

## Psychosocial Problems Associated with Vitiligo

Hend Saber Abd El-Nady, Ghada Mohammed Morad, Galila Shawky El Ganzory  
Psychiatric Mental Health Nursing, Faculty of Nursing, Ain Shams University.

### Abstract

**Background:** Vitiligo is one of the most important acquired depigmentation disorders; it is clinically characterized by the development of white macular because of the loss of functioning melanocytes in the skin or hair, or both. **The aim of the study** was to assess the psychosocial problems associated with Vitiligo. **Research design,** A descriptive cross-sectional design was utilized for this study. **Data were collected using:** Interview questionnaire and Psychosocial measurement to assess psychosocial problem among patient with Vitiligo. **The result of the study showed that** shows that there is a highly significant relation between start of treatment and social problems and there is a highly significant relation between social problems and monthly income. **Result concluded that:** Vitiligo patients were facing many types of stigma denoting that, the community still has a negative attitude towards them, which in turn the vitiligo patients counter acting this attitude by avoiding communicating with people and they preferred to live separately. **Recommendations:** Encouraging a better coordination between all healthcare partners like dermatologists, psychiatrists, and healthcare workers to settle all the issues and to help in achieving the eradication goals of vitiligo disease.

**Key words:** Psychosocial Problems, vitiligo.

### Introduction

Vitiligo is an acquired skin and mucous membrane discoloration of great cosmetic importance (*Sangma et al., 2015*), characterized by loss of skin color in patches (*Whitton et al., 2010*).

Recent data had clearly supported that Vitiligo is a T-cell mediated autoimmune disease (*Levandowski et al., 2013*). Heat shock protein 70 (HSP70) plays a main non redundant role in precipitating of depigmentation in Vitiligo (*Denman et al., 2008*).

Vitiligo represents an emblematic case: usually disfiguring and located in visible areas, confused in the past (and, in

many world regions, even in the present) with leprosy, mostly perceived by physicians as a harmless, purely cosmetic problem (*Teovska et al., 2012*).

Vitiligo patients had knowledge about their illness: aware of the causes. It is known that Vitiligo is not life-threatening. Thus although some patients were anxious, they had positive ideas on cures and disease control. As physicians, attending to patients should improve their outlook on the disease prognosis and cure (*Topal et al., 2016*).

### Signs and symptoms of Vitiligo

The clinically characteristic symptoms of the vitiligo are pale or milk- white macules or patches because of the selective

destruction of melanocytes. They found on the skin in different parts of the body and sometimes also on the mucous membranes (*Zhang et al., 2016*).

The most commonly affected areas of the skin are the face, lips, hands, arms, feet, and the genitals. Moreover, the hairs color that grow in the affected areas is usually white (*James et al., 2011*).

Vitiligo Lesions may show oral mucosal depigmentation with lip and palate being the most common sites. Sometimes oral depigmentation may be the first indicator of vitiligo which may manifest in unnoticeable areas (*Nagarajan et al., 2015*).

### **Significance of the study**

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Vitiligo is strongly associated with morbidity and mortality. Less is known about psychological and social problems associated with Vitiligo, however in recent years research has been conducted to study of psychological problems associated with Vitiligo. There is limited research done into the psychological impact of the disease and the efficacy of psychological therapy on patients with vitiligo (*Picardo and Alain, 2010*).

### **Aim of the work**

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The aim of this study is to assess the psychological problems associated with Vitiligo.

#### **Research question:**

What is the psychological problems associated with Vitiligo?

#### **Subjects and Methods**

The design followed for this study was a cross sectional descriptive research design.

#### **Setting:**

The study was conducted in the Benha Dermatology Hospital.

#### **Subjects**

A purposive sample of 80 patients of both sexes, medically diagnosed as having vitiligo, was selected from the Outpatient clinics. Patients fulfilled the following inclusion criteria:

- Both sexes.
- Different age groups.
- With no psychotic problems.
- Willing to participate in the study.

#### **Tool of the data collection:**

**Tool used for data collection were the following:**

**Tool (1):** interviewing questionnaire will developed by the research and revised by supervisor after reviewing literature in the field of vitiligo include

a) Socio - demographic characteristics: such as age, sex, marital status, educational level, income and work.

b) Social problems among patient with vitiligo). The scoring system used to assess social problem of the patients as follows; each sentence has score ranging from 1-3 (1= strongly agree, 2=agree to some text and 3= disagree).

