To seek or not to seek? Care-seeking behaviour among people with low-back pain

Monica Mortimer1,2, Gunnel Ahlberg3, and the MUSIC-Norrålje study group

1Department of Occupational Health, Stockholm County Council, Stockholm, Sweden, 2Division of Occupational Health, Department of Public Health Sciences, Karolinska Institute, S-171 76 Stockholm, Sweden, 3National Institute for Working Life, Programme for Health and Development in the new Working Life, S-171 84 Solna, Sweden

Aim: The present study sought to identify potential differences between subjects who seek care for their low-back pain problems and those who do not with respect to pain intensity, grade of disability, physical or psychosocial working conditions, individual physical or physiological factors, and lifestyle factors. Material and methods: The study population was obtained from a population-based, case-referent study, the MUSIC-Norrålje study. All persons with low-back pain among cases as well as “referents” were compared according to care-seeking behaviour. In all 727 cases with low-back pain who had sought care by any of 75 caregivers in the region, including all physicians and physiotherapists as well as chiropractors, osteopaths, and homeopaths, 721 referents with low-back pain who did not seek care participated. All participants underwent a clinical examination, and filled in a questionnaire about personal and occupational data, pain and disability, pain history, psychosomatic complaints, and present psychosocial situation. Results: High disability and high pain intensity were strongly related to care seeking among men and women with low-back pain. The odds ratios for high disability were 7.4 (CI 5.0 – 11.0) for women and 4.9 (CI 3.3 – 7.1) for men respectively. The odds ratios for high pain intensity were 3.7 (CI 2.2 – 6.0) for women and 1.7 (CI 1.1 – 2.8) for men. A more strained economic situation and use of passive coping strategies significantly increased the probability of women not seeking care. Neither previous pain history, high physical workload, nor job strain, poor job satisfaction, or life style factors (high body weight, smoking, and exercise) or psychosomatic complaints affected care-seeking behaviour. Conclusions: The most decisive factors for seeking care were disability and pain. However, numerous individuals with low disability and low pain intensity also seek care for their pain problems. Better information and advice on the common course of low-back pain may make those individuals less frightened of their pain and, as a result, reduce the consumption of care and social costs for society. The majority of people seek care for pain without wanting a medical prescription. The fact that economic factors seemed to be of importance indicates that costs for healthcare must be kept low if the goal is to give healthcare on equal terms for all.

Key words: care-seeking, disability, epidemiology, low-back pain, pain intensity.

INTRODUCTION

Low-back pain (LBP) is a common condition affecting most people at some time during their life. In surveys from Statistics Sweden in 1997, 32% of all men aged 16 – 84 reported current low-back pain and the corresponding figure for women was 38%. Similar figures are reported from other countries (1 – 12). Of all these persons who report a first or recurrent episodes of low-back pain, some seek care for their pain and some do not.

In the population-based MUSIC-Norrålje study, a case-referent study on risk and health factors for low back and neck/shoulder pain (13 – 14), 46% of the women and 43% of the men among the referents had not sought care even though they had experienced low-back pain during the last six months. The MUSIC-Norrålje study therefore gave an opportunity to study reasons underlying care-seeking behaviour.

A positive relationship between high pain intensity and disturbed daily activities and care seeking are noted in some studies (3, 5, 7, 15, 16) but not in others (17). In some studies (3, 5, 7, 15, 16), subjects with either a greater number of previous pain episodes or suffering from chronic low-back pain were reportedly less likely to seek care. In contrast, Hillman (7) noted that the longer the duration of LBP the greater the likelihood of consulting. Stressful work events, strain, and individual psychological factors were positively related to healthcare use in some studies (16, 18).
Physical workload, however, was not important in seeking care for LBP, in a study by Carey et al. (15).

Financial position may also be of importance. In one study by Elofsson et al. (20) nearly every fourth person had forgone seeking care owing to the cost. In contrast, Carey et al. (15) noted that care is often sought regardless of income. Lifestyle factors such as exercise, smoking, and overweight have been less studied in relationship to consulting for low-back pain.

