



RESEARCH ARTICLE

Effect of Psychiatric Nursing Interventions on Quality of Life for Patients with Psoriasis

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ARTICLE INFO	ABSTRACT
Received: Apr 24, 2024	<p>Psoriasis is a skin disease that causes a rash with itchy, scaly patches, most commonly on the knees, elbows, trunk, and scalp. Patients with chronic psoriasis experience a range of psychosocial problems. Psychological distress is a common part of illness, which negatively affects both disease severity and quality of life. This study aims to evaluate the effect of Psychiatric Nursing intervention on quality of life for patients with psoriasis. Research design: A quasi-experimental (pre/post-test) research design was used. Setting: the study was conducted carried out at outpatient dermatology clinics at Assiut University hospital, Egypt. Sample: A convenient sample of 100 patients, their ages ranged from (18- 65) years diagnosed with only psoriasis and not having other skin diseases. Tools: two tools were used: Tool (I) Demographic characteristics data sheet and Tool (II) The Dermatology Life Quality Index (DLQI). Results: There was a statistically significant differences between Total of Dermatology Life Quality domains of studied group pre-and post-implementation of program ($p < 0.001^*$). Conclusions: Implementing Psychiatric Nursing intervention improved quality of life among studied patients. Recommendations: Integrating Psychiatric Nursing intervention into the treatment plans for patients with psoriasis and providing patients with educational materials and counseling sessions to promote patient engagement and adherence to prescribed regimens is recommended.</p>
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INTRODUCTION

Psoriasis is a common, long-term (chronic) disease with no cure. It can be painful, interfere with sleep and make it hard to concentrate. The condition tends to go through cycles, flaring for a few weeks or months, then subsiding for a while. Common triggers in people with a genetic predisposition to psoriasis include infections, cuts or burns, and certain medications (Elzehiri et al., 2022).

Psoriasis can be present at any age and has been reported at birth and in older people of advanced age. Accurate determination of the age of onset of psoriasis is problematic, as studies which do so typically rely on a patient's recall of the onset of lesions or determine the onset from the physician's diagnosis as recorded on the initial visit (Visser et al., 2021).

The cause of psoriasis is not fully understood. Genetics, seasonal changes, skin damage, climate, immunocompromised state, specific infections, and the use of some medications have been related to different types of psoriasis (Joshi et al., 2023).

Patients with psoriasis have a reduction in the quality of life like or worse than patients with other chronic diseases, such as ischemic heart disease and diabetes. That patients with psoriasis feel

stigmatized by the condition is well established. This contributes to everyday disability leading to depression and suicidal ideation in more than 5% of patients (Meneguín et al., 2020).

Many instruments have been generated to measure aspects of disease on quality of life. The current metrics for quality of life in psoriasis generally measure one or two categories, the physical aspects of disease (pain, itch, etc) or the mental aspects of disease (self-perception, interaction with others, etc). To have a maximal quality of life, one needs to be able to participate in all aspects of life, including effective interaction with others and carrying out physical responsibilities, both at work and at home (Bartholomew et al., 2022).

Significance of the Study

Psoriasis occurs worldwide. It affects men and women of all ages, regardless of ethnic origin, in all countries (Tarannum et al., 2022). The reported prevalence of psoriasis in countries ranges between 0.09% and 11.4% (Alzeer & Aleisa, 2022). Psoriasis a serious global problem. In most developed countries, prevalence is between 1.5 and 5% (Nast, et al., 2021). In Egypt, the prevalence reported is around 3% (Abdelsamed, et al., 2021). Many studies have demonstrated that psoriasis can impact substantially on QoL, even when a relatively limited body surface area (BSA) is affected (Yeh, et al., 2022). So that this study is important to help psoriasis patients to cope with disease and improve their quality of life.

The aim of the study was:

To evaluate the effect of Psychiatric Nursing intervention on quality of life for patients with psoriasis.
Hypothesis:

H (1): Quality of life of patients with psoriasis who receive psychiatric nursing intervention will be improved than who don't receive.

PATIENTS AND METHODS

Research design

A quasi-experimental (pre-posttest) research design was used to achieve the aim of the study. Quasi-experimental studies encompass a broad range of nonrandomized intervention studies. These designs are frequently used when conducting a randomized controlled trial is not logistically feasible or ethical (Harris et al., 2006).

Setting

The study was carried out in outpatient dermatology clinics at Assiut University hospital.

Sample

A convenient sample of 100 patients (male & female), ages ranging from 18 to 65 years, were come to outpatient's clinics in Assiut University Hospitals diagnosed only with psoriasis and not have other skin diseases.