**Tool (A):** Psychological measurement to assess Psychological problem among patient with vitiligo.a) Self esteem scale: to measure positive & negative feelings toward. The scoring system used to assess Psychological problems of the patients as follows; each

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sentence has score ranging from 0-3 (3=strongly agree, 2=agree, 1 =disagree and 0 = strongly disagree).

**B) Body image scale:** It was developed by **lindgren&pauly**.

Body image scale to measure perception patient body each sentence has score ranging from 0-3 (0= never, 1=rarely, 2= sometimes and 3= usually).

### **Administrative design:**

An official permission was obtained from Benha Dermatology Hospital, in which the research was conducted. Subjects who fit the study criteria were interviewed by the researcher during their coming to the outpatient clinic, at the time, the purpose and nature of the study was explained, also agreement to participate in the study was and confidentiality was assured.

### **C- Tools Validity and Reliability:**

#### **Tools Validity:**

To achieve the criteria of trustworthiness of the tools of data collection in this study, it was tested and evaluated for face and content validity, and reliability by a jury group consisting of five experts from Faculty members from Ain Shams University. They were from different academic categories; different specialties were represented in the group such as in Psychiatric Nursing, to ascertain relevance, clarity, and completeness of the tools, experts elicited responses that either agree or disagree for the face validity and for content reliability, important, not important, and comments .

The items on which 90% or more of the experts had agreed were included in the proposed tool. The required corrections and modifications were done.

#### **Tools Reliability:**

To achieve the criteria of trustworthiness of the tool reliability a doctor in statistics checked faces and content of all items. No modifications were performed and the two parts of the tools were tested through the pilot study.

The reliability of the tools that were assessed two different times through assessing 10 patients using the developed questionnaire and reassessment after 30 days for follow up on the same sample and the results were the same each time. The validity and reliability process was done during the period from November 2016 to end of February 2017. After conducting the pilot study for measuring reliability and making modifications the supervisors permitted data collection.

#### **Pilot study:**

The Pilot study was conduct on 10% from the total sample in order to ensure the clarity of questions, applicability of the tools, time needed to compete them and perform the required modification according to the expertise opinionnaire and the result of pilot study.

#### **Statistical Design:**

The statistical analysis of data was done by using computer software for Excel program and the Statistical Package for Social Science (SPSS) program, version 22. The first part of data was descriptive data, which were revised, coded, tabulated and statistically analyzed using the proportion and percentage, the arithmetic mean ( $\bar{x}$ ), slandered deviation (SD).

#### **Ethical consideration:**

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The researcher obtained an approval to conduct the research study, received official permission from faculty of Nursing in

Ain Shams. After securing official requirements for vitiligo patients out this study.

The patients were informed about choosing to participate or not and about their right to withdraw at any time without giving any reason, and data collected will be only used for the purpose of the study. Explanation of the aim and nature of this study to the vitiligo patients with reassurance about the confidentiality of information given and that it will be used for scientific research only.

**Result:**

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**Table (1):** shows that the highest percentage of the sample (45%) were at age group between 30-39 years, 68.8% were males, 77.5% were married, 71.2% lived in rural area, 93.8% lived with their family, 56.2% their income was enough, 41.2% worked as clerks, and 50% had moderate education.

**Table (2):** shows that the highest percentage of the sample (68.8%) had no physical illness since 1-3 years, 65% started treatment since 1-3 years, 65% had chemical medication and 31.2% entered hospital twice.

**Table (3):** shows that the total self respect score of the sample was 65.1% The highest items which the sample strongly agreed to was 28.75 % to the item (I wish I could have more respect for myself) and 27.5% to the item (I feel that I have a number

of good qualities.) The highest items which the sample agreed to was 67.5% to the item (On the whole, I am satisfied with myself) and 66% to the item (I feel that I am a person of worth, at least on an equal plane with others.) while the items which the sample disagreed with was 45% disagreed with the item (All in all, I am inclined to feel that I am a failure.) and (I certainly feel useless at times)

**Table (4):** shows that the total body image satisfactions score of the sample were 56.9%. Items which the sample answered highest percent of usually was (I am concerned with deformities in my body) with 38.7 %. Item with the highest percent of sometimes was (I look negatively to my body) with 60%. Item with the highest percent of rarely was (I feel I look terrible) and (people loves and accepts me) with 27.5 % while item with the highest percent of never was (I judge people by their looks) with 36%.

