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CORRELATES OF HEALTH-CARE SEEKING ACTIVITIES IN PATIENTS WITH UROLOGICAL CHRONIC PELVIC PAIN SYNDROMES: FINDINGS FROM THE MULTIDISCIPLINARY APPROACH TO THE STUDY OF CHRONIC PELVIC PAIN (MAPP) COHORT

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Abstract

Purpose—We examined health-care seeking activities over a 12-month period in a cohort of men and women with urological chronic pelvic pain syndromes (UCPPS).

Materials and Methods—A total of 191 men and 233 women with UCPPS were followed with biweekly internet-based questionnaires about their symptoms and health-care seeking (HCS) activities, including a) healthcare provider contacts; b) office visits; c) emergency room/urgent care visits; d) medication changes; and e) medical procedures. Multivariable modeling was used to determine the association of demographic and clinical variables with HCS. HCS ‘super-users’ were defined as individuals who reported HCS activity at least 11 times during the 23 biweekly assessments.

Results—Mean values for HCS activities were 2.4 office contacts, 2.5 office visits, 1.9 medication changes, 0.9 medical procedures, and 0.3 ER/urgent care visits. There were 31 HCS ‘super-users’ who accounted for 26% of the HCS activities. Worse baseline pain severity and female sex were associated with a higher rate of all HCS activities except ER/urgent care visits. The presence of a non-urologic chronic pain condition was associated with more provider contacts, office visits, and medical procedures. Greater baseline depression symptoms were associated with more provider contacts, office visits, and medication changes. Other examined variables (age, symptom duration, catastrophizing, anxiety, urinary symptom severity, symptom variability) had minimal association with HCS.

Conclusions—HCS activities were strongly influenced by UCPPS pain severity, but not urinary symptom severity. Women and those with non-urologic overlapping pain conditions were more likely to be seen and treated for their symptoms.

Keywords

interstitial cystitis; chronic prostatitis; treatment; resource use; medications

INTRODUCTION

The term ‘urologic chronic pelvic pain syndromes’ (UCPPS) includes both interstitial cystitis/ bladder pain syndrome (IC/BPS) and chronic prostatitis/ chronic pelvic pain syndrome (CP/CPPS)¹. UCPPS symptoms are characterized by bladder pain, pelvic pain, and/or urinary symptoms such as abnormal frequency and nocturia. The etiology of these symptoms is poorly understood, and is likely heterogeneous. Although there are many treatments for UCPPS none are consistently effective. As a result, patients with UCPPS typically have multiple physician office visits and undergo numerous treatments in an attempt to improve their symptoms^{2,3}. Not surprisingly, UCPPS patients make up a significant proportion (5–15%) of urology office visits^{4–6}. However, the type, and frequency of health-care seeking (HCS) activities as well as predictors of seeking care of these patients has not been well described. We studied men and women with UCPPS to assess their HCS activities and to examine prospectively the association between a wide range of clinical and demographic factors and increased health-care seeking behaviors.

METHODS

Subject recruitment

This study was conducted as part of the Multidisciplinary Approach to the Study of Chronic Pelvic Pain (MAPP) Research Network. The Six MAPP Research Network clinical centers enrolled 191 men and 233 women with UCPPS into a 12-month prospective, observational cohort study. Study design, and inclusion/exclusion criteria were previously described in detail⁷. Study entry criteria were broad to permit recruitment of participants with a range of symptoms and symptom severity. The inclusion criteria required a clinical diagnosis of IC/BPS or CP/CPPS, and a pain score of at least one on a Likert pain scale. Women were eligible if they endorsed a sensation of pain, pressure or discomfort localized in the bladder or pelvic region that was associated with lower urinary tract symptoms. Men were eligible if they met either the same IC/BPS eligibility criteria or either of 2 CP/CPPS-specific eligibility criteria, including 1) self-reported pain or discomfort in the perineum, suprapubic area, testicles or tip of the penis, or 2) self-reported pain associated with urination or ejaculation.

Participants underwent an in-depth baseline evaluation; to account for regression to the mean, we employed a 4-week run-in period so that week 4 data were defined as baseline values for analytic purposes⁸. Less comprehensive assessments were performed at the 6- and 12-month follow-up visits⁷. Study participants also completed biweekly internet-based questionnaires about their symptoms and health-care seeking.

