Psycho- social Program to Overcome Psychosocial Problems among Patients with Acne Vulgaris

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Abstract

Background: Acne vulgaris remains the most commonly skin disease treated by physicians with prevalence reaching up to 80% during adolescence. There is no single disease which causes more psychic trauma, more general insecurity and feelings of inferiority and greater sums of psychic assessment than does acne vulgaris .**The aim of study was to** assess the effect of psycho-social program on psycho social problems among patients with acne vulgaris. **Methods:** A quasi - experimental design was utilized to achieve the aim of study. The study was conducted at the outpatient clinic of the Dermatological Hospital in Benha City. The target of this study consisted of 50 patients with acne vulgaris who were staying in the above mentioned setting. Three tools were used for data collection: -A Semi Structured Interview Questionnaire, Social Phobia and acne vulgaris Depression Checklist. **Results:** The main findings of the study were: nearly half of the studied patients have no social phobia post program and more than half of them have moderate degree of depression post program**.** There are highly statistically significant differences between total social phobia and acne degree post program and there are statistically significant differences between total depression and acne degree post program. **Conclusion** Based on the findings of the present study, it was concluded that the psycho- social program had a positive effect to overcome psychosocial problems among patients with acne vulgaris. **Recommendations**: Expand public awareness through mass media about stages of acne vulgaris and the effect of being emotionally stable on mental health and all life aspects.

Keywords: Psycho-social, Program, overcome, psychosocial problems, Patients, Acne Vulgaris.

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, 2018)***

Acne vulgaris is an extremely common disorder. Prevalence of acne varies among different populations in different studies from 50% to 80%. There is general recognition that there are many factors in the etiology of acne vulgaris. Causes could be attributed to both genetic and environmental factors. There is familial predisposition of severe forms of acne that support a genetic component. Acne usually occurs around puberty but it may start late in the thirties and forties (in adulthood). It takes several years before spontaneous remission. Prognosis of the disease is usually good but, as a chronic disease, relapses even during treatment could occur. It can remit spontaneously **(McPhee et al., 2019).**

Several factors are believed to contribute to the onset and development 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), 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 **(Picardo, 2019).**

Moreover, acne does not cause direct physical impairment; it can produce a significant psychosocial burden. It has been suggested that patients with moderate-to-severe acne suffer from poor body image, low self-esteem, and experience social phobia and constriction of activities As part of the emotional impact, increased levels of anxiety,

anger, depression, and frustration are also observed in patients with acne. Given the fact that acne causes psychological suffering, acne can affect social, vocational, and academic performance of teenagers **(Thomas, 2019)**

Acne is a common disorder among adolescents and appears to have a considerable impact on mental health. Nurses should be aware of the importance of basic psychosomatic treatment in conjunction with early medical, psycho social intervention in the management of acne. Psycho-social education is a very important concept that considered a well-established form of treatment and rehabilitation for patient with Acne. It is being defined as use of methods, techniques and educational programs in order to facilitate remission or reduce effects of the illness or disability. During the sessions therapeutic strategies that increase abilities and improve functioning of patients are being used. Psycho-social educational sessions provide knowledge that is being related to individual course of illness and healing and in effect they engage patients on cognitive and emotional levels **(Kravvas & Al-Niaimi, 2019)**.

The nurse should provide client and family with psychological support, information about acne, advise them that heat, humidity, and perspiration exacerbate acne. 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. 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 4 to 6 weeks of compliance with the treatment regimen to obtain results (**Lawton, 2018).**

Significance of 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 **.**The disease can also persist into adulthood, affecting 20-40% of all individuals. Strikingly **(Aslan et al., 2019)**.

Acne 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, social phobia 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., 2020)**.

Aim of the study:

The aim of the study was to assess the effect of psycho-social program on psycho social problems among patients with acne vulgaris.

It will be achieved through:

1. Assessing the psychosocial problems among patients with acne vulgaris.
2. Developing and implementing the psycho-social program for patients with acne vulgaris.
3. Evaluating the effect of the psycho-social program to overcome psychosocial problems among patients with acne vulgaris.

Operational definition of psychosocial problems of patients with acne vulgaris:

Psychosocial problems of patients with acne vulgaris include poor body image, low self-esteem, experience social phobia and constriction of activities as part of the emotional impact, increased levels of anxiety, anger, depression, and frustration are also observed in patients with acne.

Research Hypothesis:-

The Psycho-social program will have an effect to overcome psychosocial problems among patients with acne vulgaris.

Subject and methods:

Research design:

A quasi-experimental design (one group pre test post test design) was utilized to achieve the aim of the study.

