INTERNATIONAL JOURNAL OF PHARMACEUTICAL SCIENCES
[ISSN: 0975-4725; CODEN(USA): IJPS00]
Journal Homepage: https://www.ijpsjournal.com

Review Article

Quality of Life Burden in Tinea (Dermatophytosis) Patients: A Narrative Review

Hiba Sherin V A*, Shafeena T

Department of Pharmacy Practice, JDT Islam College of Pharmacy, Marikunnu, Vellimadukunnu, Kozhikode, Kerala 673012

ARTICLE INFO

Published: 28 Sept 2026
Keywords:
tinea; dermatophytosis; quality of life; Dermatology Life Quality Index; DLQI; psychosocial burden; financial burden
DOI:
10.5281/zenodo.23021466

ABSTRACT

Background: Dermatophytosis (tinea infection) has shifted over the past decade from a minor, self-limiting dermatosis into a chronic, recurrent, and frequently treatment-resistant disease across South Asia. Its persistent pruritus, visible lesions, and relapsing course impose a burden on patients' well-being that routine clinical assessment, centered on lesion morphology and mycological clearance, often overlooks. Objective: To review and synthesize published evidence on the impact of tinea infection on health-related quality of life (QoL) among patients attending tertiary and multicenter dermatology outpatient departments, and to identify the clinical, demographic, occupational, and psychosocial factors associated with greater QoL impairment. Methods: A narrative review was conducted of twenty-two cross-sectional and case–control studies from India and Bangladesh that assessed QoL in tinea patients using the Dermatology Life Quality Index (DLQI), with supporting evidence drawn from adjunct psychological (HADS, GHQ-12), pruritus (VAS), and financial-burden instruments. Results: Mean DLQI scores across studies ranged from approximately 8 to 21, with most cohorts falling within the "very large" to "extremely large" effect bands. Symptoms/feelings, work/school performance, and personal relationships were the most affected domains. Longer disease duration, greater body-surface-area involvement, combined exposed-and-unexposed site involvement, topical corticosteroid misuse, lower socioeconomic status, high-sweat/friction occupations, and systemic comorbidity were the factors most consistently associated with poorer QoL. Financial strain and psychological distress were prevalent and strongly correlated with DLQI scores. Conclusion: Tinea infection, particularly when chronic, recurrent, or extensive, meaningfully impairs quality of life. Incorporating validated QoL and psychosocial screening into routine dermatological care, alongside rational antifungal therapy, may help reduce this under-recognized burden.

***Corresponding Author:** Hiba Sherin V A
Address: *JDT Islam College of Pharmacy, Marikunnu, Vellimadukunnu, Kozhikode, Kerala 673012.*
Email : hibasherinva@gmail.com
Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

INTRODUCTION

Dermatophytosis, caused by keratinophilic fungi of the genera Trichophyton, Microsporum, and Epidermophyton, is among the most common conditions presenting to dermatology outpatient departments in India, Bangladesh, and other tropical regions.[1–3] Superficial fungal infections are estimated to affect roughly 20–25% of the world's population at some point in their lives,[2,4] and hospital-based Indian series report a striking rise in prevalence, chronicity, and recurrence over the past decade.[3,5] This shift has been attributed to a hot, humid climate, overcrowding and poor hygiene, irrational and widespread use of topical corticosteroid–antifungal combination creams, and the emergence of relatively resistant dermatophyte strains such as Trichophyton indotineae.[5–8]

Although dermatophytosis is rarely life-threatening, its clinical course — persistent itching, visible erythematous plaques, and frequent relapse despite apparently adequate treatment — can affect patients' lives disproportionately to its perceived clinical severity. Because quality of life (QoL) is not routinely captured in clinical notes, several groups across India and Bangladesh have used the Dermatology Life Quality Index (DLQI), a ten-item, patient-reported instrument developed by Finlay and Khan,[9] to quantify this burden. This review consolidates the findings of twenty-two such studies, together with related literature on comorbid psychological distress, financial burden, and steroid misuse, to describe the overall magnitude of QoL impairment in tinea and the factors that predict it.

2. MATERIALS AND METHODS

2.1 Review design

This is a narrative, rather than a systematic review.

2.2 Sources included

Twenty-two hospital, multicenter, or clinic-based cross-sectional (and one case–control) studies assessing QoL in patients with clinically and/or mycologically confirmed dermatophytosis, all using the DLQI as the primary or co-primary outcome, were reviewed in full: studies conducted in Kolkata,[10] Kota,[11] Bengaluru,[12] Kolar,[13] northern India,[14] Mangalore,[15] Visakhapatnam,[16] Bareilly,[17] Mymensingh (Bangladesh),[18] a 325-centre real-world Indian cohort,[19] Eastern India,[34] Chandigarh,[35] Aligarh,[36] a chronic/recurrent dermatophytosis cohort,[37] a further Indian cohort,[39] Ahmedabad,[23] and a private dermatology clinic cohort spanning several dermatophytosis subtypes.[26] Kashmir Valley,[59] a further Indian cohort,[60] a Kannada-region dermatology-clinic cohort,[61] a 372-patient Central Gujarat cohort,[62] and a rural tertiary-care cohort assessing comorbid depression.[63]

