



ELSEVIER

Identification of diagnostic subtypes of chronic pelvic pain and how subtypes differ in health status and trauma history

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KEY WORDS

Chronic pelvic pain
Health status
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Trauma
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Objective: Our primary aim was to identify subtypes of chronic pelvic pain and to compare the cases of women with the identified subtypes on health status and trauma history. We hypothesized that women with diffuse abdominal/pelvic pain would have greater health impairment and report more lifetime trauma than women with vulvovaginal pain or cyclic pain.

Study design: We collected questionnaire data on 289 consecutive women patients from a university chronic pelvic pain clinic. From patient records, 1 gynecologist identified chronic pelvic pain subtypes on the basis of reported symptoms and the localization of pain during examination. We used analysis of covariance with pairwise contrasts.

Results: Seven diagnostic subtypes were identified. Patients with diffuse abdominal/pelvic pain had more trauma and worse mental and physical health status compared with patients with vulvovaginal pain and cyclic pain. Those patients with abdominal/pelvic pain also had poorer health than patients with neuropathic and fibroid pain. Endometriosis was unrelated to health status.

Conclusion: There is immense need for further research to define subtypes of chronic pelvic pain. © 2006 Mosby, Inc. All rights reserved.

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An estimate is that 15% of women may have chronic pelvic pain (CPP) of at least 6 months duration.¹ CPP is thought to contribute to 40% of all diagnostic laparoscopies and 12% of hysterectomies.² Despite the high prevalence of CPP and high associated medical costs, there is little clarity about the disorder itself.³

Although there is no standard definition of CPP, it is defined generally as noncyclic pain of at least 6-month duration, severe enough to cause disability or to require medical care, and occurring in locations such as the

pelvis, anterior abdominal wall at or below the umbilicus, and lower back or buttocks.⁴ CPP includes diverse symptoms such as dysmenorrhea, dyspareunia, vulvar pain, and nonspecific complaints that are related to the lower abdomen, pelvic floor, or uterus.^{1,5} CPP is a heterogeneous disorder with no clinically defined subtypes, with multiple and often unknown causes, and poor treatment response.^{4,6}

Treatment of CPP is further complicated by high rates of psychologic dysfunction among women with this disorder. Compared with women with specific gynecologic conditions (eg, infertility, tubal ligation), women with CPP have significantly more depression, psychologic and somatic symptoms, and sexual abuse history.⁷⁻⁹ In general population samples, a history of sexual and/or physical abuse has been related consistently to the greater reporting of pelvic pain, dyspareunia, and dysmenorrhea.⁹⁻¹³

Although studies have documented an association of abuse and psychologic distress with pelvic pain, it remains unclear whether all types of CPP disorders are affected equally. Two studies show that women with vulvodynia (pain localized to the vulva) are less likely to have psychologic disturbance, a sexual and physical abuse history, severe pain, and other somatic complaints compared with women with other types of CPP.^{14,15} Studies also show that patients with CPP with cyclic pain only (eg, dysmenorrhea) have less psychologic distress and abuse than patients with more continuous chronic pain.^{5,16} Likewise, persons with diffuse pain conditions report more depression, anxiety, and severe pain than women with more focused pain.¹⁷ This research leads us to question whether, within the spectrum of CPP, we can find clinically identifiable pain subtypes.

The primary goals of the research presented here are to (1) identify subtypes of CPP with patient-reported symptoms and the localization of pain on physical examination, (2) describe how women with CPP subtypes compare on measures of physical and mental health status and trauma history, and (3) examine whether CPP subtypes may be more predictive of health status than diagnosis based on organic disease (eg, endometriosis). Using cross-sectional data, we hypothesize that women with more diffuse types of pain (eg, diffuse abdominal/pelvic pain) will have greater health impairment and report more lifetime trauma than women with more focused pain (eg, vulvovaginal pain) or less chronic pain (eg, cyclic pain).

