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Impact of Chronic Urticaria on Major Life-Changing Decisions: Greater Burden in Social, Physical, and Job/Career Domains

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ABSTRACT

Background: Chronic urticaria (CU) is a common condition associated with a substantial burden on patients and society, characterized by persistent symptoms and reduced sense of life control. Although existing patient-reported outcome measures (PROMs) assess disease activity and quality of life, they largely reflect the current disease state, and evidence on CU's long-term impact on major life-changing decisions (MLCDs) remains scarce.

Objectives: To evaluate CU's long-term impact on MLCDs and assess the validity and reliability of the Turkish MLCDP.

Methods: The MLCDP is a 32-item questionnaire assessing the impact of chronic diseases on MLCDs across five domains. A linguistically validated Turkish version was developed using a forward-backward translation process. In this multicentre cross-sectional study, 111 Turkish-speaking CU patients (≥ 16 years) completed the MLCDP and other PROMs during follow-up visits.

Results: CU affected at least one MLCD in 79.3%, impacting social (77, 69.4%), physical (63, 56.8%), job/career (41, 36.9%), family/relationships (23, 20.7%) and education (9, 8.1%) domains. The most commonly affected decisions of each domain were changing eating habits (67, 60.4%), not taking part in any sport activities (35, 31.5%), working flexible hours (26, 23.4%), not having a sexual relationship (16, 14.4%) and studying near home (6, 5.4%), respectively. Patients with disease onset ≤ 45 years had higher rates of at least one affected MLCD than those > 45 years (74, 82.2% vs. 10, 58.8%, $p < 0.05$). Similarly, patients with an emergency referral in the last year (30, 93.8% vs. 58, 74.4%) and those who missed school/workdays in the last year (24, 100% vs. 64, 73.6%) showed higher rates of at least one affected MLCD compared with those without (all $p < 0.05$).

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Limitations: The small sample size, single-cohort cross-sectional design, lack of controls, self-reported measures, inclusion of patients with short disease duration and unassessed potential confounders such as comorbidities, medications and personality traits.

Conclusions: CU has a long-term impact on major life-changing decisions, especially in social, physical, and job/career decisions of the patients. Younger patients and those with severe disease are particularly affected.

1 | Introduction

Chronic urticaria (CU) is a common condition characterized by recurrent wheals and/or angioedema lasting > 6 weeks, imposing a significant burden through persistent symptoms [1, 2]. Existing patient-reported outcome measures (PROMs), which assess disease activity, quality of life and disease control, merely reflect the current disease state [1]. Research on CU's long-term impact on major life-changing decisions (MLCDs) is limited, despite their relevance to overall disease burden.

The Major Life Changing Decision Profile (MLCDP) was developed by Bhatti et al. [3], to quantify the impact of chronic diseases on MLCDs, capturing an important and often irreversible dimension of disease burden [4, 5]. Chronic conditions commonly affect decisions related to career, relationships, education and family planning [6–8]; thus, incorporating MLCDP with a quality of life questionnaire provides a more comprehensive assessment of CU's overall impact [5, 7, 8].

The aim of this study was to assess the validity and reliability of the Turkish MLCDP and thereby evaluate CU's long-term impact on MLCDs.

2 | Materials and Methods

The MLCDP is a 32-item questionnaire with five domains: education, job/career, family/relationships, social and physical activity [4]. The primary measure is the total number of decisions affected by the disease [3, 4]. A linguistically validated Turkish MLCDP was obtained using a forward-backward translation process, and cognitive debriefing was performed in 10 CU patients. The study involved CU patients followed at four Urticaria Centers for Reference and Excellence (UCAREs) [9] in Turkey. Eligible participants were Turkish-speaking patients with CU who provided informed consent. Patients with disease duration < 3 months, acute urticaria, isolated angioedema, or comorbid dermatologic conditions affecting life decisions were excluded. Consecutive clinic sampling was used, and ethics approval was obtained (38-15.09.2020).

At follow-up visits, patients completed physician-administered MLCDP, urticaria control test (UCT) [10, 11], dermatology life quality index (DLQI) [12], Beck's depression inventory (BDI) [13], patient's global assessment of disease severity and disease activity-visual analogue scales (PatGA-DS-VAS and PatGA-DA-VAS), patient's assessment of change in quality of life and the impact on major decisions-Likert scales (Pat-CQoL and Pat-IMD). Adhering

to the International Guideline [1], treatment was tailored to patients' disease control level at each visit.