Demographic and Clinical Factors

Age, sex, self-reported UCPPS symptom duration, and presence of three other chronic overlapping pain conditions (COPCs) (fibromyalgia, irritable bowel syndrome, or chronic fatigue syndrome) were also self-reported by the study participants at baseline. Separate scores for UCPPS pain severity and urinary severity were obtained from biweekly responses to the Genitourinary Pain Index⁹ and the Interstitial Cystitis Symptom index¹⁰ as reported

previously¹¹. At the time of each biweekly assessment, the within-person pain and urologic symptom variability was determined based on the standard deviation of pain scores and urinary scores, respectively, for the preceding 6-week time period⁸.

Psychosocial Factors

Catastrophizing was measured using the 6-item Catastrophizing sub-scale from the Coping Strategies Questionnaire (CSQ)¹². Anxiety and depression were assessed using the Hospital Anxiety and Depression Scale (HADS)¹³.

Healthcare Seeking Behaviors (HCS)

Subjects were asked biweekly if their urologic or pelvic pain symptoms had been severe enough to cause them to seek medical care in the past two weeks, including a) contacting a healthcare provider (physician, nurse, physical therapist or other provider) by telephone or e-mail; b) seeing a healthcare provider in his/her office; c) making a trip to an emergency room (ER) or urgent care center; d) having a medication changed (new medication or different dose); or e) undergoing a medical procedure. For each HCS activity, we defined a 'super-user' as any individuals who reported the HCS at least 11 times during the 23 biweekly assessments. This value was chosen as it represented half of the 22 follow-up HCS assessments that occurred after the baseline visit. ER/urgent care visit were not included in this 'super-user' analysis due to the small number of observed events in that category.

Statistical Analysis

We determined the number of times each participant engaged in each HCS activity over the 48-week follow up period. Univariable and multivariable Poisson models with the log of the number of survey completions as an offset were used to determine the association of demographic and clinical variables with the rate of each HCS behavior over 48 weeks. The models included sex, age, presence of any COPC, symptom duration (≥ 2 years vs <2 years), baseline (pain/ urinary) symptom severity, CSQ catastrophizing score, HADS anxiety score, and HADS depression score. To assess the impact of time-varying symptom levels and variability on the likelihood of reporting engagement in each HCS behavior, univariable and multivariable logistic models were fit by generalized estimating equations to account for within-patient correlation among biweekly observations. Independence working correlation was assumed, and robust variance estimators were used for statistical inference. These models included within-person pain/urinary symptom variability, and symptom severity at the prior contact as predictors. All models also adjusted for site to account for potential site differences. Analyses were performed using SAS/STAT, version 9.3 (Cary, NC).

RESULTS

Baseline characteristics of the 424 MAPP participants have been previously reported¹⁴. The mean age of the 191 male participants was 46.8 years (range 19–82), and mean UCPPS symptom duration was 7.8 years (range 0–54). The mean age of the 233 female participants was 40.5 years (range 19–78), and mean symptom duration was 9.1 years (range 0–47). Each study participant was eligible to complete 23 HCS surveys between weeks 4 and 52 during the 12-month study period. The mean (median) number of surveys completed was

15.0 (16). At least 10 survey responses were received from 313 study participants (74%). Fewer than 3 surveys were completed by 36 study participants (8.5%), and they were excluded from analysis.

Between weeks 4 and 52, mean values for HCS activities were 2.4 office contacts, 2.5 office visits, 1.9 medication changes, 0.9 medical procedures, and 0.3 ER/urgent care visits (Table 1). The ranges of values for all HCS activities were very large, indicating significant variability across individuals regarding the use of medical resources. HCS was more common in women than men across all categories.

Results of the univariable and multivariable analyses for HCS activities are provided in Tables 2 and 3. Worse baseline pain severity and female sex were associated with an increase in the rate of all HCS activities except ER/urgent care visits. The presence of a second (non-urollogic) COPC was associated with more provider contacts, office visits, and medical procedures, while a higher HADS depression score was associated with more provider contacts, office visits, and medication changes. Other examined variables (age, symptom duration, catastrophizing score, anxiety score, baseline urinary symptom severity, most recent urinary symptom severity, pain symptom variability and urinary symptom variability) had no or minimal association with HCS activities. Higher (worse) pain severity at the most recent contact strongly predicted HCS across all models, and was the only variable that was associated with increased ER/urgent care visits.

