

# Chronic pelvic pain: evaluation of the epidemiology, baseline demographics, and clinical variables via a prospective and multidisciplinary approach

A.B. Hooker<sup>1,4</sup>, B.R. van Moorst<sup>1</sup>, E.P. van Haarst<sup>2</sup>, N.A.M. van Ooitegehem<sup>1,3</sup>  
D.K.E. van Dijken<sup>1</sup>, M.H.B. Heres<sup>1</sup>

<sup>1</sup>Department of Obstetrics and Gynaecology, <sup>2</sup>Department of Urology and <sup>3</sup>Department of Gastro-enterology and Hepatology, Sint Lucas Andreas Hospital (SLAZ), Amsterdam; <sup>4</sup>Department of Obstetrics and Gynaecology, Zaans Medical Center (ZMC), Zaandam; <sup>3</sup>Department of Gastro-enterology and Hepatology, Amstelland Hospital, Amstelveen (The Netherlands)

## Summary

**Background:** Chronic pelvic pain (CPP) is a common clinical condition with significant impact on quality of life. The etiology and pathogenesis of CPP is poorly understood. **Materials and Methods:** To examine the epidemiology, base line demographics, and clinical variables, women with CPP were prospectively analysed by an integrated and synchronised approach. **Results:** Of the 89 women with CPP analysed, the majority were assessed earlier, had a variety of surgical interventions and used pharmacological agents. Irritable bowel syndrome, dysfunction of the pelvic floor musculoskeletal system, and physical or sexual abuse were the most common diagnosed etiologies. Evaluation revealed an increased level of psychological impairment. **Discussion:** CPP is a debilitating clinical condition and a result of complex interaction between different contributing factors. Patients will benefit from an orchestrated, multidisciplinary, and synchronized approach with attention paid to the different domains of pain. Treatment is mostly not curative; avoiding profound suffering despite persisting pain should be the goal.

**Key words:** Chronic pelvic pain; Diagnosis; Risk factors; Evaluation; Treatment; Therapy.

## Introduction

Chronic pelvic pain (CPP) is a frequent and widespread disorder. The estimated prevalence in the general female population is 15%, with the highest prevalence up to 24% in women of reproductive age [1-3]. The most used clinical definition is a continuous or intermittent, non-menstrual and non-cyclic pelvic pain, lasting for at least six months. The pain is of sufficient severity or intensity to interfere with daily activities and is often unresponsive to regular treatment [4-7].

The aetiology and pathogenesis of CPP is poorly understood and as a result, effective diagnostic evaluation and interventions remain scarce [8]. About 60% of women never receive a specific diagnosis for their pain [9, 10]. Any abdominal-pelvic structure may be involved, especially organs of the genital tract, blood vessels, muscle and fasciae of the abdominal wall, pelvic floor, and gastrointestinal tract [8].

Women with CPP have a great tendency to utilize health-care resources and undergo exhaustive diagnostic evaluations without revealing an obvious cause [5]. Even if abnormalities are detected, they are mostly coincidental and not causative [11]. Forty to 50 percent of performed gynaecological laparoscopies and 12% of hysterectomies are performed because of CPP [1, 12-15].

There is a lack of published data evaluating the epidemiology of women with CPP; there are no guidelines for eval-

uation and treatment. The authors present an extensive description of the evaluation of women with CPP who consulted their multidisciplinary team.

## Materials and Methods

Since 2007, a multidisciplinary chronic pelvic pain team (CPP team) is active at the gynaecological outpatient department of the Sint Lucas Andreas Hospital. The aim of the team was to analyse, evaluate, and advise women with CPP, while avoiding prolonged suffering and hopefully reducing the number of undue surgical interventions. Because of its observational and anonymous character, this study was exempted from approval by the Institutional Review Board. The CPP team consisted of an urologist, gynaecologist, gastro-enterologist, psychologist-sexologist, and physical therapist as permanent members with experience in treating women with CPP.

