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The significance of anxiety and depression in fatigue and patterns of pain among individuals diagnosed with fibromyalgia

Relations with quality of life, functional disability, lifestyle, employment status, co-morbidity and gender

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The county population study of this thesis (Papers IV and V) is based on data from The Nord-Trøndelag Health Study (The HUNT Study), which is a collaboration between The HUNT Research Centre, Verdal, Faculty of Medicine, The Norwegian University of Science and Technology (NTNU), The National Institute of Public Health, The National Health Screening Service of Norway, and The Nord-Trøndelag County Council. This latter phase of the project was supported by a one-year grant from the Norwegian Research Council.

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CONTENTS

ABSTRACT

The main purpose of the thesis is to explore the significance of anxiety and depression in patterns of pain, fatigue, quality of life, lifestyle, functional disability, co-morbidity and gender among individuals given the diagnosis of fibromyalgia by their doctor.

Aims of the study

The specific aims of the study are:

1 To explore the relationship of anxiety and depression with two major symptoms of fibromyalgia, pain and fatigue, among female members of the Norwegian Fibromyalgia Association in two counties (Paper I)

2 To investigate the associations of anxiety and depression with quality of life, functional disability and lifestyle among female members of the Norwegian Fibromyalgia Association in two counties (Paper II)

3 To assess the impact of perceived physical dysfunction, health-related habits, and affective symptoms upon employment status among female members of the Norwegian Fibromyalgia Association in two counties (Paper III)

4 To estimate the prevalence of fibromyalgia and co-morbidity in a female county population (The Nord-Trøndelag Health Study) and to replicate the relationship of anxiety and depression with pain and fatigue reported in Paper I (Paper IV)

5 To estimate the prevalence of fibromyalgia in a county population of men (The Nord-Trøndelag Health Study) and to investigate gender differences in associations of anxiety and depression with pain and fatigue (Paper V)

Materials and methods

Two populations are included: (1) Members of the Norwegian Fibromyalgia Association in Trøndelag 1992-95 (N=322 females) and (2) participants from the Nord-Trøndelag Health Study (The HUNT Study) 1995-97 (N=2093). Among these latter participants, 1816 were females and 277 were males, and 977 females and 135 males emerged with no co-morbidity (myocardial infarction, angina pectoris or heart cramp, stroke/brain haemorrhage, diabetes,

hypermetabolism, hypometabolism, goitre, other disease of the thyroid gland, rheumatoid arthritis, arthrosis, Bechterew's disease, cancer). The remaining 839 females and 142 males of the county sample presented one or more of these conditions. In both populations, completed questionnaires included validated survey measures and indexes. Statistical analyses were performed using factor analyses and reliability tests, descriptive statistics, correlations, parametric methods, the independent samples t-test, analysis of variance (ANOVA), analysis of covariance (ANCOVA), multiple classification analysis (MCA), multivariate analysis of covariance (MANCOVA), hierarchical regression analysis, logistic regression and discriminant analysis.

Results

Aims 1 and 4: The results from Paper I and Paper IV, the sample without co-morbidity, stated independent, additive, effects of anxiety and depression upon levels of pain and fatigue, whereas interaction between anxiety and depression failed to significantly explain symptom differences among the population of female members of the Fibromyalgia Association as well as in the county population of females.

Aims 4 and 5: In the co-morbidity sample of females (Paper IV), fatigue was significantly associated only with depression, whereas pain was associated with anxiety. Results from Paper V (males) stated an additive effect of anxiety and depression only upon fatigue, and extremity pain last month was associated with anxiety. The overall prevalence of fibromyalgia was 3.2 % with 5.2 % for females, and 0.9 % for males.

Aims 1, 4 and 5: Correlational analyses indicated widespread pain among the low anxiety subgroups. In contrast, widespread pain was not indicated among anxious patients with low scores on depression (Paper I). In the more extensive data from the female county population, the idea of widespread pain in fibromyalgia was consistently supported only in participants without co-morbidity who scored low on anxiety (Paper IV). In the male sample, correlational analyses indicated widespread pain last month for all male subgroups except among those scoring low on anxiety and high on depression. Unexpectedly, males scored higher than females on depression, whereas females scored higher than males on anxiety and pain (Paper V).

Aims 5: Logistic regression analysis of associations between gender and anxiety, depression and pain last year, adjusted for age, duration of disease, fatigue and pain last month, stated that females had a higher likelihood of reporting pain last year as well as anxiety. The adjusted odds ratio of being

female was 1.20 when a participant reported pain last year, and 1.12 with anxiety, whereas the likelihood of reporting depression was reduced by 15 % in females; the adjusted odds ratio for being females was 0.85 (Paper V).

Aims 2 and 3: Results from Paper II stated additive effects of anxiety and depression also upon quality of life, subjective work ability and activity-related discomfort. Depression was significantly associated with regularity of meals. Anxiety and depression interacted due to relatively high consumption of coffee and cigarettes among the anxious and depressed subgroup, and this effect emerged only after the elimination of confounding effects of age and duration of the fibromyalgia disease (Paper II). There was no significant association of lifestyle habits and level of pain with employment status (Paper III).

Aims 3: In Paper III Perceived physical limitation (subjective work ability/GRWA) was the best measure for predicting employment status. The overall association of anxiety and depression with employment status was also significant despite that none of these two variables contributed significantly on their own.

Conclusions

1. The findings support the assumption that (1) anxiety and depression are independently associated with severity of pain and fatigue in fibromyalgia, and that (2) patients with high anxiety and low depression may communicate to the medical doctor in ways that involve a risk of diagnosing fibromyalgia when the criterion of widespread pain is not supported. These conclusions were confirmed by results from ANCOVAs that permitted more extensive control of colinearity among variables.

