Original Research Article

A STUDY OF QUALITY OF LIFE AND COPING STRATEGIES IN A PATIENTS WITH PSORIASIS

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ABSTRACT

Background: Psoriasis is a chronic inflammatory skin disorder associated with substantial psychosocial burden, including impaired Quality of Life (QoL) and Psychiatric Comorbidities. Assessing Quality of life and Evaluating coping strategies is essential for comprehensive and holistic patient management. The objective is to assess Quality of Life of patients with Psoriasis. To evaluate coping strategies in patients with Psoriasis.

Materials and Methods: A cross-sectional study was conducted over 18 months in the Departments of Psychiatry and Dermatology at a tertiary care hospital. A total of 150 patients with confirmed psoriasis were recruited through simple random sampling. Demographic and clinical data were collected using a semi-structured proforma. Psoriasis severity was assessed using the Psoriasis Area and Severity Index (PASI) scale, Quality of Life(QoL) with WHOQOL-BREF, and Coping Strategies using the Brief COPE Inventory. Statistical Data Analysis: The data collected is analyzed statistically by using IBM SPSS software version 20.0. For quantitative data, t-test and Anova test are applied. For qualitative data analysis, Chi square test is used and p value is <0.05, is considered as significant.

Results: Most patients (90%) reported moderately poor QoL, especially in physical (44.3), psychological(44.0), and social domains(43.7), while environmental(53.0) functioning was relatively preserved. Quality o Life was higher among patients without psychiatric comorbidities and lowest in those with suicidal behavior disorder. Emotion focused coping was most commonly employed (62%), particularly among patients with psychiatric comorbidities.

Conclusion: Severe psoriasis is associated with significant psychiatric comorbidities and diminished QoL. Emotion-focused coping predominates in patients with psychiatric disorders. Integrated dermatological and psychiatric care, along with patient education and targeted psychosocial support, may mitigate the psychosocial burden and enhance QoL.

Keywords: Psoriasis, Quality of Life, Coping Strategies, WHOQOL-BREF, PASI.

INTRODUCTION

Plaque psoriasis is a chronic, immune-mediated inflammatory skin disease that significantly impacts patients' physical, psychological, and social well-being.[1] The Global Burden of Disease Study reported that psoriasis accounted for 5.6 million all-age disability-adjusted life-years (DALYs) in 2016, at least three times higher than inflammatory bowel disease.[2] Its prevalence ranges from 1–3% globally, with regional variations between 0.09% and 11.43%.[3,4] Psoriasis markedly reduces Quality of Life (QoL), comparable to ischemic heart disease, diabetes, depression, and cancer.[5,6] Depending on lesion severity and distribution, patients may experience discomfort, functional limitations, and social stigma, increasing distress, depression, and risk of isolation or suicidal ideation.[7-9]

Genetic predisposition plays a key role, with HLA-C*06:02 being the most significant risk factor, particularly in early-onset disease. Additional loci, including IL23A, IL12B, and IL17RA, dysregulate the IL-23–T helper 17 axis, promoting chronic inflammation and keratinocyte hyperproliferation1. Psoriasis is often associated with comorbidities such as psoriatic arthritis, cardiovascular disease, metabolic syndrome, and psychiatric disorders, further increasing morbidity and mortality. Clinical variants include chronic plaque, generalized pustular, inverse, guttate, palmoplantar, erythrodermic, and nail/joint psoriasis.[10]

Living with a chronic, visible condition imposes substantial stress. Stressful events can trigger or exacerbate symptoms, while anxiety and depression may reduce treatment response.[11] Coping strategies—conscious efforts to manage personal and interpersonal stressors—play a critical role in mitigating these effects. Adaptive strategies enhance psychological well-being and Quality of Life, whereas maladaptive strategies may worsen distress.[11,12] Stigma-related stress is particularly pronounced in psoriasis compared with other dermatological conditions.[11]

Despite advances in medical management, few studies have systematically explored the relationship between disease severity, Quality of Life, and coping strategies, especially in local populations. Understanding these factors is essential for patient-centered care, psychosocial support, and tailored interventions.

This study aims to assess quality of life in patients with psoriasis, evaluate their coping strategies, and explore potential correlations between disease severity, coping mechanisms, and Quality of Life outcomes.