2.3 The DLQI instrument

The DLQI is a validated, self-administered ten-item questionnaire covering six domains — symptoms and feelings, daily activities, leisure, work or school, personal relationships, and treatment , each scored 0–3 over the preceding week, giving a total score of 0–30.[9] Conventional score bands are: 0–1, no effect; 2–5, small effect; 6–10, moderate effect; 11–20, very large effect; and 21–30, extremely large effect on the patient's life.[9,20] The instrument has been extensively validated and translated (including Hindi, Bangla, Kannada, Malayalam, and Telugu versions in the studies reviewed here) and remains the most widely used dermatology-specific QoL measure worldwide,[21,22] though its self-administered format restricts its use in illiterate populations in several of the reviewed studies.[17]

2.4 Synthesis approach

Findings were synthesized thematically under headings covering overall QoL burden, domains affected, and associated clinical, demographic, psychological, and financial factors, following the structure conventionally used in narrative reviews of patient-reported outcome literature.

3. RESULTS

3.1 Overall quality-of-life burden

Table 1 summarizes the twenty-two primary studies reviewed. Across settings, mean DLQI scores ranged from approximately 8.2 (in a smaller series spanning several dermatophytosis subtypes, including milder and non-chronic presentations)[26] to over 21 (in a cohort restricted to chronic and recurrent dermatophytosis),[37] with most cohorts clustering around 11–15 — solidly within the "very large effect" band, though the chronic/recurrent subset crossed into the "extremely large effect" band. In every case–control study reviewed, chronic (>6 months) dermatophytosis produced significantly higher DLQI scores than shorter-duration disease,[17,18] and a large multicentric real-world cohort of 2,776 Indian patients confirmed a median DLQI of 12 (IQR 8–17), corroborating the hospital-based findings at scale.[19] Further hospital-based series from Eastern India, Chandigarh, and Aligarh reported similar mean DLQI scores of 13.4–13.9, closely replicating this pattern across independent settings.[34–36] A 299-patient Ahmedabad cohort reported a comparable mean DLQI of 12.25 (SD 5.56), while a smaller 76-patient series spanning multiple dermatophytosis subtypes reported a lower mean DLQI of 8.2 (SD 5.1), with 26.3% of patients nonetheless falling in the very large/extremely large effect bands — together illustrating how overall QoL burden tracks the chronicity and severity mix of the population sampled.[23,26] Two further large single-centre series corroborate this range: a 425-patient Kashmir Valley cohort reported a mean DLQI of 13.93 (SD 6.26), with a very large effect in 55.5% of patients, while a 385-patient cohort found a large or extremely large effect in 75.3% of patients, one of the highest proportions reported among the reviewed studies.[59,60] Three further hospital-based series broaden this picture: a 170-patient dermatology OPD cohort reported a mean DLQI of 14.28 (SD 5.78), with a very large or extremely large effect in 66.5% of patients, most pronounced in those with combined tinea corporis, cruris, and faciei; a larger 372-patient Central Gujarat cohort reported a comparable mean DLQI of 11.5 (SD 5.35), with a very large or extremely large effect in 57.4% of patients; and a 183-patient rural tertiary-care cohort reported predominantly minimal-to-moderate impairment, with only 11.4% of patients in the very large band, illustrating how case-mix and setting continue to shape the reported burden.[61–63]

Table 1. Summary of DLQI-based quality-of-life studies in tinea/dermatophytosis reviewed in this article.

Author, Year	Setting / Sample	n	Mean DLQI (SD)	Very large / extremely large effect	Key associated factors
Das & Das, 2019	Tertiary center, Kolkata, India (tinea corporis)	328	10.08 (5.01)	36.9% / 3.7%	Duration of disease, body-surface area; no age/gender effect
Saini et al., 2021	Tertiary center, Kota, Rajasthan, India	174	15.99 (7.41)	39.0% / 31.6%	Pruritus (VAS) and GHQ-12 psychological distress correlated with DLQI

