

Deconstructing Dyspareunia:  
Description, Classification and Biopsychosocial Correlates of a Pain Disorder

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## Abstract

A frequently reported disorder affecting mostly women, dyspareunia (pain with penile-vaginal intercourse) has been under-investigated in comparison to other sexual dysfunctions and pain syndromes. After presenting a critical review of the literature, delineating the history of description, classification, prevalence, etiology, and treatment, this thesis reports two sets of results from a clinical study of over 100 women who suffer pain with intercourse and 100 matched controls. A biopsychosocial protocol was used to assess both groups. Results from the two sets of analyses showed that 1) dyspareunia may be a heterogeneous disorder with, at least, three sub-types based on physical findings, 2) pain classification variables account for more of the variance in dyspareunia than the sexual dysfunction classification system currently in use, 3) higher levels of physical pathology, psychological distress and relational maladjustment are associated with dyspareunia in general, 4) biopsychosocial differences between the pain group and matched controls vary depending on the dyspareunia sub-type. The implications of this study underline the need for a research and clinical effort that integrates psychology and gynecology to address the heterogeneity of this complex disorder.

## Résumé

La dyspareunie, une douleur fréquente chez la femme lors des relations sexuelles, a été peu étudiée en comparaison avec d'autres dysfonctionnements sexuels et syndromes de douleur. En traitant d'abord de l'historique de la description, classification, fréquence, étiologie et traitement de cette condition, cette thèse présente les résultats d'une étude clinique de plus de 100 femmes souffrant de dyspareunie et d'un groupe témoin apparié. Un protocole biopsychosocial a été utilisé pour évaluer ces deux groupes. Les résultats obtenus démontrent que 1) la dyspareunie semble être un trouble hétérogène comprenant au moins trois sous-types selon les résultats d'examens physiques; 2) les variables de classification basées sur la douleur expliquent une plus grande partie de la variance dans la dyspareunie que le système de classification des dysfonctionnement sexuels d'usage courant; 3) il existe une association entre la dyspareunie indistincte et des niveaux plus élevés de pathologie physique, détresse psychologique et inadaptation relationnelle; et 4) les différences biopsychosociales entre les cas et les témoins varient selon le sous-type de dyspareunie. Les implications de cette étude soulignent l'importance de la recherche et du travail clinique qui intègrent la psychologie et la gynécologie afin d'aborder la question de l'hétérogénéité de ce trouble.

## Manuscripts and Authorship\*

Candidates have the option of including, as part of the thesis, the text of a paper(s) submitted or to be submitted for publication, or the clearly-duplicated text of a published paper(s). These texts must be bound as an integral part of the thesis.

If this option is chosen, connecting texts that provide logical bridges between the different papers are mandatory. The thesis must be written in such a way that it is more than a mere collection of manuscripts; in other words, results of a series of papers must be integrated.

The thesis must still conform to all other requirements of the "Guidelines for Thesis Preparation." The thesis must include: A Table of Contents, an abstract in English and French, an introduction which clearly states the rationale and objectives of the study, a comprehensive review of the literature, a final conclusion and summary, and a thorough bibliography or reference list.

Additional material must be provided where appropriate (e.g. in appendices) and in sufficient detail to allow a clear and precise judgement to be made of the importance and originality of the research reported in the thesis.

In the case of manuscripts co-authored by the candidate and others, the candidate is required to make an explicit statement in the thesis as to who contributed to such work and to what extent. Supervisors must attest to the accuracy of such statements at the doctoral oral defense. Since the task of the examiners is made more difficult in these cases, it is in the candidate's interest to make perfectly clear the responsibilities of all the authors of co-authored papers. Under no circumstances can a co-author of any component of such a thesis serve as an examiner for that thesis.

\* Reprinted from the Guidelines Concerning Thesis Preparation, Faculty of Graduate Studies and Research, McGill University.



## Statement of Authorship

This thesis is comprised of three papers co-authored by myself and Dr. Irving Binik, Dr. Samir Khalife, and Dr. Deborah Cohen. The following is a statement regarding the contributions of the three other authors to this work.

The review paper was researched, written, and revised by myself. Dr. Binik served in an editorial capacity. In terms of the study and the two empirical papers which emanated from it, Dr. Binik served in an advisory capacity during the formulation of research questions and the development of protocols, and in an editorial capacity during the writing of the final manuscripts. All data was collected and analyzed by myself, and I also wrote and revised both manuscripts.

Drs. Khalife and Cohen added their gynecological expertise to the design of the physical component of the protocol and also performed gynecological examinations of the subjects.

## Statement of Original Contributions

The research presented in this thesis constitutes an original contribution to knowledge in two areas: the area of dysfunctional sexuality and the area of pain. This study represents the first controlled biopsychosocial investigation of dyspareunia as an entity rather than as a secondary symptom of specific organic diseases. Although there is a short, albeit confusing, literature addressing the classification of dyspareunia, ours is the first empirical study to test the validity of different classification systems for this disorder, one of which was a classification system developed by myself in the published review paper. The re-conceptualization of dyspareunia as primarily a pain syndrome is also a novel contribution as it challenges traditional notions of pain with intercourse as a sexual dysfunction. This modified conceptualization of dyspareunia has implications for both the area of sexual dysfunction, which had essentially appropriated dyspareunia, and for the area of pain, which, to date, had all but ignored it. The dyspareunia sub-types identified in the study represent the first empirically derived evidence of the heterogeneity of this disorder. The comparison of women with dyspareunia with matched controls on a number of biopsychosocial measures represents an initial investigation into mostly untested etiological theories in the general dyspareunia literature.

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Finally, I dedicate this work to Eugenia D'Elia who continues to be my ever shining beacon.

## Introduction

The introduction to this thesis is covered mostly by the first manuscript, "Painful coitus: A review of female dyspareunia." (Meana & Binik, 1994), which reviews the literature on dyspareunia to March 1992, and the Literature Review Update which follows that manuscript and reports any added research since then.

The rationale for studying dyspareunia was simple. Among sexual dysfunctions, it was clearly the most under-investigated relative to its reported frequency of occurrence in women (Fordney, 1978; Glatt, Zinner, & McCormack, 1990). As a pain syndrome, it had not been investigated at all. As a psychophysiological disorder involving a high incidence of physical pathology (Fordney, 1978) as well as the psychologically and culturally sensitive area of sexuality, dyspareunia posed a number of interesting questions about classification, the investigation of etiological pathways, and about the complexity of interactions in a biopsychosocial context.

In this first attempt at a controlled biopsychosocial study of dyspareunia, only a few of these issues could be realistically addressed. The objectives of the study were, thus: 1) to provide a clinical description of dyspareunia in terms of pain symptomatology and in terms of physical pathology, psychological distress, marital adjustment, history of abuse, and sexuality; 2) to investigate the extent to which existing classification systems accounted for the variance in these afore-mentioned biopsychosocial variables; 3) to test alternate ways of classifying dyspareunia; 4) to compare the biopsychosocial profile of women with dyspareunia and no-pain controls, as a first attempt at formulating empirically based etiological hypotheses.

The first paper presented, "Painful coitus: A review of female dyspareunia" (Meana & Binik, 1994), was the literature review from which we developed specific

hypotheses for the study and it provides the scholarly backdrop for our investigation. The second paper, "Coital pain in women: Sexual dysfunction or pain syndrome?"<sup>1</sup> (Meana, Binik, Khalife, & Cohen, 1995) deals exclusively with a sample of women suffering from dyspareunia. It provides a clinical description of coital pain symptomatology and tests the validity of different classification systems for coital pain. The third paper, "Biopsychosocial profile of women with dyspareunia and matched controls: Searching for etiological hypotheses" (Meana, Binik, Khalife, & Cohen, 1995) introduces no-pain control subjects and compares them to the dyspareunia sample on a number of physical and psychological measures derived from etiological hypotheses in the literature.

#### Footnote

<sup>1</sup>The terms “coital pain” and “dyspareunia” are used interchangeably in this thesis. The reason behind the usage of “coital pain” almost exclusively in the first paper and “dyspareunia” in the second relates to differences in the audiences of the two publications to which these papers were submitted.

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## Painful Coitus: A Review of Female Dyspareunia

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The literature on female dyspareunia is reviewed with an emphasis on description and classification, incidence and prevalence, etiological factors, and treatment approaches. The research is found to be plagued with methodological problems and characterized by a persistent dichotomization of issues into physiological and psychological categories. A systematized and integrated approach to the study of coital pain is proposed.

—*J. Nerv. Ment. Dis.* 182:264–272, 1994

Female dyspareunia, defined as pain associated with penile-vaginal intercourse, is the sexual dysfunction with the greatest number of reported distinctions. Its detailed clinical description in the Raesseau Papyri IV scrolls of ancient Egypt suggests that it may be one of the earliest recognized sexual dysfunctions (Costatans and Colorado, 1971). It has also been reported to be the most common of the female sexual dysfunctions (Fordney, 1978; Glatt et al., 1990; Spano and Lamont, 1975; Steege, 1984; Wabrek and Wabrek, 1975), as well as possibly the most underreported by women (Dodd and Parsons, 1984; Fullerton, 1971; Jarvis, 1984; Sarazin and Seymour, 1991), and the sexual dysfunction most commonly linked to physiological pathology (Fordney, 1978). Perhaps one of the reasons why the literature on dyspareunia is full of absolutes is because of one further distinction—it is clearly the most underinvestigated sexual dysfunction relative to its reported frequency of occurrence in women. Controlled research usually has a moderating effect on a syndrome's claim to exclusivity, but the striking paucity of research on dyspareunia has given rise to a crop of claims substantiated primarily by clinical case reports.

Until the end of the 19th century, dyspareunia was considered a physical problem of unknown etiology and little interest (Fordney, 1978). With the growth of the psychological sciences in the 20th century, the interest grew only slightly compared with that in other sexual dysfunctions, despite the emergence of psychological explanations. In fact, these proposed etiologies usually emphasized the conscious/unconscious motives underlying reports of pain and were dismissive of the sensory experience of discomfort. Dyspareunia was

thus often relegated to the realm of hysteria, not an uncommon course for a women's health care issue in the first half of this century. Although the sex therapy/research explosion of the 1960s and 1970s went a long way toward extricating dyspareunia from the classification of hysteria, it had little effect in stimulating psychological research.

The purposes of this article are: a) to review the literature on dyspareunia, b) to investigate conceptual/methodological issues in the study of coital pain, and c) to suggest future research directions. A MEDLINE search was conducted covering the period from January 1966 until March 1992. Articles focusing specifically on dyspareunia were used. However, those in which dyspareunia was noted as one in a constellation of symptoms attributed to a specific disease entity were not included.

### Description and Classification

Dyspareunia has been described and classified in a variety of ways throughout its history as a recognized dysfunction. The consistent use of the term dyspareunia, which translates from ancient Greek as "difficult mating," starts in the 1930s. In much of the psychological literature of the 40 years that followed, it was common to subsume nearly all possible reasons for female hyposexuality under the general term of frigidity (Eilery, 1954; Fenichel, 1945; Lazarus, 1963; Levine and Rosenthal, 1977; World Health Organization, 1977). The reasons behind the hyposexuality were, for the most part, assumed to be socio-emotional, and physiological correlates were all but ignored. Although it is accepted today as a syndrome in its own right, there is still a lack of consensus on the basic description of dyspareunia and on the variables pertinent to its classification (Table 1). There is currently no typology of coital pain that considers all intuitively pertinent variables.

Dyspareunia is currently defined in the DSM-III-R (1987) as the occurrence of persistent genital pain during or after intercourse. This definition, however, is far from clear. The assessment techniques used in the

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TABLE 1  
*Review of Dyspareunia (DYSPA) Classifications in the Literature*

| Author                                  | Classification Terms  | Classification Variables                        | Comments  |
|---|---|---|---|
| Mayer (1932)                            | Organic (vaginal or pelvic)/psychogenic (initial or secondary)  | Etiology/onset within lifetime/location of pain | Mayer used the historical dimension to subclassify organic cases/ the location dimension exclusively to subclassify psychogenic DYSPA   |
| Henrickson & Horn (1942)                | Primary/secondary   | Etiology  | Primary = absence of physical pathology, secondary = physical etiology  |
| Franck (1948)/ Hartnell (1955)          | Primary/secondary   | Onset within lifetime                           | Forerunner to DSM-III-R historical variable   |
| Worcester (1955)                        | Primary/secondary   | Etiology  | Primary = physical causes, secondary = psychological ones   |
| Claye (1955)                            | During penetration/ after   | Onset within intercourse episode                |   |
| Jeffcoate (1969)                        | Introital lesion/ adjacent viscera  | Etiological                                     | No consideration of psychological factors   |
| Fink (1972)                             | Introital/deep  | Location of pain                                |   |
| Abarbanel (1978)                        | Continuum of pain   | Intensity of pain                               | Avoids terms of DYSPA/vaginismus and terms it all coital discomfort   |
| Brant (1978)                            | Superficial/deep  | Etiology  | Superficial DYSPA considered to originate in lubrication failure and deep type from failure of the vagina to relax and balloon  |
| Munsick (1980)                          | Obstructive/focal/ urinary/nondescript  | Location Etiology                               | Obstructive type, partner complains the penis "hits something; focal DYSPA, pain felt in a very specific area in the vulva or inner vagina; urinary type, coital pain caused by urinary tract conditions; nondescript, unlocalizable pain   |
| Schover et al. (1980)                   | Lifelong/not lifelong/ global/situational   | Onset within lifetime Situational               |   |
| American Psychiatric Association (1987) | Psychogenic only Psychogenic and biogenic Lifelong/acquired Generalized/situational   | Etiology Onset within lifetime Situational      |   |
| Black (1988)                            | Introital DYSPA/deep DYSPA Pelvic pain after intercourse (with orgasm) Pelvic pain after intercourse (without orgasm) Colpalgia fugax | Location of pain Etiology                       | Introital DYSPA at vaginal entry due to lack of arousal and lubrication; deep DYSPA, within vagina due to displacement of uterus; pelvic pain after intercourse/no orgasm attributed to pelvic congestion; pelvic pain after intercourse/orgasm still attributed to pelvic congestion/orgasm too mild to drain congestion; colpalgia fugax, fleeting pain in the external vulva or perineal region attributed to sexual anxieties |
| ICD-10 (1992)                           | Organic Nonorganic  | Etiology  | Nonorganic DYSPA under "Sexual dysfunction not caused by organic disorder or disease; organic DYSPA classified under "Pain/conditions assoc. w/female genital organs/menstrual cycle"   |

study of dyspareunia rarely ask more than a simple question: Have you or do you have pain during or after intercourse? No studies exist in which dyspareunia is broken down into all of its clinically reported manifestations. Sandberg and Quevillon (1987) have claimed that the incidence of the rare symptom is universal, with almost every woman at some point experiencing occasional dyspareunia. Fordney (1978) stated that if the pain is limited to the moment of intromission and does not seriously interfere with desire, receptivity, or orgasm, it should not be considered dyspareunia. She further excluded pain caused by prolonged coital contact, transient infections of the vagina or adjacent viscera, or lack of lubrication.

The DSM-III-R similarly excludes from its definition pain caused by lack of lubrication. This is, however, a point of contention in the description of dyspareunia.

First, it is very difficult to ascertain whether a woman is lubricating adequately. Lubrication is not likely to occur in a gynecologist's office and relying on women's reports of lubrication is problematic, as there is wide variability, not to mention the fact that many women may not be able to report accurately their degree of lubrication. Second, the comorbidity of inhibited arousal and dyspareunia is presumed to be very high. Naturally, women anticipating pain are generally fearful rather than sexually aroused. This fear interferes with lubrication, which is a major physiological component of the sexual arousal pattern. If psychological etiologies such as fear and misconceptions about intercourse are widely discussed in the literature, it is difficult to understand why coital pain due to lack of lubrication would not qualify as dyspareunia when it is clearly associated with psychological phenomena that

inhibit arousal. Furthermore, this DSM-III-R exclusionary criterion has been ignored by many authors before and after publication of the manual (*e.g.*, Abarbanel, 1978; Black, 1988; Goldberg et al., 1987). Some have even cited lack of lubrication as the most common cause of dyspareunia (*e.g.*, Riley and Bromwich, 1987; Sarazin and Seymour, 1991).

Another descriptive and classificatory problem lies in the distinction between vaginismus and dyspareunia. Whereas vaginismus is sometimes treated in the literature as a severe case of dyspareunia (Crenshaw and Kessler, 1985), the DSM-III-R and the ICD-10 consider it an altogether different dysfunction. The criteria used to distinguish between dyspareunia and vaginismus remain unclear. The diagnosis of vaginismus is usually based on both a history of unsuccessful attempts at penetration and the confirmation of a gynecologist who finds it impossible to examine the woman vaginally (Fordney, 1978). The reason for the difficulty is described by the DSM-III-R as "an involuntary spasm of the outer third of the vagina." Thus, the two criteria for a differential diagnosis appear to be 1) that penetration is impossible in vaginismus and 2) the existence of an involuntary muscle spasm in vaginismus.

The first criterion is inevitably problematic. How is one to know why penetration is physically impossible? The reasons could range from one woman's very low pain threshold to a clinician's unwillingness to inflict any pain whatsoever during an examination to a partner's total inhibition about causing the slightest discomfort. The existing literature provides little reason to believe that what distinguishes one group of women from the other is anything but a behavioral distinction for which we have no one adequate explanation. The second criterion, the involuntary muscle spasm, is also dubious. It is clear that women who have pain with intercourse, whether the penis succeeds in penetrating or not, are fearful of this activity. Fear is accompanied by a number of anticipatory and defensive physiological reactions. In women who associate pain with genital contact, contraction of the genital musculature is common, despite varying degrees of strength of the contractions. Dyspareunia can result from a contraction of these muscles, although the contraction may not be sufficiently severe for the woman to find penetration impossible. Furthermore, it is unclear what use the word "involuntary" fulfills in this classification. How do we determine volition and who determines it?

Both the DSM-III-R and the ICD-10 further classify dyspareunia in terms of purported etiology. The ICD-10 distinguishes clearly between psychogenic dyspareunia and physiologically based dyspareunia. The DSM-III-R blurs the distinction somewhat with its two etiological classifications of psychogenic only and a combination of psychogenic and biogenic. Some progress has been

made from the days when Malleon (1954) stated that the dyspareunic patient "must be helped to see for herself that hyperesthesia (pain) is a fiction and that the pain is of her own making," but the study of dyspareunia today remains largely unaffected by the explanatory potential of pain theories, such as that of Melzack and Wall (1982), that no longer distinguish between psychogenic and other pain.

The very fact that coital pain is the only pain syndrome (other than those subsumed under somatoform disorders) within the psychiatric nosology is the ultimate testament to the persistence of these largely unfounded etiological distinctions between pains. According to the DSM-III-R, all dyspareunic pain is at least in part psychogenic. But what pain is not? Headaches, like dyspareunia, have a largely undetermined etiology, are likewise characterized by distinctly different profiles of pain of varying intensities, and have been shown to be affected by psychological interventions (Blanchard, 1992). However, they do not appear in the DSM-III-R. The absence of any clear rationale for the inclusion of dyspareunia in the DSM-III-R indicates that this dualistic approach to coital pain has probably outlived its usefulness.

Etiology is, unfortunately, not currently useful in a descriptive classification system for dyspareunia. The little research that does exist has been unable to empirically tie down individual cases of dyspareunia to a single explanation (*cf.*, *Etiology*, below). On the other hand, a purely descriptive classification system that would account for the majority of case reports of dyspareunia pain on as many dimensions as variability would warrant could go a long way toward informing etiology without making a priori assumptions. In fact, a number of authors have already hypothesized that women's descriptions of pain, along with their reports of onset and location, may be highly suggestive of the existence of organic pathology (Fink, 1972; Huffman, 1976; Masters and Johnson, 1970).

The sensory experience of pain has been overlooked traditionally for more "objective" diagnostic indicators, such as observable physical pathology, but the classification/description of pain has been an important first step in distinguishing between syndromes whose etiology is unclear and in guiding the search for etiological factors. The literature on a number of pain syndromes (*e.g.*, headache, back pain, diffuse myofascial pain syndrome) has shown reliable, descriptive typologies to be useful in directing etiological, epidemiological, and treatment research. There is still a great deal of controversy over the etiology of headaches and low back pain, but classification systems have successfully identified distinct types of headaches and back pains with the promise of uncovering different etiological pathways (Dalessio, 1984; Grahame, 1980). Although

awareness of internal sensations usually does not represent a one-to-one correspondence with actual physiological change, symptom complexes remain an integral part of the diagnostic process (Pennebaker, 1982). In the belief that our understanding of coital pain can be enhanced using an approach that has shed light on a number of other pain syndromes, we propose a classification system (Table 2) that unites all of the variables dispersed across the literature. This system could then be tested as to its usefulness in distinguishing among different types of dyspareunia with potentially different etiological pathways.

The system consists of a historical variable, a situational one, a number of variables descriptive of the pain itself, and a functional interference variable. The historical variable that has been central in the ad hoc classification of all the sexual dysfunctions concerns the onset of the problem in the individual's sexual history (American Psychiatric Association, 1987; Fordney, 1978; Schover et al., 1980). Primary refers to a lifelong condition and secondary refers to an acquired condition. The situational variable specifies whether the problem is global or specific to certain situations. Some women experience pain at all attempts at penetration, while others report it to be restricted to certain partners

or situations. Others may not yet recognize the common denominator in the pain-producing situations. Furthermore, some women report pain upon penetration by tampons or fingers in addition to intercourse, while for others the pain is restricted to intercourse. Under combinations of these two historical-situational variables, this classification system would further specify the onset of the pain within a typical episode of attempted intercourse, the location of the pain, its duration, and its intensity as determined by its subjective interference with the act of penetration.

This atheoretical descriptive system would avoid the problematic vaginismus/dyspareunia distinction and it would include and describe all types of coital pain without regard to speculations about etiology. Coupled with detailed qualitative descriptions of the pain, it could prove to be a useful predictor of primary etiology and an important tool for the planning of treatment strategies.

### Incidence and Prevalence

The incidence and prevalence of dyspareunia are unknown. The only statistics available are based on epidemiologically unsound clinical and community surveys. Two prevalence studies conducted in the 1940s contained serious methodological problems which limited their conclusions, and there were no surveys at all from 1950 to 1969. Studies in the 1970s, however, showed significantly larger prevalence figures. In clinic series studies, it has been claimed that next to anorgasmia, dyspareunia is the most common female sexual dysfunction (Kaplan, 1974; Masters and Johnson, 1970). The picture that emerges is hardly clear, with a prevalence rate anywhere from 4% to 55% (Table 3).

One of the problems in estimating incidence and prevalence rates for dyspareunia is that many prevalence studies of sexual dysfunctions do not include dyspareunia within their list of dysfunctions or fail to distinguish it from vaginismus (*e.g.*, Bancroft and Coles, 1976; Cooper, 1979; Duddle, 1975; Frank et al., 1978). Furthermore, given the finding that dyspareunia often co-exists with other sexual dysfunctions, it may not be considered as the primary problem (Fink, 1972; Fordney-Settlage, 1975; Kaplan, 1974; Masters and Johnson, 1970).

Despite the lack of stable community estimates on either prevalence or incidence, a number of authors appear convinced that the incidence of dyspareunia is increasing (Goldberg et al., 1987; Sarazin and Seymour, 1991; Schellen, 1983). In a review of the literature on the incidence and prevalence of sexual dysfunctions, Spector and Carey (1990) estimated the community prevalence to be from 8% to 23%. Most of the surveys of the 1970s and 1980s appear to confirm the increase.

TABLE 2  
*Proposed Typology for Coital Pain*

|                  | Global                              | Situational             |
|------------------|-------------------------------------|-------------------------|
| <b>Primary</b>   |                                     |                         |
| Onset            | Before                              | Before                  |
|                  | During                              | During                  |
|                  | After                               | After                   |
| Location         | Introital                           | Introital               |
|                  | Vaginal                             | Vaginal                 |
|                  | Pelvic                              | Pelvic                  |
| Duration         | Before                              | Before                  |
|                  | During                              | During                  |
|                  | After                               | After                   |
| Interference     | Mild (small/no effect)              | Mild (small/no effect)  |
|                  | Significant (penetration difficult) | Significant (difficult) |
|                  | Severe (penetration impossible)     | Severe (impossible)     |
| <b>Secondary</b> |                                     |                         |
| Onset            | Before                              | Before                  |
|                  | During                              | During                  |
|                  | After                               | After                   |
| Location         | Introital                           | Introital               |
|                  | Vaginal                             | Vaginal                 |
|                  | Pelvic                              | Pelvic                  |
| Duration         | Before                              | Before                  |
|                  | During                              | During                  |
|                  | After                               | After                   |
| Interference     | Mild (small/no effect)              | Mild (small/no effect)  |
|                  | Significant (penetration difficult) | Significant (difficult) |
|                  | Severe (penetration impossible)     | Severe (impossible)     |

TABLE 3  
*Studies on Prevalence of Dyspareunia (DYSPA)*

| Author                   | Subjects   | Age <sup>a</sup>  | SES           | Assessment                                 | N    | Findings<br>(% reporting DYSPA) | Comments <sup>a</sup> |
|--------------------------|--|-------------------|---------------|--|------|---------------------------------|-----------------------|
| Frank (1948)             | Private gynecology clinic patients   | ?                 | ?             | Mention of DYSPA in file                   | 7124 | 4.5%                            | 1, 3, 4, 5, 6         |
| Dickinson (1949)         | ?  | ?                 | ?             | ?  | 4100 | 4%                              | 1, 4, 5, 6            |
| Semmens & Semmens (1974) | Consecutive gynecology clinic patients   | ?                 | ?             | One question about coital pain             | 500  | 40%                             | 1, 3, 5, 7            |
| Fordney-Settlage (1976)  | 39% Chicano, 23% White, 27% black, 6% Oriental & Arabic; gynecology or sex therapy clinics | M-28 <sup>a</sup> | Low           | Clinical interview                         | 175  | 55%                             | 2, 3, 5, 6            |
| Kresch & Kresch (1976)   | Private gynecology clinic patients   | M-28 <sup>a</sup> | Low-Middle    | One question about coital pain             | 400  | 40%                             | 3, 7                  |
| Hite (1976)              | Readers of women's magazines, women's organizations  | 14-78             | Low/Mid/Hi    | Questionnaire                              | 3000 | 23%                             | 2, 6                  |
| Hawton (1982)            | Referrals to sexual problems clinic  | ?                 | ?             | Clinical interview                         | 152  | 3%                              | 3, 5, 6               |
| Osborn (1988)            | Gynecology clinic patients   | 35-59             | ?             | Structured interview on sexual dysfunction | 436  | 8%                              | 2, 3                  |
| Renshaw (1988)           | Married couples seeking sex therapy  | M-39 <sup>a</sup> | ?             | ?  | 1071 | 6.1%                            | 3, 5, 6               |
| Glatt (1990)             | Women who had taken part in study on STDs 15 years earlier                                 | Late 30s          | Univ educated | Questionnaire about sexuality and DYSPA    | 314  | 33.5%                           | 1, 2, 5, 6            |

<sup>a</sup>M = Median.

<sup>a</sup>Comments: 1 = sociodemographic properties of sample not reported; 2 = sample unrepresentative; 3 = clinical sample used; 4 = unclear whether subjects were asked about pain or presented with it; 5 = assessment question(s) or technique not specified; 6 = dysfunction criteria not provided; 7 = dysfunction determined by one question that does not cover frequency, intensity, or interference with coitus.

However, caution should be taken in the interpretation of these figures.

It is impossible at this point to determine whether the supposedly rising incidence of dyspareunia reflects a true elevation in the frequency of occurrence due to etiological factors more common today than 40 years ago (*e.g.*, sexually transmitted diseases) or whether it simply reflects an increased willingness to discuss sexual matters. It is also probable that women's expectations about the sexual experience have risen, making discomfort a legitimate complaint. Other possible explanations for the alleged increase are iatrogenic, a strong possibility in light of the increase in gynecological surgery (Bachman, 1986; Courtenay, 1981; Schellen, 1983). However, the same sociomedical changes of the last 50 years can also be used to argue for a decrease in the incidence of dyspareunia. Huffman (1983) argued that changing attitudes about female sexuality and the resultant abatement of fear and aversion to sex should have resulted in a decrease of dyspareunia.

### Etiology

Traditionally, the etiology of dyspareunia has been divided into organic or psychological, with most authors emphasizing one or the other (for physiologically oriented articles, see Dewitt [1991], Stuntz [1986], and Wabrek and Wabrek [1975]; for psychologically ori-

ented ones, see Fertel [1977], Haslam [1965], and Lamont [1980]). Authors in the physiological camp have claimed the prevalence of psychologically based dyspareunia to be anywhere from low to negligible (*e.g.*, Huffman, 1976), while others, like Spano and Lamont (1975), have stated that organic factors are usually correctable and seldom the cause of the continuing problem. The findings for a psychological etiology of dyspareunia vary from 17% to 70%, a range more indicative of the unsystematized approach to dyspareunia than of any of its actual characteristics (Dickinson, 1949; Fordney, 1978; Fordney-Settlage, 1975; Frank, 1948; Huffman, 1983; Kinch, 1969; Kresch and Kresch, 1976).

Unfortunately, most of these studies do not detail the protocol used to determine causality. To rule out an organic cause, one could stop at a manual-visual examination or proceed to a colposcopy (in which the vagina is magnified and treated with a solution that stains and thus makes visible lesions or abnormal cell growths), an ultrasound, or a laparoscopy (a procedure in which the inside of the abdominal cavity is examined). The validity of cross-study comparisons depends entirely upon the depth, reliability, and validity of the examination used to infer causality.

A further problem arises in the often faulty assumption of a cause and effect relationship between pathology and pain, an assumption evident in studies without

control groups. In one of the rare controlled studies, Walker et al. (1988) investigated chronic pelvic pain and found the same percentage of patients with pain and control patients with no pain to have organic pathology, with no differences in the type or degree of pathology. Despite the usefulness of existing technologies, there is still no way to determine the adequacy of a pathological stimulus to produce pain. Walker et al.'s findings suggest that pathological findings may have little relevance to reported pain.

The issue, however, is not just the complexity of ascertaining whether physiological or physical factors are at the source of the dyspareunia, but realizing that the factors that initiated the pain, even if these could be isolated, may not be the same ones that maintain it. The inevitable interaction of psychological and physiological factors is nowhere more evident than in the case of dyspareunia and it is only recently that authors have begun to abandon a persistent tendency in the literature to dichotomize the etiological search (*e.g.*, Jarvis, 1984; Sandberg and Quevillon, 1987; Sarazin and Seymour, 1991; Steege, 1984).

#### *Physiological Factors*

Abarbanel (1978) provided a useful categorization of physical etiologies as anatomic, pathologic, and iatrogenic. Anatomic factors are congenital or developmental in origin, affecting primarily the introitus and vaginal canal. These would be rare malformations of the genitals, such as agenesis of the vagina or the more common case of the rigid hymen. Pathologic factors include acute and chronic infections of the genital tract, pelvic conditions such as endometriosis and inflammation, malignant and nonmalignant growths, and disorders of the adjacent viscera. Iatrogenic factors are those induced by the physician, usually as a consequence of a surgical procedure such as an episiotomy. Dyspareunia is also common in postmenopausal women who experience vaginal atrophy as a result of hormonal changes (Bachman et al., 1984).

Focal vulvitis or vulvar vestibulitis, a condition characterized by a hyperesthesia and erythema at the introitus, has received much attention in the past 6 years, both as a syndrome in its own right and as a cause of dyspareunia (Friedrich, 1987; Peckham et al., 1986; Reid et al., 1988; Schover et al., 1992). Women with focal vulvitis experience pain not just during intercourse, but from any type of vaginal penetration or simple contact with clothing (for elaborations of some suspected physical causes, see Black [1988], Bukovsky et al. [1988], Jarvis [1984], Kohorn et al. [1986], and Stuntz [1986]).

Although a large number of physical conditions have been associated with dyspareunia, no study has examined the prevalence of any of these conditions within

dyspareunic populations. Dyspareunia is usually viewed as a symptom of a disease entity instead of as an entity in and of itself with strong correlations to certain physical conditions. In reviewing the physiological conditions associated with dyspareunia, it is important to keep in mind that dyspareunia is not a reliable symptom of any one disease. There are well-recorded instances of extensive disease in which dyspareunia was conspicuously absent from the symptom complex (Fordney, 1978).

#### *Psychological Factors*

Within a dualistic perspective, when no physical factors can be uncovered during a gynecological examination, the diagnosis of psychogenic dyspareunia is usually made. The two major theoretical perspectives from which psychological etiologies have developed are psychoanalytic theory and learning theory. Psychoanalytic theory treats dyspareunia as a hysterical or conversion symptom symbolizing an unconscious intrapsychic conflict (Fenichel, 1945; Kaplan, 1974). The analytically oriented literature, therefore, focuses on dyspareunia as the result of phobic reactions, major anxiety conflicts, hostility, or aversion to sexuality (Steege, 1984). Learning theory posits that the dyspareunic response is attributable to lack of or faulty learning which may contribute to a woman entering sexual relations with a set of negative expectations (Sotile and Kilmann, 1977). Operant conditioning models emphasize random negative events, which again create a preconditioned negative set sufficient to alter the physiological arousal response and ultimately make intercourse painful (Haslam, 1965; Fink, 1972).

Lazarus (1980) provided a useful breakdown of psychological factors into three categories: developmental, traumatic, and relational. Developmental factors refer to early influences on the formation of attitudes toward sexuality (*e.g.*, Fordney, 1978; Huffman, 1983; Lamont, 1980; Lazarus, 1980; Masters and Johnson, 1970). Usually experienced in childhood and adolescence, they set the stage for adult anxiety and fear of the coital experience. Traumatic factors refer to a prior aversive coital or sexual experience or some other trauma associated with the genital area (Black, 1988; Lamont, 1980; Lazarus, 1980; Walker et al., 1988). Relational factors range from deficits in lovemaking techniques to pervasive feelings between partners that are detrimental to the sexual relationship (*e.g.*, Fordney, 1978; Huffman, 1983; Lamont, 1980; Lazarus, 1980).

Emotional disturbances extending beyond the sexual problem itself are commonly reported for all types of dyspareunic women. Frank (1948) reported that 54.8% of his psychogenic sample manifested "psychoneuroses," compared with 24.5% of women with organically caused dyspareunia. Similarly, Beard et al. (1988) re-

ported that 60% of his sample of 35 women complaining of dyspareunia and pelvic pain had emotional disturbances, while Jarvis (1984) asserted that depression may be a potent cause of dyspareunia. Fordney (1978) claimed that dyspareunia women are no different from any other sexually dysfunctional group. She argued that these emotions are evidenced in association with the sexual problem and appear to be more reactive than etiological.

### Treatment

If physical pathology is deemed the primary source of the pain, then the appropriate medical or surgical procedures are conducted. They range from the intra-vaginal application of estrogen creams to surgical repair of the vulvar region to the extraction of abnormal growths in the adjacent viscera. Most of the medical interventions cited in the literature are not aimed at the dyspareunia itself, but rather at the disease entity believed to be the cause of the dyspareunia (*e.g.*, pelvic inflammatory disease, endometriosis, condylomata). As dyspareunia is a potential symptom of most gynecological or pelvic diseases, it is beyond the scope of this review to evaluate the literature on the very specific medical and surgical procedures available for the vast range of these diseases (for some examples, see Bukovsky et al. [1988] and Munsick [1980]).

It is consistently recommended that when dyspareunia has been a longstanding problem, regardless of physical pathology, medical correction is seldom adequate and should be followed by sex therapy (Fordney, 1978; Goldberg et al., 1987; Schover et al., 1992). The experience of pain with intercourse over a significant period of time creates a situation that is not reversed overnight with a surgical incision. The expectation of pain remains high, and arousal, which has been impeded by the pain, has to be reinstated both for the patient and her partner. Fordney (1978) cited a study of 18 women with organically based dyspareunia, 16 of whom did not improve despite medical/surgical procedures, until the relearning techniques of sex therapy were added. In Schover et al.'s (1992) study, 45 women with vulvar vestibulitis underwent a surgical intervention. Only women who refused postoperative counseling reported no improvement in dyspareunia pain. Sex therapy for dyspareunia is thus indicated whether or not physical pathology is evident.

Interestingly, though, treatments for dyspareunia are no more easily classified as physiological or psychological than are etiological factors. Most authors agree that the superficial symptom is maintained by a lack of relaxation of the genital musculature associated with inhibition of sexual arousal and the resultant lack of lubrication. The techniques that report the greatest

therapeutic success (*e.g.*, vaginal dilatation) are those that directly attack these somatic conditions. Analytic techniques or traditional psychotherapy, without the concurrent use of sex therapy techniques, do not boast much success in terms of symptom resolution (Fordney-Settlage, 1975; Masters and Johnson, 1970), although there have been no empirical attempts to compare traditional psychotherapy with any other treatment for coital pain. The most commonly used treatments, singly or in combination, are systematic desensitization, in fantasy and in vivo, couple education about sexuality and communication, vaginal exercises, and vaginal self-dilatation.

Variations of systematic desensitization have had some reported success in the treatment of dyspareunia. Lazarus (1963) treated 16 "frigid" women and reported success in nine subjects. Holroyd (1970) and Ince (1973) presented successful single case studies in which systematic desensitization, in fantasy, constituted the main treatment. Brady (1966) modified Wolpe's conventional method by adding injections of methohexital sodium to aid relaxation. Four of his five dyspareunia subjects were treated successfully in an average of 11.5 sessions.

In in vivo desensitization, intercourse is banned until clients have completed a series of increasingly close approximations to penetration, while also learning better or additional ways of performing the behavior. This is the essence of the sensate focus technique described by Masters and Johnson (1970) for treatment of all sexual dysfunctions. Although this method, with its emphasis on education and communication, is reportedly an important part of therapy, most authors agree it requires the ancillary techniques of dilatation and vaginal muscle exercises.

Vaginal dilatation is the oldest and certainly the most widely used treatment for dyspareunia and vaginismus (*e.g.*, Beasley, 1947; Bieren, 1950; Claye, 1955; Cooper, 1969; Crenshaw and Kessler, 1985; Crossen, 1913; Frank, 1948; Goldberg et al., 1987; Harlow, 1969; Huffman, 1983; Jarvis, 1984; Malleson, 1954; Mayer, 1932). It involves the woman introducing increasingly larger dilators into her vagina, thus desensitizing herself to the thought and reality of penetration. Highly touted in the literature, the reports, however, emanate from single case studies (Cooper, 1969; Crenshaw and Kessler, 1985; Haslam, 1965) or studies without comparison groups (Hall, 1952).

The techniques of voluntary vaginal muscle contraction are not as commonly reported, but they are also considered a useful adjunct to sex therapy for dyspareunia (Fordney, 1978; Hall, 1952; O'Connor, 1976). They involve learned voluntary contractions of the pubococcygeal muscle. As Fordney (1978) theorized, this exercise, commonly known as Kegel's exercise, proba-

bly does not exert its influence in the relief of dyspareunia through a strengthening of the muscle. Rather, in learning to do the exercise, the woman develops an awareness that sensations in her genital area are, to some extent, under her control.

There are a few reports of hypnosis as treatment for dyspareunia (for a review of hypnotic approaches, see Araoz [1982]). Leckie (1964) used hypnotic suggestion in treating dyspareunia, vaginismus, and anorgasmia during intercourse. He reported that 17 of 30 subjects treated specifically for dyspareunia responded successfully to hypnotic suggestion. However, this study did not reveal the criteria for treatment success.