Material and methods

Sample and procedures

This study was conducted at the University of North Carolina Pelvic Pain Clinic from April 2003 to February

2004. Consecutive English-speaking women patients between ages 18 and 66 years at the clinic were asked to fill out a brief questionnaire (n = 334). We collected data on 306 patients (91.6% of those eligible); their physician had diagnosed all with CPP. Approximately two thirds of the patients who did not complete the questionnaire (n = 19) refused to be included, and one third of the patients (n = 9) consented to be included but failed to return the questionnaire. We focused on 289 women (86.5% of eligible) who were given 1 of the 7 most common diagnoses (which are noted later). Patients (n = 17) with less common diagnoses (eg, ovarian remnant, vaginal apex pain, interstitial cystitis) were not significantly different from patients with more common diagnoses (n = 289) on age and race; however, they tended to be less educated (mean, 1.3 years lower; $P = .05$). The University of North Carolina Committee for the Protection of Human Subjects approved the study; participants signed an informed consent and the Health Insurance Portability and Accountability Act (HIPAA) release.

Categorization of pelvic pain diagnoses

Our multidisciplinary research team that specializes in pelvic pain disorders has worked toward consensus in defining diagnostic subtypes of CPP. One gynecologist (D.Z.) from our team performed a retrospective review of patient medical charts and categorized 289 of the patients into 1 of 7 primary diagnostic types. This gynecologist could not be masked to the mental and physical health information that was mentioned in the medical records. Physicians who evaluated the study patients and performed the physical examinations, however, were blinded to the study hypotheses.

Because patient perception of pain has a tremendous impact on both the presentation and treatment response, we based the categorization of CPP diagnosis both on the patient's subjective chief complaint and the localization of pain during physical examination by the treating physician. The following guidelines were used to categorize patients into primary diagnostic types:

Data from the first visit were reviewed and included the patient's chief complaint and physical examination findings concerning the location, severity, and reproducibility of pain. Subsequent visits were used only if the first visit lacked detail on patient history.

The primary diagnosis was identified by matching patient subjective chief complaints with the physical examination findings. When there were additional genitourinary history and physical examination findings, secondary and tertiary diagnoses were given.

Endometriosis overlapped with many of the primary diagnoses. Women were categorized as having endometriosis only if the chart contained confirmation by laparoscopy or disease.

Trauma and physical and sexual abuse

To obtain standardized questions on trauma and abuse history, we adapted structured interviews that had been used in previous research.¹⁸⁻²¹ We defined sexual abuse to include the following experiences where force or threat of harm was present: (1) touching the subject's breasts, pubic area, vagina, or anus with hands, mouth, or objects, (2) making the subject touch the perpetrator's genitals or anus, and (3) making the subject have vaginal or anal intercourse. In children (<13 years), however, a 5-year age differential between the victim and perpetrator was substituted for force or threat of harm. We defined physical abuse as incidents separate from sexual abuse that included (1) life threat physical attack with the intent to kill or seriously injure, with or without a weapon, and (2) other physical abuse such as being beaten, hit, kicked, bit, or burned, incidents outside the range of "normal" spanking or kids fighting.

We constructed a summary measure of number of lifetime traumas by assigning 1 point for each of the following traumas: (1) child sexual abuse, (2) adult sexual abuse, (3) life-threatening attack, (4) other physical abuse, (5) parental alcohol/drug abuse or mental illness, (6) foster care, reform school/prison before age 18 years, (7) life-threatening illness or accident, (8) child having life-threatening illness or death, (9) close friend or family member killed by drunk driver or murdered, and (10) parents or sibling deaths before subject was 18 years old. A space was provided for patients to write in other traumas; these were included if they were judged equally severe to aforementioned traumas.

