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Evaluating the Impact of Psoriasis on Quality of Life: A Cross-Sectional Study in Al Nasiriya, Thi-Qar, Iraq

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Abstract: Psoriasis is a lifelong inflammatory skin illness that may have an new Serious Consequences on a patient's quality of life. An immune-mediated inflammatory disease. Quality of life (QOL) serves as a sensitive measure to evaluate a patient's health status after receiving treatment and assessing the overall impact of the treatment on their well-being. Aim: the survey was n proposed to estimate the quality of life of a group of persons who have Psoriasis, also for explore potential connections between different components of quality of life (such as physical, psychological, social, and environmental health) and specific factors related to the patients. Method: A 50 patients with Psoriasis are included in the study. The world health Organizations quality of life assessment (WHOQOL-BREEF), short style questionnaire was used to evaluate quality of life after being revised and transformed to regional Arabic language. the patients were selected based on their accessibility and availability to the researchers. The mean age of the patients in the study was (32.98 ± 6.209). The study was conducted at AL Hussein Teaching Hospital / dermatology department in thi-qar city between November 2023 to March 2024. The questionnaire covers four main domains (26 questions): Physical Health, Psychological Well-being, Social Relationships, Environmental domain, Each domain contains several questions that collectively measure that specific aspect of quality of life. Result: The response rate was 100 %. Female were 32 while 18 were males. For overall QOL, Very poor (34%), Poor (62%) and Neither poor nor good (4%). For physical activity domain (Mean = 35 ± 4.79) ; and the social health domain (Mean = 21.00 ± 14.60), Psychological health (35.58 ± 3.38), Environmental health (44.31 ± 11.23). The total mean score was 36.31, as described as poor. In univariate analysis, age was inversely correlated with both QOL-psychological health and QOL-social health. Gender was inversely associated with all components of QOL except psychological health, where there was no correlation. Furthermore, Higher education levels were inversely associated with all components of QOL except social health, where there was no correlation. In multivariate analysis, only the age was inversely linked to psychological domain. Educational level were inversely linked to physical and psychological health. Gender was inversely linked to all components of QOL except psychological health, where there was no correlation. In Conclusion: QOL of Psoriasis patients with were poor and this condition influence social domain by the first degree, psychological activity and environmental domains are also slightly affected, the physical health domain is slightly affected. Also, It was concluded that in patients with psoriasis, age have inverse relationship with psychological health, Education level have inverse relationship with physical and psychological health, Gender have inverse relationship with all components of QOL except psychological health, where there was no correlation.

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Keywords: Psoriasis, Quality of life , WHOQOL-BREF questionnaire, Age, Thi-Qar

1. Introduction

Psoriasis is a lifelong provocative skin illness that may have a serious influence on a patient's quality of life (1). An immune-mediated inflammatory disease, psoriasis has a key genetic constituent (2,3,4,5). The conceivable reasons and triggers causing psoriasis include emotional stress, skin injury, systemic infections, certain medications and intestinal upsets (6,7,8,9). Oral injuries can happen on the lubricated membranes of the entrance, then it is not as public as on the skin and are typically go together with grazes on other fragments of the body (10). psoriasis Exploration is habitually be contingent on the feature of the skin. There are no Characteristic blood trials or analytical measures for psoriasis. intermittently a culture of skin, or abrasion may be significant to exterminate beyond circumstances and to confirm the Exploration. Skin from a culture will proposal cooperated Rete dowels if affirmative for psoriasis (11). additional scratch of psoriasis is that when the plaques are rubbed, one can discriminate pinpoint bleeding from the skin lower (12). Most patients commonly deliberate sun to be promising for their psoriasis. eventual version for a weaken in disorder bleakness over the months of summer or through raised up susceptibility to sun; level, a tiny minority discover, dangerous burn of sun can causing an Worsening of plaque psoriasis via the reaction of Koebner (13). Number of medications have been offer to cause an Worsening of psoriasis. Lithium and departure from corticosteroids are recognized to Pass about flashes of disease. Beta blockers, antimalarials, and nonsteroidal anti-inflammatory drugs (NSAID"s) have also been concerned (14).