Statistical analysis was conducted using SPSS v25.0. Group comparisons were performed with Mann-Whitney *U*, Kruskal-Wallis, Chi-square or Fisher's exact tests. Significance was set at $p < 0.05$. Internal consistency was assessed using Cronbach's alpha. Structural and convergent validity were evaluated with Spearman's correlations, and known-group validity with comparison tests based on Pat-IMD, Pat-CQoL, PatGA-DA-VAS, UCT and BDI.

3 | Results

Among 111 patients, 64 (57.7%) were female, with a mean age of 39 years and mean disease duration of 136.5 months. Sixty-nine (62.2%) had CSU, 4 (3.6%) had CIndU and 38 (34.2%) had both CSU and CIndU. Among patients with CIndU, 22 (52.4%) had SD, 9 (21.4%) had DPU, 7 (16.7%) had ChoU and 4 (9.5%) had ColdU. For details and PROMs outcomes, see Tables S1 and S2.

The translation process revealed no linguistic concerns, confirming semantic and cultural equivalence. The Turkish MLCDP showed excellent internal consistency (Cronbach's $\alpha = 0.909$), with moderate to high correlations between each item and its respective domain and total score, except for items 1 and 23 (Table S3). It correlated moderately with DLQI, PatGA-DS-VAS, PatGA-DA-VAS, Pat-CQoL and Pat-IMD, but not with UCT or BDI (Table S4). The Turkish MLCDP differentiated groups by impact on major decisions, quality of life and disease severity, but not by depression severity or treatment response (Table S5).

The median (IQR) number of affected MLCDs was 4 (1–8), and 88 patients (79.3%) reported at least one affected MLCD. Impact was seen in all domains: social (77, 69.4%), physical (63, 56.8%), job/career (41, 36.9%), family/relationships (23, 20.7%) and education (9, 8.1%). The affected decisions of each domain are shown in Table 1 and Figure S1.

Patients with disease onset ≤ 45 years had a higher median (IQR) number of affected MLCDs [5 (2–9) vs. 1 (0–2.5)] and higher rates of at least one affected MLCD overall and in job/career, family/relationships and physical domains than those > 45 years (Table 2 and Figure 1).

The number of affected MLCDs did not differ across urticaria subtypes. However, the decision not to take part in any sport activities was more frequent in patients with cholinergic

TABLE 1 | Proportion of CU patients reporting each major life-changing decision as affected with strength of influence categorized as slight-to-moderate or strong-to-very strong.

MLCDs (N = 111)	Number of patients whose MLCDs had been affected	Strength of influence	
		Slight to moderate	Strong to very strong
Education	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Left school education early	5 (4.5)	2 (40)	3 (60)
Change study subject	3 (2.7)	2 (66.7)	1 (33.3)
Study near home	6 (5.4)	3 (50)	3 (50)
Job/Career	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Change job/career	17 (15.3)	13 (76.5)	4 (23.5)
Give up job/career after starting	13 (11.7)	8 (61.5)	5 (38.5)
Take early retirement	12 (10.8)	11 (91.7)	1 (8.3)
Work flexible hours	26 (23.4)	17 (65.4)	9 (34.6)
Select a job/career suitable for health	25 (22.5)	15 (60)	10 (40)
Not to take promotion	8 (7.2)	5 (62.5)	3 (37.5)
Work shorter hours	25 (22.5)	12 (48)	13 (52)
Become self-employed	21 (18.9)	8 (38.1)	13 (61.9)
Remain unemployed	12 (10.8)	6 (50)	6 (50)
Family/Relationships	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Change plans for when to have children	13 (11.7)	7 (53.8)	6 (46.2)
Not to have children	8 (7.2)	4 (50)	4 (50)
Not to have a sexual relationship	16 (14.4)	11 (68.75)	5 (31.25)
Not to marry or have a long-term partner	9 (8.1)	4 (44.4)	5 (55.6)
Divorce or separation from partner	6 (5.4)	3 (50)	3 (50)
Social	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Change eating habits	67 (60.4)	28 (41.8)	39 (58.2)
Change smoking/drinking alcohol habits	39 (35.1)	16 (41)	23 (59)
Not to travel abroad	31 (27.9)	17 (54.8)	14 (45.2)
Move	11 (9.9)	6 (54.5)	5 (45.5)
Not to move	9 (8.1)	5 (55.6)	4 (44.4)
Not to move abroad	6 (5.4)	4 (66.7)	2 (33.3)
Wear different types/colour of clothes/shoes	30 (27)	10 (33.3)	20 (66.7)
Not to be involved in community activities	34 (30.6)	22 (64.7)	12 (35.3)
Not to socialize	25 (22.5)	17 (68)	8 (32)
Not to wear make-up	26 (23.4)	15 (57.7)	11 (42.3)
Physical	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Not to go swimming	27 (24.3)	15 (55.6)	12 (44.4)
Not to take part in any sport activities	35 (31.5)	20 (57.1)	15 (42.9)
Change to different sporting activities	25 (22.5)	15 (60)	10 (40)
Be more physically active	34 (30.6)	21 (61.8)	13 (38.2)
Give up driving	9 (8.1)	8 (88.9)	1 (11.1)

