluate themselves negatively. These negative beliefs about their appearance often lead to anxiety, shame, sadness and depression which in turn lead to maladaptive coping strategies, such as excessive mirror gazing and/or avoidance behaviors. Sufferers of body image disturbance of often perceive themselves as vain when admitting how much importance they place on physical appearance, and the feeling of shame keeps them from talking about their worries ***(Vilar et al, 2015).***

Acne, especially when it affects the face, provokes cruel taunts from other teenagers. Some find it hard to form new relationships, especially with the opposite sex. At a time when teenagers are learning to form relationships, those with acne may lack the self-confidence to go out and make these bonds and may suffer many of the psychological and social symptoms. However some patients with only minor acne suffer from disturbed body image. Even in the absence of lesions, they consider they have severe acne and described above. They are said to have "dysmorphophobic acne"***(Oakley et al., 2014).***

Some children with acne refuse to go school, leading to poor academic performance. Some people with acne take sick days from work, risking their jobs or livelihood. Acne may reduce career choices, ruling out occupations such as modeling that depend upon personal appearance. Acne patients are less successful in job applications; their lack of confidence being as important as the potential employers' reaction to their spotty skin. More people who have acne are unemployed than people who do not have acne. Many adolescents with acne seek medical help as they enter the workforce, where they perceive that acne is unacceptable and that they "should have grown out of it by now"***(Oakley et al., 2014).***

There is good evidence to support the idea that acne and associated scarring negatively impact a person's psychological state, worsen mood, lower self-esteem, and are associated with a higher risk of anxiety disorders, depression, and suicidal thoughts. Another psychological complication of acne vulgaris is acne excoriée, which occurs when a person persistently picks and scratches pimples, irrespective of the severity of their acne. This can lead to significant scarring, changes in the affected person's skin pigmentation, and a cyclic worsening of the affected person's anxiety about their appearance ***(Fife, 2016) & (Bhate &William, 2014).***

**Prevention:**

The prevention of acne relies on the successful management of modifiable risk factors implicated in its development, including underlying systemic diseases and lifestyle factors. The timely and successful management of the underlying disease will prevent the presentation or persistence of acne as well as awareness of adolescent and their families through health education, lifestyle modification and ensuring healthful environment ***(Chiang et al., 2014)&(Zoubulis, 2014).***

Maintaining a good standard of personal hygiene is the best way for someone to prevent acne on the forehead. While some pimples may be inevitable, especially during puberty, washing regularly will help to minimize the risk of a significant outbreak occurring. Other acne prevention tips include, avoiding the wearing of tight-fitting hats or clothing that cover the forehead, avoiding the use of harsh skin products on the forehead, using face scrubs to deep cleanse the skin, avoiding the temptation to touch, scratch, or pick pimples on the forehead removing any makeup before going to bed, washing straight after sport or any activity that causes sweat to build on the forehead, washing the hands regularly throughout the day and avoiding prolonged exposure to the sun ***(Kandola, 2018).***

**Treatment and management of acne:**

Acne vulgaris requires prompt and effective treatment to reduce its impact psychosocial health. Providers who understand its pathogenesis and treatment can make a significant impact through effective treatment and psychological support **(Amy Zlomek & Judy Pedro, 2016).** The focus should be to treat without delay, to reduce or clear skin lesions with minimal side effects, to prevent physical and emotional scarring. Topical therapies should be the first option for treating acne. It is essential that topical therapies are applied correctly and regularly. Initial application may cause irritation and dryness, therefore short contact gradually increasing the frequency and duration will help to aid tolerability. Products must be applied to all acne-prone areas rather than just specific lesions to prevent follicle development ***(Lawton, 2018).***

Treatments work to clear away bacteria and dry up the excess oils that lead to acne. Different acne treatments include lifestyle remedies, topical medication, oral medication, and medical procedures. The treatment that’s right for each individual depending on his/her condition. If one’s have mild to moderate acne, such as whiteheads or blackheads, the treatment should be relatively easy. However, they have cystic or inflammatory acne; the treatment may be more challenging ***(Slowiczek & Pharm, 2016).***

Treating acne at the earliest opportunity is necessary to prevent scarring and minimize post-inflammatory hyperpigmentation in patients with darker skin, these secondary changes occur in this group because melanocytes in black skin have a heightened response to cutaneous stimulation and damage ***(Bianconi- moore, 2014).*** In treating adolescent patients with acne it is important that the healthcare professional takes into consideration the presence of psychological problems. Identifying a mood disorder, severe anxiety or a personality disorder. Therefore, a strong relationship of trust between the physician and the patient should be established. However, the impact of acne is not always easy to assess clinically, so it is important that clinicians intervene early to treat it, helping to reduce the risk of scarring and the psychological impacts of acne ***(Revol et al., 2015).***

Supportive friends and family are particularly important. Things like condition and concealer can make it easier to cope with acne in everyday life and feel more confident in public ***(Arowojolu et al., 2012).*** Certain issues, including the bodily changes they experience, can dominate a young person's thoughts. In an attempt to counteract the obsessive thinking and eliminate the associated stress, one approach is to engage in behaviours that give the adolescent a certain kind of peace of mind. For the current generation, these behaviours might include social media based activities and gaming ***(***[***Revol***](https://onlinelibrary.wiley.com/action/doSearch?ContribAuthorStored=Revol%2C+O)***et al., 2015).***

Skin conditions that have strong psychophysiological aspects, such as acne, may respond to some psychological therapy trials such as biofeedback, cognitive-behavior therapy, meditation or progressive relaxation that aim to provide stress management and to counteract stress. In management of patients with co-existing acne and psychiatric symptoms, it is better to avoid psychotropic medications that may cause drug-induced acne or exacerbate acne ***(Mufaddel et al, 2017).***

Attention should be paid to psychosomatic aspects, especially if there is suspicion of depressive-anxious disorders, particularly with evidence of suicidal tendencies, body dysmorphic disorders, or also of disrupted compliance. Therefore, patients who report particularly high emotional distress or dysmorphic tendencies because of the disease should be treated adequately, if possible, by interdisciplinary therapy. The dermatologist must have some knowledge of the basics of psychotherapy and psychopharmacology, which sometimes must be coupled with systemic and topical treatments of acne in conjunction with so-called psychosomatic basic treatment ***(*** [***Saker***](http://new.ejpsy.eg.net/searchresult.asp?search=&author=Athar+A+Saker&journal=Y&but_search=Search&entries=10&pg=1&s=0) ***et al., 2017).***

Cognitive behavioral therapy (CBT) is a recommended approach for people affected by appearance related issues such as acne. It is a collaborative approach, which means the psychologist works with the patient in exploring how acne has affected the mood, thoughts, and behavior. CBT can also help him/her to cope with any difficult emotions, build self- confidence, and deal with appearance. CBT is adapted for each person and for his or her specific problem. This psychological intervention can be effective in reducing symptom severity, reducing psychological distress and increasing the ability to control and adjust to acne vulgaris ***(Shah, 2014).***

Psycho educational Programs providing patients with detailed information about their acne disease, including an etiology, therapeutic options, and prognosis, can be helpful in enhancing compliance with treatment regimen. Additionally, psycho-education directed at educating the patient with regard to common emotional reactions to their acne disease can be helpful in reducing the patient’s sense of isolation ***(Tomas & Servando, 2016).***

Many people with mild acne or pimples can manage their condition with lifestyle changes. Oil is a major cause of acne, so it is important to keep the face clean and hair away from, especially if the hair tends to be greasy. Changing a pillowcase daily or weekly can help prevent this buildup. People can use specific home remedies to help balance the skin's oil levels, reduce inflammation, kill bacteria, and prevent future acne breakouts such as green tea, honey, never touching pimples and reducing stress ***(Huizen, 2018).*** Washing face twice to three times daily with lukewarm water and a gentle cleanser that’s not abrasive. Avoidance of scrubbing the skin too hard. This can aggravate skin even more. Also, trying not to use skin care products that can be irritating, such as scented lotions or oil-based makeup. Choosing moisturizers and sunscreens that are labeled “noncomedogenic.” This means that the product won’t clog the pores ***(Beylot et al., 2014).***

Education to avoid picking at acne is necessary because this may lead to scarring. Teaching should provide guidance about appropriate hygiene, including gentle, skin washing with a mild, nondrying soap and use of oil-free non comedogenic moisturizer and sunscreen. However educate patents about the need to wash hair regularly and avoid frequent handling of the skin. Cosmetics should be oil-free and noncomedogenic ***(Mooney &lavers, 2014).***

Avoiding foods with a high glycemic index. Try to eat foods as low in fat as possible. Avoid all hot foods and drinks until they have cooled to body temperature. Spicy- hot foods, too, can worsen acne. Stimulants, like cigarettes, coffee, soda, and tea should be avoided. These stimulants affect the central nervous system to provide a stimulant for the entire body. The result is more redness of the face or flushing and more sebaceous oil to potentially cause more acne so decrease stimulants and advice those eat fresh fruits and vegetables ***(Sinha, 2018).***

Reducing life stressors, time management skills reduce time-pressured periods. Sleeping seven hours or more per night. Exercise for stress reducing by making exercise fun without fatiguing. Drinking water also helps moisten the skin. Most importantly, sleep and water helps relieve stress and relax the body. Hence, effective management of dermatological illnesses often requires combined evaluation and management of emotional factors ***(Jagtiani et al., 2017).***

Educating a patient and about reasonable expectations, a medication regimen with multiple agents and treatment-related side effects can maximize both adherence and efficacy Patience is important because some therapies may take several weeks-up to 12-to show improvement ***(Lavers, 2014).***

**Role of Psychiatric Mental Health Nurse:**

Psychiatric mental health nursing is a specialized area of nursing practice, education and research which draws on unique knowledge from nursing and related health and social sciences to inform practice and to establish its disciplinary boundaries. The focus of psychiatric/mental health nursing is not on the origins of the diagnostic categories of diseases but on people’s relationships with their illness or with their health and unique lived human responses to distress such as grief, depression, loneliness, low self-esteem and body image disturbance. The goal of psychiatric mental health nursing is on achieving and maintaining optimal mental health, well-being, and quality of life as defined by those receiving care ***(International Society of Psychiatric- Mental Health Nurses, 2012, Stuart, 2012 and David, 2012).***

Psychiatric nurses are the front line providers of care. They are the groups called on most often to carry out selective reinforcement, modeling, education, awareness about the acne extinction, skills training, shaping and role playing. Because of their direct patient contact, nurses are best able to observe patients, assess problem area, and recommend targets for cognitive behavior interaction. Nurses also may function as planners and coordinators of a complex treatment program, consultants, and teacher of other nurses’ professionals, patients and their families in order to help patients to convey unacceptable behavior to an acceptable behavior for improving patients’ social skills ***(Townsend, 2014 & Stuart, 2012).***

Furthermore, the liaison nurse should give patients the opportunity to express their feelings, take time to listen to the patient, and help the patient to accept positive and negative feelings, the nurse should also, discuss the capabilities and the positive aspects of themselves, discuss with the patients about their abilities that can still be used to improve their self-esteem, help these patients stop viewing themselves as inferior to others who are better than they are at any task. And increase their satisfaction about their appearance, improve their relationship with other and encourage those attending social events such as weddings or consolation to reduce isolation and reduce depression in order to improve the patient well-being ***(Maimai, 2014).***

**The nurse as educator**

Nurses are often the link between patients and information about their illness and treatment as they provide teaching to the client about how to manage disease which is an essential part of a comprehensive plan of care. This includes teaching health practice to promote physical and psychological well- being ***(Jones et al., 2012).***The nurse should provide teaching to patients. So, they know when to contact with mental health professional, taking medication as prescribed, keeping regular follow up appointments. Through patient's education materials and efforts, mistaken ideas can be corrected and helpful information can be provided as changing patient's beliefs through action is also powerful in management of the disease ***(Boyd &Nihart, 2012).***

On other hand, nurse provides patient and family with information about acne. Advise the client that heat, humidity, and perspiration exacerbate acne. Explain that uncleanliness, dietary indiscretions, menstrual cycle, and other myths are not responsible for acne. Explain that it will take 4 to 6 weeks of compliance with the treatment regimen to obtain results. Instruct the client to wash his face gently (do not scrub) with mild soap twice daily. Instruct the client not to squeeze blackheads, not to prop hands on or rub the face, to wash hair daily and keep it off the face, and to use cosmetics cautiously because some may exacerbate acne. Instruct the female client to inform her health care provider if she is possibly pregnant ***(Lawton, 2018).***

Furthermore, there is a positive correlation between education and patient's compliance, so that the patient education must be an initial step for promoting medication adherence. It is approved that, providing patients with information about the proper use of medication, instructing them on how to deal with adverse effects such as explanations that these products initially cause skin redness and scaling but that the skin adjusts quickly, encouraging them to take their medication appropriately and giving them feedback on how they are doing and how they can improve are all to achieve the desired outcomes. In addition, patient education may also become a part of treatment by seeking to develop insight and addressing therapeutic issues ***(Chaiyajan et al., 2012).***

Psycho education is considered an important and ethically indispensable part of the comprehensive treatment of acne vulgaris. Teaching a patient about his/her illness can increase the patient’s coping skills and understanding of the early depressive symptoms and the stressful elements anticipated. Psycho education involves providing factual information about the condition of disease and the principles of its treatment, using a combination of teaching strategies. The goal of psycho education is behavioral change, which will lead to better treatment adherence ***(Muser&Jeste, 2014).***

**The nurse as counselor**

Psychiatric nurse can use therapeutic relationship to perform the role of counselor as she can help people to focus on goals and outcomes; help people develop strategies that support self-care and participate in decisions about their health, provide a range of services including: education, research and knowledge sharing and communication; provide an opportunity for people to work towards living in a more satisfying and resourceful way; use a range of counseling skills based on counseling models such as interpersonal psychotherapy, cognitive-behavioral therapy and solution-focused therapy to improve an individual’s psychological problems for patient with acne vulgaris ***(Fortanish& Holoday, 2012).***