2. The additive effects of anxiety and depression upon quality of life, subjective work ability and activity-related discomfort may reflect a causal relationship. At this point one should keep in mind that the present design is cross-sectional. Conclusions about causal roles for anxiety and depression are therefore only tentative.

3. The results from the sample of members in the fibromyalgia support group organisation highlight the importance of perceived physical limitations in their ability to maintain employment. It is somewhat surprising that the data failed to support a role for lifestyle habits or pain, including activity-related discomfort, in employment status.

4. The present findings support the use of criteria for defining subgroups of fibromyalgia patients according to the distinctions of high versus low levels of depression and anxiety, as well as to the status of co-morbid medical conditions. The overall prevalence was 3.2 % with 5.2 % being females.

5. The analyses supported the assumption of an additive effect of anxiety and depression upon fatigue in males. They suggest a greater role of anxiety in females, as opposed to a greater role of depression in the disease process among males given the diagnosis of fibromyalgia by their doctor. The overall prevalence was 3.2 % with 0.9 % being males.

DEFINITIONS AND ABBREVIATIONS

Definitions

Functional disability is defined by subjective work ability and activity-related discomfort

Lifestyle is reflected in habits of physical activity, regularity of meals, smoking and patterns of drinking coffee and alcohol

Abbreviations

ACR	=	American College of Rheumatology
ANOVA	=	Analysis of variance
ANCOVA	=	Analysis of covariance
MANCOVA	=	Multivariate analysis of covariance
CI	=	Confidence interval
SD	=	Standard deviation
SPSS	=	Statistical Package for the Social Sciences
ICD-10	=	International Statistical Classification of Diseases
M79.0	=	Rheumatism unspecified, one of several soft-tissue disorders not specified elsewhere
Tender points	=	Specific, discrete area over muscles, bones, tendons or fat that is painful to palpation pressure, of which the patient is often unaware
Trigger points	=	A focus of hyper-irritability in a tissue that, when compressed, is locally tender and gives rise to referred pain and tenderness to a stereotypic zone

HSCL	=	Hopkins Symptom Checklist
UHI	=	Ursin's Health Inventory
QoL	=	Quality of Life
GRWA	=	Graded Reduced Work Ability = Levels of "Subjective work ability" = degree of "Perceived Physical Dysfunction"
ADS- active	=	Activity Discomfort Scale: Discomfort induced by daily activities
ADS-passive	=	Activity Discomfort Scale: Discomfort induced by physically passive activities
COOP/WONCA Chart	=	The Dartmouth (COOP) Functional Health Assessment Chart (WONCA)

LIST OF PAPERS

I Kurtze N, Gundersen K T, Svebak S. The role of anxiety and depression in fatigue and patterns of pain among subgroups of fibromyalgia patients. *British Journal of Medical Psychology* 1998; 71: 185-194.

II Kurtze N, Gundersen K T, Svebak S. Quality of life, functional disability and lifestyle among subgroups of fibromyalgia patients: The significance of anxiety and depression. *British Journal of Medical Psychology* 1999; 72: 471-484.

III Kurtze N, Gundersen K T, Svebak S. The impact of perceived physical dysfunction, health-related habits, and affective symptoms on employment status among fibromyalgia support group members. *Journal of Musculoskeletal Pain* 2001; 9 (2): 39-53.

IV Kurtze N, Svebak S. Fatigue and patterns of pain in fibromyalgia: Correlations with anxiety, depression and co-morbidity in a female county sample. *British Journal of Medical Psychology*; 2001; 74: 523-537.

V Kurtze N, Svebak S. A county population of males given the diagnosis of fibromyalgia: Comparison with women of pain, fatigue, anxiety and depression. *Submitted for publication.*

1. INTRODUCTION

Fibromyalgia is a chronic widespread unexplained musculoskeletal pain syndrome with decreased pain threshold involving core features of fatigue, nonrestorative sleep, stiffness and psychological distress such as anxiety and depression. Other symptoms include irritable bowel, headaches and paresthesias, and modulating factors such as pain aggravation after physical activity, weather changes and stress are reported. All these presenting complaints explain the reduced quality of life, including discomfort in performing activities of daily life which, again, explains the high rates of unemployment and disability [1,2]. Fibromyalgia is also associated with co-morbidity, both concomitant medical and psychiatric disorders [3,4].

The etiology of fibromyalgia is unknown and the pathogenesis is unidentified. Fibromyalgia may be categorised under various diagnostic labels depending on the predominant symptom. There is no evidence of any overt inflammatory, metabolic, or structurally abnormal underlying explanatory process in fibromyalgia [5].

The incidence of fibromyalgia is not well known. Only one population study has attempted to evaluate incidence [6]. The estimates, unfortunately, relied on 'conversion' of the reported pain condition (i.e. a move from a regional to a widespread pain condition) which is known to be unreliable [7]. Therefore, no true evidence exists to define the incidence of fibromyalgia [8]. The prevalence estimates vary from 0.66 to 10.5 % in different populations with more figures around 1 to 3 % [9-13], and the prevalence increases with age. The prevalence differences may be caused by the way of diagnosing fibromyalgia and the nature of selection bias across studies. The condition is more common in women than in men, and this gender difference is also unexplained.

As a result of the syndrome's multiple and complex interactions with many clinical characteristics, fibromyalgia is not an easy disorder for the physician to diagnose [14]. One problem is diagnosing and classifying the patient who has some, but not all, of the features of fibromyalgia, and who may have the syndrome, but do not satisfy current criteria.