The aim of the present study was to identify potential differences between subjects who seek care for their low-back pain problems and those who do not with regard to pain intensity, grade of disability, physical or psychosocial working conditions, individual physical and physiological factors, and lifestyle factors.

SUBJECTS AND METHODS

The MUSIC-Norråle study was started in order to investigate different aspects of low-back and neck/shoulder pain in a general working population. The municipality and rural district of Norråle comprise about 11,000 men and 9,200 women aged 20–59 years living and not working outside the region. At the time of this investigation about 86% of these were gainfully employed (Statistics Sweden). The study period was from 15 November 1993 to 14 November 1996. Men and women in Norråle are mainly employed in the social and medical sector, in manufacturing industry, and in the construction industry. There is for example one paper-mill factory, one chemical-technical factory, and one plastics factory in the region.

The cases were individuals from the study base who sought care for low-back pain from any of the approximately 75 caregivers in the region, including all physicians and physiotherapists as well as chiropractors, osteopaths, and homeopaths. The cases were restricted to those not having sought care or been treated for low-back pain during the previous six months. The referents were selected as a random sample, stratified by sex and age (five-year intervals), from the study base via the population register. One referent was always chosen for each case. If there was space in the investigation schedule a new referent within the same five-year span as the last case was randomly chosen. The referents were excluded if they had sought any care or been treated for low back pain or disorders in the previous six months. In the referent group 69% among the women and 68% among the men took part in the whole investigation. Results from the MUSIC-Norråle study on work-related physical and psychosocial risk factors in association with a new episode of low-back pain and neck/shoulder pain have recently been reported (13, 14).

The inclusion criteria for the present study were: self-reported pain problems in the preceding six months and at least self-reported low disability in combination with low pain intensity, i.e. Grade I according to von Korff et al. (21). A total of 727 subjects (cases) who had sought care for their low-back pain problem and 721 subjects (referents) who had not sought care in spite of low-back pain fulfilled the inclusion criteria (Figure 1).

Fig. 1. Inclusion criteria and the number of subjects participating in the study.
DATA COLLECTION

Initially all participants in the MUSIC-Norrträle study filled in a questionnaire about personal and occupational data, pain and disability, previous pain history, psychosomatic disorders, and present psychosocial situation. At the MUSIC centre the participants went through a standardized clinical examination, one interview about physical exposures in the previous 12 months, and one interview about psychosocial factors now and during the previous five years. Both interviews covered exposure at work and during leisure time.

EXPLAINING VARIABLES

**Demographic data**

Information about age and socioeconomic status was elicited with a questionnaire. The following socioeconomic groups were registered: blue-collar workers, white-collar workers in lower positions, white-collar workers in middle or higher positions, self-employed/employer and unemployed.

**Pain and disability**

Three questions about pain intensity and four about disability were asked in a self-administered questionnaire both at baseline and at the three follow-ups (21). To rate the pain intensity score the questions concerned (1) current pain in the low back, (2) the worst pain experienced during the previous six months, and (3) an average of the pain during the previous six months. The ratings were on an 11-point scale, where 0 meant no pain at all and 10 meant the worst conceivable pain.

The three questions for rating disability covered the previous six months and were phrased: (1) “How much has low-back pain interfered with your daily activities?”; (2) “How much has low-back pain changed your ability to take part in recreational, social and family activities?”; and (3) “How much has low-back pain changed your ability to work (including housework)”?

The ratings were on an 11-point scale, where 0 meant, “not affected at all” and 10 meant “impossible to continue with these activities”.

For each person the score for pain intensity and disability was defined by the sum of the three figures multiplied by 10 and divided by three.

The fourth question related to disability concerned the number of days (disability days) in the previous six months on which the subject had been unable to carry out his/her usual activities (work, school, and housework) because of the low-back pain.