Abbreviations: ChoU, cholinergic urticaria; CIndU, chronic inducible urticaria; ColdU, cold urticaria; CSU, chronic spontaneous urticaria; CU, chronic urticaria; DPU, delayed pressure urticaria; MLCDs, major life-changing decisions; SD, symptomatic dermatographism; sgAH, second-generation antihistamine.

TABLE 2 | Distribution of major life-changing decisions affected according to age at disease onset, job status and educational level.

	Age of disease onset		Job status		Educational level		
	≤45 years N = 90	>45 years N = 17	With employment N = 43	Without employment N = 68	Postgraduate degree N = 38	University/ high school N = 73	Primary school/ high school N = 73
MLCDs (N = 111)							
Education	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Left school education early	5 (5.6)	0	0	5 (7.4)	0	5 (6.8)	
Change study subject	3 (3.3)	0	0	3 (4.4)	1 (2.6)	2 (2.7)	
Study near home	5 (5.6)	0	2 (4.7)	4 (5.9)	4 (10.5)	2 (2.7)	
Job/Career	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Change job/career	16 (17.8)*	0*	12 (27.9)*	5 (7.4)*	6 (15.8)	11 (15.1)	
Give up job/career after starting	12 (13.3)	0	6 (14)	7 (10.3)	5 (13.2)	8 (11)	
Take early retirement	11 (12.2)	1 (5.9)	6 (14)	6 (8.8)	1 (2.6)*	11 (15.1)*	
Work flexible hours	24 (26.7)*	0*	19 (44.2)*	7 (10.3)*	11 (28.9)	15 (20.5)	
Select a job/career suitable for health	23 (25.6)*	0*	16 (37.2)*	9 (13.2)*	12 (31.6)	13 (17.8)	
Not to take promotion	7 (7.8)	0	4 (9.3)	4 (5.9)	2 (5.3)	6 (8.2)	
Work shorter hours	24 (26.7)*	0*	18 (41.9)*	7 (10.3)*	14 (36.8)*	11 (15.1)*	
Become self-employed	21 (23.3)*	0*	13 (30.2)*	8 (11.8)*	6 (15.8)	15 (20.5)	
Remain unemployed	11 (12.2)*	0*	4 (9.3)	8 (11.8)	2 (5.3)	10 (13.7)	
Family/Relationships	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Change plans for when to have children	13 (14.4)	0	5 (11.6)	8 (11.8)	5 (13.2)	8 (11)	
Not to have children	8 (8.9)	0	3 (7)	5 (7.4)	3 (7.9)	5 (6.8)	
Not to have a sexual relationship	15 (16.7)	0	7 (16.3)	9 (13.2)	4 (10.5)	12 (16.4)	
Not to marry or have a long-term partner	8 (8.9)	0	3 (7)	6 (8.8)	4 (10.5)	5 (6.8)	
Divorce or separation from partner	5 (5.6)	0	3 (7)	3 (4.4)	3 (7.9)	3 (4.1)	
Social	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Change eating habits	55 (61.1)	8 (47.1)	29 (67.4)	38 (55.9)	29 (76.3)*	38 (52.1)*	
Change smoking/drinking alcohol habits	35 (38.9)	3 (17.6)	19 (44.2)	20 (29.4)	20 (52.6)*	19 (26)*	
Not to travel abroad	21 (23.3)	7 (41.2)	12 (27.9)	19 (27.9)	17 (44.7)*	14 (19.2)*	

(Continues)

TABLE 2 | (Continued)