The present thesis addresses the core features of fibromyalgia and the major hypothesis is that anxiety and depression are independently associated with severity of pain and fatigue. To our knowledge presenting co-morbidity in patterns of pain and fatigue has never been explored and, therefore, provide a rationale for studying subgroups of fibromyalgia. Furthermore, the significance of anxiety and depression in quality of life, functional disability, lifestyle and

impact on employment is tested in a sample of members of a Fibromyalgia Association in Norway. These findings were replicated and extended in The Nord-Trøndelag Health Study (The HUNT Study), which permitted also the assessment of effects of somatic co-morbidity upon pain and fatigue as well as a focus study of men.

2. BACKGROUND

This chapter reviews the history and classification criteria of fibromyalgia and the descriptions of concepts involved in study aims.

2.1 History of diagnosed features

How long fibromyalgia has afflicted humans is unknown. There are references to disturbed sleep, pain, and exhaustion in The Holy Bible [15]. However, it is only in the last 150 years that the diagnostic potential of musculoskeletal symptom clustering has been recognised. In 1843 the German researcher Froriep reported distinctive areas of muscle hardness, which were painful under palpation in patients with "rheumatism" [16]. In America forty years later Beard recognised the cohesiveness of fibromyalgia symptoms, using the word 'neurasthenia' to describe the syndrome, and he labelled it 'myelasthenia' [17]. The term fibrositis was first used in 1904 by the British neurologist, Gowers, to describe lumbago, including inflammatory tenderness associated with regional pain referring to an inflammation of 'fibrous tissues of the muscles' [18]. In the same year Stockman described inflammatory changes in fibrous tissues [19], but the 'inflammatory' nature, reported in his writings between 1904 and 1920, ultimately proved to be inaccurate. British physicians used fibrositis to denote pain in the upper back and neck areas among Welsh coal miners in the 1920s and 1930s. Between 50 and 70 % of rheumatic referrals during World War II in the British armed forces were due to fibrositis [20]. The United States and Canadian physicians serving with the British Medical Services during the Second World War adopted the term. In 1940 the term first appeared in a North American rheumatology textbook, reviewed by the forerunner of the American College of Rheumatology in 1953. However, other investigators never confirmed the findings of 'inflammation' of fibrous tissue, coined by Gowers, over the next three decades.

Although Sir William Gowers of England first used the term "fibrositis" to describe nonarticular rheumatism (particularly backache), such musculoskeletal pain has been described in other parts of Europe since the 17th century [21], under other names, such as muscular rheumatism. This painful syndrome was thought to be the result of psychological problems in the 1940s through the 1960s and was considered to be a psychogenic or hysterical kind of rheumatism [22]. Since these patients, however, had consistent tenderness in specific areas of the bodies and not in others, and were often unaware that they had tender points, this designation was discarded [23-25]. The emergence of an instrument, the dolorimeter, with its promise of an objective diagnostic 'test', was an important step forward in the acceptance of the diagnosis by

professionals [26]. No substantive changes of fibrositis were evident until Smythe et al. associated systemic symptoms, such as fatigue and sleep abnormalities, with the disorder in the mid-1970s [27]. Criteria for the modern diagnosis of fibromyalgia were first described in 1975 [28]. However, the term fibromyalgia ("-algia" meaning pain, i.e. in fibrous tissue) was first introduced in 1976 by Hench [29] to replace the misnomer "fibrositis" in recognition of the pre-eminence of muscular pain in the presentation of the syndrome, and this term is the favoured designation today. Diagnostic criteria were unclear until this time.

Several sets of classification criteria have been developed over the last decades [2,25,30]. (Kraft and co-workers proposed the first set of actual criteria for diagnosing the fibrositis syndrome, but they failed to distinguish generalised disorders from local ones [31]). Smythe made the first attempt to define standardised criteria in 1972 [32]. Modifications were proposed in 1977 [23] and the Smythe criteria were published in 1979 [30]. Although not widely adopted in research studies, these criteria formed the basis for the development of all additional criteria sets. Smythe's criteria, shortly, consisted of three sections: (1) physical signs, (2) symptoms and (3) normal findings in laboratory and radiographic tests. By the presence of defined disease criteria, a number of diagnostic criteria sets were proposed both formally and/or informally, thus stimulating further research and advancing the concept of fibromyalgia considerably [25,33-42]. In the earlier literature, the term primary and secondary fibromyalgia was used [43]. The first data-based criteria of "fibrositis" (appropriately called fibromyalgia) was not published until 1981 [25]. These criteria of Yunus et al. became, for some time, the most used alternative to the earlier criteria. They considered the syndrome to be primary when no known cause or contributory disorder was present and all laboratory tests as well as roentgenograms were normal, and secondary or concomitant when associated with systemic or rheumatic diseases. This distinction was, however, abandoned by the classification criteria of the American College of Rheumatology (ACR) in 1990 [2]. The consensus of the committee was also to adopt the term fibromyalgia as suggested by Hench, rather than the older term "fibrositis". The criteria debate indicates that important problems may still exist concerning the validity of many data in fibromyalgia research. The ACR-criteria emphasises features that best differentiate fibromyalgia from other musculoskeletal pain disorders. These criteria provided a methodology for epidemiologic investigations. The ACR-criteria require more than three months of widespread pain and at least 11 positive out of 18 defined tender points (Table 1).