A total of 31 study participants (7.3%) were categorized as HCS ‘super-users’, including 7 men and 24 women. Many of these individuals were ‘super-users’ across multiple HCS activities, as shown in Table 4. Multivariable analysis (Table 5) found that female sex, increased age, higher baseline pain severity, lower baseline urinary severity and higher depressive symptoms were associated with ‘super-user’ status, holding other factors constant.

DISCUSSION

Over the course of this 12-month prospective cohort study, UCPPS participants reported an average of 2.4 provider contacts, 2.5 office visits, 1.9 medication changes, and 0.9 medical procedures specifically for their UCPPS symptoms. ER/urgent care visits were much less common, perhaps reflecting the chronic nature of the participants’ symptoms. To meet study inclusion criteria, all MAPP subjects were required to have an established UCPPS diagnosis (either IC/BPS or CP/CPPS). Therefore, our cohort did not include patients with new onset UCPPS symptoms, who often see numerous physicians and undergo multiple tests before being diagnosed and/or referred for specialty care. On the other hand, patients with longstanding UCPPS symptoms such as the MAPP participants may not utilize HCS less than those with new onset symptoms due to the chronic and persistent nature of the disorder.

The most powerful predictor of increased HCS activities was UCPPS pain symptom severity at the most recent contact (which was typically 2 weeks preceding the HCS assessment). More severe antecedent pain symptoms were associated with a significant increase in all measured HCS activities. More severe baseline pain severity was also correlated with a

higher rate of HCS activities. In contrast, urinary symptom severity, whether measured at baseline or at the most recent contact, was not associated with HCS. These findings suggest that pain symptoms and urinary symptoms have a very different impact on patients, as the pain appears to trigger office visits and treatment changes, while urinary symptoms do not. The reason for this is not clear. Perhaps patients self-treat for urinary symptoms, or maybe they are provided with therapies to use as needed (e.g., antibiotics, urinary analgesics) that do not prompt a new provider interaction. These findings reinforce our previous observations that pain symptoms and urinary symptoms in UCPPS are separate, unique constructs of these syndromes^{11,15}.

We identified distinct sex differences in HCS. Women with UCPPS utilized many more HCS than men, even after controlling for symptom severity, age, and other clinical and demographic factors. This was unexpected, as our previous findings have suggested that sex has a minimal impact on UCPPS symptom trajectory¹⁵. By definition, all women in the MAPP cohort were diagnosed with IC/BPS, while men may have either IC/BPS or CP/CPPS. Therefore, the female MAPP participants were found to exhibit more ‘bladder-centric’ symptoms than the male participants¹⁶. This could potentially have an impact on HCS, as bladder-centric symptoms could increase the likelihood of certain treatments/procedures to manage pain (e.g., cystoscopy, bladder instillations). Alternatively, there may be unmeasured clinical, demographic or psychosocial differences between the sexes or between IC/BPS and CP/CPPS that account for the observed discrepancy in HCS, as has been demonstrated for other health conditions¹⁷.

We expected that increased UCPPS symptom variability would result in increased HCS, as variable/ unpredictable symptoms would be expected to cause more bother to patients. However, no association between symptom variability and HCS was observed. It is possible that our biweekly measurements were too infrequent to accurately capture UCPPS symptom variability, as focus group studies have indicated that UCPPS symptoms can fluctuate throughout the day¹⁸. We are currently developing a process to gather symptom data on a daily basis using mobile smart-phone platforms to further investigate this issue.

The presence of another COPC was associated with more office contacts, office visits and medical procedures for UCPPS. It is possible that the increased symptom burden of having multiple COPCs leads to these individuals feeling less well and more chronically compromised. It is also possible that patients with these overlapping conditions have a larger team of healthcare providers, resulting in more HCS when participants are symptomatic. Another possibility is that some of the reported HCS may have been due to symptoms from the other (non-urologic) pain conditions, given the inherent symptomatic overlap that exists between many of these chronic pain conditions.

Psychosocial factors are known to relate to quality of life and other outcomes related to chronic pain. These observations are consistent with our finding that increased depression symptoms were associated with more provider contacts, office visits, and medication changes for UCPPS symptoms. However, other measured psychosocial variables (catastrophizing symptoms and anxiety) had no association with HCS activities.