Physical and mental health functioning

To assess the degree to which one's health interferes with physical and mental health functioning, we used the well-validated Rand 12-Item Health Survey (SF-12).²² The current study focused on (1) the physical component summary scale (healthy physical functioning) that assesses how physical health or pain affects daily activities (eg, work, recreation, ambulation), (2) the extent to which bodily pain interferes with work inside the home or outside (norm-based scoring), and (3) the mental health subscale (norm-based scoring). Reliability has been shown to be adequate for these scales (range, 0.73 to 0.87). For all SF-12 measures, a high score indicates better health.

Days in bed and pelvic surgeries

Women were asked to respond to the following questions: (1) "How many days during the past 3 months did you stay in bed (more than one-half of the day) because of illness?" and (2) "How many surgeries have you had in your lifetime? How many of these surgeries were for

the treatment of pelvic pain?" These items were adapted from previous research that documented more days in bed and surgeries among patients with abuse history and functional versus organic illness.^{19,23,24}

Nonpelvic pain symptoms

The number and frequency of nonpelvic pain symptoms was adapted from our previous studies.¹⁹ Thirteen symptoms that had been reported as "sometimes" or "often" occurring in the past 6 months were included: blurred or double vision, numbness, shortness of breath, irritations/pain in eyes or ears, frequent headaches, palpitations, chest pain, frequent backaches, muscle aches in shoulders or neck, diarrhea/constipation/nausea, indigestion, difficulty swallowing, and pain with urination.

Statistical analyses

SAS software (SAS Institute Inc, Cary, NC) was used for all analyses. We compared CPP diagnoses on demographic variables and endometriosis using analysis of variance for continuous variables (education, age), and logistic regression for bivariate outcomes (race, endometriosis). We examined the distributions of the health status variables to insure that all were distributed approximately normally. The number of pelvic surgeries and number of days in bed because of illness were truncated at 10 and 16, respectively, because of outliers. Analysis of covariance was performed on health status and trauma measures with diagnosis as a class variable, controlling for age, education, race, and endometriosis. When the class variable for diagnosis was significant ($P \leq .05$), we examined differences between the least square means using pairwise contrasts; a probability value of $\leq .05$ was considered significant. To reduce type I error, we focused on our primary hypotheses (abdominal/pelvic pain compared with vulvovaginal and cyclic pain). We report exploratory analyses examining how our 2 largest diagnostic subtypes (abdominal/pelvic and vulvovaginal) compared with other diagnostic categories on health and trauma.

Results

Sample description

Descriptive data on demographic variables, trauma, health status, and diagnostic categories are given in Table I. Generally, participants were young adults (mean, 34.2 years), educated (mean, 14.9 years), and white (77.5%); 17.0% were black. Patients with CPP in this referral practice had substantial trauma (31.8% had ≥ 3 traumas); 48% of the patients had a lifetime history of sexual and/or physical abuse. They also tended to score ≤ 25 th percentile on the SF-12 for mental health (median, 40.2), healthy physical functioning

Table I Descriptive data on demographic variables, endometriosis, diagnoses, health status, and trauma (n = 289)

	Mean	SD	Percentage	N
Age (y)	34.2	9.4		
Education (y)	14.9	2.6		
Race (white)			77.5	224
Endometriosis (present)			20.8	60
Diagnoses				
Diffuse abdominal/pelvic pain			42.2	122
Vulvovaginal pain			20.4	59
Cyclic pain			10.0	29
Neuropathic pain			9.0	26
Nonlocal pain			6.6	19
Trigger points			5.9	17
Fibroid pain			5.9	17
Healthy physical functioning	41.7	13.6		
Functioning without pain	37.9	14.1		
Non-pelvic medical symptoms (n)	4.8	3.3		
Days in bed because of illness (n)	4.5	5.8		
Lifetime surgeries for CPP (n)	1.8	2.1		
Lifetime traumas (n)	1.9	1.8		
Good mental health	42.7	11.0		

(median, 42.3), and functioning without pain (median, 37.8) compared with US female population norms; generally they fared worse than patients with rheumatoid arthritis and back pain or sciatica.²² Almost one half of the women (47.1%) reported ≥ 5 nongynecologic medical symptoms; 31.8% of the women had spent ≥ 6 days in bed because of illness in the past 3 months, and 24.1% of the women had had ≥ 3 pelvic surgeries in their lifetime. Only 20.8% of the women had documented endometriosis.