**Range of motion**

The range of motion (in degrees) of the lumbar spine, from neutral position to flexion and from neutral to extension, was measured in a standing position with a kyphometer (Model CN 4802; AZB, Geneva, Switzerland). The cut-off point for defining those with reduced range of motion was based on the distribution in the referent population. Women with a total range of motion $\leq 70$ and men with a total range of motion $\leq 62$ degrees were defined as exposed to a reduced range of motion.

**Previous pain history**

Information about previous periods of acute/sub-acute pain lasting at least seven days consecutively, and previous periods of chronic pain lasting at least three months consecutively was obtained from the self-administered questionnaire at baseline. Five response alternatives were given: “never”, “once”, “twice”, “3–5 times” and “more than 5 times”. Subjects who answered “never” were defined as unexposed.

**Physical workload**

Information regarding amount (duration and intensity level) of physical load during occupational work in the preceding 12 months was collected by interview (22). From that interview an average level of energy expenditure during occupational work was calculated and expressed in multiples of the metabolic rate (MET) at rest. High physical workload was defined as average energy expenditure $\geq 3.0$ METs for women and $\geq 3.5$ METs for men. These figures represent $\geq 30–35\%$ of maximal aerobic capacity in average 45-year-old Swedish women and men (23–24).

**Job strain**

In the Karasek and Theorell (25) model job strain is a combination of high psychological demands and low decision latitude (skill utilization and authority over decisions). The Swedish version of the JCQ scale was used. The scale includes 11 items covering the dimensions psychological demands, skill utilization, and authority over decisions.

The index of psychological demand included five items: excessive work; conflicting demands; time to do work; fast work; and hard work. The score variation was 5–20; the higher the score the higher the respondents were then pooled into five hierarchical classes according to their scores (21): Grade 0 – no pain problem last six months; Grade I – low disability – low pain intensity score; Grade II, low disability – high pain intensity score; Grade III, high disability – moderately limiting; Grade IV, high disability – severely limiting.
demands. Skill utilization included four items: learning new things; high levels of skill; high levels of creativity; and repetitious job. The score variation was 4–16; the lower the score the less the skill utilization. The index of authority over decisions included two items: questions about influence over what to do and how to perform the work. The score variation was 2–8; the lower the score, the less authority over decisions. Job strain was defined as low decision latitude (score 6–16) and high demands (score 20–24).

**Job satisfaction and social support at work**

From the baseline questionnaire, four items concerning a sense of meaningfulness in work and job satisfaction were added together to form an index for “job satisfaction”. The index consists of four items: “Do you think that your work tasks in your current job are engaging?”; “Do you feel safe and secure in your job?”; “Do you think that your job is meaningful?”; “Do you consider your job to be valued positively by others?” The score variation was 4–16; the higher the score, the more job satisfaction (26).

The index “Social support” seeks to tap social climate at the workplace (27). The index consists of six items: “there is a calm and pleasant atmosphere at my work”, “there is a good sense of fellowship”, “my workmates support me if I have a bad day”, “I’m met with acceptance”, “I get on well with my superiors”, and “I get on well with my workmates.” The score variation was 4–24; the higher the score, the more social support at work. The cut-off points for both these indices were based on the distributions in the referent population. The median values were used for classifying subjects into exposed/non-exposed.

**Passive coping strategies**

A group of questions concerned “avoiding ways to react toward workmates and superiors when in conflict or when feeling one has been treated unjustly”. These items concerned both immediate reactions and reactions has been presented by Ahlberg-Hultén et al. (27). The index “passive coping” was measured with four items; “let it pass without saying anything”, “goes away”, “feels bad (headache, stomach pain etc.)” and “get angry and irritated at home”. Four response alternatives were possible: “no, never”, “no, seldom”, “yes, sometimes”, and “yes, most often”. The score variation was 8–32; the higher the score, the higher passive coping strategies. The cut-off point was based on the distribution in the referent population. The median values were used for classifying subjects into exposed and non-exposed.

**Functional economy**

The general attitude to the private economic situation was captured in the baseline questionnaire. The answer to the question “In general what do you say about your economic situation?” was rated on a seven-point scale where 1 meant “functioning very badly” and 7 meant “functioning very well”. The cut-off point was based on distribution in the referent population. Median values were used for classifying subjects into exposed/non-exposed.