Prabhu et al., 2024	Tertiary center, Bengaluru, India (chronic, >6 mo)	220	11.05 (5.30)	49.1% / 7.3%	Body-surface area and duration of illness ($p<0.00001$); female predominance
Rajashekar et al., 2019	Tertiary/referral center, Kolar, Karnataka, India	186	12.79 (5.96)	52.7% / 11.3%	Age, duration of infection, site (thigh-fold/gluteal) of involvement
Meena et al., 2022	Tertiary center, northern India	550	14.44 (7.29) M / 15.78 (6.26) F	Not separately reported	Topical steroid abuse (92.9%), low socioeconomic status, young age, poor hygiene, widespread tinea
Imthiaz et al., 2025	Tertiary center, Mangalore, India (chronic/recurrent)	316	11.11 (7.31)	71.6% (very large band)	Anxiety/depression (HADS) and financial burden strongly correlated with DLQI
Karanam et al., 2025	Tertiary center, Visakhapatnam, India	123	17.45 (4.00)	60% / 28%	Financial dependency and worry trended with DLQI (not statistically significant)
Varshney et al., 2020	Tertiary center, Bareilly, India (case–control)	263 cases / 137 controls	14.28 (5.16) vs 11.56 (3.60)	61.6% / 12.2% (cases)	Chronicity, body-surface area, combined exposed + unexposed site involvement
Uddin & Yesmin, 2024	Tertiary center, Mymensingh, Bangladesh (case–control)	250 cases / 130 controls	14.28 (5.16) vs 11.56 (3.60)	61.6% / 12.0% (cases)	Body-surface area, exposed + unexposed site involvement, family history (controls)
Singh et al., 2026	325 centers across India (multicentric, real-world)	2776	Median 12 (IQR 8–17)	Predominantly “very large” band	Facial/trunk involvement, lesion count, high sweat/friction occupation, systemic comorbidity, treatment regimen
Patro et al., 2019	Tertiary/referral center, Eastern India	294	Not pooled (band varied by subgroup)	Moderate (low-BSA/short-duration subgroup) to very large (high-BSA/longer-duration subgroup)	Age and body-surface area ($p\leq0.05$); GHQ-12 distress in 84.9% (mean 16.98); DLQI–5D-pruritus $r=0.802$, $p<0.0001$
Narang et al., 2019	Tertiary center, Chandigarh, India	196	13.41 (7.56)	Not separately reported	Symptoms/feelings, daily activities, leisure, and personal relationships most affected; comorbid GHQ-12 psychological distress
Mushtaq et al., 2020	Tertiary center, Aligarh, India	348	13.4 (7.3)	44.8% (very large band)	Number of sites involved, body-surface area (both $p<0.001$), and symptom severity ($p=0.007$)

Das et al., 2022	Tertiary center, India (chronic/recurrent dermatophytosis)	123	21.4 (5.6)	55.3% (extremely large band)	Symptoms/feelings most affected domain; comorbid anxiety (HADS-A 10.1±3.6) and perceived stress
Jamil et al., 2023	Tertiary center, India	120	Not separately reported	72.5% (very large + extremely large)	Financial burden and financial worry significantly correlated with DLQI
Patel et al., 2020	Tertiary center, Ahmedabad, Gujarat, India	299	12.25 (5.56)	Not separately reported	Body-surface area (rs=0.251); financial burden/worry correlated with DLQI; sexual difficulty (35.6%) linked to tinea cruris
Verma et al., 2021	Dermatology clinic, India (multiple dermatophytosis subtypes)	76	8.20 (5.10)	26.3% (very/extremely large)	Female sex (9.3 vs 7.1, p=0.038); itch intensity; dermatophytosis subtype
Bashir et al., 2020	Community-based, Kashmir Valley, India	425	13.93 (6.26)	55.5% (very large band)	Duration, sites involved, BSA, pruritus/redness/burning ($p<0.05$); female sex, rural residence, age 20–39, upper-middle SES
Shukla et al., 2022	Tertiary center, India	385	Not separately reported	75.3% (large + extremely large)	Duration of illness (p=0.005), number of relapses (p=0.003), socioeconomic class (p=0.027)
Laxmi & Dilip, 2021	Dermatology OPD, India (Kannada region)	170	14.28 (5.78)	45.3% / 21.2%	Site/type of tinea (highest in combined corporis + cruris + faciei); BSA >10% in 81.2%; prior topical-steroid/native self-medication (41.2%)
Rathwa et al., 2025	Tertiary center, Central Gujarat, India	372	11.5 (5.35)	52.1% / 5.3%	Towel-sharing, bathing frequency, geographic residence, religion, seasonal variation; no significant age, gender, education, or SES effect
Johnson et al., 2025	Rural tertiary center, India	183	Not pooled (predominantly minimal–moderate)	11.4% (very large band)	HADS anxiety/depression and BDI depression severity rose monotonically with DLQI impairment

3.2 Domains of life most affected

Across nearly all studies reviewed, the "symptoms and feelings" domain — capturing itching,

soreness, and embarrassment — was the most heavily affected, with impairment reported in 67–97% of patients depending on the cohort.[11,17,18] "Work and school" and "treatment-related" domains were consistently the next most impaired, reported in 52–69% and 54–68% of patients respectively;[11,17,18] loss of work or study days was particularly pronounced among male patients.[12,23] "Personal relationships" and "sexual difficulties" domains, while less uniformly impaired, were notably worse in patients with tinea cruris and other genital or groin involvement, reflecting the embarrassment associated with lesions in intimate areas.[11,13,23] "Social and leisure activities" and "choice of clothing" were disproportionately affected in patients with extensive or multi-site disease.[15,17] Independent series from Chandigarh and Aligarh similarly identified symptoms/ feelings and daily activities as the most heavily affected domains.[35,36]