After referral, but before consultation, women were asked to complete questionnaires; women had to be capable to read and understand the Dutch language. The self-administered questionnaire was the first step in the analysis and consisted of different parts. The general part covers baseline demographic characteristics and socio-economic status. The medical part covers clinical and obstetric history, previous operations, current and past treatment, and medication use. Pain-related variables included onset, intensity, duration, association, character, and modifying factors. Pain characteristics were measured by a composed questionnaire and by the McGill Pain Questionnaire Dutch Language Version (MPQ-DLV), which is a validated self-questionnaire for measuring sensory and affective components of pain [16, 17].

The Dutch language version of the Symptom Checklist-Revised (SCL-90-R) was used to assess physical and psy-

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chopathological symptoms [18, 19]. The SCL-90-R is a validated 90-item multidimensional self-report symptom inventory using a five point rating scale. The statements are assigned to eight different dimensions: somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. The degree of psychological distress/impairment is reported by the Global Severity Index (GSI): the value of all 90 items (range 90-450). Sub-scales of the the SCL-90-R and the GSI were compared with the reference score of a normal female and a chronic pain population using the unpaired t-test. Statistical significance was determined at  $p < 0.05$ .

#### *Inventarisation and treatment*

In the inventarisation phase, all women were individually evaluated by each team member. A thorough exploration of the pain and restrictions was performed including medical, social, and cultural history. Physiological characteristics, including history of traumas, were obtained by the psychologist-sexologist. This was done through a semi-structured interview with a fairly open framework, which allowed for focused conversational two-way communication. Subsequent investigations, such as ultrasonography of the abdomen, sigmoidoscopy, and/or colonoscopy, radiography, gastroscopy, cystoscopy, and/or urodynamic study were performed if necessary.

The work-up of women with CPP consisted of complete blood count, serum chemistry, sedimentation rate, urine microscopy, and culture. A bladder diary was required, including frequency-volume chart. Vaginal and endocervical swabs for culture and chlamydia trachomatis PCR were taken. Transvaginal ultrasonography (TVUS) for screening of the vagina, tubes, uterus, and ovaries was performed. Uroflowmetry was performed and the post-voided residue was estimated by a bladderscan.

After all CPP-team members reviewed each woman, a final multidisciplinary meeting was arranged to review and generate multi-disciplinary diagnosis, advice, and treatment proposal. If necessary, women were referred for additional analysis and treatment. Otherwise, the advice and treatment was directed at pain control and reassurance. In a last visit, the results of the evaluation were thoroughly discussed and explained to the women by the gynaecologist.

## **Results**

From January 2007 to January 2009, 108 women were referred to the outpatient department for evaluation. Nineteen women had to be excluded from this analysis; two women did not meet the definition of CPP, whereas multi-disciplinary advice could not be provided to 17 women due to incomplete evaluation. Finally, 89 women with CPP were included.

The mean age was 37.5 year (SD 10.1), ranging from 17 to 61 years. The majority, 68 women (76%) had Dutch nationality, although 45 women (51%) were first-generation and 16 (18%) second-generation immigrants. Twenty-nine women (33%) were nulliparous and 73 (82%) were premenopausal. The characteristics of the women are shown in Table 1.

Seventy-five women (84%) used pharmacological agents before consultation, including laxatives in 64 women (72%) and analgesics (opiates and non-opiates) in 63 women (71%).

Sixty-six women (74%) were previously evaluated in secondary or tertiary care because of CPP and only 26 women

Table 1. — *Baseline characteristics of the 89 women analysed by the chronic pelvic pain team.*