We identified 31 HCS ‘super-users’, approximately 7% of the total MAPP cohort, who accounted for 26% of the reported HCS activities. Female sex, worse baseline pain severity, and more severe depressive symptoms were associated with HCS ‘super-user’ status, consistent with our findings that these factors predicted overall HCS activity in the MAPP cohort. In contrast, increased age was a predictor of ‘super-user’ status but were not predictive of HCS across the entire network. In addition, the presence of a non-urollogic COPC was not associated with ‘super-user’ status but was associated with increased HCS. These findings suggest that ‘extreme’ HCS behavior is more common as patients age, and is unrelated to the presence of non-urollogic pain symptoms. Finally, the inverse association between baseline urinary symptom severity and ‘super-user’ status is counter-intuitive, and suggests that perhaps a subset of patients with severe pain and minimal urinary symptoms may account for a disproportionate number of health-care activities for UCPPS. However, the univariate results (Table 5) indicate a positive association between urinary symptom severity and ‘super-user’ status. This implies that the multivariable results may reflect an association among other variables in the model rather than specifically with care-seeking activities.

Certain limitations of our analysis should be acknowledged. The MAPP cohort represents a select group of UCPPS patients who were recruited from academic tertiary care centers, and may not reflect the clinical and demographic characteristics of the broader UCPPS population. Some participants did not complete all of the biweekly assessments, and these biweekly assessments were not able to identify if multiple HCS in the same category (such as office visits) occurred during the two-week period. Both of these limitations would tend to underestimate the degree of HCS in the cohort. In addition, we did not collect data on costs, which would have provided a more comprehensive assessment of medical resource use. Nevertheless, this is the first study to prospectively examine HCS activities in a cohort of UCPPS patients. The inclusion of multiple clinical sites and extensive clinical and demographic data about the participants are strengths which help to provide valuable insights into HCS behaviors and their predictors.

CONCLUSIONS

This is the first study to prospectively examine the type and frequency of HCS activities of a cohort of UCPPS patients. On average, UCPPS symptoms accounted for 2.4 provider contacts, 2.5 office visits, 1.9 medication changes, and 0.9 medical procedures over 12 months. HCS activities were strongly influenced by UCPPS pain severity, but not urinary symptoms severity. Women were more likely than men to be seen and treated for their symptoms. Approximately 7% of the study participants were health-care ‘super-users; who accounted for 26% of the care-seeking activities.

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Table 1

Summary of health-care seeking in MAPP cohort

Activity	All Subjects (n=409)* Mean (sd) (Range)	Female (n=184)* Mean (sd) (Range)	Male (n=225)* Mean (sd) (Range)	p
E-mail or telephone contacts to healthcare provider	2.4 (3.5) (0–22)	2.9 (3.9) (0–22)	1.7 (2.8) (0–19)	0.006
Office visits	2.5 (3.8) (0–21)	3.1 (4.2) (0–21)	1.7 (3.0) (0–21)	0.0003
ER or urgent care center	0.3 (0.8) (0–6)	0.3 (0.9) (0–6)	0.2 (0.6) (0–4)	0.0582
Medication change	1.9 (2.7) (0–16)	2.4 (3.0) (0–16)	1.4 (2.2) (0–11)	<0.0001
Medical procedure	0.9 (2.4) (0–20)	1.2 (2.8) (0–20)	0.6 (1.8) (0–20)	0.0155

* Analysis limited to subjects who responded 3 times or more between weeks 4 and 52.

Association of baseline factors with engaging in health-care seeking activities (univariable)