3.3 Disease duration and chronicity

Duration of illness was the single most consistent predictor of QoL impairment across the reviewed literature. Two independently conducted case–control studies, one in India and one in Bangladesh, found that DLQI scores rose progressively with duration from roughly 6.5 in patients with disease of 6–9 months, to over 16 in those affected for more than a year and that chronic-disease cases scored significantly higher than non-chronic controls on every DLQI domain ($p<0.001$).[17,18] Similarly, cohorts of persisting and recurrent dermatophytosis reported markedly elevated mean DLQI scores compared with unselected tinea populations.[13,14] A 385-patient cohort similarly found that the number of prior relapses, alongside duration of illness, was significantly associated with DLQI ($p=0.003$ and $p=0.005$, respectively), indicating that a relapsing disease course compounds QoL impairment beyond the effect of duration alone.[60]

3.4 Body-surface-area involvement and lesion count

Body-surface-area (BSA) involvement showed a strong, statistically significant positive correlation with DLQI across almost every study that measured it, including correlation coefficients as high as $r=0.91$ ($p<0.0001$) in one series10 and $r=0.71–0.90$ in others.[15,17,18] A large real-world cohort similarly demonstrated a clear dose–response relationship between increasing lesion count and DLQI, with the greatest impairment in patients with more than five lesions.[19] A 348-patient Aligarh cohort likewise found the number of sites involved and body-surface area both significantly predicted DLQI ($p<0.001$), and a 294-patient Eastern Indian series found body-surface area significantly associated with QoL impairment.[34,36] A 299-patient Ahmedabad cohort likewise found a significant, if more modest, positive correlation between body-surface area and DLQI ($rs=0.251$, $p<0.05$), reinforcing this relationship across differing effect sizes.[23]

3.5 Anatomical site of involvement

Site of involvement independently predicted QoL impairment. Simultaneous involvement of both exposed and unexposed body sites produced worse DLQI scores than involvement of either alone in both the Indian and Bangladeshi case–control studies,[17,18] while a large multicentric cohort found facial and trunk/back involvement associated with significantly higher DLQI than their absence ($p<0.001$ for both).[19] Thigh-fold and gluteal involvement (tinea cruris) was the most common site in a persisting/recurrent dermatophytosis cohort and carried a disproportionate psychosocial burden linked to embarrassment during intimacy.[13]

3.6 Topical steroid misuse

A large northern Indian series of 550 patients found topical steroid abuse in 92.9% of cases (most often clobetasol propionate, used singly or in antifungal–steroid–antibacterial combinations), most commonly recommended by pharmacists rather than dermatologists; steroid abuse was independently and significantly associated with higher DLQI scores (15.28 vs 10.41 in non-abusers, $p<0.001$), alongside low socioeconomic status, younger age, widespread tinea, and poor hygiene practices.[14] Prescribing surveys elsewhere in the literature confirm that corticosteroid–antifungal combination creams remain in widespread, guideline-discordant use across South Asia, sustaining the atypical, treatment-resistant "tinea incognito" presentation and, by extension, chronicity and QoL impairment.[5,6,24,25] A dermatology OPD cohort likewise reported topical-steroid or native-remedy self-medication in 41.2% of patients prior to presentation, with the highest DLQI scores concentrated in those with the most extensive combined-site involvement.[61]

3.7 Socioeconomic status, education, and occupation

Lower income, lower educational attainment, and manual or high-sweat/friction occupations were repeatedly associated with worse QoL. In one series, illiterate patients scored significantly worse than those with tertiary education (16.91 vs 14.34, $p=0.001$), and those earning under 5,000 rupees monthly scored worse than those earning over 30,000 (16.58 vs 12.95, $p=0.027$).[14] A large 2,776-patient multicentric cohort similarly found that occupations involving high sweat and friction exposure (manual laborers, drivers, service staff) had the highest DLQI scores, while sedentary indoor occupations and healthcare workers had the lowest ($p=0.003$).[19] A 425-patient community-based cohort from Kashmir Valley likewise found significantly higher DLQI scores among rural residents and patients of upper-middle socioeconomic status, alongside significant associations with duration, number of sites, body-surface area, and symptom intensity (pruritus, redness, burning) (all $p<0.05$); DLQI was also significantly higher in women and in patients aged 20–39 years.[59] A 372-patient Central Gujarat cohort similarly found DLQI significantly associated with hygiene-related practices — including towel-sharing with family members, bathing frequency, and frequency of changing undergarments — as well as geographic residence, religion, and seasonal variation, although no significant association was found with age, gender, educational status, or occupation in that cohort.[62]

3.8 Financial burden

Several studies quantified financial strain directly. In a 316-patient cohort, 56.6% of patients delayed or interrupted treatment because of cost, 30.7% cut general expenses, 26.2% used savings, 12.9% borrowed money, and 16.1% reduced healthcare spending for other family members; financial burden correlated moderately with DLQI, anxiety, and depression scores.[15] A separate 123-patient study found a mean financial-burden score of 3.43 (of 5) and financial dependency in 26% of patients, with financial burden approaching statistical significance in its association with DLQI ($p=0.06$).[16] A separate 299-patient Ahmedabad cohort quantified financial strain directly, reporting a mean financial-burden score of 3.46 (SD 1.70) and a mean financial-worry score of 3.66 (SD 1.22), both of which correlated significantly with DLQI, previous treatment cost, and each other ($p<0.05$); the same cohort found that sexual difficulties, reported by 35.6% of patients, were significantly associated with tinea cruris.[23] A further 120-patient study found a very large or extremely large DLQI effect in 72.5% of

patients, with financial burden and financial worry both significantly correlated with DLQI.[39]