### Summary and Research Recommendations

The fundamental issue of the taxonomy of coital pain has been glossed over in preference of uncontrolled clinical studies and correlational investigations. The result has been a semantic and conceptual confusion that renders cross-study comparisons problematic. The establishment of a reliable, descriptive typology wherein the sensory experience of pain is considered key to a fuller understanding of both etiology and treatment, rather than the more traditional reverse formulation, could be a useful first step. Enhancing the definition of the variable in question and incorporating its multidimensionality into studies of incidence and prevalence could have the effect of narrowing the expansive range of findings currently in the literature and even yield stratified figures for the qualitatively different types of coital pain experienced by women.

As for etiology, it is evident that the single-cause approach has not been fruitful. With the current reconceptualization of most mental and physical disorders under the rubric of the biopsychosocial model, it makes little sense to take a dualistic approach to the etiology of dyspareunia. The sexual response cycle and its attendant cognitive, affective, and physiological processes defy any such categorization. Furthermore, the road to pain is littered with many individual, contextual, and interpretative differences, not to mention physical ones, that can only be identified as a pattern for any one pain syndrome with the use of appropriate control groups. Even the near consensus on treatment strategies is tainted by the virtual lack of therapy outcome studies. Attempts to obtain baseline data, as difficult as they may be, are as rare as comparison groups and outcome success is seldom operationalized.

Coital pain also raises some interesting corollary questions with more expansive implications. It represents a special case of pain in its involvement of another individual in the pain experience and in its emanation from a highly valued activity. These two facts have the potential to generate a number of important pain

research questions regarding the social context of pain and the role of expectations in the pain experience. Suspected to be grossly underreported, dyspareunia is also well positioned for the investigation of factors that determine symptom reporting, factors such as the cognitive representations of this disorder held by both the lay public and health professionals.

Dyspareunia has clearly been a neglected women's health care issue. The reasons for the neglect may range from cultural uneasiness about female sexuality to a grossly underestimated or overestimated prevalence (it is either too rare or too common to be of note). In any case, research would at the very least ascertain the extent to which coital pain is a problem and threat to women's health and adjustment. With its unique combination of biological, social, and psychological factors, coital pain is also a natural testing ground for some key issues in psychosomatics. Attempts to understand the mechanisms that initiate and maintain the pain and the multiple interactions that characterize the dysfunction could have important implications for a number of areas pertinent to health behavior, not to mention for the women suffering from this distressing condition.

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## Literature Review Update

A literature search covering the period from March 1992 until May 1995 yielded no new empirical research on the biopsychosocial nature of dyspareunia. A recent review paper on the treatment of sexual dysfunctions (Rosen & Leiblum, 1995) reiterated the need for a multidisciplinary and integrated approach to dyspareunia expressed in Meana & Binik (1994), as did Steege & Ling (1993) in their review of dyspareunia treatments. In their review chapters on the sexual pain disorders and on dyspareunia, specifically, Reid & Lininger (1993) and Quevillon (1993) also stress the benefits of a collaborative effort in the assessment and treatment of coital pain. Although research on the topic remains scarce, it does appear that the need to combine both psychological and gynecological perspectives is gaining wider acceptance, at least in theory.

The fact is that gynecology has been much more active than psychology in the last two years in the study of the possible causes and correlates of certain types of dyspareunia. Vulvar vestibulitis, a chronic inflammation of the vestibular glands associated with painful intercourse, has seen a meteoric rise in research activity of a gynecological nature. At the time of our literature review, there were only a few articles on this condition and a certain degree of hesitancy as to its recognition as a medical condition (Friedrich, 1987; Peckham, Maki, Patterson, & Hafez, 1986; Reid, Greenberg, Daoud, Husain, Selvaggi, Wilkinson, 1988). Diagnosed primarily through the localization of pain to the vulvar vestibule and rarely yielding histopathological findings (Kurman, 1994), it remained a controversial diagnosis.

Two years later, the tide has clearly changed. There have been a number of studies investigating potential etiologic and correlative physiological factors such as auto-immunity, candidiasis and the human papilloma virus (e.g., Bazin, Bouchard,

Brisson, Morin, Meisels, & Fortier, 1994; Marinoff & Turner, 1992; Fitzpatrick, De Lancey, Elkins, & McGuire, 1993; Foster, Robinson & Davis, 1993), although the etiology of vulvar vestibulitis remains unknown. Treatment studies have investigated interferon, calcium citrate, cortisone, muscular biofeedback and surgery (e.g., Bornstein, Pascal, Abramovici, 1993; Glazer, Rodke, Swencionis, Hertz, & Young, 1995; Marinoff, Turner, Hirsch & Richard, 1993; Solomons, Melmed & Heitler, 1991).

It should be noted that, despite the growth in research on vulvar vestibulitis, most of the aforementioned etiological studies are not controlled and have small sample sizes. Much of the research remains at the level of case studies. Furthermore, there have been no randomized controlled treatment studies. Subject selection and outcome criteria remain unclear in most of these studies and measures of pain are relatively primitive.

There have been no published studies on the psychological aspects of either the etiology or treatment of vulvar vestibulitis since the Schover, Youngs & Cannata (1992) study reported in our review. One unpublished study by Weber, Waters, Schover & Mitchinson (1995) found that vaginal anatomy, assessed by length, introital caliber and atrophy, did not correlate well with sexual function, including dyspareunia. These authors suggest that psychosocial factors such as marital satisfaction may be more closely related to sexual function than physical factors.

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### Transition Text 1

The issues raised in the critical literature review guided the design of the study on which the following two manuscripts are based. After confirming that there was no literature on the pain symptomatology of dyspareunia, we decided, as a first step, to document the qualitative and quantitative description of coital pain as well as its characteristics on historical, contextual, temporal, location and interference dimensions. The lack of consistency in the classification of the disorder led us to propose a new atheoretical classification system that brought together all of the intuitively pertinent variables in the literature, except etiology . The next step was to test this classification system against other systems to determine which system and/or variables accounted most accurately for the variation in psychophysiological correlates of dyspareunia. The following manuscript is the result of these investigations.

Running Head: COITAL PAIN

Coital pain in women:  
Sexual dysfunction or pain syndrome?

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## Abstract

This study investigated the clinical attributes of coital pain and the variables used to classify it. A systematic clinical description of the pain symptomatology was obtained through the administration of a structured interview and standardized pain measures to 112 women suffering from coital pain, ranging in age from 19 to 65. Subjects also underwent three different gynecological examinations and completed standardized measures of psychopathology, marital adjustment and sexual attitudes, the results of which were used to test the ability of three different classification systems, including the DSM-IV, to predict physical and psychosocial outcomes. Using classification analysis, temporal pattern and location of the pain were found to be the best predictors of physical diagnoses, although none of the taxa in the three classification systems tested were related to psychosocial outcomes. Sexual impairment of women suffering from coital pain notwithstanding, the results support the consideration of coital pain as primarily a pain syndrome, rather than a sexual dysfunction.

## Coital pain in women: Sexual dysfunction or pain syndrome?

Coital pain, as represented by the sexual pain disorders in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; American Psychiatric Association, 1994), is an interesting example of a woman's health problem misplaced and consequently neglected due to a history of diagnostic confusion and a paucity of controlled research (Meana & Binik, 1994). The current consensus in the gynecological literature is that coital pain not considered a direct symptom of organic disease belongs to psychiatric nosologies (Copeland, 1993). As a matter of fact, coital pain is the only pain in the DSM-IV outside of the somatoform disorders. The psychiatric consensus is that coital pain is a sexual dysfunction, sub-classifiable in the same manner as all other sexual dysfunctions (DSM-IV, 1994). The face validity of its classification as a sexual dysfunction has been so pervasive that, until last year, coital pain was omitted from exhaustive pain classifications (Merskey, 1986). The latest edition of the International Association for the Study of Pain (IASP) Classification of Chronic Pain (Merskey & Bogduk, 1994) is the first to include *pain due to dyspareunia and vaginismus* in its long list of pains. Because no data were available, however, coital pain is not further classified as to its locational and temporal properties, as are most other pains in the IASP classification.

In the DSM-IV, *dyspareunia*, pain associated with sexual intercourse, and *vaginismus*, a putative vaginal muscle spasm that interferes with intercourse, are categorized as two distinct sexual dysfunctions. They are classifiable on historical (lifelong/acquired), contextual (generalized/situational), and etiological (due to psychological factors/due to combined factors) dimensions. The main exclusion criterion is the existence of a general medical condition. As noted by Wincze and

Carey (1991), there are no available studies of the validity of the DSMIII-R or DSM-IV diagnostic system for these or any other sexual dysfunctions. A number of authors have criticized the etiological distinction between psychogenic and organic sub-types as inaccurate and dualistic depictions of complex biopsychosocial problems (LoPiccolo, 1992; Mohr & Beutler, 1990; Meana & Binik, 1994). One response has been to propose more flexible sexual dysfunction classification schemas (e.g. Schover, Friedman, Weiler, Heiman, & LoPiccolo, 1982), and these efforts have resulted in approaches to the classification of sexual dysfunction more sophisticated than those provided by DSM-III or DSM-IV (Rosen & Leiblum, 1995). However, it remains theoretically unclear why coital pain would be better described as a sexual dysfunction than would a low back pain occasioned by intercourse.

There are two theoretical reasons to hypothesize that the sexual dysfunction classification system may not, in fact, describe the clinical properties of coital pain as well as the pain classification system. First, coital pain is the only female sexual dysfunction involving pain. Second, coital pain is the only female sexual dysfunction in which organic factors are hypothesized to play a major role (Rosen & Leiblum, 1995). Given these distinctions, it is not intuitive that the predominantly psychosocial taxa used to sub-type other sexual dysfunctions would be useful in the classification of coital pain. On the other hand, pain classification, with its emphasis on pain symptomatology might be more helpful in identifying sub-types of coital pain.

Excluding etiology, the IASP chronic pain system consists of four taxa (region, system, pattern of occurrence, onset of pain). Only two of these are applicable to the investigation of within-pain group variability; the region of the pain and its onset (for coital pain, the system is invariably *genito-urinary* and the pattern of occurrence is invariably *recurring regularly*). The DSM-IV system consists of a historical taxon, identifying the pain as lifelong or acquired, and a contextual one, identifying the pain

as occurring in all comparable situations (generalized) or only in some clearly defined situations (situational). Meana and Binik (1994) proposed a system for the classification of coital pain that combined the taxa of both the DSM-IV and IASP systems. Etiology was not a taxon of this latter system, as it was argued that an atheoretical approach to the classification of coital pain might be more useful in light of the paucity of etiological research.

The purpose of this study was, thus, two-fold. The first goal was to provide a systematic, clinical description of coital pain with regard to pain symptomatology. Of particular interest were: qualitative/quantitative indices of the pain and descriptions of the pain on historical, contextual, locational, temporal, and interference dimensions.

The second, and main, goal of the study was to examine whether coital pain was better conceptualized as a health/pain problem, akin to headaches or back pain, or as a sexual dysfunction, like primary anorgasmia or inhibited desire. To do this we examined the validity of the DSM-IV classification system for coital pain as compared with the IASP classification system of chronic pain (Merskey & Bogduk, 1994), and the system proposed by Meana and Binik (1994), combining elements of both. Our empirical strategy was to attempt to determine the relationship between the theoretical taxa of these different classification systems for coital pain and the results from three different gynecological examinations and measures of psychopathology, attitudes toward sexuality, relationship adjustment and history sexual abuse. The physical examinations chosen are the three standard non-surgical gynecological procedures available for the investigation of physical conditions commonly associated with coital pain (Meana & Binik, 1994). Our choice of psychosocial indices was dictated by prevailing theories about the psychological etiology of coital pain which center on negative attitudes toward sexuality, traumatic sexual experiences, and relationship maladjustment (e.g., Lazarus, 1989).

By testing the relationship between the theoretical taxa of these classification systems and the empirically derived physical and psychosocial findings in our sample, we attempted to relate classification back to potential etiology. Our hypothesis was that taxa composing the chronic pain classification system would add descriptive and predictive validity to the existing DSM-IV system as reflected in the identification of sub-types of coital pain and in the prediction of physical and psychosocial outcomes.

#### Method

##### Subjects

Subjects were recruited through the publication of two articles on the topic of coital pain which appeared in two different Montreal daily newspapers (one English and one French). There were three exclusion criteria: lack of distress over the pain, generalized pelvic or genital pain not exclusive to intercourse, and pregnancy. Subjects were initially screened over the telephone, and the procedure was explained to them in detail at that time. If interested, they were then given an appointment at the Department of Obstetrics and Gynecology of the Royal Victoria Hospital. Of the 117 women who were given appointments after the telephone screening, five were excluded at the time of testing. Four of these women had genital or pelvic pain at times other than during sexual activity and one elderly woman showed serious signs of dementia during the procedure.

The mean age of subjects was 37.5 years (range = 19-65). Thirty-five percent were between 19-29 years of age, 24% were 30-39, 16% were 40-49, and 25% were 50-65. Forty-eight percent of the subjects were interviewed in English and 52% in French. Seventy-eight percent of the subjects were North American-born, 11% were European, and 11% were born elsewhere. Seventy-one percent were raised Roman

Catholic, 13% Jewish, 7% Protestant, 2% Muslim, 2% Greek Orthodox, and 5% no religion. The religious composition of our sample is representative of the religious composition of the population of Montreal, Canada, as per the latest census (Minister of Industry, Science and Technology, 1991). Forty-six percent of the women in our sample were married; 21% were living with their partners; 19% were regularly dating one partner; and 14% had no partner at the time of their participation in the study. Sixty-three percent were nulliparous; 31% had one or two children; and 6% had more than two children. The mean years of education was 14.67 years ( $sd=.28$ ), the equivalent of one year of undergraduate university.

### Measures

#### Self-Report Measures

Structured Interview. A structured interview was devised for the purposes of the study for the following two reasons; 1) there was no available standardized instrument to investigate some of the questions relevant to the hypotheses, in particular regarding the theoretical taxa and time constraints and 2) time constraints on an already lengthy protocol limited the number of standardized measures we could ask subjects to complete.<sup>1</sup> The interview covered the following areas: socio-demographic information, medical history, description and history of the pain as per the theoretical taxa described above, sexual activity and satisfaction, and history of sexual abuse. The sociodemographic information requested was date and place of birth, religion respondent was brought up in, relationship status, number of children, and number of years of formal education. The medical history section inquired about the menstrual cycle, pregnancy and birthing history, history of vaginal and bladder infections (including STD's), other genital-pelvic conditions, as well as non-gynecologically

related conditions. The coital pain section requested the approximate date on which the pain started, the percentage of times in terms of intercourse episodes that pain was felt, the degree to which the existence or intensity of pain depended on a series of factors/situations, whether the pain was felt with other partners or with other types of penetration/genital stimulation, the onset of the pain within a typical intercourse attempt, the duration of the pain, the location of the pain, and its degree of interference with intercourse. The section on sexuality inquired about the respondent's frequency of intercourse and masturbation, levels of desire, arousal, and aversion, and orgasmic capacity. Sexual abuse was assessed categorically by asking women whether they considered themselves to have been sexually abused either as children or as adults. If they answered in the affirmative, they were then asked if the abuse had involved vaginal penetration.

McGill-Melzack Pain Questionnaire (MPO; Melzack, 1975). The MPQ is both a qualitative and quantitative measure of pain. Respondents were asked to indicate which of 78 adjectives presented accurately described their pain. Three separate scores were obtained for the sensory, evaluative, and affective dimensions of the pain in addition to three major indices: the pain rating index, which is a total pain score taking all the dimensions of the pain into account; the number of words chosen; and the present pain index, which is an indicator of present pain intensity.

Brief Symptom Inventory (BSI; Derogatis, 1982). The BSI is a 53-item measure of psychopathology in which respondents indicated the extent to which they had experienced each of the symptoms presented in the seven days prior, on a continuum from *not at all* to *extremely*. Respondents received scores on nine scales and one overall psychopathology index: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, paranoid ideation, psychoticism, phobia, hostility and a global severity index. Subject scores were computed in reference to female non-

patient norms ( a score of 50 on any scale being the norm and a score of 70 representing the clinical cut-off).

Sexual Opinion Survey (SOS; White, Fisher, Byrne, Kingma, 1977; Fisher, Byrne, White & Kelley, 1988). The SOS is a 21-item measure of the disposition to respond to sexual cues along a negative-positive dimension of affect and evaluation (erotophobia/erotophilia). Each item describes a positive or negative affective-evaluative response to a sexual activity or situation. Respondents indicate agreement-disagreement on a seven-point scale. Scores range from 0 (most erotophobic) to 126 (most erotophilic). The mean score for Canadian female adults is 57.54 (sd. 25.85) (Fisher et al, 1988).

Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959) The short version of the questionnaire consists of 15 items. Six of the items have multiple-choice responses such as: "Have you ever wished you had not married? (a) Frequently, (b) Occasionally, (c) Rarely" Eight items ask the extent of agreement or disagreement on marital issues such as "dealing with in-laws" or "sexual relations" and one item provides a 7-point scale evaluating their feelings about their relationship as very unhappy to perfectly happy. Responses were scored as per the system described by Locke & Wallace (1959), where the norm is 100, and a total score was obtained . For the purposes of this study, we modified the language of the scale to apply to both married and co-habiting couples.

### Physical examinations

The three gynecological procedures performed are standard clinical exams designed to detect different types of pathology, although there is often some overlap.

Standard gynecological examination. This examination involved a standardized visual examination of the vulvar region, palpation of the vulvar, vaginal, and pelvic



regions, and a Q-tip test where a Q-tip is used to exert pressure on a number of sites surrounding the vaginal opening in an attempt to localize entry level pain. Examples of the types of pathology detectable through this procedure are vulvar atrophy, inflammation of vestibular glands, vulvar erosion, scarring from episiotomies, excessively rigid hymen, and congenital anomalies. Because of its reliance on palpation, this exam was useful in the localization of pain to areas demarcable from other structures.

Endovaginal ultrasound. An ultrasound probe was inserted into the vagina emitting sound waves that then reverberated off organs in the abdominal cavity to create an image of the uterus and ovaries on a screen monitor; other structures such as the bladder were also visible. Pathologies this exam detected included certain cases of endometriomas, fibroids, ovarian cysts, and uterine or ovarian atrophy. Although this exam was not as proficient in localizing painful sites as the manual gynecological examination, it did detect excessive tenderness in the uterus, ovaries, and bladder.

Colposcopy. This examination had as its primary aim the detection of abnormal cell growth, primarily in the cervical region. For the purposes of this study, the vulvar region was also closely inspected. After the speculum was inserted, the cervix and the walls of the vagina were treated with an acetowhitening solution that temporarily stained abnormal cell growths or lesions so that they became visible when the area was viewed with a colposcope (a magnifying instrument). Because of the more microscopic nature of this examination, it detected a larger number of conditions than the other two exams. The types of pathology detectable were vulvar erosions or inflammation, vulvar and vaginal atrophy, cervical conditions, condyloma, and abnormal cell changes at the cervical level. Although its major focus was on atypical cell changes, this exam also, localized painful sites.

Cultures. Prior to the manual-visual examination a urine sample was obtained for laboratory examination. At the time of the manual visual examination, smears for the following cultures were obtained: general cervical culture, gonorrhea, ureaplasma/mycoplasma, chlamydia. At the time of the colposcopy, a PAP smear was also taken.

#### Procedure

Upon arrival at the Department of Obstetrics and Gynecology of the Royal Victoria Hospital, women were interviewed individually by a clinically trained interviewer for approximately 45 - 60 minutes. After the interview, they were asked to complete a number of questionnaires dealing with the characteristics of the pain, psychopathology, sexual attitudes and relationship adjustment (see Measures section for list of questionnaires given). Upon completion of the questionnaires, they were asked to empty their bladder for the purposes of the urine culture. They then underwent the standard gynecological examination (including cultures), the endovaginal ultrasound, and finally the colposcopy (including PAP). The entire protocol required approximately 3 hours to complete, including waiting time between examinations. The results of the examinations were then communicated to each subject 3-4 weeks after participation in the study. Although this was not a treatment study, we offered treatment recommendations and made referrals, if necessary, at that time.

The interviewer was blind to the results of each of the three examinations. Each physician was blind both to the subject's responses in the structured interview and questionnaires and to the results of either of the two other examinations. It was, however, impossible for physicians to be blind to whether the subject had penetration

pain or not since women with coital pain often experience significant pain during the examination.

Arriving at a diagnosis for each woman was a two-step process. First, participating physicians were instructed at each gynecological examination (standard, ultrasound, colposcopy), to document all physical findings, without making a judgment as to the relationship of any one physical finding and coital pain. This means that any pathology that showed up on examination was documented, even if it was generally not considered to be pain-related. Since each exam was performed only once by one physician, interrater reliability for the findings of any one gynecological examination could not be measured. However, one very conservative assessment of the reliability of physical findings was to measure interrater reliability between the standard gynecological exam and the colposcopy (the 2 exams that resemble each other most) on the most frequently occurring findings. Despite the fact that these two examinations are markedly different and not designed to detect the same types of pathology, the percentage agreement for the most frequently occurring (>10%) physical findings was 70%.

The second part of the diagnostic process involved making a clinical judgment about which of the physical findings from the three examinations were most likely related to coital pain. Once all exam and culture results were received, a final diagnosis was determined for each woman in the following manner: one participating gynecologist reviewed the results from the three examinations and cultures for each subject and made a clinical judgment about the single most probable cause or primary contributor to coital pain, if any were found. Some pathology was judged to be pain-related and some was not. These judgments were made largely on the basis of gynecological expertise, as there are no well-established rules about what type of pathology leads to coital pain. After all subjects had been examined and all the raw

data collected, we then hired an independent gynecologist, blind to the hypotheses of the study, to review all physical charts, as the participating gynecologist had, and to give her final diagnosis based on the results of the three different gynecological examinations and cultures. This provided us with a direct measure of interrater reliability on the diagnostic decision. The percentage agreement for final diagnoses was 84%, yielding a kappa coefficient of .83 (Cohen, 1960).

## Results

### Overview

After reporting on the relation between the socio-demographic characteristics of our sample and all of our measures, the presentation of results will proceed as follows: First, we will present descriptive statistics on pain symptomatology (qualitative pain descriptors and theoretically derived taxa), physical findings from the examinations and cultures and psychosocial measures. We will then present results examining the relationships between the theoretically derived taxa of coital pain and 1) physical findings and 2) psychosocial findings. Because there is no theoretical ground to posit a relationship between degree of sexual impairment and either classification variables or biopsychosocial correlates, we did not analyze the subjects' level of sexual impairment.

### Covariates

In a preliminary analysis of the data, we performed a series of univariate tests (ANOVAs, chi-squares, Pearson r's) to determine whether there were any significant relationships between any of our measures (pain symptomatology, physical findings, and psychosocial findings) and the socio-demographic composition of our sample (age, language, birthplace, religion, marital status, number of children, and educational

level). There were no significant relations between our measures and the sociodemographic variables, other than the one expected between age and the presence of vulvar/vaginal atrophy, as opposed to other diagnoses,  $F(3,108) = 33.10, p < .001$ .

### Descriptive Statistics

#### Pain Symptomatology

Description of the pain. Coital pain appears to be a pain syndrome comparable to other syndromes on sensory, affective, evaluative, and intensity dimensions of the MPQ (for a comparison with other pains see Table 1). The high scores on pain intensity and the number of words chosen to describe the pain indicate that coital pain is a significant discomfort for these women.

We also analysed the MPQ adjectives most often chosen by subjects to describe their pain. See Table 2 for a comparison to qualitative descriptions of other pains. The sensory profile of coital pain is distinctive relative to other pains. Note also that coital pain sufferers chose no affective adjective more than 30% of the time and chose a larger variety of evaluative adjectives than individuals suffering from other pain syndromes.

Theoretical taxa. The summary of results for theoretical taxa is presented in Table 3. The majority of women in this sample experienced coital pain that was acquired and generalized. The onset of the pain was reported to occur at the moment of penile entry for the majority, however, a significant minority reported it to start only when the penis had fully entered the vaginal canal. The pain during intercourse was experienced in three main areas: the introitus exclusively, inside the vagina exclusively, and both at the introitus and inside the vagina, simultaneously. Most women reported it to last during penetration and for some time after penile exit. In terms of interference

with intercourse, over 50% of the women described it as severe, with a median intercourse frequency of 1.5 times per month.

### Physical Findings

All the women who agreed to participate in the study were successfully examined vaginally, despite the fact that five of them reported having been diagnosed with vaginismus.

All physical findings. Table 4 presents a listing of all pathology found in each of the three examinations, prior to any distinction being made between conditions believed to be coital pain-related or not. Because each exam detects different types of pathology, it is important to note that a woman can show pathology in more than one exam and that one exam can show more than one type of pathology.

Final diagnoses. As described in the Procedure section, a clinical judgment about the most likely cause of or contributor to coital pain was made after reviewing all the physical findings from the three gynecological examinations. These final coital pain-related diagnoses derived from the chart reviews yielded 4 diagnostic groups based on physical findings:

- 1) The first diagnostic group (24%) had no coital pain-related physical findings. The diagnostic specificity of this category of coital pain sufferers involved a complete absence of physical findings on all exams and cultures or the presence of findings judged by the gynecologists to be unrelated to the experience of pain during intercourse. This group would represent those women traditionally judged to have "psychogenic" coital pain.

- 2) The second group (46%) suffered from vulvar vestibulitis. Vulvar vestibulitis is defined as a chronic inflammation of the vestibular glands (small glands located in the posterior of the introitus). The specific diagnostic criteria which led to

this diagnosis were a) severe pain on vestibular touch or attempted entry, b) tenderness to pressure localized within the vulvar vestibule, and c) physical findings confined to vulvar erythema (redness) of various degrees (Friedrich, 1987).

3) The third diagnostic group (13%) that emerged was the vulvar/vaginal atrophy group. The specific diagnostic criteria which led to this diagnosis were a visually detectable impoverishment of skin elasticity and turgor and labial fullness, as well as a visible thinning of the vaginal mucosa, all of which are commonly attributed to estrogen deficiency and linked to coital pain (Bachmann, Leiblum, Kemmann, Colburn, Swarzman, and Shelden, 1984; Khaw, 1992).

4) The fourth group (17%) was mixed. The diagnostic specificity of this group naturally varied as the group was a catch-all for other pain-related conditions. The general diagnostic criterion for inclusion in this group was the presence of physical findings judged to be pain-related that were neither atrophy nor vulvar vestibulitis. This included conditions such as a prolapsed uterus or specific and restricted localization of pain to one structure or site (e.g., tender utero-sacral ligaments).

#### Psychosocial findings

The Brief Symptom Inventory (BSI). Mean scores and standard deviations of women with coital pain on the 9 scales and the global severity scale were as follows: somatization - M=48.13 (sd. 23.59); obsessive compulsive - M=54.70 (sd. 16.71); interpersonal sensitivity - M=50.06 (sd. 22.63); depression - M=51.79 (sd. 21.73); anxiety - M=53.57 (sd. 18.42); hostility - M=46.98 (sd. 24.79); phobic anxiety - M=30.41 (sd. 30.81); paranoid ideation - M=43.65 (sd. 28.35); psychoticism - 36.76 (sd. 32.34); global severity index - M=57.77 (sd. 9.17).

Physical and sexual abuse. Thirty-seven percent of the sample considered themselves to have been sexually abused at some point in their lives. Twenty percent

reported sexual abuse in their childhood, and in 12% of subjects penetration was involved in the abuse. Twenty-three percent reported sexual abuse in their adult life, in 15% of subjects penetration was involved. Six percent reported having suffered sexual abuse both as children and as adults.

Locke-Wallace Marital Adjustment Scale. The mean score was 98.28 (sd. 32.38) and the median was 109.

Sexual Opinion Survey. The mean score was 73.47 (sd.18.08) and the median was 77.0.

#### Relationship between theoretical taxa and diagnostic groups based on physical findings

The following tests involved the three diagnostic groups: vulvar vestibulitis, vulvar/vaginal atrophy, and no pain-related physical findings. We routinely excluded the mixed group, as it was heterogeneous in terms of type of pain-related physical findings, leaving no reason to expect group membership to relate to any other variable. Results are presented before and after the Bonferroni adjustment to illustrate the consistency of results under both conditions.

To test the relationship between theoretically derived taxa (lifelong/acquired, global/situational, onset of the pain, location of the pain, duration of the pain, interference with intercourse) and diagnostic groups, a series of chi-squares were computed. There were no significant between-group differences on whether the pain was lifelong or acquired, global or situational, how long the pain lasted, nor on the degree of interference with intercourse. Without the Bonferroni correction for multiple tests of significance, diagnostic groups differed only on onset of the pain  $\chi^2(2, N = 92) = 26.36, p < .00003$ , and location of the pain,  $\chi^2(12, N = 92) = 45.12, p < .00001$ . With the Bonferroni correction ( $.05/6 = .008$ ), these results remained significant.



The differences between the three diagnostic groups on these two taxa (location and onset) are as follows: 1) Onset of the pain; the vulvar vestibulitis and atrophy groups reported an identical pattern of onset to each other. Ninety-two percent of both groups reported that pain started at entry and 8% that it started only once the penis had fully entered. Seven percent of women with no pain-related physical findings reported the pain to start before penile entry, 44% at the moment of penile entry, and 49% once the penis had fully entered vaginal canal; 2) Location of the pain; the pain reported by the no-pain-related physical findings group were almost equally dispersed among six of the possible seven sites (see Table 3 for a listing of these). Forty-eight percent of the vulvar vestibulitis group reported pain at the entry of the vagina, while 32% reported pain at the entry point and inside the vaginal canal. The other 20% were dispersed among 4 other sites. On the other hand, the atrophy group differed substantially from the vulvar vestibulitis group in terms of location of the pain. Eighty-six percent reported it to be inside the vaginal canal, while the other 14% were equally dispersed between two other sites.

After dummy coding the onset and location variables, discriminant analyses were conducted to test the hypothesis regarding the ability of different classification systems to categorize women as to potential physiological etiologies. Despite large diagnostic group size differences, prior probabilities were assumed to be equal in the classification analysis to ensure a conservative measure of significance.

The discriminant function analysis for the DSM-IV taxonomy yielded one significant function,  $\chi^2(4, N=92)=10.10, p<.05$ , in which only the lifelong/acquired taxon accounted for more than 30% of the variance. The discriminant function for the Meana-Binik taxonomy yielded two significant functions,  $\chi^2(12, N=92)=60.67, p<.001$  and  $\chi^2(5, N=92)=19.95, p<.01$ . On the first function, only onset of the

pain taxa accounted for more than 30% of the variance and on the second function, only location taxa accounted for more than 30% of the variance. The discriminant function for the IASP Classification of Coital Pain taxonomy also yielded two significant functions,  $\chi^2(8, N=92)=53.99, p<.001$  and  $\chi^2(3, N=92)=14.48, p<.01$ . Onset taxa accounted for more than 30% of the variance in the first function and location taxa accounted for more than 30% of the variance in the second function.

The discriminant function analysis also yielded a classification analysis which further examined the ability of the different classifications systems to classify women into their diagnostic groups. The classification scores for the DSM-IV taxonomy (lifelong/acquired, global/situational), the Meana-Binik taxonomy (the afore-mentioned two variables plus onset, location and duration of the pain, and interference with intercourse) and the two relevant taxa from the IASP Classification of Chronic Pain (location and onset) are presented in Table 5. On the basis of the classification variables of each system, the DSM-IV system correctly classified 42% of the women with no pain-related findings, vulvar vestibulitis and atrophy. The Meana-Binik system correctly classified 72% of the women and, with only 2 taxa, the IASP system correctly classified 60%.

Because the atrophy group has the clear confound of age, we conducted a second series of discriminant analyses to examine the classification rates only for women with vulvar vestibulitis and women with no physical findings. In this second series, the DSM-IV system classified correctly at chance levels (53%) while the Meana-Binik system correctly classified 81% of the women in these 2 groups and the IASP Classification of Chronic Pain performed almost as well as the Meana-Binik system, correctly classifying 79% of individual cases.

Relation between theoretical taxa and psychosocial findings

Univariate tests (ANOVA's and chi-squares) were conducted to determine the relation between the theoretical taxa and measures of psychopathology, sexual abuse, relationship adjustment and attitudes toward sexuality. Before the Bonferroni correction, there were only four significant findings: Women whose pain was situational scored higher on the obsessive-compulsive scale of the BSI,  $F(1,108) = 4.29, p < .04$ ; women whose coital pain was acquired scored higher on the anxiety scale,  $F(1,108) = 7.26, p < .008$ ; and women who reported the pain to last from before penile-vaginal contact to some time after penile withdrawal scored higher on the Global Severity Index,  $F(1,108) = 3.87, p < .02$  and had a lower marital adjustment score,  $F(2,74) = 4.37, p < .02$ . After the Bonferroni adjustment for multiple tests, however, these 4 isolated results were no longer significant. Thus, no single theoretical taxon appeared to have a significant relationship to the measures of psychopathology, marital adjustment, history of abuse and sexual attitudes used in this study.

Eleven stepwise multiple regressions were performed between the complete set of dummy coded taxa and the nine scales of the BSI, the global severity index of the BSI, and marital adjustment as the dependent variables.  $R$  was not significantly different from zero for any of these regressions.

Discriminant analyses were conducted to test the hypothesis regarding the ability of different classification systems to categorize women as to history of sexual abuse. On the basis of the classification variables of each system, no system was able to classify women as to whether or not they had been sexually abused as children. However, in terms of adult sexual abuse, the Meana-Binik system correctly classified 74% of the women, the DSM-IV system correctly classified 73% and the IASP system

correctly classified 80%. More pointedly, the taxa which accounted for more than 30% of the variance in both the Meana-Binik system function [ $\chi^2(6,N=112)=21.72$ ,  $p<.01$ ] and in the IASP system function [ $\chi^2(3,N=112)=15.02$ ,  $p<.01$ ] were onset of the pain before actual contact with male genitalia and coital pain located in the pelvic area.

### Discussion

This clinical description suggests that coital pain is comparable to other pain syndromes on a number of dimensions. It is an acute, recurrent pain eliciting a wealth of descriptors and characterized by a reported intensity that surpasses a number of recognized pain syndromes. It appears to be mostly acquired and generalized, although there is substantial variation in the temporal pattern and location of the pain. The interference of coital pain with intercourse is also reported to be mostly severe. The physical profile of this sample suggests that coital pain may be a heterogeneous disorder, yielding at least three different diagnostic groups: vulvar vestibulitis, vulvar/vaginal atrophy, and no apparent physical findings. A fourth mixed group was too heterogeneous to constitute a separate analyzable category, but a larger sample could yield more diagnostic groups. As to psychosocial factors, our sample did not appear to differ from the norms available on psychopathology, marital adjustment, attitudes toward sexuality, and self-identification as having been sexually abused, (Feldman, Feldman, Goodman, McGrath, Pless, Corsini, & Bennett, 1991; Finkel, 1994), although comparison with matched controls would be necessary for an empirically-based psychosocial description of women who suffer from coital pain. An

investigation of the sexual disability of these women would also require comparison to matched controls.

As to the relationship between theoretical taxa and either physical or psychological findings, no single taxon predicted psychosocial findings and only onset and location of the pain differentiated between empirically derived diagnostic groups based on physical findings. When the taxa were assembled as per the different classification systems to allow for inter-correlations, our hypothesis that taxa used in the classification of pain would add predictive power to the existing sexual dysfunction taxa (DSM-IV) was confirmed in regards to physical findings. The DSM-IV classification performed poorly compared to the Meana-Binik system, although location and onset of the pain alone accounted for much more of the variance in physical findings than was expected. More pointedly, when the classification systems were tested on their ability to distinguish women with no physical findings from women with vulvar vestibulitis, the IASP two-taxa pain classification system performed as well as the six-taxa Meana-Binik system, while the DSM-IV sexual dysfunction classification did not perform as well as either. Pelvic pain during intercourse and onset of the pain before intercourse also accounted for most of the variance in the relationship between classification systems and adult sexual abuse, indicating that location and onset of the pain may be at least as related to some psychosocial factors as other taxa. This finding also confirms reports linking sexual abuse with pelvic pain, specifically (Toomey, Hernandez, Gittelman, & Hulka, 1993).

In clinical terms, this implies that knowing whether a woman's coital pain is lifelong or acquired, generalized or situational indicates very little about potential physical pathology, psychopathology, marital distress, sexual attitudes or a history of abuse. Clearly these variables address questions that seem intuitively relevant in the assessment and treatment of these women. However, we currently have no empirical

reason to believe the answers relate back to major biopsychosocial factors. The taxa that best informed potential etiology in our study were the location and temporal pattern of the pain. Yet, these variables have been almost absent from the literature on the sexual pain disorders (Meana & Binik, 1994).

The explanation for this omission is a classification issue. The DSM-IV essentially defines the pain in question exclusively in terms of the common denominator activity that triggers it: intercourse. It has come to be classified as a sexual dysfunction rather than a clinical pain syndrome. It is the equivalent of labelling any variety of back ailments, "a lifting-heavy-objects disorder." Although it is assumed that women with coital pain are sexually impaired to varying degrees, the emphasis on sexual dysfunction adds little to our understanding of this disorder.

Furthermore, the consequences of this emphasis are major. First, the sexual act, unlike the act of lifting heavy objects, is culturally sensitive and has long proven fertile ground for the development of psychological theories unsupported by empirical data (Foucault, 1978; Kaplan, 1983; Wakefield, 1992). Second, the definition of this pain exclusively through its association with intercourse has prevented classification according to the most logical question of someone in pain; "where does it hurt?" Unprompted, women in our study answered that question in one of seven different ways and their answers were the best predictors of physical findings upon examination. The female genital and pelvic area is, indeed, characterized by a variety of structures and mucosa with markedly different innervation and musculature, sensitive to different types of pathogens (Copeland, 1993; Kurman, 1994). Furthermore, the majority of women in our study reported pain with gynecological examinations and in a variety of other contexts unrelated to sexual intercourse. Third, this conceptualization of coital pain risks burdening these women with the stigma of

sexual inadequacy, when they could be considered as suffering from a pain syndrome that interferes with a certain activity, as many pain syndromes do.

If we were to consider pain associated with intercourse of unknown etiology simply as a pain syndrome like migraine or chronic low back pain, we would be closer to escaping the forced choice paradigm of dualistic approaches to etiology. For example, vulvar vestibulitis, the largest of our diagnostic groups, is currently a diagnosis based primarily on the localization of pain to a very small and specific site. Despite the fact that the etiology of vulvar vestibulitis is unknown, gynecologists now recognize it as a medical condition (Friedrich, 1987; Marinoff & Turner, 1992; Mann, Kaufman, Brown, & Adam, 1992). Ten years ago, women with vulvar vestibulitis would have been considered cases of "psychogenic dyspareunia" and, without clear histopathological findings, it is unclear why gynecology has changed its stance or whether it will revert back in the future. As Spitzer & Williams (1990) note, "face validity is directly proportional to the number of approving faces" (p. 593). An etiologically based classification, or even etiologically based exclusion criteria, for a diagnostic category that, to date, has demonstrated only face validity seems premature.