MATERIALS AND METHODS

Study Setting and Design: This cross-sectional study was conducted in the Departments of Psychiatry and Dermatology at Basaveshwara Teaching and General Hospital, affiliated with H.K.E. Society's Mahadevappa Rampure Medical College, Kalaburagi. The study aimed to evaluate quality of life and coping strategies in patients with psoriasis. The study duration was 18 months. Written informed consent was obtained from all participants prior to enrollment. Participants were recruited using simple random sampling from consecutive patients attending the Dermatology outpatient department. Eligibility was determined based on predefined inclusion and exclusion criteria.

Sample Size: The sample size was calculated based on the prevalence of psychiatric morbidity in psoriasis patients reported by Paradesi RK *et al.*[13] (73.33%). Using the formula:

$$n = \frac{Z^2 \times P \times Q}{L^2}$$

where Z=1.96Z = 1.96, P=73.33%P = 73.33\%, Q=26.67%Q = 26.67\%, and L=7.3%L = 7.3\% (10% of P), the minimum sample size was 141. To account for potential dropouts, 150 patients were recruited.

Inclusion Criteria

1. Age ≥18 years with a confirmed diagnosis of psoriasis.
2. Medically stable and provided written informed consent.

Exclusion Criteria

1. Major systemic illnesses, including hypertension, diabetes mellitus, epilepsy, lupus, sickle cell anemia, cancers, cardiovascular disease, stroke, HIV, or asthma.
2. Pre-existing psychiatric disorders diagnosed prior to the onset of psoriasis.
3. Current corticosteroid therapy.

Informed Consent: Written informed consent was obtained from all participants and, where applicable, their relatives in their native language prior to enrollment.

Data Collection: Demographic information (age, sex, education, marital status, residence, and socioeconomic status) and clinical history related to psoriasis were collected using a semi-structured proforma. Data collection was conducted by trained personnel under standardized conditions to ensure reliability and confidentiality.

Assessment Instruments

1. Modified Kuppuswamy Socioeconomic Scale

Used to classify participants into socioeconomic categories (upper, upper-middle, lower-middle, upper-lower, lower) based on the education of the household head, occupation, and monthly family income. Socioeconomic status was evaluated as a potential factor influencing stress, coping, and access to healthcare.

2. WHOQOL-BREF

A 26-item instrument assessing four domains: physical health, psychological health, social relationships, and environment. Items are rated on a 5-point Likert scale, with higher scores indicating better quality of life.

3. Brief COPE Inventory

A 28-item self-report questionnaire assessing 14 coping strategies (adaptive and maladaptive) on a 4-point Likert scale. Adaptive strategies include active coping, planning, positive reframing, acceptance, humor, religion, and support-seeking; maladaptive strategies include denial, venting, behavioral disengagement, self-distraction, substance use, and self-blame.

4. Psoriasis Area and Severity Index (PASI)

PASI scores quantify psoriasis severity by evaluating lesion erythema, induration, scaling, and percentage of body surface area affected. The body is divided into four regions, with regional scores weighted and summed to yield a total score ranging from 0 (no disease) to 72 (most severe).

Statistical Data Analysis

Data were analyzed using IBM SPSS Statistics version 20.0. Continuous variables were expressed as mean ± standard deviation and compared using independent t-tests or one-way ANOVA after assessing normality and homogeneity of variance. Categorical variables were summarized as frequencies and percentages and analyzed using the Chi-square test. Correlations between continuous variables were evaluated using Pearson or Spearman coefficients, as appropriate. All analyses were two-tailed, and p-values <0.05 were considered statistically significant.

RESULTS

Table 1: Socio-demographic profile of patients (n = 150)

Variable	Category	Frequency	Percentage (%)
Age (years)	<20	5	3.3
	21–30	37	24.7
	31–40	66	44.0
	41–50	42	28.0
Gender	Male	69	46.0
	Female	81	54.0
Socio-economic status	Upper middle	33	22.0
	Upper lower	53	35.3
	Lower middle	25	16.7
	Lower	39	26.0
Religion	Hindu	111	74.0
	Muslim	35	23.4
	Christian	2	1.3
	Sikh	2	1.3
Residence	Rural	112	74.7
	Urban	38	25.3
Marital status	Married	143	95.3
	Unmarried	7	4.7

The study included 150 psoriasis patients. The majority were between 31–40 years (44%), followed by 41–50 years (28%) and 21–30 years (24.7%), while only 3.3% were <20 years. Females (54%) slightly outnumbered males (46%). Most participants belonged to the upper-lower (35.3%) and lower (26%) socio-economic classes, with fewer from the upper-middle (22%) and lower-middle (16.7%) groups. The predominant religion was Hinduism (74%), followed by Muslims (23.4%), with Christians and Sikhs comprising 1.3% each. Rural residents formed the majority (74.7%), and most participants were married (95.3%).