MLCDs (N = 111)	Age of disease onset		Job status		Educational level		
	≤45 years N = 90	>45 years N = 17	With employment N = 43	Without employment N = 68	Postgraduate degree N = 38	University/ high school N = 73	Primary school/ high school N = 73
Move	11 (12.2)	0	6 (14)	5 (7.4)	5 (13.2)	6 (8.2)	6 (8.2)
Not to move	9 (10)	0	5 (11.6)	4 (5.9)	1 (2.6)	8 (11)	8 (11)
Not to move abroad	6 (6.7)	0	3 (7)	3 (4.4)	2 (5.3)	4 (5.5)	4 (5.5)
Wear different types/ colour of clothes/shoes	26 (28.9)	3 (17.6)	11 (25.6)	19 (27.9)	14 (36.8)	16 (21.9)	16 (21.9)
Not to be involved in community activities	29 (32.2)	2 (11.8)	12 (27.9)	22 (32.4)	17 (44.7)*	17 (23.3)*	17 (23.3)*
Not to socialize	22 (24.4)*	0*	10 (23.3)	15 (22.1)	11 (28.9)	14 (19.2)	14 (19.2)
Not to wear make-up	23 (25.6)	2 (11.8)	8 (18.6)	18 (26.5)	12 (31.6)	14 (19.2)	14 (19.2)
Physical	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Not to go swimming	25 (27.8)*	1 (5.9)*	12 (27.9)	15 (22.1)	11 (28.9)	16 (21.9)	16 (21.9)
Not to take part in any sports activities	31 (34.4)*	1 (5.9)*	12 (27.9)	23 (33.8)	14 (36.8)	21 (28.8)	21 (28.8)
Change to different sporting activities	22 (24.4)	3 (17.6)	12 (27.9)	13 (19.1)	12 (31.6)	13 (17.8)	13 (17.8)
Be more physically active	29 (32.2)	4 (23.5)	13 (30.2)	21 (30.9)	10 (26.3)	24 (32.9)	24 (32.9)
Give up driving	7 (7.8)	2 (11.8)	4 (9.3)	5 (7.4)	4 (10.5)	5 (6.8)	5 (6.8)
At least one decision had been affected							
in all MLCDP	74 (82.2)*	10 (58.8)*	36 (83.7)	52 (76.5)	33 (86.8)	55 (75.3)	55 (75.3)
in the education domain	8 (8.9)*	0*	2 (4.7)	7 (10.3)	4 (10.5)	5 (6.8)	5 (6.8)
in the job/career domain	38 (42.2)*	1 (5.9)*	24 (55.8)	17 (25)	18 (47.4)	23 (31.5)	23 (31.5)
in the family/ relationships domain	21 (23.3)*	0*	10 (23.3)	13 (19.1)	8 (21.1)	15 (20.5)	15 (20.5)
in the social domain	10 (58.8)	63 (70)	31 (72.1)	46 (67.6)	31 (81.6)*	46 (63)*	46 (63)*
in the physical domain	55 (61.1)*	5 (29.4)*	26 (60.5)	37 (54.4)	26 (68.4)	37 (50.7)	37 (50.7)

Note: Bold values indicate statistically significant results.
Abbreviation: MLCDs, major life-changing decisions.
**p* < 0.05, Chi-square test.