Diagnostic subtypes

The most common primary diagnostic categories of CPP that were identified by chart review were as follows:

- (1) Diffuse abdominal/pelvic pain (42.2%) referred to pain that was elicited during examination that was not localized and was without a single reproducible point or tender palpable spot. Abdominal region pain included right and left lower quadrant and pain across the abdomen. Pelvic region pain included the walls of the vagina, pelvic floor muscles, uterus, cervix, uterosacral ligaments, and bladder. Diffuse abdominal and diffuse pelvic pain were grouped together because of similarity in pain type, the overlap between the 2 types of pain (43.4% had

both), and the small number with primary pelvic pain (n = 8). Many patients (39.3%) with diffuse abdominal/pelvic pain had a secondary or tertiary diagnosis of another musculoskeletal type disorder (eg, levator spasm, piriformis/sacroiliac joint pain, fibromyalgia).

- (2) Vulvovaginal pain (20.4%) included vulvar vestibulitis syndrome, vulvodynia, vaginismus, lichen sclerosis, atypical vulvar pain, and vaginal atrophy. These patients reported symptoms located within the vulvar region that were focal and reproducible on examination. Among women with vulvovaginal pain, vulvar vestibulitis syndrome was a primary diagnosis with 71.2% and either primary or secondary with 78.0%. Few had nonvulvovaginal secondary diagnoses.
- (3) Cyclic pain (10.0%) referred to patients with at least 2 weeks of a pain-free interval each month with clear cyclic exacerbation; usually pain occurred during the luteal menstrual phase. Many of the women (37.9%) had uterine tenderness on examination. Although not technically CPP because of cyclic exacerbation, these patients were included for comparison purposes.
- (4) Neuropathic pain (9.0%) included a mix of pain disorders that was initiated after surgery (eg, vulvar surgery, cesarean delivery, or abdominal hysterectomy).
- (5) Patients with nonlocal pain (6.6%) complained of pelvic pain, abdominal pain, and/or other associated symptoms such as dyspareunia, but the examiner was unable to reproduce the pain or find a focus of tenderness.
- (6) Trigger points (5.9%) included patients who had a focal single point of tenderness on abdominal examination that reproduced at least 50% of their chief complaints. Patients who received abdominal "trigger point" injection were also included when no other details were in patient charts. As secondary diagnoses, 29.4% of the women had other musculoskeletal disorders (eg, fibromyalgia, muscle spasm).
- (7) Fibroid tumor pain (5.9%) was based on physical examination findings, either pain on palpation of the uterus that reproduced symptoms or menorrhagia with daily pressure and/or pain with menstrual exacerbation. Asymptomatic fibroid tumors without pelvic pain were excluded because the patient did not have CPP.

Comparison of diagnostic subtypes on health status and trauma

Because the diagnostic categories differed from each other on age ($P = .0002$), education ($P < .0001$), race