Characteristic	n	Percentage (%)
<i>Age (years)</i>		
< 25	14	15.7
26 – 35	23	25.8
36 – 45	35	39.3
46 – 55	13	14.6
> 56	4	4.5
<i>Nationality</i>		
Dutch	68	76.4
Mediterranean	15	16.9
Other	6	6.7
<i>Marital status</i>		
Single / living apart	34	38.2
Married / living together	46	51.7
Separated / divorced	9	10.1
<i>Living situation</i>		
Alone	20	16.9
Alone with children	13	10.1
With spouse (and children)	46	67.8
With parents	6	6.7
Other	4	4.5
<i>Parity</i>		
None	29	32.6
1	17	19.1
2	23	25.8
> 2	20	22.5
<i>Religion</i>		
No religion	31	34.8
Islamic	30	33.7
Christian	20	22.5
Other	8	9.0
<i>Education</i>		
Primary school	13	14.6
Lower secondary school	26	29.2
Higher secondary school	11	12.4
Higher professional education	24	27.0
University	4	4.5
No education	4	4.5
Unknown	7	7.9
<i>Employment</i>		
Full-time	26	29.2
Social security	26	29.2
Part-time	14	15.7
Unemployment	11	12.4
Student	4	4.5
Disability insurance	5	5.6
Other	3	3.3
<i>Stages of reproductivity</i>		
Premenopausal	73	82.0
Perimenopausal	14	15.7
Postmenopausal	2	2.2
Unknown	1	1.1
<i>Medication<sup>a</sup></i>		
No medication	14	15.7
Laxative	64	71.9
Analgesic (including opiates)	63	70.8
Paracetamol	40	44.9
Non-steroidal anti-inflammatory drugs	34	38.2
Opiates	11	12.4
Hormonal / contraceptives	18	20.2
Antidepressants	17	19.1
Benzodiazepines	12	13.5
Antacids / H <sub>2</sub> -receptor antagonists	7	7.9

Table 1. — Baseline characteristics of the 89 women analysed by the chronic pelvic pain team.

Characteristic	n	Percentage (%)
<i>Prior surgery</i>		
None	26	29.2
Appendectomy	12	13.5
Laparoscopy	49	55.1
No anomalies	24	49.0
Adhesions	9	18.4
Endometriosis	4	8.2
Uterine fibroids	3	6.1
Benign ovarian cyst	2	4.1
Unknown	7	14.3
Hysterectomy	10	11.2
Cesarean section	12	13.5
Miscarriage	6	6.7
Induced abortion	12	13.5
<i>Diagnosis<sup>b</sup></i>		
Irritable bowel syndrome (IBS)	24	27
Adhesions	15	16.9
Endometriosis	10	11.2
Myoma uteri	7	7.9

<sup>a</sup> All used medication were registered; mostly more than one medication was used.

<sup>b</sup> More than one diagnosis was possible.

(29%) had no prior surgery. Laparoscopy was the most performed procedure in 49 women (55%); in 23 (26%) within 24 months before evaluation and in eight (9%) repeatedly. However, it was not completely clear whether all surgical interventions were only indicated because of CPP. In the majority of procedures, no abnormalities were detected; adhesions were detected in 15 cases (17%), endometriosis in nine (10%), myoma uteri in three, and benign ovarian cyst in two cases. Irritable bowel syndrome (IBS) was the most diagnosed etiology in 24 women (27%); adhesions, endometriosis, and myoma uteri in 15 (17%), 10 (11%), and seven (8%) women respectively.

### Evaluation

In the work-up, 11 women (13%) had an elevated sedimentation rate, without signs of a clinical infection. The median duration of pain was 36 months, interquartile range 16-96 months. Thirty-eight women (43%) reported pain duration of more than four years. Seventy-two respondents (81%) had pain for at least three days a week and 45 (51%) had daily pain. The pain had a varying course in 39 women (44%) and was moderate to severe in 82 (81%), as measured by MPQ-DLV. The pain characteristics and details are presented in Table 2.

Forty-six women (52%) required additional investigation to rule out somatic disorders. Seventy-four procedures were performed. Ultrasonography of the abdomen was the most performed examination in 22 women (23%); the other investigations were performed in 23 women (25%). In the 67 women previously evaluated, 62 abnormalities were detected in 38 women (57%); in the 22 women not previously analysed, 12 abnormalities were detected in seven (27%). The examinations performed, as well as the detected abnormalities, are shown in Table 3.