Table 1 *The American College of Rheumatology (ACR) 1990 criteria for the classification of fibromyalgia* [2]

1. History of widespread pain

Pain is considered widespread when all of the following are present: Pain in both sides of the body, pain above and below the waist. In addition, axial skeletal pain (cervical spine or anterior chest or thoracic spine or low back) must be present. "Low back" pain is considered lower segment pain.

2. Pain in 11 of 18 tender point sites on digital palpation (see Figure 1)

Pain, on digital palpation, must be present in at least 11 of the 18 following tender point sites:

1. Occiput: bilateral at the suboccipital muscle insertions.
2. Low cervical: bilateral at the anterior aspects of the intertransverse spaces at C5-C7.
3. Trapezius: bilateral, at the midpoint of the upper border.
4. Supraspinatus: bilateral, at origins, above the scapula spine near the medial border.
5. Second rib: bilateral, at the second costochondral junctions, just lateral to the junctions on upper surfaces.
6. Lateral epicondyle: bilateral, 2 cm distal to the epicondyles.
7. Gluteal: bilateral, in upper outer quadrants of buttocks in anterior fold of muscle.
8. Greater trochanter: bilateral, posterior to the trochanteric prominence.
9. Knee: bilateral, at the medial fat pad proximal to the joint line.

Digital palpation should be performed with an approximate force of 4 kg. For a tender point to be considered "positive" the subject must state that the palpation was painful. "Tender" is not to be considered "painful".

For classification purposes, patients will be said to have "fibromyalgia" if both criteria are satisfied. Widespread pain must have been present for at least 3 months. The presence of a second clinical disorder does not exclude the diagnosis of fibromyalgia.

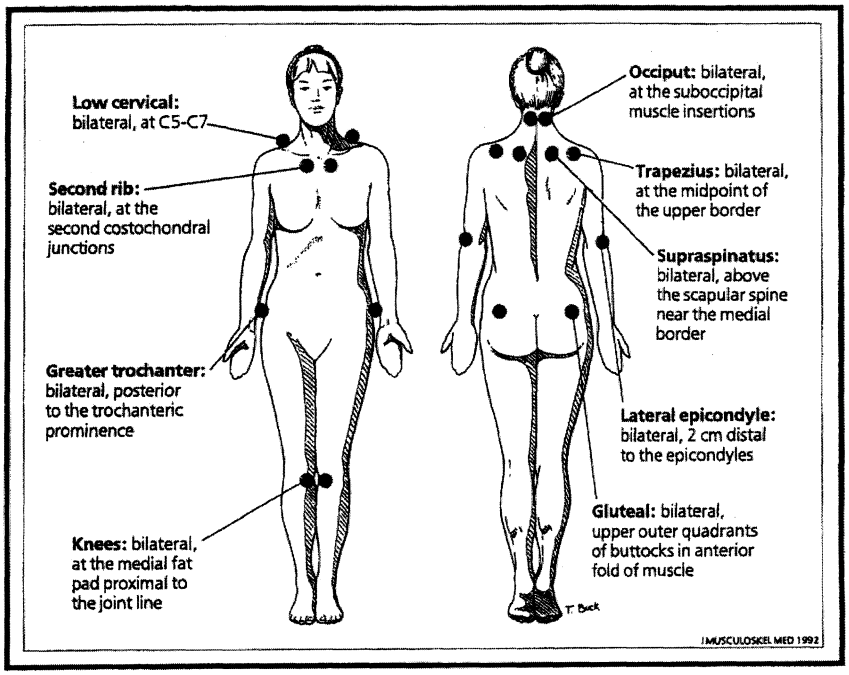

Figure 1 *Tender points in patients with fibromyalgia* [44]

Figure 1 presents the 18 tender point sites of the 1990 ACR-criteria for classification of fibromyalgia. These tender points are often unknown to the patient and indeed to many physicians, but are easily found by the examiner because of their precisely predictable locations. Furthermore, they occur at sites slightly tender in normal individuals. The World Health Organization (WHO), in developing the International Classification of Diseases (ICD), has incorporated fibromyalgia in the 10th revision of ICD, where "fibromyalgia" is coded M 79.0 [45].

2.2 Pain

"Widespread pain" is the central feature of the fibromyalgia construct, which in a sense is related to the patient report of "pain all over". The pain may be regional at first and spread to other areas. Pain has been defined as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage" [46]. Therefore, the subjective perception of pain is multidimensional, and measurement of pain might include attention to physiologic, psychologic, cultural, and social dimensions. Pain threshold and tenderness are suggested altered by psychologic factors, sleep disturbance, and chronic nociceptive stimuli, based on strong correlational evidence. Thus the concomitants of the pain, the pain amplification process, produce behavioural or psychologic changes or both, including anxiety and depression, in many patients with fibromyalgia [14]. However, pain is always subjective. Stimuli causing pain are liable to damage of tissue recognised by biologists. Because the pain always is unpleasant it is also an emotional experience. In the absence of tissue damage or any other definable pathophysiological cause, many people still report pain that may, therefore, be due to psychological circumstances. Taking the subjective report of pain, there is no way to distinguish their experience from that due to tissue damage[46]. Thus pain is the primary problem and the individual's response to having a chronic pain disease may cause depression and anxiety [47].