3.9 Psychological comorbidity

Psychological distress was both prevalent and closely linked to QoL impairment. Using the Hospital Anxiety and Depression Scale (HADS), one study found abnormal anxiety in 21.2% and abnormal depression in 15.8% of chronic dermatophytosis patients, with a high positive correlation between DLQI and anxiety (rho=0.71) and a moderate correlation with depression (rho=0.62).[15] A separate study combining DLQI with the General Health Questionnaire (GHQ-12) and a visual analogue scale for pruritus found significant positive correlations among all three measures (VAS–DLQI r=0.70; DLQI–GHQ-12 r=0.53; VAS–GHQ-12 r=0.58), underscoring itch as a key mediator linking infection to psychological and QoL burden.[11] In a 123-patient chronic/recurrent dermatophytosis cohort, mean DLQI reached 21.4±5.6 with an "extremely large effect" in 55.3% of patients, alongside a mean HADS-anxiety score of 10.1±3.6, while separate Chandigarh and Eastern Indian series similarly found high rates of GHQ-12 psychological distress (up to 88.4% and 84.9% of patients, respectively) correlating with DLQI.[34,35,37] A 183-patient rural tertiary-care cohort using the Hospital Anxiety and Depression Scale alongside Beck's Depression Inventory similarly found borderline-to-abnormal anxiety in 17.4% and depression in 11.4% of patients, with the severity of anxiety, depression, and DLQI impairment increasing together in a monotonic pattern.[63]

3.10 Systemic comorbidity and treatment regimen

The largest cohort reviewed (2,776 patients across 325 Indian centres) found that obesity, hypertension, diabetes mellitus, hepatic dysfunction, cardiac disorders, and renal disease were each independently associated with significantly worse DLQI scores (all $p<0.001$), suggesting compounded disease burden in medically vulnerable patients. The same study found that treatment regimen significantly influenced patient-reported QoL, with super-bioavailable itraconazole combined with topical antifungal therapy associated with the most favorable DLQI outcomes compared with itraconazole monotherapy or conventional itraconazole-based regimens ($p<0.001$).[19]

3.11 Age and gender

Findings on age and gender were mixed and, in several individual studies, not statistically significant. Most studies found no significant association between gender and DLQI,[10,11,16,18] though three found modestly higher scores in females — including a 76-patient series spanning multiple dermatophytosis subtypes that reported a statistically significant difference (9.3±5.2 in females vs 7.1±4.7 in males, $p=0.038$),[13,14,26] and a fourth, 425-patient community-based cohort that likewise found significantly higher DLQI in women,[59] and one large multicentric study found significantly higher DLQI in adults aged 31–60 years than in those over 60,[19] a community-based cohort found the highest DLQI in patients aged 20–39,[59] while smaller single-centre studies found no significant age effect.[10,12] A 372-patient Central Gujarat cohort similarly found no significant association between DLQI and age or gender.[62] This inconsistency likely reflects differences in study population, occupational exposure, and cultural factors across settings rather than a uniform biological effect.

4. DISCUSSION

4.1 Comparison with other dermatoses

The absolute DLQI scores reported for chronic dermatophytosis (often 14–18) are comparable to, and in several series exceed, those reported for other chronic dermatoses long recognized as QoL-impairing, including psoriasis, acne vulgaris, and vitiligo.[13,14,17,18,27–29] This is notable given that dermatophytosis has historically been regarded in clinical practice as a trivial, self-limiting infection; the reviewed evidence instead positions chronic, recurrent tinea as a substantial and under-recognized contributor to dermatology-related QoL burden.

4.2 Clinical implications

Taken together, the reviewed evidence supports three practical implications for clinical care. First, routine incorporation of a brief validated QoL instrument (such as the DLQI) into dermatophytosis consultations, particularly for patients with chronic, extensive, or recurrent disease, could help identify those experiencing disproportionate impact despite seemingly modest clinical severity.[19] Second, screening for psychological distress and financial strain — not merely lesion extent — may better capture the full burden of disease and guide referral for counselling or social support.[15,16] Third, discouraging unsupervised topical corticosteroid use and promoting adherence to evidence-based antifungal regimens may reduce chronicity and its downstream QoL cost.[6,14]

4.3 Strengths

This review draws on a geographically consistent and methodologically comparable body of hospital and multicenter based evidence, including one large real-world cohort of nearly 2,800 patients, allowing convergent findings across independent settings to be identified with reasonable confidence.