Management can be topical or systemic with ultraviolet light. Phototherapy and systemic agents should be used only when topical managements are insufficient. Novel systemic managements for psoriasis comprise a quickly rising group of biological therapies (15-19). Quality of Life is defined by the WHO as "individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns", Psoriasis is be included in Predominant dermal conditions in America (20). This chronic disorder has a Considerable adverse effects on patients' quality of life. Psoriasis has been connected to bleakness and suicidal predispositions, This training attempt to framework disparate quality of life procedures existing for psoriasis their usage in revisions exploring patient pronounced Significances connected with pharmacological interferences for psoriasis. The WHOQOLBREF is a smaller version of the first initial instrument that could be more suitable and useful for use in major clinical trials, The WHOQOL-BREF tool relies on twenty-sex goods, twenty-four quality of life aspects , as well as two other concerns , including total quality of life and general wellbeing, assessing the following four broad domains: physical health, psychological health, social relationships, and environmental side (21).

Objectives: Present studies have been undertaken to evaluate the quality of life of patients with psoriasis in Al Nasiriya/ Iraq and to regulate other proposed clinical and sociodemographic influences that may influence the quality of life of the participants .

2. Materials and Methods

Fifty participants of both sexes have been participated in this cross- sectional analysis, they are collected from Al Nasiriya Hospital consultant, private pharmsmacy located in Hay Alaskary-Thi-Qar, after recomendation of either Dermatologist, by electronic questionnaire and from the relatives. they are questioned to assess the quality of life with psoriasis and to analyze further suggested clinical and sociodemographicc factors that may influence the quality of life of these patients, including (age, sex, marital status,

educational level). The study duration continued from November 2023 to March 2024 and the patients were collected during that period. all patients are diagnosed by the specialist dermatologist.

Inclusion criteria

- 1- people aged 65 and older
- 2-The extent of the illness is ≥ 3 months.
- 3- Ordained pharmacological management for psoriasis.

Exclusion criteria

- 1- Patient with problems with replying questions' understanding.
- 3- consequent other Considerable diseases like diabetes mellitus
- 4-Pregnant or lactating women.

1-The questionnaires: The researchers used the Arabic version of the WHOQOL-BREF questionnaire of 24 (Paper-based) to assess the participants' quality of life. The questionnaire covers four main domains: Physical Health (seven items) Psychological Well-being (six items), Social Relationships (three items), Environment (eight items). Each domain contains several questions that collectively measure that specific aspect of quality of life. In addition to the four domains, there are two standalone questions; first Question pertains to a person's general perception of their overall quality of life while second Question relates to a person's general perception of their overall health. Participants respond to the questions using a five-point Likert-type scale. The scale ranges from 1 to 5, where 1 represents "not at all/never/very dissatisfied/very poor" while 5 represents "extremely/always/very satisfied/very good" Higher scores on the Likert scale that indicate greater personal satisfaction in the respective domain or aspect of quality of life (22).

2- Study design: It's important to note that this data collection process by the Arabic version of the WHOQOL-BREF questionnaire aims to ensure that participants understand the study's objectives and the content of the questionnaire. This informed consent process and the provision of clear instructions help to maintain the ethical standards of research and ensure that participants are making an informed decision to participate. Additionally, the time it takes for each patient to complete the questionnaire (approximately 5 minutes) gives an indication of the level of effort required from participants and potentially the complexity of the questions involved (22).