A number of limitations of this study should be noted. The first of these is the possibility of a sampling artefact. The women in our study volunteered mostly out of a desire to discover the "cause" of their pain and any available treatments. This means that women who felt they knew for certain what was causing their pain probably did not volunteer for the study. Second, judging from their educational profile, our sample was characterized by a high socio-economic status. Although there have been some suggestions that the prevalence of coital pain is higher in low socio-economic groups (Fordney-Settlage, 1975), there is no reason to believe that the typology of coital pain therein would be any different. Third, while all efforts were taken to standardize gynecological examination procedures and final diagnoses derived from

chart reviews were conducted by two independent raters, we were not able to have each examination conducted twice by different physicians. There are clearly ethical concerns about the number of gynecological examinations to which you can submit women for whom these examinations are generally painful and psychologically distressing. Finally, some of our measures could be improved. In addition to qualitative and quantitative retrospective self-report of pain, it would be useful to measure pain during actual gynecological palpation and through a daily sampling methodology. There is little question that we also need a more in-depth analysis of sexual abuse, as well as the role of the partner. Finally, our measures of psychopathology and relationship adjustment were brief and could be expanded.

This clinical description of coital pain and the issues addressed concerning its traditional classification raise numerous questions to guide future research. If we were to consider the sexual pain disorders as pain syndromes, it would become imperative for future research to compare coital pain to other pains, not just descriptively, as we have done, but in terms of a host of biopsychosocial relationships. Furthermore, if coital pain is in fact heterogeneous, as our 3 diagnostic groups suggest, the differences and similarities between these groups could provide key guiding hypotheses in etiological searches and prove to be important determinants of differentiated treatment strategies to improve the physical and psychological health of this largely untreated group of women in pain.



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Footnote

<sup>1</sup> Copies of the structured interview are available from the corresponding author.

Table 1. Comparison of Clinical Pain Syndromes on MPQ Scales

| Pain syndrome | N   | Mean Age | Mean pain intensity | Mean pain rating index | Mean # of words chosen | Sensory dimension mean | Affective dimension mean | Evaluative dimension mean |
|---------------|-----|----------|---------------------|------------------------|------------------------|------------------------|--------------------------|---------------------------|
| Coital pain   | 112 | 37       | 3.3                 | 24.1                   | 12.0                   | 14.6                   | 2.2                      | 2.7                       |
| Phantom limb  | 6   | 54       | 3.0                 | 25.0                   | 8.3                    | 17.2                   | 3.2                      | 3.3                       |
| Cancer        | 16  | 56       | 2.8                 | 26.0                   | 8.8                    | 17.3                   | 2.3                      | 4.1                       |
| Back pain     | 14  | 48       | 2.6                 | 26.3                   | 10.9                   | 14.0                   | 3.5                      | 3.3                       |
| Dysmenorrhea  | 25  | 20       | 2.4                 | 17.5                   | 6.7                    | 12.6                   | 2.4                      | 2.5                       |
| Arthritis     | 19  | 55       | 1.9                 | 18.8                   | 8.1                    | 10.3                   | 2.5                      | 1.9                       |

*[Data for other pain syndromes obtained from Melzack (1975) and Melzack, & Katz (1992).]*

Table 2. Descriptive Characteristics of Clinical Pain Syndromes  
 (Only those words chosen by more than one-third of the patients are listed, and the percentage of patients who chose each word are shown below the word.)

| Dysmenorrhea       | Labour pain         | Cancer pain         | Phantom limb pain | Postherpetic pain   | Coital pain         |
|--------------------|---------------------|---------------------|-------------------|---------------------|---------------------|
| <b>Sensory</b>     |                     |                     |                   |                     |                     |
| Cramping<br>(44%)  | Cramping<br>(82%)   | Shooting<br>(50%)   | Stabbing<br>(50%) | Sharp<br>(84%)      | Burning<br>(51%)    |
| Aching<br>(44%)    | Sharp<br>(64%)      | Sharp<br>(50%)      | Cramping<br>(50%) | Tender<br>(83%)     | Sore<br>(49%)       |
|                    | Shooting<br>(46%)   | Gnawing<br>(50%)    | Burning<br>(50%)  | Pulling<br>(67%)    | Sharp<br>(43%)      |
|                    | Aching<br>(46%)     | Burning<br>(50%)    | Aching<br>(38%)   | Aching<br>(50%)     | Tender<br>(39%)     |
|                    | Pounding<br>(37%)   | Heavy<br>(50%)      | Sharp<br>(38%)    |                     | Aching<br>(32%)     |
|                    | Stabbing<br>(37%)   | Throbbing<br>(38%)  |                   |                     |                     |
| <b>Affective</b>   |                     |                     |                   |                     |                     |
| Sickening<br>(56%) | Exhausting<br>(46%) | Exhausting<br>(50%) | Tiring<br>(50%)   | Tiring<br>(50%)     |                     |
| Tiring<br>(44%)    | Tiring<br>(37%)     |                     |                   | Exhausting<br>(38%) |                     |
|                    | Fearful<br>(36%)    |                     |                   | Cruel<br>(38%)      |                     |
| <b>Evaluative</b>  |                     |                     |                   |                     |                     |
|                    | Intense<br>(46%)    | Unbearable<br>(50%) |                   |                     | Annoying<br>(34%)   |
|                    |                     |                     |                   |                     | Miserable<br>(33%)  |
|                    |                     |                     |                   |                     | Unbearable<br>(31%) |

[Data for other pain syndromes obtained from Melzack & Katz (1992)]



Table 3. Summary of Theoretical Taxa Results (N=112)

|                                     |     |  |                     |
|-------------------------------------|-----|--|---------------------|
| <u>Historical</u>                   |     | <u>Temporal Pattern</u>  |                     |
| Lifelong                            | 35% | Onset of pain  |                     |
| Acquired                            | 65  | • before penile entry  | 2%                  |
| <u>Generalized/Situational</u>      |     | • at moment of penile entry  | 72                  |
| Generalized                         | 70% | • once penis fully entered   | 25                  |
| Situational                         | 30: | • after penis withdrawal   | 1                   |
| Pain with all partners              | 76% | <u>Duration of pain</u>  |                     |
| No pain with some                   | 24  | • before, during & after exit  | 2%                  |
| Mean % of attempts that are painful | 88% | • during penile thrusting only   | 38                  |
| <u>Pain with:</u>                   |     | • during penile thrusting & after  | 60                  |
| friction of clothing                | 21% | <u>Interference</u>  |                     |
| urination                           | 18  | <u>Interference with intercourse</u><br>(1-mild / 2-moderate / 3-severe) |                     |
| tampon insertion                    | 33  | • mild   | 12%                 |
| finger insertion                    | 45  | • moderate   | 35                  |
| manual stimulation                  | 21  | • severe   | 53                  |
| gynecological exam                  | 66  | <u>Intercourse frequency</u>   |                     |
| <u>Location</u>                     |     | mean   | 3.7 times per month |
| • introitus only                    | 29% | median   | 1.5 times per month |
| • inside vagina only                | 22  |  |                     |
| • pelvic area only                  | 6   |  |                     |
| • introitus & inside vagina         | 31  |  |                     |
| • introitus & pelvic area           | 1   |  |                     |
| • inside vagina & pelvic area       | 5   |  |                     |
| • introitus, vagina & pelvic area   | 4   |  |                     |

Table 4 . Summary of Physical Findings\*\*

| Standard gynecological exam<br>(N= 110) |     | Ultrasound<br>(N=110)            |     | Colposcopy<br>(N=108)            |     | Cultures<br>(N=99) |     |
|---|-----|----------------------------------|-----|----------------------------------|-----|--------------------|-----|
| Vulvar vestibulitis                     | 45% | No findings                      | 70% | Vulvar vestibulitis              | 33% | Gardnerella        | 18% |
| No findings                             | 29  | Fibroids                         | 15  | No findings                      | 32  | Ureaplasma         | 16  |
| Vulvar atrophy                          | 11  | Ovarian cystt                    | 8   | Vulvar erosion/<br>derm.prob.    | 12  | Yeast infection    | 5   |
| Tender bladder/urethra                  | 6   | Uterine/ovarian<br>atrophy       | 7   | Cervical eversion                | 9   | Urine infection    | 4   |
| Erythema                                | 5   | Tender bladder                   | 1   | Vaginal atrophy                  | 7   | Atypical PAP       | 4   |
| Muscle contraction                      | 4   | Tender utero-sacral<br>ligaments | 1   | Cervical inflammation            | 5   | Mycoplasma         | 1   |
| Vulvar erosion                          | 2   | Tender ovaries                   | 1   | Cervical polyp                   | 3   | Chlamydia          | 1   |
| Fibroid (very large)                    | 1   |                                  |     | Monolilial vaginitis             | 2   |                    |     |
| Tender utero-sacral<br>ligaments        | 2   |                                  |     | Erythema                         | 2   |                    |     |
| Tender uterus                           | 1   |                                  |     | Prolapsed uterus                 | 2   |                    |     |
| Ovarian cyst (very large)               | 1   |                                  |     | Endometriosis                    | 2   |                    |     |
| Scarring                                | 1   |                                  |     | Congenital anomaly               | 1   |                    |     |
|   |     |                                  |     | Fibroid (very large)             | 1   |                    |     |
|   |     |                                  |     | Condyloma                        | 1   |                    |     |
|   |     |                                  |     | Squamous metaplasia              | 1   |                    |     |
|   |     |                                  |     | Tender bladder                   | 1   |                    |     |
|   |     |                                  |     | Tender uterus                    | 1   |                    |     |
|   |     |                                  |     | Tender utero-sacral<br>ligaments | 1   |                    |     |

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\*\*The N's for exams differ because a 2 women did not undergo the standard gynecological exam, 2 did not indergo the ultrasound exam and 4 did not undergo the colposcopy for reasons relating to scheduling difficulties. Complete culture sets were not available for all women due to the reasons above and contaminated results.

Table 5. Classification Tables from Discriminant Analyses for Diagnostic Groups Using Three Classification Systems

## DSM-IV System (historical, contextual)

|                             |    | Predicted group membership |      |    |      |    |      |
|-----------------------------|----|----------------------------|------|----|------|----|------|
|                             |    | 1                          |      | 2  |      | 3  |      |
| Actual Group                | n  | n                          | %    | n  | %    | n  | %    |
| 1. No pain-related findings | 27 | 11                         | 40.7 | 3  | 11.1 | 13 | 48.1 |
| 2. Vulvar vestibulitis      | 52 | 12                         | 23.1 | 18 | 34.6 | 22 | 42.3 |
| 3. Atrophy                  | 13 | 2                          | 15.4 | 1  | 7.7  | 10 | 76.9 |

*Note.* The percentage of "grouped" cases correctly classified on the basis of this system was 42.4%. Correct classifications appear on the diagonal.

## Meana &amp; Binik System (historical, contextual, locational, temporal-onset, temporal-duration, and interference)

|                             |    | Predicted group membership |      |    |      |    |      |
|-----------------------------|----|----------------------------|------|----|------|----|------|
|                             |    | 1                          |      | 2  |      | 3  |      |
| Actual Group                | n  | n                          | %    | n  | %    | n  | %    |
| 1. No pain-related findings | 27 | 19                         | 70.4 | 4  | 14.8 | 4  | 14.8 |
| 2. Vulvar vestibulitis      | 52 | 6                          | 11.5 | 37 | 71.2 | 9  | 17.3 |
| 3. Atrophy                  | 13 | 1                          | 7.7  | 2  | 15.4 | 10 | 76.9 |

*Note.* The percentage of "grouped" cases correctly classified on the basis of this system was 71.7%.

(table continued)

(Table 5 continued...)

## IASP Classification of Chronic Pain System (locational, temporal-onset)

| Actual Group                | n  | Predicted group membership |      |    |      |    |      |
|-----------------------------|----|----------------------------|------|----|------|----|------|
|                             |    | 1                          |      | 2  |      | 3  |      |
|                             |    | n                          | %    | n  | %    | n  | %    |
| 1. No pain-related findings | 27 | 20                         | 74.1 | 3  | 11.1 | 4  | 14.8 |
| 2. Vulvar vestibulitis      | 52 | 11                         | 21.2 | 24 | 46.2 | 17 | 32.7 |
| 3. Atrophy                  | 13 | 1                          | 7.7  | 1  | 7.7  | 11 | 84.6 |

*Note.* The percentage of "grouped" cases correctly classified on the basis of this system was 60.0%.

## Transition Text 2

Nine months into the testing of women with dyspareunia, we started testing no-pain control subjects. Having investigated questions exclusively related to women with dyspareunia, we were then in a position to start comparing these women with no-pain controls on a number of factors hypothesized in the literature to be of etiological relevance. The literature review had yielded four general sets of etiological hypotheses: physical pathology, psychological distress/psychopathology, relational adjustment and history of physical/sexual abuse. These became the major variables on which groups were compared in search of empirically-derived etiological hypotheses. We also compared groups on measures of sexuality. The following manuscript is the result of these investigations.

Running Head: DYSPAREUNIA ETIOLOGY

Biopsychosocial Profile of Women with Dyspareunia and Matched Controls:  
Searching for Etiological Hypotheses

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## Abstract

In a biopsychosocial investigation of the etiology of dyspareunia, 105 women with dyspareunia, ranging in age from 19 to 65 were compared with 105 matched no-pain controls on the results of three different gynecological examinations, standardized measures of psychopathology, relationship adjustment, sexual attitudes and a structured interview investigating medical history, sexual function, and history of physical and sexual abuse. The entire sample of dyspareunia sufferers, as a whole, had significantly higher levels of physical pathology, psychopathology, relationship maladjustment, and sexual dysfunction, as well as more negative attitudes toward sexuality. However, when dyspareunia sub-types (no physical findings, vulvar vestibulitis, vaginal atrophy, mixed findings), were compared to their respective sets of controls, the no physical findings sub-type was the one to differ most from its controls on psychosocial factors while the vulvar vestibulitis group differed most from its controls on measures of sexual function. The implications of these results are discussed in support of a differentiated approach to the study of pain during intercourse.

Biopsychosocial Profile of Women with Dyspareunia and Matched Controls:  
Searching for Etiological Hypotheses

Dyspareunia, or pain associated with penile-vaginal intercourse, has the distinction of being the only pain listed in the DSM-IV (DSM-IV; American Psychiatric Association, 1994), outside of the somatoform disorders. It is a problem experienced predominantly by women (Rosen & Leiblum, 1995) and appears to be common, with a community prevalence estimated at 10% to 15% (Laumann, Gagnon, Michael & Michaels, 1994; Rosen, Taylor, Leiblum & Bachmann, 1993). Since the earliest recorded description of its clinical features in ancient Egypt, dyspareunia has been described and categorized in a variety of ways [c.f. Meana & Binik, (1994) for a review]. Current conceptualizations range from considering dyspareunia a sexual dysfunction (DSM-IV) to considering it either a symptom of identifiable organic disease or a psychiatric symptom (Copeland, 1993; Kurman, 1994). For reasons which are not clear, the International Association for the Study of Pain (IASP) has only just included it in its latest classification of pain, albeit with no description of its clinical characteristics (Merskey & Bogduk, 1994).

Our review of the clinical and research literature concerning dyspareunia strongly suggests that the symptomatology of the pain has been systematically overlooked, with proposed classifications being largely etiological and dualistic, emphasizing the distinction between psychological cases and physical ones (Meana & Binik, 1994). The major etiological determinants invoked in the literature we reviewed were divided along the dualistic schema of physical causes versus psychological ones. In the physical camp, a wide variety of factors such as pelvic inflammatory disease, vulvar vestibulitis, endometriosis, scarring, lubrication failure, atrophy, vaginal



infections (including sexually transmitted diseases), and condyloma (genital warts) have been proposed (Sandbergh & Quevillon, 1987; Steege & Ling, 1993; Abarbanel, 1978; Bachmann, Leiblum, Kemmann, Colburn, Schwarzman, & Shelden, 1984). The predominant psychological factors in the literature on the etiology of dyspareunia have been general psychopathology (with an emphasis on phobic anxiety and somatization), negative attitudes toward sexuality, relationship conflicts, and sexual abuse (Kaplan, 1984; Steege, 1984; Lazarus, 1989; Rosen & Leiblum, 1995; Sotile & Kilmann, 1977). Amidst the theorizing, there exists very little controlled research covering the symptomatology, classification, etiology or treatment of this apparently common problem (Meana & Binik, 1994).

In a recent study, we investigated the relation between classification variables and physical and psychosocial findings in a group of 112 women presenting with dyspareunia (Meana, Binik, Khalife & Cohen, 1995). We tested three different classification systems as to their ability to predict the type of physical findings found upon gynecological examination, as well as measures of psychopathology, sexual attitudes, marital adjustment, and history of sexual abuse. The three classification systems tested were the DSM-IV sexual dysfunction system which focuses on historical and contextual aspects of pain occurrence, the IASP Classification of Chronic Pain (Merskey & Bogduk, 1994) which focuses on the location and temporal pattern of the pain, and the Meana-Binik coital pain classification system, which combines elements of both (Meana & Binik, 1994).

The results showed that no single classification variable of any of these systems was related to psychosocial findings. However onset and location of the pain differentiated women found to have vulvar/vaginal atrophy upon gynecological examination from women with vulvar vestibulitis (a chronic inflammation of the vulvar vestibule) from women in whom no physical pathology was detected during the

examination. Furthermore, when these classification variables were assembled as per their respective classification systems to allow for intercorrelations, the DSM-IV system performed poorly in the prediction of physical findings compared to the Meana-Binik (Meana & Binik, 1994) and IASP (Merskey & Bogduk, 1994) systems. Location of the pain and its onset within any one episode of intercourse, neither of which are included in the DSM-IV classification, clearly accounted for most of the variance in the prediction of physical findings. Interestingly, the IASP classification system performed better than either of the other two systems even in the identification of women who had been sexually abused, a psychosocial variable.

The study thus tendered two major conclusions: First, it suggested that dyspareunia might be a heterogeneous disorder with, at least, three distinct sub-types based on physical findings upon examination: vulvar vestibulitis, vulvar/vaginal atrophy, and no detectable physical findings. Second, it suggested that the traditional conceptualization and classification of dyspareunia as a sexual dysfunction might be less faithful to the clinical features of the disorder than its conceptualization as a pain syndrome.

Having investigated the symptomatology of dyspareunia and its relation to biopsychosocial correlates within a pain sample, we then decided to test the major etiological hypotheses in the literature through a controlled comparison. The following study compared 105 matched no-pain controls to 105 of the women with dyspareunia in the Meana et al (1995) study on physiological findings upon examination and on a number of self-report measures relating to medical history, psychopathology, attitudes toward sexuality, sexual functioning, relationship adjustment, and physical and sexual abuse. Our hypotheses were guided by the etiological theories in the literature and by the findings of the first study regarding the heterogeneity of dyspareunia and its likeness to a pain syndrome rather than a psychosexual dysfunction. In terms of the

differences between the entire sample of women with dyspareunia and controls, we predicted, based on the existing etiological literature, 1) that the sample with dyspareunia would have more physical pathology upon examination; 2) that they would score higher on measures of psychopathology; 3) that there would be more sexual abuse in the histories of women with dyspareunia; 4) that they would report lower levels of relationship adjustment and; 5) that they would be more sexually dysfunctional.

Based on the findings of the Meana et al (1995) study, we predicted that these hypothesized differences between the undifferentiated group of women with dyspareunia and controls would not all generalize to comparisons of sub-types with their matched controls. More specifically we made the following predictions about the dyspareunia sub-type/control dyads: 1) that all subtypes, with the exception of the one with no detectable physical findings, would have more physical findings upon gynecological examination than controls; 2) that the sub-type with no detectable physical findings would be the only sub-type to have higher levels of psychopathology, lower levels of relationship adjustment, more negative attitudes about sexuality, and a higher incidence of sexual abuse in their past than their set of controls; 3) that all subtypes would report higher levels of sexual impairment than their controls.

## Method

### Subjects

Recruitment. For a description of the recruitment of women with dyspareunia see Meana et al (1995). The recruitment of no-pain controls was started 9 months after the recruitment of the pain sample. No-pain controls were recruited through the

publication of paid advertisements in the same two newspapers that had originally carried the articles on dyspareunia used to recruit the pain sample. The ads briefly explained the procedure and offered \$50.00 payment plus a comprehensive gynecological check-up to prospective participants. Women who called were asked first, if they currently experienced pain with intercourse and second, if they had ever experienced pain with intercourse for a period of a month or more. Women who answered yes to either of these two questions were excluded from participation. Pregnancy was the other exclusion criterion. After the telephone screening, during which the procedure was explained in detail, appointments were made at the Department of Obstetrics and Gynecology, Royal Victoria Hospital, for those callers who were still interested. Appointments were made for 120 women.

Matching. Of the 120 no-pain controls tested, we were able to match 105 of them with 102 of the women with dyspareunia tested in the Meana et al study (1995) and three new dyspareunia subjects on the following five variables: language of the interview (French or English), age (within 5 years), relationship status (single, dating, married/cohabiting), whether or not they had given birth, and whether they were pre- or post- menopausal. The rationale for the choice of matching criteria was as follows: We matched for language of the interview to control for the possible effect of culture on sexual attitudes, symptom reporting, and reporting of sexual abuse, all of which have been hypothesized to be culture-linked (Suggs & Miracle, 1993; Canino, Rubio-Stipec, Canino, & Escobar, 1992; Fabrega, 1992; Gaston-Johansson, Albert, Fagan, & Zimmerman, 1990). Within the bi-cultural context of Quebec society, language of the interview was the most efficient, albeit gross, way of controlling for this factor. Age was chosen to control for both generational differences in sexual functioning, sexual attitudes, and reporting of sexual abuse as well as lifespan changes in physiology, sexual functioning and attitudes. Whether or not women had had children

served as a control for etiological hypotheses relating to the normal process of birth and its occasional complications (e.g., prolapsed uterus, episiotomy scars, etc.)

(Bachmann, 1986; Schellen, 1983). The pre- post-menopausal matching criterion was included to control for the hypothesized effect of hormonal changes on mood and the physical condition of the vulvar/vaginal area (Best, Rees, Barlow, & Cowen, 1992; Sherwin, 1988; Bachmann, Leiblum, Kenmann, Colburn, Schwarzman, & Shelden, 1984; Khaw, 1992). Finally, we matched relationship status to control for the effect of the availability of a partner on measures of sexual activity.

Subject characteristics. Because of our matching procedure, there were no significant differences between the dyspareunia sample and the no-pain control sample on the matching variables. There were group differences on two non-matched variables: birthplace  $\chi^2 (2, N=210) = 6.60, p < .04$  and religion  $\chi^2 (3, N=210) = 12.40, p < .01$ . The dyspareunia group had more subjects born in places other than North America or Europe and more subjects with a Catholic upbringing than the no-pain control group. Neither of these two variables, however, had a significant pattern of relation to any of the dependent measures (see Table 1 for the descriptive characteristics of the sample).

## Measures

### Self-Report Measures

Structured Interview. A structured interview was devised for the purposes of the study for the following two reasons; 1) there was no available standardized instrument to investigate some of the questions relevant to the hypotheses and 2) time constraints on an already lengthy protocol limited the number of standardized measures we could ask subjects to complete.<sup>1</sup> The interview covered the following areas: socio-

demographic information, medical history, description and history of the pain (for coital pain subjects only), sexual activity and satisfaction, and history of physical and sexual abuse. The sociodemographic information requested was date and place of birth, religion respondent was brought up in, relationship status, number of children, and number of years of formal education. The medical history section inquired about the menstrual cycle, pregnancy and birthing history, history of vaginal and bladder infections (including STD's), other genital-pelvic conditions, as well as non-gynecologically related conditions. The coital pain section was not administered to control subjects and will not be described here. The section on sexuality inquired about the respondent's frequency of intercourse and masturbation, levels of desire, arousal, and aversion, and orgasmic capacity. Sexual abuse was assessed categorically by asking women whether they considered themselves to have been sexually abused either as children or as adults. If they answered in the affirmative, they were then asked if the abuse had involved vaginal penetration.

Brief Symptom Inventory (BSI;Derogatis,1982). The BSI is a 53-item measure of psychopathology in which respondents indicated the extent to which they had experienced each of the symptoms presented in the seven days prior, on a continuum from *not at all* to *extremely*. Respondents received scores on nine scales and one overall psychopathology index: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, paranoid ideation, psychoticism, phobia, hostility and a global severity index. Subject scores were computed in reference to female non-patient norms (a score of 50 on any scale being the norm and a score of 70 representing the clinical cut-off).

Sexual Opinion Survey (SOS;White, Fisher, Byrne, Kingma, 1977; Fisher, Byrne, White & Kelley, 1988). The SOS is a 21-item measure of the disposition to respond to sexual cues along a negative-positive dimension of affect and evaluation

(erotophobia/erotophilia). Each item describes a positive or negative affective-evaluative response to a sexual activity or situation. Respondents indicate agreement-disagreement on a seven-point scale. Scores range from 0 (most erotophobic) to 126 (most erotophilic). The mean score for Canadian female adults is 57.54 (sd. 25.85) (Fisher et al, 1988).

Locke-Wallace Marital Adjustment Scale (Locke & Wallace, 1959). The short version of the questionnaire consists of 15 items. Six of the items have multiple-choice responses such as: "Have you ever wished you had not married? (a) Frequently, (b) Occasionally, (c) Rarely" Eight items ask the extent of agreement or disagreement on marital issues such as "dealing with in-laws" or "sexual relations" and one item provides a 7-point scale evaluating their feelings about their relationship as very unhappy to perfectly happy. Responses were scored as per the system described by Locke & Wallace (1959), where the norm is 100, and a total score was obtained. For the purposes of this study, we modified the language of the scale to apply to both married and co-habiting couples.

Sexual Activity Questionnaire (Ochs, Meana, Pare, Mah & Binik, 1994). This questionnaire consists of a list of 44 descriptions of non-penetrative foreplay activities and 24 illustrations of different intercourse positions. Respondents are asked to answer "yes" or "no" to whether they have engaged in the listed activity or intercourse position. For the purposes of this study, respondents were asked to endorse only those activities and positions in which they had engaged over the last six month period.

### Physical examinations

The three gynecological procedures performed are standard clinical exams designed to detect different types of pathology, although there is often some overlap.

Standard gynecological examination. This examination involved a standardized visual examination of the vulvar region, palpation of the vulvar, vaginal, and pelvic regions, and a Q-tip test where a Q-tip is used to exert pressure on a number of sites surrounding the vaginal opening in an attempt to localize entry level pain. Examples of the types of pathology detectable through this procedure are vulvar atrophy, inflammation of vestibular glands, vulvar erosion, scarring from episiotomies, excessively rigid hymen, and congenital anomalies. Because of its reliance on palpation, this exam was useful in the localization of pain to areas demarcable from other structures.

Endovaginal ultrasound. An ultrasound probe was inserted into the vagina emitting sound waves that then reverberated off organs in the abdominal cavity to create an image of the uterus and ovaries on a screen monitor; other structures such as the bladder were also visible. Pathologies this exam detected included certain cases of endometriomas, fibroids, ovarian cysts, and uterine or ovarian atrophy. Although this exam was not as proficient in localizing painful sites as the manual gynecological examination, it did detect excessive tenderness in the uterus, ovaries, and bladder.

Colposcopy. This examination had as its primary aim the detection of abnormal cell growth, primarily in the cervical region. For the purposes of this study, the vulvar region was also closely inspected. After the speculum was inserted, the cervix and the walls of the vagina were treated with an acetowhitening solution that temporarily stained abnormal cell growths or lesions so that they became visible when the area was viewed with a colposcope (a magnifying instrument). Because of the more microscopic nature of this examination, it detected a larger number of conditions than the other two exams. The types of pathology detectable were vulvar erosions or inflammation, vulvar and vaginal atrophy, cervical conditions, condyloma, and



abnormal cell changes at the cervical level. Although its major focus was on atypical cell changes, this exam also, localized painful sites.

Cultures. Prior to the manual-visual examination a urine sample was obtained for laboratory examination. At the time of the manual visual examination, smears for the following cultures were obtained: general cervical culture, gonorrhea, ureaplasma/mycoplasma, chlamydia. At the time of the colposcopy, a PAP smear was also taken.

#### Procedure

The protocol for control subjects was identical to that for women with dyspareunia with the following exceptions: The control subjects were not administered the coital pain section of the structured interview nor the McGill-Melzack Pain Questionnaire (MPQ) (Melzack, 1975).

Upon arrival at the Department of Obstetrics and Gynecology of the Royal Victoria Hospital, women were interviewed individually by a clinically trained interviewer for approximately 45 - 60 minutes. After the interview, they were asked to complete a number of questionnaires dealing psychopathology, sexual attitudes and relationship adjustment (see Measures section for list of questionnaires given). They were then asked to empty their bladder for the purposes of a urine culture. Shortly after they underwent the standard gynecological examination (including cultures), the endovaginal ultrasound, and finally the colposcopy (including PAP). The entire protocol required approximately 3 hours to complete, including waiting time between examinations. The results of the examinations were then communicated to each subject 3-4 weeks after participation in the study.

The interviewer was blind to the results of each of the three examinations. Each physician was blind both to the subject's responses in the structured interview and questionnaires and to the results of either of the two other examinations. It was, however, impossible for physicians to be blind to whether the subject had penetration pain or not since women with dyspareunia usually experience significant pain during the examination.

Participating physicians were instructed at each gynecological examination, (standard, ultrasound, colposcopy), to document all physical findings. Since each exam was performed only once by one physician, interrater reliability for the findings of any one gynecological examination could not be measured. However, one very conservative assessment of the reliability of physical findings was to measure interrater reliability between the standard gynecological exam and the colposcopy (the 2 exams that resemble each other most). Despite the fact that these two examinations are markedly different and not designed to detect the same types of pathology, the percentage agreement on physical findings for the control group was 84%.

## Results

### Overview

First, we will present the data of the 105 women with dyspareunia, mostly from the Meana et al (1995) study, into sub-types as diagnosed in that study. This data is re-presented here as it differs slightly from that of the previous study in the following way: We were able to match only 102 of the 112 women in the previous study and subsequently found three new dyspareunia subjects we could match to controls. Once this data is presented, comparisons between women with dyspareunia and no-pain controls will then be made on 7 general categories of findings; physical

findings upon examination, medical history, pain history (other than dyspareunia), psychopathology, sexual functioning/attitudes, relationship adjustment and history of physical and sexual abuse. For each of these 7 categories, there will be a comparison between the undifferentiated dyspareunia sample and its matched controls, and then between each dyspareunia sub-type (no physical findings, vulvar vestibulitis, atrophy, mixed findings) and its matched controls. Each subtype was compared to its matched controls in separate MANOVA's rather than in an all-inclusive 2 (pain/no pain) X 4 (diagnostic group) MANOVA because the cell-size differences exceeded a one to three ratio, a condition that results in appreciable errors in probability estimates as well as in non-orthogonality in the interaction effects of ANOVA's and any contrasts (Ferguson & Takane, 1989). All MANOVA's grouped variables with intercorrelations of less than .5.

#### Dyspareunia Sub-Types

As described in the Procedures section of the Meana et al. (1995) study, the results of all physical examinations for women with dyspareunia were reviewed and a clinical judgment was made as to the most probable cause or primary contributor to the pain by one of the participating gynecologists and then by an independent gynecologist, blind to the hypotheses of the study. The interrater percentage agreement for these 105 cases was 87%, yielding a kappa coefficient of .86 (Cohen, 1960). This process resulted in 4 diagnostic groups or dyspareunia subtypes. Below are the diagnostic results for the 105 women with dyspareunia for whom matched no-pain controls were found.

1) The first diagnostic group or sub-type (N=25) had no diagnosable dyspareunia-related physical findings. The diagnostic specificity of this category of dyspareunia sufferers involved a complete absence of physical findings on all exams

and cultures or the presence of findings judged by the gynecologists to be unrelated to the experience of pain during intercourse. This group would represent those women traditionally judged to have "psychogenic" dyspareunia.

2) The second diagnostic group (N=54) suffered from vulvar vestibulitis. Vulvar vestibulitis is defined as a chronic inflammation of the vestibular glands (small glands located in the posterior of the introitus at the level of the hymenal remnants). The specific diagnostic criteria which led to this diagnosis were a) severe pain on vestibular touch or attempted entry, b) tenderness to pressure localized within the vulvar vestibule, and c) physical findings confined to vulvar erythema (redness) of various degrees (Friedrich, 1987).

3) The third diagnostic group (N=9) that emerged was the vulvar/vaginal atrophy group. The specific diagnostic criteria which led to this diagnosis were a visually detectable impoverishment of skin elasticity and turgor and labial fullness, as well as a visible thinning of the vaginal mucosa, all of which are commonly attributed to estrogen deficiency and linked to coital pain (Bachmann, Leiblum, Kemmann, Colburn, Swarzman, and Shelden, 1984; Khaw, 1992).

4) The fourth group (N=17) was mixed. The diagnostic specificity of this group naturally varied as the group was a catch-all for other dyspareunia-related conditions. The general diagnostic criterion for inclusion in this group was the presence of physical findings judged to be pain-related that were neither atrophy nor vulvar vestibulitis. This included conditions such as a prolapsed uterus or specific and restricted localization of pain to one structure or site (e.g., tender utero-sacral ligaments).

### Control Comparisons

#### Physical Findings

Entire dyspareunia sample. The entire dyspareunia sample differed from its matched controls on two of the three gynecological examinations performed, the standard manual-visual examination and the colposcopy. When examined via the standard manual-visual examination, women with dyspareunia showed higher levels of physical pathology,  $\chi^2$  (11, N=208) = 98.98,  $p < .001$ . Twenty-seven percent of the pain group showed an absence of physical findings, while there were no physical findings in 92% of the no-pain controls. Of the 8% of no-pain controls with physical findings, there was one subject with visible vulvar/vaginal atrophy, one with an excessively tender uterus, one with suspected endometriosis, one with a large ovarian cyst, and 4 subjects were found to have vulvar vestibulitis, all of these conditions being potentially pain-related. On colposcopic examination, the dyspareunia group again showed a larger number of physical findings,  $\chi^2$  (17, N=202)=54.76,  $p < .001$ . Thirty-one percent of the dyspareunia group had no colposcopic findings in comparison to 63% of controls. Again, a small number of control subjects had conditions that could theoretically produce dyspareunia: 3 women were found to have vulvar vestibulitis, 2 vulvar erosion, and 4 vulvar/vaginal atrophy.

There were no differences between the entire sample and its controls on physical findings from the ultrasound examination nor from the cultures or PAP test. Table 2 provides a listing of physical findings from the three gynecological exams for both the entire dyspareunia sample and its no-pain controls.

Dyspareunia sub-types. Three of the four sub-types (vulvar vestibulitis, atrophy, mixed findings) showed more physical pathology than controls in the

standard manual visual examination while only one sub-type (vulvar vestibulitis) showed more physical pathology than controls on colposcopic examination.

Upon standard manual-visual examination, women with vulvar vestibulitis showed a higher frequency of physical pathology,  $\chi^2 (11, N=107) = 95.39, p < .001$ . In terms of the colposcopy, the vulvar vestibulitis group again showed a higher frequency of physical findings than controls,  $\chi^2 (11, N=103) = 56.55, p < .001$ . Women with atrophy also showed more physical pathology than controls when examined via the standard manual-visual gynecological examination,  $\chi^2 (3, N=18) = 14.50, p < .01$ , as did the mixed findings sub-type,  $\chi^2 (10, N=34) = 22.00, p < .05$ .

Neither the atrophy nor the mixed findings sub-types had different results from controls on colposcopic examination. No sub-type differed from controls on results from the ultrasound examination, cultures or PAP test. The no findings sub-type did not differ from controls on any of the three gynecological examinations.

### Medical History

Entire dyspareunia sample. A multivariate ANOVA on gynecologically-related medical history variables revealed that the dyspareunia group had had more gynecologically-related complications than controls,  $F (7, 1211) = 3.33, p < .01$ . However, the only individual variable that was significant was the number of yeast infections reported,  $F (1, 173) = 7.45, p < .01$ , with the dyspareunia group reporting the larger number. In terms of non-gynecologically-related medical history variables, a MANOVA showed no overall between-group difference. Univariate tests on birth complications also revealed that the dyspareunia sample had had a larger number of cesarian section deliveries,  $F (1, 73) = 5.48, p < .05$  (see Table 3).

Dyspareunia sub-types. The vulvar vestibulitis sub-type was the only sub-type to differ significantly from controls on gynecologically-related medical history variables,  $F(7, 700) = 3.48, p < .001$ , reporting a higher number of gynecological complications. The only significantly different individual variable, however, was the larger number of yeast infections reported by women with vulvar vestibulitis,  $F(1, 100) = 6.78, p < .01$ .

The mixed sub-type reported a larger number of caesarian section deliveries than their controls  $F(1, 13) = 22.18, p < .01$ . but controls reported a larger number of episiotomies  $F(1, 11) = 6.45, p < .05$ . No sub-type differed from controls on non-gynecologically-related medical history variables (see Table 3).

#### Pain History

Entire dyspareunia sample. In comparison to controls, a significantly larger number of women with dyspareunia reported pain with urination, tampon insertion, finger insertion, and during gynecological examination (see Table 4). When women were asked about other non-genital aches and pains regularly experienced over the past 6 months, there were no differences between the entire dyspareunia sample and controls.

Dyspareunia sub-types. In comparison to controls, a significantly larger number of women in all dyspareunia sub-types reported routinely feeling pain during gynecological examinations. The vulvar vestibulitis, atrophy, and mixed findings sub-types also more frequently reported pain with vaginal finger insertion than did controls. Both the no physical findings and vulvar vestibulitis sub-types reported pain with tampon insertion more frequently than controls. The atrophy and no physical findings sub-types more frequently reported pain with non-penetrative manual stimulation by a partner. The vulvar vestibulitis sub-type was the only one to report pain with urination

more frequently than its set of controls. There were no differences between any of the sub-types and their respective sets of controls on the number of other non-genital aches and pains reported (see Table 4).

### Psychopathology

MANOVA's were conducted to test for the overall difference in psychopathology between pain groups and their respective set of matched controls. All group means (entire sample and sub-types) were within the normal range for female non-patient norms (Derogatis, 1983).

Entire dyspareunia sample. Significant overall differences in symptom reporting were found between the entire sample and its controls,  $F(9, 1845) = 2.68$ ,  $p < .01$ , with the dyspareunia sample reporting more symptoms than controls. The three scales on which women with dyspareunia scored significantly higher than controls were interpersonal sensitivity  $F(1, 205) = 8.39$ ,  $p < .01$ , depression  $F(1, 205) = 5.46$ ,  $p < .05$ , and phobic anxiety  $F(1, 205) = 4.02$ ,  $p < .05$ , and all scales showed mean differences in the same direction (see Table 5).

Dyspareunia sub-types. Only two sub-types differed significantly from their controls on psychopathology. Both the no physical findings sub-type,  $F(9, 423) = 2.17$ ,  $p < .05$ , and the atrophy sub-type,  $F(9, 135) = 9.31$ ,  $p < .001$  reported more symptoms than their sets of controls. Both the no findings and atrophy sub-types scored higher than controls on obsessive-compulsive tendencies  $F_{nf}(1, 47) = 4.05$ ,  $p < .05$ ,  $F_{at}(1, 15) = 6.38$ ,  $p < .05$ , interpersonal sensitivity  $F_{nf}(1, 47) = 4.06$ ,  $p < .05$ ,  $F_{at}(1, 15) = 15.91$ ,  $p < .01$ , depression  $F_{nf}(1, 47) = 4.52$ ,  $p < .05$ ,  $F_{at}(1, 15) = 5.76$ ,  $p < .05$ , and phobic anxiety  $F_{nf}(1, 47) = 4.08$ ,  $p < .05$ ,  $F_{at}(1, 15) = 52.56$ ,  $p < .001$ . The atrophy group alone scored higher than controls on anxiety  $F(1, 15) = 5.04$ ,  $p < .05$ , hostility  $F(1, 15) = 14.71$ ,  $p < .01$ , and psychoticism  $F(1, 15) = 4.50$ ,



$p < .05$ . There were no significant overall psychopathology differences between the vulvar vestibulitis sub-type and its controls nor between the mixed findings sub-type and its controls (see Table 5 and Figure 1).