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, 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 Qalubia Governorate. This hospital was selected due to the high number of patients selecting help there.

Subjects:

Sample size:

The target of this study consists of 50 patients with acne vulgaris who are from outpatient clinic of the Dermatological Hospital in Benha City**.**

Sampling type Purposive sampling was used in the present study. Patients who fulfilled the inclusion criteria were medically diagnosed as acne vulgaris, willing to participate in the study and both sexes (male- female) Exclusion criteria: Any neurological disorder, mental retardation or any cognitive disorder.

Tools of Data Collection: The following tools were used for data collection. Arabic translation of all the tools by the researcher and retranslation into English and tested for their translation.

Tool (1): A Structured Interview Questionnaire

This tool was developed by the researcher in Arabic language to assess all related socio-demographic and clinical data of the studied sample, including three parts as the following:-

Part 1: Socio-Demographic characteristics of the study sample as (age, sex, level of education, marital status, and occupation, family income and family members).

Part 2: Clinical data: which include: age of first appearance of acne vulgaris, family history, number of visit to dermatologist, response to treatment and seasonal variation).

Part 3: Acne history: which include: causes, types, degree, places and complications of acne

Tool (2): Social Phobia Inventory (SPIN):- Social Phobia Inventory (SPIN). It was designed by **Conner et al., (2000)** to measure social phobia disorder (fear-avoidance- physiological arousal) .It consisted of 17 items. Rating 0-4 where 0 indicate not at all, 1 little bit, 2 somewhat, 3 very much, 4 extremely. Scoring system of social phobia range from 0-68 where none= less than 20, mild= 21-30, moderate =31-40, sever= 41-50, very sever =51 or more.

Tool (3): Acne vulgaris Depression Checklist (ADCL): Acne vulgris Depression Checklist (ADCL) was adopted by **David (1989)** .It was designed to measure depression of patient with acne, it consists of 25 items. It was divided to four-subscale: - (Thoughts and feeling, activities and personal relationship, physical symptoms and suicidal urges). All subscale was rated from 0-4 where 0 indicate not at all, 1 sometimes, 2 moderately, 3 a lot, 4 extremely. Scoring system range from 0-100 where 0-5 no depression, 6-10 normal but unhappy, 11-25 mild depression, 26-50 moderate depression, 51-75 severe depression, 76-100 extreme depression.

Validity of the tools

They were tested for content validity by jury of five experts in the field of psychiatric Health Nursing specialty to ascertain relevance and completeness. The tools proved to be valid.

Reliability of the tools

Reliability was applied by the researcher for testing the internal consistency of the tool, by administration of the same tools to the same subjects under similar conditions on one occasion. Answers from repeated testing were compared (Test-re-test reliability). The tools revealed (Cronbach's alpha = 0.90) for Social

Phobia Inventory and (Cronbach's alpha=0.91) for acne vulgaris Depression Checklist.

Methods

Administrative approval:

Official letter was obtained from the Dean Faculty of Nursing- Benha University to the Director of the dermatology hospital to interviewing the patients. Oral consent of the subjects was taken to participate study and all authorized personal concerned the title, objective, tools to conduct the proposed study, a full explanation about the aim of the study will be explored

Ethical considerations:

The patients with acne vulgaris were briefed about the purpose of the study, encouraged and give fully informed oral consent to participate. It was emphasized that all data collected was strictly confidential and the data would be used for scientific purposes only and the patient has full right to withdraw from the study at any time.

Pilot study:

A pilot study was conducted on 10% of the sample to test by the designed assessment tool and its applicability on the sample, and in order to estimate the time needed to fill in the sheets, and to identify obstacles or problems in data collection and accordingly necessary modifications were done. Subjects who shared in the pilot study were excluded from the main study sample.

Fieldwork:

- The study was carried out from the beginning of May 2021 to the end of July 2021.
- The aim and the nature of the study were explained to the studied sample and assured that their personal data will be treated confidentiality and will be used only for research purpose, and then it was possible to carry out the study with minimum resistance.
- The researchers met each patient individually after introducing themselves and explained to them the purpose of the study to seek participants' cooperation and emphasizing that all collected information is strictly confidential.
- The researchers conducted the program on three months two visits/week (Sundays and Mondays), from 9.00 a.m. to 11.00 a.m. carried out in the outpatient clinic of the Dermatological Hospital in Benha City. The subjects were divided into 5 groups; each of them consisted of 7-10 patients with acne vulgaris. The period of implementation was 3 months. Implementation of the study passed into three phases (assessment phase, implementation phase and evaluation phase).