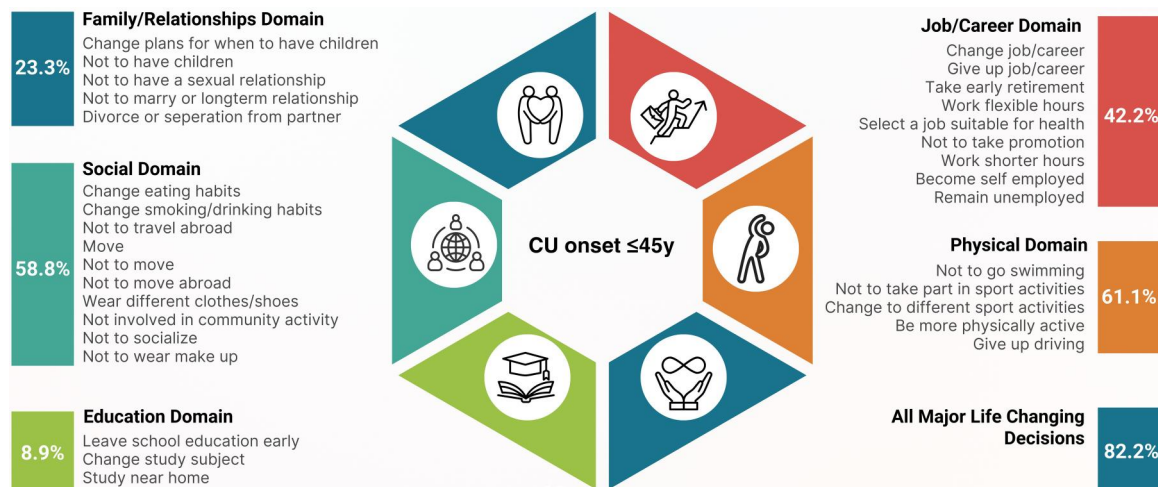


FIGURE 1 | Proportion of patients with chronic urticaria and disease onset at ≤ 45 years reporting at least one major life-changing decision (MLCD) affected overall and across individual domains. Examples of affected decisions within each domain are presented.

urticaria (CholU) compared with symptomatic dermographism (SD) [6 (85.7%) vs. 4 (18.2%), $p = 0.008$].

Patients with sleep disturbance, emergency referral, or missed school/workdays in the last year had higher median (IQR) numbers of affected MLCDs than those without [7 (2–9) vs. 4 (0.5–8); 7 (3.25–9) vs. 3 (0–8); 7.5 (4–12.25) vs. 3 (0–8), respectively, $p < 0.05$ for all]. These severity indicators were associated with a greater impact on MLCDs across multiple domains (Table 3).

4 | Discussion

One of the most novel and clinically relevant aspects of our study is the demonstration that CU may extend beyond symptom burden and substantially influence patients' life trajectory. Our findings suggest that the disease can shape major life-changing decisions, including those related to education, career choices, family planning and intimate relationships. This highlights CU as not only a medical condition but also a life-modifying disease with long-term personal and social consequences.

CU symptoms led patients to withdraw from community activities, limit travel and modify personal appearance to cope with their condition. This aligns with previous studies [3, 14] and supports the notion that visible symptoms can cause embarrassment and promote isolation [15]. Over time, this withdrawal may contribute to low self-esteem and an increased risk of mental health problems [16]. Reduced engagement in sports, particularly among patients with CholU, likely reflects symptom-triggering factors [1] and may further limit the ability to maintain a healthy lifestyle [17].

Occupational functioning was also affected, with many patients adjusting their work environments by prioritizing flexible schedules, reduced hours or health-compatible roles

due to health concerns and workplace challenges, which may hinder career progression and financial security [6, 18]. Importantly, evidence indicates that achieving complete clinical response may restore work capacity [19]. The greater impact observed in patients with earlier disease onset, especially ≤ 45 years, suggests that CU may reduce productivity and contribute to workforce loss.

Sexual relationships and family functioning were also negatively affected, particularly in younger patients, who are at a critical stage for MLCDs [20]. In addition, patients with more severe disease features demonstrated a greater impact on MLCDs, underscoring the importance of complete control and the need for early and effective disease management before the disease has a detrimental effect on patients' life course.

This study has several limitations. It was conducted in a single cohort from tertiary UCARE centers with a small sample size and no a priori power calculation. The absence of a control group, reliance on self-reported measures, inclusion of patients with short disease duration and cross-sectional design were further limitations. In addition, comorbidities, concomitant medications and individual personality traits were not systematically evaluated and may have influenced decision-making. Larger and longitudinal studies are needed to confirm these findings.

In conclusion, the Turkish MLCDP was successfully adapted and validated as a reliable and valid instrument for assessing the long-term impact of CU, complementing existing PROMs in capturing overall disease burden. CU may substantially affect MLCDs, particularly in social, physical and job/career domains, with greater impact in younger patients and those with more severe disease. These findings underscore the need for early and effective treatment as well as a holistic management approach that extends beyond symptom control to support patients' broader life trajectories.

TABLE 3 | Distribution of major life-changing decisions affected according to sleep disturbance, emergency referral and missed school/workday in the last year.