**The nurse as advocate**

As the patient advocates, the nurse functions to protect rights of the patient through acceptance and support for decisions that are made. Compliance with treatment usually improves as the nurse demonstrates an empathetic positive regard for patient's needs. Empathy involves the nurse's willingness to understand the situation from the patient's perspective. By being willing to listen to the patient and encourage them to express their feeling ***(Rogers et al., 2013).***

**Role of psychiatric nurse toward psychological problems of adolescents with acne vulgaris:**

Providing support is one of the primary tasks of nurses. They are usually the main source of support for patients and families during illness and stress. Supportive care includes a set of general and special medical interventions carried out by a nurse to protect and comfort the patient and not just to treat his illness ***(Ebrahimi et al., 2014).*** Cognitive restructuring involves teaching patients that negative thoughts result from unhealthy thinking. These negative thoughts typically lead to behavior problems, such as a decline in previously healthy social relationships. Once patient understand the connection between unhealthy thinking and negative thoughts, they are better able to notice these detrimental behaviors. Nurses and other healthcare practioners will then teach them to replace their negative way of thinking with more positive thoughts ***(Sockol, 2015).***

Stress management. A variety of stress management techniques can be taught to adolescents, which can be used to help relieve symptoms of depression. One type of meditation that can be used to teach relaxation techniques to help reduce stress levels is mindfulness ***(Ames et al., 2014).*** Listening to certain types of music, particularly new-age music and classical music can increase feelings associated with relaxation. In addition, deep breathing has become increasingly important in recovery from depression because the practice of deep breathing stimulates parasympathetic nervous system, responsible for activities that occur when our body is at rest. It functions in an opposite manner to the sympathetic nervous system ***(Borhcard, 2016).***

CBT, Interpersonal therapy (IPT), and behavioral therapy have been proven effective in the treatment of depression. CBT helps people change their negative styles of thinking and behaving, and helps guard against relapse because people learn skills of how to reshape their thinking and behaviors, whereas IPT focuses on working through personal relationships that may contribute to depression and relieve complication of acne. Cognitive therapy focuses on monitor his/her negative, automatic thoughts. Cognitive therapy actively pursue the patient’s point of view, nurse used problem solving technique to help patient think beyond the immediate future and help patient to find solution to his problems***( Elizabeth & Varcarolis, 2017).***

Nursing intervention to depression among adolescents with acne, when first communicating with the patient, nurse must use simple, direct sentence, avoid complex sentences or directions. Encourage the patient to ventilate negative feelings about acne in whatever way is comfortable-verbal and nonverbal. Let the patient know the nurse will listen and accept what is being expressed, allow (and encourage) the patient to cry because crying is a healthy way of expressing feelings of sadness, hopelessness, and despair. Stay with and support the patient if he or she desire. Provide privacy; interact with patient on topics related to his/her problem such as acne and its complication. Do not probe for information, because topics that are unrelated to patients may be threating and discourage communication with other ***(Elizabeth & Varcarolis, 2017).***

Monitoring the patient mood, encourage the patient to participate in pleasant activities, developing route and structure in daily life. Encourage the patient to identify events that cause unpleasant emotional response to gaining insight that helps in developing self-control. Helping the patient to acquire new coping strategies to deal effectively with stressful situation by teaching him cognitive restructuring technique all these relieves the negative feeling ***(Fortinasfa& Warret, 2014).***

**How Can Nurses Help or Prevent Depression:**

There are certain things that Nurses can do to help prevent depression altogether. Encouraging outdoor activities, even when the patient doesn't feel like doing them, is an excellent way to combat depression. A healthy diet and a regular eating schedule help to improve depressive symptoms. New hobbies help patients realize fun activities they can engage in to be entertained, even though they may not be able to do everything they could once do. Many things Nurses do can help a depressed patient not feel so worthless, and sometimes even lift their spirits. Talking to patients about their feelings is a good first step in dealing with their depression. Being sympathetic helps they know that the nurse understand their feelings rather than judge them for how they feel so Nurse play an important role in dealing with depressed patients ***(Bettencourt, 2016).***

On other hand it is still important to remember to treat them as if they are all individual cases, and never group them together. Accept their feelings toward current situation. Trying to find reason with them about their problems. Then reassure them of depression treatments. A little reassurance could make all the difference in a depressed patient's outlook. The caring compassionate attitude that Nurses are known for could be exactly what a depressed patient needs and how effective they are. Let them know that treatment has high success rates, and they can work with their doctor to find the best treatment options ***(Bettencourt, 2016).***

In nursing intervention for depressed patient nurse must maintain safe environment to patient. The nurse must establish rapport and demonstrate respect for the patient to facilitate the patient’s willingness to communicate his or her thoughts and feelings with nurse. Assist the patient with verbalizing feelings to promote a healthy and expressive form of communication. Identify the patient’s social support system, and encourage the patient to use it to minimize isolation and loneliness and to provide assistance with monitoring the illness and its treatment. Supported from loved ones conveys caring and concern and helps to promote functioning. Praise the patient for attempts at alternate activities and interactions with others to encourage socialization and to promote self-esteem ***(Patricia et al., 2016).***

Moreover, nurse assists the patient in establishing daily goals and expectation to promote structure and direction and to minimize cognitive difficulties. Assist the patient with identification of negative, self-defeating thoughts and with modifying them into more realistic thoughts to promote more accurate and positive thoughts about the self and others because patient with depression focus on negative. Teach the patient and his or her significant others about the patient’s disorder and its treatment when the patient is able to learn to increase knowledge, to promote adherence to treatment, and to minimize guilt regarding the disorder. Gradually increase levels of activity and exercise for patient with depression to minimize fatigue and to increase activity tolerance. Identify sources of external stress and assist the patient with coping with these stressors in a more effective manner to minimize stressors and to promote adaptive coping mechanism ***(Patricia et al., 2016).***

People are experiencing depression they can often feel very isolated. They may feel that don’t have the energy to socialize so depressed people must form important relationships. However, these relationships may be potentially helpful in getting through this tough time. Encourage anyone who depressed to communicate their needs to people they love and trust. Relaxation consider most effective way to coping with stress through make time during the day to relax there are many ways to relax-yoga, reading, listening to a relaxation tape relaxation exercise used to help depressed people to proper sleep such as muscular relaxation exercise. Depression can effect on people’s appetite so encourage the patients to eat regular, appropriate amounts ***(Elizabeth & Varcarolis, 2017).***

Together the nurse and the patient might discuss fears and feeling and encourage the patient to share feelings with family members, peers, and staff. Another approach is to help the patient to modify behavior and learn new ways of coping with stress. The nurse may act as a role model or engage the patient in role playing. This activity can decrease fears about new responses to problem situation ***(Gail, 2014).***

Self- hypnosis can make a person more yielding than normal, patients who lack self-esteem can be taught self-hypnotic techniques which can induce relaxation and strengthen their self-esteem. Specifically, once the patient is in a self-hypnotic state the therapist can communicate messages to the patient, allowing the relaxation and strengthening process to occur. When teaching self-hypnosis, a word or phrase should be stated to the patient for them to repeat. This will not work unless the patient deliberately uses the word or phrase to hypnotize themselves ***(Halland and Earle, 2013).***

The nurse should teach the patients with low self-esteem, to make a list of his/her positive qualities write down at least ten positive qualities about the self and return to this list as often as needed to boost his morale. Stop comparing one’s self to others. Compliment himself regularly either by looking in the mirror and saying something like about himself / herself or writing it in a journal, simply smile, focus on his/her accomplishments, forgive factors affecting self-esteem and remember only positives factors. Find something special in each day, do something pleasant and rewarding, like catching up on the favorite television show, reading books, eat better and dress clean clothes, and spend more time with supportive people and less time with destructive people ***(Simms, 2013).***

In addition to the nursing role for improving adolescent with low self-esteem as the following: it is important for a nurse to help patient to achieve something positive, through communication of nurse acceptance to patient as a worthwhile human being increases self-esteem, spend time with client; this conveys to the patient that feels ones worth all time, assist client in identifying positive aspects of self and in developing plans and give positive reinforcement for problem identification and development of more adaptive coping behaviors, positive reinforcement enhances self-esteem and increases patient’s use of acceptable behavior ***(Townsend, 2011).***

Nursing intervention for adolescent with acne who have low self-esteem 1- determine patient’s perception of appearance and the meaning of it to detect the cause or contributing factor to assist patient. 2- identify response of family or significant others to the patient change in appearance. 3- Discuss and assist with planning. Provide hope, but avoid giving false reassurance. 4- provide an open environenent and trusting relationship to facilitate patient’s ability to deal with current situation 5- make patient do list successes and strengths and provide positive feedback to help patient develop internal self-worth and new coping behaviors. 6- Assess content of negative self-talk because self-blame, shame, and guilt promote feelings of low self-esteem ***(Doenges et al., 2014).***

Other things nurse can do to improve self-esteem for adolescents with acne such as help client formulate goals for self not related to eating and create a manageable plan for reaching those goals, one at a time, progressing from simple to more complex, note patient’s withdrawal from or discomfort in social settings, encourage patient to take charge of own life in a more healthful way by making own decisions and accepting self as she or he is at this moment. Let client know that it is acceptable to be different from family, particularly mother. Encourage client to express anger and acknowledge when it is verbalized. Assist client to learn strategies other than eating for dealing with feelings. Have client keep a diary of feelings, particularly when thinking about food ***(Doenges et al., 2014).***

Nurse must convey an accepting attitude, encourage patient to express self openly, an accepting attitude enhance trust and communicate to the patient that you believe he\she is worthwhile person, regardless of what is expressed. Make patient focus on positive attributes if self-esteem is to be enhanced. Encourage discussion of past accomplishments and offer support in undertaking new tasks because recognition and positive reinforcement enhance self-esteem and encourage repetition of desirable behavior. Encourage patient not attention to undesirable behaviors this discourage to their repetition. And assist patient to avoid ruminating about past failure, withdraw attention if client persists. Bringing positive aspects of patients may not see it this help to change perception [***(Kornhaber***](https://www.ncbi.nlm.nih.gov/pubmed/?term=Kornhaber%20R%5BAuthor%5D&cauthor=true&cauthor_uid=27789958) ***et al., 2016)***

Nursing intervention to improve self-esteem: 1. Listen to client’s comments and responses to situation Rationale: Active listening provides clues to patient’s view of self, role changes, needs, and level of acceptance. 2. Assess dynamics of patient including patient’s role in family and cultural factors, rationale: patient’s previous role in family unit is disrupted or altered by injury. 3. Involving patient in family unit reduces feelings of social isolation, helplessness, and uselessness. 4. Provide accurate information. Discuss concerns about prognosis and treatment honestly at patient’s level of acceptance, because, open discussion of treatment and prognosis may focus on current and immediate needs. 5. Discuss meaning of change with patient and Assess interactions between patients because Actual change in body image may be different from that perceived by patient ***(Doenges et al., 2014).***

Moreover, Accept patient and show concern for individual as a person, identify and build on patient’s strengths; give positive reinforcement for progress noted, rationale: Genuine concern and regard for the client as an individual establishes therapeutic atmosphere for self-acceptance and encouragement and allowing patient to make decisions and participate in self-care activities, as possible, rationale: Encouraging client participation in care decision making recognizes that patient is still responsible for own life and provides some sense of control over situation ***(Doenges et al., 2014).***

Nurses must establish a rapport with adolescents to promote verbalization of fears, encourage adolescents to be responsible for treatment and follow up and give positive reinforcement because responsibility reinforces sense of self-esteem and encourage the adolescents to become involved with school activities and peers because involvement in activities help enhance self-esteem and allows the adolescents to explore new experiences and friendships ***( Gilwayne, 2017).***

The nurse should teach the patients that, it is possible to improve self-esteem and to change a negative perception of oneself into a positive one. Teach the patients to make a list of strengths and positive attributes, learn to accept compliments, don’t keep putting self-down, stop apologizing, try new things, spend time with people who help to feel good about self, treat self with respect and consideration, smile at other people and look them in the eye, and be aware of the body language this help build confidence and rebuild self-esteem ***(Carelse, 2014).***

Moreover, nurse must accept expression of feelings of frustration, dependency, anger and grief, recognize the normalcy of response to the actual or perceived change in body shape or function and discuss with patient about the normalcy of body image disturbance and the grief process and teach the patient adaptive behavior (use of adaptive equipment, wings, cosmetics, clothing) that conceals the altered body part or enhances the shape of the body ***(Gilwayne, 2017).***

The nurse must encourage the patient to separate feelings about their appearance from feelings about self-worth, positive remarks by the caregiver may encourage the patient to develop more positive responses to his or her body image, giving into negative feelings of the patient’s appearance, teach the patient phrases they can use when people ask about their appearance (ex, when people ask about their appearance, instruct them to respond with what is different about you that make you unique) and encourage the patient to look and touch his disturbed part frequently and educate caregiver of the patient to help them understand and accept their change in appearance ***(MacGinley, 2016) .***

**SUBJECT AND METHODS**

**Aim of the Study:**

The present study was carried out to examine the psychological problems of adolescent related to acne vulgaris (depressive symptoms, body image and self-esteem) through-

1. Assessing the presence of depressive symptoms in patients with acne vulgaris.
2. Assessing the perceived body image in patients with acne vulgaris.
3. Assessing the self-esteem in patients with acne vulgaris.
4. Examining the relation between the degree of acne with the severity of depressive symptoms, self-esteem and body image perception in acne vulgaris patients.

***R*esearch Question*:***

What are psychological problems of adolescent related to acne vulgaris?

1. ***Research Design:***

A descriptive correlational design was utilized to achieve the aim of the study.