Sample size

Sample size was calculated by Open Epi Info version (3) according to previous study conducted by Nagarajan., et al (2018), using the following equation

$$n = \frac{N \times p(1-p)}{\left[\left[N - 1 \times \left(d^2 \div z^2 \right) \right] + p(1-p) \right]}$$

to detect an effect size of one group (pre/ post-test). After considering the exclusion criteria, the final sample size was (100). Where N = total patient population size. The Z= confidence level is 0.95 and is equal to 1.96, D= the error ratio is = 0.05 P= the property availability ratio and neutral = 0.50. The group assignments were determined through simple randomization, with numbers starting with even numbers assigned to group 1 and odd numbers to group 2.

Study tools

Tool (I): Personal and clinical data sheet

This tool was developed by the researcher to collect the information about the personal data such as (age, gender, education level, residence, occupation and marital status and clinical data such as (patient's diagnosis, history of psychiatric disorder and the influence of environmental factors.

Tool (II): The Dermatology Life Quality Index (DLQI)

DLQI is dermatology specific, patient-reported, quality of life measure that is very widely used to assess the quality of life in psoriasis patients. It consists of ten questions that measure daily activities, leisure, symptoms, feelings, work, school, and personal relationships.

The patient responds to each question on a Likert-type scale from 0 to 3 and sums up all items, generating a score ranging from 0 to 30. The higher the DLQI score considered more impaired the quality of life is, with a score of >10 represents a severely affected life by the skin condition.

The score is categorized to no effect on patients' life at all (0–1), small effect (2–5), moderate effect (6–10), very large effect (11–20), and extremely large effect (21–30). The Dermatology Life Quality Index (DLQI) has been validated and shown to be a reliable measurement ($\alpha = .87$) (Finlay,1994).

Booklet

The researcher developed a designed booklet based on the patient assessment needs and a literature review as well as opinions of psychiatric and dermatology experts. It was written in simple Arabic and supported by photo illustrations and colored pictures to be suitable for all patients regardless of their educational level, involving theoretical and practical parts.

The theoretical section covers general information on psoriasis, including the definition of psoriasis, its causes, types, symptoms, treatment of psoriasis, and its management, strategies to cope with disease improve their quality of life, On the other hand, the practical part focuses on relaxation techniques.

Content validity

The tools of this study were tested content validity by the five experts in the field of psychiatric mental health nursing and medicine experts from Assiut university, three from psychiatric nursing and two from psychiatric medicine, to confirm accuracy and relevance of the information and tools and necessary modification was done. tools were translated into Arabic version by the researcher and reviewed by the experts.

Pilot study

Pilot study was done to evaluate the tools clarity and applicability as well as the time needed to fulfill each sheet. It was carried out on 10% of the total number that equal 5 patients of the studied sample, this number was excluded from the total sample. All subjects were recruit in the pilot study met the inclusion criteria.

Ethical considerations

The study received ethical approval from the nursing faculty (465) on October 27/2022. The researcher emphasized that the participation was voluntary, and the patients had the right to refuse to participate in the research and could withdraw at any time without any rationale. Verbal consent was obtained from each patient before contributing to the present study. There were no risks for studying patients during the application of the study. Confidentiality and anonymity of any obtained information were assured by coding all data.

Procedure

The proposed program was conduct through the following phases:

Assessment phase (early phase)

This phase aimed to assess the studied sample; each patient was interviewed to collect the necessary data. Based on the assessment phase, the program and media were prepared by the researcher in the form of teaching methods such as lectures and discussion which were reviewed by supervisors. media that was used booklet, pictures.

Preparatory phase

The planning phase included the program strategies time, number of sessions, teaching methods, media used. In addition, the teaching place and the program facilities were checked for appropriateness. The number of sessions was 4 sessions, one session every week; the duration of each session ranged from 30-60 minutes. Sessions were introduced about (introduction about psoriasis, General view about treatment of psoriasis, and its management, strategies to cope with disease to improve their quality of life, etc....). A variety of teaching methods was included in this program lectures, group discussion, and sharing experience of the studied sample was utilized in this program.

The content of program as the following:

- Session 1: the researcher gave an introduction about the program, its goals, place and schedule of sessions, and pretest questionnaire.
- Session 2: Introduction about psoriasis, definition of psoriasis, Types of psoriasis, etiology of psoriasis, Sign and symptoms of psoriasis, and management of psoriasis.
- Session 3: strategies to cope with psoriasis to improve their quality of life: - training about three types of relaxation techniques (deep breathing exercise, progressive relaxation technique, and passive progressive relaxation technique).