#### Relationship adjustment

The entire dyspareunia sample showed lower levels of relationship adjustment than its controls  $F(1,137) = 7.56, p < .01$ . The only dyspareunia sub-type with significantly lower levels of relationship adjustment was the no physical findings sub-type  $F(1, 38) = 5.43, p < .05$  (see Table 6).

#### Physical and sexual abuse

There were no differences between the entire dyspareunia sample or any pain sub-type and its matched controls on physical abuse during childhood or adulthood nor on sexual abuse during childhood or adulthood. Furthermore, when the responses of subjects who were sexually abused were analyzed as to whether the abuse involved penetration, there were, again, no differences between pain groups and their controls (see Table 7 for number of subjects who reported abuse).

#### Sexuality

Six sexuality variables with intercorrelations  $< .5$  (intercourse frequency, desire frequency, level of desire, level of arousal, level of aversion, and masturbation frequency) were entered into a MANOVA. Univariate tests of significance were conducted to analyze eight sexuality variables that did not qualify for the MANOVA (ability to achieve orgasm through masturbation, partner manual stimulation, oral stimulation, and intercourse, the number of foreplay activities and intercourse positions engaged in 6 months prior, sexual arousability, and erotophobia) due to high

intercorrelations and the fact that some of these variables were not applicable to all subjects (e.g., a woman who does not engage in oral sex cannot be asked how often she has an orgasm during this activity).

Entire dyspareunia sample. Significant overall differences in sexual functioning were found between the entire dyspareunia sample and its controls,  $F(6,1248) = 11.71, p < .001$ . Women with dyspareunia reported lower frequencies of intercourse  $F(1, 208) = 16.25, p < .001$ , masturbation  $F(1,208) = 6.35, p < .05$ , and desire  $F(1,208) = 10.78, p < .01$ , and lower levels of desire  $F(1,208) = 18.86, p < .001$  and arousal  $F(1, 208) = 15.32, p < .001$ . They also reported being less successful at achieving orgasm through oral stimulation  $F(1, 157) = 7.34, p < .01$  and through intercourse  $F(1, 207) = 34.81, p < .001$ , as well as engaging in a smaller number of intercourse positions than controls  $F(1,168) = 13.10, p < .001$ . Finally, women with dyspareunia were significantly more erotophobic than controls  $F(1,176) = 7.40, p < .01$ .

Dyspareunia sub-types. On measures of sexuality, only two sub-types (vulvar vestibulitis and mixed findings) showed substantial sexual impairment. On the sexuality MANOVA, the vulvar vestibulitis sub-type showed lower overall levels of sexual function,  $F(6,636) = 10.63, p < .001$  than controls. They reported lower frequencies of intercourse  $F(1,106) = 17.03, p < .001$ , masturbation  $F(1, 106) = 5.58, p < .05$  and desire  $F(1, 106) = 9.22, p < .01$ , and lower levels of desire  $F(1,106) = 11.45, p < .01$  and arousal  $F(1,106) = 8.18, p < .01$ . They also reported being less successful at achieving orgasm through oral stimulation  $F(1,85) = 6.15, p < .05$ , and through intercourse  $F(1,106) = 21.90, p < .001$ , as well as engaging in a smaller number of intercourse positions than controls  $F(1,87) = 27.04, p < .001$ . In addition, women with vulvar vestibulitis were significantly more erotophobic than controls  $F(1,92) = 4.84, p < .05$ .

The mixed findings sub-type,  $F(6,192) = 3.06$ ,  $p < .01$ , also showed more impaired sexual function than controls, although to a lesser extent than the vulvar vestibulitis group. They reported lower levels of desire  $F(1,32) = 6.31$ ,  $p < .05$  and they were more aversive to the sexual act than controls  $F(1,32) = 5.31$ ,  $p < .05$ . They also reported being less successful at achieving orgasm through intercourse  $F(1, 32) = 5.02$ ,  $p < .05$ .

Neither the no physical findings sub-type nor the atrophy sub-type differed significantly from their matched controls on the sexuality MANOVA, although the no findings group did report a lower frequency of orgasm through intercourse  $F(1,47) = 7.45$ ,  $p < .01$  (see Table 6).

### Discussion

When this entire undifferentiated sample of women suffering from dyspareunia was compared to its matched controls, four of our hypotheses were confirmed. Women who experience pain with intercourse were found to have more physical pathology and a more complicated gynecological history, mostly of infections and gynecological surgeries. They were also found to have a greater number of psychological symptoms, with an emphasis on interpersonal sensitivity, depression, and phobic anxiety. They had lower levels of relationship adjustment and more negative attitudes about sexuality. Their sexual impairment was evident in almost every aspect of sexual function as they had lower frequencies of intercourse and masturbation, less desire and arousal, and were less orgasmic than controls. They also reported genital pain in situations other than intercourse much more frequently. They did not, however, report a higher incidence of either physical or sexual abuse, past or present.

The confirmation of four out of five etiological hypotheses illustrates the difficulty in determining a single causal pathway for dyspareunia in general. The general profile of the dyspareunic woman, as per this sample, is a mildly psychologically distressed woman with some gynecological problem, who is less than happy in her relationship, feels ambivalent about sexuality, and has an impoverished sex life. Determining the causal agent of pain in this configuration is problematic and probably futile, as this combination of complex factors strongly suggests interactions. Prospective studies would be needed to tease apart the reactive from the causal. Furthermore, research suggests that even if one identifies the causal agent of dyspareunia, the factors that caused the pain in the first place may not be the only (or even the same) factors that maintain it. When Schover, Youngs, & Cannata (1992) evaluated the effects of surgery for vulvar vestibulitis, sex therapy was required to achieve painless intercourse in all cases. Fordney (1978) reported similar results in the treatment of "organic" dyspareunia.

The fact that most women with dyspareunia also experience pain with genital contact other than intercourse suggests that the defining characteristic of this pain should not be the activity of intercourse but the location of the pain - the genitalia ( and sometimes pelvic region). One could argue that pain due to tampon insertion, finger insertion and gynecological examination still requires penetration but that leaves the urination pain reported unexplained. This urination pain was uniformly described as a burning pain felt when urine passed over a certain area in the vulvar region - there was no penetration at all in these cases. Despite the fact that these women are clearly sexually dysfunctional as an undifferentiated group, the current emphasis on the sexual aspect of the pain may be an overstatement that hinders non-sexual etiologic avenues that could prove fruitful.

When the entire pain sample was broken up into dyspareunia sub-types and compared to controls separately, we found a substantial amount of variation. Only three sets of results were common to all sub-types: As we predicted, all dyspareunia sub-types, with the exception of the no findings group, showed more physical pathology: All sub-types also reported more pain than controls with gynecological examinations and other types of genital contact: Finally, no dyspareunia sub-type reported more physical and sexual abuse than its set of controls.

We had predicted that the no findings sub-type, the group traditionally referred to as suffering from "psychogenic dyspareunia," would be the only one to have more psychological symptoms, more negative attitudes toward sexuality, lower levels of relationship adjustment and a higher incidence of abuse than its matched controls. This hypothesis was only partly confirmed. The no findings group did, in fact, show higher levels of psychological symptom reporting than its controls, although, unexpectedly, the atrophy sub-type also differed from controls on this measure. The no findings group was also the only group that showed lower levels of relationship adjustment than controls. However, the sole group more erotophobic than controls was the vulvar vestibulitis group. We also predicted that all sub-types would differ from controls on measures of sexual functioning. This seemed the most obvious of our predictions and more symptomatological than etiological in nature. The results, however, were surprising. Two sub-types showed minimal sexual dysfunction when compared to controls: the no-findings group and the atrophy group, the same two groups with higher number of psychological symptoms.

It is not difficult to posit an explanation for the higher levels of psychological symptoms and relationship maladjustment in the no physical findings sub-type. This group could be conceptualized as a "psychogenic" dyspareunia group in whom the pain experienced with intercourse could be a somatic manifestation of psychological or

relational conflict. It is more difficult to interpret the elevated psychological symptom reporting in the atrophy group primarily because this group was very small and the possibility of a sampling artefact is probable. An alternate explanation for the difference, were it to be sustained in a larger group, could relate to the link between mood and estrogen levels. Although we asked women whether they were on hormone replacement therapy and found no differences between groups, we did not know the length of the therapy and we did not measure circulating levels of estrogen. It could be that women in the pain group were estrogen-deficient and experiencing the negative mood to which this condition is commonly associated (Best et al, 1992; Sherwin, 1988).

As to sexuality, it is intriguing that the no-findings group were the least sexually dysfunctional. Perhaps their psychosexual problem has a component to which our measures of desire, arousal, and frequency of sexual activity were not sensitive. Sex-guilt (Mosher, 1966, 1988) or shame could be candidates in a further investigation of what ails this particular group of women. The atrophy group also showed low levels of sexual dysfunction when compared to controls. Again, because of the small group size, interpretations can only be tentative. One such possibility is that there is a general decrease in sexual activity for this age group. The more negative attitudes toward sexuality in the vulvar vestibulitis group could be explained as a result of the gross sexual dysfunction they suffer, although, in terms of etiology, one would have expected the no findings group to be more negative about sexuality.

In general, the results of this study lend support to the argument presented by Meana et al (1995) regarding the heterogeneity of dyspareunia. The dyspareunia subtypes (no findings, vulvar vestibulitis, atrophy, mixed) suggested in that earlier analysis are further validated by the psychosocial differences found in this study between these sub-types and their matched controls. The heterogeneity of dyspareunia

does not just appear to exist on a physiological dimension but on psychological and behavioural ones. More specifically, this study suggests that the psychosocial etiological factors common in the literature do not appear to be factors in most women with diagnosable physical findings. If our sample in any way represents a rough prevalence of dyspareunia sub-types in the community, these prevalent psychosocial etiological hypotheses apply to a minority of women who suffer from dyspareunia. Abuse, another common etiological hypothesis, does not appear to apply at all.

Another important implication of this data is that we cannot assume gross sexual dysfunction in women suffering from dyspareunia, at least not as far as self-report of desire, arousal, and intercourse frequency. Curiously, the least sexually dysfunctional group in our sample was the group with no physical findings - the "psychogenic" group. This is particularly interesting considering that this group would fall squarely within the DSM-IV category of dyspareunia as a sexual dysfunction due to psychological factors when, in fact, they are the only group in our sample that could be described as not suffering from a sexual dysfunction at all. This lends support to the argument raised by Meana et al (1995) regarding the complications inherent in considering dyspareunia a sexual dysfunction rather than a pain syndrome.

There are a number of limitations to this study. First, both our pain group and our controls had a very high socio-economic status. Generalizability to women in lower socio-economic levels may be limited. Second, while all efforts were taken to standardize gynecological examination procedures and while final diagnoses for the women with dyspareunia were conducted by two independent raters, we were not able to have each examination conducted twice by different physicians. There are clearly ethical concerns about the number of gynecological examinations to which you can submit women for whom these examinations are generally painful and psychologically distressing. Third, the size of our atrophy group was small which limited our

confidence in the interpretation of results for this group. Finally, some of our measures were brief and could be expanded.

In conclusion, this controlled investigation into the biopsychosocial correlates of dyspareunia suggests that a complex combination of factors play a role in the experience of pain with intercourse. The recent emphasis on the need for integrating medical and psychological approaches to treatment (Rosen & Leiblum, 1995), should be accompanied by the same integrative effort in research. It also suggests that dyspareunia does not appear to belong in the realm of psychopathology and that there are questions about the usefulness of emphasizing the sexual dysfunction aspect of this condition. If dyspareunia is in fact as heterogenous as our research suggests, future studies could investigate the biopsychosocial particulars of the different types of dyspareunia rather than perpetuate etiologic hypotheses that do not appear to generalize across sub-types. The group with no biological findings poses interesting psychological questions, as do the grossly understudied post-menopausal group of women.



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Footnote

<sup>1</sup> Copies of the structured interview are available from the corresponding author.

Table 1 - Descriptive Characteristics of Sample

| Variable                  | Dyspareunia<br>(N=105) |       | No-Pain<br>(N=105) |       |
|---------------------------|------------------------|-------|--------------------|-------|
|                           | N                      | %     | N                  | %     |
| Language of the interview |                        |       |                    |       |
| English                   | 50                     | 48    | 50                 | 48    |
| French                    | 55                     | 52    | 55                 | 52    |
| Age                       |                        |       |                    |       |
| 19-29 years               | 40                     | 38    | 38                 | 36    |
| 30-39 years               | 29                     | 28    | 30                 | 29    |
| 40-49 years               | 14                     | 13    | 18                 | 17    |
| 50-66 years               | 22                     | 21    | 19                 | 18    |
| Pre-menopausal            | 85                     | 81    | 85                 | 81    |
| Post-menopausal           | 20                     | 19    | 20                 | 19    |
| Number of children        |                        |       |                    |       |
| 0                         | 68                     | 65    | 67                 | 64    |
| 1-2                       | 30                     | 29    | 28                 | 27    |
| 3+                        | 7                      | 6     | 10                 | 9     |
| Birthplace                |                        |       |                    |       |
| Canada-USA                | 82                     | 78    | 84                 | 80    |
| Europe                    | 10                     | 10    | 17                 | 16    |
| Elsewhere                 | 13                     | 12    | 4                  | 4     |
| Religion (brought up in)  |                        |       |                    |       |
| Catholic                  | 76                     | 72    | 63                 | 60    |
| Protestant                | 8                      | 8     | 22                 | 21    |
| Jewish                    | 10                     | 10    | 4                  | 4     |
| Other/None                | 11                     | 10    | 16                 | 15    |
|                           | M                      | SD    | M                  | SD    |
| Age                       | 36.06                  | 11.95 | 36.46              | 12.47 |
| Years of formal education | 14.83                  | 3.05  | 15.30              | 3.09  |
| Number of children        | .67                    | 1.10  | .78                | 1.19  |

Table 2. Comparison of Physical Findings Between Entire Sample and Matched Controls

| Standard gynecological exam      | Entire Pain Sample (N=104) |    |                  |    | Controls (N=104)                 |    |                  |    | Ultrasound                 |                                  |                  |    |                            |    |                  |   | Colposcopy |  |  |  |  |  |  |  |
|----------------------------------|----------------------------|----|------------------|----|----------------------------------|----|------------------|----|----------------------------|----------------------------------|------------------|----|----------------------------|----|------------------|---|------------|--|--|--|--|--|--|--|
|                                  | Entire Pain Sample (N=104) |    | Controls (N=104) |    | Entire Pain Sample (N=104)       |    | Controls (N=102) |    | Entire Pain Sample (N=102) |                                  | Controls (N=100) |    | Entire Pain Sample (N=102) |    | Controls (N=100) |   |            |  |  |  |  |  |  |  |
|                                  | N                          | %  | N                | %  | N                                | %  | N                | %  | N                          | %                                | N                | %  | N                          | %  | N                | % |            |  |  |  |  |  |  |  |
| No findings                      | 28                         | 27 | 96               | 92 | No findings                      | 76 | 73               | 83 | 81                         | No findings                      | 32               | 31 | 63                         | 63 |                  |   |            |  |  |  |  |  |  |  |
| Vulvar vestibulitis              | 53                         | 51 | 4                | 4  | Fibroids                         | 14 | 13               | 7  | 7                          | Vulvar vestibulitis              | 34               | 33 | 3                          | 3  |                  |   |            |  |  |  |  |  |  |  |
| Vulvar atrophy                   | 9                          | 9  | 1                | 1  | Ovarian cyst                     | 5  | 5                | 8  | 8                          | Vulvar erosion/<br>derm. prob.   | 10               | 10 | 2                          | 2  |                  |   |            |  |  |  |  |  |  |  |
| Tender bladder/urethra           | 5                          | 5  |                  |    | Uterine/ovarian<br>atrophy       | 6  | 6                | 4  | 4                          | Cervical eversion                | 10               | 10 | 12                         | 12 |                  |   |            |  |  |  |  |  |  |  |
| Erythema                         | 5                          | 5  |                  |    | Tender bladder                   | 1  | 1                |    |                            | Vaginal atrophy                  | 6                | 6  | 4                          | 4  |                  |   |            |  |  |  |  |  |  |  |
| Muscle contraction               | 4                          | 4  |                  |    | Tender utero-sacral<br>ligaments | 1  | 1                |    |                            | Cervical inflammation            | 5                | 5  | 7                          | 7  |                  |   |            |  |  |  |  |  |  |  |
| Vulvar erosion                   | 2                          | 2  |                  |    | Tender ovaries                   | 1  | 1                |    |                            | Cervical polyp                   |                  |    | 1                          | 1  |                  |   |            |  |  |  |  |  |  |  |
| Fibroid (very large)             | 1                          | 1  |                  |    |                                  |    |                  |    |                            | Monolial vaginitis               | 1                | 1  | 2                          | 2  |                  |   |            |  |  |  |  |  |  |  |
| Tender utero-sacral<br>ligaments | 2                          | 2  |                  |    |                                  |    |                  |    |                            | Erythema                         | 3                | 3  |                            |    |                  |   |            |  |  |  |  |  |  |  |
| Tender uterus                    | 1                          | 1  | 1                | 1  |                                  |    |                  |    |                            | Prolapsed uterus                 | 1                | 1  |                            |    |                  |   |            |  |  |  |  |  |  |  |
| Ovarian cyst (very large)        | 1                          | 1  |                  |    |                                  |    |                  |    |                            | Endometriosis                    | 2                | 2  | 1                          | 1  |                  |   |            |  |  |  |  |  |  |  |
| Scarring                         | 1                          | 1  |                  |    |                                  |    |                  |    |                            | Congenital anomaly               | 1                | 1  |                            |    |                  |   |            |  |  |  |  |  |  |  |
|                                  |                            |    |                  |    |                                  |    |                  |    |                            | Fibroid (very large)             | 1                | 1  |                            |    |                  |   |            |  |  |  |  |  |  |  |
|                                  |                            |    |                  |    |                                  |    |                  |    |                            | Condyloma                        | 1                | 1  | 1                          | 1  |                  |   |            |  |  |  |  |  |  |  |
|                                  |                            |    |                  |    |                                  |    |                  |    |                            | Squamous metaplasia              | 2                | 2  | 10                         | 10 |                  |   |            |  |  |  |  |  |  |  |
|                                  |                            |    |                  |    |                                  |    |                  |    |                            | Tender bladder                   | 1                | 1  |                            |    |                  |   |            |  |  |  |  |  |  |  |
|                                  |                            |    |                  |    |                                  |    |                  |    |                            | Tender uterus                    | 1                | 1  |                            |    |                  |   |            |  |  |  |  |  |  |  |
|                                  |                            |    |                  |    |                                  |    |                  |    |                            | Tender utero-sacral<br>ligaments | 1                | 1  |                            |    |                  |   |            |  |  |  |  |  |  |  |

Note: The N's for exams differ because a 2 women did not undergo the standard gynecological exam, 2 did not undergo the ultrasound exam and 4 did not undergo the colposcopy for reasons relating to scheduling difficulties. Also note that a woman can show more than one pathology on one exam, thus the N's for the specific physical findings sometimes exceed the number of subjects seen and the percentages sometimes exceed 100.



Table 3. Means and Standard Deviations of each Sub-type and its Matched Controls on Medical History Variables

| Measure   | Entire Group (n=105) |        | Entire Controls (n=105) |        | No findings Group (n=25) |        | No findings Controls (n=25) |        | Vulvar Vestibulitis (n=54) |        | VV Controls (n=54) |        | Atrophy Group (n=9) |        | Atrophy Controls (n=9) |        | Mixed Group (n=17) |        | Mixed Controls (n=17) |        |
|---|----------------------|--------|-------------------------|--------|--------------------------|--------|-----------------------------|--------|----------------------------|--------|--------------------|--------|---------------------|--------|------------------------|--------|--------------------|--------|-----------------------|--------|
|   | M                    | (SD)   | M                       | (SD)   | M                        | (SD)   | M                           | (SD)   | M                          | (SD)   | M                  | (SD)   | M                   | (SD)   | M                      | (SD)   | M                  | (SD)   | M                     | (SD)   |
| <b>MEDICAL HISTORY</b>                                |                      |        |                         |        |                          |        |                             |        |                            |        |                    |        |                     |        |                        |        |                    |        |                       |        |
| <b>Gynecological</b>                                  |                      |        |                         |        |                          |        |                             |        |                            |        |                    |        |                     |        |                        |        |                    |        |                       |        |
| # of miscarriages                                     | .18                  | (.64)  | .18                     | (.47)  | .20                      | (.52)  | .11                         | (.46)  | .22                        | (.76)  | .24                | (.51)  | 1.00                | (2.29) | .11                    | (.33)  | .06                | (.24)  | .13                   | (.34)  |
| # of abortions  | .26                  | (.61)  | .28                     | (.58)  | .10                      | (.31)  | .32                         | (.82)  | .18                        | (.52)  | .24                | (.47)  | .22                 | (.67)  | .56                    | (.88)  | .71                | (.92)  | .38                   | (.62)  |
| # of yeast infections                                 | 2.22**               | (3.37) | 1.09                    | (1.86) | 1.50                     | (1.57) | .84                         | (2.30) | 2.84**                     | (4.13) | 1.20               | (1.84) | 1.67                | (3.28) | .00                    | (.00)  | 1.18               | (1.55) | 1.30                  | (1.40) |
| # of bladder infections (last 2 years)                | .73                  | (1.53) | .41                     | (1.32) | 1.20*                    | (2.35) | .05                         | (.23)  | .53                        | (1.12) | .49                | (1.53) | .67                 | (2.00) | .11                    | (.33)  | .77                | (1.35) | .63                   | (1.36) |
| # of STD's (in past)                                  | .66                  | (1.06) | .48                     | (.75)  | .90                      | (1.30) | .47                         | (.77)  | .55                        | (.99)  | .43                | (.70)  | .22                 | (.67)  | .56                    | (1.33) | .71                | (.99)  | .69                   | (.87)  |
| dysmenorrhea (10-pt scale)                            | 5.14                 | (2.64) | 5.12                    | (2.74) | 5.30                     | (2.87) | 4.11                        | (3.14) | 5.35                       | (2.57) | 5.31               | (2.51) | N/A                 | N/A    | N/A                    | N/A    | 4.29               | (2.54) | 6.00                  | (2.76) |
| # of gynec surgeries                                  | .49                  | (.74)  | .30                     | (.59)  | .65*                     | (.59)  | .21                         | (.54)  | .43                        | (.70)  | .28                | (.53)  | .67                 | (.86)  | .89                    | (.93)  | .82                | (1.43) | .31                   | (.70)  |
| # of c sections                                       | .57*                 | (.80)  | .18                     | (.61)  | .31                      | (.63)  | .08                         | (.28)  | .69                        | (.95)  | .46                | (.97)  | .00                 | (.00)  | .00                    | (.00)  | 1.14**             | (.69)  | .00                   | (.00)  |
| # of episiotomies                                     | 1.03                 | (.98)  | 1.21                    | (1.02) | 1.30                     | (.95)  | 1.23                        | (1.01) | 1.00                       | (1.05) | 1.07               | (.76)  | 1.50                | (1.00) | .75                    | (1.50) | .20**              | (.45)  | 1.63                  | (1.19) |
| # of childbirth lacerations                           | .45                  | (.78)  | .26                     | (.50)  | 1.00                     | (1.05) | .31                         | (.63)  | .20                        | (.42)  | .15                | (.38)  | .00                 | (.00)  | .50                    | (.58)  | .20                | (.45)  | .25                   | (.46)  |
| <b>Non gynecological</b>                              |                      |        |                         |        |                          |        |                             |        |                            |        |                    |        |                     |        |                        |        |                    |        |                       |        |
| # of general surgeries                                | 1.20                 | (1.31) | 1.10                    | (1.18) | 1.60                     | (1.61) | .92                         | (1.04) | .82                        | (.95)  | .94                | (.94)  | 2.67                | (1.66) | 1.56                   | (.88)  | .88                | (.93)  | 1.00                  | (1.12) |
| # of chronic illnesses                                | .33                  | (.69)  | .29                     | (.53)  | .56                      | (.96)  | .28                         | (.46)  | .20                        | (.45)  | .26                | (.52)  | .56                 | (.73)  | .67                    | (.87)  | .29                | (.77)  | .18                   | (.39)  |
| # of psychological therapies                          | 1.04                 | (1.13) | .78                     | (.93)  | 1.32                     | (1.31) | .96                         | (1.10) | .96                        | (1.10) | .70                | (.90)  | .89                 | (.93)  | .56                    | (.73)  | .94                | (1.03) | .88                   | (.86)  |
| # of psychotropic medications (current prescriptions) | .23**                | (.61)  | .05                     | (.26)  | .20                      | (.65)  | .08                         | (.40)  | .17                        | (.54)  | .04                | (.19)  | .33                 | (.71)  | .00                    | (.00)  | .41                | (.71)  | .06                   | (.24)  |
| # of general medications (current prescriptions)      | .51                  | (1.12) | .43                     | (1.10) | .92                      | (1.60) | .32                         | (.63)  | .28                        | (.66)  | .44                | (1.34) | .78                 | (1.09) | .89                    | (1.27) | .48                | (1.28) | .29                   | (.59)  |

- \* denotes that the pain group mean differs significantly from that of its matched controls with  $p < .05$
- \*\* denotes that the pain group mean differs significantly from that of its matched controls with  $p < .01$

Table 4. Genital Pains Other than Dyspareunia

| Pain due to:                        | Entire Group |                | Controls |                | No Findings |                | Controls |                | Vulvar Vest. |                | Atrophy |                | Mixed   |                | Controls |                |
|-------------------------------------|--------------|----------------|----------|----------------|-------------|----------------|----------|----------------|--------------|----------------|---------|----------------|---------|----------------|----------|----------------|
|                                     | (%)          | X <sup>2</sup> | (%)      | X <sup>2</sup> | (%)         | X <sup>2</sup> | (%)      | X <sup>2</sup> | (%)          | X <sup>2</sup> | (%)     | X <sup>2</sup> | (%)     | X <sup>2</sup> | (%)      | X <sup>2</sup> |
| Friction with clothing              | 21           | .68            | 16       | .12            | 13          | .12            | 17       | .82            | 24           | 17             | 33      | 11             | 1.29    | 12             | 24       | 81             |
| Urination                           | 18           | 3.91*          | 16       | .00            | 17          | .00            | 8        | 6.45*          | 26           | 8              | 0       | 0              | 0       | 6              | 6        | 1.00           |
| Tampon insertion                    | 36           | 21.47**        | 36       | 8.08**         | 4           | 8.08**         | 42       | 11             | 12.88**      | NA             | NA      | NA             | NA      | 25             | 12       | .97            |
| Non-penetrative partner stimulation | 22           | 3.24           | 32       | 4.22*          | 8           | 4.22*          | 17       | 19             | .69          | 50             | 0       | 0              | 5.88*   | 12             | 6        | .36            |
| Finger insertion                    | 44           | 37.71**        | 30       | 3.70           | 8           | 3.70           | 52       | 8              | 25.04**      | 63             | 11      | 11             | 4.89*   | 29             | 0        | 5.86*          |
| Gynecological examination           | 67           | 81.11**        | 54       | 14.52**        | 4           | 14.52**        | 72       | 8              | 46.55**      | 77             | 0       | 0              | 11.45** | 65             | 12       | 10.09**        |

\* p < .05  
 \*\* p < .01

Table 5. Means and Standard deviations of each Sub-type and its Matched Controls on Psychopathology

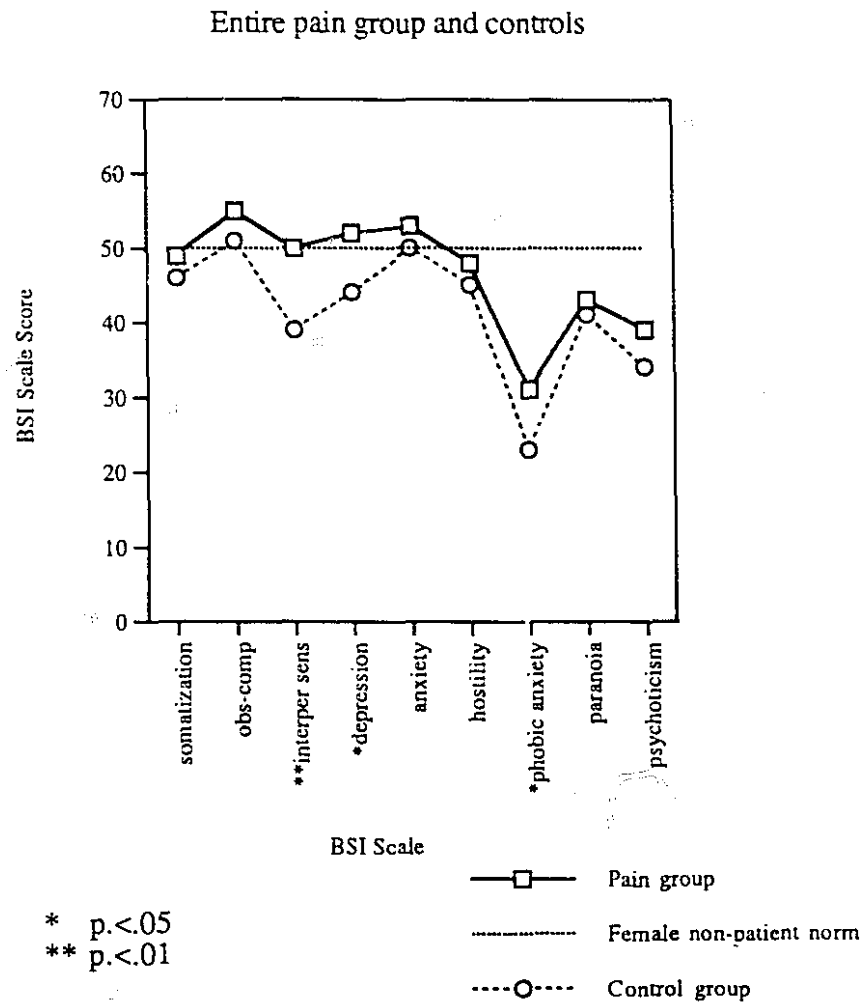
| Measure                   | Entire Group (n=103) |         | Entire Controls (n=104) |         | No findings Group (n=25) |         | No findings Controls (n=24) |         | Vulvar Vestibulitis (n=54) |         | VV Controls (n=54) |         | Atrophy Group (n=8) |         | Atrophy Controls (n=9) |         | Mixed Group (n=16) |         | Mixed Controls (n=17) |         |  |
|---------------------------|----------------------|---------|-------------------------|---------|--------------------------|---------|-----------------------------|---------|----------------------------|---------|--------------------|---------|---------------------|---------|------------------------|---------|--------------------|---------|-----------------------|---------|--|
|                           | M                    | (SD)    | M                       | (SD)    | M                        | (SD)    | M                           | (SD)    | M                          | (SD)    | M                  | (SD)    | M                   | (SD)    | M                      | (SD)    | M                  | (SD)    | M                     | (SD)    |  |
| <b>PSYCHOPATHOLOGY</b>    |                      |         |                         |         |                          |         |                             |         |                            |         |                    |         |                     |         |                        |         |                    |         |                       |         |  |
| <b>BSL Scales</b>         |                      |         |                         |         |                          |         |                             |         |                            |         |                    |         |                     |         |                        |         |                    |         |                       |         |  |
| somatization              | 48.57                | (23.29) | 46.23                   | (24.04) | 53.88                    | (21.31) | 41.25                       | (27.68) | 43.63                      | (25.44) | 49.19              | (21.50) | 62.63               | (7.48)  | 39.89                  | (30.22) | 49.94              | (20.13) | 47.24                 | (23.12) |  |
| obsessive compulsive      | 54.48                | (17.14) | 50.55                   | (19.97) | 58.52*                   | (14.36) | 47.45                       | (23.01) | 50.11                      | (20.19) | 52.72              | (20.50) | 62.00*              | (7.37)  | 44.89                  | (17.81) | 59.16              | (7.32)  | 50.71                 | (14.52) |  |
| interpersonal sensitivity | 49.50**              | (23.16) | 39.38                   | (26.95) | 51.60*                   | (24.36) | 35.98                       | (29.50) | 47.20                      | (23.58) | 46.19              | (22.83) | 61.25**             | (8.41)  | 19.00                  | (28.79) | 48.06              | (24.46) | 32.71                 | (28.88) |  |
| depression                | 52.01*               | (21.78) | 44.29                   | (25.61) | 54.48*                   | (21.89) | 39.00                       | (28.78) | 49.83                      | (23.37) | 48.87              | (22.68) | 58.57*              | (7.76)  | 31.78                  | (30.52) | 52.25              | (21.74) | 43.82                 | (25.67) |  |
| anxiety                   | 53.22                | (18.91) | 50.32                   | (18.56) | 52.40                    | (24.37) | 43.04                       | (26.35) | 53.46                      | (16.72) | 54.41              | (12.31) | 57.88*              | (9.55)  | 38.56                  | (22.56) | 51.38              | (20.84) | 53.82                 | (15.19) |  |
| hostility                 | 47.49                | (24.63) | 45.11                   | (25.09) | 49.92                    | (26.56) | 47.04                       | (22.91) | 47.04                      | (23.82) | 48.63              | (22.89) | 60.75**             | (8.92)  | 19.22                  | (29.35) | 38.56              | (27.69) | 44.88                 | (26.59) |  |
| phobic anxiety            | 31.26*               | (30.78) | 22.89                   | (29.22) | 37.10*                   | (31.26) | 19.79                       | (28.72) | 26.52                      | (30.14) | 28.44              | (29.89) | 54.13**             | (22.49) | .00                    | (.00)   | 26.75              | (31.56) | 21.77                 | (30.60) |  |
| paranoid ideation         | 43.31                | (28.10) | 40.47                   | (27.66) | 42.84                    | (30.72) | 41.71                       | (27.94) | 40.22                      | (28.24) | 41.48              | (27.70) | 55.38               | (24.79) | 37.00                  | (28.16) | 48.44              | (25.04) | 37.35                 | (29.02) |  |
| psychoticism              | 38.56                | (31.97) | 33.74                   | (31.65) | 36.84                    | (33.88) | 34.63                       | (32.84) | 37.57                      | (31.87) | 34.39              | (31.25) | 50.38*              | (31.72) | 19.44                  | (25.24) | 38.69              | (31.15) | 38.00                 | (33.16) |  |

\* denotes that the pain group means differs significantly from its matched controls with p<.05

\*\* denotes that the pain group means differs significantly from its matched controls with p<.01

Note: N's differ due to missing data

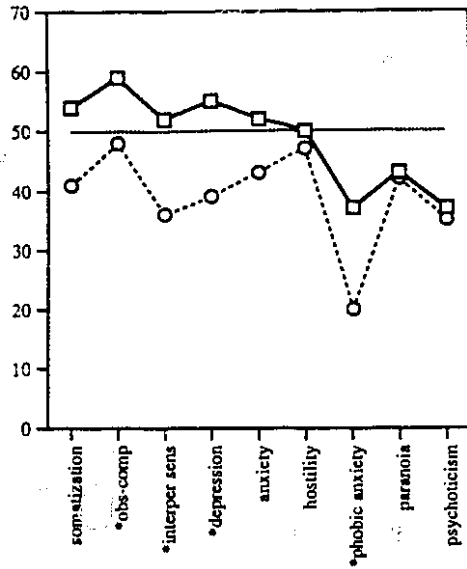
Figure 1. Graphic Comparison of Pain Groups and Controls on Psychopathology



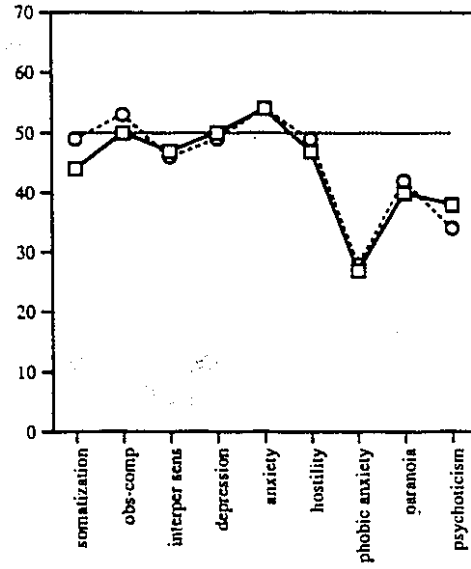
(Fig. 1 continued)

(Fig 1. cont'd)