1. ***Research Setting:***

The study was conducted at the Outpatient Clinic of the Dermatological Hospital in Benha City beside the Psychiatric & the Chest Hospital, it has three entrances, and the first entrance is for buying the consultation tickets & the pharmacy, the second leads to three clinics numbered as 3, 4, 5, and physical therapy. The third leads to two clinic numbered as 1, 2. It’s the most specialist hospital for dermatological disorder in Qilyubia; this hospital was selected due to the high number of patients selecting help there.

1. **Research Subject:*-***

All patients visiting the clinic at this period. A convenience sample of 200 patients fulfilled the inclusion and exclusion criteria during the spring season were selected.

**Inclusion criteria**

1. Both sexes (male- female)
2. patients at adolescent age group
3. Medically diagnosed as acne vulgarity
4. Willing to participate in the study

**Exclusion criteria**

1- Subjects with history of a known mental disorder

2- Subjects with somatic diseases such heart, pulmonary and joint disease

**Tools of Data Collection:**

In order to achieve the aims of the study, the following tools will be used:-

**Tool(1):** **Structured Interview Questionnaire**:

This tool was developed by the researcher based on pertinent literature and guidance of supervisors to elicit information about:

A**-** Socio-Demographic characteristics of the study sample as (code, age, sex, marital status, grade of education and occupation, etc………)

B- Clinical data: which include: history, age of first appearance of acne vulgaris, number of visit to dermatologist, response to medication, seasonal variation and acne degree)

**Tool (2):** **Beck Depression Inventory**

This scale was originally developed by **Beck (1966)**, translated into Arabic by **Ghareeb (1989**), to measure depressive symptoms. It includes 21 questions as sadness, pessimism, past failure, loss of pleasure, guilty feelings, punishment feelings; self-dislike& self-criticalness .Each question was answered from 0-3 grad. Total Score of depressive symptoms scale was categorized as follows: 0-13: indicates no depression, 14-19: indicates mild depression, 20-28: indicates moderate depression and 29 -63: indicates severe depression.

**Tool (3): Rosenberg Scale**

This scale was developed by **Rosenberg (1965)**,to assess self-esteem. It consists of 10 items classified into negative sentences and Positive sentences Each question is answered from 0-3 scores in positive sentence 0 means strongly disagree, 1 means disagree, 2 means agree, 3 means strongly agree but negative sentences 0 means strongly agree, 1 means agree, 2 means disagree, 3 means strongly disagree

Total Scoring system of self- esteem scale was categorized as follows:

* 0-10: indicate low self- esteem
* 11-20: indicate moderate self-esteem
* 21-30: indicate high self-esteem

**Tool (4): Body Image Scale**

This scale was developed by **Gamal (2016)**, to measure body image among patients with acne vulgaris. It Includes 30-items, Each question is answered from 0 to 3 grade where no negative body image scored as 0, mild negative body image scored as 1, moderate negative body image scored as 2, highly negative body image scored as 3, appositively the negative items scored

Scoring system of body image scale was categorized as follows:

* 0-13 :indicate no negative body image
* 14-43 :indicate mild negative body image
* 44-73 : indicate moderate negative body image
* 74 -90 : indicate highly negative body image

**Methods of the study**

**The preparatory phase:-**

An extensive literature related to the study area was done including electronic dissertation, available books, articles, doctoral dissertation, research and peer interaction, and idea from external sources and periodicals. A review of literature to formulate knowledge base relevant to the study area was also done to get a clear picture of all aspects related to the research topic.

**Validity of the tools:-**

Tools were provided to a jury of three experts in Psychiatric Nursing Field. Tools were checked for the relevancy, clarity comprehensiveness and applicability of the questions. The tools proved to be valid according to their opinions.

**Reliability of the tools:**

It was applied by the researcher for testing the internal consistency of the tools by administration of the same tools to the same subjects under similar condition on one occasion. Answer from repeated testing were compared (test – retest reliability) the tools revealed strongly reliable at .86 for Beck Scale, .67 for Rosenberg Scale and .93 for Body Image Scale.

**Approval:**

Official letter from the Faculty of Nursing Benha University to all authorized personal of the dermatology hospital to conduct the study was done. Oral consent of the subjects was taken to participate in the study. Full explanation about the aim of the study was explored

**Consent and Ethical consideration**

All subjects were informed that participation in the study is voluntary; no name will be included in the questionnaire sheet. Anonymity and confidentiality of each participant will be respected and protected, confidentiality was assured and subjects were informed that the content of the tool will be used for research purpose only and they had the right to refuse to participate in the study or withdraw at any time without any consequences.

**Pilot study**

A pilot studywas done after the development of the tools and before starting data collection. It was conducted on 20 patients of acne vulgaris at the outpatient clinic of the Dermatological Hospital in Benha City. Using the tools of the study (1), (2), (3) and (4). The purpose of the pilot study was to test the clarity, applicability and feasibility of the tools. In addition to, it served to estimate the approximate time needed for interviewing the patients as well as to find any problems that might interfere with data collection. After obtaining results of pilot study, modifications of tools were done. A final format was developed under the guidance of supervisors. Those patients were excluded from the actual study.

**Field work: (procedure of data collection)**

Beforedata collected an official letter was addressed from Faculty of Nursing Benha University to the Director of Benha Dermatologic Hospital at the above mentioned setting for requesting their permission and cooperation to conduct the study. All of the authorized personnel provided needed information about the purpose and the importance of the study. The patient who fit the inclusion and exclusion criteria was approached by the researcher to fill the questionnaire according to the following:-

1. The researcher introduced herself to the patients then explained the aim of the study to each one of them.
2. Oral consent will be obtained from every participant who fulfills the inclusion criteria
3. A brief description about the purpose of the study and the type of questionnaire required for filling was given to each participant
4. The researcher visited the selected site to collect data from subjects from out patients clinic in Dermatologic Hospital in spring season
5. Questionnaire sheets were distributed between patients in clinic and they were asked to fill them individually. Each interview lasted from 15to 30 minute
6. An individual interview was conducted for illiterate participant to help them to fill the questionnaire.
7. The period of study were from beginning of march, 2018 till beginning of June,2018 about two days per week (Saturday-Monday) at 9am to 12am

**Statistical analysis:**

Data collected from the study was coded, revised and entered using PC. Data entry and statistical analysis were done using the Statistical Package for Social Science (SPSS) version 20; Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, mean and standard deviation for quantitative variables. Qualitative variables were compared using the chi-square test and correlation coefficient was used to measure the direction and strength of the correlation between variables. A statistical significant difference was considered if p was <.005. A very highly statistical significant difference was considered if p was <0.001.

**Table (1): Frequency Distribution Socio Demographic Data of the Studied Sample.**

|  |  |  |
| --- | --- | --- |
| **Socio-Demographic Data** | **N** | % |
| **Sex** | | |
| Male | 30 | 15.0 |
| Female | 170 | **85.0** |
| **Age** | | |
| 12 to less 15 | 18 | 9.0 |
| 15 to less17 | 49 | 24.5 |
| 17to less 19 | 133 | **66.5** |
| Mean± SD | **15.4±2.08** | |
| **Residence** | | |
| Rural | 146 | **73.0** |
| Urban | 54 | 27.0 |
| **Education** | | |
| Illiterate | 7 | 3.5 |
| Basic education | 18 | 9.0 |
| Diploma | 73 | 36.5 |
| High graduate | 102 | **51.0** |
| **Work** | | |
| Unemployed | 144 | **72.0** |
| Employed | 56 | 28.0 |
| **Marital** | | |
| Married | 40 | 20.0 |
| Single | 160 | **80.0** |

This table shows that: Majority of the sample is female (85%). Regarding age, mean age is 15.4±2.08 years. More than half of studied sample (51%) are highly educated and most of them (80%) are single.

**Table (2): Frequency Distribution of the Clinical Data of the Studied Sample**

|  |  |  |
| --- | --- | --- |
| **Clinical Data** | N | % |
| **Family history of acne** | | |
| Yes | 126 | **63.0** |
| No | 74 | 37.0 |
| **Numbers visit to dermatologist in month** | | |
| one visit | 93 | **46.5** |
| two visits | 61 | 30.5 |
| Three visits | 16 | 8.0 |
| More than three visits | 30 | 15.0 |
| Mean± SD | **2.02±1.33** | |
| **Response to treatment** | | |
| Yes | 130 | **65.0** |
| No | 70 | 35.0 |
| **How long did it take for the appearance of response** | | |
| After two weeks | 39 | 30.0 |
| After one month | 39 | 30.0 |
| After two months | 37 | 28.5 |
| More than two months | 15 | 11.5 |
| **Age of first appearance of acne** | | |
| Less than 12 | 39 | 30.0 |
| 12 to less 15 | 39 | 30.0 |
| 15 to less 17 | 37 | 28.5 |
| 17 to 18 | 15 | 11.5 |
| Mean± SD | **15.4±2.08** | |
| **In any seasonal acne increase in appearance** | | |
| In Winter | 35 | 17.5 |
| In spring | 16 | 8.0 |
| In Summer | 145 | **72.5** |
| In Autumn | 4 | 2.0 |

This table reveals that, near to two third (63%) of studied samples have a positive history of acne, 65% of them are responsive to treatment. Nearly three-quarters of the studied samples (72.5%) shows an increase of acne in summer and the mean age of first appearance to acne was 15.4±2.08 years

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Beck Depression Scale Items** | **Severe** | | **Moderate** | | **Mild** | | **No** | |
| **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |
| Sadness | 12 | 6.0 | 22 | 11.0 | 105 | **52.5** | 61 | 30.5 |
| Pessimism | 29 | **14.5** | 26 | 13.0 | 59 | 29.5 | 86 | 43.0 |
| Past failure | 3 | 1.5 | 44 | 22.0 | 35 | 17.5 | 118 | 59.0 |
| Loss of pleasure | 19 | 9.5 | 33 | 16.5 | 82 | 41.0 | 66 | 33.0 |
| Guilty feelings | 6 | 3.0 | 45 | 22.5 | 48 | 24.0 | 101 | 50.5 |
| Punishment feelings | 11 | 5.5 | 31 | 15.5 | 78 | 39.0 | 80 | 40.0 |
| Self-dislike | 6 | 3.0 | 19 | 9.5 | 43 | 21.5 | 132 | 66.0 |
| Self-criticalness | 18 | 9.0 | 64 | **32.0** | 57 | 28.5 | 61 | 30.5 |
| Suicidal thoughts or wishes | 5 | 2.5 | 18 | 9.0 | 44 | 22.0 | 133 | **66.5** |
| Crying | 26 | 13.0 | 27 | 13.5 | 57 | 28.5 | 90 | 45.0 |
| Irritability | 14 | 7.0 | 16 | 8.0 | 88 | 44.0 | 82 | 41.0 |
| Loss of interest | 10 | 5.0 | 27 | 13.5 | 68 | 34.0 | 95 | 47.5 |
| Indecisiveness | 8 | 4.0 | 59 | 29.5 | 69 | 34.5 | 64 | 32.0 |
| Worthlessness | 10 | 5.0 | 37 | 18.5 | 64 | 32.0 | 89 | 44.5 |
| Loss of energy | 14 | 7.0 | 42 | 21.0 | 69 | 34.5 | 75 | 37.5 |
| Changes in sleeping pattern | 18 | 9.0 | 27 | 13.5 | 90 | 45.0 | 65 | 32.5 |
| Tiredness or fatigue | 12 | 6.0 | 34 | 17.0 | 97 | 48.5 | 57 | 28.5 |
| Changes in appetite | 15 | 7.5 | 14 | 7.0 | 87 | 43.5 | 84 | 42.0 |
| Weight loss | 15 | 7.5 | 19 | 9.5 | 36 | 18.0 | 130 | 65.0 |
| Loss of interest in sex | 14 | 7.0 | 22 | 11.0 | 54 | 27.0 | 110 | 55.0 |
| Preoccupation with health | 25 | **12.5** | 16 | 8.0 | 57 | 28.5 | 102 | 51.0 |

**Table (3): Frequency Distribution of the Level of Beck Depressive Symptoms.**

This table shows that, more than half of studied samples (52.5%) suffered from mild sadness. While 14.5%, have severe symptoms of pessimism. Around one-third (32%) suffered from moderate self-criticalness and about 12.5% of them have severe preoccupation about health.

**Figure (1): Level of Depressive Symptoms in the Studied Sample**

This figure illustrate that nearly three quarter of the studied sample have depressive symptoms ranged from mild ,moderate and severe (33%), (27.5%) and (13%) respectively.

**Table (4):** **Relationship between Sex and Depressive Symptoms among the Studied Sample**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sex** | **Depressive Symptoms** | | | | | | | | | |
| **No** | | **Mild** | | **Moderate** | | **Severe** | | **X²** | **p-value** |
| N | % | N | % | N | % | N | % |  |  |
| Male | 11 | 20.8 | 10 | 15.2 | 8 | 14.5 | 1 | 3.8 | 3.92 | 0.27 |
| Female | 42 | 79.2 | 56 | 84.8 | 47 | 85.5 | 25 | 96.2 |
| **Total** | 53 | 26.5 | 66 | 33 | 55 | 27.5 | 26 | 13 |

˃ .05 No statistically significant.