Psycho-social program construction:

1- **Preparatory phase:** A review of recent, current, past, national and international literature by the researchers using books, magazines periodicals and network. This was done to get a clear picture of all aspects related to psycho-social program about the patients with acne vulagris. The tools were designed to assess psychosocial problems among patients with acne vulagris before and after implementing Psycho –social program.

2- **The assessment phase:** comfortable, private place was chosen for the interviewers. Orientation was done about the researcher's name, purpose, significance, content of the study. Subjects were interviewed where pre-assessment was done using : A Structured Interview Questionnaire , Social Phobia Inventory and Acne vulgaris Depression Checklist. This phase take two months.

3- **The planning and implementing phase**: The general objective of the study was to knowing the effect of Psycho -social program to overcome psychosocial problems among patients with acne vulagris. The content of the Psycho-social program sessions was as follows:

- **Session 1: -** Beginning with acquaintance between the researcher and patients, introduction and description of the program schedule and presentation of the program content.

- **Session 2: -** Knowledge about acne and how it occurs, symptoms - causes - types - the effect of skin disease on the psychological state
- **Session 3: -** Identify complications of acne, Practical ways to treat and prevent acne.
- **Session 4:** Apply practical ways to control social phobia.
- **Session5:** Apply practical ways to improve the psychological state of acne patients.
- **Session 6:** Apply an exercise to reduce negative emotions.
- **Session 7:** Apply deep breathing exercise.
- **Session 8:** Summary of the main points of the program content.

The Psych-social program/theoretical and practical training included 8 sessions (1 Introduction about of program, 2 Theoretical and 4 Practical sessions and the final session for patients to revising the program content and gaining overview about the all sessions and their objectives). Each session takes from 30-45 minutes for theory and 45-60 minutes for practical. The teaching methods used were small group discussions, brain storming, lecture, providing the example, role play, demonstration and re-demonstration and pictures were used as media. At the end of each session summary, feedback, further clarifications were done for vague items. Booklets were distributed as teaching media at the work place.

4- Evaluating phase: to evaluate the effect of Psycho-social program to overcome psychosocial problems among patients with acne vulagris by using post-test that similar to the pre-test was applied

Statistical analysis:

The collected data were organized, coded, computerized, tabulated and analyzed by using the statistical package for social science (SPSS), version (20). Data analysis was accomplished by the use of number, percentage distribution for qualitative variables , mean and standard deviation for quantitative variables, and correlation coefficient was used determine statistically significance relations significant $p < 0.05$.

Results

Table (1): This table shows that, more than half of the studied sample (%56.0) are less than 18 years old with a mean age of 16.40 ± 2.06 years and (64.0%) of them were female and have intermediate education, single and not working (64.0%, 62.0% and 64.0% respectively), more than two thirds (72.0 %) were enough income and more than half (52.0%) of them are family numbers from 3-4 persons.

This table reveals that, less than half (40.0%) of studied sample age of first appearance to acne are from 12 to less 15 years old with a mean age of **15.4±2.08** years . Near to two third (64%) of studied samples have a positive history of acne, less than half (42.0%) of them are two visits to dermatologist in month, most (66%) are responsive to treatment and less than half (44.0%) of them take two weeks for the appearance of response. Nearly three- quarters of the studied samples (72.0%) shows an increase of acne in summer .

Table (3): This table reveals that, more than half (%52.0) of the studied sample cause of Acne are from Cosmetic agents. Nearly two thirds (60.0%) the Types of the Acne are Black acne, majority (88.0 %) of the studied sample have Mild degree of acne and only (12.0%) have Moderate degree of acne.

Table (4): This table illustrates that near to one quarter (24.0%) of visible acne site at Face and only (4.0%) of them at Face, Neck and Shoulder. Less than one quarter (20.0%) of the studied sample according to invisible site of the Acne lies at the chest and only (4.0%) of them at upper shoulder.

Table (5): This table shows that the complications associated with acne among the studied sample are injuries and infection (12.0% and 16.0% respectively).

Figure (1): This figure shows that nearly half (48.0%) of the studied patients have no social phobia and only (8.0%) have sever phobia post program.

This figure illustrates that (16%) of the studied sample have moderate degrees of depression preprogram, while more than half (60.0%) of the studied sample have moderate degrees of depression post program. Moreover, (40%) of the studied sample have severe depression preprogram, while less than one-third (20.0%) of them have severe depression post program.

Table (6): This table reveals that there are highly statistically significant differences between total social phobia and Acne degree post program

Table (7): This table illustrate that there is statistically significant differences between total depression and Acne degree post program.

Table (8): This table shows that there is positive correlation between total social phobia and total depression pre and post program.