3- Statistical analysis: Informations collected was inserted into Microsoft Excel and filled in for descriptive statistics in the Statistical Kit for Social Sciences (SPSS) program(version 24). The quality of life of psoriatic patients was the dependent variable for this analysis while independent variables were included (age, sex). Definite variables were granted as regularities and proportions and (Means \pm SD) were granted as continuous variables. To spot the Correlation between the categorical variables, the Pearson's chi square (X2) test was recycled. Variance analysis (ANOVA) was used for the comparison of means between two classes. A pvalue of 0.05 was found to be meaningful.

3. Results

Table 1 shows that the mean age of the patients was 32.98 ± 6.209 , and 48% of them were less than 30 years old. Most of them (64%) were female, and all patients (100%) were married.

The educational level represented 48% of patients who were secondary school graduates. When the patient were asked about quality of life, the majority (62%) commented that it was poor. Almost two-thirds of the patients (68%) said that they were very dissatisfied with their health..

Table 1. Socio-demographical features of patients

Variables	Value
Age	
Age (years), mean \pm SD	32.98 \pm 6.209
<30 years, n (%)	24 (48%)
30 – 39 years, n (%)	16 (32%)
40 – 49 years, n (%)	40-49
Gender	
Male, n (%)	18 (36%)
Female, n (%)	32 (64%)
Marital status	
Married, n (%)	50 (100%)
Level of education	
Illiterate, n (%)	11 (22%)
Primary school graduate, n (%)	4 (8%)
Secondary school graduate, n (%)	24 (48%)
College graduate, n (%)	11 (22%)
Abbreviations: SD: standard deviation; n: frequencies; %: percentage.	

Table 2. quality of life of the participants.

Quality of life	Value
Very poor	17 (34%)
Poor	31 (62%)
Neither poor nor good	2 (4%)
How satisfied are you with your health?, n (%)	
Very dissatisfied	34 (68%)
Dissatisfied	16 (32%)
Abbreviations: SD: standard deviation; n: frequencies; %: percentage	

The mean score of four domains and the total score of the WHOQOL-BREF are depicted in Table 3. The maximum and minimum mean values of quality of life Fields were found for the physical health Field (Mean = 44.35; neither poor nor good) and the social health domain (Mean = 21.00; poor), respectively. The total mean score was 36.31, as described as poor.

Table 3. questionnaire scores of Quality of life of patients.

Quality of life (QOL)	Mean \pm SD	Scores
Physical health	44.35 \pm 4.79	Neither
Psychological health	35.58 \pm 3.38	Poor
Social health	21.00 \pm 14.60	Poor
Environmental health	44.31 \pm 11.23	Neither
Total score	36.31 \pm 6.45	Poor
Abbreviations: SD: standard deviation Scores of QOL: very poor = 0-19; Poor =20-39; Neither poor nor good =40-59; Good =60-79; Very good = 80-100		

In univariate analysis, age was inversely correlated with both QOL-psychological health and QOL-social health. Gender was inversely associated with all components of QOL except psychological health, where there was no correlation. Furthermore, Higher

education levels were inversely associated with all components of QOL except social health, where there was no correlation, as seen in Table 4.

Table 4. Univariate linear regression analysis between QOL and farther scores of patients.

Variables	QOL-Physical health		QOL-Psychological		QOL-Social		QOL-Environmental	
	Regression coefficient	P value	Regression coefficient	P value	Regression coefficient	P value	Regression coefficient	P value
Age	-0.178	0.217	-0.454	0.001	-0.293	0.039	-0.227	0.114
Gender	-0.425	0.002	0.170	0.239	-0.369	0.008	-0.846	0.000
Education level	-0.443	0.001	-0.354	0.012	-0.190	0.186	-0.319	0.024
Abbreviations: QOL: quality of life								

In multivariate analysis, only the age was inversely linked to psychological domain. Educational level were inversely linked to physical and psychological health. Gender was inversely linked to all components of QOL except psychological health, where there was no correlation, as describe in Table 5.

Table 5. Multivariate linear regression analysis between QOL and farther scores of patients.

