The impact of chronic vulval pain on quality of life and psychosocial wellbeing

Hilary Sargeant and Frances O’Callaghan

School of Psychology

Griffith University
Abstract

**Background:** Chronic or recurrent pain associated with the female reproductive system is not well understood and has been neglected in research, despite it being a costly health problem.

**Aims:** The present research investigated the psychosocial impact of vulval pain on health-related quality of life, sexual wellbeing, and relationship satisfaction.

**Methods:** Between June and December 2004, Australian women with and without vulval pain completed a questionnaire containing a range of well-validated self-report measures. Questionnaires were returned by 51 women aged between 19 and 68 years with vulval pain and 46 women aged between 21 and 65 years without vulval pain.

**Results:** Women with vulval pain reported significantly worse health-related quality of life, higher levels of distress related to sexual activities, and lower levels of happiness in couple relationships than those without pain.

**Conclusions:** These results highlight serious psychosocial implications for women experiencing chronic vulval pain. Understanding the impact that vulval pain has on women may assist in developing appropriate psychosocial interventions that may improve quality of life.

Key Words: Vulvovaginitis, psychology, quality of life
Introduction

It has been suggested that chronic or recurrent pain associated with the female reproductive system is not well understood, and has been neglected in research, despite it being a costly health problem.\textsuperscript{1} In Australia, there are no prevalence data available on the number of women who experience chronic vulval pain. However, a study of women in the United States yielded a lifetime incidence rate of 16\% for burning, knifelike pain in the genital area that lasted 3 months or more and caused excessive levels of pain on contact.\textsuperscript{2}

Chronic superficial vulval pain and discomfort takes many forms, including burning, stinging, and itching.\textsuperscript{3, 4} It may be felt only during sexual intercourse, experienced continually, or triggered by non-sexual activities like walking.\textsuperscript{5} The present study focused on chronic superficial vulval pain due to a range of non-malignant conditions, including vulvodynia, vulval vestibulitis syndrome (VVS), vulval dermatoses, and chronic candidiasis.

Vulval pain can affect women’s physical functioning, restricting physical activities,\textsuperscript{6} affecting everyday activities such as sitting, relaxing, and sleeping,\textsuperscript{5, 7} and causing pain with a range of sexual and non-sexual contact (e.g., use of tampons, friction with clothing, urination, and partner stimulation).\textsuperscript{8} It can also impact on the social, psychosexual, and psychological wellbeing of women, although the limited research in this area has tended to be mixed. For example, some research indicates a decrease in relationship satisfaction and an increase in marital distress among women with vulval pain or dyspareunia.\textsuperscript{6, 9, 10, 11} Other research has shown no difference in marital satisfaction between women with VVS and other women.\textsuperscript{12, 13} VVS has a major adverse effect on the sexual functioning of sufferers\textsuperscript{10} and is a risk factor for developing psychosexual complications.\textsuperscript{6} Research has
shown that women with VVS were highly likely to have pain during sexual intercourse, significantly reduced arousal potential, an inability to have sexual intercourse due to their symptoms, a decreased interest in and negative feelings towards intercourse, and to refuse a partner’s sexual advances. \(^{14}\) Some research on the psychological impact of vulval pain has found high levels of distress, depression or other negative psychological symptoms among women with vulval pain.\(^ {15,10,16}\) However, other research has found both sufferers and partners to be psychologically healthy, albeit possibly suffering from situationally-defined sexual dysfunction.\(^ {12}\)

The present exploratory research aimed to investigate factors related to vulval pain among Australian women, to further understand psychosocial implications of vulval pain on women’s quality of life and demographic and medical factors that may differentiate women with vulval pain from others.

**Methods**

Women with vulval pain were recruited by health practitioners from medical settings across Australia, including sexual health clinics, and private gynaecology and psychology practices. A convenience sample of women without vulval pain was recruited from local workplaces. As an inducement to participate, women were eligible to enter a draw for a $150 gift voucher. Questionnaires were completed and returned via mail by ninety-seven women and were included in the present research.