Figure (3): This figure shows that there is positive correlation between total social phobia and total depression pre program.

Figure (4): This figure reveals that there is positive correlation between total social phobia and total depression post program.

Table (1): Frequency distribution of studied sample regarding socio-demographic characteristics

Socio-demographic characteristics	No	%
Age		
<18	28	**56.0**
18+	22	44.0
Mean ±SD	**16.40 ± 2.06**	
Sex		
Male	18	36.0
Female	32	**64.0**
Level of education		
Read and write	14	28.0
Intermediate education	32	**64.0**
Higher education	4	8.0
Marital status		
Single	31	**62.0**
Married	19	38.0
Occupation		
Working	18	36.0
Not Working	32	**64.0**
Family income		
Enough	36	**72.0**
Not enough	14	28.0
Family Number		
from 3-4 persons	26	**52.0**
from 5-6 persons	24	48.0
Total	**50**	**100.0**

Table (2): Frequency distributions of studied sample regarding Clinical data.

Clinical data	N	%
Age of first appearance of acne		
Less than 12	15	30.0
12 to less 15	20	40.0
15 to less 17	10	20.0
17 to 18	5	10.0
Mean± SD	**15.4±2.08**	
Family history of acne		
Yes	32	**64.0**
No	18	36.0
Numbers visit to dermatologist in month		
one visit	16	32.0
two visits	21	**42.0**
Three visits	5	10.0
More than three visits	8	16.0
Mean± SD	**2.02±1.33**	
Response to treatment		
Yes	33	**66.0**
No	17	34.0
How long did it take for the appearance of response		
After two weeks	20	**40.0**
After one month	15	30.0
After two months	10	20.0
More than two months	5	10.0
In any seasonal acne increase in appearance		
In Winter	8	16.0
In spring	4	8.0
In Summer	36	**72.0**
In Autumn	2	4.0

Table (3): Frequency distributions of studied sample regarding Acne History.

Acne History	No	%
Cause of Acne		
Cosmetic agents	26	**52.0**
Food	18	36.0
Menstruation	6	12.0
Types of the Acne		
Black acne	30	**60.0**
White acne	8	16.0
Red acne	8	16.0
Abscesses	4	8.0
Degree of Acne		
Mild degree	44	**88.0**
Moderate degree	6	12.0
Total	**50**	**100.0**

Table (4): Frequency distributions of studied sample according Places of the Acne.

Places of the Acne.	No	%
Visible places		
Face	12	24.0
Neck	6	12.0
Shoulder	8	16.0
Face, Neck and shoulder	2	4.0
Invisible places		
The chest	10	20.0
Upper shoulder	2	4.0
The thighs	4	8.0
Chest and thighs	6	12.0

Table (5): Frequency distributions of studied sample regarding complication

Complication	No	%
Injuries associated with acne		
Yes	6	**12.0**
No	44	88.0
An infection of the pimples		
Yes	8	**16.0**
No	42	84.0
Total	**50**	**100.0**

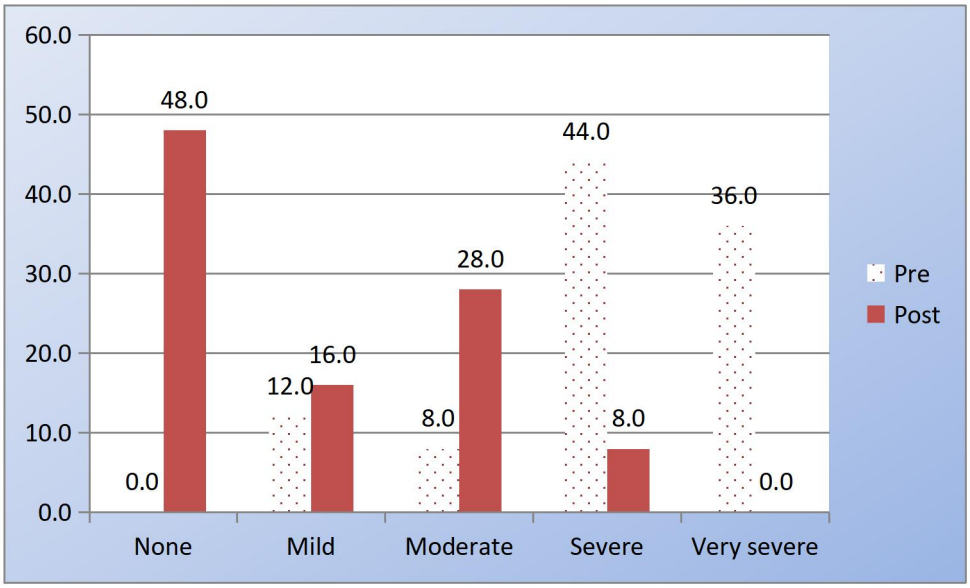

Figure (1): Frequency distribution of studied sample regarding social phobia pre and post program