2.3 Fatigue

Fatigue is one of the core features of fibromyalgia [1]. Fatigue can be defined as "an enduring, subjective sensation of generalised tiredness or exhaustion" [48], influenced by biological, psychological, and social factors [49,50]. Fatigue also occurs in depression and other psychiatric disorders. Individual differences of fatigue are reflected in intensity, distress and levels of interference with daily activities where compensatory physical and mental efforts are needed to cope [51,52]. These psychological dimensions of fatigue may also apply to pain, and pain may in itself induce daytime fatigue due to its interference with sleep during the night [51,53]. Thus fatigue may be both a symptom and an aggravating factor. Approximately eighty percent of patients with fibromyalgia will complain of fatigue, especially associated with poor sleep [54]. Fibromyalgia patients tend to refer to fatigue as the most disabling factor in the activities of daily living [55].

2.4 Psychological status

Emotional distress is one of the core features of fibromyalgia, and the syndrome has often, not surprisingly, been considered a psychiatric disorder. The role of psychological factors in fibromyalgia has been controversial, and may play an etiological role in the condition [56]. Studies using psychological tests or rating scales have demonstrated characteristic profiles of subgroups of patients with fibromyalgia, compared with normal controls and with rheumatoid arthritis patients [35,57-59]. However, Clark et al. and Ahles et al. failed to support a role for psychological factors in fibromyalgia [60,61]. Thus, the majority of studies of fibromyalgia patients have demonstrated a pattern of emotional distress. Although empirical evidence for the physiological basis of fibromyalgia remains elusive, the psychological factors appear to be important correlates in the establishment and maintenance of fibromyalgia. Psychosocial factors may be the result, rather than the cause, of the fibromyalgia process despite that there is no empirical evidence to support this notion [62]. Although the organic aetiology of fibromyalgia still remains unclear, a growing literature has suggested that psychological factors are important in its initiation and maintenance [63]. It is difficult to evaluate psychological status in patients. Therefore psychiatric consultations are recommended as an important part in the management of fibromyalgia, to tease out psychiatric disorders associated with fibromyalgia [64]. However, patients suffering primarly from a psychiatric disorder, with the additional diagnosis of fibromyalgia, are rare [65]. Getting an accurate picture of psychological status in fibromyalgia is difficult also because of the bias inherent in patient selection of clinical studies.

Anxiety and depression are major indicators of psychological distress, and they may be involved in ways that explain differences of symptom patterns and functional disability among subgroups of patients with fibromyalgia. This possibility has never been systematically explored in empirical research.

2.4.1 Anxiety

Most persons with fibromyalgia report some anxiety or depression. The extent to which psychological symptoms are involved is not clear [66]. A concept such as anxiety has not yet been incorporated into the clinical assessment of fibromyalgia, perhaps because being "anxious" is not understood in the same way as is being "depressed" [67]. Anxiety and somatization are common findings in studies of fibromyalgia, but not described as frequently as depression. Higher anxiety levels for fibromyalgia compared to rheumatoid arthritis patients are reported [68-70]. Central features of fibromyalgia have been found to be independent of psychological status. Pain severity, however, may be

influenced by psychological factors [66]. However, fibromyalgia patients still scored higher on anxiety and depression after correcting for their higher pain scoring [71]. Current anxiety may not be secondary to pain, but trait anxiety may be causally related to pain [72].

2.4.2 Depression

In fibromyalgia patients, depressive symptoms, current depression measured through self-reported questionnaires and interviews[68,69,73], and lifetime depression rates [74-76] are increased, compared to other patient groups and normal controls. Hudson et al. [77] suggested that fibromyalgia might be a form of major affective disorder. However, Kirmayer et al. [75] found no significant differences between fibromyalgia patients and patients with rheumatoid arthritis in the occurrence of depression.

However, pain has been the major difficulty in understanding the relationship between fibromyalgia and depression. Pain in fibromyalgia is rated as more severe than that felt by other chronic sufferers. Few studies of depression in fibromyalgia have controlled for pain levels. In a short review of thirteen studies of anxiety and depression, using rheumatoid arthritis patients as control groups, Walter et al. used meta-analytic techniques to examine the relation between pain and depression [78]. The results revealed a clear relationship between pain levels and depression differences. This short review supports that psychological disturbance is associated with fibromyalgia, but it is not clear if depression is a consequence of experiencing chronic pain [63]. Walter et al. concluded that affective distress is not a unique feature of fibromyalgia, but seems to be caused by higher levels of pain severity [78].

From a clinical perspective, any contribution from anxiety and depression to the severity of the disease is important, partly because these psychological conditions are treatable and partly because they can have a deleterious effect on the patient's ability to cope with the symptoms of fibromyalgia [79].

2.5 Quality of life

A wide variety of dimensions have been used to describe quality of life. The core indicator of quality of life is the extent of being happy or dissatisfied with one's life. However, this broad indicator may cover health status, environment, economic resources, social relationships, work, and leisure time [68,80-84]. Quality of life, as seen from the medical literature, tends to focus on specific signs, symptoms, and functional capacity, because these factors are believed to be the

outcomes most affected by medical care [68,85-91]. Quality of life may also be defined in term of functional capacity, which is reflected in the ability to carry out daily life activities [91]. The impact of fibromyalgia on quality of life may involve questions of whether fibromyalgia is a disabling disease because of its complex nature, involving physical, psychological, and behavioural disturbances, often interfering with work ability [92]. In this thesis, quality of life is defined as subjective well-being.