Table 2a

PARAMETER	CONTACT PROVIDER		OFFICE VISIT		ER/URGENT CARE VISIT		MEDICATION CHANGE		MEDICAL PROCEDURE	
	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p
Female Sex	1.66 (1.21,2.26)	0.0014	1.71 (1.24,2.36)	0.0012	1.75 (0.98,3.11)	0.0582	1.76 (1.31,2.38)	0.0002	1.72 (1.2,94)	0.0487
Increased Age (5 years)	0.98 (0.94,1.03)	0.535	0.98 (0.94,1.03)	0.5421	0.91 (0.83,1.01)	0.0891	0.97 (0.93,1.02)	0.2394	1.05 (0.97,1.13)	0.2461
Presence of any COPC	1.78 (1.36,2.33)	<0.0001	1.9 (1.44,2.5)	<0.0001	1.92 (1.11,3.33)	0.0193	1.62 (1.24,2.1)	0.0003	1.95 (1.21,3.13)	0.006
Symptom Duration (2 years)	1.01 (0.76,1.35)	0.9385	0.99 (0.74,1.33)	0.961	0.69 (0.4,1.21)	0.1966	0.9 (0.68,1.18)	0.4394	1.02 (0.63,1.67)	0.9207
Baseline Pain Severity	1.09 (1.07,1.12)	<0.0001	1.11 (1.08,1.14)	<0.0001	1.12 (1.07,1.17)	<0.0001	1.08 (1.06,1.11)	<0.0001	1.14 (1.09,1.18)	<0.0001
Baseline Urinary Severity	1.05 (1.02,1.07)	0.0002	1.06 (1.04,1.09)	<0.0001	1.06 (1.01,1.1)	0.0159	1.04 (1.02,1.07)	<0.0001	1.07 (1.03,1.11)	<0.0001
CSQ Total (0–36)	1.04 (1.02,1.05)	<0.0001	1.04 (1.02,1.05)	<0.0001	1.03 (0.99,1.06)	0.1334	1.02 (1.01,1.04)	0.0052	1.01 (0.98,1.04)	0.424
HADS Anxiety (0–21)	1.05 (1.02,1.08)	0.0015	1.05 (1.02,1.08)	0.0025	1.01 (0.96,1.07)	0.6269	1.04 (1.01,1.07)	0.0185	1.01 (0.95,1.07)	0.7458
HADS Depression (0–21)	1.08 (1.05,1.12)	<0.0001	1.09 (1.05,1.12)	<0.0001	1.08 (1.01,1.15)	0.028	1.07 (1.04,1.1)	<0.0001	1.05 (1.1,1.11)	0.07

Table 2b

Association of baseline factors with engaging in health-care seeking activities (multivariable)

PARAMETER	CONTACT PROVIDER		OFFICE VISIT		ER/URGENT CARE VISIT		MEDICATION CHANGE		MEDICAL PROCEDURE	
	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p	Rate Ratio (95% CI)	p
Female Sex	1.44 (1.08,1.92)	0.0124	1.44 (1.07,1.94)	0.016	1.34 (0.71,2.53)	0.3678	1.59 (1.2,2.12)	0.0013	1.71 (1.02,2.86)	0.0426
Increased Age (5 years)	1.06 (1.01,1.11)	0.0285	1.07 (1.01,1.12)	0.0114	0.97 (0.86,1.08)	0.5608	1.02 (0.98,1.07)	0.2817	1.16 (1.06,1.26)	0.0009
Presence of any COPC	1.4 (1.08,1.82)	0.0105	1.44 (1.11,1.86)	0.0054	1.45 (0.81,2.6)	0.2166	1.24 (0.96,1.61)	0.0962	1.44 (0.93,2.22)	0.1032
Symptom Duration (2 years)	0.92 (0.71,1.2)	0.5612	0.86 (0.67,1.12)	0.2603	0.64 (0.35,1.15)	0.1327	0.83 (0.64,1.07)	0.1495	0.79 (0.5,1.24)	0.305
Baseline Pain Severity	1.07 (1.03,1.12)	0.0002	1.09 (1.05,1.13)	<0.0001	1.1 (1.04,1.17)	0.0008	1.07 (1.04,1.11)	<0.0001	1.17 (1.11,1.23)	<0.0001
Baseline Urinary Severity	0.99 (0.96,1.02)	0.4371	0.99 (0.96,1.03)	0.717	0.99 (0.94,1.05)	0.8037	0.99 (0.96,1.02)	0.4988	0.98 (0.93,1.02)	0.2744
CSQ Total (0–36)	1.02 (1,1.04)	0.1032	1.01 (0.99,1.04)	0.2623	1 (0.96,1.04)	0.948	0.99 (0.98,1.01)	0.4206	0.99 (0.96,1.04)	0.788
HADS Anxiety (0–21)	0.99 (0.96,1.03)	0.7587	1 (0.96,1.03)	0.8883	0.94 (0.86,1.02)	0.1506	0.99 (0.96,1.03)	0.6782	0.99 (0.92,1.07)	0.8438
HADS Depression (0–21)	1.03 (0.99,1.07)	0.1038	1.03 (0.99,1.07)	0.1125	1.06 (0.99,1.13)	0.1008	1.05 (1.01,1.09)	0.0056	1.01 (0.95,1.07)	0.694

Association of time-varying factors with engaging in health-care seeking activities in a given 2-week interval (univariable)