Implementation of the program

During this phase, the patients who were included in the study were divided into five subgroups, each one containing ten participants. The educational program covered the theoretical part about psoriasis, definition of psoriasis, Types of psoriasis, etiology of psoriasis, Sign and symptoms of psoriasis, and management of psoriasis. Also, the program included several practical sessions in which teaching different types of relaxation techniques. After each session the researcher spent a brief period reviewing the content of session as well as obtaining patient's feedback.

Evaluation of the program

- Evaluation of both studied and control groups was done using the same study tools firstly, before program implementation (pre-test) and secondly, four weeks after implementation of the program (post-test)

Statistical design

Data management was done by coding entering responses into the computer. The researcher checked all data to avoid any discrepancies; data were examined for coding and entry error. Subject's records were stored in SPSS software (Statistical Package for the Social Science version 26). Descriptive statistics were used to analyze the sample population. Mean/range/standard deviation, chi square and frequency discretion were reported for age, educational level. Paired t test. Level of significance is considered at $P < 0.05$

RESULTS

Table (1): Distribution of personal data among studied and control groups

Variables	Experimental n= 50		Control n= 50		P- value
	No.	%	No.	%	

Age: (Mean ± SD)	34.70±11.41		36.70±10.41		0.362
<30 years	17	34. 0	16	32. 0	0.533
30 – 40 years	19	38. 0	15	30. 0	
> 40 years	14	28. 0	19	38. 0	
Sex:					0.105
Male	33	66. 0	25	50. 0	
Female	17	34. 0	25	50. 0	
Marital status					0.517
Single	17	34. 0	14	28. 0	
Married	33	66. 0	36	72. 0	
Residence:					0.545
Rural	23	46. 0	20	40. 0	
Urban	27	54. 0	30	60. 0	
Level of education					0.257
Read and write	10	20	20	40	
Preparatory	7	14	5	10	
Secondary	20	40	15	30	
University education	13	26	10	20	
Occupation					0.313
Not work	13	26	18	36	
Work	37	74	32	64	

*statistically significant difference (p<0.05)

Table (1) illustrates personal data of study and control group. As regards age, the mean age of the study group was 34.70±11.41, while that of control group was 36.70±10.

As regards marital status; 34% of the studied group and 28 % of control group were single, while 66% of study group and 72% of control group were married. Regarding residence, it was clear that 46% of the studied group and 40% of control group were from rural area, while 54% of study group and 60% of control group were from urban area.

Regarding occupation it was clear that 74% of the studied group and 64% of control group were workers. As regards level of education, the table shows that 40% of the studied group and 30% of control group graduated from secondary school. There were no significant differences between study and control group regarding personal data.

Table (2): Distribution of Clinical data among studied and control groups

Variables	Experimental n= 50		Control n= 50		P-value
	No.	%	No.	%	
History of starting illness (Mean ± SD):	11.52±5.48		11.46±5.52		0.957
< 10 years	20	40.0	20	40.0	0.946
10 – 20 years	24	48.0	25	50.0	

> 20 years	6	12.0	5	10.0	
#Factors that trigger symptoms:					0.186
Season change	46	55.4	50	60.2	
Smoking	12	14.5	12	14.5	
Life stresses	25	30.1	21	25.3	

#More than answer

*statistically significant difference (p<0.05)

Table (2): - shows that 48% of the studied group and 50% of control group had history of starting illness from (10-20) years. As regards factors that trigger symptoms 55.4% of study group and 60.2% of control group were affected by Season change. There were no significant differences between study and control group regarding Clinical data.

Table (3): Distribution levels of Dermatology Life Quality Index among studied and control groups at pre and post intervention

Levels Dermatology Life Quality Index	Experimental n= 50		Control n= 50		P-value ¹
	No.	%	No.	%	
Pre intervention					
Moderate effect on patient's life	5	10.0	3	6.0	0.762
Very large effect on patient's life	23	46.0	24	48.0	
Extremely large effect on patient's life	22	44.0	23	46.0	
Mean ± SD	20.36±6.71		21.94±6.15		0.223
Post intervention					
Small effect on patient's life	3	6.0	0	0.0	<0.001*
Moderate effect on patient's life	47	94.0	0	0.0	
Very large effect on patient's life	0	0.0	18	36.0	
Extremely large effect on patient's life	0	0.0	32	64.0	
Mean ± SD	7.44±1.47		22.68±5.18		<0.001*
P-value ²	<0.001*		0.067		

Table (3): Reveals that there were significant differences between pretest and post test in studied group in all items as regard to levels of Dermatology Life Quality Index (p<0.001) Also, there were statistically significant difference between studied and control groups (p<0.001) at post intervention.