**Lifestyle factors and overweight**

At the baseline, information regarding amount (duration and intensity level) of exercise was collected by interview. During the interview, the subject described each specific exercise and the hours spent weekly on each activity (22, 28). Directly afterwards, the interviewer estimated the level of energy expenditure needed to perform each specific activity. In this study we used information about exercise at a dichotomous level (yes/no).

**Body mass index (BMI)** was calculated from body weight (kg) and height (m) according to the formula [kg/(m)^2] and overweight/obesity was defined according to the recommendations of the World Health Organisation (WHO) (29). Smokers, ex-smokers, and non-smokers were identified from the questionnaire.

**Psychosomatic complaints**

The sum index for psychosomatic complaints included 17 questions concerning general psychological symptoms, headache, stomach troubles, psychosomatic heart troubles, and somatic anxiety. The score variation was 17–34, the higher the score, the more the psychosomatic complaints. The cut-off point for defining those with psychosomatic complaints was based on the distribution in the referent population. The median value was used for classifying subjects into exposed and non-exposed.

**DATA TREATMENT AND STATISTICAL ANALYSIS**

The relationship between the explaining variables and care-seeking for low-back pain was estimated by calculating the odds ratio (OR) with 95% confidence intervals (CI) All analyses were performed separately for men and women. The analyses were performed with SPSS for Windows, version 10.1.0.

Some of the cut-off points for classification of “exposed” and “unexposed” were based on prior hypothesis about harmful exposure. The pain intensity score and the disability score were dichotomized into exposed/non-exposed. Subjects with a pain intensity...
score >50 (21) were defined as exposed and those with a disability score >10 (arbitrarily chosen) were exposed.

For total range of motion, job satisfaction, passive coping, psychosomatic complaint, and economy the cut-off point was based on distribution in the referent population. The median values were used for classifying subjects into exposed/non-exposed. Initial univariate analyses for all the explanatory variables were performed. Exposures for which the odds ratios were statistically significant were then entered into a logistic regression model separately for men and women. Potential confounding from age was taken into account. The logistic regression analyses were tested for goodness of fit by means of the Hosmer and Lemeshow method (30).

RESULTS

A minority of the initial care seekers, 31% of the women, and 22% of the men, had visited a physician. The majority had either visited a physiotherapist or and other caregivers. The distribution into age and socioeconomic groups was rather similar between care seekers and non-care seekers. Significantly more care seekers, 25% versus 9% among women, and 22% versus 6% among men belonged to pain grade 3 and 4 (Table I).

Univariate analysis

The odds ratios for care seeking for high pain intensity were 3.4 (men) and 5.9 (women) and for high disability 6.0 (men) and 7.3 (women) respectively. There were significantly more care seekers among both men and women, with previous acute/sub-acute and chronic pain (Tables II, III). For men, decreased range of spine motion was related to seeking care (OR 2.0). Women who had not sought care reported less job satisfaction (OR 0.7) and more use of passive coping strategies (OR 0.7). This was not noted among men. Other physical or psychosocial working conditions did not seem important for care-seeking behaviour. Significantly, more women in the care-seeking group considered their economic situation to be rather good. The same tendency was noted among men (Tables II, III).