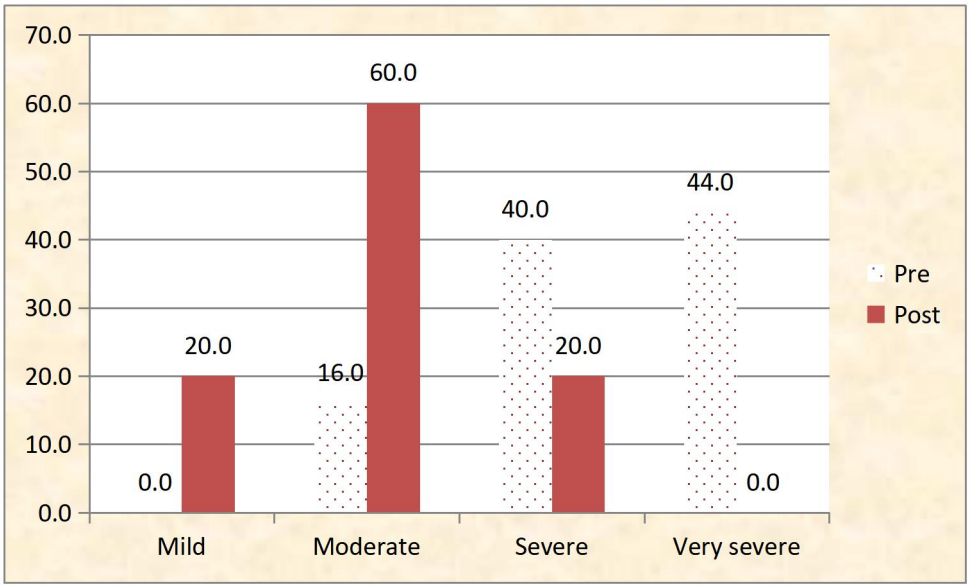

Figure (2): Frequency distribution of studied sample regarding depression pre and post program

Table (6): Relation between total social phobia and degree of Acne pre and post program

Total social phobia	Acne degree							
	Pre				Post			
	Mild degree		Moderate degree		Mild degree		Moderate degree	
	No	%	No	%	No	%	No	%
Non	0	0.0	0	0.0	22	50.0	2	33.3
Mild	6	13.6	0	0.0	8	18.2	0	0.0
Moderate	4	9.1	0	0.0	14	31.8	0	0.0
Severe	20	45.5	2	33.3	0	0.0	4	66.7
Very severe	14	31.8	4	66.7	0	0.0	0	0.0
	X^2 =3.32		p-value =0.34		X^2 =32.6		p-value =0.000**	

Table (7): Relation between total depression and degree of Acne pre and post program.

Total depression	Acne degree							
	Pre				Post			
	Mild degree		Moderate degree		Mild degree		Moderate degree	
	No	%	No	%	No	%	No	%
Mild	0	0.0	0	0.0	8	18.2	2	33.3
Moderate	8	18.2	0	0.0	30	68.2	0	0.0
Severe	18	40.9	2	33.3	6	13.6	4	66.7
Very severe	18	40.9	4	66.7	0	0.0	0	0.0
	X^2 =1.96		p-value =0.37		X^2 =12.1		p-value =0.002*	

Table (8): Correlation between total social phobia and total depression pre and post program

Total Depression	Social phobia			
	Pre		Post	
	r	p-value	r	p-value
	0.78	0.000**	0.92	0.000**

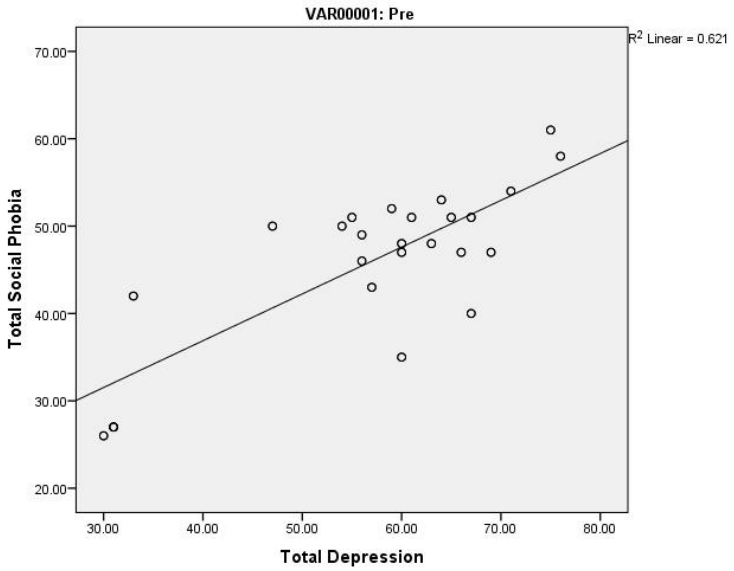

Figure (3): Correlation between total social phobia and depression pre the program