4.4 Limitations

This review has several limitations inherent to its narrative design. No formal systematic search protocol, date restriction, or risk-of-bias appraisal was applied, and publication bias toward statistically significant findings cannot be excluded. Nearly all reviewed studies are cross-sectional, precluding causal inference, and most originate from India and Bangladesh, limiting generalizability to other regions. Several studies relied on self-reported financial and hygiene data subject to recall bias, and translated DLQI versions used across studies have not uniformly undergone independent psychometric validation.[15,16] Longitudinal studies integrating DLQI with standardized clinical severity indices are needed to clarify causal pathways between disease chronicity, treatment response, and QoL recovery.

5. CONCLUSION

Dermatophytosis, once regarded as a benign nuisance, is associated across a substantial and geographically consistent body of hospital-based evidence with meaningful, often “very large” to “extremely large,” impairment of quality of life, particularly when chronic, recurrent, extensive, or complicated by topical steroid misuse, psychological distress, or financial strain. Disease duration and body-surface-area involvement are the most consistently replicated predictors of QoL impairment, while socioeconomic status, occupation, anatomical site, and systemic comorbidity further modulate this burden. Integrating quality-of-life and psychosocial assessment into routine dermatological care, alongside rational, guideline-concordant antifungal therapy, represents a practical and evidence-supported step toward reducing the disproportionate human cost of this increasingly common disease.

REFERENCES

1. Hay RJ, Ashbee HR. Fungal infections. In: Griffiths CEM, Barker J, Bleiker T, Chalmers R, Creamer D, editors. Rook's Textbook of Dermatology. 9th ed. Oxford: Wiley-Blackwell; 2016.
2. Havlickova B, Czaika VA, Friedrich M. Epidemiological trends in skin mycoses worldwide. Mycoses. 2008;51(Suppl 4):2–15.
3. Verma S, Madhu R. The great Indian epidemic of superficial dermatophytosis: an appraisal. Indian J Dermatol. 2017;62(3):227–236.
4. AL-Khikani FH. Dermatophytosis, a worldwide contiguous fungal infection: growing challenge and few solutions. Biomed Biotechnol Res J. 2020;4:117–122.
5. Dogra S, Uprety S. The menace of chronic and recurrent dermatophytosis in India: is the problem deeper than we perceive? Indian Dermatol Online J. 2016;7(2):73–76.
6. Rajagopalan M, Inamadar A, Mittal A, Miskeen AK, Srinivas CR, Sardana K, et al. Expert consensus on the management of dermatophytosis in India (ECTODERM India). BMC Dermatol. 2018;18:6.
7. Nenoff P, Verma SB, Vasani R, Burmester A, Hipler UC, Wittig F, et al. The current Indian epidemic of superficial dermatophytosis due to Trichophyton mentagrophytes – a molecular study. Mycoses. 2019;62(1):336–356.
8. Verma SB, Panda S, Nenoff P, Singal A, Rudramurthy SM, Uhrlass S, et al. The unprecedented epidemic-like scenario of dermatophytosis in India: I. Epidemiology, risk factors and clinical features. Indian J Dermatol Venereol Leprol. 2021;87:154–175.
9. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI): a simple practical measure for routine clinical use. Clin Exp Dermatol. 1994;19(3):210–216.
10. Das NK, Das S. A study to assess the quality of life (QOL) of patients suffering from tinea corporis attending dermatology OPD of a tertiary care centre of Eastern India. Int J Med Res Rev. 2019;7(06):490–495.
11. Saini S, Shail A, Manish J, Devendra Y. The social and psychological impact of superficial dermatophytic infection using DLQI and GHQ-12: a cross-sectional study in 174 patients at a tertiary care centre in southern-east Rajasthan. J Dermatol Res Rev Rep. 2021;2(4):1–6.
12. Prabhu N, Rajeshwari KA, Sangolli PM. Quality of life in patients with chronic dermatophytosis: a cross-sectional study. Our Dermatol Online. 2024;15(4):349–352.
13. Rajashekar TS, Nandigonnanavar S, Kuppuswamy SK, Madhavi GS. Dermatology life quality index in patients with persisting and recurrent dermatophytoses. Int J Res Dermatol. 2019;5(1):139–143.
14. Meena D, Hazarika N, Chauhan P, Goyal P. Steroid abuse, quality of life, and various risk factors in dermatophytosis: a cross-sectional observational study from a tertiary care center in northern India. Acta Dermatovenerol APA. 2022;31:135–140.
15. Imthiaz NF, Hegde SP, Sathyanath S, Shenoy MM, Pinto M, Razak A. Assessment of psychosocial well-being, psychological distress, and financial burden in patients with chronic and recurrent dermatophytosis. Psychiatriki. 2025. doi:10.22365/jpsych.2025.015.
16. Karanam P, Veldi VD, Metta AK, Angara SSP, Rani N, Sandhya P, et al. Psychosocial and financial impact of dermatophytosis on patients attending a tertiary care centre at Visakhapatnam: a cross-sectional study. Cureus. 2025;17(4):e82483.
17. Varshney AP, Gahalaut P, Pardal PK, Mishra N, Rastogi MK, Thapa M. Quality of life in patients with chronic dermatophytosis. Nepal J Dermatol Venereol Leprol. 2020;18(1):44–51.
18. Uddin K, Yesmin S. Quality of life in patients with chronic dermatophytosis in a tertiary care hospital, Bangladesh. The Insight. 2024;7(1):175–185.
19. Singh P, Shenoy M, Girdhar M, Parasramani SG, Das A, Mishra PS, et al. Assessing the impact of dermatophytosis on quality of life using the Dermatology Life Quality Index: a