Table 2: Distribution of study sample based on severity of Psoriasis Area and Severity Index (PASI) score

Pasi score (Severity)	Frequency	Percentage
Moderate	20	13.3%
Severe	130	86.7%
Total	150	100%

According to the Psoriasis Area and Severity Index (PASI), severe disease was observed in the majority (86.7%), while only 13.3% had moderate psoriasis.

Table 3: Distribution of coping strategies (COPE & Carver's 14 strategies).

Coping strategy	Frequency	Percentage
Problem focused	19	12.67%
Emotion focused	93	62%
Avoidant coping	38	25.33%
Total	150	100%
Carver's coping	Frequency	Percentage
Self-distraction	24	5.33%
Active coping	49	10.8%
Denial	17	3.78%
Substance use	24	5.33%
Use of emotional support	78	17.33%
Use of instrumental support	16	3.55%
Behavioural disengagement	32	7.11%
Venting	43	9.55%
Positive reframing	75	16.67%
Planning	40	8.89%
Humor	6	1.33%
Acceptance	44	9.78%
Religion	0	0
Self-blame	2	0.4%
Total	150x3	100%

Coping mechanisms varied across patients. Emotion-focused coping was the most common (62%), followed by avoidant coping (25.3%) and problem-focused coping (12.7%). In terms of Carver's 14 strategies, use of emotional support (17.3%) and positive reframing (16.7%) were the most frequent, followed by acceptance (9.8%), venting (9.6%), and active coping (10.8%). Less frequently used strategies included behavioural disengagement (7.1%), planning (8.9%), denial (3.8%), substance use (5.3%), self-distraction (5.3%), and instrumental support (3.6%). Humor (1.3%) and self-blame (0.4%) were the least used strategies, while religious coping was absent in this cohort.

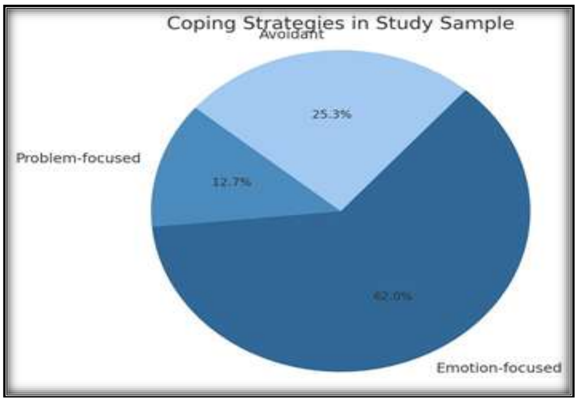

Figure 1

Table 4: WHO-QOL scores and domains.

WHO-QOL Category	Frequency (%)	Domain Scores (Mean)
Moderately poor	135 (90%)	Physical: 44.3; Psychological: 44.0; Social: 43.7; Environmental: 53.0
Poor	15 (10%)	–
Total	150 (100%)	–

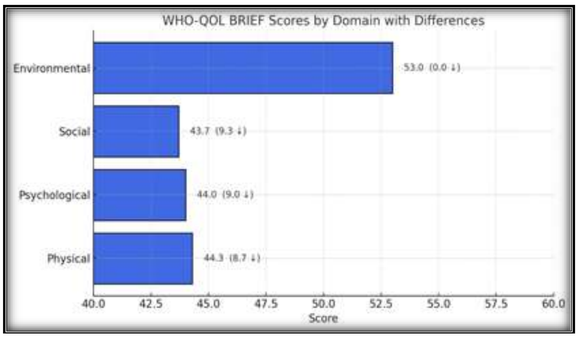

Figure 2

Quality of life assessment revealed that the majority of patients (90%) had moderately poor WHO-QOL scores, while 10% had poor scores. Mean domain scores indicated reduced quality of life across all areas, with physical (44.3), psychological (44.0), and social (43.7) domains being particularly affected, while the environmental domain showed a relatively higher score (53.0).

Table 5: Association of WHO-QOL with socio-demographic and clinical variables.