This table shows that mild, moderate& severe depressive symptoms in the studied sample are higher among female in comparison with male with no statistical significant difference.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Socio-demographic**  **characteristics** | | | **Beck Depressive Symptoms Score** | | | | | | | | | | |
| No  (n=53) | | Mild (n=66) | | Moderate (n=55) | | severe (n=26) | | X2 | | p-value |
| N | % | N | % | N | % | N | % |  | |  |
| **Sex** | | | | | | | | | | | | | |
| Male | | 11 | | 20.8 | 10 | 15.2 | 8 | 14.5 | 1 | 3.8 | 3.92 | 0.27 | |
| Female | | 42 | | **79.2** | 56 | **84.8** | 47 | 85.5 | 25 | **96.2** |
| **Age** | | | | | | | | | | | | | |
| 12 to less 15 | | 1 | | 1.9 | 8 | 12.1 | 7 | 12.7 | 2 | 7.7 | 6.75 | 0.344 | |
| 15 to less17 | | 13 | | 24.5 | 14 | 21.2 | 13 | 23.6 | 9 | 34.6 |
| 17to less 19 | | 39 | | 73.6 | 44 | 66.7 | 35 | 63.6 | 15 | 57.7 |
| **Residence** | | | | | | | | | | | | | |
| Rural | | 37 | | 69.8 | 50 | 75.8 | 43 | 78.2 | 16 | 61.5 | 3.01 | 0.39 | |
| Urban | | 16 | | 30.2 | 16 | 24.2 | 12 | 21.8 | 10 | 38.5 |
| **Education** | | | | | | | | | | | | | |
| Illiterate | | 2 | | 3.8 | 1 | 1.5 | 3 | 5.5 | 1 | 3.8 | 6.59 | 0.67 | |
| Basic education | | 3 | | 5.7 | 7 | 10.6 | 7 | 12.7 | 1 | 3.8 |
| Diploma | | 17 | | 32.1 | 23 | 34.8 | 23 | 41.8 | 10 | 38.5 |
| High graduate | | 31 | | 58.5 | 35 | 53.0 | 22 | 40.0 | 14 | 53.8 |
| **Work** | | | | | | | | | | | | | |
| Unemployed | | 35 | | 66.0 | 52 | 78.8 | 40 | 72.7 | 17 | 65.4 | 3.022 | 0.388 | |
| Employed | | 18 | | 34.0 | 14 | 21.2 | 15 | 27.3 | 9 | 34.6 |
| **Marital** | | | | | | | | | | | | | |
| Married | 11 | | | 20.8 | 15 | 22.7 | 9 | 16.4 | 5 | 19.2 | 0.79 | 0.85 | |
| un married | 42 | | | 79.2 | 51 | 77.3 | 46 | 83.6 | 21 | 80.8 |

**Table (5): Relation between Socio-Demographic Characteristics and Depressive Symptoms of the Studied Sample.**

˃ 0.05 No statistically significant.

This table shows that, there is no statistically significant difference between Socio-Demographic Characteristics (sex, age, residence, income &marital status) of the studied samples and beck depressive symptoms.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Clinical Data** | **Beck Depressive Symptoms Scale** | | | | | | | | | | | |
| No (n=53) | | | Mild (n=66) | | moderate (n=55) | | Severe (n=26) | | X2 | p-value | |
| N | | % | N | % | N | % | N | % |  |  | |
| **Family history of acne** | | | | | | | | | | | | |
| Yes | | 30 | 56.6 | 42 | 63.6 | 37 | 67.3 | 17 | 65.4 | 1.43 | 0.69 | |
| No | | 23 | 43.4 | 24 | 36.4 | 18 | 32.7 | 9 | 34.6 |
| **Numbers visit to dermatologist in month** | | | | | | | | | | | | |
| One visit | | 29 | 54.7 | 26 | 39.4 | 27 | 49.1 | 11 | 42.3 | 5.85 | 0.75 | |
| Two visits | | 13 | 24.5 | 23 | 34.8 | 16 | 29.1 | 9 | 34.6 |
| Three visits | | 4 | 7.5 | 7 | 10.6 | 2 | 3.6 | 3 | 11.5 |
| More than three visits | | 7 | 13.2 | 10 | 15.2 | 10 | 18.2 | 3 | 11.5 |
| **Response to treatment** | | | | | | | | | | | | |
| Yes | 32 | | 60.4 | 44 | 66.7 | 38 | 69.1 | 16 | 61.5 | 1.12 | 0.77 | |
| No | 21 | | 39.6 | 22 | 33.3 | 17 | 30.9 | 10 | 38.5 |
| **If yes after what response occur** | | | | | | | | | | | | |
| After two weeks | 13 | | 24.5 | 15 | 22.7 | 15 | 27.3 | 6 | 23.1 | 10.63 | | 0.56 |
| After one month | 7 | | 13.2 | 19 | 28.8 | 17 | 30.9 | 5 | 19.2 |
| After two months | 10 | | 18.9 | 13 | 19.7 | 9 | 16.4 | 5 | 19.2 |
| More than two months | 7 | | 13.2 | 6 | 9.1 | 3 | 5.5 | 5 | 19.2 |
| **Age of first appear of acne** | | | | | | | | | | | | |
| Less than 12 | 7 | | 13.2 | 3 | 4.5 | 7 | 12.7 | 3 | 11.5 | 5.22 | | 0.81 |
| 12 to less 15 | 17 | | 32.1 | 18 | 27.3 | 14 | 25.5 | 7 | 26.9 |
| 15 to less 17 | 16 | | 30.2 | 22 | 33.3 | 19 | 34.5 | 7 | 26.9 |
| 17 to18 | 13 | | 24.5 | 23 | 34.8 | 15 | 27.3 | 9 | 34.6 |
| **In any seasonal acne increase in appearance** | | | | | | | | | | | | |
| In Winter | 7 | | 13.2 | 14 | 21.2 | 11 | 20.0 | 3 | 11.5 | 4.73 | | 0.85 |
| In spring | 3 | | 5.7 | 7 | 10.6 | 4 | 7.3 | 2 | 7.7 |
| In Summer | 42 | | 79.2 | 43 | 65.2 | 39 | 70.9 | 21 | 80.8 |
| In Autumn | 1 | | 1.9 | 2 | 3.0 | 1 | 1.8 | 0 | 0.0 |

**Table (6): Relation between Clinical Data and Depressive Symptoms of the Studied Sample.**

˃ 0.05 No statistically significant.

This table illustrates that, there is no statistically significant difference between clinical data of the studied samples and beck level of depressive symptoms P >.005.

**Table (7): Frequency Distribution of Items of Rosenberg Self-Esteem Score of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Rosenberg self-esteem scale items** | **Strongly disagree** | | **Disagree** | | **Agree** | | **Strongly agree** | |
| N | % | N | % | N | % | N | % |
| I feel that I am a person of worth, at least on an equal plane with others. | 110 | **55.0** | 71 | 35.5 | 14 | 7.0 | 5 | 2.5 |
| I feel that I have a number of good qualities. | 75 | 37.5 | 109 | **54.5** | 15 | 7.5 | 1 | .5 |
| All in all, I am inclined to feel that I am a failure | 28 | 14.0 | 98 | 49.0 | 53 | 26.5 | 21 | 10.5 |
| I am able to do things as well as most other people | 64 | 32.0 | 97 | 48.5 | 22 | 11.0 | 17 | 8.5 |
| I feel I do not have much to be proud of | 31 | 15.5 | 63 | 31.5 | 73 | 36.5 | 33 | 16.5 |
| I take a positive attitude toward my self | 57 | 28.5 | 87 | 43.5 | 48 | 24.0 | 8 | 4.0 |
| On the whole , I am satisfied with my self | 55 | 27.5 | 92 | 46.0 | 41 | 20.5 | 12 | 6.0 |
| I wish I could have more respect for my self | 10 | 5.0 | 23 | 11.5 | 82 | 41.0 | 85 | **42.5** |
| I certainly feel useless at times | 4 | 2.0 | 80 | 40.0 | 84 | 42.0 | 32 | 16.0 |
| At times I think I am no good at all | 24 | 12.0 | 57 | 28.5 | 91 | **45.5** | 28 | 14.0 |

This table shows that, about more than half of studied samples (55%) strongly disagree about feeling that he is a person of worth, at least on an equal plane with others. More than half of them, (54.5%) disagree about feeling that he has a number of good qualities. Around half of studied samples (45.5%) agree that he is not good at all and (42.5%) of them strongly agree about he wish he could have more respect for himself.

**Figure (2):** Level of Self-Esteem among the Studied Sample.

This figure illustrates that, around three- quarters (70%) of studied sample have moderate level of self-esteem while only around one-fifth of them (18.5%) have high level of self-esteem.

**Table (8):** Relationship between Sex and Self-Esteem among the Studied Sample.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sex | Self –Esteem | | | | | | | |
| Low | | Moderate | | High | | X² | p-value |
| N | % | N | % | N | % |  |  |
| Male | 4 | 13.3 | 17 | 56.7 | 9 | 30.0 | 3.52 | 0.17 |
| Female | 19 | 11.2 | 123 | 72.4 | 28 | 16.5 |
| Total | 23 | 11.5 | 140 | 70.0 | 37 | 18.5 |

˃ 0.05 No statistically significant.

This table illustrate that, higher self-esteem are among male than female with no statistical significant difference between them.

**Table (9):** Relation between Socio-Demographic Characteristics and level of Self-Esteem of the studied sample**.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Socio-Demographic**  **Characteristics** | **Self- Esteem Score** | | | | | | | | | |
| **Low (n=23)** | | **Moderate (n=140)** | | **High (n=37)** | | **X²** | **p-value** | | |
| **N** | **%** | **N** | **%** | **N** | **%** |  |  | | |
| **Sex** | | | | | | | | | | |
| Male | 4 | 17.4 | 17 | 12.1 | 9 | 24.3 | 3.52 | | | 0.17 |
| Female | 19 | 82.6 | 123 | 87.9 | 28 | 75.7 |
| **Age** | | | | | | | | | | |
| 12 to less 15 | 5 | 21.7 | 11 | 7.9 | 2 | 5.4 | 7.38 | | | 0.117 |
| 15 to less17 | 7 | 30.4 | 35 | 25.0 | 7 | 18.9 |
| 17to less 19 | 11 | 47.8 | 94 | 67.1 | 28 | 75.7 |
| **Residence** | | | | | | | | | | |
| Rural | 15 | 65.2 | 103 | 73.6 | 28 | 75.7 | 0.86 | | 0.64 | |
| Urban | 8 | 34.8 | 37 | 26.4 | 9 | 24.3 |
| **Education** | | | | | | | | | | |
| Illiterate | 2 | 8.7 | 3 | 2.1 | 2 | 5.4 | 13.84 | | **0.031** | |
| Basic education | 3 | 13.0 | 14 | 10.0 | 1 | 2.7 |
| Diploma | 13 | 56.5 | 50 | 35.7 | 10 | 27.0 |
| High graduate | 5 | 21.7 | 73 | 52.1 | 24 | 64.9 |
| **Work** | | | | | | | | | | |
| unemployed | 16 | 69.6 | 100 | 71.4 | 28 | 75.7 | 0.33 | | | 0.84 |
| Employed | 7 | 30.4 | 40 | 28.6 | 9 | 24.3 |
| **Marital** | | | | | | | | | | |
| Married | 2 | 8.7 | 33 | 23.6 | 5 | 13.5 | 3.92 | | | 0.14 |
| un married | 21 | 91.3 | 107 | 76.4 | 32 | 86.5 |

\* statistically significant.

This table reveals that, there is only statistical significant difference between level of education and self-esteem while no statistically significant difference between the remaining items of socio demographic data of the studied sample and self-esteem score.

**Table (10): Relation between Clinical Data and level of Self-Esteem of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Clinical Data** | **Self-Esteem Scale** | | | | | | | | | |
| Low (n=23) | | Moderate (n=140) | | | | High (n=37) | | X2 | p-value |
| N | % | N | | | % | N | % |  |  |
| **Family history of acne** | | | | | | | | | | |
| Yes | 15 | 65.2 | | 85 | | 60.7 | 26 | 70.3 | 1.2 | 0.54 |
| No | 8 | 34.8 | | 55 | | 39.3 | 11 | 29.7 |
| **Numbers visit to dermatologist in month** | | | | | | | | | | |
| One visit | 8 | 34.8 | | | 65 | 46.4 | 20 | 54.1 | 7.18 | 0.304 |
| Two visits | 5 | 21.7 | | | 45 | 32.1 | 11 | 29.7 |
| Three visits | 4 | 17.4 | | | 10 | 7.1 | 2 | 5.4 |
| More than three visits | 6 | 26.1 | | | 20 | 14.3 | 4 | 10.8 |
| **Response to treatment** | | | | | | | | | | |
| Yes | 15 | 65.2 | | | 92 | 65.7 | 23 | 62.2 | 0.16 | 0.92 |
| No | 8 | 34.8 | | | 48 | 34.3 | 14 | 37.8 |
| **If yes after what response occur** | | | | | | | | | | |
| After two weeks | 5 | 21.7 | | | 37 | 26.4 | 7 | 18.9 | 4.9 | 0.76 |
| After one month | 5 | 21.7 | | | 35 | 25.0 | 8 | 21.6 |
| After two months | 6 | 26.1 | | | 26 | 18.6 | 5 | 13.5 |
| More than two months | 3 | 13.0 | | | 13 | 9.3 | 5 | 13.5 |
| **Age of first appear of acne** | | | | | | | | | | |
| Less than 12 | 3 | 13.0 | | | 12 | 8.6 | 5 | 13.5 | 5.77 | 0.44 |
| 12 to less 15 | 6 | 26.1 | | | 41 | 29.3 | 9 | 24.3 |
| 15 to less 17 | 11 | 47.8 | | | 42 | 30.0 | 11 | 29.7 |
| 17 to 18 | 3 | 13.0 | | | 45 | 32.1 | 12 | 32.4 |
| **In any seasonal acne increase in appearance** | | | | | | | | | | |
| In Winter | 5 | 21.7 | | | 21 | 15.0 | 9 | 24.3 | 6.42 | 0.37 |
| In spring | 0 | 0.0 | | | 14 | 10.0 | 2 | 5.4 |
| In Summer | 18 | 78.3 | | | 101 | 72.1 | 26 | 70.3 |
| In Autumn | 0 | 0.0 | | | 4 | 2.9 | 0 | 0.0 |

˃ 0.05 No statistically significant.

This table illustrates that, there is no statistically significant difference between clinical data of the studied sample and self-esteem p>.005.