The questionnaire consisted of a range of well-validated self-report measures including the Medical Outcomes Study, Short Form (SF-36)\(^ {17}\) measuring health-related quality of life, the Abbreviated Dyadic Adjustment Scale\(^ {18}\) measuring relationship
satisfaction, and the Female Sexual Distress Scale\textsuperscript{19} measuring distress related to sexual activities. Medical history questions using some items from the McGill Pain Questionnaire\textsuperscript{20} and demographic questions were included. The research was approved by the University’s Human Research Ethics Committee.

**Results**

*Demographic information*

The mean age of women with vulval pain was 33.27 years ($SD = 13.73$; range 19–68 years). This was not significantly different to the mean age of 36.76 years ($SD=13.05$; range 21–65 years) for women without vulval pain ($t (95) = -1.28, p > .05$). Similar proportions of women in each group were married or in a defacto relationship. There was no significant difference in nulliparity between groups ($\chi^2 (1) = .34, p > .05$). In both groups, the majority of participants were born in Australia.

*Medical information*

Medical information was obtained about dysmenorrhea, age of menarche, and recurrent yeast infections. A Chi-square analysis showed that the proportion of women who *often* or *always* had pain or severe cramps during their period was significantly higher among those with vulval pain (59%) compared with those without (28%) ($\chi^2 = 9.76, df = 1, p < .01$). The mean age of menarche for women with vulval pain (12.43 years) was significantly earlier than the mean age of menarche for women without vulval pain (13.11 years), $t = 2.26, df = 94, p < .05$. Over half of the women with vulval pain (54%) had experienced frequent or recurrent yeast infections, compared with 28% of women without
pain. This was a statistically significant difference between the two groups ($\chi^2 = 6.08$, $df=1$, $p < .05$).

**Vulval pain**

Information gathered on vulval pain is shown in Table 1. Among women reporting vulval pain, the most commonly diagnosed condition (47%) was vulvar vestibulitis syndrome, followed by vulvodynia (37%). Forty-one per cent of women had been diagnosed with more than one vulval pain condition. Participants with vulval pain were asked to rate the severity of their pain, on a scale from 0–100. The range was 10–100, with mean 66.24 (SD = 22.89).

**Health related quality of life**

In addition to the 8 subscales that measure physical functioning, bodily pain, general health perceptions, vitality, social functioning, limitations to physical and emotional roles, mental health, and reported health change, the SF-36 also yields standardised physical and mental health summary scales. Descriptive statistics from these scales are shown in Table 2 and from the subscales in Table 3. Both summary scales and all subscales apart from Physical functioning reflected significantly worse health-related quality of life for women with vulval pain than for those with no pain.

**Relationship satisfaction and sexual distress**

Table 4 shows descriptive statistics for women with and without vulval pain using measures of relationship satisfaction and sexual distress. Overall relationship satisfaction
levels in each group were not significantly different. However, the last item alone on the ADAS (i.e., the level of overall happiness) has been shown appropriate for use as a brief diagnostic tool of marital quality, as it differentiates between adjusted and distressed couples.22 Using this item only, women without vulval pain were seen to be significantly happier in their relationships than those with pain. In addition, women with vulval pain reported significantly higher levels of distress related to sexual activities.

Discussion

The aim of the present research was to investigate the psychosocial impact of vulval pain on quality of life, including physical and mental health, sexual wellbeing, and couple relationships. It was found that women with vulval pain were worse off on a range of outcomes related to quality of life than women without vulval pain and differed significantly from other women on a number of medical issues.

Medical differences

A significantly higher proportion of women with vulval pain often or always experienced pain or severe cramps during their period, compared with women without pain, underlining previous research linking dysmenorrhea and VVS.10 The mean age for menarche was significantly earlier for women with vulval pain than women without pain, supporting previous research that found early menarche to be a risk factor for VVS.3 A significantly higher proportion (54%) of women with vulval pain reported having had frequent or recurrent yeast infections than women without pain, a similar finding to other
Further exploration is warranted into factors that may mediate or moderate links between dysmenorrhea, early menarche, recurrent yeast infections and vulval pain.