<table>
<thead>
<tr>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care seekers</td>
<td>Non-care seekers</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
</tr>
<tr>
<td>20–29 years</td>
<td>66</td>
</tr>
<tr>
<td>30–39 years</td>
<td>107</td>
</tr>
<tr>
<td>40–49 years</td>
<td>143</td>
</tr>
<tr>
<td>50–59 years</td>
<td>91</td>
</tr>
<tr>
<td><strong>Socioeconomic status</strong></td>
<td></td>
</tr>
<tr>
<td>Blue-collar workers</td>
<td>201</td>
</tr>
<tr>
<td>White-collar workers</td>
<td>124</td>
</tr>
<tr>
<td>Self-employed and employer</td>
<td>19</td>
</tr>
<tr>
<td>Unemployed</td>
<td>61</td>
</tr>
<tr>
<td><strong>Caregivers</strong></td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>120</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>125</td>
</tr>
<tr>
<td>Other caregiver</td>
<td>147</td>
</tr>
<tr>
<td><strong>Pain grades</strong></td>
<td></td>
</tr>
<tr>
<td>Pain grade 1. Low disability–low pain intensity</td>
<td>173</td>
</tr>
<tr>
<td>Pain grade 2. Low disability–high pain intensity</td>
<td>136</td>
</tr>
<tr>
<td>Pain grade 3. High disability–moderately limiting</td>
<td>73</td>
</tr>
<tr>
<td>Pain grade 4. High disability–severely limiting</td>
<td>28</td>
</tr>
</tbody>
</table>

Table I. Number (n) and percentage in different age groups, socioeconomic groups, choice of caregivers, and pain-grades for care-seeking men and women
Multiple logistic regression analyses

The factors that remained significant for both men and women who had sought care for low-back pain were pain intensity and disability. The odds ratios for high disability were 7.4 for women and 4.9 for men. The odds ratios for high pain intensity were 3.7 for women and 1.7 for men. Reduced range of motion remained a significant factor for men (OR 1.8) in the multiple analysis.

The factors that remained significant for women who had not sought care for low-back pain were passive coping (OR 0.6) and less functional economy (OR 0.6).

The results were essentially the same when the subjects belonging to pain grade 0 were included in the analysis.

DISCUSSION

Our main findings were that high disability and high pain intensity were strongly related to care seeking among both men and women with low-back pain. A less good economic situation and the use of passive coping strategies increased the probability for not seeking care among women. Neither physical or psychosocial working conditions, nor lifestyle factors or psychosomatic complaints affected care-seeking behaviour in this population.

Table II. Number (n) and percentage of exposed female care seekers and non-care seekers, odds ratios (OR1) with 95% confidence intervals (95% CI), estimated odds ratios in a multiple logistic regression analysis (OR2) for seeking care for low-back pain