real-world cross-sectional study from India. Cureus. 2026;18(4):e106253.
20. Hongbo Y, Thomas CL, Harrison MA, Salek MS, Finlay AY. Translating the science of quality of life into practice: what do dermatology life quality index scores mean? J Invest Dermatol. 2005;125(4):659–664.
21. Basra MK, Fenech R, Gatt RM, Salek MS, Finlay AY. The Dermatology Life Quality Index 1994–2007: a comprehensive review of validation data and clinical results. Br J Dermatol. 2008;159(5):997–1035.
22. Nijsten T. Dermatology life quality index: time to move forward. J Invest Dermatol. 2012;132(1):11–13.
23. Patel NH, Padhiyar JK, Patel AP, Chhebber AS, Patel BR, Patel TD. Psychosocial and financial impact of disease among patients of dermatophytosis, a questionnaire-based observational study. Indian Dermatol Online J. 2020;11:373–377.
24. Mijaljica D, Spada F, Harrison IP. Emerging trends in the use of topical antifungal-corticosteroid combinations. J Fungi (Basel). 2022;8(8):812.
25. Sonego B, Corio A, Mazzoletti V, et al. Trichophyton indotineae, an emerging drug-resistant dermatophyte: a review of the treatment options. J Clin Med. 2024;13(12):3558.
26. Verma S, Vasani R, Reszke R, Matusiak L, Szepietowski JC. The influence of superficial dermatophytoses epidemic in India on patients' quality of life. Postepy Dermatol Alergol. 2021;38:102–105.
27. Nayak PB, Girisha BS, Noronha TM. Correlation between disease severity, family income, and quality of life in psoriasis: a study from South India. Indian Dermatol Online J. 2018;9(3):165–169.
28. Hazarika N, Rajaprabha RK. Assessment of life quality index among patients with acne vulgaris in a suburban population. Indian J Dermatol. 2016;61(2):163–168.
29. Hedayat K, Karbakhsh M, Ghiasi M, Goodarzi A, Fakour Y, Akbari Z, et al. Quality of life in patients with vitiligo: a cross-sectional study based on Vitiligo Quality of Life index (VitiQoL). Health Qual Life Outcomes. 2016;14:1–9.
30. Zhang M, Zhang N. Quality of life assessment in patients with alopecia areata and androgenetic alopecia in the People's Republic of China. Patient Prefer Adherence. 2017;11:151–155.
31. Al-Mutairi N, Eldin ON. Clinical profile and impact on quality of life: seven years' experience with patients of alopecia areata. Indian J Dermatol Venereol Leprol. 2011;77(4):489–493.
32. Abedini R, Hallaji Z, Lajevardi V, Nasimi M, Khaledi MK, Tohidinik HR. Quality of life in mild and severe alopecia areata patients. Int J Womens Dermatol. 2018;4(2):91–94.
33. Raddadi AA, Jfri A, Samarghandi S, Matury N, Habibullah T, Alfarshoti M, et al. Psoriasis: correlation between severity index (PASI) and quality of life index (DLQI) based on type of treatment. J Dermatol Surg. 2016;20(1):15–18.
34. Patro N, Panda M, Jena AK. The menace of superficial dermatophytosis on the QOL of patients attending referral hospital in Eastern India: a cross-sectional observational study. Indian Dermatol Online J. 2019;10:262–266.
35. Narang T, Bhattacharjee R, Singh S, Jha K, Mahajan R, Dogra S, et al. Quality of life and psychological morbidity in patients with superficial cutaneous dermatophytosis. Mycoses. 2019;62(8):680–685.
36. Mushtaq S, Faizi N, Amin SS, Adil M, Mohtashim M. Impact on quality of life in patients with dermatophytosis. Australas J Dermatol. 2020;61(4):e184–e188.
37. Das A, Sil A, Fatima F, Podder I, Jafferany M. Impact of chronic and recurrent dermatophytosis on quality of life and psychologic morbidity – a cross-sectional study. J Cosmet Dermatol. 2022;21(8):3586–3592.
38. Das A, Fatima F, Sil A, Podder I, Jafferany M. Therapeutic management of psychological morbidity and impaired quality of life in patients with persistent dermatophytoses. Dermatol Ther. 2020;33(6):e14124.