Table II Health status and trauma by CPP diagnosis

CPP diagnosis	Healthy physical functioning (least square mean \pm SE)	Functioning without pain (least square mean \pm SE)	Non-pelvic medical symptoms (least square mean \pm SE)	Days in bed because of illness (least square mean \pm SE)	Lifetime pelvic surgeries (least square mean \pm SE)	Lifetime traumas (least square mean \pm SE)
Diffuse abdominal/pelvic pain	35.7 \pm 1.1 ^a	31.6 \pm 1.1 ^a	5.6 \pm 0.3 ^a	7.2 \pm 0.5 ^c	2.7 \pm 0.2 ^a	2.4 \pm 0.2 ^c
Vulvovaginal pain	50.6 \pm 1.6 ^c	50.1 \pm 1.6 ^c	3.8 \pm 0.4 ^b	0.5 \pm 0.7 ^a	0.5 \pm 0.3 ^b	1.1 \pm 0.2 ^a
Cyclic pain	45.3 \pm 2.1 ^{bd}	40.4 \pm 2.2 ^b	3.9 \pm 0.6 ^b	3.2 \pm 1.0 ^{bd}	1.1 \pm 0.4 ^{bc}	1.5 \pm 0.3 ^{ab}
Neuropathic pain	41.4 \pm 2.3 ^{bd}	36.0 \pm 2.3 ^{ab}	3.8 \pm 0.6 ^b	2.2 \pm 1.1 ^{ab}	1.5 \pm 0.4 ^c	1.7 \pm 0.3 ^{abc}
Nonlocal pain	39.6 \pm 2.6 ^{ab}	35.5 \pm 2.7 ^{ab}	5.1 \pm 0.7 ^{ab}	4.5 \pm 1.2 ^{bd}	1.2 \pm 0.4 ^{bc}	2.0 \pm 0.4 ^{bc}
Trigger points	41.2 \pm 2.8 ^{abd}	36.1 \pm 2.9 ^{ab}	5.1 \pm 0.7 ^{ab}	5.5 \pm 1.3 ^{cd}	2.8 \pm 0.5 ^a	2.6 \pm 0.4 ^c
Fibroid pain	48.1 \pm 2.9 ^{cd}	41.1 \pm 3.0 ^b	4.8 \pm 0.8 ^{ab}	4.6 \pm 1.4 ^{bcd}	0.6 \pm 0.5 ^{bc}	2.2 \pm 0.4 ^{bc}
Diagnosis <i>P</i> value	<.0001	<.0001	.006	<.0001	<.0001	.0009

Analysis of covariance results with diagnosis as a class variable; probability value from the *F*-test controlled for age, education, race, and endometriosis. Means sharing a common superscript are not significantly different from each other; means with a different letter (^{a, b, c, d}) show differences ($P \leq .05$) between diagnostic groups, with pairwise contrasts of least squared means.

($P = .008$), and presence of endometriosis ($P < .0001$), we controlled for these variables in all analyses. As hypothesized, women with diffuse abdominal/pelvic pain compared with patients with vulvovaginal pain and cyclic pain, respectively, had worse physical functioning ($P < .0001$; $P < .0001$), more pain ($P < .0001$; $P = .0004$), on average almost 2 more nonpelvic medical symptoms ($P = .0005$; $P = .007$), more days in bed because of illness ($P < .0001$; $P = .0004$), more lifetime surgeries for pelvic pain ($P < .0001$; $P = .0002$), and more trauma ($P < .0001$; $P = .02$; Table II). Those women with diffuse abdominal/pelvic pain also scored worse than patients with (1) neuropathic pain on physical functioning ($P = .03$), nonpelvic medical symptoms ($P = .008$), days in bed ($P < .0001$), and pelvic surgeries ($P = .007$); (2) fibroid pain on physical functioning ($P < .0001$), pain ($P = .004$), and pelvic surgeries ($P < .0001$); and (3) nonlocal pain on days in bed ($P = .05$) and pelvic surgeries ($P = .002$). No significant differences were found on health status or trauma between patients with diffuse abdominal/pelvic pain and patients with trigger points.

Women with vulvovaginal pain had (1) better physical functioning compared with all diagnostic groups, except fibroid pain; (2) less pain compared with all other diagnoses; (3) fewer medical symptoms compared with diffuse abdominal/pelvic pain; (4) fewer days in bed compared with all other groups, except neuropathic pain; (5) fewer surgeries compared with patients with diffuse abdominal/pelvic pain, trigger points, and neuropathic pain; and (6) less trauma compared with all groups, except cyclic and neuropathic pain. Patients with trigger points fared worse than patients with vulvovaginal pain on 5 of the 6 variables in Table II.