MLCDs (N = 111)	Sleep disturbance in the last year		Emergency referral in the last year		Missed school/workday in the last year	
	Positive N = 34	Negative N = 77	Positive N = 32	Negative N = 78	Positive N = 24	Negative N = 87
Education	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Left school education early	2 (5.9)	3 (3.9)	1 (3.1)	4 (5.1)	0	5 (5.7)
Change study subject	3 (8.8)*	0*	2 (6.3)	1 (1.3)	1 (4.2)	2 (2.3)
Study near home	4 (11.8)	2 (2.6)	3 (9.4)	3 (3.8)	2 (8.3)	4 (4.6)
Job/Career	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Change job/career	8 (23.5)	9 (11.7)	7 (21.9)	10 (12.8)	6 (25)	11 (12.6)
Give up job/career after starting	7 (20.6)	6 (7.8)	5 (15.6)	8 (10.3)	4 (16.7)	9 (10.3)
Take early retirement	6 (17.6)	6 (7.8)	2 (6.3)	10 (12.8)	3 (12.5)	9 (10.3)
Work flexible hours	11 (32.4)	15 (19.5)	9 (28.1)	17 (21.8)	11 (45.8)*	15 (17.2)*
Select a job/career suitable for health	11 (32.4)	14 (18.2)	8 (25)	17 (21.8)	9 (37.5)*	16 (18.4)*
Not to take promotion	4 (11.8)	4 (5.2)	3 (9.4)	5 (6.4)	3 (12.5)	5 (5.7)
Work shorter hours	10 (29.4)	15 (19.5)	9 (28.1)	16 (20.5)	12 (50)*	13 (14.9)*
Become self-employed	7 (20.6)	14 (18.2)	6 (18.8)	15 (19.2)	7 (29.2)	14 (16.1)
Remain unemployed	8 (23.5)*	4 (5.2)*	4 (12.5)	8 (10.3)	4 (16.7)	8 (9.2)
Family/Relationships	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Change plans for when to have children	7 (20.6)	6 (7.8)	5 (15.6)	8 (10.3)	3 (12.5)	10 (11.5)
Not to have children	5 (14.7)	3 (3.9)	3 (9.4)	5 (6.4)	1 (4.2)	7 (8)
Not to have a sexual relationship	9 (26.5)*	7 (9.1)*	7 (21.9)	9 (11.5)	5 (20.8)	11 (12.6)
Not to marry or have a long-term partner	5 (14.7)	4 (5.2)	4 (12.5)	5 (6.4)	2 (8.3)	7 (8)
Divorce or separation from partner	3 (8.8)	3 (3.9)	2 (6.3)	4 (5.1)	2 (8.3)	4 (4.6)
Social	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Change eating habits	23 (67.6)	44 (57.1)	27 (84.4)*	40 (51.3)*	21 (87.5)*	46 (52.9)*
Change smoking/drinking alcohol habits	14 (41.2)	25 (32.5)	11 (34.4)	28 (35.9)	14 (58.3)*	25 (28.7)*
Not to travel abroad	12 (35.3)	19 (24.7)	14 (43.8)*	17 (21.8)*	11 (45.8)*	20 (23)*
Move	3 (8.8)	8 (10.4)	3 (9.4)	8 (10.3)	4 (16.7)	7 (8)
Not to move	4 (11.8)	5 (6.5)	5 (15.6)	4 (5.1)	3 (12.5)	6 (6.9)
Not to move abroad	2 (5.9)	4 (5.2)	1 (3.1)	5 (6.4)	2 (8.3)	4 (4.6)
Wear different types/colour of clothes/shoes	13 (38.2)	17 (22.1)	11 (34.4)	19 (24.4)	10 (41.7)	20 (23)

(Continues)

TABLE 3 | (Continued)