**Table(5):** shows that the total social problems score of the sample were 64.8%. Items which the sample strongly agreed to was (I avoid people who will talk about skin problems) with 41% Item with the highest percent of agree to some extent was (My colleagues avoid me) and (I am isolated from others) with 48% Item with the highest percent of disagree was (I avoid high position because of my skin) and (I feel unsatisfied because of my work skills decreasing) with 45%.

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**Table (1):** Distribution of studied patient with vitiligo according to demographic data (n=80).

Variable	No.	%
<b>Age</b>		
20-29	20	25.0
30-39	36	45.0
40-49	18	22.5
50-59	6	7.5
<b>Gender</b>		
Male	55	68.8
Female	25	31.2
<b>Marital status</b>		
Single	12	15.0
Married	62	77.5
Widow	1	1.2
Divorced	5	6.2
<b>Residence</b>		
Rural	57	71.2
Urban	23	28.8
<b>Lives with who</b>		
Alone	5	6.2
With family	75	93.8
<b>Monthly income</b>		
Enough	45	56.2
Not enough	35	43.8
<b>Occupation</b>		
Clerk	33	41.2
Technical	25	31.2
Office work	9	11.2
Housewife	3	3.8
Worker	3	3.8
Network	7	8.8
<b>Education</b>		
Primary	7	8.8
Secondary	4	5.0
Moderate education	40	50.0
High education	29	36.2

**Table (2):** Distribution of sample according to illness history (n=80).

Variable	No.	%
<b>Physical illness</b>		
Yes	25	31.2
No	55	68.8
<b>Start of illness (years)</b>		
1-3	51	63.8
3-5	9	11.2
5 >	20	25.0
<b>Start of treatment (years)</b>		
1-3	52	65.0
3-5	14	17.5
5>	14	17.5
<b>Medication type</b>		
Psychiatric	5	6.2
Chemical	52	65.0
Both	23	28.8
<b>Number of hospital entry</b>		
1	22	27.5
2	25	31.2
3 or more	21	26.2
None	12	15.0

Table (3): Distribution of sample according to self respect scale (n=80).

No.	Items	Strongly agree		Agree		Disagree		Strongly disagree	
		No.	%	No.	%	No.	%	No.	%
1	On the whole, I am satisfied with my self	8	10	54	67.5	14	17.5	4	5
2	At times I think I am no good at all	11	13.75	45	56.25	22	27.5	2	2.5
3	I feel that I have a number of good qualities	22	27.5	46	57.5	12	15	0	0
4	I am able to do things as well as most other people	16	20	50	62.5	12	15	2	2.5
5	I feel I do not have much to be proud of.	4	5	42	52.5	26	32.5	8	10
6	I certainly feel useless at time.	9	11.25	44	55	26	32.5	1	1.25
7	I feel that I am a person of worth, at least on an equal plane with others	13	16.25	53	66.25	14	17.5	0	0
8	I wish I could have more respect for my self	23	28.75	38	47.5	13	16.25	6	7.5
9	All in all, I am included to feel that I am a failure	5	6.25	30	37.5	36	45	9	11.25
10	I take a positive attitude toward my self	6	7.5	50	62.5	19	23.75	5	6.25
Total score								65.1%	

Table (4): Distribution of sample according to body image satisfaction (n=80).