**Table (11): Frequency Distribution of the Items of Body Image Score in the Studied Sample.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Body Image Scale Items** | **Highly** | | **Moderate** | | **Mild** | | **Never** | |
| N | % | N | % | N | % | N | % |
| Look at my formative negative look. | 39 | 19.5 | 98 | **49.0** | 44 | 22.0 | 19 | 9.5 |
| I see that I am constrained by my body. | 23 | 11.5 | 70 | 35.0 | 30 | 15.0 | 77 | 38.5 |
| Some email features my face. | 42 | 21.0 | 69 | **34.5** | 33 | 16.5 | 56 | 28.0 |
| I would rather stay at home than go on a trip with my colleagues | 49 | 24.5 | 55 | 27.5 | 40 | 20.0 | 56 | 28.0 |
| I feel people do not see me as attractive | 41 | 20.5 | 83 | 41.5 | 39 | 19.5 | 37 | 18.5 |
| I try to avoid looking at the women in my room | 31 | 15.5 | 68 | 34.0 | 35 | 17.5 | 66 | 33.0 |
| I feel that my body parts are different from others. | 31 | 15.5 | 45 | 22.5 | 53 | 26.5 | 71 | 35.5 |
| I feel unable to understand the nature of my body. | 25 | 12.5 | 73 | 36.5 | 41 | 20.5 | 61 | 30.5 |
| Avoid attending social events such as weddings or consolation. | 50 | 25.0 | 62 | 31.0 | 35 | 17.5 | 53 | 26.5 |
| I am sad when I look at my shape in women. | 38 | 19.0 | 63 | 31.5 | 33 | 16.5 | 66 | 33.0 |
| I feel dissatisfied with my body. | 32 | 16.0 | 62 | 31.0 | 38 | 19.0 | 68 | 34.0 |
| Most of my friends seem to look better than me. | 53 | 26.5 | 75 | 37.5 | 30 | 15.0 | 42 | 21.0 |
| I see that my clothes are less worthy than my colleagues. | 25 | 12.5 | 51 | 25.5 | 29 | 14.5 | 95 | 47.5 |
| I refuse to wear bathing suits at the resort. | 67 | 33.5 | 49 | 24.5 | 24 | 12.0 | 60 | 30.0 |
| I see that my form is ugly and disgusting. | 19 | 9.5 | 37 | 18.5 | 26 | 13.0 | 118 | **59.0** |
| I accept my body as it is. | 26 | 13.0 | 21 | 10.5 | 59 | 29.5 | 94 | 47.0 |
| I feel it is better to change my shape and face. | 28 | 14.0 | 72 | 36.0 | 25 | 12.5 | 75 | 37.5 |
| I see that there is a contradiction between my thoughts and formality | 34 | 17.0 | 66 | 33.0 | 53 | 26.5 | 47 | 23.5 |
| I feel embarrassed by my appearance when I go out with my colleagues. | 33 | 16.5 | 61 | 30.5 | 27 | 13.5 | 79 | 39.5 |
| My physical appearance worries me. | 34 | 17.0 | 65 | 32.5 | 34 | 17.0 | 67 | 33.5 |
| The distortions present in my body | 108 | **54.0** | 50 | 25.0 | 16 | 8.0 | 26 | 13.0 |
| I needed cosmetic surgery to create consistency in my body. | 39 | 19.5 | 47 | 23.5 | 31 | 15.5 | 83 | 41.5 |
| I have no confidence in me. | 35 | 17.5 | 59 | 29.5 | 35 | 17.5 | 71 | 35.5 |
| I avoid mixing people with my feelings that they do not accept my formality. | 21 | 10.5 | 63 | 31.5 | 23 | 11.5 | 93 | 46.5 |
| Judging people depending on the shapes of their bodies. | 29 | 14.5 | 29 | 14.5 | 26 | 13.0 | 116 | **58.0** |
| I see that I enjoy people's acceptance. | 11 | 5.5 | 18 | 9.0 | 68 | **34.0** | 103 | 51.5 |
| People move away from their feeling that they are strange. | 21 | 10.5 | 38 | 19.0 | 36 | 18.0 | 105 | 52.5 |
| I'm worried about my physical defects | 33 | 16.5 | 56 | 28.0 | 34 | 17.0 | 77 | 38.5 |
| I cannot stay long where people live | 45 | 22.5 | 63 | 31.5 | 28 | 14.0 | 64 | 32.0 |
| I cannot interact with people in a natural way because of my body | 42 | 21.0 | 39 | 19.5 | 24 | 12.0 | 95 | 47.5 |

This table shows that, near to quarter of the studied sample cannot interact with people in a natural way because of his body and cannot stay long where people live. More than half (54%) of studied sample feel much distortions present in his body. Near to half of them (49%) sometimes look at his formative negative look.

**Figure (3):** Frequency Distribution of Studied Sample Regarding Level of Negative Body Image among the Studied Sample**.**

This figure reveals that, majority of the studied sample have negative body image ranged from mild, moderate and severe (46.5%), (32%) and (11%) respectively.

**Table (12):** **Relationship between Sex and Negative Body Image among the Studied Sample.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sex** | **Negative Body Image** | | | | | | | | | |
| **No** | | **Mild** | | **Moderate** | | **High** | | **X²** | **p-value** |
| **N** | **%** | **N** | **%** | **N** | **%** | **N** | **%** |  |  |
| Male | 2 | 6.7 | 14 | 46.7 | 10 | 33.3 | 4 | 13.3 | 0.68 | 0.87 |
| Female | 19 | 11.2 | 79 | 46.5 | 54 | 31.8 | 18 | 10.6 |
| **Total** | 21 | 10.5 | 93 | 46.5 | 64 | 32.0 | 22 | 11.0 |

˃.05 No statistical significant

This table demonstrates that, male have high level of negative body image than female with no statistical significant difference between them

**Table (13):** **Relation between Socio-Demographic Characteristics and Level of Negative Body Image of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Socio-demographic**  **Characteristics** | **Body Image Score** | | | | | | | | | | | | | |
| **No**  **(n=21)** | | **Mild (n=93)** | | | **Moderate (n=64)** | | | **High (n=22)** | | | **X²** | **p-value** | |
| **N** | **%** | **N** | | **%** | **N** | **%** | | **N** | **%** | |  |  | |
| **Sex** | | | | | | | | | | | | | | |
| Male | 2 | 9.5 | 14 | | 15.1 | 10 | 15.6 | 4 | | 18.2 | | 0.68 | 0.87 | |
| Female | 19 | 90.5 | 79 | | 84.9 | 54 | 84.4 | 18 | | 81.8 | |
| **Age** | | | | | | | | | | | | | | |
| 12 to less 15 | 2 | 9.5 | 8 | 8.6 | | 7 | 10.9 | 1 | | 4.5 | | 4.86 | | 0.56 |
| 15 to less17 | 2 | 9.5 | 23 | 24.7 | | 16 | 25.0 | 8 | | 36.4 | |
| 17to less 19 | 17 | 81.0 | 62 | 66.7 | | 41 | 64.1 | 13 | | 59.1 | |
| **Residence** | | | | | | | | | | | | | | |
| Rural | 11 | 52.4 | 73 | | 78.5 | 46 | 71.9 | | 16 | 72.7 | | 5.99 | | 0.11 |
| Urban | 10 | 47.6 | 20 | | 21.5 | 18 | 28.1 | | 6 | 27.3 | |
| **Education** | | | | | | | | | | | | | | |
| Illiterate | 0 | 0.0 | 5 | | 5.4 | 2 | 3.1 | | 0 | 0.0 | | 14.3 | | 0.11 |
| Basic education | 1 | 4.8 | 13 | | 14.0 | 2 | 3.1 | | 2 | 9.1 | |
| Diploma | 5 | 23.8 | 28 | | 30.1 | 30 | 46.9 | | 10 | 45.5 | |
| High graduate | 15 | 71.4 | 47 | | 50.5 | 30 | 46.9 | | 10 | 45.5 | |
| **Work** | | | | | | | | | | | | | | |
| Unemployed | 14 | 66.7 | 70 | | 75.3 | 45 | 70.3 | | 15 | 68.2 | | 1.03 | | 0.79 |
| Employed | 7 | 33.3 | 23 | | 24.7 | 19 | 29.7 | | 7 | 31.8 | |
| **Marital** | | | | | | | | | | | | | | |
| Married | 6 | 28.6 | 18 | | 19.4 | 14 | 21.9 | | 2 | | 9.1 | 2.76 | 0.42 | |
| Un married | 15 | 71.4 | 75 | | 80.6 | 50 | 78.1 | | 20 | | 90.9 |

˃ .05 No statistically significant.

This table illustrate that, there is no statistically significant difference between all items of socio demographic characteristics of the studied sample and level of negative body image.

**Table (14): Relation between Clinical Data and Body Image of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Clinical Data** | **Body Image Scale** | | | | | | | | | | |
| **No (n=21)** | | | **Mild** | | **Moderate (n=64)** | | **High (n=22)** | | **X2** | **p-value** |
| **N** | | **%** | **N** | **%** | **N** | **%** | **N** | **%** |  |  |
| **Family history of acne** | | | | | | | | | | | |
| Yes | | 13 | 61.9 | 61 | 65.6 | 43 | 67.2 | 9 | 40.9 | 5.36 | 0.14 |
| No | | 8 | 38.1 | 32 | 34.4 | 21 | 32.8 | 13 | 59.1 |
| **Numbers visit to dermatologist in month** | | | | | | | | | | | |
| One visit | | 11 | 52.4 | 42 | 45.2 | 25 | 39.1 | 15 | 68.2 | 14.89 | 0.094 |
| Two visits | | 6 | 28.6 | 33 | 35.5 | 20 | 31.3 | 2 | 9.1 |
| Three visits | | 1 | 4.8 | 4 | 4.3 | 7 | 10.9 | 4 | 18.2 |
| More than three visits | | 3 | 14.3 | 14 | 15.1 | 12 | 18.8 | 1 | 4.5 |
| **Response to treatment** | | | | | | | | | | | |
| Yes | | 13 | 61.9 | 65 | 69.9 | 39 | 60.9 | 13 | 59.1 | 1.86 | 0.6 |
| No | | 8 | 38.1 | 28 | 30.1 | 25 | 39.1 | 9 | 40.9 |
| **If yes after what response occur** | | | | | | | | | | | |
| After two weeks | | 4 | 19.0 | 23 | 24.7 | 14 | 21.9 | 8 | 36.4 | 9.67 | 0.64 |
| After one month | | 4 | 19.0 | 23 | 24.7 | 15 | 23.4 | 6 | 27.3 |
| After two months | | 5 | 23.8 | 16 | 17.2 | 14 | 21.9 | 2 | 9.1 |
| More than two months | | 1 | 4.8 | 13 | 14.0 | 4 | 6.3 | 3 | 13.6 |
| **Age of first appear of acne** | | | | | | | | | | | |
| Less than 12 | | 3 | 14.3 | 9 | 9.7 | 6 | 9.4 | 2 | 9.1 | 8.07 | 0.52 |
| 12 to less 15 | | 4 | 19.0 | 25 | 26.9 | 22 | 34.4 | 5 | 22.7 |
| 15 to less 17 | | 5 | 23.8 | 28 | 30.1 | 20 | 31.3 | 11 | 50.0 |
| 17 to 18 | | 9 | 42.9 | 31 | 33.3 | 16 | 25.0 | 4 | 18.2 |
| **In any seasonal acne increase in appearance** | | | | | | | | | | | |
| In Winter | | 8 | 38.1 | 17 | 18.3 | 9 | 14.1 | 1 | 4.5 | 16.46 | 0.05\* |
| In spring | | 2 | 9.5 | 5 | 5.4 | 8 | 12.5 | 1 | 4.5 |
| In Summer | | 11 | 52.4 | 70 | 75.3 | 44 | 68.8 | 20 | 90.9 |
| In Autumn | | 0 | 0.0 | 1 | 1.1 | 3 | 4.7 | 0 | 0.0 |

0.05\* mean statistical significant

˃0.05 mean no statistical significant

This table illustrates that, there is statistically significant relationship between seasonal acne increase in appearance and body image P>.005 while there is no statistically significant difference between the remaining other items of clinical data of the studied sample and body image.

**Figure (4):** **Level of Acne Degree among the Studied Sample.**

This figure illustrate more than half of studied sample (58.5%) have moderate acne degree, about one-third of them (32.5%) have mild acne degree.

**Table (15):**  **Relation between Acne degree and Sex.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sex** | **Acne Degree** | | | | | | | |
| **Mild (n=65)** | | **Moderate (n=117)** | | **Severe (n=18)** | | **X²** | **p-value** |
| N | % | N | % | N | % |  |  |
| Male | 6 | 9.2 | 20 | 17.1 | 4 | 22.2 | 2.83 | 0.24 |
| Female | 59 | 90.8 | 97 | 82.9 | 14 | 77.8 |
| Total | 65 | 32.5 | 117 | 58.5 | 18 | 9 |

˃.05 No statistical significant

This table shows that female have higher mild, moderate and severe acne degree than male with no statistical significant difference between acne degree and gender P>.005

**Table (13):** **Relation between Socio-Demographic Characteristics and Acne Degree among the Studied Sample.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Socio-Demographic** | **Acne Degree** | | | | | | | | |
| **Mild (n=65)** | | | **Moderate (n=117)** | | **Severe(n=18)** | | **X²** | **p-value** |
| **N** | | **%** | **N** | **%** | **N** | **%** |  |  |
| **Sex** | | | | | | | | | |
| Male | | 6 | 9.2 | 20 | 17.1 | 4 | 22.2 | 2.83 | 0.24 |
| Female | | 59 | 90.8 | 97 | 82.9 | 14 | 77.8 |  |  |
| **Age** | | | | | | | | | |
| 12 to less 15 | | 3 | 4.6 | 14 | 12.0 | 1 | 5.6 | 8.16 | 0.08 |
| 15 to less17 | | 11 | 16.9 | 31 | 26.5 | 7 | 38.9 |  |  |
| 17to less 19 | | 51 | 78.5 | 72 | 61.5 | 10 | 55.6 |  |  |
| **Residence** | | | | | | | | | |
| Rural | | 51 | 78.5 | 84 | 71.8 | 11 | 61.1 | 2.36 | 0.30 |
| Urban | | 14 | 21.5 | 33 | 28.2 | 7 | 38.9 |  |  |
| **Education** | | | | | | | | | |
| Illiterate | | 1 | 1.5 | 5 | 4.3 | 1 | 5.6 | ? |  |
| Basic education | | 6 | 9.2 | 10 | 8.5 | 2 | 11.1 | ? |  |
| Diploma | | 23 | 35.4 | 42 | 35.9 | 8 | 44.4 | ? |  |
| High graduate | | 35 | 53.8 | 60 | 51.3 | 7 | 38.9 | ? |  |
| **Work** | | | | | | | | | |
| unemployed | | 45 | 69.2 | 88 | 75.2 | 11 | 61.1 | 1.9 | 0.38 |
| Employed | | 20 | 30.8 | 29 | 24.8 | 7 | 38.9 |  |  |
| **Marital** | | | | | | | | | |
| Married | | 12 | 18.5 | 27 | 23.1 | 1 | 5.6 | 3.13 | 0.2 |
| un married | | 53 | 81.5 | 90 | 76.9 | 17 | 94.4 |  |  |

˃ 0, 05 No statistically significant.