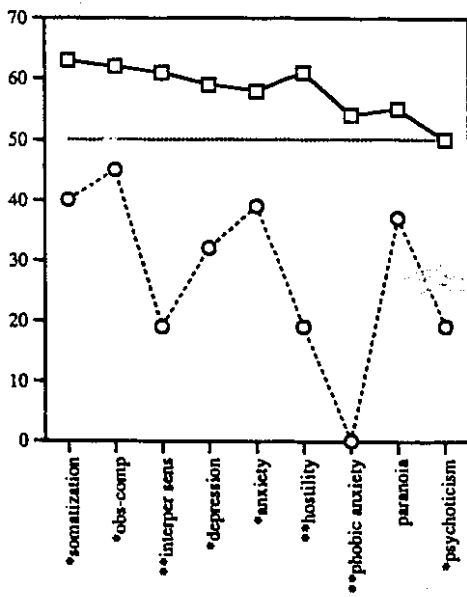
No findings Sub-type and controls



Vulvar Vestibulitis Sub-type and Controls



Atrophy Sub-type and Controls



Mixed Sub-type and Controls

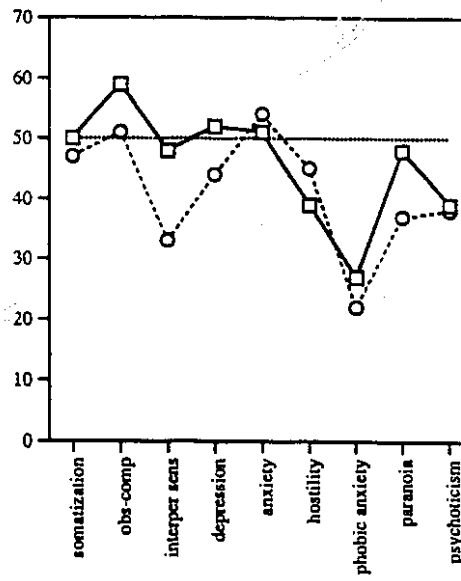


Table 6. Means and Standard Deviations of each Sub-type and its Matched Controls on Sexuality and Relationship Measures

| Measure   | Entire Group (n=105) |         | Entire Controls (n=105) |         | No findings Group (n=25) |         | No findings Controls (n=25) |         | Vulvar Vestibulitis (n=54) |         | VV Controls (n=54) |         | Atrophy Group (n=9) |         | Atrophy Controls (n=9) |         | Mixed Group (n=17) |         | Mixed Controls (n=17) |         |
|---|----------------------|---------|-------------------------|---------|--------------------------|---------|-----------------------------|---------|----------------------------|---------|--------------------|---------|---------------------|---------|------------------------|---------|--------------------|---------|-----------------------|---------|
|   | M                    | (SD)    | M                       | (SD)    | M                        | (SD)    | M                           | (SD)    | M                          | (SD)    | M                  | (SD)    | M                   | (SD)    | M                      | (SD)    | M                  | (SD)    | M                     | SD      |
| <b>SEXUALITY</b>                                    |                      |         |                         |         |                          |         |                             |         |                            |         |                    |         |                     |         |                        |         |                    |         |                       |         |
| <b>Historical</b>                                   |                      |         |                         |         |                          |         |                             |         |                            |         |                    |         |                     |         |                        |         |                    |         |                       |         |
| age at first intercourse                            | 19.51                | (4.98)  | 19.07                   | (4.68)  | 19.36                    | (5.45)  | 21.36                       | (7.04)  | 19.31                      | (4.46)  | 17.94              | (3.30)  | 23.67               | (7.62)  | 21.00                  | (4.28)  | 18.18              | (3.17)  | 18.24                 | (2.71)  |
| lifetime # of partners                              | 8.63                 | (10.80) | 10.45                   | (12.63) | 12.52                    | (14.97) | 10.67                       | (13.83) | 6.94                       | (8.70)  | 10.06              | (10.69) | 4.11                | (3.33)  | 6.44                   | (5.05)  | 10.65              | (10.74) | 13.63                 | (18.59) |
| <b>Sexual Function</b>                              |                      |         |                         |         |                          |         |                             |         |                            |         |                    |         |                     |         |                        |         |                    |         |                       |         |
| intercourse frequency/month                         | 3.69**               | (5.32)  | 7.70                    | (8.60)  | 6.30                     | (7.40)  | 6.32                        | (7.15)  | 3.02**                     | (4.35)  | 9.23               | (10.16) | 46**                | (.68)   | 3.11                   | (2.80)  | 3.69*              | (4.56)  | 7.27                  | (5.99)  |
| desire frequency/month                              | 6.87**               | (9.71)  | 12.01                   | (12.79) | 8.50                     | (10.58) | 9.75                        | (10.10) | 6.63**                     | (10.13) | 14.04              | (14.79) | 4.56                | (6.02)  | 3.93                   | (3.72)  | 6.52               | (8.96)  | 13.18                 | (10.86) |
| desire level (10-point scale)                       | 4.95**               | (2.53)  | 6.31                    | (1.95)  | 4.88                     | (2.89)  | 6.24                        | (2.22)  | 5.04**                     | (2.36)  | 6.39               | (1.74)  | 5.33                | (2.83)  | 5.44                   | (2.07)  | 4.59*              | (2.50)  | 6.59                  | (2.12)  |
| arousal level (10-point scale)                      | 5.93**               | (2.61)  | 7.13                    | (1.75)  | 5.44*                    | (2.99)  | 6.88                        | (1.79)  | 6.04**                     | (2.55)  | 7.26               | (1.82)  | 5.89                | (3.06)  | 7.11                   | (1.36)  | 6.35               | (2.00)  | 7.12                  | (1.73)  |
| sexual arousability (SAI)                           | 80.25                | (28.86) | 82.88                   | (22.69) | 77.19                    | (38.01) | 80.68                       | (24.31) | 75.70                      | (27.70) | 84.28              | (21.63) | 95.17*              | (7.57)  | 74.22                  | (21.36) | 91.15              | (22.17) | 86.24                 | (24.79) |
| aversion level(10-point scale)                      | 1.70                 | (1.58)  | 1.38                    | (1.22)  | 1.96                     | (2.39)  | 1.72                        | (1.70)  | 1.65                       | (1.31)  | 1.40               | (1.22)  | 1.22                | (.67)   | 1.11                   | (.33)   | 1.71*              | (1.26)  | 1.00                  | (.00)   |
| masturbation frequency/month                        | 2.07*                | (3.65)  | 3.95                    | (6.74)  | 2.52                     | (4.49)  | 3.48                        | (6.23)  | 2.07*                      | (3.79)  | 4.46               | (6.39)  | .89                 | (1.36)  | 1.44                   | (2.19)  | 2.00               | (2.65)  | 4.35                  | (9.71)  |
| <b>orgasmic success with (%):</b>                   |                      |         |                         |         |                          |         |                             |         |                            |         |                    |         |                     |         |                        |         |                    |         |                       |         |
| masturbation  | 88.69                | (29.48) | 91.74                   | (24.27) | 90.63                    | (27.20) | 91.67                       | (25.89) | 91.29                      | (28.37) | 91.40              | (23.46) | 87.50               | (25.00) | 100.00                 | (.00)   | 77.00              | (38.89) | 90.00                 | (31.62) |
| manual stimulation                                  | 51.56                | (45.60) | 62.21                   | (40.98) | 37.55                    | (44.09) | 55.87                       | (45.14) | 57.82                      | (45.36) | 64.07              | (38.06) | 46.88               | (50.78) | 61.25                  | (48.53) | 53.33              | (45.74) | 65.29                 | (43.50) |
| oral stimulation                                    | 51.37**              | (44.26) | 68.94                   | (37.30) | 40.67                    | (43.42) | 51.75                       | (43.39) | 54.84*                     | (44.31) | 75.23              | (31.44) | 52.86               | (47.16) | 84.00                  | (35.78) | 51.43              | (46.68) | 68.18                 | (42.14) |
| intercourse   | 12.85**              | (27.81) | 40.29                   | (38.64) | 10.76**                  | (25.79) | 35.88                       | (37.80) | 12.41**                    | (27.67) | 41.94              | (37.26) | 28.89               | (43.43) | 54.44                  | (45.58) | 8.82*              | (19.49) | 33.76                 | (41.49) |
| # of foreplay activities engaged in (last 6 months) | 24.24                | (8.28)  | 25.62                   | (6.46)  | 24.50                    | (10.57) | 24.17                       | (5.95)  | 25.38                      | (6.77)  | 27.35              | (5.04)  | 16.83               | (10.36) | 16.56                  | (8.90)  | 23.80              | (7.13)  | 27.18                 | (5.39)  |
| # of intercourse positions (last 6 months)          | 9.17**               | (7.01)  | 12.61                   | (5.38)  | 11.13                    | (8.59)  | 11.43                       | (4.81)  | 8.82**                     | (5.86)  | 14.64              | (4.69)  | 3.67                | (3.50)  | 5.56                   | (6.23)  | 10.70              | (8.77)  | 11.94                 | (3.86)  |
| erotophilia (SOS)                                   | 73.45 **             | (18.37) | 81.52                   | (20.18) | 75.93                    | (17.96) | 81.48                       | (23.52) | 74.10*                     | (19.34) | 82.98              | (19.37) | 62.83               | (21.01) | 75.11                  | (20.23) | 73.50              | (14.11) | 80.35                 | (18.39) |
| <b>RELATIONSHIP ADJUSTMENT</b>                      |                      |         |                         |         |                          |         |                             |         |                            |         |                    |         |                     |         |                        |         |                    |         |                       |         |
| Locke-Wallace                                       | 98.19**              | (32.91) | 111.45                  | (23.07) | 86.85*                   | (38.05) | 110.15                      | (23.41) | 102.56                     | (27.75) | 110.34             | (23.69) | 89.44               | (35.05) | 103.50                 | (24.16) | 116.56             | (28.74) | 125.33                | (15.73) |

\* denotes that the pain group means differs significantly from its matched controls with p < .05  
 \*\* denotes that the pain group means differs significantly from its matched controls with p < .01

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**Table 7. Number of Subjects Reporting Past or Present Physical and Sexual Abuse.**

| Type of Abuse:                 | Entire Group<br>(n=105) | Controls<br>(n=105) | No Findings<br>(n=25) | Controls<br>(n=25) | Vulvar Vest.<br>(N=54) | Controls<br>(n=54) | Atrophy<br>(n=9) | Controls<br>(n=9) | Mixed<br>(n=17) | Controls<br>(n=17) |
|--------------------------------|-------------------------|---------------------|-----------------------|--------------------|------------------------|--------------------|------------------|-------------------|-----------------|--------------------|
| Physical (child)               | 10                      | 16                  | 5                     | 6                  | 4                      | 8                  | 0                | 2                 | 1               | 0                  |
| Physical (adult)               | 15                      | 16                  | 6                     | 7                  | 7                      | 5                  | 1                | 2                 | 1               | 2                  |
| Sexual (child)                 | 22                      | 21                  | 6                     | 5                  | 13                     | 12                 | 0                | 2                 | 3               | 2                  |
| Penetrative childhood abuse    | 9                       | 10                  | 1                     | 2                  | 6                      | 6                  | 0                | 1                 | 1               | 0                  |
| Sexual (adult)                 | 26                      | 26                  | 8                     | 9                  | 12                     | 11                 | 1                | 2                 | 5               | 4                  |
| Penetrative adult abuse (rape) | 20                      | 15                  | 6                     | 6                  | 10                     | 5                  | 0                | 2                 | 4               | 2                  |

Note:  $X^2$  values are not shown as there were no significant differences between any pain group its set of matched controls.

## General Conclusion and Directions for Future Research

The research conducted for this thesis is presented as a compilation of three articles. The discussion of theoretical issues and results is, thus, sufficiently covered in the individual summary and discussion sections of each paper. In order to avoid redundancy, this general conclusion section will focus mainly on suggestions for future research on the problem of coital pain and its potential for addressing a number of issues of general health psychology relevance.

Whether we decide to consider coital pain a sexual dysfunction with a high comorbidity of physical pathology or a pain syndrome with a high incidence of sexual dysfunction, the results of this study demonstrate that, at the very least, coital pain is a women's health care problem in need of serious attention. Mainstream health psychology has been somewhat reticent in the past to deal with sexuality, despite the fact that sexual function is an integral part of health (Binik, Meana, Courtois, & Stravynski, 1993). Perhaps one of the consequences dyspareunia has suffered in being labelled a sexual dysfunction is this unfortunate neglect from health psychologists. Other pain syndromes of unknown etiology, such as headaches and chronic low back pain, have not succumbed to the same fate.

However, the biopsychosocial profile of the women in this study suggests that, regardless of whether the factors we investigated were etiologic or reactive, women who experience pain with intercourse are confronting a health problem both from a physiological and psychological perspective. They generally have gynecological problems and they are generally more distressed than women without pain. Ultimately, labelling dyspareunia one thing or another is relevant only insofar as it has an impact on the treatment of these women. The little research that exists has shown that, even in the case of surgical treatment for what is perceived to be a physical cause



of the pain, there is little or no improvement without attention to psychological factors (Schover, Youngs & Cannata, 1992).

Despite the psychophysiological interactions that are necessarily characteristic of a condition as complex as coital pain, gynecological investigations far outnumber psychological ones and the only part of the dyspareunia knowledge base that is growing substantially is the physical one. We may be witnessing the reverse trend of what occurred in the treatment of erectile dysfunctions. Prior to Masters & Johnson (1970), erectile dysfunction was regarded as a primarily physiological problem. With the publication of their seminal work on sexual dysfunction, the pendulum swung to the other pole and erectile problems were regarded almost exclusively in psychological terms. Today there is a growing realization of the need for a biopsychosocial approach (Rosen & Leiblum, 1992). With the increasing prevalence (or possibly just recognition) of vulvar vestibulitis (Goetsch, 1991), dyspareunia, the psychosexual disorder of the past, could be on its way to becoming the strictly physical disorder of the future. Theory, the data available, and the lesson of erectile dysfunction will hopefully prevent a delay in the realization that integrated approaches hold the most promise.

Finally, it is important to keep in mind that despite our search for etiologic factors both psychological and physiological, pain is pain. It is an experience that does not have to be validated by findings of any kind, other than the report of the woman in question. There are numerous pain syndromes of unknown etiology (Merskey & Bogduk, 1994), and certain types of dyspareunia may fall into this category. The dyspareunia sub-types derived from physical findings in our study depend largely on the fact that we did not do this study 10 years ago when all of the women in the vulvar vestibulitis group would have been classified as having no physical findings at all,

simply because vulvar vestibulitis was not a recognized medical condition and diagnostic techniques had not been developed.

There are numerous directions in which research into coital pain could proceed, other than in the obvious elaboration and more in-depth investigation of the biopsychosocial correlates we examined. We are currently either in the planning stages or conducting three other studies and a pain measure relating to some of the issues raised in this thesis.

The first of these is a mail follow-up of the 120 women in our study with dyspareunia, the data of which is currently being collected. Of interest in this follow-up were questions relating to changes in the intensity and nature of the pain, changes in sexual and relationship satisfaction, and treatment followed since participation in the study. Although this follow-up does not constitute a controlled study and treatment was not part of the protocol of the original study, we believe the results will provide some useful data about the course of the pain, its prolonged effect on sexual function and relationship adjustment, and the ways in which women manage a health problem for which there is only rarely a clearly effective treatment. This study has the potential to generate some interesting hypotheses for further study.

We are also currently designing a study addressing an area of interest that was briefly raised in the review paper - the classification of vaginismus and its categorical distinction from dyspareunia. Without revisiting the theoretical issues already covered in that paper, the results of our study regarding the problems inherent in the DSM-IV classification of dyspareunia only reinforce the need to investigate the attributes of the other DSM-IV sexual pain disorder - vaginismus. Furthermore, with the introduction of vulvar vestibulitis into the sexual pain arena, there exists the possibility that the intense entry pain which characterizes it and sometimes renders any penetration impossible, could be misdiagnosed as vaginismus. Alternately, if vaginismus is

indeed characterized by a distinct defensive muscle spasm, the presence of vulvar vestibulitis could lead to vaginismus, as has been argued by Abramov, Wolman, & David (1994).

The study we are designing and piloting next month will compare the electromyographic responses upon attempted gynecological penetration, in addition to the psychosexual attributes, of women diagnosed as having vaginismus and women with vulvar vestibulitis, women with dyspareunia of unknown physical origin (the equivalent of our no-findings group), and no pain controls. This would be one way of simultaneously testing the putative muscle spasm allegedly exclusive to vaginismus and the predominantly psychological etiologic factors to which vaginismus is generally attributed (Rosen & Leiblum, 1995).

Another more complex study in the planning stages, will attempt to get closer to the origins of the initial pain experience by investigating first intercourse experiences in college women. We believe a study of young adult women who have either not had intercourse yet or just had a few intercourse experiences could be a fruitful way of investigating psychological variables relating to the etiology of pain with intercourse. We will attempt to determine the scripts and expectations these women brought to their first intercourse experience, as well as the nature of their first experience, if they already had one, and prospectively test the relationship of these expectation sets and initial experiences on the development of dyspareunia over the following four to five years. In her study of 400 teenage girls, Thompson (1990) identified two distinct groups; girls who described sexual initiation as painful, boring, or disappointing and girls who emphasized curiosity, desire and pleasure. Would dyspareunia develop more frequently in the group with negative expectations and negative first experiences or would these be unrelated to the development of pain? In light of the fact the vulvar vestibulitis sub-type in our study was the only sub-type to be more erotophobic than its

set of controls, this question seems particularly relevant. Many of the women in this group were in their 20's.

With its rich combination of biological, psychological and social factors, the study of dyspareunia is also well-positioned to address a number of questions of general interest to health psychology.

Coital pain emanates from what is generally considered a highly valued and desired activity. Although this would not be true of the dyspareunic woman whose primary conflict is sexual aversion, the majority of women in our study were truly baffled by their condition and reported no such aversion. The only other reports, of which we are aware, of highly valued activities involving stimuli that habitually produce pain are cultural rites in which individuals undergo excruciating procedures as part of some socially condoned and desired ritual or strenuous sports activities (Melzack & Wall, 1982). The difference between these instances and dyspareunia is that the cultural or personal desirability of a painful situation can serve to decrease and even eliminate the pain, a mechanism that is not triggered in the case of dyspareunia. This raises interesting questions about pain and the expectations inherent in the sexual situation. Perhaps pain perception during sex is enhanced because of the incongruence of its occurrence within a personally desirable and often affectionate interpersonal context. On the other hand, perhaps our cultural representations of the sexual act are tainted with images of violence that trigger pain in psychologically and physiologically vulnerable women.

Dyspareunia further represents a special case of pain because it occurs in a social context - in the presence of another individual. To what extent do others affect the individual's perception of pain? One study found that women in labour reported more pain if their husbands had been present during delivery (Melzack, 1984). There are a number of potential explanations for that particular finding, but the point is that

the presence of others can actually modify our perceptions of pain. In the case of dyspareunia, the pain does not only happen in the presence of another but can be interpreted to be caused by the other (as can labour pain!). It would be interesting to investigate the effects of the partner's attitude and behaviour on the woman's pain perception. Would the partner's denial of the pain result in more or less pain than in his validation of it? The answers to these questions might be quite surprising. One of the reported correlates of both dyspareunia and vaginismus is a male partner who is caring, concerned and very sensitive to his partner's pain (Cooper, 1969; Fertel, 1977, Taylor, 1975). In a study on chronic pain and spouse behaviour, it was suggested that solicitous spouse behaviours may contribute to the maintenance of pain behaviours (Romano, Turner, Friedman, Bulcroft, Jensen, Hops, & Wright, 1992).

In order to eventually study this and other pain-related questions, we are currently designing a multidimensional pain measure that will, in part, measure the woman's perception of her partner's attitude and behaviour relating to her coital pain. Based on The West Haven-Yale Multidimensional Pain Inventory (Kerns, Turk, & Rudy, 1985), our multidimensional coital pain scale consists of three parts; the intensity of the pain and its relation to mood (10 Likert-type scales), the extent to which the pain interferes with numerous aspects of a woman's life, other than intercourse (20 scales), and the behaviour of the partner before, during, and after a painful intercourse attempt (20 scales). This will constitute a first step in investigating whether the role of the partner is related to different aspects of the pain experience.

Finally, dyspareunia is one of a number of conditions of largely unknown etiology such as irritable bowel syndrome, interstitial cystitis, and myofascial pain syndrome, just to name three. These disorders present a particularly interesting case for health psychologists precisely because causal pathways remain a mystery. The lack of a certain physical diagnosis provides fertile ground for the unfettered development

of implicit theories about illness, both on the part of patients and health care professionals. These implicit theories or common-sense representations of illness have the potential to affect symptom reporting, help seeking, compliance to health-promoting regimes, psychosocial adjustment, and, ultimately, the disease process itself, as it is affected by all of the aforementioned (Leventhal, Meyer, & Nerez, 1980; Meyer, Leventhal, Gutmann, 1985).

Using Leventhal's (1980) and Lau & Hartman's (1983) five components of the way in which people think about illness (identity, time line, consequences, cause, and cure), it would be interesting to investigate the relationship between these perceptions in women with dyspareunia and the health-relevant questions they have been hypothesized to affect. It would also be informative to investigate how their partners and doctors respond to the same questions, and measure whether the degree of concordance/discordance between the woman's common-sense representation of her illness and those of significant others around her has any relationship to a number of factors affecting the woman's general well-being.

In summary, the study of coital pain has the potential to provide us with important information about the general areas of pain, sexuality, and health behaviour. At best, we could find effective treatment strategies for this large group of women in a distressful situation. At worst, we could validate their pain and assume only what their data tells us.

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APPENDICES

Appendix A - Newspaper Articles and Advertisements

# Painful sex is not at all unusual

SUSAN SCHWARTZ  
THE GAZETTE

If you are a woman with an intimate sexual problem, it's a good bet this is not information you have shared with many people. Sexuality and sexual activity, after all, are intensely private topics.

So if you experience pain during intercourse, chances are you haven't discussed it with your family doctor or your gynecologist.

Chances also are that your doctor doesn't routinely ask you whether intercourse is painful.

Yet dyspareunia, the medical name for pain during intercourse, could affect up to half of all women. According to some reports, dyspareunia is the most common sexual problem affecting women and it is on the rise.

The problem is that no one knows for sure. Precious little research has been done into dyspareunia and what causes it and no standardized treatment or even definition exists.

A team of Montreal scientists hopes to do something about that.

The psychology department at McGill University and two doctors at the Royal Victoria Hospital are teaming up on a research project. They hope to determine how widespread dyspareunia is, to find physiological and psychological factors that make sufferers different from other women — if, indeed, they are different — and to help them.

Irv Binik, director of the Sex Therapy Service at the Royal Victoria, became interested in investigating the phenomenon when he observed that the service was seeing a considerable number of women with dyspareunia.

Often these women have made the rounds of experts — gynecologists, pain specialists, acupuncturists, sex therapists and even urologists — with no luck.

Binik, who is also a professor of psychology at McGill, recruited



Dr. Samir Khalife (right) and Marta Meana share data on an ultrasound test. They are collaborating on research project.

Marta Meana, a postgraduate psychology student, and two obstetrician/gynecologists at the Royal Victoria, Dr. Deborah Cohen and Dr. Samir Khalifé. Meana reviewed the literature on the subject and the team designed a study incorporating a gynecological and a psychological assessment.

Binik favors an inter-disciplinary approach to the problem. When urologists and sex therapists teamed up to treat male impotence and erectile problems, he explained, they revolutionized treatment. And he believes a parallel approach is likely to be successful in dyspareunia: "There is a physical response; obviously it is influenced by more than just one factor."

Sometimes there's an obvious cause for dyspareunia — infection or inadequate vaginal lubrication or an anatomical problem, for instance — and treatment, either med-

ical or surgical, is straightforward. But not always.

Besides, it's likely that even if a physiological problem is isolated, a psychological component needs to be addressed, said Meana, if dyspareunia has lasted a year or longer. Inevitably, an association develops between intercourse and fear. "The problem acquires a whole other dimension, which can feed into other problems in a relationship."

Dyspareunia is rarely the primary reason a woman goes to a doctor. But studies have shown that if she's asked about it, she answers honestly.

"My standard questions to patients have always included one about pain during intercourse," Khalifé said. Cohen, too, asks the question routinely.

But many doctors don't. Some simply don't feel comfortable discussing sex, Meana said. "One of

the most common reports from women is that the sexuality aspect is often ignored by doctors."

The topic is a difficult one for many women to broach. And if they do bring it up, and a doctor rebuffs them or pooh-poohs them, they're unlikely to broach it again in the near future. "If you get a bad initial reaction, if you feel you have been told to go away, you might wait years before trying to ask for help again," Binik said.

Unfortunately, keeping quiet about a problem often serves only to heap isolation and shame on top of the suffering, Meana said.

And for many women, dyspareunia is a long-standing problem. Cultural uneasiness might be a factor, Meana suggested: Some women are prepared to live with the pain because they don't expect sex to be that pleasant in the first place.

And maybe one reason so little is known about dyspareunia is that it's predominantly a woman's health problem, she ventured. Overall, far less research has been done into female sexuality than male sexuality.

Male dyspareunia does exist; but Meana noted one difference: "When something is terribly wrong with a man's sexual organs, sex can't happen. With women's it can."

Meana's goal is to get a sense from the study — she hopes to assess 100 women with dyspareunia — of how each participant is affected by the pain and of how it interferes with her life.

She also plans to provide information about treatment options. "I can give a lot of information about what they can do," she said.

*For an appointment to take part in the dyspareunia study, phone Marta Meana at 398-6095 on Tuesdays from 9 to 11:45 a.m. and 2:15 to 5 p.m. Or leave a message for Meana, weekdays from 9 to 5, with Judi Young at 398-6094.*

# La dyspareunie, une douleur méconnue

C'est parce qu'il s'agit d'un problème de femmes, prétend un chercheur

RAYMOND BERNAYÈZ

■ Alors que les mécanismes de la douleur chez l'être humain ont été passés au crible ces dernières années, on ignore à peu près tout des causes et du traitement de la dyspareunie, c'est à dire de la douleur ressentie par une femme au quatre dans le cours de son existence, à court ou long terme, lors de la pénétration vaginale. Et si on ne connaît pas la pathologie, c'est tout bonnement parce que l'on a négligé de l'étudier scientifiquement.

Depuis le mois de mars dernier, des chercheurs de l'Université McGill, en collaboration avec l'hôpital Royal Victoria, regroupés au sein d'une équipe multidisciplinaire, étudient scientifiquement le phénomène. Une quarantaine de femmes souffrantes de dyspareunie ont déjà été recrutées.

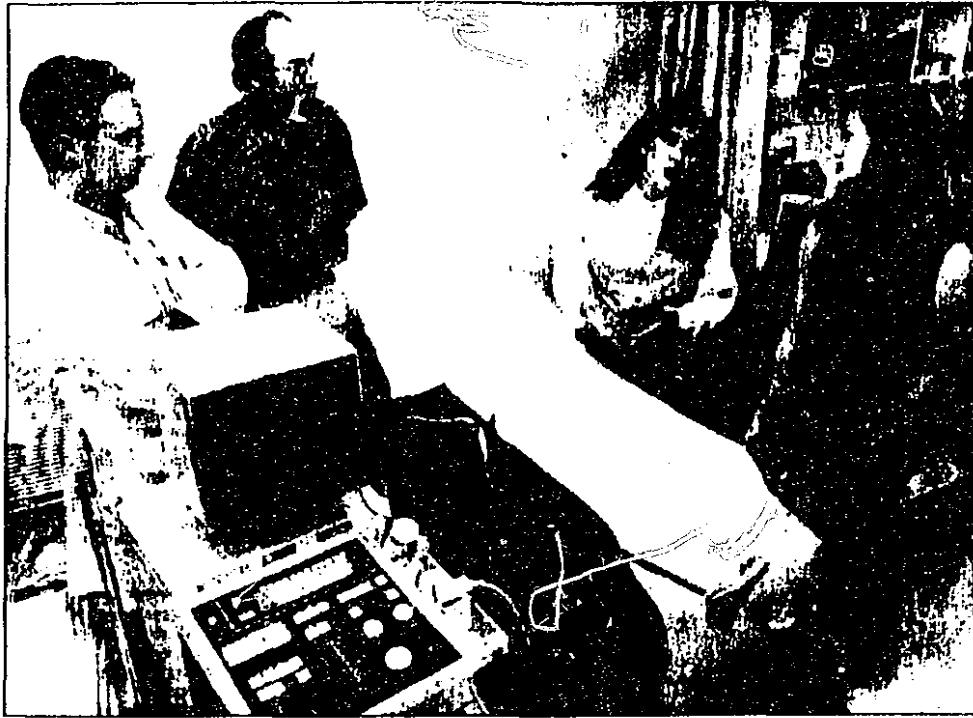
« Si nous ignorons tant de choses au sujet de la dyspareunie, c'est tout simplement parce que les gens qui s'intéressent à la douleur ne connaissent pas cette douleur-là, souligne un membre de l'équipe, le psychologue Irving Bink. Le terme dyspareunie n'existe même pas dans la classification jusqu'à tout récemment, la plupart des recherches portaient sur les problèmes masculins. En sexologie, il y a eu les plus d'études portant sur les problèmes masculins que sur les problèmes féminins ».

Selon un autre membre de l'équipe, le gynécologue Samir Khalife, cette méconnaissance n'est que le reflet du traitement traditionnellement réservé aux femmes en recherche

« En sexologie, de grands chapitres ont été consacrés à l'impotence et à l'impuissance masculine alors que nous ne retrouvons qu'un minuscule chapitre concernant la dyspareunie ».

C'est dans le but de combler cette lacune et pour répondre adéquatement aux attentes des femmes, que l'équipe multidisciplinaire a été constituée.

« Depuis trois ans, explique le Dr Irving Bink, nous avons constaté que beaucoup de femmes se présentaient avec ce problème à la clinique de dysfonction sexuelle de l'hôpital Royal Victoria. Elles avaient consulté séparément des psychologues, des gynécologues ou des sexologues qui n'avaient, individuellement, rien pu faire pour les aider. Nous étions nous-mêmes dépourvus devant ce



De gauche à droite, le Dr Samir Khalife, le Dr Irving Bink, Martha Meana et Sophie Bergeron, dans une salle d'examen à l'hôpital Royal Victoria.

PHOTO LUC MICHÈRE/ALLET LA PIVRA

problème. Vint alors l'idée de constituer une équipe réunissant des psychologues et des gynécologues, de solliciter la participation de femmes qui vivent ces difficultés, d'étudier leurs cas et de formuler conjointement des recommandations ».

### Causes psychologiques ou physiques ?

L'état actuel des connaissances ne permet pas de dire si ces douleurs sont spécifiquement attribuables à des causes psychologiques ou physiques (physiologiques).

« Lorsque nous parlons de sexualité, nous ne pouvons jamais séparer la psychologie de la physiologie, ajoute un autre membre de l'équipe, Martha Meana, candidate doctorale en psychologie. Par exemple, si la femme n'est pas excitée, si elle

n'est pas lubrifiée, il y aura un problème physiologique ».

Le Dr Bink souligne que d'autres facteurs psychologiques peuvent induire une douleur physique. Nous retrouvons cela parfois chez les femmes qui ont subi une ou plusieurs agressions sexuelles durant l'enfance.

« Psychologiquement, il n'y a pas de profil de femmes souffrant de dyspareunie, souligne Martha Meana. Il y a beaucoup de femmes qui n'ont jamais subi d'abus sexuels dans leur enfance. Elles se réveillent un matin avec un problème de douleur et nous ne savons pas pourquoi. C'est ce que nous tentons de déterminer ensemble ».

Inversement, des problèmes psychologiques peuvent découler de difficultés ressenties sur le plan physiologique.

« Une simple infection vulvaire

et vaginale, une banale vaginite peut causer une douleur physique, précise le Dr Samir Khalife. Une fois guérie, tout rentre habituellement dans l'ordre. C'est sans doute la cause la plus fréquente de dyspareunie

« Si nous excluons les facteurs infectieux, d'autres facteurs peuvent être à l'origine de la douleur, poursuit-il. Nous pouvons penser à une inflammation des glandes vestibulaires, même si nous n'attribuons pas à défaut à quoi elle est due exactement. Il peut y avoir des problèmes attribuables à des malformations vaginales congénitales. C'est rare. Il se peut que les problèmes se situent plutôt au niveau du col, de l'utérus ou des ovaires. Des spasmes musculaires pourraient être évoqués également. Toutes ces causes peuvent

potentiellement être à l'origine du problème physique. Mais pas nécessairement. Et c'est là que les facteurs psychologiques peuvent entrer en ligne de compte, car nous constatons aussi que certaines femmes qui ont ces problèmes physiques ou physiologiques ressentent de la douleur et d'autres pas. En entravant le problème physique, on n'entrave pas nécessairement le problème psychologique. On a mal une fois, deux fois, trois fois, puis le problème physique en vient parfois à générer un problème psychologique qu'il faudra traiter de toute manière une fois le problème physique entravé. Voilà pourquoi nous avons décidé de constituer une équipe multidisciplinaire. Le gynécologue seul, le psychologue seul ou le sexologue seul ne parlent pas à recommander des solutions pour l'ensemble du

problème ».

« Comment fait-on pour rétablir le contact entre une femme mariée et son mari, dit Martha Meana, lorsque la femme n'a pas eu de relations sexuelles avec son mari durant quatre ans à cause d'un problème de dyspareunie? »

« Chose certaine, il faudra sûrement songer à rayer le terme frigidité de notre vocabulaire ».

« Le terme frigidité, spécifie le Dr Bink, n'est plus employé. Il a des connotations négatives et de toute manière, il ne décrit pas la réalité. La réalité, c'est qu'il y a des femmes qui ont un problème de douleurs, qui sont quand même excitées. Elles n'en ressentent pas moins des douleurs lorsqu'il y a pénétration. Il y a peut-être des femmes qui ne veulent pas la pénétration pour d'autres raisons, mais cela ne fait pas partie du cadre de nos recherches. Notre groupe est constitué de femmes qui veulent la pénétration, mais qui ont de la difficulté à vivre cela à cause de la douleur ».

### Une femme sur quatre

Les chercheurs estiment qu'environ une femme sur quatre a vécu ou vivra cette difficulté dans le cours de son existence. Elles vivront peut-être ces problèmes durant une brève période de temps et ne les ressentiront plus jamais. Dans d'autres cas, la douleur persistera et la personne atteinte hésitera à se confier à un médecin.

À long terme, la dyspareunie a manifestement des effets dévastateurs pour la femme atteinte et, le cas échéant, le couple. À court terme, les effets ne doivent pas être sous-estimés. Un résultat, il s'agit de la douleur, par exemple, au début d'une relation ou dans les débuts d'un mariage ».

L'équipe, constituée également des gynécologues Deborah Cohen, W. Goldsmith et L. Stannard, de Danielle Hanc infirmière, et de Sophie Bergeron, candidate doctorale en psychologie, veut étudier ce problème.

Pour y parvenir, ces professionnels de la santé sollicitent la participation de toutes les femmes qui seraient disposées à contribuer à cette étude, qu'elles ressentent ou non ces douleurs, puisque la procédure implique également la constitution d'un groupe témoin. Pour obtenir des informations additionnelles, vous êtes priés d'entrer en communication avec Martha Meana en composant le (514) 398-6114, ou le (514) 398-6694.

The Gazette April 7, 1994

**McGILL UNIVERSITY and THE  
ROYAL VICTORIA HOSPITAL**

seek women aged 19-65  
to participate in a

**GYNECOLOGY  
STUDY.**



Callers will be first screened over the phone to evaluate if they are eligible to participate.

Participants will be asked to undergo an interview and 3 different gynecological examinations at the **Royal Victoria Hospital.**

**Participants will be remunerated \$50.00 for their time (3 hours) and expenses.**

Those interested in more information should contact **Marta Meana at 398-6114.**



L'UNIVERSITÉ MCGILL ET  
L'HÔPITAL ROYAL VICTORIA  
sont à la recherche de  
femmes âgées entre 19 et 65  
ans pour participer à un

**PROJET DE  
RECHERCHE EN  
GYNÉCOLOGIE**

La participation à ce projet comporte une interview et 3 examens gynécologiques différents faits à l'hôpital Royal Victoria. Une rémunération de 50 dollars sera offerte aux participantes pour leur présence (2 à 3 heures) et pour couvrir les frais de déplacement. Les femmes intéressées sont invitées à entrer en contact avec

**Marta Meana au 398-6114.**

S2048503

La Presse, January, 17, 1994

Appendix B- Subject Consent Form

## SUBJECT CONSENT FORM

### Study of the Classification and Etiology of Coital Pain in Women

This study is being conducted to investigate the properties of the pain a significant number of women experience when they engage in sexual intercourse, along with the physiological and psychological correlates of this condition. This attempt to better understand a largely neglected problem will help health professionals formulate more efficient treatment regimes for women experiencing this frustrating and disruptive condition.

I voluntarily agree to participate in the research project entitled "The Classification and Etiology of Coital Pain in Women: A Pilot Study" conducted by Dr. Irving Binik, Dr. Samir Khalife, Dr. Debra Cohen, Danielle Hone and Marta Meana as the principal investigators, Dept. of Obstetrics and Gynecology, Royal Victoria Hospital and Department of Psychology, McGill University (398-6094).

I voluntarily agree to participate in the following components of the procedure that I have indicated with a check mark:

\_\_\_\_\_ Structured interview and questionnaires which ask about my medical history, coital pain, sexuality, body attitudes, relationships, and current somatic and psychological symptoms (duration: 45 - 60 min).

\_\_\_\_\_ Standard gynecological examination.

\_\_\_\_\_ Colposcopy (generally painless procedure whereby the vagina and cervix are magnified and treated with a solution to detect any abnormalities. The discomfort is equivalent to that of a standard examination using a speculum).

\_\_\_\_\_ Ultrasound (procedure that investigates abdominal and vaginal abnormalities by placing an instrument much like a stethoscope directly on these areas - abdominal ultrasounds are painless but vaginal ultrasounds can cause some discomfort).

I understand that all information collected from me is strictly confidential. My name will only appear on this consent form and a contact form and will not be placed on any questionnaires.

I understand that I am under no obligation to participate in this study. Furthermore, I am free to withdraw from the study at any time or to refuse to answer any questions posed without need of an explanation on my part.

In the event that I have any complaints or dissatisfactions with this research, I know I can communicate them, if I so wish, to Dr. I. Binik, Professor, Department of Psychology, McGill University (tel: 398-6094) and Director of Sex Therapy Service, Royal Victoria Hospital (tel. 842-1231, local 4285).

Signature \_\_\_\_\_

Name (print) \_\_\_\_\_

Date \_\_\_\_\_

Witness \_\_\_\_\_

## FORMULAIRE DE CONSENTEMENT

### Etude sur la classification et l'étiologie (les causes) des douleurs coïtales chez la femme

Cette étude a pour but d'examiner la douleur qu'un nombre significatif de femmes ressentent durant la relation sexuelle, de même que les corrélats physiologiques et psychologiques de cet état. Cette démarche vers une meilleure compréhension de ce problème trop souvent négligé vise à aider les professionnels de la santé à développer des traitements plus efficaces pour les femmes qui souffrent de ce problème frustrant et dérangeant.

J'accepte librement de participer au projet de recherche intitulé "La classification et l'étiologie des douleurs coïtales chez la femme: étude pilote", projet conduit par Dr. Irving Binik, Dr. Samir Khalifé, Dr. Debra Cohen, Danielle Hone et Marta Meana, M.A., principaux investigateurs, ainsi que le Service de thérapie sexuelle et le Département d'obstétrique et de gynécologie de l'Hôpital Royal Victoria, de même que le Département de psychologie de l'Université McGill (398-6094).

Parmi les étapes suivantes, j'accepte librement de participer à celles que j'ai cochées.

\_\_\_\_\_ Entrevue dirigée et questionnaires portant sur mon histoire médicale, mes douleurs durant les relations sexuelles, ma sexualité, mes attitudes face à mon corps, mes relations, ainsi que mes symptômes physiques et psychologiques (Durée: 45 à 60 minutes).

\_\_\_\_\_ Examen gynécologique de routine.

\_\_\_\_\_ Coloscopie (procédure habituellement sans douleur lors de laquelle le vagin et le col de l'utérus sont amplifiés et traités avec une solution permettant de détecter toute anomalie. L'inconfort est équivalent à celui ressenti lors d'un examen au spéculum).

\_\_\_\_\_ Ultrason (procédure qui permet de détecter des anomalies abdominales ou vaginales en plaçant un instrument semblable au stéthoscope directement sur l'abdomen ou sur la paroi vaginale - cette procédure peut causer un certain inconfort).

Il est entendu que toute information me concernant demeure strictement confidentielle. Mon nom n'apparaîtra que sur ce formulaire de consentement de même que sur le contrat et il n'apparaîtra sur aucun questionnaire.

Il est entendu que je ne suis nullement obligée de participer à cette étude. De plus, je demeure libre de me retirer de l'étude en tout temps ou de refuser de répondre à n'importe quelle question, et ce, sans avoir à fournir d'explication.

Advenant que j'aie des plaintes ou des insatisfactions par rapport à cette étude, je sais que je peux communiquer, si je le veux, avec Dr. Binik, professeur du Département de psychologie de l'Université McGill (Tél: 398-6094) et Directeur du Service de thérapie sexuelle de l'Hôpital Royal Victoria (Tél: 842-1231, poste 4285).