2.6 Disability

Disability has to be viewed as a multidimensional issue [92]. Although functional disability is a central issue in almost every musculoskeletal disorder, it has remained largely unexplored in fibromyalgia, despite the fact that such disability may be one of the major outcomes of the fibromyalgia syndrome and that most patients complain of dysfunction [93]. Disability affects the patient's home, recreational and working life [1] and is reflected in behaviour. The majority of assessments used in fibromyalgia rely on self-report, where validation is difficult or impossible. No valid instrument has been developed to assess disability in patients with fibromyalgia [94]. Functional disability can be studied either by measures of overall ability to do work related tasks or by specifically observing tasks described in a functional status survey [95]. White et al. reported that fibromyalgia resulted not only in work disability, but also in loss of function in activities of daily living [96]. However, the prevalence of work disability and compensation is related to laws and regulations that differ between countries, and is related to differences in social support system, even between counties within one country [97,98]. In this thesis functional disability is defined by subjective work ability and activity-related discomfort.

2.7 Lifestyle

Physical activity has been the most emphasised lifestyle component in current reports. Physical capacity in fibromyalgia patients is low and the majority is aerobically unfit [99,100]. Most of the fibromyalgia patients exercise very little because of the perception that exertion worsens their pain, or possibly because of fatigue. A consequence of poor fitness is the reduced capacity to perform daily activities [101]. However, they seem to have exercise intolerance that is not simply due to being physically unfit: Delayed recovery from exercise-induced pain may be a disease-related problem in fibromyalgia patients [102]. The less extreme recruitment of motor units and metabolic activity during exhaustive exercise indicates a lower exercise tolerance which appears somehow to be connected with the reduced physical activity of these patients [103]. These

activity patterns apparently reflect reduced oxidative enzyme levels and capilarization of skeletal muscles in fibromyalgia patients compared with healthy controls [104]. Nonetheless, fibromyalgia patients seem to benefit from aerobic exercise at a level sufficient to improve aerobic capacity [105,106].

Lifestyle factors such as habits of alcohol, eating and smoking have been described primarily as demographic characteristics of fibromyalgia [107]. Levels of substance P (a spinal pain peptide) have been found to be significantly higher in fibromyalgia patients who were smokers compared with non-smokers [108]. A Finnish epidemiological study reported no significant association with body mass index, smoking, or mental stress at work [11]. However, a recent study noted increasing patterns of distress with increased smoking and body mass index [109]. In this thesis lifestyle is reflected in habits of physical activity, regularity of meals, smoking and drinking coffee and alcohol.

2.8 Co-morbidity

Fibromyalgia has been reported to be associated with more than forty-six infectious, metabolic, neurologic and neoplastic diseases [110]. Several studies have assessed the co-morbidity of fibromyalgia with medical disorders [3,111-113]. In this thesis status of co-morbidity is defined as no co-morbidity or one or several of different medical diseases (see METHOD).

2.9 Gender

Fibromyalgia is reported more frequently in women than in men in rheumatology clinics [2,25], community samples [13] and family studies [114]. Although familial occurrence of fibromyalgia has commonly been observed, data on a genetic role in this condition are limited [115]. The prevalence is estimated to be around 2 % in the general population with a biased distribution of 3.4 % in women and 0.5 % in men [13]. The reasons for this strong female predominance in fibromyalgia are not known. Prevalence rates usually increase with age in both males and females [13,116]. Only a few studies have addressed sex differences in fibromyalgia [117-121]. To our knowledge, this thesis (Paper V) is the first study to report from a sample of men diagnosed with fibromyalgia within a complete county population. In this thesis the relationship of anxiety and depression with pain and fatigue in males, and differences between males and females with fibromyalgia in an adult county population is investigated.

3. AIMS OF THE STUDY

The main purpose of the study is to explore the significance of anxiety and depression in patterns of pain, fatigue, quality of life, lifestyle, functional disability, co-morbidity and gender difference of prevalence in persons given the diagnosis of fibromyalgia. The specific aims of the study are:

1. To explore the relationship of anxiety and depression with two major symptoms of fibromyalgia, pain and fatigue, among female members of the Norwegian Fibromyalgia Association in two counties (Paper I)

2. To explore the significance of anxiety and depression in quality of life, functional disability and lifestyle among female members of the Norwegian Fibromyalgia Association in two counties (Paper II)

3. To explore the impact of perceived physical dysfunction, health-related habits, and affective symptoms on employment status among female members of the Norwegian Fibromyalgia Association in two counties (Paper III)

4. To estimate the prevalence of fibromyalgia and co-morbidity in a female county population (The Nord-Trøndelag Health Study) and to replicate the relationship of anxiety and depression with pain and fatigue (Paper IV)

5. To estimate the prevalence of fibromyalgia in a county population of male (The Nord-Trøndelag Health Study) and to investigate possible gender differences in associations of anxiety and depression with pain and fatigue (Paper V)

4. MATERIALS AND METHODS

The present thesis is based on two population studies in Trøndelag, Norway. One recruited members of the Norwegian Fibromyalgia Association in the counties of North- and South-Trøndelag (1992-95). The other recruited participants from The Nord-Trøndelag Health Study (1995-97).

4.1 The Norwegian Fibromyalgia Association study

This project started in October 1992 and ended in December 1995. It was part of a five-year research program on chronic musculoskeletal pain supported by the Norwegian Ministry of Health and Social Affairs (1992-1997) [122]. The present author as project leader was responsible for the questionnaires, data collection and evaluation while employed by the North-Trøndelag Research Institute [123-126].