Table 2. — Pain characteristics as reported by the 89 women analysed by the chronic pelvic pain team.

Pain characteristic	n	Percentage (%)
<i>Duration of pain (in years)</i>		
< 1	20	22.5
1 to < 2	17	19.1
2 to < 4	14	15.7
> 4	38	42.7
<i>Pain description</i>		
Continuous	51	57.3
Non-continuous	33	37.1
Other	5	5.6
<i>Pain localisation</i>		
Left lower abdomen	17	19.1
Right lower abdomen	26	29.2
Left and right lower abdomen	24	27.0
Other	22	24.7
<i>Pain type</i>		
Boring	30	33.7
Cutting	27	30.3
Cramping	9	10.1
Burning	7	7.9
Other	16	18.0
<i>Pain correlation<sup>a</sup></i>		
No correlation	44	49.4
Menstruation	19	21.3
Meal	14	15.7
Exertion	13	14.6
Voiding	12	13.5
Defecation	9	10.1
Stress/tension	6	6.7
Other	38	42.7
<i>Pain onset</i>		
Sudden	40	45.5
Gradual	44	49.4
Other	4	5.6
<i>Pain onset</i>		
Unexpected	49	55.1
After pregnancy/delivery	18	20.2
After operation	8	9.0
After illness	3	3.4
Other	11	12.4
<i>Pain course</i>		
Varying	39	43.8
Increasing	34	38.2
Identical	14	15.7
Other	2	2.2
<i>Severity</i>		
Light	7	7.9
Moderate	40	44.9
Severe	32	36.0
Unknown	10	11.2
<i>Pain frequency</i>		
Daily	45	50.6
5 to 6 days / week	19	21.3
3 to 4 days / week	8	9.0
< 2 days / week	3	3.4
Unknown	14	15.7

<sup>a</sup> More than one correlation could be present.

### Urology

Urine analysis, including urine culture of all women, revealed no abnormalities. Twenty-four women (27%) had a

Table 3. — Additional examinations performed in the 89 women evaluated by the chronic pelvic pain team.

Patient evaluated	n	Percentage (%)
No additional investigations	43	48.3
Additional investigations <sup>a</sup>	46	51.7
Performed investigations	n	Percentage (%)
Total procedures	74	100
<i>Cystoscopy</i>	13	17.6
No abnormalities	12	16.2
Cystitis	1	1.4
<i>Abdominal radiography</i>	12	16.2
No abnormalities	9	12.1
Coprostasis	3	4.1
<i>Ultrasonography abdomen</i>	22	29.7
No abnormalities	18	24.3
Connective tissue disease	1	1.4
Pancreas abnormality	1	1.4
Other	2	2.7
<i>Gastroscopy</i>	11	14.9
No abnormalities	3	4.1
Peptic ulcer disease/gastritis	6	8.1
Diaphragmatic hernia	2	2.7
<i>Sigmoidoscopy/Colonoscopy</i> <sup>b</sup>	16	21.6
No abnormalities	4	5.4
Hemorrhoids	5	6.8
Anal fissures	1	1.4
Polyps	3	4.1
Colorectal cancer	1	1.4
Diverticulosis	2	2.7
Inflammatory bowel disease (IBD)	1	1.4

<sup>a</sup> Some patients had more than one additional investigation; a total of 74 investigations were performed in 46 patients.

<sup>b</sup> One patient had both polyps and diverticulosis.

Table 4. — SCL-90-R scores of 89 women evaluated by the chronic pelvic pain team.