This table shows that: there is no statistical significant relation between acne degree and socio-demographic characteristics of the studiedsample.

**Table (14):** **Relation between Both of Beck Depressive Symptoms, Self-Esteem, and Body Image with Acne Degree of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **All Scale** | **Acne Degree** | | | | | | | |
| **Mild (n=65)** | | **Moderate (n=117)** | | **Severe (n=18)** | | **X2** | **p-value** |
| **N** | **%** | **N** | **%** | **N** | **%** |  |  |
| **Total Beck score** | | | | | | | | |
| NO | 23 | 35.4 | 29 | 24.8 | 1 | 5.6 | 33.82 | **0.000\*\*** |
| Mild | 26 | 40.0 | 38 | 32.5 | 2 | 11.1 |
| Moderate | 14 | 21.5 | 35 | 29.9 | 6 | 33.3 |
| Severe | 2 | 3.1 | 15 | 12.8 | 9 | 50.0 |
| **Total Self -esteem score** | | | | | | | | |
| Low | 4 | 6.2 | 14 | 12.0 | 5 | 27.8 | 11.24 | 0.024 |
| Moderate | 53 | 81.5 | 79 | 67.5 | 8 | 44.4 |
| High | 8 | 12.3 | 24 | 20.5 | 5 | 27.8 |
| **Total Body image score** | | | | | | | | |
| No | 10 | 15.4 | 9 | 7.7 | 2 | 11.1 | 36.48 | **0.000\*\*** |
| Mild | 38 | 58.5 | 54 | 46.2 | 1 | 5.6 |
| Moderate | 12 | 18.5 | 45 | 38.5 | 7 | 38.9 |
| High | 5 | 7.7 | 9 | 7.7 | 8 | 44.4 |

\*\*Highly statistical significant.

This table reveals that, there is high statistically significant relation between acne degree and depressive symptoms. There is high statistically significant relation between acne degree and body image and there is no statistically significant relation between acne degree and self-esteem.

**Table (18): Relation between Level of Depressive Symptoms and Level of Self -Esteem of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Beck Score** | **Self – Esteem** | | | | | | | |
| **Low** | | **Moderate** | | **High** | | **X²** | **p-value** |
| N | % | N | % | N | % | 24.52 | **0.000\*\*** |
| No | 1 | 4.3 | 35 | 25.0 | 17 | 45.9 |
| Mild | 5 | 21.7 | 46 | 32.9 | 15 | 40.5 |
| Moderate | 11 | 47.8 | 40 | 28.6 | 4 | 10.8 |
| Severe | 6 | 26.1 | 19 | 13.6 | 1 | 2.7 |

\*\* High statistical significant

This table shows there is highly statistical significant relation between level of self-esteem and level of depressive symptoms p<.005

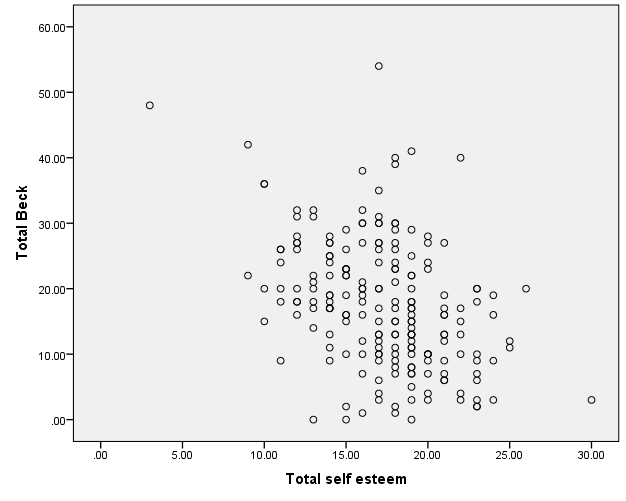


Figure (5) shows relation between level of depressive symptoms and level of self-esteem of the studied sample. It reveals that there is highly statistical significant relation between level of self-esteem and level of depressive symptoms p<.005.

**Table (19): Relation between Level of Depressive Symptoms and Level of Body Image of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Beck Score** | **Body Image Score** | | | | | | | | | |
| No | | Mild | | Moderate | | High | | X2 | p-value |
| N | % | N | % | N | % | N | % |  |  |
| No | 6 | 28.6 | 32 | 34.4 | 12 | 18.8 | 3 | 13.6 | 17.06 | **0.048\*** |
| Mild | 11 | 52.4 | 27 | 29.0 | 21 | 32.8 | 7 | 31.8 |
| Moderate | 3 | 14.3 | 26 | 28.0 | 17 | 26.6 | 9 | 40.9 |
| Severe | 1 | 4.8 | 8 | 8.6 | 14 | 21.9 | 3 | 13.6 |

\* Statistical significant

This table shows that, there is statistical significant relation between level of body image and level of depressive symptoms p<.005.

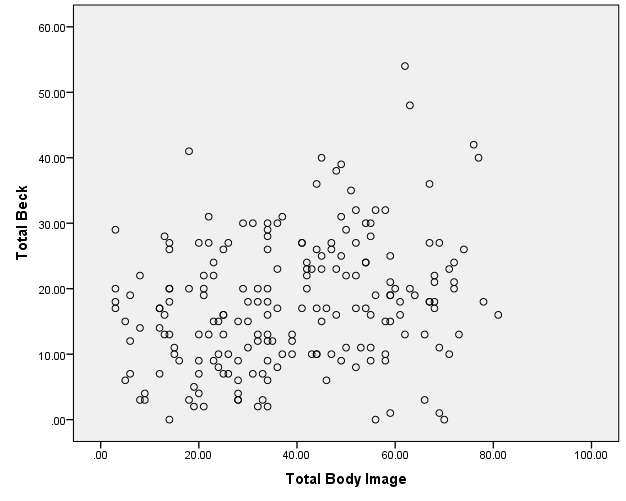


Figure (6): shows Relation between level of depressive symptoms and level of Body Image of the studied sample. It illustrates that there is statistical significant relation between level of body image and level of depressive symptoms p<.005

**Table (20): Relationship between Level of Body Image and level of Self -Esteem of the Studied Sample.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Self- Esteem** | **Body Image Score** | | | | | | | | | |
| No | | Mild | | Moderate | | High | | X2 | p-value |
| N | % | N | % | N | % | N | % |  |  |
| Low | 0 | 0.0 | 6 | 6.5 | 9 | 14.1 | 8 | 36.4 | 34.6 | **0.000\*\*** |
| Moderate | 12 | 57.1 | 64 | 68.8 | 51 | 79.7 | 13 | 59.1 |
| High | 9 | 42.9 | 23 | 24.7 | 4 | 6.3 | 1 | 4.5 |

\*\*High statistical significant.

This table shows that there is highly statistical significant relation between level of body image and level of self-esteem p<.005

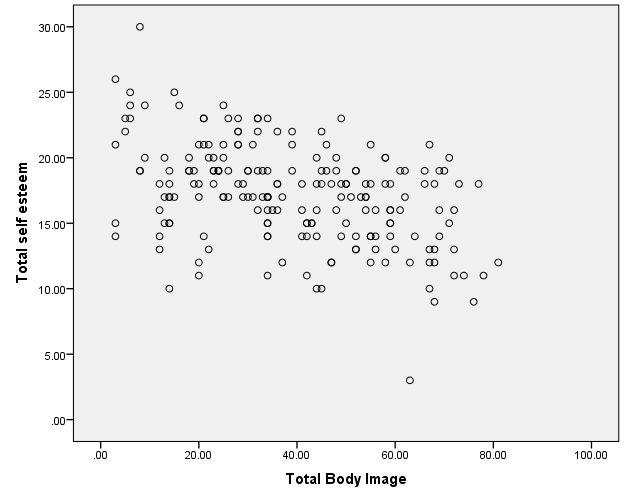


Figure (7): Shows relationship between level of body image and level of self-esteem of the studied sample. It reveals that there is highly statistical significant relation between level of body image and level of self-esteem p<.005.

**Table (21): Correlation between Total Score of Beck Depressive Symptoms, Self- Esteem, Acne Degree and Body Image.**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Total** | **Self-esteem** | | **Negative body image** | | | **Acne degree** | |
| r | P-value | | r | P-value | r | P-value |
| Depressive symptoms | -0.40 | **0.000\*\*** | 0.24 | | **0.000\*\*** | 0.32 | **0.000\*\*** |
| Self-esteem |  |  | -0.43 | | **0.000\*\*** | -0.20 | 0.78 |
| Negative body image |  |  |  | |  | 0.27 | **0.000\*\*** |

**\*\* High statistical significant**

**This table reveals that,** there is negative significant correlation between depressive symptoms and self-esteem while positive significant correlation between depressive symptoms and both of negative body image and acne degree. There is negative significant correlation between self-esteem and negative body image. There is positive correlation between negative body image and acne degree. Negative correlation means when depressive symptoms increase self-esteem decrease and when self-esteem increase negative body image decrease. Positive correlation mean when acne degree increase negative body image increase, when acne degree increase depressive symptoms increase and when negative body image increase depressive symptoms increase.

**Discussion**

Acne consistently represents the top three most prevalent skin conditions in the general population. Acne vulgaris affects ~85% of young adults aged 12–25 years (**George, 2018).** Acne may have negative effects on the psychological status of the adolescents it can lead to the developmental issues of body image, socialization, and Psychological issues such as dissatisfaction with appearance, embarrassment, self-consciousness, lack of self-conﬁdence, low self-esteem and depression feeling lead to reduced self-esteem, and less social interaction with others (**Saeed et al., 2018).**

This study aimed to assess psychological problems of adolescents with acne vulgaris in outpatient clinics Dermatologic Hospital at Banha City.

The present study revealed that. Majority of the patients were females. This might be due to the fact the females are more interested in their body image and skin care, these results were similar to a study done by ***Sharma et al., (2017) & Skroza et al.,( 2018)*** they found that most of their studded sample were women. Also supported by ***Coban et al., (2017)*** who found that two-thirds of the studied group were female. *Also congruent with**the study of* ***Bagatin et al., (2014)&Hazarika and Archana(2016)they*** found that more than half of studied group were female while these results contradicted with ***Simic et al., (2017)*** they found more than half of studied group were male.

As regards the age, the present study showed that most of the studied in age group ranging from 15 to 20 years the mean age 15.4±2.08 years, this might be due to that hormonal changes which occurred early in life at the time of adolescence or young adulthood. This result is congruent with ***Noorbala et al., (2013***) who pointed out that most of the studied group had ages range from 15 to 18 years with mean age 16.5 years. Also supported with the result of ***Simic et al., (2017)*** they found that most acne patients mean age 17.4 years. Also similar to the result of ***Bagatin et al., (2014)*** showed that the higher incidence of acne between age of 15-17 years and ***Hazarika and Archana (2016***) found that two-thirds of acne patients between age 15-20years

As regards the residence, the present study revealed that three quarters of studied sample lives in a rural area. This could be due to the geographical destination of hospital which is beside to rural population, experiencing more adverse living circumstances than urban populations and have lack of knowledge regarding hygienic care than in urban areas. This result was contradicted with **Campbell et al., (2016**) who declared in their results that prevalence of acne more common in urban area and ***Jabeen et al., (2017)*** they showed that majority of patient belong to urban area. One the same line **Vallerand et al., (2018)** showed that low rates of acne were reported in rural societies.

As regards to the educational level, the result of the present study revealed that more than half of the total samples were highly educated, may be due to they had increase awareness of the problem and the awareness that treatment could be available in clinics. Or this illustrate that patients have the interest to know, learn, retain information regarding management of acne and interest their health. This result was consistent with ***Kawshar & Rajesh, (2013)*** they found the same result, most the studied sample was high graduate followed by secondary school. Also supported by ***Uslu et al., (2008)*** showed that more than half of patients were high school students. Another study by ***Jabeen et al., (2017)*** showed that majority of patient in their study had a college degree.

Regarding to work status, the result of present study show that three-quarters of the sample were unemployed. This might be due to most of them were undergraduate, this result contradicted with **Oakley et al., (2014)** they found that most of studied sample were employed.

Regarding seasonal variation, the present study showed that acne increase in appearance in summer in most of the studied sample. This might be due to in summer, the patient sweat more which can bring additional risks. Sweat can bond with dirt, oil and other impurities to clog pores and, if one’s enjoy working out, sweat can linger in the clothes making patient more vulnerable to bacterial infections. Summer also brings with it the additional risk of sunburn, which will certainly damage the skin and inspire an inflammatory reaction. This may be due to heat being skin able to produce more sebum. This finding is consistent with ***Abo El-fetoh et al., (2016)*** indicated that more than half of his studied sample had an increase in acne appearance in summer months also **Kawshar&Rajesh, (2013)** ***Sardana et al.,* (2014)** they found that acne appearance increase during summer but **Balato et al., (2014)** they showed that the improvement of acne in summer and exacerbation in winter.