4.1.1 The study population from the Norwegian Fibromyalgia Association in Trøndelag

Membership of the Norwegian Fibromyalgia Association requires that a physician has verified the diagnosis of fibromyalgia. Papers I, II and III were based upon 322 females in both counties of Trøndelag. The subjects were recruited by a procedure involving support from leaders at the national, county, and local levels of the association. The total number of members in the two counties was 688. Twenty-nine men were excluded from the population [N=659]. Thus the eligible population counted 659 subjects where 332 returned the completed questionnaire. The response rate was 50.4 %. Ten females did not have the diagnosis verified by a physician. Thus 322 females took part in the study. During this three-year program the participants repeatedly had to complete several extensive questionnaires. Participants were included on the premise that they completed the initial survey without having to be prompted, and this may explain the low participation rate. However, this response rate was regarded as acceptable for a long questionnaire addressing a group of people with chronic pain and concentration problems. This selection format might have defined a relatively compliant sample of the members of the support group association. No information was available on the non-responders.

These three hundred twenty-two female members of the Norwegian Fibromyalgia Association in the area of Troendelag completed an extensive

survey measure that also included items for the identification of high versus low anxiety and depression subsamples. Criteria for the distinction between high and low anxiety and depression subgroups are given below. Twenty-six participants met criteria for Low Anxiety/Low Depression (mean age: 42.6, SD: 9.4 range: 28-61). Twenty-four participated in the Low Anxiety/High Depression subgroup (mean age: 48.0, SD: 9.6, range: 26-69). Twenty-one patients met criteria for High Anxiety/Low Depression (mean age: 47.6, SD: 9.6, range: 26-70), and twenty-seven were defined by High Anxiety and High Depression (mean age: 47.9, SD: 8.6, range: 31-69). Accordingly, mean and SD for Duration of the disease for the same subgroups were 20.1 and 13.3 for the Low Anxiety/Low Depression subgroup, 15.2 and 8.1 for the Low Anxiety/High Depression subgroup, 17.1 and 9.9 for the High Anxiety/Low Depression subgroup and 19.6 and 12.0 for the High Anxiety/High Depression subgroup, respectively.

4.2 The North-Trøndelag Health Study 1995-97

The Health Study of Nord-Trøndelag 1995-97 (HUNT 2) is one of the two largest health screening surveys that have ever been carried out in Norway. It is also a major population study on an international scale (see http://www.hunt.folkehelsa.no/). The population of North-Trøndelag is stable with a sex- and age distribution similar to Norway as a whole, as are also geography, economy, industry and sources of income, morbidity and mortality patterns. However, the county has no large city, and the levels of education and average income are somewhat lower than the national average.

4.2.1 The study population from the North-Trøndelag Health Study

HUNT 2 invited the entire population aged ≥20 years (N=92936). The participation rate was 70.2 % (N = 65220) who completed the questionnaire that was mailed with the invitation (questionnaire 1), and 57316 (61.7 %) participated in the associated health examination, where a second questionnaire (questionnaire 2) was distributed to be completed and returned by mail (see http://www.hunt.folkehelsa.no/).

In questionnaire I, 2093 aged ≥20 years stated that their doctor had given them the diagnosis of fibromyalgia. Among these were 1816 females who were included in Paper IV. They were divided into 977 females with no co-morbidity (myocardial infarction, angina pectoris or heart cramp, stroke/brain haemorrhage, diabetes, hypermetabolism, hypometabolism, goitre, other

disease of the thyroid gland, rheumatoid arthritis, arthrosis, Bechterew's disease, cancer), and a remaining group of 839 participants who presented one or more of these conditions (Population of Paper IV).

The fibromyalgia sample without co-morbidity (N=977) was divided into high and low anxiety and depression subgroups by the use of the median criterion. Persons with median score were excluded. Among those who met this criterion, fifty participants were recruited in each of four subgroups to form subsamples of Low Anxiety/Low Depression (mean age: 47.34, SD: 9.92 range: 29-72), Low Anxiety/High Depression (mean age: 45.46, SD: 9.04, range: 25-69), High Anxiety/Low Depression (mean age: 44.24, SD: 8.64, range: 25-60) and High Anxiety/High Depression (mean age: 47.48, SD: 9.77, range: 20-66), respectively. With more than fifty participants qualifying for inclusion in one of these four subgroups, a random selection procedure was applied to obtain N=50.

The fibromyalgia sample with co-morbidity (N=839) was also organised into high and low anxiety and depression subgroups by the use of the median criterion. Fifty participants were recruited from groups of Low Anxiety/Low Depression (mean age: 56.30, SD: 12.22 range: 35-81), Low Anxiety/High Depression (mean age: 52.48, SD: 11.79, range: 31-81), High Anxiety/Low Depression (mean age: 53.22, SD: 12.89, range: 31-81) and High Anxiety/High Depression (mean age: 55.52, SD: 11.30, range: 31-80), respectively, by use of the same recruitment procedure for N=50 in each subgroup as described in the paragraph above.

From Questionnaire I, 277 males and 1816 females aged ≥20 years, who stated that their doctor had given them the diagnosis of fibromyalgia, were included in the last paper. Among these 135 males and 977 females emerged with no co-morbidity (see above) and the remaining 142 males and 839 females presented one or more of these conditions (Population of Paper V).

The fibromyalgia male sample (N=277) was divided into high and low anxiety and depression subgroups by the use of the median criterion and with exclusion of subjects who obtained the median score. This meant that one hundred and eighty-eight participants were distributed to four subgroups to meet criteria for Low Anxiety/Low Depression (mean age: 50.01, SD: 14.15 range: 25-79; N=69), Low Anxiety/High Depression (mean age: 60.17, SD: 12.38, range: 42-83; N=18), High Anxiety/Low Depression (mean age: 48.46, SD: 14.35, range: 24-77; N=28) and High Anxiety/High Depression (mean age: 49.90, SD: 11.59, range: 24-83; N=73), respectively.