There was a trend for the diagnostic groups to differ on mental health functioning ($P = .07$). Pairwise comparisons showed poorer mental health among

patients with diffuse abdominal/pelvic pain (least square mean, 41.8 \pm 1.0 [SE]), trigger points (least square mean, 38.98 \pm 2.7), and fibroid pain (least square mean, 39.2 \pm 2.8) compared with patients with vulvovaginal pain (least square mean, 45.7 \pm 1.5) and cyclic pain (least square mean, 46.4 \pm 2.1; all probability values were $< .05$).

Endometriosis

The presence of endometriosis was more common among women with cyclic pain (37.9%), diffuse abdominal/pelvic pain (29.5%), and nonlocal pain (26.3%) compared with 5.9% to 7.7% in the 4 other diagnoses. Endometriosis, however, was not significantly related to any measure of mental or physical health status ($P > .09$) in the group as a whole or within the largest group of patients (diffuse abdominal/pelvic pain; $P > .10$).

Comment

Patients with CPP in our referral based university study had (1) poorer mental and physical health status compared with US female population norms and patients with other pain, (2) many nongynecologic medical symptoms and days in bed because of illness, (3) many pelvic surgeries, and (4) high rates of trauma that included 48% with and sexual and/or physical abuse history. In this select setting, patients with CPP were largely subcategorized into 2 common subtypes: diffuse abdominal/pelvic pain (42.2%) and vulvovaginal pain (20.4%).

As hypothesized, patients with diffuse abdominal/pelvic pain had worse mental and physical health status and more trauma, compared with patients with vulvovaginal pain and cyclic pain. Patients with diffuse abdominal/pelvic pain also tended to demonstrate worse

physical health status, compared with patients with neuropathic pain and fibroid tumor pain. As expected, women with vulvovaginal pain had the best mental and physical health status and the least trauma, compared with other CPP diagnoses, most consistently compared with diffuse abdominal/pelvic pain and trigger point pain. Whereas the medians on healthy physical functioning and functioning without pain for patients with vulvovaginal pain were comparable to US female population norms, medians for diffuse abdominal/pelvic pain and trigger points were well below the 25th percentile.

Endometriosis was more prevalent among patients with diffuse abdominal/pelvic pain, cyclic pain, and nonlocal pain, compared with other groups. Despite the fact that many gynecology procedures and surgeries are based on a diagnosis of endometriosis, we did not find that this condition was related to worse mental or physical health status in the group as a whole or among patients with diffuse abdominal/pelvic pain. The diagnostic categories were far better predictors of health status than the presence of endometriosis.

Our study is intended to provide a description of patients with CPP and diagnostic subtypes within a referral-based university clinic, which is a CPP population that uses a great deal of medical resources. This study is the first to define subtypes of CPP on the basis of patient subjective complaint of pain with substantiation from physician assessment and the first to compare the health and trauma history among these subtypes. Several aspects of the study design limit our conclusions. First, findings from our patient population may not be generalizable to patients with CPP who are seen in primary care. In addition, the physician who assigned the diagnoses was not masked to the patient's mental and physical health status because this information was present in the medical record; however, the physicians who wrote in the charts were blinded to study aims. Because 1 investigator assigned diagnostic categories, we could not assess interrater reliability. Furthermore, we had insufficient power (range, 0.43-0.67) to evaluate moderate differences ($d = .5$) of the 2 most common diagnoses with the other subtypes. Last, our study did not include information on the diagnosis of irritable bowel syndrome, which is an illness that occurs in 35% of patients with CPP²⁵ and which may affect overall health status. We have recently added Rome II criteria to our questionnaire so that our future research will be able to examine the overlap of irritable bowel syndrome with the diagnostic categories. Despite these limitations, our data suggest that patients with diffuse abdominal/pelvic pain appear to have the most trauma and the worst health status compared with most other CPP subtypes; patients with vulvovaginal pain fared the best.