No.	Items	Usually		Sometimes		Really		Never	
		No.	%	No.	%	No.	%	No.	%
1	I look negatively to my body	15	18.75	48	60	7	8.75	10	12.5
2	I am constrained because of my body	22	27.5	32	40	11	13.75	15	18.75
3	I tend to change my facial features	27	33.75	33	41.25	10	12.5	10	12.5
4	I stay indoors when I am in a journey	25	31.25	34	42.5	14	17.5	7	8.75
5	I feel people do not see me attractive	28	35	32	40	14	17.5	6	7.5
6	I avoid looking to mirror.	18	22.5	36	45	17	21.25	9	11.25
7	I feel my body parts different from others	27	33.5	31	38.75	9	11.25	13	16.25
8	I cannot understand my body	20	25	35	43.75	13	16.25	12	15
9	I avoid attending social meetings	25	31.25	28	35	12	15	15	18.75
10	I feel sad when I look in mirror	21	26.25	34	42.5	10	12.5	15	18.75
11	I feel unsatisfied with my body	22	27.5	32	40	13	16.25	13	16.25
12	I avoid moving since my body is not in harmony	18	22.5	31	38.75	13	16.25	18	22.5
13	I feel my clothes is less value than other	13	16.25	21	26.25	20	25	26	32.5
14	I refuse to wear swim suits	29	36.25	27	33.75	8	10	16	20
15	I feel I look terrible	17	21.25	24	30	22	27.5	17	21.25
16	I accept my body	22	27.5	34	42.5	13	16.25	11	13.75
17	It is better to change my look and face	23	28.75	33	41.25	10	12.5	14	17.5
18	There is contradiction between my thoughts and looks	21	26.25	38	47.5	7	8.75	14	17.5
19	I feel embarrassed by my looks	10	12.5	44	55	11	13.75	15	18.75
20	My body image worries me	23	28.75	31	38.75	13	16.25	13	16.25
21	I am concerned with deformities in my body	31	38.75	22	27.5	14	17.5	13	16.25
22	I need cosmetic surgery	26	32.5	27	33.75	10	12.5	17	21.25
23	I lack self confidence in my looks	19	23.75	28	35	16	20	17	21.25
24	I avoid meeting people	15	18.75	36	45	16	20	13	16.25
25	I judge people by their looks	12	15	24	30	15	18.75	29	36.25
26	People loves and accepts me	17	21.25	30	37.5	22	27.5	11	13.75
27	People avoid me	14	17.5	32	40	15	18.75	19	23.75
28	I feel worried about my deformities	18	22.5	31	38.75	17	21.25	14	17.5
29	I cannot stay long with people	12	15	32	40	10	12.5	17	21.25
30	I cannot interact with people normally	24	30	27	33.75	21	26.25	17	21.25
Total score								56.9%	

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**Table (5):** Distribution of sample according to social problems (n=80).

No.	Item	Strongly agree		Agree to some extent		Disagree	
		No.	%	No.	%	No.	%
1	I avoid social occasions	27	33.75	38	47.5	15	18.75
2	My social relations are superficial	19	23.75	42	52.5	19	23.75
3	I avoid going out	26	32.5	33	41.25	21	26.25
4	I avoid people who will talk about skin problems	33	41.25	26	32.5	21	26.25
5	I feel my skin delays my marriage	23	28.75	35	43.75	22	27.5
6	I prefer not to go out	17	21.25	36	45	27	33.75
7	My husband/spouse refuse to go out with me	14	17.5	31	38.75	35	43.75
8	I feel offended by my husband/spouse comments	19	23.75	34	42.5	27	33.75
9	I feel ashamed of my self	16	20	39	48.75	25	31.25
10	I hate people negative comments	30	37.5	31	38.75	19	23.75
11	I feel treated differently in public transport	25	31.25	36	45	19	23.75
12	My skin makes me nervous with others	23	28.75	30	37.5	27	33.75
13	I avoid high position because of my skin	15	18.75	29	36.25	36	45
14	I am deprived of high position because of my skin	23	28.75	25	31.25	32	40
15	I am treated different at work	19	23.75	29	36.25	32	40
16	I feel ashamed from people looking at me	27	33.75	31	38.75	22	27.5
17	I feel unsatisfied because of my work skills decreasing	19	23.75	25	31.25	36	45
18	I do not prefer to engage in social activity	22	27.5	34	42.5	24	30
19	I do not make friends easily	20	25	32	40	28	35
20	My colleagues avoid me	13	16.25	39	48.75	28	35
21	I am isolated from others	17	21.25	39	48.75	24	30
22	My friends avoid going out with me	18	22.5	29	36.25	33	41.25
23	A lot think that my disease is contagious	32	40	29	36.25	19	23.75
24	A lot hurt my feelings	24	30	35	43.75	21	26.25
25	I prefer to be with other patients	22	27.5	34	42.5	24	30
26	I prefer to fill any form about my disease	12	15	34	42.5	34	42.5
<b>Total score</b>				<b>64.8%</b>			

### Discussion

Vitiligo is a common depigmenting skin disorder, characterized by acquired, idiopathic, progressive, circumscribed hypomelanosis of the skin and hair (Yaghoobi et al., 2011).

The present study aimed to assess the psychosocial problems associated with vitiligo. This aim was supported by achieving answering the following research question, what is the psychosocial problem associated with vitiligo?

#### Part (I) Socio demographic characteristics of vitiligo patients

The result of the current study showed that the two third of the sample were males, this result is in agreement with Asati et al. (2016); Bae et al. (2017) and Gül et al.

(2017) who stated that the majority of patients in their studies were males. While this result disagree with Sheth et al. (2013) and Al Houssien et al. (2017) who stated that the majority of patients were females.