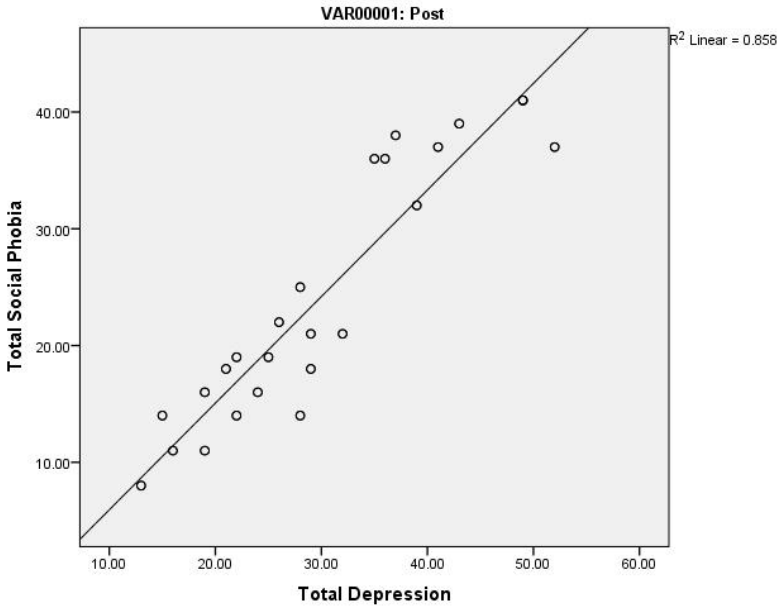

Figure (4): correlation between total social phobia and depression post the program

Discussion

Acne is a common inflammatory dermatosis which most frequently affects the face during adolescence1. Although acne does not cause direct physical impairment, it can produce a significant psychosocial burden. It has been suggested that patients with moderate-to-severe acne suffer from poor body image, low self-esteem, and experience social isolation and constriction of activities. As part of the emotional impact, increased levels of anxiety, anger, depression, and frustration are also observed in patients with acne **(Smithard et al., 2021)**Therefore, the current study conducted with a view to develop psycho educational program to overcome psychosocial problems among patients with acne vulgaris.

The current study results showed that more than half of the studied samples are less than 18 years old with a mean age of 16.40 ± 2.06 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 **Taghi et al. (2020**) who pointed out that most of the studied group age range from 15 to 18 years with mean age 16.5 years.

The present study revealed that Majority of the patients were females. This might be due to female more interested in their bodies and skin care, these results were similar to a study done by **Skroza et al. (2018**) they found that most of their studded sample were women. Also supported by **Coban et al. (2019)** who found that two-thirds of the studied group were female. Also congruent with the study **Hazarika and Archana(2019)** they found that more than half of studied group were female while these results contradicted with **Simic et al. (2019)** they found more than half of studied group were male .

The results of the present study revealed that majority of studied sample are intermediate education, single and not working .This might be due to most of them were undergraduate and still in education and depending on their families. This result is congruent with **Jeong et al. (2021)** who found that most of the studied groups are still in education, not married and not working.

The present study documents that, regarding family history of acne among studied sample were two thirds of them having positive history this might be due toacne has an inherited predisposition due to involvement of the cytochrome P450-1A1 gene, *CYP1A1*, and steroid 21-hydroxylase, P-450-c21.This result was in the same line with **Abhineetha et al., (2021)** whose result revealed that more half of studied group had positive family history of acne and more than half of them had first-degree relatives of patients with acne

The current study results indicated that less than half of the studied sample are two visits to dermatologist in month and most of them are responsive to treatment this might be due to the negative effects of acne on the face this leads to recurrent visits to dermatologist. Also, Nearly three- quarters of the studied samples shows an increase of acne in summer. 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., (2020)** who found that more than half of his studied sample have increase acne appearance in summer months

The current study illustrated that more than half of the studied sample cause of Acne are from Cosmetic agents this might be due to the the fact of cosmetic agent that contains on chemical substances that harm the skin .This finding is consistent with **Magdy and Ahmed (2018)** they found more than half of their sample were believed that Cosmetic products are aggravate acne .Also, the majority of the studied sample have mild degree of acne this result is congruent with **Skroza et al., (2018)** they showed that mild acne is the most frequent form. Also the result of study was supported by **Mutair et al., (2019**) they showed in their study that more than half of acne cases were mild degree.