Previous research has shown disruption of pain regulatory mechanisms among women with psychiatric disorders and more psychopathologic disorders among

women with chronic pain.²⁶ We might hypothesize that dysregulation of central and pain regulatory mechanisms may be more pronounced among those women with diffuse abdominal/pelvic pain than among patients with CPP with more focused (eg, vulvovaginal) or cyclic disorders; such differences in dysregulation may explain some of the mental and physical health differences among diagnostic subtypes.

As shown by this study and other research,⁷⁻⁹ many women with CPP have considerable trauma and psychopathologic disorders. In treating patients with CPP, clinicians may want to consider treatments that affect central mechanisms, such as psychotropic medications. It may also be beneficial to screen for mental health disorders, and when appropriate, to provide a referral for psychiatric and psychological services.

The diagnostic categorization of pelvic pain is only a first step in a needed field of research that tests treatments and examines mechanisms underlying these diverse sets of disorders. Further research is also necessary on the role of endometriosis in CPP, given that the diagnostic groupings that were identified by our research were more predictive of physical and mental health status than was endometriosis. Because endometriosis did not predict poor health status in the group as a whole or in women with abdominal pain, we must begin to question our unidimensional focus on this disease as a reason for pain and subsequent medical and surgical therapies. The evidence presented here emphasizes the immense need for further research in the definition of subtypes of CPP to improve treatments and health outcomes for these patients.

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Discussion

JANICE L. BACON, MD. The authors are to be congratulated for an excellent study that attempted to further our efforts to define and evaluate chronic pelvic pain in women.

Too often physicians begin an evaluation of a patient's condition with chronic pelvic pain with a "shotgun" approach—ready, fire, aim—attempting therapy before clearly identifying a differential diagnosis and the most appropriate step-wise pattern of treatment.

This study reminds us of the importance of a careful, detailed history that incorporates extensive detail. From this, a differential diagnosis can be created. Here, the authors attempt to aide the provider in focusing the history and evaluation into subsets of patients with chronic pelvic pain. Evaluation techniques and planned therapies then become more evident. Although many articles have addressed the specific medical conditions that exhibit chronic pelvic pain, few articles include guidelines to aid in the grouping of symptoms into categories or subsets, which facilitates further testing and therapeutic trials.

The subsets addressed in the current investigation include diffuse abdominal/pelvic pain, vulvovaginal pain, cyclic pain, neuropathic pain, non-local pain, trigger points, and fibroid pain.

The evaluation of these disorders and comparison of the conditions of the women with a different subset of chronic pelvic pain were performed by questionnaire that discussed the specifics of the patient symptoms, their general health status, and their personal history of physical or emotional trauma. All questionnaires consisted of validated tools that were based on previous research initiatives.

The subsets of patients were developed through a retrospective chart review by a physician. Questionnaires then focused on trauma, physical and sexual abuse, physical and mental health, pelvic surgery, and the number of days in bed in the last three months due to illness.

After the results of the questionnaires and SAS tabulation of statistics were evaluated, the following conclusions were drawn: (1) Most participants were young (mean, 34.2 years), educated (14.9 years), and white (77.5%). (2) Significant numbers of patients had a history of trauma, with 48% of these patients having a history of physical or sexual abuse.

The most common diagnostic categories of chronic pelvic pain identified by chart review included diffuse abdominal pelvic pain (42.2%), localized vulvovaginal pain (20.4%), cyclic pain (10%), and neuropathic pain (9%).

Other subsets (nonlocal pain, trigger points, and fibroid pain) included 5.9% to 6.6% of subjects. Questionnaire scores were tabulated and showed that women with diffuse abdominal/pelvic pain have worse health status and higher prevalence of trauma compared with women with cyclic and localized vulvovaginal pain.

1. In addition to the subsets that were studied in this investigation, how would you include other