Concerning the level of education the result of the present study showed that half of the sample had moderate education.

Regarding patients' occupation, the result of the present study revealed that the two fifth of the sample worked as clerks. Olasode et al. (2007) found that the occupation and the social status of the people affected varied widely. They involved farmers, housewives, students, bricklayers, clerical officers and medical personnel, it may be due to, there is stigma because the low of knowledge about vitiligo leading the people to refuse to treat and work with vitiligo patient if the patient accept to work with people, the negative behavior of people is

keeping patient to force leave the work and this lead to low income suffering his family.

Regarding the monthly income the result of the present study revealed that more than half of the sample their income was enough, this may be due to the vitiligo patients were working living with their family and there were enough sources for income.

#### **Part (II) History of illness regarding vitiligo**

As regard medical history of the studied patients with vitiligo in the current study, the results revealed that two thirds of the sample had no physical illness, started the illness since 1-3 years, had chemical medication and entered hospital twice.

This result was agreed with *Bae et al. (2017)* who found that the median duration of disease was 3.00 years. This finding disagrees with *Paravar and Lee (2010)* who indicated that average disease duration of 5-7 years. *Gönül et al. (2012)* stated that the disease onset age was significantly lower in women. In *Sangma et al. (2015)* who studied Quality of Life and Psychological Morbidity in Vitiligo Patients, mean duration of the disease was  $4.60 \pm 5.90$  years.

#### **Part (IV) Body image among patients with vitiligo**

From another side the present study showed that the total body image satisfactions score of the sample was slightly more than half of them. Items which the sample answered highest percent of usually was (I am concerned with deformities in my body) with about more than one third. Item with the highest percent of sometimes was (I look negatively to my body) with two thirds. Item with the highest percent of rarely was (I feel I look terrible) and (People loves and accepts me) with less than one third while

item with the highest percent of never was (I judge people by their looks) with slightly more than one third.

In Egyptian population with darker skin color, vitiligo is associated with major social, emotional, economic, and psychological negative implications for patients with the disease and their families.

#### **Part (V) Social problems among patients with vitiligo**

The present study showed that the total social problems score of the sample was more than two thirds. Items which the sample strongly agreed to was (I avoid people who will talk about skin problems) with less than half. Item with the highest percent of agree to some extent was (My colleagues avoid me) and (I am isolated from others) with less than half. Item with the highest percent of disagree was (I avoid high positions because of my skin) and (I feel unsatisfied because of my work skills decreasing) with less than half.

This result was in agreement with *Firooz et al. (2004)* who studied What patients with vitiligo believe about their condition, almost one-half of patients believed that their illness had major consequences on their lives. One-half of patients believed that their illness was likely to be permanent rather than temporary, more so in patients with longer disease duration and a higher level of education. Only two thirds of patients considered that their treatments were effective. Also, *Porter et al. (1990)* recorded that majority of vitiligo patients experienced anxiety and embarrassment when meeting strangers or beginning a new sexual relationship and many felt that they were the victims of rude remarks.



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### Conclusion

▪ Vitiligo patients were facing many types of stigma denoting that, the community still has a negative attitude towards them vitiligo patients counter acting this attitude by avoiding communication with people and they preferred to live separately.

▪ Vitiligo can negative affect the quality of life, self esteem, and body image of patients, thereby; resulting in psychosocial problems Addressing psychosocial factors is an essential aspect of the management of vitiligo.

▪ There is a moderate significant inverse relation between self respect and social problems. There is a very strong significant inverse relation between body image satisfaction and social problems.

### Recommendations

▪ Designing and conducting a national level mass campaign of health education for the general public. The general public should be made aware that vitiligo patients need social support.

▪ Encouraging a better coordination between all healthcare partners like dermatologists, psychiatrists, and healthcare workers to settle all the issues and to help in achieving the eradication goals of vitiligo disease.

▪ Improving psychosocial rehabilitation, increasing emotional stability and self-worth of the discharged vitiligo patients should be encouraged to maintain stable married life for them. Also as a step to reduce depression, loneliness, discrimination and rejection common among discharged patients.

▪ Highlighting the need to encourage the discharged patients to be active in all religious activities.

▪ The family members of discharged patients should be health educated on the benefits of providing emotional support to vitiligo patients. They should be enlightend on the need to combact vitiligo patients to combact the problem of stigma in the communities.

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### Conflict of interest:

No Yes

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