Variables	QOL-Physical health		QOL-Psychological		QOL-Social		QOL-Environmental	
	Regression coefficient	P value	Regression coefficient	P value	Regression coefficient	P value	Regression coefficient	P value
Age	-0.035	0.787	-0.378	0.006	-0.260	0.068	-0.137	0.079
Gender	-0.359	0.006	0.239	0.062	-0.347	0.012	-0.815	0.000
Education level	-0.368	0.007	-0.271	0.046	-0.043	0.763	-0.131	0.098
Abbreviations: QOL: quality of life								

4. Discussion

Another study reported that at least 20% of psoriasis patients had expected suicide (34). Regarding the environmental domain which assess living conditions and financial status. Our study showed that the environment domain has been demonstrated that the majority of patients got Neither poor nor good score and this finding was in agreement with previous study that recorded that Psoriasis patients again appreciate Sheepish and uncomfortable around their complaint and careful this to be the vilest characteristic of their disease, High tension in this populace may frequently outcome from other persons responding to their disease or expectancy of the equivalent (35). Regarding Multivariate analysis which based in observation and analysis of more than one statistical outcome variable at a time, it is found that age only was independently correlate (inverse relationship) with psychological health, other finding of study related with age; recorded that Psoriasis has a greater sway upon the quality of life of patients in the age of 18 to 45 year age variety, also recorded that the older age at inception of psoriasis linked earlier with lesser psychosocial indisposition (36). similarly, It is consistent with other results described by Amy de la Breteuque connection statistically momentous among age and associated with lower psychosocial morbidity QoL (37,38). Regarding Multivariate analysis, it is found that Gender was independently correlate (inverse relationship) with all components of QOL except psychological health, where there was no correlation (37). Other studies is in disagreement with our study, were found that Gender and quality of life to be unconnected, and there are no variance in the sternness of physical symptoms agonized by men and women, Record of revisions testified that female had poor quality of life in distinction to male with psoriasis (37,38). Regarding Multivariate analysis, it is found that Education level were inversely related with physical and psychological health. Other

studies recorded that a key factor that affected the QoL of patients are numerous and the education level is one of them (39).

Limitations of the study:

Sample size, less number of prior research studies on the topics in thi-qar .

5. Conclusion

Depending on the study result; It was concluded that QOL of Psoriasis patients were poor and this disorder influence social domain by the first degree, psychological activity and environmental domains are also slightly affected, the physical health domain is slightly affected. Also, It was concluded that in patients with psoriasis, age have inverse relationship with psychological health, Education level have inverse relationship with physical and psychological health, Gender have inverse relationship with all components of QOL except psychological health, where there was no correlation.

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Ethics Statements

Official administrative approvals were obtained from AL Hussein Teaching Hospital / dermatology department (who were provided with detailed information regarding the study aim and methodology), all participants in the study received a detailed explanation of the study's purpose and methodology, and that their verbal informed consent was obtained after clarifying the objectives. This demonstrates a strong commitment to ethical research practices.