*Health-related quality of life*

As suggested by previous research,6, 7 women with vulval pain had significantly lower physical and mental health-related quality of life than women without pain. The health of women with vulval pain limited them significantly in areas of physical, psychological, occupational and social functioning, and to a significantly greater extent than women without pain.

*Sexual distress*

It was expected that women with vulval pain would have significantly higher levels of distress related to sexual activities than women without pain. One-third of women with vulval pain, but no women without pain, reported always feeling distressed about their sex life. Nearly one-third of women with vulval pain (31%), compared with just 2% of women without pain, reported always being unhappy about their sexual relationship. Nearly one-quarter of women with vulval pain, but none without pain, reported always feeling stressed about sex. Almost one-third of women with vulval pain, but no women without pain, reported always feeling dissatisfied with their sex life. The present research highlights negative emotions accompanying this sexual dysfunction.

*Relationship satisfaction*

Although women with vulval pain did not have significantly lower levels of overall relationship satisfaction than those with no pain, they had significantly lower levels of happiness within the relationship. It may be that couples in which the woman has vulval
pain are able to function at a level similar to couples in which the woman does not have pain, but vulval pain and associated sexual difficulties impact on feelings of happiness within the couple.

These findings may help to explain inconsistencies noted with previous research. When assessing marital satisfaction, results may differ depending on measures used and aspects assessed. Further investigations into differences in particular aspects of marital satisfaction may assist in determining specific areas of intervention that could be targeted with couple therapy, to improve happiness and satisfaction within the relationship.

Implications for Practice

Given the considerable proportion of women reporting always being distressed, unhappy and stressed about their sex lives, teaching a couple to broaden their sexual repertoire, such that intercourse does not become the major part of sexual activities, may be very important in assisting couples dealing with these conditions to increase couple happiness and decrease sex-related distress. This could be an extremely useful early intervention for all women diagnosed with vulval pain conditions. Future research could investigate the efficacy of such intervention. It would also be useful to determine whether such therapy would be better delivered to couples, rather than individual women. Research into therapy for women with early stage cancer has shown couple therapy to be more effective than individual therapy in improving couples’ supportive communication, reducing psychological distress and coping effort, and improving sexual adjustment. Since sexual pain is also an interpersonal pain, similar results may well be seen when looking at therapy with women with vulval pain.
Limitations

There are some limitations to the present research that should be considered. Rather than convenience sampling, it may be useful in future to obtain a community sample of women without vulval pain and randomly sample enough women to include sufficient women with vulval pain. This may help to assess the characteristics and needs of women who are not currently being treated for vulval pain.

There may have been an overstatement of vulval pain conditions, as they were not able to be verified by a medical practitioner. However, since the sample of women was taken from health professionals, and since women with this sort of pain are usually well-informed about their condition, a gross overstatement of these conditions is unlikely. Obtaining medical verification of these diagnoses would have been difficult and such identification may have threatened the anonymity of women, reducing the number who participated.

The cross-sectional research design of the current study enabled data to be gathered at only one point in time. Due to the many pre-existing differences between groups being compared in cross-sectional studies, it is possible that any differences subsequently found might be due to some unmeasured variable. Longitudinal studies are therefore needed allowing for examination of within-individual change, and the direction of causality.

The use of self-report measures is a further possible limitation. However, steps were taken to ensure the current research was as accurate as possible, with reliable measures used, and an appropriate sample size obtained for the analyses undertaken. As the questionnaire was anonymous, and as anecdotal evidence from participants and health
professionals suggested that women were pleased to participate as the research might lead to improvements in treatment, it is likely that responses were accurate.