Signature

\_\_\_\_\_

Nom en lettres moulées

\_\_\_\_\_

Date

\_\_\_\_\_

Témoin

\_\_\_\_\_



Appendix C - McGill-Melzack Pain Questionnaire

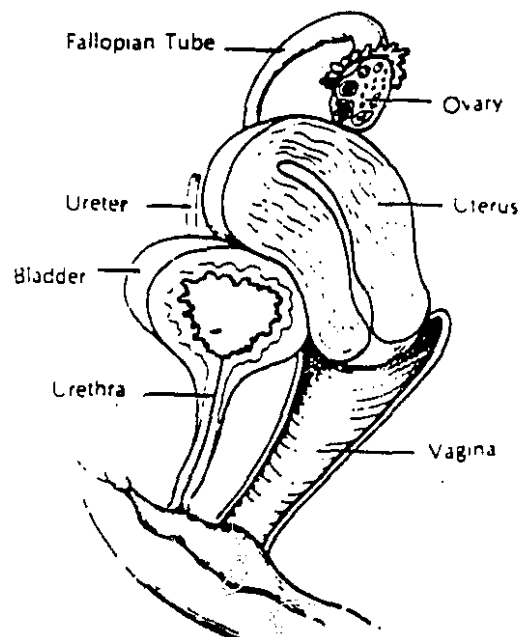
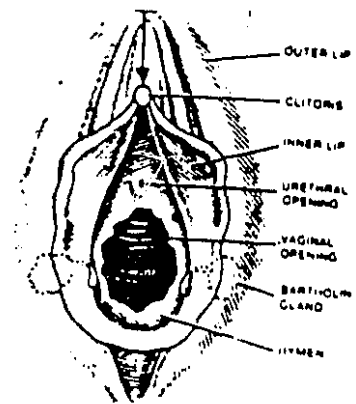
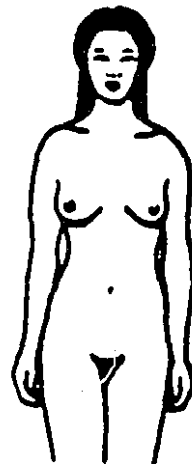
# McGill - Melzack Pain Questionnaire

Patient's Name \_\_\_\_\_ Date \_\_\_\_\_

PRI: S \_\_\_\_\_ A \_\_\_\_\_ E \_\_\_\_\_ M(S) \_\_\_\_\_ M(AE) \_\_\_\_\_ M(T) \_\_\_\_\_ PRI(T) \_\_\_\_\_  
 (1-10) (11-15) (16) (17-19) (20) (17-20) (1-20)

|              |                 |
|--------------|-----------------|
| 1 FLICKERING | 11 TIRING       |
| QUIVERING    | EXHAUSTING      |
| PULSING      | 12 SICKENING    |
| THROBBING    | SUFFOCATING     |
| BEATING      | 13 FEARFUL      |
| POUNDING     | FRIGHTFUL       |
| 2 JUMPING    | TERRIFYING      |
| FLASHING     | 14 PUNISHING    |
| SHOOTING     | GRUELLING       |
| 3 PRICKING   | CRUEL           |
| BORING       | VICIOUS         |
| DRILLING     | KILLING         |
| STABBING     | 15 WRETCHED     |
| LACINATING   | BLINDING        |
| 4 SHARP      | 16 ANNOYING     |
| CUTTING      | TROUBLESOME     |
| LACERATING   | MISERABLE       |
| 5 PINCHING   | INTENSE         |
| PRESSING     | UNBEARABLE      |
| GNAWING      | 17 SPREADING    |
| CRAMPING     | RADIATING       |
| CRUSHING     | PERFORATING     |
| 6 TUGGING    | PUNCTING        |
| PULLING      | 18 TIGHT        |
| WRENCHING    | NUMB            |
| 7 HOT        | DRAWING         |
| BURNING      | SQUEEZING       |
| SCALDING     | TEARING         |
| SEARING      | 19 COOL         |
| 8 TINGLING   | COLD            |
| ITCHY        | FREEZING        |
| SMARTING     | 20 NAGGING      |
| STINGING     | NAUSEATING      |
| 9 DULL       | AGONIZING       |
| SCORE        | DREADFUL        |
| HURTING      | TORTURING       |
| ACHING       | PPI             |
| HEAVY        | 0 No pain       |
| 10 TENDER    | 1 MILD          |
| TAUT         | 2 DISCOMFORTING |
| RASPING      | 3 DISTRESSING   |
| SPLITTING    | 4 HORRIBLE      |
|              | 5 EXCRUCIATING  |

PPI \_\_\_\_\_ COMMENTS: \_\_\_\_\_



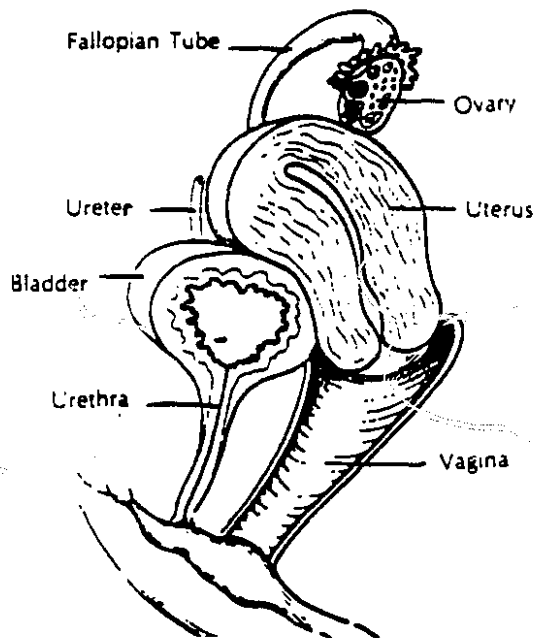
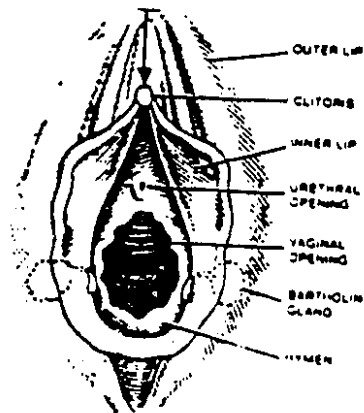
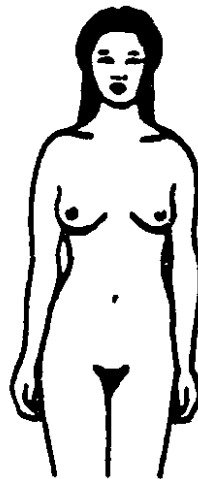
# Questionnaire Melzack sur la douleur (McGill)

Nom du patient \_\_\_\_\_ Date \_\_\_\_\_

PRI \_\_\_\_\_ S \_\_\_\_\_ A \_\_\_\_\_ E \_\_\_\_\_ M(S) \_\_\_\_\_ M(AE) \_\_\_\_\_ M(T) \_\_\_\_\_ PRI(T) \_\_\_\_\_  
 (1-10) (11-15) (16) (17-19) (20) (17-20) (1-20)

|  |   |
|--|---|
| 1. Qui tremblote<br>Qui tremote<br>Qui palpite<br>Qui bat<br>Qui élance<br>Qui manie | 12. Ecoeurante<br>— Etouffante  |
| 2. Par secousse<br>Brusque<br>Fulgurante   | 13. Epeurante<br>Effrayante<br>Terrifiante  |
| 3. Qui pique<br>Qui perce<br>Qui penetre<br>Qui poignarde                            | 14. Violente<br>Éreintante<br>Cruelle<br>Tuante<br>Torturante                             |
| 4. Vive<br>Aigue<br>Déchirante   | 15. Déprimante<br>Aveuglante  |
| 5. Qui pince<br>Qui presse<br>Qui ronge<br>Qui crampe<br>Qui écrase                  | 16. Agaçante<br>Exasperante<br>Intense<br>Honte<br>Intolérable                            |
| 6. Qui tiraille<br>Qui tire<br>Qui tord  | 17. Qui s'étend<br>Qui rayonne<br>Qui rentre<br>Qui transperce                            |
| 7. Chaude<br>Brulante<br>Bouillante<br>Comme marqué<br>au fer rouge                  | 18. Raide<br>Engourdie<br>Tendue<br>Qui serre<br>Qui arrache                              |
| 8. Qui fourmille<br>Qui démange<br>Cuisante<br>Cinglante                             | 19. Fraiche<br>Froide<br>Glacée   |
| 9. Sourde<br>Douleuruse<br>Drué<br>Penible<br>Poignante                              | 20. Énervante<br>Dégoûtante<br>Épouvantable<br>Atroce<br>Agonisante                       |
| 10. Sensible<br>Crispée<br>Qui écorche<br>Qui fend                                   | 0 Pas de douleur<br>1 Faible<br>2 Inconfortable<br>3 Forte<br>4 Sévère<br>5 Insupportable |
| 11. Fatigante<br>Épuisante   |   |

PPI \_\_\_\_\_ Commentaires: \_\_\_\_\_



Appendix D - Structured Interview

**DYSPAREUNIA STUDY**

**STRUCTURED INTERVIEW**

Socio-demographic information

Medical history

Dyspareunia interview

Subject Number \_\_\_\_\_

Referral from \_\_\_\_\_

Examiner \_\_\_\_\_

Date \_\_\_\_\_

Place \_\_\_\_\_ Time \_\_\_\_\_



## MEDICAL HISTORY

- 1) Do you menstruate regularly? YES NO If no, please state whether you are menopausal or specify any other reason why you do not have periods and  
**SKIP TO Q-4**

2) How many menstrual periods have you had in the last year? \_\_\_\_\_

- 3) Please rate on the following scale the pain you experience during your menstrual periods.

|         |   |   |   |                    |   |   |   |   |              |
|---------|---|---|---|--------------------|---|---|---|---|--------------|
| 1       | 2 | 3 | 4 | 5                  | 6 | 7 | 8 | 9 | 10           |
| no pain |   |   |   | moderately painful |   |   |   |   | very painful |

- 4) In terms of contraception, which of the following best describes your situation? (you can circle as many as apply)

- |  |  |
|--|--|
| a) Douche                                      | b) Spermicide jelly or foam  |
| c) Condoms                                     | d) Diaphragm   |
| e) Cervical cap                                | f) Sponge  |
| g) IUD   | h) The pill  |
| i) Morning-after pill                          | j) Tubal ligation (tubes tied)                                     |
| k) Hysterectomy                                | l) Partner has vasectomy   |
| m) You are infertile                           | n) Partner is infertile  |
| o) You no longer have periods due to menopause | p) Rhythm method (abstain when ovulating)                          |
| q) Partner exits before ejaculating            | r) No contraceptive measures taken but do not want to get pregnant |
| s) Trying to get pregnant                      | t) You are pregnant  |
| u) You are breast-feeding                      | w) Do not engage in intercourse at all                             |
| w) Other, please specify                       |  |

- 5) Have you ever had a cesarian delivery? YES NO If yes, please specify when it or they occurred.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mo/year      mo/year      mo/year      mo/year      mo/year

6) Have you ever had an episiotomy to facilitate the baby's exit, that is, was an incision made in your vaginal opening at the time of birth? YES NO DON'T KNOW  
If yes, please specify when it or they occurred.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mo/year mo/year mo/year mo/year mo/year

7) Have you ever experienced any lacerations during delivery, that is, has your vaginal opening ever torn when giving birth? YES NO DON'T KNOW

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mo/year mo/year mo/year mo/year mo/year

8) Have you ever had a miscarriage? YES NO If yes, please specify when it or they occurred.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mo/year mo/year mo/year mo/year mo/year

9) Have you ever had an abortion? YES NO If yes, please specify when it or they occurred and in what week of the pregnancy.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mo/year mo/year mo/year mo/year mo/year

10) Approximately how many yeast or other vaginal infections have you had in the last 2 years? \_\_\_\_\_ If the answer was not 0, please specify how long the average infection lasted. \_\_\_\_\_ days. If the answer was 0 SKIP TO Q-11.

11) Are you presently suffering from a yeast infection? YES NO If yes please specify how long you have had it for. \_\_\_\_\_ days

12) Approximately how many bladder infections have you had in the last 2 years? \_\_\_\_\_ If the answer is not 0, please specify how long the average infection lasted. \_\_\_\_\_ days. If the answer was 0, please SKIP TO Q-13.

13) Are you presently suffering from a bladder infection? YES NO If yes, please specify how long you have had it for. \_\_\_\_\_ days

14) Have you ever suffered from any of the following sexually transmitted diseases?  
Please place check marks

- Chlamydia \_\_\_\_\_
- Gardnerella vaginalis \_\_\_\_\_
- Genital herpes \_\_\_\_\_
- Genital warts \_\_\_\_\_
- Gonorrhea \_\_\_\_\_
- H.I.V \_\_\_\_\_
- Syphillis \_\_\_\_\_
- Trichomoniasis \_\_\_\_\_
- Other \_\_\_\_\_ Please specify \_\_\_\_\_



If you have had any of the above has/have the condition(s) been successfully treated or is it/are they being currently treated in some way? YES NO

Please specify \_\_\_\_\_  
\_\_\_\_\_

15) Have you ever suffered from pelvic inflammatory disease? YES NO If no SKIP TO Q-17. If yes, PROCEED TO Q-15.

16) Do you have pelvic inflammatory disease at the moment? YES NO

17) How was it or is it being treated?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

18) Have you ever had endometriosis? YES NO If no SKIP TO Q-20 If yes, PROCEED TO Q-18.

19) Do you have endometriosis at the moment? YES NO

20) How was it or is it being treated?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

21) Please list any operations you have had along with the year in which you had them.

| Operations | Year  |
|------------|-------|
| _____      | _____ |
| _____      | _____ |
| _____      | _____ |
| _____      | _____ |
| _____      | _____ |

22) Please list any serious illnesses you have or have had along with the years when you suffered from them?

| Illnesses | Years |
|-----------|-------|
| _____     | _____ |
| _____     | _____ |
| _____     | _____ |
| _____     | _____ |
| _____     | _____ |

23) Do you regularly suffer from any kind of pain? Please check off as many of the following as apply.

- Abdominal pain (apart from menstrual cramps) \_\_\_\_\_
- Arthritis \_\_\_\_\_ where? \_\_\_\_\_
- Back pain \_\_\_\_\_
- Chest pains \_\_\_\_\_
- Earaches \_\_\_\_\_
- Headaches \_\_\_\_\_
- Muscle pains (e.g. arms and legs) \_\_\_\_\_
- Neck pain \_\_\_\_\_
- Pain in kidneys \_\_\_\_\_
- Sore throat \_\_\_\_\_
- Stomach pains \_\_\_\_\_
- Toothaches \_\_\_\_\_
- Other \_\_\_\_\_ Please specify \_\_\_\_\_

24) Have you ever been treated by a psychologist, psychiatrist or social worker? YES NO  
Please specify the reason why.

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25) Please list any medications you are presently taking and what they are for.

| Medication | For   |
|------------|-------|
| _____      | _____ |
| _____      | _____ |
| _____      | _____ |
| _____      | _____ |

## SEXUAL ACTIVITY SCREENING FORM

- 1) Have you had or attempted sexual intercourse with a man in the past 6 months?  
 YES NO If yes, complete **Form A (pages 7-12)** and do not answer any further questions on this page. If no, **PROCEED TO Q-2**
- 2) Have you ever had or attempted sexual intercourse? YES NO If yes, complete **Form B (pages 13-18)** and do not answer any further questions on this page. If no, **PROCEED TO Q-3.**
- 3) In the past 6 months have you regularly experienced pain in your genital area in any of the following situations?
- a) Friction with tight clothing \_\_\_\_\_
  - b) Urinating \_\_\_\_\_
  - c) Inserting a tampon \_\_\_\_\_
  - d) Masturbating with your hand \_\_\_\_\_
  - e) Masturbating with a vibrator/or other object \_\_\_\_\_
  - f) Partner stimulating you manually \_\_\_\_\_
  - g) Inserting one of your fingers \_\_\_\_\_
  - h) Inserting one of your partner's fingers \_\_\_\_\_
  - i) Inserting two of your fingers \_\_\_\_\_
  - j) Inserting two of your partner's fingers \_\_\_\_\_
  - k) Standard gynecological examination \_\_\_\_\_
  - l) Other \_\_\_\_\_ please specify \_\_\_\_\_

If you checked off any of the above, did you ever report the pain to a health professional?  
 YES NO If yes, please specify what kind of health professional and what you were told.

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- 4) Do you expect or think that if you were to have intercourse in the near future that it would be a painful experience or one causing physical discomfort? (Please answer by placing a mark on the scale)

|         |   |   |   |                    |   |   |   |              |    |
|---------|---|---|---|--------------------|---|---|---|--------------|----|
| 1       | 2 | 3 | 4 | 5                  | 6 | 7 | 8 | 9            | 10 |
| no pain |   |   |   | moderately painful |   |   |   | very painful |    |

If you have never had or attempted intercourse you have completed this questionnaire.

# FORM A

(all women presently having intercourse)

- 1) Over the past 6 months approximately how many times did you have intercourse per month? \_\_\_\_\_
- 2) In the past 6 months, have you ever experienced pain or significant discomfort before, during or after intercourse? YES NO If no, SKIP TO Q-27
- 3) Why do you think you have pain with intercourse? What is your personal theory about your discomfort?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- 4) In the past 6 months what percentage of the time has your partner's erect penis been able to enter your vagina? \_\_\_\_\_% of the times we have tried.
- 5) Once inside the vagina, what percentage of the time have you been able to tolerate the in-and-out movement of the penis over the past 6 months? \_\_\_\_\_% of the times that my partner has successfully entered.
- 6) Over the past 6 months, what is the average length of time that your partner's erect penis is in your vagina ? \_\_\_\_\_minutes
- 7) In the last 6 months what percentage of the time do you experience pain due to intercourse? \_\_\_\_\_% of the times we have tried. If the answer is 100%, SKIP TO Q-9. If less than 100%, PROCEED TO Q-8.
- 8) Is there anything special about the times when you do not have pain? Are there any special circumstances you can identify ? Please check off any of the following that apply or specify circumstances not listed.

It depends on (put check mark on as many as apply)

- |   |  |
|---|--|
| How tired I am _____                    | How aroused I am _____                         |
| How lubricated I am _____               | How long foreplay lasts _____                  |
| The intercourse position we use _____   | The place where we have intercourse _____      |
| How nervous or anxious I am _____       | The time of my menstrual cycle _____           |
| The partner I am having sex with _____  | Whether I am angry with my partner _____       |
| Whether we are alone in the house _____ | Whether I have taken any drugs _____           |
| The time of day _____                   | Whether I have had an alcoholic beverage _____ |

Other \_\_\_\_\_(please specify) \_\_\_\_\_

9) When you do have pain, is the pain always the same or does it vary? Is it worse sometimes than others?  
\_\_\_\_\_  
\_\_\_\_\_

10) Do you notice anything special about when it is better or worse? Does it depend on  
(Please place check marks on as many as apply)

|   |  |
|---|--|
| How tired I am _____                    | How aroused I am _____                         |
| How lubricated I am _____               | How long foreplay lasts _____                  |
| The intercourse position we use _____   | The place where we have intercourse _____      |
| How nervous or anxious I am _____       | The time of my menstrual cycle _____           |
| The partner I am having sex with _____  | Whether I am angry with my partner _____       |
| Whether we are alone in the house _____ | Whether I have taken any drugs _____           |
| The time of day _____                   | Whether I have had an alcoholic beverage _____ |
| Other _____(please specify) _____       | _____  |

11) When did you first have intercourse?  
Month \_\_\_\_\_ Year \_\_\_\_\_

12) When did you start having pain with intercourse regularly?  
Month \_\_\_\_\_ Year \_\_\_\_\_

13) What is the total number of sexual partners you have had intercourse with? \_\_\_\_\_ If the answer is 1 skip to Q-15

14) Have you had pain with all your sexual partners since the pain started? YES NO  
Please specify \_\_\_\_\_  
\_\_\_\_\_

15) When does the pain typically start?  
a) before penis touches vaginal opening  
b) when penis starts to enter vagina  
c) when penis has fully entered and is thrusting  
e) immediately after intercourse  
f) more than 1/2 hour after intercourse  
g) other. Please specify \_\_\_\_\_  
\_\_\_\_\_

16) Does the pain typically start suddenly or gradually? Please place a mark on the following scale.

|                |   |   |   |   |   |   |   |   |               |
|----------------|---|---|---|---|---|---|---|---|---------------|
| 1              | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10            |
| very gradually |   |   |   |   |   |   |   |   | very suddenly |

17) How long does the pain typically last for? Please give an estimate in minutes and then circle one of the following.

Time: \_\_\_\_\_ minutes

- a) before penile entry + during penile thrusting + after penile exit
- b) during the penile thrusting only
- c) during the penile thrusting and for some time after penile thrusting
- d) only for a period after penile exit
- e) other. Please specify \_\_\_\_\_

18) Where do you feel typically feel the pain? (You can choose more than one)

- a) at the vaginal opening
- b) inside the vagina
- c) in the pelvic or abdominal region

19) Is it typically limited to a particular spot you can point to or is it a general area?

\_\_\_\_\_

\_\_\_\_\_

20) Have you ever tried lubricants to relieve the pain during intercourse? YES NO  
If no, SKIP TO Q-23.

21) What kind of lubricants? \_\_\_\_\_

22) Does it still hurt with lubricants? YES NO SOMETIMES

23) Have you ever tried anything other than lubricants to ease the pain and to what extent was it successful?

\_\_\_\_\_

\_\_\_\_\_

24) Is there anything your partner does during intercourse that makes your pain better or worse? YES NO Please specify \_\_\_\_\_

25) Have you ever discussed the pain with your partner? YES NO

- 26) Have you ever reported pain with intercourse to a health professional? YES NO  
 If yes, please specify what kind of health professional (e.g. nurse, family doctor, gynecologist, sex counsellor, psychologist, etc.) and what you were told.

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- 27) Over the past 6 months approximately how many times have you felt sexual desire per month? \_\_\_\_\_ times per month

- 28) Please rate on the following scale your average level of desire for sex during the past 6 months.

|                  |   |   |   |             |   |   |   |   |                 |
|------------------|---|---|---|-------------|---|---|---|---|-----------------|
| 1                | 2 | 3 | 4 | 5           | 6 | 7 | 8 | 9 | 10              |
| no desire at all |   |   |   | some desire |   |   |   |   | a lot of desire |

- 29) Please rate on the following scale your average level of arousal (excitement) during sex in the past 6 months.

|                    |   |   |   |                  |   |   |   |   |              |
|--------------------|---|---|---|------------------|---|---|---|---|--------------|
| 1                  | 2 | 3 | 4 | 5                | 6 | 7 | 8 | 9 | 10           |
| not aroused at all |   |   |   | somewhat aroused |   |   |   |   | very aroused |

- 30) Please compare on the following scale your level of arousal in the past 6 months to what you consider your normal level of arousal during sex.

|                       |   |   |   |        |   |   |   |   |                       |
|-----------------------|---|---|---|--------|---|---|---|---|-----------------------|
| 1                     | 2 | 3 | 4 | 5      | 6 | 7 | 8 | 9 | 10                    |
| much less than normal |   |   |   | normal |   |   |   |   | much more than normal |

- 31) During the past 6 months, approximately how many times did you masturbate per month? \_\_\_\_\_ times per month. If 0, SKIP TO Q-33. If more than 0 PROCEED TO Q-32.

- 32) In the past 6 months, what percentage of the time that you masturbated, did you achieve orgasm? \_\_\_\_\_ % of the time

- 33) Please rate on the following scale your feelings about the sexual act in terms of feelings of disgust or aversion over the past 6 months.

|                       |   |   |   |   |   |   |   |   |                 |
|-----------------------|---|---|---|---|---|---|---|---|-----------------|
| 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10              |
| not disgusting at all |   |   |   |   |   |   |   |   | very disgusting |

34) In the past 6 months, what percentage of the time that your partner manually stimulates you do you achieve orgasm?

\_\_\_\_\_ % of the time or \_\_\_\_\_ My partner rarely/never stimulates me manually

35) In the past 6 months, what percentage of the time that your partner stimulates you orally do you achieve orgasm?

\_\_\_\_\_ % of the time or \_\_\_\_\_ My partner rarely/never stimulates me orally

36) In the past 6 months, what percentage of the time do you achieve orgasm through intercourse only? \_\_\_\_\_ % of the time

37) How would you rate your partner's average level of sexual desire or interest in the past six months?

|                  |   |   |   |             |   |   |                        |   |    |
|------------------|---|---|---|-------------|---|---|------------------------|---|----|
| 1                | 2 | 3 | 4 | 5           | 6 | 7 | 8                      | 9 | 10 |
| no desire at all |   |   |   | some desire |   |   | a great deal of desire |   |    |

38) How would you compare your partner's average level of sexual desire or interest in the past 6 months to his "normal" level of sexual desire?

|                       |   |   |   |        |   |   |                       |   |    |
|-----------------------|---|---|---|--------|---|---|-----------------------|---|----|
| 1                     | 2 | 3 | 4 | 5      | 6 | 7 | 8                     | 9 | 10 |
| much less than normal |   |   |   | normal |   |   | much more than normal |   |    |

39) What percentage of the time that sex has been initiated in the past 6 months does your partner have difficulties achieving or maintaining an erection \_\_\_\_\_ %

40) Over the past 6 months, approximately how long does your partner remain erect before ejaculating once he has entered you? \_\_\_\_\_ minutes

41) What percentage of the time that you have had sex in the past 6 months does your partner achieve orgasm? \_\_\_\_\_ % of the time.

42) In the past 6 months have you regularly experienced pain in your genital area in any of the following situations?

- a) Friction with tight clothing \_\_\_\_\_
- b) Urinating \_\_\_\_\_
- c) Inserting a tampon \_\_\_\_\_
- d) Masturbating with your hand/or other object \_\_\_\_\_
- e) Masturbating with a vibrator \_\_\_\_\_
- f) Partner stimulating you manually \_\_\_\_\_
- g) Inserting one of your fingers \_\_\_\_\_
- h) Inserting ne of your partner's fingers \_\_\_\_\_
- i) Inserting two of your fingers \_\_\_\_\_
- j) Inserting two of your partner's fingers \_\_\_\_\_
- k) Standard gynecological examination \_\_\_\_\_
- l) Other \_\_\_\_\_ please specify \_\_\_\_\_



If you checked off any of the above, did you ever report the pain to a health professional?  
 YES NO If yes, please specify what kind of health professional and what you were told.

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- 43) Do you consider yourself to have been physically abused as a child?  
 YES NO
- 44) Do you consider yourself to have been physically abused as an adult?  
 YES NO
- 45) Do you consider yourself to have been sexually abused as a child?  
 YES NO If yes, proceed to Q-46 . If no, skip to Q-47 .
- 46) Did it involve any kind of penetration (e.g., fingers, objects, penis)?  
 YES NO
- 47) Do you consider yourself to have been sexually assaulted in your adult life?  
 YES NO If yes, proceed to Q-48 . If no, **you have completed this questionnaire. Do not proceed to FOKM B. Thank you.**
- 48) Did it involve any kind of penetration (e.g., fingers, objects, penis)?  
 YES NO

**You have completed this questionnaire. Thank you.**

## FORM B

**(women who are not having intercourse now  
but have had it in the past)**

1) When did you last have intercourse?

Month \_\_\_\_\_ Year \_\_\_\_\_

2) What is the reason you have not had intercourse in the past 6 months?

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3) When you had intercourse in the past did you ever experience pain or significant discomfort before, during or after intercourse? YES NO If no, SKIP TO Q-28

4) Why do you think you have pain with intercourse? What is your personal theory about your discomfort?

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5) In the past, what percentage of the time was your partner's erect penis able to enter your vagina? \_\_\_\_\_% of the times we tried.

6) Once inside the vagina, what percentage of the time were you able to tolerate the in-and-out movement of the penis? \_\_\_\_\_% of the times that my partner successfully entered.

7) What was the average length of time that your partner's erect penis was in your vagina? \_\_\_\_\_minutes

8) In the past, how often did you experience pain with intercourse? (please answer in percentage terms) \_\_\_\_\_% of the times I tried.

- 9) Was there anything special about the times when you did not have pain? Were there any special circumstances you can identify? Please check off any of the following that apply or specify circumstances not listed.

It depended on (put check mark on as many as apply)

|  |   |
|--|---|
| How tired I was _____                    | How aroused I was _____                       |
| How lubricated I was _____               | How long foreplay lasted _____                |
| The intercourse position we used _____   | The place where we had intercourse _____      |
| How nervous or anxious I was _____       | The time of my menstrual cycle _____          |
| The partner I was having sex with _____  | Whether I was angry with my partner _____     |
| Whether we were alone in the house _____ | Whether I had taken any drugs _____           |
| The time of day _____                    | Whether I had had an alcoholic beverage _____ |
| Other _____ (please specify) _____       |   |

- 10) When you did have pain, was the pain always the same or did it vary? Was it worse sometimes than others?
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

- 11) Did you notice anything special about when it was better or worse? Did it depend on (put check mark on as many as apply)

|  |   |
|--|---|
| How tired I was _____                    | How aroused I was _____                       |
| How lubricated I was _____               | How long foreplay lasted _____                |
| The intercourse position we used _____   | The place where we had intercourse _____      |
| How nervous or anxious I was _____       | The time of my menstrual cycle _____          |
| The partner I was having sex with _____  | Whether I was angry with my partner _____     |
| Whether we were alone in the house _____ | Whether I had taken any drugs _____           |
| The time of day _____                    | Whether I had had an alcoholic beverage _____ |
| Other _____ (please specify) _____       |   |

- 12) When did you first have intercourse?

Month \_\_\_\_\_ Year \_\_\_\_\_

- 13) When did you start having pain with intercourse regularly?

Month \_\_\_\_\_ Year \_\_\_\_\_

- 14) What is the total number of sexual partners you have had intercourse with? \_\_\_\_\_ If the answer is 1 SKIP TO Q-16.



23) Did it still hurt with lubricants? YES NO

24) Did you ever try anything other than lubricants to ease the pain and to what extent was it successful?

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25) Did your partner ever do anything during intercourse that made your pain better or worse? YES NO Please specify \_\_\_\_\_

26) Did you ever discuss the pain with your partner? YES NO

27) Did you ever report pain with intercourse to a health professional? YES NO  
If yes, please specify what kind of health professional and what you were told.

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28) Approximately how many times did you feel sexual desire per month during the last period when you were sexually active? \_\_\_\_\_ times per month.

29) Please rate on the following scale your average level of desire during the last period in which you were sexually active.

|                  |   |   |   |             |   |   |   |                 |    |
|------------------|---|---|---|-------------|---|---|---|-----------------|----|
| 1                | 2 | 3 | 4 | 5           | 6 | 7 | 8 | 9               | 10 |
| no desire at all |   |   |   | some desire |   |   |   | a lot of desire |    |

30) Please rate on the following scale your average level of arousal (excitement) during sex over the last period when you were sexually active.

|                    |   |   |   |                  |   |   |   |              |    |
|--------------------|---|---|---|------------------|---|---|---|--------------|----|
| 1                  | 2 | 3 | 4 | 5                | 6 | 7 | 8 | 9            | 10 |
| not aroused at all |   |   |   | somewhat aroused |   |   |   | very aroused |    |

31) Please compare on the following scale your level of arousal during those last few months when you were sexually active to what you consider your normal level of arousal during sex.

|                       |   |   |   |        |   |   |                       |   |    |
|-----------------------|---|---|---|--------|---|---|-----------------------|---|----|
| 1                     | 2 | 3 | 4 | 5      | 6 | 7 | 8                     | 9 | 10 |
| much less than normal |   |   |   | normal |   |   | much more than normal |   |    |

32) During the past 6 months, approximately how many times did you masturbate per month? \_\_\_\_\_ times per month. If 0, SKIP TO Q-34. If more than 0 PROCEED TO Q-33.

33) Over the past 6 months, what percentage of the time that you masturbated, did you achieve orgasm? \_\_\_\_\_% of the time

34) Please rate on the following scale your feelings about the sexual act in terms of disgust or aversion.

|                       |   |   |   |   |                 |   |   |   |    |
|-----------------------|---|---|---|---|-----------------|---|---|---|----|
| 1                     | 2 | 3 | 4 | 5 | 6               | 7 | 8 | 9 | 10 |
| not disgusting at all |   |   |   |   | very disgusting |   |   |   |    |

35) What percentage of the time that your partner(s) manually stimulated you did you achieve orgasm?

\_\_\_\_\_ % of the time or \_\_\_ My partner(s) rarely/never stimulated me manually.

36) What percentage of the time that your partner(s) stimulated you orally did you achieve orgasm?

\_\_\_\_\_ % of the time or \_\_\_ My partner(s) rarely/never stimulated me orally.

37) What percentage of the time did you achieve orgasm through intercourse only?  
\_\_\_\_\_ % of the time

38) How would you rate your last or current partner's average level of sexual desire or interest in the last period when you were sexually active?

|                  |   |   |             |   |   |                        |   |   |    |
|------------------|---|---|-------------|---|---|------------------------|---|---|----|
| 1                | 2 | 3 | 4           | 5 | 6 | 7                      | 8 | 9 | 10 |
| no desire at all |   |   | some desire |   |   | a great deal of desire |   |   |    |

39) How would you compare your partner's average level of sexual desire or interest during the last period when you were sexually active to his "normal" level of sexual desire?

|                       |   |   |        |   |   |                       |   |   |    |
|-----------------------|---|---|--------|---|---|-----------------------|---|---|----|
| 1                     | 2 | 3 | 4      | 5 | 6 | 7                     | 8 | 9 | 10 |
| much less than normal |   |   | normal |   |   | much more than normal |   |   |    |

40) What percentage of the time that sex was initiated did your last or current partner have difficulties achieving or maintaining an erection? \_\_\_\_\_%

41) Approximately how long did your partner remain erect before ejaculating once he had entered you? \_\_\_\_\_ minutes

42) What percentage of the time that you had sex did your partner achieve orgasm? \_\_\_\_\_ % of the time.

43) Have you ever regularly experienced pain in your genital area in any of the following situations?

- a) Friction with tight clothing \_\_\_\_\_
- b) Urinating \_\_\_\_\_
- c) Inserting a tampon \_\_\_\_\_

- d) Masturbating with your hand\_\_\_\_\_
- e) Masturbating with a vibrator\_\_\_\_\_
- f) Partner stimulating you manually\_\_\_\_\_
- g) Inserting one of your fingers\_\_\_\_\_
- h) Inserting one of your partner's fingers\_\_\_\_\_
- i) Inserting two of your fingers\_\_\_\_\_
- j) Inserting two of your partner's fingers\_\_\_\_\_
- k) Standard gynecological examination\_\_\_\_\_
- l) Other\_\_\_\_\_please specify\_\_\_\_\_

If you checked off any of the above, did you ever report the pain to a health professional?  
 YES NO If yes, please specify what kind of health professional(e.g., nurse, family  
 doctor, gynecologist, sex counsellor, psychologist,etc.) and what you were told.

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44) Do you consider yourself to have been physically abused as a child?  
 YES NO

45) Do you consider yourself to have been physically abused as an adult?  
 YES NO

46) Do you consider yourself to have been sexually abused as a child?  
 YES NO If yes, PROCEED TO Q-47 . If no, SKIP TO Q-48 .

47) Did it involve any kind of penetration (e.g., fingers, objects, penis)?  
 YES NO

48) Do you consider yourself to have been sexually assaulted in your adult life?  
 YES NO If yes, PROCEED TO Q-49 . If no, you have completed this  
 questionnaire. Thank you.

49) Did it involve any kind of penetration (e.g., fingers, objects, penis)?  
 YES NO

**You have completed this questionnaire. Thank you.**

**ETUDE SUR LA DYS-PAREUNIE**

**ENTREVUE DIRIGEE**

**Information socio-démographique  
Histoire médicale  
Entrevue sur la dyspareunie**

**Numéro de la participante** \_\_\_\_\_

**Référée par** \_\_\_\_\_

**Examinatrice** \_\_\_\_\_

**Date** \_\_\_\_\_

**Lieu** \_\_\_\_\_ **Heure** \_\_\_\_\_



## INFORMATION SOCIO-DEMOGRAPHIQUE

- 1) Date de naissance           /        /         
mois    jour    année
  
- 2) Lieu de naissance \_\_\_\_\_
  
- 3) Lieux de naissance de la mère \_\_\_\_\_ et du père \_\_\_\_\_
  
- 4) Dans quelle religion avez-vous été élevée? \_\_\_\_\_  
 Pratiquez-vous encore cette religion? OUI NON  
 Sinon, pratiquez-vous une autre religion? OUI NON  
 Si oui, veuillez indiquer laquelle: \_\_\_\_\_
  
- 5) Avez-vous un partenaire sexuel régulier? OUI NON
  
- 6) Dans les 6 derniers mois, avez-vous eu des relations sexuelles avec un ou des partenaires que vous ne considérez pas comme réguliers? OUI NON
  
- 7) Laquelle des situations suivantes décrit le mieux votre situation?  
 a) Célibataire non engagée dans une relation  
 b) Célibataire avec un partenaire régulier  
 c) En union de fait  
 c) Mariée
  
- 8) Avez-vous des enfants (i.e., des enfants biologiques, non adoptés)? OUI NON  
 Si oui, veuillez indiquer leur nombre ainsi que l'âge de chacun.  
 Nombre d'enfants: \_\_\_\_\_ Ages:        /        /        /        /        /
  
- 9) Avec combien de personnes partagez-vous votre domicile? \_\_\_\_\_  
 Quelle est votre relation avec chacune de ces personnes? (Par exemple, mari, enfant, etc.)  

|          |          |          |
|----------|----------|----------|
| 1. _____ | 4. _____ | 7. _____ |
| 2. _____ | 5. _____ | 8. _____ |
| 3. _____ | 6. _____ | 9. _____ |
  
- 10) Combien d'années d'étude avez-vous complétées? \_\_\_\_\_
  
- 11) Quel est votre emploi actuel?  
 Ménagère \_\_\_\_\_  
 Etudiante \_\_\_\_\_ Domaine d'étude \_\_\_\_\_  
 Autre emploi. \_\_\_\_\_ Veuillez spécifier \_\_\_\_\_  
 Sans emploi \_\_\_\_\_  
 Veuillez indiquer dans quel domaine vous avez été formée si vous ne travaillez pas dans ce domaine présentement.  
 \_\_\_\_\_

## HISTOIRE MEDICALE

1) Vos menstruations sont-elles régulières? OUI NON

Sinon, veuillez indiquer si vous êtes dans votre ménopause ou toute autre raison pour laquelle vos menstruations sont irrégulières. Puis passez au numéro 4.

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2) Combien de périodes menstruelles avez-vous eues dans les 12 derniers mois? \_\_\_\_\_

3) Veuillez indiquer sur l'échelle ci-dessous le degré de douleur que vous ressentez habituellement lors de vos menstruations.

|                |   |   |   |                 |   |   |   |   |                 |
|----------------|---|---|---|-----------------|---|---|---|---|-----------------|
| 1              | 2 | 3 | 4 | 5               | 6 | 7 | 8 | 9 | 10              |
| Aucune douleur |   |   |   | Douleur modérée |   |   |   |   | Douleur extrême |

4) Lequel ou lesquels des points suivants décrivent le mieux votre situation en ce qui concerne la contraception?

- |  |   |
|--|---|
| a) La douche vaginale                                  | b) La Gelée ou la mousse spermicide                                       |
| c) Le condom   | d) Le diaphragme  |
| e) La cape cervicale                                   | f) L'éponge vaginale  |
| g) Le stérilet (dispositif intra-utérin: D.I.U.)       | h) La pilule  |
| i) La pilule du lendemain                              | j) La ligature des trompes  |
| k) L'hystérectomie                                     | l) Mon partenaire a une vasectomie  |
| m) Je suis stérile                                     | n) Mon partenaire est stérile   |
| o) Je n'ovule plus dû à ma ménopause                   | p) La méthode rythmique<br>(i.e. abstinence durant l'ovulation)           |
| q) Le coït interrompu<br>(retrait avant l'éjaculation) | r) Aucune mesure contraceptive même<br>si je ne veux pas devenir enceinte |
| s) J'essaie de devenir enceinte                        | t) Je suis enceinte   |
| u) J'allaité   | v) Je n'ai aucunes relations sexuelles                                    |
| w) Autre, veuillez préciser.                           |   |
- 
- 

5) Avez-vous déjà eu une césarienne? OUI NON

Si oui, veuillez indiquer quand cela vous est arrivé.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mois/année    mois/année    mois/année    mois/année    mois/année

6) Vous est-il déjà arrivé, au moment de la naissance de votre bébé, d'avoir une épisiotomie, c'est-à-dire une incision au niveau de l'ouverture vaginale afin de faciliter la sortie du bébé? OUI NON JE NE SAIS PAS

Si oui, veuillez indiquer quand cela vous est arrivé.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mois/année    mois/année    mois/année    mois/année    mois/année

- 7) Vous est-il déjà arrivé, au moment de la naissance de votre bébé, d'avoir une laceration ou déchirement du vagin? OUI NON JE NE SAIS PAS  
Si oui, veuillez indiquer quand cela vous est arrivé.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mois/année mois/année mois/année mois/année mois/année

- 8) Avez-vous déjà eu une fausse-couche? OUI NON  
Si oui, veuillez indiquer quand cela vous est arrivé.