The result of the present study illustrated that near to one quarter of the studied sample having visible acne site at Face. This might be due to that the face more sensitive visible skin on the body and more exposed to sun and dust. This result was in the same line with **Abhineetha et al., (2021)** whose result revealed that the face was the most commonly involved area and papules were the most prevalent lesion type.This is similar to prior studies.**Durai& Nair,(2019)** Because the face plays an important role in body image, the presence of facial lesions may be unacceptable for patients and therefore they may present more frequently to dermatologists.

An important finding from the current study revealed that nearly half of the studied patients have no social phobia post program implementation. This indicates the effectiveness of the program content such as application of sessions about how to control social phobia and training the patients on deep breathing exercise which lead to increase sociality of the patients and decrease fear from society.This result consistent with**Do JE et al., (2019)** who showed that a significant decrease in scores from pre- to post-assessment on the degree of social phobia

In addition to, the finding of the present study reported that, more than half of the studied samples have moderate degree of depression post program implementation. This may be due to response of the studied samples to apply the practical ways which improve the psychological state of patients with acne and apply an exercise to reduce negative emotions of them. This finding was in corroborated with **Niemeier et al., (2020)** they found in their study that the majority of teenagers with acne having severe degree of depression before implementation of psychosocial intervention and improved after implementation of psychosocial intervention

Additionally, the finding of the current study pointed out that, there are highly statistically significant differences between total social phobia and acne degree post program. This might be due to Psychological and social consequences of acne vulgaris are considerable although it is not causing severe morbidity or physical disability. Acne often leads to significant psychological and physical morbidity. More than a cosmetic nuisance, acne can produce anxiety, depression, and other psychological problems that affect patients' lives in ways comparable to life-threatening or disabling diseases This result was consistent with the study done by **Aktan et al.,(2020)** who found that there was a highly statistically significant difference between degree of acne and levels of social phobia.

The present study illustrated that, there are statistically significant differences between total depression and acne degree post program. Where the levels of depression were higher according to the severity of the degree of acne. This might be due to increasing severity of acne degree lead to more impaired body image leading to psychological distress among patients with acne as depression. As a result of program interventions and psychological support such as reassurance and relaxation techniques lead to decrease level of depression among patients with acne. This finding was corroborated with **Dunn et al, (2019)** who found that there was positive significant correlation between depression and degree of acne. General self-image, social relationships, and depression were significantly correlated with the subjective grade of severity.

The findings of the present study showed that, there are positive correlation between total social phobia and total depression pre and post program. This meant when social phobia increased depression increased pre program but after program intervention development of skills through social interaction, further exposure and habituation with prediction of further coping, increased self-efficacy and confidence lead to social integration. All of this leads to decrease depression symptoms. This result was agreement with **Lee et al., (2018)** who found that there was positive significant correlation between social phobia and depression.

Conclusion:

Based on the finding of the current study, it can be concluded that, the above mentioned findings proved and reinforced the research hypothesis that the psycho social program had a positive effect to overcome psychosocial problems among patients with acne vulgaris.

Recommendations

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

- Expand public awareness through mass media about stages of acne vulgaris and the effect of being emotionally stable on mental health and all life aspects.
- 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.

Further study: *Evaluate the effect of psycho-social program on psychosocial problems among patients with acne vulgaris with long term follow up and longer sample size with different ages.

References

Abhineetha , H., Wapna, B., & Vinay, B.(2021): Impact of Acne Vulgaris on Quality of Life and Self-esteem. From the Oxford Medical College, *Cutis.*;98:121-124

Abo El-Fetoh, N., Alghamdi, R., Albarqi, W., Asiri, A. &Alruwaili, **N. (2020):** Epidemiology of Acne Vulgaris in Adolescent and Young Females In Riyadh City. IntJ Adv Res. volume 4, Issue 12, P.p589–98.doi: 10.21474/IJAR01/2434.

Aktan, E. ¨ Ozmen, A. & Anli, B.(2020):- **"**Anxiety, depression, andnature of acne vulgaris in adolescents," *International Journal of Dermatology*, vol. 39, no. 5, pp. 354–357.

Aslan, İ., Özcan, F., Karaarslan, T., Kıraç, E. & Aslan, M. (2019):Acne vulgaris Jan, volumes128-129, Pp:1-7.