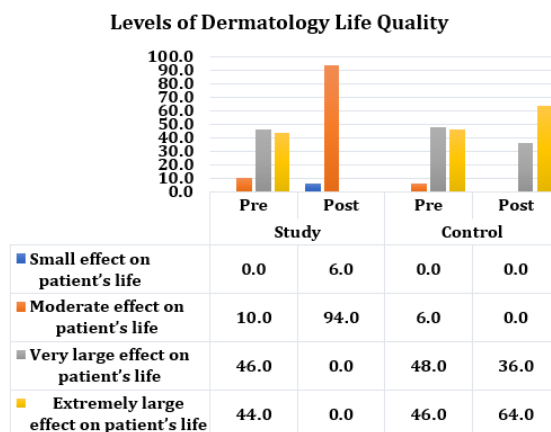


Figure (1): Show levels of Dermatology Life Quality Index of the studied and control groups, (46%) of the studied group and (48%) from the control group were in the very large effect level on patients life at pre intervention. While high percentage (94%) of the studied group were in moderate effect level on patients life and (64%) from the control group were in the extremely large effect level on patients life at post intervention.

Table (4): Relationship between personal data and total of Dermatology Life Quality among studied and control groups at pre and post intervention

Variables	Experimental n= 50		Control n= 50	
	Pre	Post	Pre	Post
	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Age: (years)				
< 30	25.59±3.6 3	22.64±5.13	24.12±3.50	24.37±3.24
30 - 40	25.84±3.3 6	21.78±5.31	25.93±3.51	27.40±2.35
> 40	26.07±3.9 1	23.92±5.16	26.10±4.25	24.94±4.53
P. value	0.984	0.679	0.265	0.534
Sex:				
Male	26.36±3.3 4	22.84±5.09	26.36±3.34	25.16±4.17
Female	25.11±4.0 1	22.35±5.48	25.11±4.01	25.84±3.31
P. value	0.250	0.752	0.250	0.526
Marital status				
Single	26.00±3.7 9	21.82±4.68	24.21±3.44	24.50±3.13
Married	25.90±3.5 4	23.12±5.43	25.88±3.92	25.88±3.92
P. value	0.934	0.407	0.168	0.243
Residence:				
Rural	26.69±3.4 1	7.57±1.50	25.60±4.25	25.05±4.37
Urban	25.29±3.6 7	7.33±1.47	25.30±3.60	25.80±3.30
P. value	0.172	0.584	0.790	0.493
Level of education				
Read and write	19.87±7.7 8	7.67±1.59	22.75±6.54	23.25±5.56
Preparatory	20.60±5.5 0	7.80±1.48	21.62±5.85	22.38±5.11
Secondary	20.33±6.6 9	7.04±1.37	19.89±5.40	21.33±4.21
University	21.50±6.2 5	8.17±1.47		
P. value	0.969	0.281	0.476	0.619
Occupation				
Not work	20.58±6.7 1	7.55±1.55	22.73±6.24	23.17±5.36
Work	20.00±6.8 7	7.26±1.37	20.33±4.42	20.44±3.75
P. value	0.770	0.512	0.108	0.088

Table (4): shows that, there were no statistically significant differences between pre and post program intervention for mean score of Dermatology Life Quality and personal data among study group and no statistically significant differences between pre and post program intervention for total of Dermatology Life Quality and personal data among control group.

Table (5): Relationship between Clinical data and total of Dermatology Life Quality among studied and control groups at pre and post intervention

Variables	Experimental n= 50		Control n= 50	
	Pre	Post	Pre	Post
	Mean±SD	Mean±SD	Mean±SD	Mean±SD
History of starting illness:				
< 10 years	19.10±6.38	7.30±1.72	20.75±7.16	22.15±5.63
10 - 20 years	21.17±6.52	7.50±1.25	22.96±5.16	23.32±4.58
> 20 years	21.33±8.96	7.67±1.63	21.60±6.84	21.60±6.84
P. value	0.564	0.840	0.494	0.676
Factors that trigger symptoms :				
Season change	20.35±6.94	7.37±1.45	21.94±6.15	22.68±5.18
Smoking	23.67±5.30	7.67±1.56	20.58±6.01	21.58±5.28
Life stresses	21.32±5.85	7.44±1.42	20.90±6.00	21.95±5.08
P. value	0.281	0.817	0.693	0.743

Table (5): shows that there were no statistically significant differences between clinical data and total of Dermatology Life Quality in studied and control groups at pre and post at pre and post-implementation of the program.