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
mois/année mois/année mois/année mois/année mois/année

- 9) Avez-vous déjà eu un avortement? OUI NON  
Si oui, veuillez indiquer quand cela vous est arrivé et à quel moment (semaine) de la grossesse.

\_\_\_\_\_(\_\_\_\_)/\_\_\_\_\_(\_\_\_\_)/\_\_\_\_\_(\_\_\_\_)/\_\_\_\_\_(\_\_\_\_)/\_\_\_\_\_(\_\_\_\_)  
mois/an/(sem.) mois/an/(sem.) mois/an/(sem.) mois/an/(sem.) mois/an/(sem.)

- 10) Dans les deux dernières années, combien d'infections vaginales ou aux levures (champignon) avez-vous eues? \_\_\_\_\_ Si vous n'en avez eu aucune, passez au numéro 11. Si vous en avez eu une ou plus, veuillez indiquer la durée moyenne de vos infections en jours. \_\_\_\_\_

- 11) Souffrez-vous présentement d'une infection aux levures? OUI NON Si oui, veuillez indiquer depuis combien de jours. \_\_\_\_\_

- 12) Dans les deux dernières années, combien d'infections de la vessie avez-vous eues en moyenne? \_\_\_\_\_ Si vous n'en avez eu aucune, passez au numéro 13. Si vous en avez eu une ou plus, veuillez indiquer la durée moyenne de ces infections en jours. \_\_\_\_\_

- 13) Souffrez-vous présentement d'une infection de la vessie? OUI NON Si oui, veuillez indiquer depuis combien de jours vous avez cette infection. \_\_\_\_\_

- 14) Avez-vous déjà souffert d'une maladie transmise sexuellement ?  
Si oui, veuillez indiquer laquelle ou lesquelles en faisant un crochet à l'endroit approprié.

La chlamydia \_\_\_\_\_  
La gardnerella vaginalis \_\_\_\_\_  
La gonorrhée \_\_\_\_\_  
La syphilis \_\_\_\_\_  
La vaginite à trichomonas \_\_\_\_\_  
Les condylômes accuminés (ou verrues génitales ou crêtes de coq) \_\_\_\_\_  
Le virus de l'immunodéficience humaine (V.I.H.) \_\_\_\_\_  
L'herpès génital \_\_\_\_\_  
Autre \_\_\_\_\_ Veuillez préciser. \_\_\_\_\_

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Si vous avez eu une des maladies transmises sexuellement indiquées ci-dessous, le traitement a-t-il réussi? OUI NON Etes-vous présentement en traitement? OUI NON  
Veuillez préciser. \_\_\_\_\_

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15) Avez-vous déjà souffert d'une inflammation des tubes ovariens ou utérin? OUI NON  
Si oui, continuez au numéro 15. Sinon, passez au numéro 17.

16) Souffrez-vous présentement de ce genre d'inflammation? OUI NON

17) Veuillez décrire le traitement que vous avez reçu ou que vous recevez présentement pour cette inflammation?

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18) Avez-vous déjà souffert d'endométriose? OUI NON  
Si oui, continuez au numéro 18. Sinon, passez au numéro 20.

19) Souffrez-vous présentement d'endométriose? OUI NON

20) Veuillez décrire le traitement que vous avez reçu ou que vous recevez présentement pour votre endométriose.

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21) Veuillez dresser la liste des opérations chirurgicales que vous avez subies et l'année durant laquelle vous avez subi chacune.

| Opération | Année |
|-----------|-------|
| _____     | _____ |
| _____     | _____ |
| _____     | _____ |
| _____     | _____ |
| _____     | _____ |

22) Veuillez dresser la liste des maladies sérieuses dont vous avez souffert et la période (les années) durant lesquelles vous avez eu chacune.

| Maladie | Années |
|---------|--------|
| _____   | _____  |
| _____   | _____  |
| _____   | _____  |
| _____   | _____  |
| _____   | _____  |

23) Souffrez-vous régulièrement d'une ou de plusieurs des douleurs suivantes?  
Si oui, lesquelles?

- Arthrite \_\_\_\_\_ A quel endroit? \_\_\_\_\_  
Douleurs abdominales (autres que les crampes menstruelles) \_\_\_\_\_  
Douleurs au cou \_\_\_\_\_  
Douleurs musculaires (par exemple, bras et jambes) \_\_\_\_\_  
Douleurs rénales (aux reins; douleurs au côté) \_\_\_\_\_  
Douleurs thoraciques (au niveau de la poitrine) \_\_\_\_\_  
Maux de dents \_\_\_\_\_  
Maux de dos \_\_\_\_\_  
Maux de gorge \_\_\_\_\_  
Maux d'estomac \_\_\_\_\_  
Maux de tête \_\_\_\_\_  
Maux d'oreilles \_\_\_\_\_  
Autre \_\_\_\_\_ Veuillez préciser. \_\_\_\_\_

24) Avez-vous déjà été traitée par un(e) psychologue, un(e) psychiatre ou un(e) travailleur(euse) social(e)? OUI NON Veuillez indiquer la raison de votre consultation.

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25) Veuillez dresser la liste des médicaments que vous prenez présentement et ce qu'ils visent à traiter.

Médicament:

Pour:

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## FORMULAIRE D'ACTIVITE SEXUELLE

NOTEZ BIEN: l'expression "relation sexuelle" employée ici réfère à une relation sexuelle avec pénétration.

- 1) Avez-vous eu ou tenté d'avoir une relation sexuelle dans les 6 derniers mois? OUI  
NON Si oui, complétez le **Formulaire A** (pages 9-14) sans compléter les autres questions de cette section. Sinon, continuez au numéro 2.
- 2) Avez-vous déjà eu ou tenté d'avoir une relation sexuelle? OUI NON  
Si oui, complétez le **Formulaire B** (pages 15-20). Sinon continuez au numéro 3.
- 3) Dans les 6 derniers mois, avez-vous régulièrement ressenti de la douleur dans la région génitale dû à une ou plusieurs des situations suivantes? Lesquelles?
  - a) Friction due à des vêtements serrés \_\_\_\_\_
  - b) Quand vous urinez \_\_\_\_\_
  - c) A l'insertion d'un tampon \_\_\_\_\_
  - d) Durant la masturbation (avec la main) \_\_\_\_\_
  - e) Durant la masturbation avec un vibrateur ou un autre objet \_\_\_\_\_
  - f) Quand votre partenaire vous stimule manuellement \_\_\_\_\_
  - g) Quand vous insérez un de vos doigts dans votre vagin \_\_\_\_\_
  - h) Quand votre partenaire insère un de ses doigts dans votre vagin \_\_\_\_\_
  - i) Quand vous insérez deux de vos doigts dans votre vagin \_\_\_\_\_
  - j) Quand votre partenaire insère deux de ses doigts dans votre vagin \_\_\_\_\_
  - k) A un examen gynécologique de routine \_\_\_\_\_
  - l) Autre \_\_\_\_\_ Veuillez préciser. \_\_\_\_\_

Si vous avez sélectionné un des points ci-dessus, avez-vous déjà parlé du problème à un(e) professionnel(le) de la santé? OUI NON Si oui, veuillez indiquer de quel genre de professionnel il s'agissait (i.e., infirmière, médecin de famille, gynécologue, sexologue, psychologue, etc.) et ce qu'il ou elle vous a dit.

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4) Si vous deviez avoir une relation sexuelle dans un avenir prochain, dans quelle mesure croyez-vous que l'expérience serait douloureuse? Veuillez l'indiquer en faisant un trait sur l'échelle ci-dessous.

---

|                |   |   |   |                 |   |   |   |   |                 |
|----------------|---|---|---|-----------------|---|---|---|---|-----------------|
| 1              | 2 | 3 | 4 | 5               | 6 | 7 | 8 | 9 | 10              |
| Aucune douleur |   |   |   | Douleur modérée |   |   |   |   | Douleur extrême |

## FORMULAIRE A

(pour les femmes ayant présentement des relations sexuelles)

- 1) Dans les 6 derniers mois, combien de fois par mois en moyenne avez-vous eu des relations sexuelles? \_\_\_\_\_ fois par mois.
- 2) Durant les 6 derniers mois, avez-vous ressenti de la douleur ou de l'inconfort significatif durant ou après les relations sexuelles? OUI NON Sinon, passez au numéro 27.
- 3) D'après vous, quelle est la raison pour laquelle vos relations sexuelles sont douloureuses? Quelle est votre théorie là-dessus?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 4) Durant les 6 derniers mois, à quelle fréquence le pénis en érection de votre partenaire a-t-il pu pénétrer dans votre vagin? \_\_\_\_\_% des fois que nous avons essayé.
- 5) Durant les 6 derniers mois, à quelle fréquence pouviez-vous tolérer le mouvement de va-et-vient du pénis une fois qu'il était dans votre vagin?  
\_\_\_\_\_ % des fois que mon partenaire a réussi à me pénétrer.
- 6) Durant les 6 derniers mois, pendant combien de temps en moyenne le pénis en érection de votre partenaire a-t-il pu demeurer dans votre vagin? \_\_\_\_\_ minutes.
- 7) Durant les 6 derniers mois, à quelle fréquence avez-vous ressenti de la douleur ou de l'inconfort causé par la relation sexuelle? \_\_\_\_\_% des fois que nous avons essayé. Si la réponse est 100%, passez au numéro 10. Sinon, poursuivez au numéro 8.
- 8) Avez-vous remarqué quelque chose de spécial à propos des fois que vous avez des relations sexuelles sans douleur? Pouvez-vous identifier des circonstances particulièrement favorables ou défavorables? Veuillez cocher les points qui s'appliquent à votre cas et/ou préciser les circonstances qui ne sont pas énumérées ci-dessous.

Ma douleur durant les relations sexuelles dépend de...

- Jusqu'à quel point je suis fatiguée \_\_\_\_\_
- Jusqu'à quel point je suis excitée \_\_\_\_\_
- Jusqu'à quel point je suis lubrifiée \_\_\_\_\_
- La durée des jeux préliminaires \_\_\_\_\_
- La position que nous adoptons pour faire l'amour \_\_\_\_\_
- L'endroit où nous nous trouvons \_\_\_\_\_
- Jusqu'à quel point je suis nerveuse ou anxieuse \_\_\_\_\_
- Où je me trouve dans mon cycle menstruel \_\_\_\_\_
- Le partenaire avec lequel je me trouve \_\_\_\_\_
- Si je suis fâchée après mon partenaire \_\_\_\_\_
- Si nous sommes seuls dans la maison \_\_\_\_\_
- Le moment de la journée \_\_\_\_\_
- Si j'ai consommé un breuvage alcoolisé \_\_\_\_\_



Si j'ai consommé des drogues (peu importe le genre) \_\_\_\_\_  
Autre \_\_\_\_\_ Veuillez préciser.

9) La douleur que vous ressentez lors des relations sexuelles est-elle toujours la même ou est-ce qu'elle varie? Y a-t-il des occasions où la douleur est pire?

10) Remarquez-vous que certains facteurs semblent affecter la douleur? Veuillez cocher, dans la liste ci-dessous, les facteurs qui semblent influencer votre douleur dans un sens ou dans l'autre.

Jusqu'à quel point je suis fatiguée \_\_\_\_\_  
Jusqu'à quel point je suis excitée \_\_\_\_\_  
Jusqu'à quel point je suis lubrifiée \_\_\_\_\_  
La durée des jeux préliminaires \_\_\_\_\_  
La position que nous adoptons pour faire l'amour \_\_\_\_\_  
L'endroit où nous nous trouvons \_\_\_\_\_  
Jusqu'à quel point je suis nerveuse ou anxieuse \_\_\_\_\_  
Où je me trouve dans mon cycle menstruel \_\_\_\_\_  
Le partenaire avec lequel je me trouve \_\_\_\_\_  
Si je suis fâchée après mon partenaire \_\_\_\_\_  
Si nous sommes seuls dans la maison \_\_\_\_\_  
Le moment de la journée \_\_\_\_\_  
Si j'ai consommé un breuvage alcoolisé \_\_\_\_\_  
Si j'ai consommé des drogues (peu importe le genre) \_\_\_\_\_  
Autre \_\_\_\_\_ Veuillez préciser.

11) Quand avez-vous eu une relation sexuelle complète pour la première fois?

Mois \_\_\_\_\_ Année \_\_\_\_\_

12) A quel moment avez-vous commencé à ressentir de la douleur de façon régulière lors des relations sexuelles?

Mois \_\_\_\_\_ Année \_\_\_\_\_

13) Quel est le nombre total de partenaires sexuels avec lesquels vous avez eu des relations sexuelles? \_\_\_\_\_ Si la réponse est "un", passez au numéro 16.

14) Avez-vous ressenti de la douleur avec tous vos partenaires sexuels depuis que vous avez commencé à ressentir de la douleur durant les relations sexuelles? OUI NON

Veuillez préciser. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



24) Est-ce que, durant la relation sexuelle, votre partenaire fait des choses qui affectent dans un sens ou dans l'autre la douleur? OUI NON Veuillez spécifier.

25) Avez-vous déjà parlé de cette douleur à votre partenaire sexuel? OUI NON

26) Avez-vous déjà parlé de cette douleur à un professionnel de la santé ? OUI NON  
Si oui, veuillez indiquer de quel genre de professionnel il s'agissait (i.e., infirmière, médecin de famille, gynécologue, sexologue, psychologue, etc.) et ce qu'il ou elle vous a dit.

27) Durant les 6 derniers mois, combien de fois par mois en moyenne avez-vous ressenti du désir sexuel? \_\_\_\_\_ fois par mois.

28) Veuillez indiquer sur l'échelle ci-dessous votre niveau moyen du désir sexuel durant les 6 derniers mois.

|             |   |   |   |             |   |   |   |   |                   |
|-------------|---|---|---|-------------|---|---|---|---|-------------------|
| 1           | 2 | 3 | 4 | 5           | 6 | 7 | 8 | 9 | 10                |
| Pas du tout |   |   |   | Desir moyen |   |   |   |   | Beaucoup du désir |

29) Veuillez indiquer sur l'échelle ci-dessous votre niveau moyen d'excitation sexuelle durant les relations sexuelles pour les 6 derniers mois.

|                     |   |   |   |               |   |   |   |   |              |
|---------------------|---|---|---|---------------|---|---|---|---|--------------|
| 1                   | 2 | 3 | 4 | 5             | 6 | 7 | 8 | 9 | 10           |
| Pas excitée du tout |   |   |   | Assez excitée |   |   |   |   | Très excitée |

30) Veuillez indiquer sur l'échelle ci-dessous comment votre niveau d'excitation des 6 derniers mois se compare à ce que vous considérez comme étant votre niveau d'excitation habituel ("normal") durant les relations sexuelles.

|                                       |   |   |   |                              |   |   |   |   |                                      |
|---------------------------------------|---|---|---|------------------------------|---|---|---|---|--------------------------------------|
| 1                                     | 2 | 3 | 4 | 5                            | 6 | 7 | 8 | 9 | 10                                   |
| Beaucoup moins excitée que d'habitude |   |   |   | Aussi excitée que d'habitude |   |   |   |   | Beaucoup plus excitée que d'habitude |

31) Durant les 6 derniers mois, quelle est la fréquence à laquelle vous vous masturbiez? \_\_\_\_\_ fois par mois. Si la réponse est 0, passez au numéro 33. Sinon, continuez avec le numéro 32.

32) Durant les 6 derniers mois, quel est le pourcentage de fois que la masturbation vous a conduit à l'orgasme? \_\_\_\_\_ % des fois que je me masturbais.

33) Veuillez indiquer sur l'échelle ci-dessous votre degré de dégoût ou d'aversion pour les relations sexuelles dans les 6 derniers mois.

|                           |   |   |   |   |   |   |   |   |                               |
|---------------------------|---|---|---|---|---|---|---|---|-------------------------------|
| 1                         | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10                            |
| Aucune aversion ou dégoût |   |   |   |   |   |   |   |   | Aversion ou dégoût importants |

34) Est-ce que votre partenaire vous stimule parfois manuellement? OUI NON  
Si oui, durant les 6 derniers mois, quel est le pourcentage de fois que la stimulation manuelle de votre partenaire vous a menée à l'orgasme? \_\_\_\_\_ % des fois.

35) Est-ce que votre partenaire vous stimule parfois oralement? OUI NON  
Si oui, durant les 6 derniers mois, quel est le pourcentage de fois que la stimulation orale de votre partenaire vous a menée à l'orgasme? \_\_\_\_\_ % des fois.

36) Durant les 6 derniers mois, dans quelle proportion du temps atteigniez-vous l'orgasme uniquement grâce à la relation sexuelle? \_\_\_\_\_ % des fois.

37) Veuillez évaluer sur l'échelle ci-dessous le niveau moyen de désir ou d'intérêt sexuel de votre partenaire durant les 6 derniers mois.

|             |   |   |   |                 |   |   |   |   |                   |
|-------------|---|---|---|-----------------|---|---|---|---|-------------------|
| 1           | 2 | 3 | 4 | 5               | 6 | 7 | 8 | 9 | 10                |
| Aucun désir |   |   |   | Un peu de désir |   |   |   |   | Beaucoup de désir |

38) Veuillez indiquer sur l'échelle ci-dessous comment le niveau d'excitation sexuelle de votre partenaire durant les 6 derniers mois se compare à son niveau d'excitation habituel ("normal") durant les relations sexuelles.

|                               |   |   |   |                       |   |   |   |   |                              |
|-------------------------------|---|---|---|-----------------------|---|---|---|---|------------------------------|
| 1                             | 2 | 3 | 4 | 5                     | 6 | 7 | 8 | 9 | 10                           |
| Beaucoup moins que d'habitude |   |   |   | Autant que d'habitude |   |   |   |   | Beaucoup plus que d'habitude |

39) Durant les 6 derniers mois, quel pourcentage des fois qu'une relation sexuelle était initiée votre partenaire a-t-il eu de la difficulté à obtenir ou maintenir une érection? \_\_\_\_\_ % des fois que nous avons initié une relation sexuelle.

40) Durant les 6 derniers mois, pendant combien de minutes approximativement votre partenaire demeurait-il en érection, une fois entré en vous, avant d'éjaculer? \_\_\_\_\_ minutes.

41) Durant les 6 derniers mois, dans quelle proportion du temps la relation sexuelle a-t-elle mené votre partenaire à l'orgasme? \_\_\_\_\_ % des fois.

42) Dans les 6 derniers mois, avez-vous régulièrement ressenti de la douleur dans la région génitale dû à une ou plusieurs des situations suivantes? Lesquelles?

- a) Friction due à des vêtements serrés \_\_\_\_\_
- b) Quand vous urinez \_\_\_\_\_
- c) A l'insertion d'un tampon \_\_\_\_\_
- d) Durant la masturbation (avec la main) \_\_\_\_\_
- e) Durant la masturbation avec un vibrateur ou un autre objet \_\_\_\_\_
- f) Quand votre partenaire vous stimule manuellement \_\_\_\_\_
- g) Quand vous insérez un de vos doigts dans votre vagin \_\_\_\_\_
- h) Quand votre partenaire insère un de ses doigts dans votre vagin \_\_\_\_\_
- i) Quand vous insérez deux de vos doigts dans votre vagin \_\_\_\_\_
- j) Quand votre partenaire insère deux de ses doigts dans votre vagin \_\_\_\_\_
- k) A un examen gynécologique de routine \_\_\_\_\_
- l) Autre \_\_\_\_\_ Veuillez préciser. \_\_\_\_\_

43) Vous est-il déjà arrivé de ressentir régulièrement de la douleur dans la région génitale dû à une ou plusieurs des situations suivantes? Lesquelles?

- a) Friction due à des vêtements serrés \_\_\_\_\_
- b) Quand vous urinez \_\_\_\_\_
- c) A l'insertion d'un tampon \_\_\_\_\_
- d) Durant la masturbation (avec la main) \_\_\_\_\_
- e) Durant la masturbation avec un vibreur ou un autre objet \_\_\_\_\_
- f) Quand votre partenaire vous stimulait manuellement \_\_\_\_\_
- g) Quand vous insériez un de vos doigts dans votre vagin \_\_\_\_\_
- h) Quand votre partenaire insérait un de ses doigts dans votre vagin \_\_\_\_\_
- i) Quand vous insériez deux de vos doigts dans votre vagin \_\_\_\_\_
- j) Quand votre partenaire insérait deux de ses doigts dans votre vagin \_\_\_\_\_
- k) A un examen gynécologique de routine \_\_\_\_\_
- l) Autre \_\_\_\_\_ Veuillez préciser. \_\_\_\_\_

Si vous avez sélectionné un des points ci-dessus, avez-vous déjà parlé du problème à un(e) professionnel(le) de la santé? OUI NON Si oui, veuillez indiquer de quel genre de professionnel il s'agissait (i.e., infirmière, médecin de famille, gynécologue, sexologue, psychologue, etc.) et ce qu'il ou elle vous a dit.

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44) Considérez-vous que vous avez souffert d'abus physique lorsque vous étiez enfant?  
OUI NON

45) Considérez-vous que vous avez souffert d'abus physique depuis que vous êtes adulte?  
OUI NON

46) Considérez-vous que vous avez été abusée sexuellement lorsque vous étiez enfant?  
OUI NON Si oui, continuez avec le numéro 47. Sinon, passez au numéro 48.

47) Est-ce que le ou les incidents ont impliqué une pénétration (c'est-à-dire avec doigts, objets ou pénis)? OUI NON

48) Considérez-vous que vous avez été abusée sexuellement depuis que vous êtes adulte?  
OUI NON Si oui, continuez au numéro 49. Sinon, vous avez fini de compléter ce questionnaire. Merci.

49) Est-ce que le ou les incidents ont impliqué une pénétration (c'est-à-dire avec doigts, d'objets ou pénis)? OUI NON

**Vous avez fini de compléter ce questionnaire. Merci.**

**FORMULAIRE B**  
**(Femmes n'ayant pas de relations sexuelles présentement**  
**mais en ayant eu dans le passé)**

1) Quand avez-vous eu une relation sexuelle pour la dernière fois?

Mois \_\_\_\_\_ Année \_\_\_\_\_

2) Quelle est la raison pour laquelle vous n'avez pas eu de relations sexuelles dans les 6 derniers mois?

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3) Quand vous aviez des relations sexuelles dans le passé, aviez-vous de la douleur ou un inconfort significatif avant, pendant ou après la relation sexuelle? OUI NON Sinon, passez au numéro 28.

4) D'après vous, quelle est la raison pour laquelle vos relations sexuelles étaient douloureuses? Quelle est votre théorie là-dessus?

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5) Dans le passé, à quelle fréquence est-ce que le pénis en érection de votre partenaire pouvait pénétrer dans votre vagin? \_\_\_\_\_ % des fois que nous essayions.

6) Une fois à l'intérieur de votre vagin, à quelle fréquence pouviez-vous tolérer le mouvement de va-et-vient du pénis? \_\_\_\_\_ % des fois que mon partenaire réussissait à me pénétrer.

7) Pendant combien de temps en moyenne le pénis en érection de votre partenaire pouvait-il demeurer dans votre vagin? \_\_\_\_\_ minutes.

8) Dans le passé, à quelle fréquence ressentiez-vous de la douleur ou de l'inconfort significatif durant les relations sexuelles? \_\_\_\_\_ % des fois que j'essayais.

9) Avez-vous déjà remarqué quelque chose de spécial à propos des fois que vous aviez des relations sexuelles sans douleur? Pouvez-vous identifier des circonstances particulièrement favorables ou défavorables? Veuillez cocher les points qui s'appliquent à votre cas et/ou préciser les circonstances qui ne sont pas énumérées ci-dessous.

Ma douleur durant les relations sexuelles dépendait de...

Jusqu'à quel point j'étais fatiguée \_\_\_\_\_

Jusqu'à quel point j'étais excitée \_\_\_\_\_

Jusqu'à quel point j'étais lubrifiée \_\_\_\_\_

La durée des jeux préliminaires \_\_\_\_\_

La position que nous adoptions pour faire l'amour \_\_\_\_\_

L'endroit où nous nous trouvions \_\_\_\_\_

Jusqu'à quel point j'étais nerveuse ou anxieuse \_\_\_\_\_

Où je me trouvais dans mon cycle menstruel \_\_\_\_\_  
Le partenaire avec lequel je me trouvais \_\_\_\_\_  
Si j'étais fâchée après mon partenaire \_\_\_\_\_  
Si nous étions seuls dans la maison \_\_\_\_\_  
Le moment de la journée \_\_\_\_\_  
Si j'avais consommé un breuvage alcoolisé \_\_\_\_\_  
Si j'avais consommé des drogues (peu importe le genre) \_\_\_\_\_  
Autre \_\_\_\_\_ Veuillez préciser.

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10) Est-ce que la douleur que vous ressentiez lors des relations sexuelles était toujours la même ou est-ce qu'elle variait? Y avait-il des occasions où la douleur était pire?

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11) Remarquez-vous que certains facteurs semblaient affecter la douleur? Veuillez cocher, dans la liste ci-dessous, les facteurs qui semblaient influencer votre douleur dans un sens ou dans l'autre. Ma douleur semblait dépendre de...

Jusqu'à quel point j'étais fatiguée \_\_\_\_\_  
Jusqu'à quel point j'étais excitée \_\_\_\_\_  
Jusqu'à quel point j'étais lubrifiée \_\_\_\_\_  
La durée des jeux préliminaires \_\_\_\_\_  
La position que nous adoptions pour faire l'amour \_\_\_\_\_  
L'endroit où nous nous trouvions \_\_\_\_\_  
Jusqu'à quel point j'étais nerveuse ou anxieuse \_\_\_\_\_  
Où je me trouvais dans mon cycle menstruel \_\_\_\_\_  
Le partenaire avec lequel je me trouvais \_\_\_\_\_  
Si j'étais fâchée après mon partenaire \_\_\_\_\_  
Si nous étions seuls dans la maison \_\_\_\_\_  
Le moment de la journée \_\_\_\_\_  
Si j'avais consommé un breuvage alcoolisé \_\_\_\_\_  
Si j'avais consommé des drogues (peu importe le genre) \_\_\_\_\_  
Autre \_\_\_\_\_ Veuillez préciser.

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12) Quand avez-vous eu votre première relation sexuelle?

Mois \_\_\_\_\_ Année \_\_\_\_\_

13) A quel moment avez-vous commencé à ressentir de la douleur de façon régulière lors des relations sexuelles?

Mois \_\_\_\_\_ Année \_\_\_\_\_

14) Quel est le nombre total de partenaires sexuels avec lesquels vous avez eu des relations sexuelles? \_\_\_\_\_ Si la réponse est "un", passez au numéro 16.





24) Avez-vous déjà essayé autre chose qu'un lubrifiant pour éviter ou soulager la douleur et dans quelle mesure est-ce que cette méthode a eu du succès?

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25) Est-ce que, durant la relation sexuelle, votre partenaire faisait des choses qui affectaient dans un sens ou dans l'autre la douleur? OUI NON Veuillez spécifier.

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26) Avez-vous déjà parlé de cette douleur à votre partenaire sexuel? OUI NON

27) Avez-vous déjà parlé de cette douleur à un professionnel de la santé? OUI NON  
Si oui, veuillez indiquer de quel genre de professionnel il s'agissait (i.e., infirmière, médecin de famille, gynécologue, sexologue, psychologue, etc.) et ce qu'il ou elle vous a dit.

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28) En moyenne, combien de fois par mois ressentiez-vous du désir sexuel lors de la dernière période durant laquelle vous étiez active sexuellement? \_\_\_\_\_ fois par mois.

29) Veuillez indiquer sur l'échelle ci-dessous votre niveau moyen du désir sexuel durant les 6 derniers mois.

|             |   |   |   |             |   |   |   |   |                   |
|-------------|---|---|---|-------------|---|---|---|---|-------------------|
| 1           | 2 | 3 | 4 | 5           | 6 | 7 | 8 | 9 | 10                |
| Pas du tout |   |   |   | Desir moyen |   |   |   |   | Beaucoup du désir |

30) Veuillez indiquer sur l'échelle ci-dessous votre niveau moyen d'excitation sexuelle lors de la dernière période durant laquelle vous étiez active sexuellement?

|                     |   |   |   |               |   |   |   |   |              |
|---------------------|---|---|---|---------------|---|---|---|---|--------------|
| 1                   | 2 | 3 | 4 | 5             | 6 | 7 | 8 | 9 | 10           |
| Pas excitée du tout |   |   |   | Assez excitée |   |   |   |   | Très excitée |

31) Veuillez indiquer sur l'échelle ci-dessous comment votre niveau d'excitation lors des relations sexuelles pour les derniers mois durant lesquels vous étiez active sexuellement se compare à ce que vous considérez comme étant votre niveau d'excitation habituel ("normal") durant les relations sexuelles.

|                                       |   |   |   |                              |   |   |   |   |                                      |
|---------------------------------------|---|---|---|------------------------------|---|---|---|---|--------------------------------------|
| 1                                     | 2 | 3 | 4 | 5                            | 6 | 7 | 8 | 9 | 10                                   |
| Beaucoup moins excitée que d'habitude |   |   |   | Aussi excitée que d'habitude |   |   |   |   | Beaucoup plus excitée que d'habitude |

32) Durant les 6 derniers mois, quelle est la fréquence à laquelle vous vous masturbiez? \_\_\_\_\_ fois par mois. Si la réponse est 0, passez au numéro 34. Sinon, continuez avec le numéro 33.

33) Durant les 6 derniers mois, quel est le pourcentage de fois que la masturbation vous a conduit à l'orgasme? \_\_\_\_\_ % des fois que je me masturbais.

34) Veuillez indiquer sur l'échelle ci-dessous votre degré de dégoût ou d'aversion pour les relations sexuelles.

|                           |   |   |   |   |                               |   |   |   |    |
|---------------------------|---|---|---|---|-------------------------------|---|---|---|----|
| 1                         | 2 | 3 | 4 | 5 | 6                             | 7 | 8 | 9 | 10 |
| Aucune aversion ou dégoût |   |   |   |   | Aversion ou dégoût importants |   |   |   |    |

35) Est-ce que votre partenaire vous stimulait parfois manuellement? OUI NON  
Si oui, quel est le pourcentage de fois que la stimulation manuelle de votre partenaire vous menait à l'orgasme? \_\_\_\_\_ % des fois.

36) Est-ce que votre partenaire vous stimulait parfois oralement? OUI NON  
Si oui, quel est le pourcentage de fois que la stimulation orale de votre partenaire vous menait à l'orgasme? \_\_\_\_\_ % des fois.

37) Dans quelle proportion du temps atteigniez-vous l'orgasme uniquement grâce à la relation sexuelle? \_\_\_\_\_ % des fois.

38) Veuillez évaluer sur l'échelle ci-dessous le niveau moyen de désir ou d'intérêt sexuel de votre dernier partenaire ou de votre partenaire actuel pour la dernière période durant laquelle vous étiez active sexuellement.

|             |   |   |                 |   |   |   |                   |   |    |
|-------------|---|---|-----------------|---|---|---|-------------------|---|----|
| 1           | 2 | 3 | 4               | 5 | 6 | 7 | 8                 | 9 | 10 |
| Aucun désir |   |   | Un peu de désir |   |   |   | Beaucoup de désir |   |    |

39) Veuillez indiquer sur l'échelle ci-dessous comment le niveau d'excitation sexuelle de votre partenaire pour la dernière période durant laquelle vous étiez active sexuellement se comparait à son niveau d'excitation habituel ("normal") durant les relations sexuelles.

|                               |   |   |                       |   |   |   |                              |   |    |
|-------------------------------|---|---|-----------------------|---|---|---|------------------------------|---|----|
| 1                             | 2 | 3 | 4                     | 5 | 6 | 7 | 8                            | 9 | 10 |
| Beaucoup moins que d'habitude |   |   | Autant que d'habitude |   |   |   | Beaucoup plus que d'habitude |   |    |

40) Quel pourcentage des fois qu'une relation sexuelle était initiée votre partenaire avait-t-il de la difficulté à obtenir ou maintenir une érection? \_\_\_\_\_ des fois que nous initiions une relation sexuelle.

41) Pendant combien de minutes approximativement votre partenaire demeurait-il en érection, une fois entré en vous, avant d'éjaculer? \_\_\_\_\_ minutes.

42) Dans quelle proportion du temps la relation sexuelle menait-t-elle votre partenaire à l'orgasme? \_\_\_\_\_ % des fois.

Si vous avez sélectionné un des points ci-dessus, avez-vous parlé du problème à un(e) professionnel(le) de la santé? OUI NON Si oui, veuillez indiquer de quel genre de professionnel-il s'agissait (i.e., infirmière, médecin de famille, gynécologue, sexologue, psychologue, etc.) et ce qu'il ou elle vous a dit.

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- 43) Considérez-vous que vous avez souffert d'abus physique lorsque vous étiez enfant?  
OUI NON
- 44) Considérez-vous que vous avez souffert d'abus physique depuis que vous êtes adulte?  
OUI NON
- 45) Considérez-vous que vous avez été abusée sexuellement lorsque vous étiez enfant?  
OUI NON Si oui, continuez avec le numéro 46. Sinon, passez au numéro 47.
- 46) Est-ce que le ou les incidents ont impliqué une pénétration (c'est-à-dire avec doigts, objets ou pénis)? OUI NON
- 47) Considérez-vous que vous avez été abusée sexuellement depuis que vous êtes adulte?  
OUI NON Si oui, continuez au numéro 48. Sinon, vous avez fini de compléter ce questionnaire. Ne complétez pas le FORMULAIRE B. Merci.
- 48) Est-ce que le ou les incidents ont impliqué une pénétration (c'est-à-dire avec doigts, objets ou pénis)? OUI NON

**Vous avez fini de compléter ce questionnaire. Merci.**

Appendix E - Brief Symptom Inventory

**INSTRUCTIONS:**

Below is a list of problems people sometimes have. Please read each one carefully, and circle the number to the right that best describes HOW MUCH THAT PROBLEM HAS DISTRESSED OR BOTHERED YOU DURING THE PAST 7 DAYS INCLUDING TODAY. Circle only one number for each problem and do not skip any items. If you change your mind, erase your first mark carefully. Read the example below before beginning, and if you have any questions please ask about them.

SEX

MALE

FEMALE

NAME: \_\_\_\_\_

LOCATION: \_\_\_\_\_

EDUCATION: \_\_\_\_\_

MARITAL STATUS: MAR \_\_\_ SEP \_\_\_ DIV \_\_\_ WID \_\_\_ SING \_\_\_

| DATE |     |      |
|------|-----|------|
| MO   | DAY | YEAR |
|      |     |      |

| ID. NUMBER |
|------------|
|            |

| AGE |
|-----|
|     |

**EXAMPLE**

HOW MUCH WERE YOU DISTRESSED BY

|              |            |              |            |             |           |
|--------------|------------|--------------|------------|-------------|-----------|
|              | NOT AT ALL | A LITTLE BIT | MODERATELY | QUITE A BIT | EXTREMELY |
| 1. Bodyaches | 0          | 1            | 2          | 3           | 4         |

VISIT NUMBER: \_\_\_\_\_

HOW MUCH WERE YOU DISTRESSED BY:

|   | NOT AT ALL | A LITTLE BIT | MODERATELY | QUITE A BIT | EXTREMELY |   |
|---|------------|--------------|------------|-------------|-----------|---|
| 1. Nervousness or shakiness inside  | 1          | 0            | 1          | 2           | 3         | 4 |
| 2. Faintness or dizziness   | 2          | 0            | 1          | 2           | 3         | 4 |
| 3. The idea that someone else can control your thoughts                             | 3          | 0            | 1          | 2           | 3         | 4 |
| 4. Feeling others are to blame for most of your troubles                            | 4          | 0            | 1          | 2           | 3         | 4 |
| 5. Trouble remembering things   | 5          | 0            | 1          | 2           | 3         | 4 |
| 6. Feeling easily annoyed or irritated  | 6          | 0            | 1          | 2           | 3         | 4 |
| 7. Pains in heart or chest  | 7          | 0            | 1          | 2           | 3         | 4 |
| 8. Feeling afraid in open spaces or on the streets                                  | 8          | 0            | 1          | 2           | 3         | 4 |
| 9. Thoughts of ending your life   | 9          | 0            | 1          | 2           | 3         | 4 |
| 10. Feeling that most people cannot be trusted                                      | 10         | 0            | 1          | 2           | 3         | 4 |
| 11. Poor appetite   | 11         | 0            | 1          | 2           | 3         | 4 |
| 12. Suddenly scared for no reason   | 12         | 0            | 1          | 2           | 3         | 4 |
| 13. Temper outbursts that you could not control                                     | 13         | 0            | 1          | 2           | 3         | 4 |
| 14. Feeling lonely even when you are with people                                    | 14         | 0            | 1          | 2           | 3         | 4 |
| 15. Feeling blocked in getting things done  | 15         | 0            | 1          | 2           | 3         | 4 |
| 16. Feeling lonely  | 16         | 0            | 1          | 2           | 3         | 4 |
| 17. Feeling blue  | 17         | 0            | 1          | 2           | 3         | 4 |
| 18. Feeling no interest in things   | 18         | 0            | 1          | 2           | 3         | 4 |
| 19. Feeling fearful   | 19         | 0            | 1          | 2           | 3         | 4 |
| 20. Your feelings being easily hurt   | 20         | 0            | 1          | 2           | 3         | 4 |
| 21. Feeling that people are unfriendly or dislike you                               | 21         | 0            | 1          | 2           | 3         | 4 |
| 22. Feeling inferior to others  | 22         | 0            | 1          | 2           | 3         | 4 |
| 23. Nausea or upset stomach   | 23         | 0            | 1          | 2           | 3         | 4 |
| 24. Feeling that you are watched or talked about by others                          | 24         | 0            | 1          | 2           | 3         | 4 |
| 25. Trouble falling asleep  | 25         | 0            | 1          | 2           | 3         | 4 |
| 26. Having to check and double check what you do                                    | 26         | 0            | 1          | 2           | 3         | 4 |
| 27. Difficulty making decisions   | 27         | 0            | 1          | 2           | 3         | 4 |
| 28. Feeling afraid to travel on buses, subways, or trains                           | 28         | 0            | 1          | 2           | 3         | 4 |
| 29. Trouble getting your breath   | 29         | 0            | 1          | 2           | 3         | 4 |
| 30. Hot or cold spells  | 30         | 0            | 1          | 2           | 3         | 4 |
| 31. Having to avoid certain things, places, or activities because they frighten you | 31         | 0            | 1          | 2           | 3         | 4 |
| 32. Your mind going blank   | 32         | 0            | 1          | 2           | 3         | 4 |
| 33. Numbness or tingling in parts of your body                                      | 33         | 0            | 1          | 2           | 3         | 4 |
| 34. The idea that you should be punished for your sins                              | 34         | 0            | 1          | 2           | 3         | 4 |
| 35. Feeling hopeless about the future   | 35         | 0            | 1          | 2           | 3         | 4 |

## BSI

SIDE 2

| HOW MUCH WERE YOU DISTRESSED BY                                    |            |              |            |             |           |   |
|--|------------|--------------|------------|-------------|-----------|---|
|  | NOT AT ALL | A LITTLE BIT | MODERATELY | QUITE A BIT | EXTREMELY |   |
| 36. Trouble concentrating  | 36         | 0            | 1          | 2           | 3         | 4 |
| 37. Feeling weak in parts of your body                             | 37         | 0            | 1          | 2           | 3         | 4 |
| 38. Feeling tense or keyed up                                      | 38         | 0            | 1          | 2           | 3         | 4 |
| 39. Thoughts of death or dying                                     | 39         | 0            | 1          | 2           | 3         | 4 |
| 40. Having urges to beat, injure, or harm someone                  | 40         | 0            | 1          | 2           | 3         | 4 |
| 41. Having urges to break or smash things                          | 41         | 0            | 1          | 2           | 3         | 4 |
| 42. Feeling very self-conscious with others                        | 42         | 0            | 1          | 2           | 3         | 4 |
| 43. Feeling uneasy in crowds, such as shopping or at a movie       | 43         | 0            | 1          | 2           | 3         | 4 |
| 44. Never feeling close to another person                          | 44         | 0            | 1          | 2           | 3         | 4 |
| 45. Spells of terror or panic                                      | 45         | 0            | 1          | 2           | 3         | 4 |
| 46. Getting into frequent arguments                                | 46         | 0            | 1          | 2           | 3         | 4 |
| 47. Feeling nervous when you are left alone                        | 47         | 0            | 1          | 2           | 3         | 4 |
| 48. Others not giving you proper credit for your achievements      | 48         | 0            | 1          | 2           | 3         | 4 |
| 49. Feeling so restless you couldn't sit still                     | 49         | 0            | 1          | 2           | 3         | 4 |
| 50. Feelings of worthlessness                                      | 50         | 0            | 1          | 2           | 3         | 4 |
| 51. Feeling that people will take advantage of you if you let them | 51         | 0            | 1          | 2           | 3         | 4 |
| 52. Feelings of guilt  | 52         | 0            | 1          | 2           | 3         | 4 |
| 53. The idea that something is wrong with your mind                | 53         | 0            | 1          | 2           | 3         | 4 |

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Nom : \_\_\_\_\_

Date : \_\_\_\_\_

Voici une liste de problèmes dont se plaignent parfois les gens. Lisez attentivement chaque énoncé et encerclez le chiffre qui décrit le mieux COMBIEN VOUS AVEZ ÉTÉ INCOMMODÉ(E) PAR CE PROBLÈME DURANT LES SEPT (7) DERNIERS JOURS, INCLUANT AUJOURD'HUI ?