Dimensions	Study group (n = 82)	Normal population (n = 577)	Chronic pain population (n = 2450)
	Mean (SD)	Mean (SD)	Mean (SD)
Anxiety	19.2 (8.1)	14.6 (5.7)*	15.4 (6.3)*
Agoraphobia	10.2 (4.8)	8.7 (3.4)*	9.1 (4.0)#
Depression	32.8 (13.7)	23.8 (8.6)*	28.4 (11.4)*
Somatization	29.5 (10.1)	18.7 (7.1)*	24.9 (7.9)#
Insufficiency	18.6 (7.3)	14.1 (5.1)#	17.9 (6.4)*
Sensitivity	28.7 (11.8)	26.3 (8.8)*	25.2 (9.1)*
Hostility	9.5 (4.2)	17.6 (2.4)*	8.2 (3.1)*
Insomnia	14.3 (5.3)	5.2 (2.8)*	7.4 (3.7)*
GSI	167 (55.1)	128.9 (36.4)*	148.6 (45.5)*

GSI: global severity index. Difference between groups was measured with the unpaired t-test. Statistical significance: \*  $p < 0.001$ , #  $p < 0.05$ .

sense of urgency when needing to urinate; 15 (17%) had urge-incontinence. A sense of hesitation was reported by 16 women (18%) and dysuria by 22 (25%). Recurrent bladder infection was reported by 28 women (32%). The frequency-volume chart showed an abnormal urine volume in 23 women; 45 (51%) reported a urine frequency of at least eight times/day. In 58 women (65%) no abnormalities could be detected during urological evaluation. Dysfunction of the musculoskeletal pelvic floor was the most diagnosed etiology in 24 women (27%) based on uroflowmetry; a combination of urine flow,

Table 5. — Diagnosis and treatment proposed to the 89 patients by the chronic pelvic pain team.

Diagnosis	n	Percentage (%)
Irritable bowel syndrome (IBS)	51	57.3
Pelvic floor musculoskeletal disorders	50	56.2
Physical or sexual abuse	50	56.2
Vulvodynia (provoked)	29	32.5
Somatic diagnosis suspected (referral)	10	11.2
Peptic ulcer disease	6	6.7
Endometriosis	4	4.5
Myoma uteri	4	4.5
Adenomyosis	3	3.4
Overactive bladder	3	3.4
Diaphragmatic hernia	2	2.2
Diverticular disease	2	2.2
Inflammatory bowel disease	1	1.1
Colorectal cancer	1	1.1
Other	2	2.2
Treatment advice	n	Percentage (%)
Physiotherapy and/or counseling	52	58.4
Pharmacological	51	57.3
– Analgesic	2	2.2
– Hormonal/contraceptives	2	2.2
– Laxative	36	40.4
– Other	11	12.4
Physiotherapy	50	56.2
Referral to other specialist	10	11.2
No treatment	5	5.6
Surgical treatment/evaluation	4	4.5
– Laparoscopy	3	3.4
– Hysteroscopy	1	1.1
Other	2	2.2

a striking abnormal flow pattern, and volume. Other detected urologic abnormalities included overactive bladder ( $n = 3$ ).

### Gynaecology

Dyspareunia was the most reported abnormality by 48 respondents (54%) and dysmenorrhea by 24 (27%). One woman had a positive culture for chlamydia trachomatis, while two had a candida infection, and all were treated. In 36 women (40%), no abnormalities were detected during gynaecological evaluation, while musculoskeletal pelvic floor dysfunction and provoked vulvodynia were diagnosed in 29 (33%) and 19 women (21%), respectively. Other gynaecological abnormalities included endometriosis ( $n = 4$ ), myoma uteri ( $n = 4$ ), adenomyosis ( $n = 3$ ), and other abnormalities ( $n = 2$ ).

### Gastro-enterology

Constipation was reported by 58 women (65%), followed by nausea, diarrhea, and heartburn in 21, 20, and 13 women, respectively. In 13 women (15%) no abnormalities could be detected during evaluation. Fifty-one women (57%) were diagnosed with IBS according to the Rome II criteria [20]. Other detected pathology included peptic ulcer ( $n = 6$ ), diverticulosis ( $n = 2$ ), inflammatory bowel disease ( $n = 1$ ), and colorectal cancer ( $n = 1$ ).