MLCDs (N = 111)	Sleep disturbance in the last year		Emergency referral in the last year		Missed school/workday in the last year	
	Positive N = 34	Negative N = 77	Positive N = 32	Negative N = 78	Positive N = 24	Negative N = 87
Not to be involved in community activities	14 (41.2)	20 (26)	16 (50)*	18 (23.1)*	12 (50)*	22 (25.3)*
Not to socialize	13 (38.2)*	12 (15.6)*	12 (37.5)*	13 (16.7)*	10 (41.7)*	15 (17.2)*
Not to wear make-up	11 (32.4)	15 (19.5)	15 (46.9)*	11 (14.1)*	9 (37.5)	17 (19.5)
Physical	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Not to go swimming	10 (29.4)	17 (22.1)	10 (31.3)	17 (21.8)	9 (37.5)	18 (20.7)
Not to take part in any sports activities	13 (38.2)	22 (28.6)	14 (43.8)	21 (26.9)	13 (54.2)*	22 (25.3)*
Change to different sporting activities	7 (20.6)	18 (23.4)	10 (31.3)	15 (19.2)	8 (33.3)	17 (19.5)
Be more physically active	8 (23.5)	26 (33.8)	12 (37.5)	22 (28.2)	11 (45.8)	23 (26.4)
Give up driving	6 (17.6)*	3 (3.9)*	3 (9.4)	6 (7.7)	4 (16.7)	5 (5.7)
At least one decision had been affected						
in all MLCDP	30 (88.2)	58 (75.3)	30 (93.8)*	58 (74.4)*	24 (100)*	64 (73.6)*
in the education domain	4 (11.8)	5 (6.5)	3 (9.4)	6 (7.7)	2 (8.3)	7 (8)
in the job/career domain	17 (50)	24 (31.2)	12 (37.5)	29 (37.2)	16 (66.7)*	25 (28.7)*
in the family/relationships domain	12 (35.3)*	11 (14.3)*	11 (34.4)*	12 (15.4)*	7 (29.2)	16 (18.4)
in the social domain	26 (76.5)	51 (66.2)	28 (87.5)*	49 (62.8)*	23 (95.8)*	54 (62.1)*
in the physical domain	20 (58.8)	43 (55.8)	22 (68.8)	41 (52.6)	20 (83.3)*	43 (49.4)*

Note: Bold values indicate statistically significant results.

Abbreviation: MLCDs, major life-changing decisions.

* $p < 0.05$, Chi-square test.

Author Contributions

All authors contributed to the study conception and design. Sinem Ornek Ozdemir, Kubra Cure, Pelin Kuteyla Can and Emek Kocaturk performed material preparation. Sinem Ornek Ozdemir, Kubra Cure, Defne Baskurt, Rabia Oztas Kara, Muhammed Burak Yucel, Esra Sarac, Pelin Kuteyla Can, Bahar Sevimli Dikicier, Ragip Ertas, Andac Salman, Murat Türk, Utkan Kızıltac and Emek Kocaturk performed data collection. Sinem Ornek Ozdemir and Emek Kocaturk performed analysis and Sinem Ornek Ozdemir, Defne Baskurt and Emek Kocaturk wrote the original draft. Faraz Mahmood Ali, Sam Salek, Andrew Y. Finlay and Emek Kocaturk reviewed and edited the manuscript. Sam Salek, Andrew Y. Finlay and Emek Kocaturk supervised the project. All authors read and approved the final manuscript.

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Ethical Approval

The study was approved by the Human Research Ethics Board of Istinye University (38-15.09.2020).

Patient Consent

All patients in this manuscript have given written informed consent for participation in the study and the use of their data and their case details for publication.

Conflicts of Interest

Andrew Y. Finlay shares copyright ownership of both the DLQI and the MLCDP, whereas Sam Salek is a joint copyright owner of the MLCDP. Cardiff University receives royalties from certain uses of these measures, with both Andrew Y. Finlay and Sam Salek receiving their respective shares in accordance with standard university policy. Other authors have no relevant conflict of interest in relation to this work. However, Rabia Oztas Kara has given speeches for Novartis, AbbVie, Lilly, Menarini, Sanofi and L'Oréal. Ragip Ertas has served on advisory boards and given speeches for Novartis, AbbVie, Janssen, Pfizer, Sanofi, Lilly and Bilim. Andac Salman has served on advisory boards and given speeches for AbbVie, Menarini, Novartis, Pfizer and Pierre Fabre. Murat Türk has served on advisory boards and given speeches for AstraZeneca, GSK, Novartis, Vem ilaç, and Abdi İbrahim. Emek Kocaturk has served on advisory boards and given speeches for Novartis, Sanofi, Abdi İbrahim, Pfizer and La Roche Posay. Bahar Sevimli Dikicier has given speeches for Novartis, Sanofi, Pfizer and AbbVie.

Data Availability Statement

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.

Figure S1. Proportion of CU patients reporting each major life-changing decision affected, stratified by strength of influence. Blue bars indicate slight-to-moderate influence, while red bars indicate strong-to-very strong influence. CU, chronic urticaria; MLCs, major life-changing decisions.

Supporting File 1: jvc270433-sup-0002-Supplementary_Tables.docx.

Supporting File 2: jvc270433-sup-0003-STROBE_checklist_v4_cross-sectional.doc.