0 = Pas du tout  
1 = Un peu  
2 = Passablement  
3 = Beaucoup  
4 = Excessivement

- |     |  |           |
|-----|--|-----------|
| 1.  | Nervosité ou impressions de tremblements intérieurs                        | 0 1 2 3 4 |
| 2.  | Faiblesses ou étourdissements  | 0 1 2 3 4 |
| 3.  | L'idée que quelqu'un peut contrôler vos pensées                            | 0 1 2 3 4 |
| 4.  | L'impression que d'autres sont responsables de la plupart de vos problèmes | 0 1 2 3 4 |
| 5.  | Difficulté à vous rappeler certaines choses                                | 0 1 2 3 4 |
| 6.  | Facilement irritée et contrariée   | 0 1 2 3 4 |
| 7.  | Douleurs à la poitrine ou cardiaques                                       | 0 1 2 3 4 |
| 8.  | Peur dans des espaces ouverts ou sur la rue                                | 0 1 2 3 4 |
| 9.  | Des pensées de vous enlever la vie   | 0 1 2 3 4 |
| 10. | Le sentiment que vous ne pouvez pas avoir confiance en personne            | 0 1 2 3 4 |
| 11. | Manque d'appétit   | 0 1 2 3 4 |
| 12. | Soudainement effrayé(e) sans raison  | 0 1 2 3 4 |
| 13. | Crises de colère incontrôlables  | 0 1 2 3 4 |
| 14. | Sentiment d'être seul(e) même avec d'autres personnes                      | 0 1 2 3 4 |
| 15. | Blocage devant une tâche à accomplir                                       | 0 1 2 3 4 |
| 16. | Vous sentir seul(e)  | 0 1 2 3 4 |
| 17. | Vous sentir triste, nostalgique  | 0 1 2 3 4 |
| 18. | Absence d'intérêt  | 0 1 2 3 4 |
| 19. | Avoir peur   | 0 1 2 3 4 |
| 20. | Vous sentir facilement blessé(e) ou froissé(e)                             | 0 1 2 3 4 |
| 21. | Sentir que les gens ne sont pas aimables ou ne vous aiment pas             |           |
| 22. | Vous sentir inférieur(e) aux autres  | 0 1 2 3 4 |

0 = Pas du tout  
 1 = Un peu  
 2 = Passablement  
 3 = Beaucoup  
 4 = Excessivement

- |     |  |           |
|-----|--|-----------|
| 23. | Nausées, douleurs ou malaises à l'estomac  | 0 1 2 3 4 |
| 24. | Sentiments qu'on vous observe ou qu'on parle de vous   | 0 1 2 3 4 |
| 25. | Difficulté à vous endormir   | 0 1 2 3 4 |
| 26. | Besoin de vérifier et de re-vérifier ce que vous faites  | 0 1 2 3 4 |
| 27. | Difficulté à prendre des décisions   | 0 1 2 3 4 |
| 28. | Peur de prendre l'autobus, le métro ou le train  | 0 1 2 3 4 |
| 29. | Difficulté à prendre votre souffle   | 0 1 2 3 4 |
| 30. | Bouffées de chaleur ou des frissons  | 0 1 2 3 4 |
| 31. | Besoin d'éviter certains endroits, certaines choses ou certaines activités parce qu'ils vous font peur | 0 1 2 3 4 |
| 32. | Des blancs de mémoire  | 0 1 2 3 4 |
| 33. | Engourdissements ou picotements dans certaines parties du corps (i.e. bras, jambes, figure, etc.)      | 0 1 2 3 4 |
| 34. | L'idée que vous devriez être puni(e) pour vos péchés   | 0 1 2 3 4 |
| 35. | Sentiment de pessimisme face à l'avenir  | 0 1 2 3 4 |
| 36. | Difficulté à vous concentrer   | 0 1 2 3 4 |
| 37. | Sentiment de faiblesse dans certaines parties du corps   | 0 1 2 3 4 |
| 38. | Sentiment de tension ou de surexcitation   | 0 1 2 3 4 |
| 39. | Pensées en relation avec la mort   | 0 1 2 3 4 |
| 40. | Envie de frapper, d'injurier ou de faire mal à quelqu'un   | 0 1 2 3 4 |
| 41. | Envie de briser ou de fracasser des objets   | 0 1 2 3 4 |
| 42. | Tendance à l'anxiété en présence d'autres personnes  | 0 1 2 3 4 |
| 43. | Vous sentir mal à l'aise dans des foules - au centre d'achat ou au cinéma                              | 0 1 2 3 4 |
| 44. | Ne jamais vous sentir près de quelqu'un d'autre  | 0 1 2 3 4 |
| 45. | Moments de terreur et de panique   | 0 1 2 3 4 |
| 46. | Vous disputer souvent  | 0 1 2 3 4 |



0 = Pas du tout  
1 = Un peu  
2 = Passablement  
3 = Beaucoup  
4 = Excessivement

- |     |   |           |
|-----|---|-----------|
| 47. | Nervosité lorsque vous êtes laissé(e) seul(e)                           | 0 1 2 3 4 |
| 48. | Sentiment de ne pas être reconnu(e) à votre juste valeur                | 0 1 2 3 4 |
| 49. | Vous sentir tellement tendu(e) que vous ne pouvez pas rester en place   | 0 1 2 3 4 |
| 50. | Sentiment d'être bon(ne) à rien   | 0 1 2 3 4 |
| 51. | Sentiment que les gens vont profiter de vous si vous les laissez faire. | 0 1 2 3 4 |
| 52. | Avoir des sentiments de culpabilité                                     | 0 1 2 3 4 |
| 53. | Avoir l'impression que votre esprit (tête) est dérangé(e)               | 0 1 2 3 4 |

Appendix F - Sexual Arousal Inventory

SEXUAL AROUSAL INVENTORY

ALL RESPONDENTS REMAIN ANONYMOUS

The experiences in this inventory may or may not be sexually arousing to you. There are no right or wrong answers. Read each item carefully and then circle the number which indicates how sexually aroused you feel when you have the described experience, or how sexually aroused you think you would feel if you actually experienced it. The meaning of the numbers is given below:

- 1 adversely affects arousal; unthinkable, repulsive, distracting
- 0 doesn't affect sexual arousal
- 1 possibly causes sexual arousal
- 2 sometimes causes sexual arousal; slightly arousing
- 3 usually causes sexual arousal; moderately arousing
- 4 almost always sexually arousing; very arousing
- 5 always causes sexual arousal; extremely arousing

| <u>PLEASE ANSWER EVERY ITEM</u>                                      | <u>How you feel or think you would feel if you were actually involved in this experience</u> |   |   |   |   |   |   |
|--|--|---|---|---|---|---|---|
| 1. When a loved one stimulates your genitals with mouth and tongue   | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 2. When a loved one fondles your breasts with his/her hands          | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 3. When you see a loved one nude                                     | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 4. When a loved one caresses you with his/her eyes                   | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 5. When a loved one stimulates your genitals with his finger         | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 6. When you are touched or kissed on the inner thighs by a loved one | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 7. When you caress a loved one's genitals with your fingers          | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 8. When you read an erotic or "sexy" story                           | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 9. When a loved one undresses you                                    | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 10. When you dance with a loved one                                  | -1   | 0 | 1 | 2 | 3 | 4 | 5 |
| 11. When you have intercourse with a loved one                       | -1   | 0 | 1 | 2 | 3 | 4 | 5 |

- 1 adversely affects arousal; unthinkable, repulsive, distracting
- 0 doesn't affect sexual arousal
- 1 possibly causes sexual arousal
- 2 sometimes causes sexual arousal; slightly arousing
- 3 usually causes sexual arousal; moderately arousing
- 4 almost always sexually arousing; very arousing
- 5 always causes sexual arousal; extremely arousing

|   |    |   |   |   |   |   |   |
|---|----|---|---|---|---|---|---|
| 12. When a loved one touches or kisses your nipples                       | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 13. When you caress a loved one (other than genitals)                     | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 14. When you see erotic pictures or slides                                | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 15. When you lie in bed with a loved one                                  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 16. When a loved one kisses you passionately                              | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 17. When you hear sounds of pleasure during sex                           | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 18. When a loved one kisses you with an exploring tongue                  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 19. When you read suggestive or erotic poetry                             | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 20. When you see a strip show   | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 21. When you stimulate your partner's genitals with your mouth and tongue | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 22. When a loved one caresses you (other than genitals)                   | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 23. When you see an erotic movie (sexy film)                              | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 24. When you undress a loved one  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 25. When a loved one fondles your breasts with mouth and tongue           | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 26. When you make love in a new or unusual place                          | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 27. When you masturbate   | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 28. When your partner has an orgasm                                       | -1 | 0 | 1 | 2 | 3 | 4 | 5 |

ECHELLE D'EXCITATION SEXUELLE

TOUTES LES RÉPONDANTES DEMEURENT ANONYMES

Les expériences décrites dans cet inventaire peuvent ou non vous sembler excitantes sexuellement. Il n'y a pas de bonnes ou de mauvaises réponses. Lisez chaque phrase attentivement. Ensuite, encerclez le chiffre qui correspond: a) à votre niveau d'excitation sexuelle lorsque vous vivez l'expérience décrite, ou b) au niveau d'excitation sexuelle que vous penseriez atteindre si vous viviez réellement cette expérience. La signification de chaque chiffre est la suivante:

- 1 Affecte la réponse sexuelle de façon NEGATIVE; impensable, répugnant, distrayant
- 0 N'AFPECTE PAS la réponse sexuelle
- 1 Peut POSSIBLEMENT procurer une excitation sexuelle
- 2 Procure parfois une excitation sexuelle; LÉGEREMENT EXCITANT
- 3 Procure généralement une excitation sexuelle; MODÉRÉMENT EXCITANT
- 4 Procure presque toujours une excitation sexuelle; TRÈS EXCITANT
- 5 Procure toujours une excitation sexuelle; EXTRÊMEMENT EXCITANT

Comment vous vous sentez  
ou pensez que vous  
vous sentiriez si  
vous viviez cette expérience

REPONDEZ À TOUS LES PHRASES

|  |    |   |   |   |   |   |   |
|--|----|---|---|---|---|---|---|
| 1. Votre partenaire stimule vos organes génitaux avec sa bouche ou sa langue | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 2. Votre partenaire touche à vos seins avec ses mains                        | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 3. Vous regardez votre partenaire nu   | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 4. Votre partenaire vous désire des yeux                                     | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 5. Votre partenaire stimule vos organes génitaux avec ses doigts             | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 6. Votre partenaire vous touche ou vous embrasse à l'intérieur des cuisses   | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 7. Vous caressez les organes génitaux de votre partenaire avec vos doigts    | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 8. Vous lisez une histoire érotique ou "sexy"                                | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 9. Votre partenaire vous déshabille  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 10. Vous dansez avec votre partenaire  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 11. Vous avez un rapport sexuel avec votre partenaire                        | -1 | 0 | 1 | 2 | 3 | 4 | 5 |

- 1 Affecte la réponse sexuelle de façon NEGATIVE; impensable, répugnant, distrayant
- 0 N'AFECTE PAS la réponse sexuelle
- 1 Peut POSSIBLEMENT procurer une excitation sexuelle
- 2 Procure parfois une excitation sexuelle; LEGEREMENT EXCITANT
- 3 Procure généralement une excitation sexuelle; MODEREMENT EXCITANT
- 4 Procure presque toujours une excitation sexuelle; TRES EXCITANT
- 5 Procure toujours une excitation sexuelle; EXTREMEMENT EXCITANT

|  |    |   |   |   |   |   |   |
|--|----|---|---|---|---|---|---|
| 12. Votre partenaire touche ou embrasse vos mamelons                                   | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 13. Vous caressez votre partenaire (sans toucher les organes génitaux)                 | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 14. Vous voyez des photos ou diapositives érotiques                                    | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 15. Vous vous étendez sur le lit avec votre partenaire                                 | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 16. Votre partenaire vous embrasse avec passion  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 17. Vous entendez des sons exprimant le plaisir sexuel durant votre relation sexuelle  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 18. Votre partenaire vous embrasse avec une langue "exploratrice"                      | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 19. Vous lisez de la poésie érotique ou suggestive                                     | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 20. Vous voyez un spectacle d'effeuillage ("strip-tease")                              | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 21. Vous stimulez les organes génitaux de votre partenaire avec la bouche ou la langue | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 22. Votre partenaire vous caresse (sans toucher les organes génitaux)                  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 23. Vous regardez un film érotique   | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 24. Vous déshabillez votre partenaire  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 25. Votre partenaire caresse vos seins avec la bouche et la langue                     | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 26. Vous faites l'amour dans un endroit nouveau ou peu habituel                        | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 27. Vous vous masturbez  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |
| 28. Votre partenaire parvient à l'orgasme  | -1 | 0 | 1 | 2 | 3 | 4 | 5 |

Appendix G - Sexual Opinion Survey

The Sexual Opinion Survey -- Revised  
(Fisher, Byrne, White, & Kelley, in press)

Please respond to each item as honestly as you can. There are no right or wrong answers, and your answers will be completely confidential.

1. I think it would be very entertaining to look at erotica (sexually explicit books, movies, etc.).

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

2. Erotica (sexually explicit books, movies, etc.) is obviously filthy and people should not try to describe it as anything else.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

3. Swimming in the nude with a member of the opposite sex would be an exciting experience.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

4. Masturbation can be an exciting experience.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

5. If I found out that a close friend of mine was a homosexual, it would annoy me.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

6. If people thought I was interested in oral sex, I would be embarrassed.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

7. Engaging in group sex is an entertaining idea.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

8. I personally find that thinking about engaging in sexual intercourse is arousing.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

9. Seeing an erotic (sexually explicit) movie would be sexually arousing to me.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

10. Thoughts that I may have homosexual tendencies would not worry me at all.

I strongly agree : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree



11. The idea of my being physically attracted to members of the same sex is not depressing.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

12. Almost all erotic (sexually explicit) material is nauseating.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

13. It would be emotionally upsetting to me to see someone exposing themselves publicly.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

14. Watching a stripper of the opposite sex would not be very exciting.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

15. I would not enjoy seeing an erotic (sexually explicit) movie.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

16. When I think about seeing pictures showing someone of the same sex as myself masturbating, it nauseates me.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

17. The thought of engaging in unusual sex practices is highly arousing.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

18. Manipulating my genitals would probably be an arousing experience.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

19. I do not enjoy daydreaming about sexual matters.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

20. I am not curious about explicit erotica (sexually explicit books, movies, etc.).

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

21. The thought of having long-term sexual relations with more than one sex partner is not disgusting to me.

I strongly agree :\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: I strongly disagree

**Questionnaire d'opinions sur la sexualité - révisé**  
(Fischer, Byrne, White & Kelley)

Veillez répondre à chaque énoncé de façon aussi honnête que possible. Il n'y a pas de bonnes ou de mauvaises réponses. Vos réponses demeureront strictement confidentielles.

1. Je crois que regarder des livres et films érotiques serait très divertissant.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

2. Les livres et films érotiques sont dégoûtants et les gens ne devraient pas les décrire autrement.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

3. Nager nu(e) avec quelqu'un du sexe opposé serait une expérience excitante.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

4. La masturbation peut être une expérience excitante.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

5. Si je réalisais qu'un(e) ami(e) intime était homosexuel(le), cela me dérangerait.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

6. Si les gens pensaient que le sexe oral m'intéressait, je serais gêné.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

7. L'idée de participer à des pratiques sexuelles en groupe est divertissante.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

8. Personnellement, je crois que penser à faire l'amour est excitant.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

9. Voir un film érotique (sexuellement explicite) m'exciterait sexuellement.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

10. La pensée que je puisse avoir des tendances homosexuelles ne m'inquiète pas du tout.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

11. L'idée que je sois attiré(e) physiquement par des personnes du même sexe que moi n'est pas déprimante.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

12. Presque tout le matériel érotique (sexuellement explicite) est dégoûtant.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

13. Ce serait perturbant pour moi de voir quelqu'un se montrer nu en public.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

14. Regarder un(e) strip-teaseur(euse) du sexe opposé ne serait pas très excitant.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

15. Je n'aimerais pas voir un film érotique.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

16. Quand j'imagine voir des photos de quelqu'un du même sexe que moi se masturber, ça me dégoûte.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

17. L'idée de prendre part à des pratiques sexuelles inusitées est très excitante.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

18. Toucher mes organes génitaux serait probablement une expérience excitante.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

19. Je n'aime pas rêvasser à propos de sexualité.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

20. Je n'ai pas de curiosité à propos des livres et films érotiques.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

21. L'idée d'avoir des relations sexuelles à long terme avec plus d'un partenaire ne me dégoûte pas.

tout à fait d'accord : \_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_:\_\_\_: tout à fait en désaccord

Appendix H - Locke-Wallace Marital Adjustment Scale

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### RELATIONSHIP ADJUSTMENT SCALE

1. Check the point on the scale below which best describes the degree of happiness, everything considered, of your present marriage/relationship. The middle point, "HAPPY", represents the degree of happiness which most people get from their marriage/relationship, and the scale gradually ranges on one side to those few who are very unhappy in their marriage/relationship, and on the other, to those few who experience extreme joy or felicity in marriage/relationship.

\_\_\_\_\_

Totally unhappy

Happy

Perfectly happy

State the approximate extent of agreement or disagreement between you and your mate on the following items. Please check the one most appropriate column for each item.

| Always<br>Agree | Almost<br>Always<br>Agree | Occa-<br>sionally<br>Disagree | Fre-<br>quently<br>Disagree | Almost<br>always<br>Disagree | always<br>Disagree |
|-----------------|---------------------------|-------------------------------|-----------------------------|------------------------------|--------------------|
|-----------------|---------------------------|-------------------------------|-----------------------------|------------------------------|--------------------|

2. Handling family finances

3. Matters of recreation

4. Demonstration of affection

5. Friends

6. Sex relations

7. Conventionality (right good, or proper conduct)

8. Philosophy of life

9. Ways of dealing with partner's parents

10. When disagreements arise, they usually result in:

Man giving in \_\_\_\_\_ Woman giving in \_\_\_\_\_ Agreement by mutual give and take \_\_\_\_\_

11. Do you and your mate engage in outside interests together?

All of them \_\_\_\_\_ Some of them \_\_\_\_\_ Very few of them \_\_\_\_\_ None of them \_\_\_\_\_

12. In leisure time do you generally prefer: To be "on the go"? \_\_\_\_\_ to stay at home? \_\_\_\_\_  
Does your mate generally prefer: To be "on the go"? \_\_\_\_\_ to stay at home? \_\_\_\_\_

13. Do you ever wish you had not married/moved in with your partner?

Frequently \_\_\_\_\_ Occasionally \_\_\_\_\_ Rarely \_\_\_\_\_ Never \_\_\_\_\_

14. If you had your life to live over, do you think you would:

Marry/live with the same person? \_\_\_\_\_ Marry/live with a different person? \_\_\_\_\_  
Not marry at all? \_\_\_\_\_

15. Do you confide in your mate?

Almost never \_\_\_\_\_ Rarely \_\_\_\_\_ In most things \_\_\_\_\_ In everything \_\_\_\_\_

Nom: \_\_\_\_\_

Date: \_\_\_\_\_

### ENQUETE MARITALE LOCKE-WALLACE

1. Veuillez cocher sur l'échelle ci-dessous le point qui décrit le mieux le degré de bonheur qui existe dans votre mariage actuel. Le point central, 'HEUREUX', représente le degré de bonheur que la plupart des gens éprouvent au cours de leur union maritale. L'échelle s'étend graduellement d'une part vers le petit nombre de personnes dont le mariage est très malheureux et, d'autre part, vers le petit nombre qui vivent une expérience maritale de bonheur absolu.

Très malheureux

Heureux

Parfaitement heureux

Veillez indiquer pour chaque point suivant le degré approximatif d'accord ou de désaccord entre vous et votre conjoint. Veillez donner une seule réponse appropriée pour chaque item.

|                      |                                 |                               |                       |  |                               |
|----------------------|---------------------------------|-------------------------------|-----------------------|--|-------------------------------|
| Toujours<br>d'accord | Presque<br>toujours<br>d'accord | Désaccord<br>occa-<br>sionnel | Désaccord<br>fréquent | Presque<br>toujours<br>en dé-<br>saccord | Toujours<br>en dé-<br>saccord |
|----------------------|---------------------------------|-------------------------------|-----------------------|--|-------------------------------|

2. Administration du budget familial

3. Récréation

4. Témoignages d'affection

5. Amis

6. Relations sexuelles

7. Usages conventionnels (conformité aux exigences de la société)

8. Philosophie de la vie

9. Façon d'agir avec la belle-famille

10. Lorsqu'il y a désaccord, il en résulte habituellement:

que l'époux cède \_\_\_\_\_ que l'épouse cède \_\_\_\_\_ qu'il y a accord par concessions mutuelles \_\_\_\_\_

11. Est-ce que vous et votre conjoint prenez part ensemble à des activités à l'extérieur?

Toutes \_\_\_\_\_ Quelques unes \_\_\_\_\_ Très Peu \_\_\_\_\_ Aucune \_\_\_\_\_

12. Pendant vos heures de loisirs, vous préférez habituellement \_\_\_\_\_ sortir \_\_\_\_\_ rester  
à la maison. Votre conjoint préfère habituellement \_\_\_\_\_ sortir \_\_\_\_\_ rester à la maison
13. Avez-vous déjà souhaité ne pas être marié?  
Fréquemment \_\_\_\_\_ de temps en temps \_\_\_\_\_ rarement \_\_\_\_\_ jamais \_\_\_\_\_
14. Si vous aviez le choix de refaire votre vie, que feriez-vous?  
\_\_\_\_\_ Je marierais la même personne. \_\_\_\_\_ Je marierais quelqu'un d'autre \_\_\_\_\_  
\_\_\_\_\_ Je ne me marierais pas.
15. Vous vous confiez à votre conjoint:  
presque jamais \_\_\_\_\_ rarement \_\_\_\_\_ le plupart du temps \_\_\_\_\_ toujours \_\_\_\_\_



Appendix I - Sexual Activity Questionnaire

Subject #:

Session #1 or #2









Date:

















Sexual Activity Questionnaire W

Foreplay and non-penetration activities: (circle Yes or No for each item)

|  | Occurred |
|--|----------|
|  | Yes No   |
| 1 Romantic dining, (e.g., candle light and wine).                                      | Yes No   |
| 2 We danced together.  | Yes No   |
| 3 We wrestled together, we roughoused.   | Yes No   |
| 4 I wore sexy clothing.  | Yes No   |
| 5 My partner wore sexy clothing.   | Yes No   |
| 6 We looked at videos, magazines or other erotic materials.                            | Yes No   |
| 7 We used a sex toy (e.g., vibrator).  | Yes No   |
| 8 I tied up my partner.  | Yes No   |
| 9 My partner tied me up.   | Yes No   |
| 10 I danced for my partner.  | Yes No   |
| 11 My partner danced for me.   | Yes No   |
| 12 I disrobed and/or stripped in front of my partner.                                  | Yes No   |
| 13 My partner disrobed and/or stripped in front of me.                                 | Yes No   |
| 14 I took my partner's clothing off, I undressed my partner.                           | Yes No   |
| 15 My partner took my clothing off, my partner undressed me.                           | Yes No   |
| 16 We undressed each other at the same time.   | Yes No   |
| 17 We kissed on the lips, French kissing, deep kissing.                                | Yes No   |
| 18 I kissed my partner on the body (e.g., neck, stomach, back, etc. but not genitals). | Yes No   |
| 19 My partner kissed me on the body.   | Yes No   |
| 20 We hugged each other, we held one another, we cuddled.                              | Yes No   |
| 21 I hugged my partner, I held my partner.   | Yes No   |
| 22 My partner hugged me, my partner held me.   | Yes No   |
| 23 I caressed & fondled my partner, lightly touched my partner (not genitals).         | Yes No   |
| 24 My partner caressed & fondled me, partner touched me lightly (not genitals).        | Yes No   |
| 25 I massaged my partner (non genital), I rubbed my partner.                           | Yes No   |
| 26 My partner massaged me (non genital), my partner rubbed me.                         | Yes No   |
| 27 I sucked, bit, or licked my partner's body (excluding the genitals).                | Yes No   |
| 28 My partner sucked, bit, or licked my body (excluding my genitals).                  | Yes No   |
| 29 I orally stimulated my partner's genitals (fellatio, cunnilingus).                  | Yes No   |
| 30 My partner orally stimulated my genitals.   | Yes No   |
| 31 69, sixty nine, fellatio and cunnilingus at the same time.                          | Yes No   |
| 32 I masturbated myself while my partner was present.                                  | Yes No   |
| 33 My partner masturbated while I was present.   | Yes No   |
| 34 I masturbated my partner with my hands, I rubbed my partner's genitals.             | Yes No   |
| 35 My partner masturbated me with his/her hands.                                       | Yes No   |
| 36 We simultaneously masturbated each other with our hands.                            | Yes No   |
| 37 I rubbed my partner's genitals with part of my body (not my mouth or hands).        | Yes No   |
| 38 My partner rubbed my genitals with part of his/her body (not mouth or hands).       | Yes No   |
| 39 We had a shower or a bath together.   | Yes No   |
| 40 I put food on my partner (e.g., I put honey on partner's chest and licked it off).  | Yes No   |
| 41 My partner put food on me.  | Yes No   |
| 42 I stimulated my partner's anus with my tongue (rimming).                            | Yes No   |
| 43 My partner stimulated my anus with his/her tongue (rimming).                        | Yes No   |
| 44 We engaged in anal intercourse (this is a penetration activity).                    | Yes No   |
| 45 OTHER:  |          |
| 46 OTHER:  |          |

Intercourse Positions (circle Yes or No in every box)

| The man is on top of the woman.  |  |  |   | Explanatory notes   |
|--|--|--|---|---|
| 1<br> | 2<br> | 3<br> | 4<br> | 1: Missionary position, the man's legs are together, woman's apart.<br>2: Modified missionary, the man's legs are apart, woman's together.<br>3: Missionary position with the woman's legs raised up.<br>4: Woman is facing away from man, thus the man enters from behind. |
| Yes  | No   | Yes  | No  |   |
| The woman is on top of the man. (continued on next line)                                 |  |  |   | Explanatory notes   |
| 5<br> | 6<br> | 7<br> | 8<br> | 5: The missionary upside down, the woman's legs are apart.<br>6: Same as #5 except that the woman's legs are together.<br>7: Man raises his legs up in an apart position, otherwise like #6.<br>8: Same as #5, except here woman is kneeling instead of prone.              |
| Yes  | No   | Yes  | No  |   |

| More positions with woman on top of man.   |  |  |  | Explanatory notes.   |
|--|--|--|--|--|
| 9<br><br>Yes    No  | 10<br><br>Yes    No | 11<br><br>Yes    No | 12<br><br>Yes    No | 9: Woman is kneeling over man and sitting upright.<br>10: Woman is squatting over man, her feet are near his head.<br>11: Woman is kneeling, facing away from man.<br>12: Woman is facing away from man, lying prone.  |
| Man positioned behind the woman. [vaginal rear entry].   |  |  |  | Explanatory notes.   |
| 13<br><br>Yes    No | 14<br><br>Yes    No | 15<br><br>Yes    No | 16<br><br>Yes    No | 13: Intercourse, man may be upright or leaning over.<br>14: Man and woman are both kneeling, bodies upright. Contrast with #20.<br>15: Half rear entry, woman on side, man enters vagina from rear.<br>16: "Spooning" position, man behind woman, both on their sides. |
| Either the man or the woman is standing.   |  |  |  | Explanatory notes.   |
| 17<br><br>Yes    No | 18<br><br>Yes    No | 19<br><br>Yes    No | 20<br><br>Yes    No | 17: Intercourse while both are standing more or less upright.<br>18: Man is standing, woman's legs wrapped around him, free standing.<br>19: Man is standing, woman lying down, similar to #23.<br>20: Vaginal rear entry intercourse, both standing on feet.          |
| Other positions with man and woman facing each other.  |  |  |  | Explanatory notes.   |
| 21<br><br>Yes    No | 22<br><br>Yes    No | 23<br><br>Yes    No | 24<br><br>Yes    No | 21: "X" position. Legs may be extended instead of folded.<br>22: Similar to X position, except sitting on a chair or other object.<br>23: Man kneeling, woman prone, facing, usually on edge of bed.<br>24: Both lying prone, facing each other.                       |
















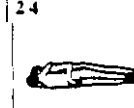
Sujet #: \_\_\_\_\_

Questionnaire d'activité sexuelle

| Préliminaires et activités sans pénétration: (encercler Oui ou Non pour chaque item) |  | S'est produit |     |
|--|--|---------------|-----|
| 1  | Souper romantique (ex. chandelles et vin).   | Oui           | Non |
| 2  | Nous avons dansé ensemble  | Oui           | Non |
| 3  | Nous avons luné ensemble, nous nous sommes uraillés                                      | Oui           | Non |
| 4  | J'ai porté des vêtements sexys.  | Oui           | Non |
| 5  | Mon partenaire a porté des vêtements sexys   | Oui           | Non |
| 6  | Nous avons regardé des vidéos, magazines ou autre matériel érotique.                     | Oui           | Non |
| 7  | Nous avons utilisé un jouet sexuel (ex. vibreur).  | Oui           | Non |
| 8  | J'ai attaché mon partenaire.   | Oui           | Non |
| 9  | Mon partenaire m'a attachée  | Oui           | Non |
| 10   | J'ai dansé pour mon partenaire   | Oui           | Non |
| 11   | Mon partenaire a dansé pour moi.   | Oui           | Non |
| 12   | Je me suis dévêtue et/ou j'ai fait un strip-tease devant mon partenaire.                 | Oui           | Non |
| 13   | Mon partenaire s'est dévêtu et/ou a fait un strip-tease devant moi.                      | Oui           | Non |
| 14   | J'ai enlevé les vêtements de mon partenaire, je l'ai déshabillé.                         | Oui           | Non |
| 15   | Mon partenaire a enlevé mes vêtements, il m'a déshabillée.                               | Oui           | Non |
| 16   | Nous nous sommes déshabillés en même temps.  | Oui           | Non |
| 17   | Nous nous sommes embrassés sur les lèvres, baiser profond ("french kiss").               | Oui           | Non |
| 18   | J'ai embrassé mon partenaire sur le corps (excluant les organes génitaux).               | Oui           | Non |
| 19   | Mon partenaire m'a embrassée sur le corps.   | Oui           | Non |
| 20   | Nous nous sommes serrés dans les bras.   | Oui           | Non |
| 21   | J'ai serré mon partenaire dans mes bras.   | Oui           | Non |
| 22   | Mon partenaire m'a serrée dans ses bras.   | Oui           | Non |
| 23   | J'ai caressé mon partenaire, je l'ai touché légèrement (pas les organes génitaux).       | Oui           | Non |
| 24   | Mon partenaire m'a caressée, il m'a touchée légèrement (pas les organes génitaux).       | Oui           | Non |
| 25   | J'ai massé mon partenaire (non génital), je l'ai frictionné.                             | Oui           | Non |
| 26   | Mon partenaire m'a massée (non génital), il m'a frictionnée.                             | Oui           | Non |
| 27   | J'ai sucé, mordu ou léché le corps de mon partenaire (excluant les organes génitaux).    | Oui           | Non |
| 28   | Mon partenaire a sucé, mordu ou léché mon corps (excluant les organes génitaux).         | Oui           | Non |
| 29   | J'ai stimulé oralement les organes génitaux de mon partenaire (fellatio).                | Oui           | Non |
| 30   | Mon partenaire a stimulé oralement mes organes génitaux (cunnilingus).                   | Oui           | Non |
| 31   | 69, soixante-neuf, fellatio et cunnilingus en même temps.                                | Oui           | Non |
| 32   | Je me suis masturbée pendant que mon partenaire était présent.                           | Oui           | Non |
| 33   | Mon partenaire s'est masturbé pendant que j'étais présente.                              | Oui           | Non |
| 34   | J'ai masturbé mon partenaire avec mes mains, j'ai frictionné ses organes génitaux.       | Oui           | Non |
| 35   | Mon partenaire m'a masturbée avec ses mains.   | Oui           | Non |
| 36   | Nous nous sommes masturbés simultanément avec nos mains.                                 | Oui           | Non |
| 37   | J'ai frotté les organes génitaux de mon partenaire avec une partie de mon corps.         | Oui           | Non |
| 38   | Mon partenaire a frotté mes organes génitaux avec une partie de son corps.               | Oui           | Non |
| 39   | Nous avons pris une douche ou un bain ensemble.  | Oui           | Non |
| 40   | J'ai mis de la sourriture sur mon partenaire (ex: miel sur sa poitrine, que j'ai léché). | Oui           | Non |
| 41   | Mon partenaire a mis de la sourriture sur moi.   | Oui           | Non |
| 42   | J'ai stimulé l'anus de mon partenaire avec ma langue.                                    | Oui           | Non |
| 43   | Mon partenaire a stimulé mon anus avec sa langue.  | Oui           | Non |
| 44   | Nous avons pratiqué des rapports anaux (ceci est une activité de pénétration).           | Oui           | Non |
| 45   | AUTRE: _____   |               |     |
| 46   | AUTRE: _____   |               |     |

Positions de rapports sexuels (encercler Oui ou Non dans chaque boîte)

| L'homme est par-dessus la femme. |     |     |     | Notes explicatives.  |
|----------------------------------|-----|-----|-----|--|
| 1                                | 2   | 3   | 4   | 1: Missionnaire, jambes de l'homme ensemble, celles de la femme écartées.<br>2: Missionnaire modifié, jambes de l'homme écartées, celles de la femme ensemble.<br>3: Position missionnaire avec jambes de la femme relevées.<br>4: Femme est sur le ventre, homme la pénétrant ainsi par derrière. |
|                                  |     |     |     |  |
| Oui                              | Non | Oui | Non |  |
|                                  |     |     |     |  |
| La femme est par-dessus l'homme. |     |     |     | Notes explicatives.  |
| 5                                | 6   | 7   | 8   | 5: Missionnaire à l'envers, jambes de la femme sont écartées.<br>6: Comme au #5, sauf que jambes de la femme sont ensemble.<br>7: Comme au #6, sauf qu'homme relève jambes dans position écartée.<br>8: Comme au #5, sauf que femme est à genoux plutôt qu'étendue.                                |
|                                  |     |     |     |  |
| Oui                              | Non | Oui | Non |  |
|                                  |     |     |     |  |

| D'autres positions avec la femme par-dessus l'homme.                                  |   |   |   | Notes explicatives   |
|---|---|---|---|--|
| 9    | 10   | 11   | 12   | 9 Femme approuvée au-dessus de l'homme et assise à la verticale.<br>10 Femme est accouplée par-dessus l'homme, pieds près de sa tête.<br>11 Femme agenouillée regardant dans direction opposée à l'homme.<br>12 Femme regarde dans direction opposée à l'homme et est dirigée sur lui. |
| Oui Non   | Oui Non   | Oui Non   | Oui Non   |  |
| Homme positionné derrière la femme (entrée vaginale arrière).                         |   |   |   | Notes explicatives   |
| 13   | 14   | 15   | 16   | 13 Pénétration vaginale, homme à la verticale ou penché.<br>14 Homme et femme tous deux accouplés, corps à la verticale.<br>15 Demi-entrée arrière, femme sur côté, homme pénétrant vagin par arr.<br>16 "Cuillère", homme derrière femme, tous deux sur côté.                         |
| Oui Non   | Oui Non   | Oui Non   | Oui Non   |  |
| Soit l'homme ou la femme est debout.  |   |   |   | Notes explicatives   |
| 17   | 18   | 19   | 20   | 17 Pénétration vaginale, tous deux étant plus ou moins debout.<br>18 Homme est debout, jambes de la femme l'entourent.<br>19 Homme est debout, femme étendue, similaire à #23.<br>20 Pénétration vaginale par l'arrière, tous deux debout.   |
| Oui Non   | Oui Non   | Oui Non   | Oui Non   |  |
| D'autres positions avec l'homme et la femme se faisant face.                          |   |   |   | Notes explicatives   |
| 21  | 22  | 23  | 24  | 21 Position du "X" Jambes peuvent être étendues au lieu de pliées.<br>22 Similaire au "X", mais assis sur une chaise ou un autre objet.<br>23 Homme agenouillé, femme étendue, se faisant face, sur bord du lit.<br>24 Tous deux étendus, se faisant face.                             |
| Oui Non   | Oui Non   | Oui Non   | Oui Non   |  |



# Williams & Wilkins

A Waverly Company

06/05/95

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