Variable	Category	Moderately Poor n=135 (%)	Poor n=15 (%)	χ² & p value
Age	<20	5 (3.7)	0	4.703 (0.09)
	21–30	36 (26.7)	1 (6.7)	
	31–40	56 (41.5)	10 (66.7)	
	41–50	38 (28.1)	4 (26.7)	
Gender	Male	59 (43.7)	10 (66.7)	10.68 (0.001*)
	Female	76 (56.3)	5 (33.3)	
Socio-economic status	Upper middle	30 (22.2)	3 (20.0)	16.08 (0.01*)
	Upper lower	49 (36.3)	4 (26.7)	
	Lower middle	23 (17.0)	2 (13.3)	
	Lower	33 (24.4)	6 (40.0)	
Marital status	Single	7 (5.2)	0	36.9 (0.001*)
	Married	128 (94.8)	15 (100)	
Residence	Urban	101 (74.8)	11 (73.3)	14.8 (0.001*)
	Rural	34 (25.2)	4 (26.7)	

Quality of life showed significant associations with several socio-demographic variables. Poor WHO-QOL was more frequent in patients aged 31–40 years (66.7%) compared with other age groups, though the association was not statistically significant (p=0.09). Male patients (66.7%) reported poorer QOL compared to females (33.3%) (p=0.001). Socio-economic status also showed significant association (p=0.01), with poor QOL more common in lower-class patients (40%). Marital status revealed all poor QOL cases were among married patients (p=0.001). Residence also showed significant variation (p=0.001), with the majority of poor QOL cases from urban areas (73.3%).

DISCUSSION

This present study evaluated quality of life (QoL) and coping strategies among 150 patients with psoriasis. Most participants were aged 31–40 years (44%) with a slight female preponderance (54%), consistent with previous reports indicating bimodal age peaks in psoriasis onset.[14,15] The gender distribution likely reflects regional socio-cultural norms influencing healthcare-seeking behavior, as reported by Paradesi RK et al. (2020).[13] The majority of participants belonged to lower socio-economic strata (upper-lower 35.3%, lower 26%) and rural areas (74.7%), reflecting the hospital's catchment population. Most patients were married (95.3%), in line with regional socio-cultural patterns.

Severe psoriasis was predominant (86.7%), which is expected in tertiary care settings where patients with advanced disease are more likely to present, highlighting the substantial psychological burden of psoriasis and underscoring the importance of routine mental health screening in dermatology practice.

Coping strategies were predominantly emotion-focused (62%), followed by avoidant (25.3%) and problem-focused (12.7%) approaches, with emotion-focused coping most common among patients with psychiatric comorbidities. Positive reframing (16,67%) and seeking emotional support (17.33%) were the most frequently employed Carver strategies, whereas religious coping was absent, possibly reflecting cultural or individual differences. These findings are consistent with prior literature suggesting that chronic dermatological illness promotes reliance on emotion regulation strategies rather than active problem-solving.[17,18] The predominance of emotion-focused coping may partly contribute to the observed reduction in Quality of Life, as reliance on passive coping strategies has been associated with greater psychosocial distress.

Quality of life was moderately poor in the majority of patients (90%), particularly in the physical(44.3), psychological(44), and social domains(43.7), whereas environmental functioning was relatively preserved(53). Poor Quality of Life was significantly associated with male gender, lower socio-economic status, urban residence, and married status, reflecting the multifactorial determinants of psychosocial burden in psoriasis. These results are consistent with national surveys demonstrating substantial negative impacts of psoriasis on daily functioning and mental health, including increased risk of suicidal ideation.[19,20]

Overall, these findings emphasize the need for integrated dermatological and psychiatric care. Routine screening for psychiatric comorbidities, patient education, counseling, and targeted interventions to improve adaptive coping strategies may help alleviate psychosocial burden and enhance QoL. Future studies should employ longitudinal designs and explore culturally tailored interventions to better understand and address the psychosocial challenges faced by patients with psoriasis.

CONCLUSION

This study evaluated quality of life and coping strategies in 150 patients with psoriasis. Severe psoriasis predominated (86.7%). Emotion-focused coping emerged as the most frequently employed strategy (62%), particularly among patients with psychiatric comorbidities.

The majority of patients (90%) exhibited moderately poor quality of life, with the physical, psychological, and social domains most affected, while environmental functioning remained relatively preserved. Patients without psychiatric comorbidities demonstrated higher WHO-QOL scores, whereas those with suicidal behavior disorder had the lowest scores. Poor quality of life was significantly associated with male gender, lower socio-economic status, urban residence, and married status. These findings underscore the substantial psychosocial burden of severe psoriasis, particularly in the presence of psychiatric comorbidities. Integrating dermatological and psychiatric care, along with structured patient education and targeted psychosocial support, may mitigate the psychosocial impact of the disease, enhance coping mechanisms, and improve overall quality of life in this patient population.

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