As regards family history for acne vulgaris, the result of the present study revealed that nearly two-thirds of the studied patients had a positive family history for acne, this illustrate that positive family history of acne considered one of the most common causes associated with the development of acne. In addition, the study confirmed that the higher familial risks provided strong genetic epidemiological evidence for the overall heritable effects in the etiology of acne, This result supported with the study developed by ***Abo El-fetoh*** ***et al., (2016)*** results revealed that more than half of their patient had a positive family history of acne and more than half of them had first-degree relatives of patients with acne, another study supported to the result of study also ***Vilar et al.,(2015***) reported that more than half of studied sample suffering from acne had a family history of acne especially their parents.

Regarding to depression among patients with acne, the result of the present study indicated that depressive symptoms were higher among patients who have acne vulgaris ranged from mild, moderate and severe. This might be due to their feeling of negative body image , especially their face and skin which appears worse in the first period of treatment and ointments that treat acne, which makes the person leave treatment and feel despair, which leads to chronic depression. These results was supported by **Al-Huzali et al., (2014)** they found thatnearly half of studied group reported in depression, severe depression was reported in 12.3%of acne patients while mild &moderate depression were reported by 16.2%&12.3% respectively. This also congruent with **Yentzer et al., (2010) & Haloversan et al., (2011)** **& Yang et al., (2014)**they showed that acne was associated with higher rate of depression and **Vallerand et al.,(2018)** pointed out that acne had a significant increase risk for developing major depression.

Depressive symptoms was more in females than males this might be due to several challenges faced females as feeling a hormonal change due to menstrual cycle, pregnancy, childbirth, stress of life, constant anxiety and muting their feelings compared to men. This result come in agreement with **Delgard et al., (2008) & Uhlenhake et al., (2010)** who showed that females with acne suffer from depression more than male. Prevalence of depression more in women with acne than men. Another study done by **Danby&William, (2015**) supported to the present study result showed that, girls with acne reported significantly higher levels of depressive symptoms; the rate of depression was twice as high in women with acne as in men. This result come in disagreement with **Yang et al., (2014)** who reported that depression more common in male with acne than women, while on the other hand **Golchai et al., (2010) & Paulina et al., (2018)** believed that there wasn’t any difference for depression between gender.

Concerning the relationship between depression and socio-demographic characteristics of acne patients. The result of the present study revealed that there was no statistical significant relationship between socio-demographic characteristics (sex, age, residence, income, work status &marital status). This confirm that acne was the main cause of depression on this study sample This result confirmed with ***Golchai et al.,( 2010)*** they reported severity of depression was not related to age, gender and marital status.

Moreover, this result agree with the result of study doneby ***Refattar et al.,(2015***)they found there were no important significant changes between socio demographic data(gender, age, marital status, occupation and depression.

The result of present study showed that unmarried studied sample had more psychological problems in comparison to married patients with no significant difference between them, this might be due to defect in support from near person and their children and those revert attention toward them this result supported by ***Golchai et al., ( 2010) & Paulina et al., (2018)*** they found no significant difference between married patient and single one but this result contradict with ***Doger et al.,(2010)*** they reached higher frequency of psychiatric disorders among married patients with acne in compared to unmarried.

Concerning relationship between family history and depression this study showed that about two-thirds of the studied sample who had positive family history of acne had acne and severe depression with no statistical significant difference between them. This might be due to genetic effect of acne which causes depression. This study was congruent with ***Al-Huzali et al., (2014)*** they showed there was no statistical significant difference between them although more patients with positive history of acne had severe depression.

Regarding to relationship between acne and self-esteem. The result of present study revealed that, nearly three-quarters of studied group have moderate self-esteem and tenth of them have low self-esteem. This might be due to shakiness of self-esteem by the criticism of others with the irony of others who suffer from acne and this drives the teenager infected with acne to lose confidence in the self and evaluate themselves negatively. This result was supported by **Tasoula et al., (2012) &Vilar et al., (2015)** noted that embarrassment and decreased self-esteem in all patients with acne other studies was supported by study result of **Dharshana et al., (2016)&Muffedel et al.,( 2017)** also showed that self-esteem was significantly lower in patients with acne.

Regarding the relationship between self-esteem and gender, the results showed that higher self-esteem was among male than female. This might be due to female more interested in their shape and beauty than male so any change in appearance affect their self-esteem. This study results was supported by*the result of* ***Do et al., (2009)*** & ***Hassan et al., (2009)*** they found that women with acne have greater low self-esteem. The result of this study was contradict with ***Abdel Hafez et al., (2009)*** they pointed out that male patients with acne had significantly lower self-esteem when compared with women, in contrast to the study of ***Tasoula et al., (2012)*** they reach to men and women with acne affected equally in low self- esteem.

Concerning the relationship between self-esteem and socio-demographic characteristics of acne patients. The result of the present study revealed that there was only statistical significant difference between level of education and self-esteem while no statistical difference between the remaining items of socio demographic and self-esteem. This might be due to whenever level of education increase patient awareness of acne management increase so less effect on self-esteem. This result was supported with **Ghodusi & Heidari (2014)** who showed that there was significant relationship between self-esteem and level of education but no significant relationship was observed between self-esteem and sex, monthly income.

Regarding to the relationship between acne and body image. The result of present study revealed that. Majority of studied sample with acne vulgaris suffer negative body image, this might be due to the change in the skin appearance complicated by change body image. The result of study was supported by ***Feton-Danou, (2010)*** who found acne induces a significantly impaired body image .Also supported by the result of ***Bowe et al., (2011)*** they showed most of patients with acne suffer from body image disturbance and by ***Hedden et al., (2008)*** showed that patient with acne had significantly lower body image.

Regarding relationship between body image and gender. This result showed that male had high level of negative body image than female, with no statistical significant difference between them, this might be due to male in this sample were more interested in their bodies or might be due to the difference in the site, degree and onset of acne, This result was supported with ***Ghodusi & Heidari,(2014)and Amr et al., (2014)*** they found that there was no significant correlation between body image and gender. The result of this study was contradicted with ***Delgard et al., (2008)*** they showed that girls have negative body image and poor body satisfaction than boys.

Concerning the relationship between body image and socio-demographic characteristics of acne patients. The result of the present study revealed that there was not statistical significant relation between body image and socio demographic characteristics ( age, sex, marital status, education, income and work status) this might be due to all patient in the same stage(adolescents) had similar circumstances and characteristics. This result contradict with **Ghodusi & Heidari (2014)** who pointed that, there was a significant relationship between body image and marital status, education and work status

Regarding acne degree the result of the present study revealed that more than half of the studied sample had moderate degree of acne, while minority of them had severe degree of acne. This might be due to most patients were interested on their appearance and visit dermatology when acne introduce to moderate degree or mild degree. This result was similar to ***Bagatin et al., (2014)*** who found the same result in his study that majority of patients had moderate degree of acne while minority of them had severe degree of acne. Also this result was supported with the result of ***Dunn et al., (2011)*** they showed that more than third of patients had mild acne; one- third of them had moderate acne while minority of them had severe acne. While was contradicted with study *of*  ***Coban et al.,( 2017)***they reported that more than half of acne patients had mild degree but more than one-third of them had moderate degree.

Moreover Regarding acne degree, the result of study was contradicted with **Skroza et al., (2018)** they showed that mild acne is the most frequent form. Also the result of study was contradicted with **Al-Huzali *et al., (2014***) they showed in their study that more than half of acne cases were mild degree.

As regard relationship between acne degree and gender. This result showed that severity of acne more in female in comparison with male with no statistical significant difference between acne degree and gender. This might be due to the women search for other methods to cover acne such as cosmetics leading acne to become severe. This result supported by ***Noorbala et al., (2013)*** they showed that there was no significant difference between acne severity and gender. This result contradicts with ***Dunn et al., (2011)*** they showed that severity of acne more in boys than girls.

As regard the correlation between acne degree and depressive symptoms. The findings of this study result revealed that there was a highly statistically significant relationship between depressive symptoms and acne degree. This might be due to negative effect of acne and its severity on negative feeling of body image and appearance and mood. This was supported by **Al-Huzali et al., (2014)** they showed severity of acne was significant associated with depression amongacne patients. Also consistent to the results of **Al-Shidhani et al., (2015)** they stated that any increase in acne severity would lead to an increase in the negative effects on the patient’s feelings and moods also **Mufaddel et al., (2017)** they reported that there were significant association between severity of acne and mental distress. But this result disagree with **Kodra et al., (2018)& Jagtiani et al., (2017)** they showed non-significant correlation between depression and severity of acne vulgaris.

As regard the correlation between acne degree and self-esteem. The finding of this result revealed that there was negative insignificant correlation between acne degree and self-esteem. Most of studied sample had low and moderate self-esteem .this might be due to during the period of adolescents they were preoccupied and interested with their appearance and self-esteem. Acne develops negative feeling of body image which effect on their self-confidence, mood and self-esteem so whenever acne increases in severity effect on self-esteem. This finding is supported with ***Vilar et al., (2015)*** they showed that there was no correlation between acne severity and self-esteem. Also ***Turrion-Merino et al., (2015) &*** ***Mandluru et al., (2016)*** they not reached to the effect of severity of acne on self-esteem while contradicted with **S*u et al., (2015) &*** ***Kodra et al., (2018)*** they demonstrated that there was significant correlations between poor self-esteem and Severity of acne. Also contradicted to the result of study by ***Hosthota et al., (2016)*** they pointed to moderate and severe acne vulgaris correlated to reduced self-esteem.

Concerning the correlation between acne degree and body image. The result of the present study revealed that there was a statistical positive significant correlation between acne degree and negative body image, this might be due to whenever acne increase in severity leads to disturbed appearance so causes body image disturbance and whenever severity of acne increase lead to deformity in face so effect on body image. **(Do et al., 2009)** they pointed to acne grading correlated more with body-image impairment, supported this finding. But this finding was contradicted with ***Feton-Danou, (2010) &* Ghodusi & Heidari (2014)** they foundthat body image was not correlated to severity of acne. Also contradicted with the study of ***Amr et al., (2014***) they showed in their result that the body image satisfaction was unrelated to acne severity.

Concerning relationship between depression and self-esteem. The result of present study clarified that. There was high statistical significant relation between level of depressive symptoms and level of self-esteem. This might be due effect of acne vulgaris on mood , anger feeling from their appearance that lead to loss confident and negative view towards to themselves. This result was supported with [**Dharshana**](http://www.atmph.org/searchresult.asp?search=&author=Saravanan+Dharshana&journal=Y&but_search=Search&entries=10&pg=1&s=0) **et al., (2016)** they showed that there was statistical significant relationship between depression and self-esteem among patients with acne. Also **Dalgard et al., (2008)** they showed that depressive symptoms were strongly correlated with low self-esteem.

Concerning relationship between total body image and depression. The present study revealed that, there was statistical significant relation between level of body image and level of depressive symptoms. This might be due to effect of acne on appearance companied with avoiding others and relationships this leading to feeling anger, despair and crying, this result confirmed with **Taleporos and Mccabe, (2005)** and **Ghodusi & Heidari (2014)** they showed that there was significant relationship between body image and depression indicated higher levels of positive body image have lower levels of depression.

Concerning relationship between body image and self-esteem. The present study showed that, there was high statistical significant relationship between level of body image and level of self-esteem. This might be due to patients with acne were not satisfied from their appearance leads to feelings of low self-esteem this result confirmed with ***Rashed et al., (2011)*** they observed significant direct relationship between body image and self-esteem. Also supported to the result of study *by* ***Conner & Casey (2006)*** they showed that there was significant relation between two variables.

Concerning correlation between depression, self-esteem and body image with acne degree. The present study pointed out that there was negative significant correlations between depressive symptoms and self-esteem while positive significant correlation between depressive symptoms and both of negative body image and acne degree, there was positive correlation between negative body image and acne degree. This might be due to disturbances in the appearance of the body as a result of acne which drives them to panic about the view of others. All these circumstances make adolescents look at themselves negatively; feel low self-esteem therefore make them suffering from depression. This result was supported by **Dalgard et al., (2008),** **Robin et al., (2012) & Vilar et al., (2015)** they showed in their study depressive symptoms were strongly correlated with low self-esteem, negative body satisfaction and acne degree. Another study by **Paulina et al., (2018)** showed that Depression was positively correlated with body image, whether depression led to misperception of attitude to appearance.

***Conclusion***

***Based on the result of this study, the following conclusions were formulated:***

Acne vulgaris influence negatively on patients’ psychological status, nearly three-quarters of the studied sample had depressive symptoms, around three-quartersof studied sample had moderate level of self-esteem, and majority of the studied sample had negative body image. There was correlation between acne vulgaris with depression, body image and self-esteem. There was statistically significant relation between acne degree and self-esteem. There was a statistical significant relation between acne degree and depressive symptoms. There was positive significant correlation between negative body image and acne degree.

***Recommendations***

**Based on the findings and conclusion** **of this study, the following recommendations are suggested:**

* There is a need for incorporation of psychological intervention in the management of acne vulgaris, for improvement the psychological wellbeing in cases.
* Stress management and assertiveness training program should be given to acne patients to relieve their psychological problems (depression) and enhance their coping patterns.
* Psychological counseling should be integrated as nursing intervention for acne patients to improve their self-esteem and body image.
* Psycho-educational programs should be conducted to improve people's knowledge about acne, causes, early detection, and management to improve patient's mental health.
* Increase awareness of patient about acne through social media, educated them about importance of follow up and change their life style and follow healthy diet and avoid high glycemic diet and uses cosmetics. Setting up supportive groups could also be of immense help for these patients
* Dermatological checkups should be included in general checkups in schools. Along with gender, age factor should also be considered to have an even look on this matter.
* Education of dermatologists and general practitioners alike, about the psychosocial impairments of acne can help in identifying cases with acne.
* Family involvement can also help the patient to come out of any distress. Family must show acceptance to the appearance of adolescent with acne and not critique to them.
* Emphasize on importance of peer acceptance during period of acne.