### Psycho-sexology

A history of sexual and/or physical abuse was reported by 50 women (56%); 28 (32%) reported affective deprivation, physical/verbal abuse or neglect, and 18 women (20%) reported domestic violence or assault, while 11 (12%) reported both. A history of childhood or adult sexual abuse was reported by 38 women (43%). Rape of violation was reported by 31 women (35%). The combination of sexual abuse and physical or emotional abuse was reported by 20 women (23%). Support, counselling, and therapy were provided to 50 women (56%).

Dyspareunia was reported by 73 women (82%); profound, superficial, and combined in respectively 63, 59, and 49 women. Vulvodynia, based on characteristic findings in history and gynaecological examination was diagnosed in 29 women (33%). Thirteen women (15%) reported to have no sexual relations. Decreased desire for sexual activity was reported by 43 women (57%) and decreased or impaired excitement by 38 (50%) women. Pelvic pain after or during intercourse was reported by 48 women (54%); after orgasm by 40 (45%) women.

The SCL-90-R scores of 82 women (92%) of this study group are presented in Table 4. All the dimensions of the SCL-90 and the GSI, the degree of psychological distress impairment, were all significantly elevated compared to a general female and chronic pain population.

### Treatment proposal

The multi-disciplinary diagnosed etiologies were IBS in 51 women (57%), followed by pelvic floor musculoskeletal dysfunction in 50 (56%), and physical and/or sexual abuse in 50 women (56%). The other etiologies are presented in Table 5. Fourteen women (15.7%) were referred for further analysis or surgical treatment.

The majority of women, 51 (57%), received a combination therapy, 29 (33%) received mono-therapy, while five (6%) women were considered untreatable. The most provided treatment proposal included counselling or psychotherapy in 52 women (58%), followed by pelvic floor physiotherapy in 51 (57%), and pharmacotherapy in 50 (56%). The other proposals are shown in Table 5.

### Discussion

This prospective study reports the epidemiology of women with CPP, concentrating on the baseline demographic and clinical variables, evaluated by a pragmatic and clinically-fixed protocol. Questionnaires were the first step in the evaluation.

The median pain duration was 36 months while 43% had pain for at least four years and 81% at least three days a week, a group with long lasting discomfort. Before consultation, 74% of the women were evaluated because of CPP, while 71% underwent a variety of surgical interventions without revealing a definitive cause for their pain.

When pain is long-lasting, it becomes a disease with its own physiopathology, involving multiple systems, leading to psychological impairment [8]. A thorough evaluation is

advised as unrecognized or undetected abnormalities can be present, even in women previously evaluated. However, abnormalities may be coincidental rather than causal or secondary.

The final multidisciplinary diagnosis and treatment advice was generated, based on detailed evaluation of the patient and identification of all possible factors. The most diagnosed etiologies were IBS in 57%, pelvic floor musculoskeletal disorders in 56%, and psychosexual dysfunction in 56%. Treatment aims to stop or reduce the severity of pain and exacerbations. Opioid analgesics should generally be discouraged due to the risk of dependence. Other pharmacological agents include (combined) oral contraceptive, laxatives, and anti-depressants.

Surgery can be used as a diagnostic tool but only after consultation and evaluation by different specialists [21-23]. Laparoscopy does not appear to affect either pain symptoms or quality of life at long term [23, 24]. There is still no consensus in the role of adhesions in generating CPP; they constitute a very common finding [25]. Hysterectomy is often performed but almost 40% will have persistent and three to five percent worsening of pain [3]. Treatment of anxiety and depression in women with CPP improves the quality of life [26]. Pelvic floor training is effective, resulting in significant relief and improvement [27, 28].

CPP is not a diagnosis but a description of a long-lasting condition; the single most common indication for referral to the gynaecologist [3, 11, 21]. The reported prevalence of CPP varies according to several variables, but the rate is similar to that of asthma, migraine headaches, and chronic back pain [1, 29, 30]. Women with CPP are mostly managed by primary care physicians and only 30%-40% are referred for further evaluation [1, 9, 11].