Conclusions

While the prevalence of vulval pain conditions in Australia is not known, it is likely that a sizeable proportion of Australian women experience such conditions, with a consequent detrimental effect on their mental and physical health and limiting social and occupational activities. Vulval pain conditions can lead to high levels of distress related to sexual activities, and to decreased levels of happiness in couple relationships. Understanding the impact that vulval pain has on women may assist in providing appropriate psychosocial interventions that may improve quality of life in a number of ways.
References


Table 1

Medical diagnoses and pain information among women with vulval pain

<table>
<thead>
<tr>
<th>Diagnosed vulval pain conditions</th>
<th>Proportion of sample (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulvar vestibulitis syndrome</td>
<td>47</td>
</tr>
<tr>
<td>Vulvodynia</td>
<td>37</td>
</tr>
<tr>
<td>Chronic candidiasis</td>
<td>33</td>
</tr>
<tr>
<td>Vulval dermatoses</td>
<td>24</td>
</tr>
<tr>
<td>Vulval papillomatosis</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
<tr>
<td>Always had pain with intercourse</td>
<td>35</td>
</tr>
<tr>
<td>Pain with direct pressure only</td>
<td>69</td>
</tr>
<tr>
<td>Pain spontaneously without provocation</td>
<td>31</td>
</tr>
</tbody>
</table>
Table 2

*Descriptive statistics from the mental and physical health summary scores on the SF-36*

<table>
<thead>
<tr>
<th></th>
<th>Vulval pain</th>
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<th>No vulval pain</th>
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<th>t</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Min</td>
<td>Max</td>
<td>M</td>
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<tr>
<td>MCS</td>
<td>-.35</td>
<td>1.01</td>
<td>-2.80</td>
<td>1.74</td>
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<td>PCS</td>
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<td>1.05</td>
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*Note.* MCS = Mental health composite score; PCS = Physical health composite score.

***p<.001.
Table 3

*Descriptive statistics from the SF-36 subscales*

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<tr>
<th></th>
<th>GHP</th>
<th>PR</th>
<th>RL-EP</th>
<th>RL-PP</th>
<th>SF</th>
<th>BP</th>
<th>GMH</th>
<th>V</th>
<th>Total</th>
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<tr>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>$M$</td>
<td>16.90</td>
<td>26.45</td>
<td>4.70</td>
<td>6.20</td>
<td>7.08</td>
<td>6.47</td>
<td>19.92</td>
<td>11.84</td>
<td>102.92</td>
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<tr>
<td>$SD$</td>
<td>4.36</td>
<td>4.09</td>
<td>1.15</td>
<td>1.61</td>
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<td>2.01</td>
<td>5.01</td>
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<tr>
<td>Min</td>
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<td>3</td>
<td>4</td>
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<td>3</td>
<td>9</td>
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<td>Max</td>
<td>24</td>
<td>30</td>
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<td>10</td>
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<tr>
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<tr>
<td>$M$</td>
<td>20.66</td>
<td>27.96</td>
<td>5.26</td>
<td>7.60</td>
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<td>8.61</td>
<td>23.54</td>
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<tr>
<td>$SD$</td>
<td>2.76</td>
<td>3.29</td>
<td>1.08</td>
<td>1.00</td>
<td>1.69</td>
<td>1.73</td>
<td>3.16</td>
<td>3.15</td>
<td>11.42</td>
</tr>
<tr>
<td>Min</td>
<td>13</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>16</td>
<td>7</td>
<td>85</td>
</tr>
<tr>
<td>Max</td>
<td>25</td>
<td>30</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>29</td>
<td>21</td>
<td>138</td>
</tr>
</tbody>
</table>

$t$ values: -5.00**, -1.98, -2.43*, -5.12**, -4.40**, -5.58**, -5.82**, -6.31**

*Note.* GHP = General Health Perceptions; PF = Physical Functioning; RL–EP = Role Limitations due to Emotional Problems; RL–PP = Role Limitations due to Physical Problems; SF = Social Functioning; BP = Bodily Pain; GMH = General Mental Health; V = Vitality.

* $p < .05$, ** $p < .01$. 
Table 4

Descriptive statistics on measures of relationship satisfaction and sexual distress

<table>
<thead>
<tr>
<th></th>
<th>Vulval pain</th>
<th>No vulval pain</th>
<th>t</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>Min</td>
</tr>
<tr>
<td>Relationship satisfaction</td>
<td>25.51</td>
<td>5.87</td>
<td>11</td>
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<tr>
<td>Overall happiness</td>
<td>3.66</td>
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<tr>
<td>Sexual distress</td>
<td>29.42</td>
<td>11.47</td>
<td>0</td>
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</table>

Note. **p < .01.