REFERENCES

1. Baiez YK, Mohammed WK, Interventional Program on Nurses Practices Regarding Burn Wound Dressing, Pakistan Journal of Medical & Health Sciences, 2022, 18;16(05):670
2. Setoyama A, Sawada Y, Saito-Sasaki N, Ohmori S, Omoto D, Yamamoto K, Yoshioka H, Okada E, Nakamura M., Psoriasis epidemiology screening tool (PEST) is useful for the detection of psoriatic arthritis in the Japanese population, Scientific Reports, 2021; 9;11(1):1-7.
3. Raharja. A, Mahil, Barker J. N, Psoriasis: a brief overview, Clinical Medicine, 2021; 21(3):170-173.
4. Bowcock AM, Barker JN, Genetics of psoriasis: the potential impact on new therapies, J Am Acad Dermatol, 2003;49(2 Suppl):1-6.
5. Nestle FO, Kaplan DH, Barker J, Mechanisms of disease: psoriasis, N Engl J Med, 2009;361(5):496- 509.
6. Sfrikakis PP, Iliopoulos A, Elezoglou A, Kittas C, Stratigos A, Psoriasis induced by anti-tumor necrosis factor therapy: A paradoxical adverse reaction. Arthritis Rheumatism, 2005;52:2513-8.
7. Dopytalska K, Sobolewski P, Błaszczak A, Szymańska E, Walecka I., Psoriasis in special localizations, Reumatologia, 2018; 56(6):392-398.
8. Okamoto F, Umebayasi Y, Ohtsuka F, Hommura S, Factors associated with increased aqueous flare in psoriasis, Jpn J Ophthalmol, 2001;45:172-6. Campanati A, Neri P, Giuliadori K, Arapi I, Carbonari G, Borioni E, Psoriasis beyond the skin surface: A pilot study on the ocular involvement, Int Ophthalmol, 2015;35:331-40.
9. Van De, Kerkhof PCM, Papulosquamous and Eczematous dermatoses: Psoriasis, Dermatology, Edinburg: Mosby; 2003; 125-49.
10. Cruickshank R, Medical microbiology; a guide to diagnosis and control of infection, Ediburg; London: E and S Livingston Ltd, 1965, 888-889.
11. Ellen JB, Sydney MF, Bailly & Scott's diagnostic microbiology, USA, Missouri, 190, 453.