Women were individually analysed by all team members for several reasons. First, exploration of the medical history is crucial and of the utmost importance, mostly being more indicative than several diagnostic investigations [11]. Second, the etiology of CPP is often complex with presence of associated disorders. The combination of medical history combined with multidisciplinary examination rules out gross pathology and can prevent unnecessary diagnostic and invasive interventions [31]. Finally, the physician-patient relationship is positively influenced, which encourages advice and treatment compliance.

The diagnostic label a women receives depends on various factors, including age, symptoms, tract involvement, presentation, result of performed evaluation, and investigations [21]. A complex interaction between different factors exists and treatment of only some of them will lead to incomplete relief and frustration of both patient and clinician [11, 32]. In line with other reports, the most frequently reported etiologies in the present cohort were non-gynecologic, while most women were referred to a gynaecologist for evaluation [5, 11, 31]. The results obtained by a multidisciplinary approach are significantly better compared to traditional treatment by a gynecologist alone [33].

CPP is related to low-self-esteem, physical, sexual, and emotional abuse, domestic violence, low marital satisfaction, anxiety, depression, and somatic symptoms with a

high correlation between anxiety and depression in the same woman [5, 26, 34, 35]. It is unclear whether pain, depression, and anxiety are related to the specific diagnosis of CPP or if they better correlate to the presence of a chronic secondary illness.

Women with CPP have an increased level of psychological impairment/distress as shown by SCL-90 and by the GSI, and compared to a normal female and chronic pain population, the degree of psychological suffering is significantly elevated (Table 4). Medical specialist cannot be expected to conduct a thorough psychological evaluation. However, they have an important role in identifying women who may benefit from psychological assessment and treatment [11].

Endometriosis, generally associated with cyclic symptoms, is considered a different entity with specific diagnostic and therapeutic strategies, although it was diagnosed in four women. Interstitial cystitis has intentionally not been diagnosed, as it is a syndrome of unknown etiology without pathognomonic diagnostic findings [36, 37]. A systematic review did not demonstrate apparent differences between multi-treatment modalities and placebo [38]. As such, this diagnosis is not particularly helpful in women with CPP.

Women with CPP are generally recognized as difficult to evaluate, diagnose, and treat, mainly because of the complexity and the different components of the condition [23]. Women are often referred because they are dissatisfied with provided care and feel dismissed [21, 39–41]. CPP is a costly condition; in addition to the frequent use of healthcare resources, 15% of women report absence from work, while 45% report decreased productivity [1]. The treatment of women with CPP should focus towards restoring normal function and control of pain, minimizing disability and enhancing quality of life [31, 40].

The present study has several strengths and from a clinical point of view, important implications. This is the first prospective study in which the epidemiology of women with CPP is systematically reported. Potential components, including psycho-social ones related to the onset, maintenance, and clinical course of CPP were analysed in the evaluation with validated instruments. However, interpretations of these findings cannot be generalised to all women with CPP because the study was conducted in a highly-selected population.

## Conclusion

CPP is a debilitating condition among women with a considerable impact on quality of life and is a result of a complex interaction between multiple factors. Individuals with CPP have a long history of pain, psychiatric suffering, decreased productivity, and diagnostic evaluations. Identification of relevant components of CPP by an integrated approach leads to a better evaluation compared to analysis by individual specialists alone. Treatment is mostly not curative and achievement of a higher quality of life despite persisting pain should be the goal; managing rather than curing. Further research is necessary to establish the rela-

tionship between demographic, clinical, and pain variables and long-term outcome.

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Address reprint requests to:  
 A.B. HOOKER, M.D.  
 Sint Lucas Andreas Hospital  
 Department of Obstetrics and Gynaecology  
 Zaans Medical Center  
 Department of Obstetrics and Gynaecology  
 Koningin Julianaplein 58  
 P.O. box 210. Zaandam, NL 1500 EE  
 e-mail: hooker.a@zaansmc.nl;  
 a.hooker@slaz.nl; a.b.hooker@hotmail.com