***Summary***

Acne is widely considered a chronic skin disease that primarily affects individuals going through puberty, with prevalence among this population of almost 95 percent. However, acne is principally a disorder of adolescence, there three different groups of acne patients can be considered: preadolescent, adolescent, and post-adolescent patients **(Skroza et al, 2018)**. Acne is neither life threatening nor physically debilitating, but it can affect social and psychological functioning of affected patients and lead to deterioration of their life. Moderate to severe acne lesions may leave post inflammatory hyper pigmentation and/or atrophic scars that can effect on the patient and lead to reduced self-esteem, and less social interaction with others. Also, it can lead to anxiety, depression, and other psychological problems that threaten the life of the patient **(Saeed et al., 2018).**

***Aim of the study:***

The present study was carried out to assess the psychological problems of adolescent related to acne vulgaris (depressive symptoms, body image and self-esteem) through:-

1. Assessed the presence of depressive symptoms in patients with acne vulgaris.
2. Assessed the perceived body image in patients with acne vulgaris.
3. Assessed the self-esteem in patients with acne vulgaris.
4. Examined the relation between degree of acne with the severity of depression, self-esteem and body image perception.

***Research Question:***

What were psychological problems of adolescent related to acne vulgaris?

***Research Design:***

A descriptive correlational design was utilized to achieve the aim of the study.

***Research Setting:***

This study was conducted at the outpatient Clinic of Dermatological Hospital in Banha City, which is affiliated to the General Secretariat.

***Research Subjects:***

A convenience sample of 200 patients of acne vulgaris in the Dermatological Hospital in Benha City was chosen for study that fulfilled the inclusion and exclusion criteria during the spring season.

***Inclusion criteria:***

1. Both sexes (male- female)
2. patients at adolescent age group
3. Medically diagnosed as acne vulgarity
4. Able to communicate. Willing to participate in the study

***Exclusion criteria:***

1- Subjects with history of a known mental disorder (psychological – Mental and cognitive disorder).

2- Subjects with chronic somatic diseases (such as heart, pulmonary and joint disease etc……..)

***Tools of Data Collection:***

To achieve the aim of the study all studied patients with acne vulgaris were subjected to three data collections tools including:

***Tool (1): Structured Interview Questionnaire***

This tool was developed by the researcher to elicit information about socio-demographic characteristics and Clinical data of the patients.

***Tool (2)*:** **Beck Depression Inventory**

This scale was originally developed by **Beck (1966)** translated into Arabic by **Ghareeb (1989),** to measure depressive symptoms

**Tool (3):** **Rosenberg Scale**

This scale was developed by **Rosenberg (1965),** to assess self-esteem.

**Tool (4):** **Body Image Scale**

This scale was developed by **Gamal (2016),** to measure body image among patients with acne vulgaris.

***The findings of this study can be summarized in the followings:***

* Majority of studied sample( 85.0%) were female, the mean age of the studied sample was 15.4±2.08 years old, almost of studied sample (80.0%) were single and more than half of them (51.0%) were highly educated.
* Nearly two-thirds of studied sample (63.0%) had a positive family history of acne; and 65% of them are responsive to treatment. Nearly three-quarters of studied sample (72.5%) showed an increase in acne during summer and the mean age of first appearance of acne was 15.4±2.08years old.
* Nearly three-quarters of studied sample had depressive symptoms ranged from mild, moderate and severe (33%), (27.5%) and (13%) respectively.
* Around three-quarters (70%) of studied sample had moderate level of self-esteem while only around one-fifth of them (18.5%) have high level of self-esteem.
* The majority of the studied sample had negative body image ranged from mild, moderate and severe (46.5%), (32%) and (11%) respectively, males had a high level of negative body image than females with no statistical significant difference between them.
* There was a statistical significant difference between level of education and self-esteem.
* There was a positive significant correlation between depressive symptoms and both of negative body image and acne degree.
* There was a positive significant correlation between acne degree and negative body image.
* There was negative significant correlation between depressive symptoms and self-esteem.
* There was a statistically significant relationship between seasonal acne appearance and body image P>.005
* There was a highly statistical significant relation between level of body image and level of self-esteem p<.005.

***From the result of the present study, one can conclude that:***

* Acne vulgaris influence negatively on patients’ psychological status. There was correlation between acne vulgaris with depression, body image and self-esteem.

***Based on the previous findings of the present study the following recommendations were suggested:***

* Stress management and assertiveness training program should be given to acne patients to relieve their psychological problems (depression) and enhance their coping patterns.
* Psychological counseling should be integrated as nursing intervention for acne patients to improve their self-esteem and body image.
* Psycho-educational programs should be conducted to improve people's knowledge about acne, causes, early detection, and management to improve patient's mental health.
* Dermatological checkups should be included in general checkups in schools. Along with gender, age factor should also be considered to have an even look on this matter.

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**المشاكل النفسية لدى المراهقين المصابين بحب الشباب**

توطئه للحصول على درجة الماجستير فى تمريض الصحة النفسية والعقلية

مقدمة **من**

**سماح سعد مصطفى ابوزيد**

**معيدة بقسم تمريض الصحة النفسية و العقلية**

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**كلية التمريض**

**جامعة بنها**

**2019**

**الملخص العربى**

**المقدمة**

يعتبر حب الشباب مرض جلدي مزمن يؤثر في المقام الأول على المراهقين وينتشر بين هذه الفئة العمرية حوالى 95 في المئة ويسبب اضطراب في سن المراهقة. يمكن اعتبار ثلاث مجموعات مختلفة من مرضى حب الشباب: مرضى فى سن ماقبل المراهقة، والمراهقين وفي مرحلة ما بعد المراهقة. حب الشباب يؤثر على الأداء الاجتماعي والنفسي للمرضى المصابين به وتؤدي إلى تدهور حياتهم. الدرجة المتوسطة والشديدة من حب الشباب قد تترك تصبغات التهابية / أو ندبات ضامرة يمكن أن تؤثر على المريض وتشوه منظره وتؤدي إلى تقليل تقدير الذات ، وتفاعل اجتماعي أقل مع الآخرين. أيضا ، يمكن أن يؤدي إلى القلق والاكتئاب ، وغيرها من المشاكل النفسية التي تهدد حياة المريض.

**الهدف من الدراسة:**

كان الهدف من هذه الدراسة هو تقييم المشاكل النفسية للمراهقين المرتبطة بحب الشباب (أعراض الاكتئاب ، صورة الجسم وتقدير الذات) من خلال: -

1. تقييم وجود أعراض الاكتئاب في المرضى الذين يعانون من حب الشباب.
2. تقييم ادراك صورة الجسم في المرضى الذين يعانون من حب الشباب.
3. تقييم تقدير الذات في المرضى الذين يعانون من حب الشباب .
4. إيجاد العلاقة بين الاكتئاب، وتقدير الذات وإدراك صورة الجسم في مرضى حب الشباب .

**سؤال البحث**

ما هي المشاكل النفسية للمراهقين المرتبطة بحب الشباب؟

**تصميم البحث**

تم استخدام تصميم الوصفي لتحقيق هدف الدراسة.

**إعداد البحث**

أجريت هذه الدراسة في العيادة الخارجية لمستشفى الأمراض الجلدية في مدينة بنها التابعة للأمانة العامة

**عينة البحث**

تم اختيار عينة متاحة من مائتى مريض من حب الشباب في مستشفى الأمراض الجلدية في مدينة بنها للدراسة التي استوفت معايير الاشتمال والاستبعاد خلال موسم الربيع.

**معايير الاشتمال**

1. كلا الجنسين (ذكور واناث)
2. المرضى في المجموعة العمرية للمراهقين
3. كان لديهم تشخيصا طبيا لحب الشباب
4. قادرة على التواصل وعلى استعداد للمشاركة في الدراسة

**معايير الاستبعاد**

1. المرضى ذات التاريخ من الاضطرابات العقلية والنفسية والذهنية
2. المرضى ذات الأمراض الجسدية المزمنة مثل( أمراض القلب والرئتين والمفاصل الخ.........)

**أدوات جمع البيانات**

**الأداة (1): استبيان المقابلة المنظمة**

تم تطوير هذه الأداة من قبل الباحثة للحصول على معلومات حول الخصائص الشخصية والبيانات الاكلينكية للمرضى.

**الأداة (2): مقياس بيك الاكتئاب (1966)**

تم تطوير هذا المقياس من بيك عام ألف وتسعمائة وستة وستون (1966) وترجم إلى العربية بواسطة غريب عام ألف وتسعمائة وتسعة وثمانون (1989) ، لقياس أعراض الاكتئاب

**الأداة (3): مقياس روزنبرغ(1965)**

  تم تطوير هذا المقياس من قبل روزنبرغ عام ألف وتسعمائة وخمسة وستون (1965) ، لتقييم تقدير الذات.

**الأداة (4): مقياس صورة الجسم (2016)**

تم تطوير هذا المقياس من قبل جمال عام ألفان وتسعة عشر (2016) لقياس صورة الجسم بين المرضى الذين يعانون من حب الشباب.

**توضح النتائج الرئيسية لهذه الدراسة أن**

* أغلبيةالمرضى (85٪) كانت اناث ، وكان متوسط عمرالمرضى 15.4 ± 2.08 سنة ، وكان معظمهم غير متزوجين، وكان أكثر من نصفهم (51٪) متعلما تعليما جامعيا.
* ما يقرب من ثلثي المرضى (63 ٪) لديهم تاريخ إيجابي من حب الشباب و65٪ منهم يستجيبون للعلاج. ما يقرب من ثلاثة أرباع المرضى (72.5 ٪) تظهر زيادة حب الشباب في الصيف وكان متوسط العمرللظهور الأول لحب الشباب 15.4 ± 2.08 سنة من العمر.
* حوالى ما يقرب من ثلاثة أرباع المرضى يعانوا من أعراض الاكتئاب تراوحت بين بسيطة (33%) معتدلة (27.5%) وحادة (13 ٪)
* حوالي ثلاثة أرباع (70٪) من المرضى لديهم مستوى متوسط من تقدير الذات ، في حين أن حوالي خمسهم فقط (18.5٪) لديهم مستوى عالٍ من تقدير الذات.
* أﻏﻠﺒﻴﺔ عينة اﻟﺪراﺳﺔ ﻟﺪﯾﮭﺎ ﺻﻮرة ﺳﻠﺒﯿﺔ ﻟﻠﺠﺴﻢ ﺗﺮاوﺣﺖ ﻣﻦ بسيطة ) 46.5٪) وﻣﺘﻮﺳﻄﺔ (32٪) وﺧﻄﯿﺮة (11٪) بالنسبة الى صورة الجسم اشارت الدراسة الى ان الذكور ﻟﺪﯾﮭﻢ ﻣﺴﺘﻮى ﻣﺮﺗﻔﻊ ﻣﻦ ﺻﻮرة اﻟﺠﺴﻢ اﻟﺴﻠﺒﯿﺔ عن اﻹﻧﺎث ﻣﻊ ﻋﺪم وﺟﻮد ﻓﺮق إﺣﺼﺎﺋﻲ ﻛﺒﯿﺮ ﺑﯿﻨﮭﻢ.

وقد أظهرت الدراسة الحالية الاتى:

* وجود فرق إحصائي كبير بين مستوى التعليم وتقدير الذات.
* وجود دلالة إحصائية بين درجة حب الشباب والأعراض الاكتئابية.
* وجود علاقة ذات دلالة إحصائية عالية بين درجة حب الشباب وصورة الجسم.
* وجود علاقة ذات دلالة إحصائية بين درجة حب الشباب وتقدير الذات.
* وجود علاقة ذات دلالة إحصائية بين ظهور حب الشباب الموسمي وصورة الجسم
* وجود علاقة ذات دلالة إحصائية عالية بين مستوى تقدير الذات ومستوى أعراض الاكتئاب p <.005
* وجود علاقة ذات دلالة إحصائية بين مستوى صورة الجسم ومستوى أعراض الاكتئاب وجود علاقة ذات دلالة إحصائية عالية بين مستوى صورة الجسم ومستوى تقدير الذات
* وجود ارتباط معنوي سلبي بين أعراض الاكتئاب وتقدير الذات في حين كان هناك ارتباط كبير إيجابي بين أعراض الاكتئاب وكل من صورة الجسم السلبية وحب الشباب.
* وجود علاقة ملحوظة سلبية بين تقدير الذات وصورة الجسم السلبية.
* وجود ارتباط إيجابي بين صورة الجسم السلبية ودرجة حب الشباب.

**من نتيجة الدراسة الحالية ، يمكن للشخص أن يستنتج ما يلي**:

يؤثر حب الشباب الشائع بشكل سلبي على الحالة النفسية للمرضى وكان هناك ارتباط بين حب الشباب مع الاكتئاب ، صورة الجسم وتقدير الذات.

**بناءً على النتائج السابقة للدراسة الحالية ، تم اقتراح التوصيات التالية:**

* ينبغي تطبيق برنامج تدريب على الإجهاد والتأكيد على مرضى حب الشباب للتخفيف من مشاكلهم النفسية وتعزيز أنماط التكيف لديهم.
* يجب أن يتم دمج الاستشارة النفسية كجزء من التدخل التمريض لمرضى حب الشباب لتحسين تقديرهم لذاتهم وصورة الجسم.
* يجب إجراء برامج نفسية تعليمية لتحسين معرفة الناس بحب الشباب وأسبابه والاكتشاف المبكر والإدارة لتحسين الصحة العقلية للمريض.
* يجب أن يتم الفحوصات الجلدية ضمن الفحوصات العامة في المدارس. مع الاخذ فى الاعتبار عامل السن والجنس.