DISCUSSION

Psoriasis is a chronic, non-communicable, painful, disfiguring and disabling disease, the prevalence of which shows geographic variations, suggesting that it might be influenced by climatic factors such as sun exposure and humidity and with great negative impact on patients’ quality of life (Mahapatra & Shrikrishna, 2023). Psoriasis causes great physical, emotional, and social burden. (QoL) is often significantly impaired. Disfiguration, disability, and marked loss of productivity are common challenges for people with psoriasis (Elbaramony & Ibrahim, 2021).

Psychiatric nursing intervention increases the chances of long-term recovery in many ways, provides valuable information that helps alleviate worry and provides an opportunity for patients to ask questions even if the subject is difficult or embarrassing (Graham et al, 2020).

Relaxation techniques are characterized as a planned, organized, and repeated body movement that aims to promote or maintain physical fitness. The most common relaxation techniques include progressive muscles relaxation and deep breathing exercises. Relaxation techniques have been recognized as a potential add-on improvement of climate change worry among psoriasis patients (Bringmann et al, 2021).

This study aimed to assess the effectiveness of Psychiatric nursing intervention on climate change worry and quality of life for psoriasis patients.

In the present study, it was noticed that the mean age of studied sample (34.70±11.41). This might be due to the psoriasis is often begins between ages 15 and 35 and lifestyle and environmental factors lead to develop psoriasis symptoms during this age. This result is supported by (Armstrong, et al, 2021) who reported that the mean age of studied sample (33.70±11.41).

Concerning sex, about two-thirds of studied sample were males. This might be due to most of participants were male and because of culture make male seek treatment and woman don’t have time for going to hospital and seeking treatment. This result is supported by Maul, et al, 2021 who

mentioned that about two-thirds of their sample were males. This finding was contradicted with McBride, et al., 2021 who reported that most of studied sample were females.

Regarding personal data, the current study revealed that there are no significant differences among experimental and control groups as regard personal data. This was consistent with Elzehiri, et al, (2022), the studies of who found that are no significant differences among experimental and control groups as regard personal data. In contrast to Rzeszutek, (2021), who found there were significant differences among experimental and control groups as regard personal data.

Regarding clinical data, the current study revealed that more than half of the studied sample had a history of starting illness from 10-20 years. This finding could be explained by that psoriasis is chronic and not cured from disease and needed treatment. These findings are similar to previous studies conducted by Merola, et al, (2022), who reported that (67%) of the studied sample were with history of starting illness from 10-20 years. This finding was contradicted with Nicolescu, et al, (2022), who stated that (35%) of the studied sample had history of starting illness from 10-20 years.

Regarding to factors that trigger symptoms, the present study revealed that more than half of psoriasis patients were affected by season change These results could be attributed to psoriasis had seasonal component the symptoms increase in winter and fall in summer and springer. These findings are in agreement with Liang, et al, (2023) who found that more than half of psoriasis patients were affected by Season change But they are contradicted to study conducted by El-Komy, et al, (2023) who found that half of psoriasis patients were affected by Season change

The present study found that, there are statistically significant differences between Total of Dermatology Life Quality domains between pretest and posttest in Experimental group. This finding could be explained by that the effect of implementation program in improvement Quality of Life for experimental group this was consistent with the studies of Nagarajan & Thappa, (2018) who found that there were statistically significant differences between Total of Dermatology Life Quality domains between pretest and posttest in Experimental group.

In the current study, there were no statistically significant differences between personal data and total of Dermatology Life Quality among experimental group at pretest and posttest. This was similar to the studies of Barbieri, et al (2020), who found that no statistically significant differences between personal data and total of Dermatology Life Quality among studies sample In contrast to the studies of (Houghton ., et al (2021), who found that statistically significant differences between personal data and total of Dermatology Life Quality among studies sample.

In the current study, there were no statistically significant differences between clinical data and total of Dermatology Life Quality among experimental group at pretest and posttest. This was similar to the studies of Finlay ., et al (2021), who found that no statistically significant differences between clinical data and total of Dermatology Life Quality among studies sample. In contrast to the studies of Yucel, et al (2021), who found that that statistically significant differences between clinical data and total of Dermatology Life Quality among studies sample.

CONCLUSION

Implementing Psychiatric Nursing intervention improved quality of life among studied patients.

Recommendations

Integrating Psychiatric Nursing intervention into the treatment plans for patients with psoriasis and providing patients with educational materials and counseling sessions to promote patient engagement and adherence to prescribed regimens is recommended.

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