39. Jamil R, Saxena K, Koti V, Mohanty S. Dermatophytosis: its impact on quality of life and financial burden. Int J Med Biomed Stud. 2023;7(1):7–13.
40. Salari N, Heidarian P, Hosseinian-Far A, Babajani F, Mohammadi M. Global prevalence of anxiety, depression, and stress among patients with skin diseases: a systematic review and meta-analysis. J Prev (2022). 2024;45:611–649.
41. Zigmond AS, Snaith RP. The Hospital Anxiety and Depression Scale. Acta Psychiatr Scand. 1983;67(6):361–370.
42. Romppel M, Braehler E, Roth M, Glaesmer H. What is General Health Questionnaire assessing? Dimensionality and psychometric properties of the General Health Questionnaire-12 in a large-scale German population sample. Compr Psychiatry. 2013;54(4):406–413.
43. Montazeri A, Harirchi AM, Shariati M, Garmaroudi G, Ebadi M, Fateh A. The 12-item General Health Questionnaire (GHQ-12): translation and validation study of the Iranian version. Health Qual Life Outcomes. 2003;1:66.
44. Gould D, et al. Visual Analogue Scale (VAS). J Clin Nurs. 2001;10:697–706.
45. Weisshaar E, Szepietowski JC, Dalgard FJ, Garcovich S, Gieler U, Giménez-Arnau AM, et al. European S2k guideline on chronic pruritus. Acta Derm Venereol. 2019;99(5):469–506.
46. Elman S, Hynan LS, Gabriel V, Mayo MJ. The 5-D itch scale: a new measure of pruritus. Br J Dermatol. 2010;162(3):587–593.
47. Basra MKA, Salek MS, Camilleri L, Sturkey R, Finlay AY. Determining the minimal clinically important difference and clinically important difference bands for the Dermatology Life Quality Index. Dermatology. 2015;230(1):27–36.
48. Veenstra CM, Regenbogen SE, Hawley ST, Griggs JJ, Banerjee M, Kato I, et al. A composite measure of personal financial burden among patients with stage III colorectal cancer. Med Care. 2014;52(11):957–962.
49. Wild D, Grove A, Martin M, Eremenco S, McElroy S, Verjee-Lorenz A, Erikson P. Principles of good practice for the translation and cultural adaptation process for patient-reported outcomes (PRO) measures: report of the ISPOR Task Force for Translation and Cultural Adaptation. Value Health. 2005;8(2):94–104.
50. Bishnoi A, Vinay K, Dogra S. Emergence of recalcitrant dermatophytosis in India. Lancet Infect Dis. 2018;18(3):250–251.
51. D'Souza MJ, Hundi G. Awareness of risk factors for dermatophytoses and its impact on quality of life among adults in Mangalore: a cross-sectional study. IOSR J Dent Med Sci. 2018;17:64–70.
52. Drake LA, Scher RK, Smith EB, Faich GA, Smith SL, Hong JJ, et al. Effect of onychomycosis on quality of life. J Am Acad Dermatol. 1998;38(5):702–704.
53. Gupta AK, Mays RR. The impact of onychomycosis on quality of life: a systematic review of the available literature. Skin Appendage Disord. 2018;4:208–216.
54. Panda S, Verma S. The menace of dermatophytosis in India: the evidence that we need. Indian J Dermatol Venereol Leprol. 2017;83(3):281–284.
55. Sahoo AK, Mahajan R. Management of tinea corporis, tinea cruris, and tinea pedis: a comprehensive review. Indian Dermatol Online J. 2016;7(2):77–86.
56. WHOQOL Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. Psychol Med. 1998;28(3):551–558.
57. World Health Organization. WHOQOL: Measuring Quality of Life. Geneva: World Health Organization; 1997.
58. Yeung H, Takeshita J, Mehta NN, Kimmel SE, Ogdie A, Margolis DJ, et al. Psoriasis severity and the prevalence of major medical comorbidity: a population-based study. JAMA Dermatol. 2013;149(10):1173–1179.
59. Bashir S, Hassan I, Wani RT. Influence of dermatophytosis on quality of life: a cross sectional study from Kashmir Valley in North

India. Int J Community Med Public Health. 2020;7(5):1711–1716.
60. Shukla P, Verma P, Suvirya S, Pathania S, Kapoor D. Cutaneous dermatophytosis: a problem deeper than we perceive – a cross sectional prospective study on quality of life in 385 patients. Clin Epidemiol Glob Health. 2022;17:101115.
61. Laxmi H, Kumar Dilip NR. The impact of superficial dermatophytosis on quality of life: a cross-sectional observational study. IP Indian J Clin Exp Dermatol. 2021;7(3):191–196.
62. Rathwa M, Vinod GM, Sivanthiga G, Sheth P, Nanda S, Shringarpure K. Assessment of the quality of life (QoL) and associated factors in patients suffering from tinea infection attending dermatology OPD of a tertiary care hospital, Gujarat, India: a cross-sectional study. J Dermatol Case Rep. 2025;18(1):70–76.
63. Johnson RA, Prithviraj HK T, Swaroop MR, Monisha R, Karthick KS, Poornima HK S. Depression and quality of life among patients with dermatophyte infections at a rural tertiary care hospital: a cross sectional study. IP Indian J Clin Exp Dermatol. 2025;11(1):33–38.

HOW TO CITE: Hiba Sherin V A, Shafeena T, Quality of Life Burden in Tinea (Dermatophytosis) Patients: A Narrative Review, Int. J. of Pharm. Sci., 2026, Vol 4, Issue 9, 3633-3645. https://doi.org/10.5281/zenodo.23021466