Table 3a

PARAMETER	CONTACT PROVIDER		OFFICE VISIT		ER/URGENT CARE VISIT		MEDICATION CHANGE		MEDICAL PROCEDURE	
	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p
Pain Severity (previous contact)	1.13 (1.1,1.17)	<0.0001	1.14 (1.11,1.18)	<0.0001	1.14 (1.1,1.19)	<0.0001	1.10 (1.08,1.13)	<0.0001	1.12 (1.07,1.16)	<0.0001
Urinary Severity (previous contact)	1.08 (1.05,1.11)	<0.0001	1.08 (1.05,1.11)	<0.0001	1.07 (1.03,1.12)	0.0022	1.05 (1.02,1.07)	<0.0001	1.06 (1.02,1.1)	0.0015
Pain Variability (6-week sd)	1.03 (0.95,1.11)	0.5156	1.04 (0.96,1.13)	0.3245	1.14 (0.99,1.31)	0.0792	1.04 (0.96,1.12)	0.3531	1.1 (0.99,1.22)	0.0783
Urinary Variability (6-week sd)	1.14 (1.04,1.26)	0.0076	1.14 (1.04,1.25)	0.0044	1.24 (1.04,1.48)	0.0177	1.20 (1.1,1.31)	<0.0001	1.19 (1.05,1.34)	0.0054

Association of time-varying factors with engaging in health-care seeking activities in a given 2-week interval (multivariable)

Table 3b

PARAMETER	CONTACT PROVIDER		OFFICE VISIT		ER/URGENT CARE VISIT		MEDICATION CHANGE		MEDICAL PROCEDURE	
	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p	Odds Ratio (95% CI)	p
Pain Severity (previous contact)	1.11 (1.07,1.15)	<0.0001	1.11 (1.07,1.15)	<0.0001	1.14 (1.05,1.23)	0.001	1.09 (1.05,1.13)	<0.0001	1.08 (1.02,1.14)	0.0128
Urinary Severity (previous contact)	1.04 (1,1.09)	0.0782	1.01 (0.97,1.07)	0.5642	1.04 (0.94,1.16)	0.4602	1 (0.96,1.04)	0.9175	1 (0.92,1.08)	0.9644
Pain Variability (6-week sd)	1.06 (0.97,1.15)	0.2132	1.09 (0.99,1.2)	0.072	1.16 (0.94,1.42)	0.1695	1.04 (0.96,1.13)	0.3792	1.12 (0.99,1.26)	0.0725
Urinary Variability (6-week sd)	1.09 (0.96,1.23)	0.1946	1.03 (0.92,1.16)	0.5894	1.16 (0.89,1.5)	0.2711	1.16 (1.04,1.29)	0.0063	1.1 (0.94,1.28)	0.2446

Table 4

Overlap of high-use health-care seeking wctivities in the 31 “super-users”

	Men	Women	Total
Super-User in:			
- One HCS Activity	4	8	12
- Two HCS Activities	2	10	12
- Three HCS Activities	1	5	6
- Four HCS Activities	0	1	1
Total	7	24	31

Table 5

Factors associated with “super-user” status

PARAMETER	Odds Ratio	Univariable		Multivariable		
		95% CI	p	Odds Ratio	95% CI	p
Female Sex	2.78	(1.13, 6.82)	0.03	4.30	(1.42, 13.11)	<0.01
Increased Age (5 years)	1.11	(0.98, 1.26)	0.10	1.48	(1.22, 1.79)	<0.001
Presence of any COPC	2.68	(1.26, 5.73)	0.01	2.20	(0.88, 5.53)	0.09
Symptom Duration (2 years)	0.75	(0.35, 1.60)	0.45	0.37	(0.14, 0.93)	0.03
Baseline Pain Severity	1.19	(1.10, 1.28)	<0.001	1.35	(1.19, 1.54)	<0.001
Baseline Urinary Severity	1.05	(0.99, 1.12)	0.11	0.87	(0.79, 0.95)	0.003
CSQ Total (0–36)	1.04	(0.99, 1.08)	0.10	0.98	(0.92, 1.05)	0.61
HADS Anxiety (0–21)	1.09	(1.00, 1.18)	0.06	1.03	(0.91, 1.17)	0.63
HADS Depression (0–21)	1.16	(1.10, 1.26)	<0.001	1.14	(1.03, 1.31)	0.05