<table>
<thead>
<tr>
<th></th>
<th>Care seekers n=410</th>
<th>Non-care seekers n=434</th>
<th>Univariate analysis</th>
<th>Multiple analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>OR1 CI</td>
<td>OR1 CI</td>
</tr>
<tr>
<td>Pain intensity score ≤ 50</td>
<td>58</td>
<td>89</td>
<td>1.0 4.1–8.4</td>
<td>1.0 2.2–6.0</td>
</tr>
<tr>
<td>Pain intensity &gt; 50</td>
<td>42</td>
<td>11</td>
<td>5.8 3.7–9.9</td>
<td>3.7 2.2–6.0</td>
</tr>
<tr>
<td>Disability score ≤ 10</td>
<td>25</td>
<td>71</td>
<td>1.0 1.0</td>
<td>1.0 1.0</td>
</tr>
<tr>
<td>Disability score &gt; 10</td>
<td>75</td>
<td>29</td>
<td>7.3 7.4–9.9</td>
<td>7.4 5.0–11.0</td>
</tr>
<tr>
<td>Total range of motion &gt; 70°</td>
<td>33</td>
<td>39</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Total range of motion ≤ 70°</td>
<td>67</td>
<td>61</td>
<td>1.3 1.0–1.7</td>
<td>0.8 0.5–1.3</td>
</tr>
<tr>
<td>No previous sub-acute pain</td>
<td>29</td>
<td>40</td>
<td>1.0 1.0</td>
<td>1.0 1.0</td>
</tr>
<tr>
<td>Previous sub-acute pain</td>
<td>71</td>
<td>60</td>
<td>1.6 1.2–2.2</td>
<td>0.8 0.5–1.3</td>
</tr>
<tr>
<td>No previous chronic pain</td>
<td>64</td>
<td>75</td>
<td>1.7 1.2–2.2</td>
<td>0.9 0.6–1.4</td>
</tr>
<tr>
<td>Previous chronic lasting pain</td>
<td>36</td>
<td>25</td>
<td>1.0 1.0</td>
<td>1.0 1.0</td>
</tr>
<tr>
<td>Low physical workload &lt; 3 MET</td>
<td>85</td>
<td>88</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>High physical workload ≥ 3 MET</td>
<td>15</td>
<td>12</td>
<td>1.3 0.9–2.0</td>
<td>0.9 0.6–1.4</td>
</tr>
<tr>
<td>No strain</td>
<td>92</td>
<td>90</td>
<td>0.8 0.5–1.3</td>
<td>0.9 0.6–1.4</td>
</tr>
<tr>
<td>Good job satisfaction</td>
<td>41</td>
<td>34</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Poor job satisfaction</td>
<td>59</td>
<td>66</td>
<td>0.7 0.5–1.0</td>
<td>0.9 0.6–1.4</td>
</tr>
<tr>
<td>Passive coping ≤ 18</td>
<td>56</td>
<td>46</td>
<td>1.0 1.0</td>
<td>1.0 1.0</td>
</tr>
<tr>
<td>Passive coping &gt; 18</td>
<td>44</td>
<td>54</td>
<td>0.7 0.5–0.9</td>
<td>0.6 0.4–0.9</td>
</tr>
<tr>
<td>Positive social climate</td>
<td>51</td>
<td>44</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>No positive social climate</td>
<td>49</td>
<td>56</td>
<td>0.8 0.6–1.0</td>
<td>0.6 0.4–1.0</td>
</tr>
<tr>
<td>BMI ≤ 23.9</td>
<td>46</td>
<td>48</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>BMI &gt; 23.9</td>
<td>54</td>
<td>52</td>
<td>1.1 0.8–1.7</td>
<td>0.8 0.6–1.7</td>
</tr>
<tr>
<td>Non-smokers</td>
<td>66</td>
<td>63</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Smokers</td>
<td>34</td>
<td>37</td>
<td>0.9 0.7–1.2</td>
<td>0.6 0.4–0.9</td>
</tr>
<tr>
<td>No sports activities</td>
<td>38</td>
<td>44</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Perform sport activities</td>
<td>62</td>
<td>56</td>
<td>1.3 1.0–1.7</td>
<td>1.0 1.0</td>
</tr>
<tr>
<td>Psychosomatic complaints ≤ 31</td>
<td>40</td>
<td>40</td>
<td>1.0 1.0</td>
<td>1.0 1.0</td>
</tr>
<tr>
<td>Psychosomatic complaints &gt; 31</td>
<td>60</td>
<td>60</td>
<td>1.0 0.7–1.3</td>
<td>0.6 0.4–0.9</td>
</tr>
<tr>
<td>Functional economy &gt; 5</td>
<td>52</td>
<td>44</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Functional economy ≤ 5</td>
<td>48</td>
<td>56</td>
<td>0.7 0.5–0.9</td>
<td>0.6 0.4–0.9</td>
</tr>
</tbody>
</table>

Notes: OR1 adjusted for age; Hosmer and Lemeshow goodness of fit test p = 0.74.
**Pain and disability**

It is interesting that about 70% of the women and 80% of the men sought care for their low-back pain problems from others than a physician. This indicates that the majority seek care for pain relief without medical prescription or sick leave. To seek care for pain especially in combination with disability is reasonable, since this may interfere with one’s job, the housework, or social activities. This accords with a previous study by McPhillips-Tangum et al. (31) who conducted in-depth interviews with 54 patients. Nearly all participants who sought care cited difficulty in performing normal activities.

Low-back pain is not a serious disorder in the majority of cases but according to Wadell (32) about 40% of patients with low-back pain thought that they were suffering from a serious illness. It is most important for caregivers to inform people about the common course of mild low-back pain in order to reduce care seeking due to fear of a serious illness. Carefully selected and presented information and advice can have positive effects on patients’ beliefs and clinical outcome (33).

As many as half of the referents in the Music-Norråê study reported low-back pain in combination with disability in the preceding six months.
without consulting for their pain problems, which is in concordance with some other studies (3, 7).