Coban, M., Turkmen, M. &Coban, K. (2019): Quality of life in patients with mild or moderate acne vulgaris. J CinDermatol Volume 2 Issue 5.ISSN: 2574-7800.

Connor, K., Davidson, R., Churchill, E., Sherwood, A., Weisler, R. & FOA, E. (2000). Psychometric properties of the social phobia inventory (SPIN). The British Journal of psychiatry, 176 (4), pp: 379-386.

David, B. (1989): Acne vulgaris depression checklist taken from the feeling good hand book. Using the new mood therapy in everyday life. Available at http // healingheartscc.com/docs/first steps/FS Depression Quiz.pdf (Accessed 10/11/2017 p.m).

Do, J., Cho, S. & In, S.(2019):- Psychosocial aspects of acne vulgaris: a community-based study with Korean adolescents. *Ann Dermatol*.;21:125-129.

Dunn, L. ,O'Neill, J.& Feldman, S.(2019):- Acne in adolescents: quality of life, self-esteem, mood, and psychological disorders. *Dermatol Online J*.;17:1.

Durai, P.& Nair, D.(2019):- Acne vulgaris and quality of life among young adults in South India. *Indian J Dermatol*;60:33-40.

Hazarika, N. & Archana, M.(2019) .The Psychosocial Impact of Acne Vulgaris Article in Indian Journal of Dermatology · September 2016 DOI: 10.4103/0019-5154.

Jagtiani, A., Nishal, P., Jangid, P., Sethi, S., Dayal, S. & Kapoor, A.(2020). Depression and suicidal ideation in patients with acne, psoriasis, and alopecia areata Year Volume 22, Issue 1, Pp : 50-54

Jeong, S., Eun, D., Sun-Mi, P., Sung-Il In, M. &Ki-Young, A .(2021):- Psychosocial Aspects of Acne Vulgaris: A Community-based Study with Korean Adolescents.

Kravvas, G. and Al-Niaimi, F. (2019):- A systematic review of treatments for acne scarring. Part 1: Non-energy-based techniques. Scars Burn Heal.

Lawton, S. (2018):- Maintaining skin health in older people. Nursing Older People. doi: 10.7748/nop.2018.e1082, https:// journals. rcni.com/nursing-older-people.

Lee, S., Cho, H., Seung, N. & Jung ,S. 2018):-Quality of life of acne patients. Korean J Dermatol;44:688-695.

Magdy, A., Darwish,B. & Ahmed , A. (2018):-Knowledge, Beliefs, and Psychosocial Effect ofAcne Vulgaris among Saudi Acne Patients

McPhee, M., Papadakis, a. & Rabow, M. (2019):- Current Medical Diagnosis and Treatment, McGraw-Hill, New York, NY,USA, 50th edition.

Mutair, S., Shaaf, K., Awad, S. & Abdullah, K. (2019). Prevalence of depression among acne patients in king faisal hospital and king abulaziz hospital in makkah, Saudi Arabia. Doi : 10.5455\ ijmsph. 2014. 090720141.

Niemeier, J., Kupfer, D. & Gieler, U. (2020):-"Acne vulgaris—psychosomatic aspects," *Journal of the German Society of Dermatology*,vol. 4, no. 12, pp. 1027–1036.

Picardo, M. (2019):- Everything you need to know about cystic acne.Last updated Mon 4 December Reviewed by University of Illinois-Chicago, School of Medicine https://www.medicalnewstoday.com/articles/103258.php

Šimic, D., Penavic, J. ,Babic, D. &Gunarić, A.(2019).Psychological status and Quality of life in acne patients treated with oral isotretinoinsychiatriaDanubina,; Vol. 29

Skroza, N., Tolino, E., Mambrin, A., Zuber, S., Balduzzi, V., Bernardini, N.,&Potenza, C. (2018). Adult Acne Versus Adolescent Acne J CLIN AesthetDermatol. Jan, volume11, Issue(1), Pp.21-25.

Smithard, A.,Glazebrook, C. &Williams, H. (2021):-Acne prevalence, knowledge about acne and psychological morbidity in mid-adolescence: a community-based study. Br J Dermatol;145:274-279.

Taghi, M., Mozaffary, B. &Noorbala, M. (2020): Prevalence of acne and its impact on the quality of life in high school aged adolescents in Yazd, Iran. Journal of Pakistan Association of Dermatologist, volume 23, Issue (2)Pp: 168-172.

Thomas, D. (2019):- Psychosocial effects of acne. J Cutan Med Surg;8Suppl 4:3-5.