12. Harsh M, Textbook of Pathology, Medical Publisher Ltd. New Delhi, 5th ed, 2005, 802-803.
13. Kaine J, Song X, Kim G, Hur P, Palmer JB, Higher incidence rates of comorbidities in patients with psoriatic arthritis compared with the general population using US administrative claims data, *J Manag Care Spec Pharm*, 2019 ;25(1):122-32.
14. Soyland E, Funk J, Rajka G, Sandberg M, Thune P, Rustad L, Helland S, Middelfart K, Odu S, Falk ES, Effect of dietary supplementation with very-long-chain n-3 fatty acids in patients with psoriasis, *N Engl J Med*, 1993, 328:1812-1816.
15. Kurpet K, Chwatko G, S100 proteins as novel therapeutic targets in psoriasis and other autoimmune diseases, *Molecules*, 2022, 27(19), 6640.
16. Brown AC, Hairfield M, Richards DG, McMillin DL, Mein EA., Nelson CD, Medical nutrition therapy as a potential complementary treatment for psoriasis--five case reports, *In Altern Med Rev*, 2004, 9(3):297-307.
17. Gupta AK, Ellis CN, Tellner DC, Anderson TF, Voorhees JJ, Doubleblind, placebo-controlled study to evaluate the efficacy of fish oil and low dose UVB in the treatment of psoriasis, *In Br J Dermatol*, 1989, 120:801-807.
18. Wolters M. (2005). Diet and psoriasis: experimental data and clinical evidence. *Br J Dermatol*, 153:706-714.
19. Farquhar M. Definitions of quality of life: A taxonomy. *Journal of Advanced Nursing*, 1995; 22 (3): 502-508.
20. Dehghan A, Ghaem H, Borhani Haghighi A, Kashfi SM, Zeyghami B, Comparison of quality of life in Parkinson's patients with and without fatigue, *BimonthJHormozganUnivMedSci*, 2011;15(1):49-55.
21. Leila T, Azizallah D, Archive of SID Compare the Quality of Life in Type 2 Diabetic Patients with Healthy Individuals (Application of WHOQOL-BREF) Archive of SID, *Zahedan J Res Med Sci*, 2017; 19(2):5882.
22. Dehvan F, Saeed DM, Dehkordi AH, Gheshlagh RG, Quality of life of Iranian patients with type 2 diabetes: A systematic review and meta-analysis, *Nursing Practice Today*, 2019
23. Apalla Z, Nikolaou V, Fattore D, Fabbrocini G, Freites-Martinez A , Sollena P, Sibaud, V, European recommendations for management of immune checkpoint inhibitors-derived dermatologic adverse events. The EADV task force 'Dermatology for cancer patients' position statement, *Journal of the European Academy of Dermatology and Venereology*, 2022, 36(3), 332-350.
24. Pearce DJ, Singh S, Balkrishnan R, Kulkarni A, Fleischer AB, Feldman SR, The negative impact of psoriasis on the workplace, *J Dermatolog*, 2006, 17:2
25. Apalla Z, Nikolaou V, Fattore D, Fabbrocini G, Freites-Martinez A, Sollena P, Sibaud V, European recommendations for management of immune checkpoint inhibitors-derived dermatologic adverse events, The EADV task force 'Dermatology for cancer patients' position statement, *Journal of the European Academy of Dermatology and Venereology*, 2022, 36(3), 332-350
26. Seng KT, Nee ST, Group therapy: a useful and supportive treatment for psoriasis patients, *Int J Dermatol*, 1997, 36:110-112
27. Ginsburg IH, Link BG, Psychosocial consequences of rejection and stigma feelings in psoriasis patients, *Int J Dermatol*, 1993, 32:587-591.
28. Weiss SC, Kimball AB, Liewehr DJ, Blauvelt A, Turner ML, Emanuel EJ, Quantifying the harmful effects of psoriasis on healthrelated quality of life, *J Am Acad Dermatol*, 2002, 4:512-518.
29. Nast A, Smith C, Spuls PI, Avila Valle, G, Bata-Csörgö, Z, Boonen H, Dressler C, EuroGuiDerm Guideline on the systemic treatment of Psoriasis vulgaris--Part 2: specific clinical and comorbid situations. *Journal of the European Academy of Dermatology and Venereology*, 2021, 35(2), 281-317.
30. Devrimci-Ozguven H, Kundakci TN, Kumbasar H, Boyvat A, The depression, anxiety, life satisfaction and affective expression levels in psoriasis patients, *J Eur Acad Dermatol Venereol*, 2000, 14:267-271.
31. Esposito M, Saraceno R, Giunta A, Maccarone M, Chimenti S, An Italian study on psoriasis and depression, *Dermatology*, 2006, 212:123-127.
32. NJ, Gupta AK, Kirkby S, Ellis CN, Suicidal ideation in psoriasis, *Int J Dermatol*, 1993, 32:188-190
33. Krueger G, Koo J, Lebwohl M, Menter A, Stern RS, Rolstad T, The impact of psoriasis on quality of life: results of a 1998 National Psoriasis Foundation patient-membership survey., *Arch Dermatol* 2001, 137:280-284)

34. Fortune DG, Main CJ, O'Sullivan TM, Griffiths CE, Quality of life in patients with psoriasis: the contribution of clinical variables and psoriasis-specific stress, *Br J Dermatol*, 1997, 137:755-760.
35. Maul JT, Augustin M, Sorbe C, Conrad C, Anzengruber F, Mrowietz U, Navarini A, Association of sex and systemic therapy treatment outcomes in psoriasis: a two-country, multicentre, prospective, noninterventional registry study, *British Journal of Dermatology*, 2021, 185(6), 1160-1168.
36. Sendrasoa FA, Razanakoto NH, Ratovonjanahary V, Raharolahy O, Ranaivo IM, Andrianarison M, Rapelanoro RF, Quality of life in patients with psoriasis seen in the Department of Dermatology, Antananarivo, Madagascar, *BioMed Research International*, 2020 (1), 9292163.
37. Chen Y, Wei L, Song. Y, Zhang R, Kuai L, Li B, Wang R, Life quality among psoriasis patients based on Dermatology Life Quality Index evaluation and its association with psoriasis severity in China: a cross-sectional study, *Annals of Medicine*, 2023, 55(1), 2231847.8200.