We found that men with a reduced range of motion in the spine were more likely to seek care for low-back pain. However, as reduced range of motion is probably associated with pain it cannot be interpreted as a single risk factor for care-seeking behaviour.

Among the non-care seekers in the present study, 60% of the women and 68% of the men had previously suffered from low-back pain for seven days or more. This emphasizes how extensive and common low-back pain is. Low-back pain recurs in one-half of patients (4) and Von Korff (34) noted similar figures in a cohort study of patients who complained of both acute and chronic pain.

As in the present study, Papageorgiou et al. (35) found that the experience of previous pain did not influence the decision on whether to consult for a new episode of LBP. Further, they noted that the majority of episodes of low-back pain do not lead to consultation.

**Psychosomatic symptoms**

It is a commonly held view by both laypersons and health professionals that seeking care for low-back troubles frequently coincides with high levels of psychological distress. Measured in terms of psychosomatic complaints this was, however, not found in the present study, which is in agreement with a study by Croft et al. (19). In another study, Cameron et al. (17) noted that care seekers did not report more intense negative mood ratings than non-care seekers.

**Working conditions**

It is interesting to note that neither physical nor psychosocial conditions at work seem to be of major importance for seeking care for low-back pain. It would certainly be reasonable to assume that persons with a high physical workload would be more motivated to strive to get pain relief since working in awkward positions will provoke more pain than working in more favourable positions. However, from this study we cannot exclude that those subjects with either high physical workload or bad psychosocial conditions are more likely to stay home for shorter periods more often because of low-back pain than those with better working conditions. The logical link between psychosocial factors at work and seeking care is less clear. Persons with high levels of self-autonomy (decision latitude) at work may have greater opportunity to leave work for medical consultations, while those working under less favourable psychosocial conditions may be at higher risk of low-back pain (13).

Passive coping in relation to superiors and workmates reflects both a personality orientation and factors in the workplace. As expected, women who reported frequent use of passive coping strategies sought care to a lesser extent than those who did not.

One explanation for the differences between the results of the present study and those of previous research may be due to the inclusion criteria for the care seekers, as individuals with more or less continuous problems and ongoing treatment because of low back pain were excluded.

Furthermore, some of the explanatory variables in the present study were dichotomized and the median values were used for classifying subjects into exposed and non-exposed groups. This implies that a potential difference between extremely exposed groups and more moderately but high exposed groups is not accentuated. The differences between the results of this study and those of previous research may also be explained by this difference in levels of criteria.

In this study all caregivers in the region, from physician to homeopath, participated. The results may have been different if care-seeking behaviour only was explored for subjects seeking care from a physician, as in most other studies.

**Non-working conditions**

It was an interesting finding that women who reported a strained economic situation did not seek care for low-back pain as much as those reporting a better economic situation. The same pattern was noted among men, although this was not statistically significant. Even if the self-reported “functional economy” is not the same as an actual low income the results may mirror the fact that the economy plays an important role for the decision to seek care or not. Patient charges for consulting have tripled in real terms from 1979 to 1995 (20).

**CONCLUSION**

The most decisive factors for seeking care were pain and disability. However, the results also show that many individuals with considerably less pain and disability also seek care for their pain problems. Better information and advice on the common course of mild low-back pain may make those individuals less frightened and, as a result, reduce the consumption of care and costs to the individual as well as to society. The fact that economic factors seemed to be of importance shows that costs for healthcare must be kept low if the goal is healthcare on equal terms. Neither physical or psychosocial working conditions,

Scand J Public Health 31
nor lifestyle factors or psychosomatic complaints affected care-seeking behaviour in this population.

ACKNOWLEDGEMENT

The authors are grateful to all caregivers in Norrtälje, the administrators in the Norrtälje section of the County Council, the advisory board to the MUSIC network, and all the collaborators for excellent work before, during and after the study. The MUSIC-Norrta¨lje Study was supported by grants from the Stockholm Council and the Swedish Council for Work Life Research.

REFERENCES


Accepted 02 06 21