4.3 Survey measures in Papers I, II, and III

The 23-item **Hopkins Symptom Check List** [HSCL] [127] was used to assess anxiety and depression. Questions address severity of complaints over the course of the previous fourteen days. The HCSL was designed by Rickels and his colleagues for use in family practice [128] and family planning settings [129], and it measures several dimensions of psychopathology including depression, anxiety, phobia, and psychosis. The HSCL-23 incorporates ten items from the HSCL-58 anxiety cluster and thirteen items from the depression cluster. The HSCL-23 has been validated in two large-scale health surveys in Norway [130]: N=74 977; [131]: N=8096.

Clinical and questionnaire [132,133] studies with this instrument have shown high correlations between anxiety and depression. It is often difficult, therefore, to distinguish such subdimensions of psychological well being empirically, especially in nonclinical samples [133]. Our study of three hundred twenty-two survey participants applied the HSCL indexes of anxiety and depression used previously by Tambs and Moum [133] in a large-scale Norwegian survey (Paper I, II, III).

Pain was measured by the items on pain over the last thirty days given in the Ursin's Health Inventory (**UHI**) [134]. The index of **fatigue** counted two UHI items (tiredness, sleep problems) and two items from the HSCL (out of energy, strained). All indexes presented with satisfactory Cronbach's alphas (Paper I, Table 1).

Quality of Life (QoL) included four items from the North-Troendelag Health Survey of 1984-86 [84]. The index presented a satisfactory Cronbach's alpha (Paper II, Table 1).

Subjective work ability was measured by a Graded Reduced Work Ability scale (**GRWA**), constructed for the Norwegian Ministry of Health and Social Affairs [135]. This scale consists of five items reflecting levels of perceived work ability of the individual in relation to the actual complaints. The index presented a satisfactory Cronbach's alpha (Paper II, III, Table 1).

The Activity Discomfort Scale (ADS) was completed to determine the levels of pain caused by daily activities [135,136]. The ADS presented a five-point scoring format on the amount of pain caused by each of eighteen common daily activities, such as walking, bending, sitting, standing, driving and the like. A two factor varimax analysis of these eighteen items defined a cluster of eight items reflecting discomfort due to physical activities (**ADS-active**) and another cluster of three

items reflecting discomfort with non-physical activities (**ADS-passive**). Confirmatory factor analysis and reliability tests (Cronbach's alpha) of these indexes presented high internal consistency scores (see Papers II and III, Table 1, for alpha scores on all indexes).

Lifestyle reflected habits of physical activity, regularity of meals, smoking and patterns of drinking coffee and alcohol. Physical activity was defined by hours per week (six-point scoring format: 1=more than four hours, 6=no physical activity at all). Regularity of meals was defined by breakfast, lunch and dinner (four-point scoring format: 7=every day, 0=almost never/never, index scores min 2-max 21). Pattern of drinking coffee was defined by cups of coffee per day (five-point scoring format: 1=no coffee at all, 5=more than ten cups of coffee). Pattern of alcohol consumption was defined by items on alcohol consumption in general and on beer, wine and spirits. Alcohol consumption in general was defined by frequency of drinking any alcohol containing beverage last month (six-point scoring format: 1= never, 6= more than four times per week). (Papers II and III) Beer was defined by bottles per week (six-point scoring format: 1=no bottle, 6=more than 24 bottles). Wine was defined by bottles per week (five-point scoring format: 1=no bottle, 5= more than six bottles). Spirit was defined by drinks and bottles per week (five-point scoring format: 1=no drinks, 5=more than three bottles). (Paper II)

Employment status was defined as working full- or part-time and not working or performing housework. The dependent variable was dichotomised with "unemployment" defined as being out of work and in housework [assigned a score of 1] and "employment" defined as working full-time and part-time [assigned a score of 2]. (Paper III)

4.4 Survey measures in Papers IV and V

Levels of anxiety and depression were assessed by use of a Norwegian version of the **Hospital Anxiety and Depression Scale (HADS)** [137]. The HADS consists of seven items measuring Anxiety (HADS-A) and seven items measuring depression (HADS-D). The time span for the HADS items is "the last week". The HADS A-scale covers the states of anxious mood, restlessness and anxious thoughts. The focus of the HADS D-scale is on the affective component of depression including loss of interest and diminished pleasure [138]. The HADS was originally developed to estimate the presence of anxiety and depression in non-psychiatric patients treated at hospital clinics. A four-step scoring format was adopted to prevent a medium level response to the items. The HADS has been validated in Dutch and Swedish samples of a general

population [139,140]. The Dutch study concluded that the dimensional structure and reliability of the HADS appeared to be stable across medical settings and age groups. The Swedish study concluded that the HADS is a useful indicator of clinical depression and anxiety. All indexes presented with satisfactory Cronbach's alphas (Papers IV and V, Table 1).

Fatigue counted four items (sleep-problems and tiredness). Three items assessed prevalence of sleep problems and were scored according to a four-step format (1 = never, 4 = always). The fourth item assessed presence of neurasthenia and was scored by a seven-step format (1 = very strong and in good mood, 7 = very tired and exhausted). The index was presented with a satisfactory Cronbach's alpha. (Papers IV and V, Table 1).

Musculoskeletal pain was measured by items from the Standardised Nordic Questionnaires for the assessment of musculoskeletal complaints (SNQ). The adopted section of the SNQ consists of a drawing of the human body that is divided into areas to define the "neck" etc., and response alternatives on pain are dichotomised. One section assesses the prevalence of pain over "the last year" and another is oriented to "the last thirty days". This means that prevalence reflects both chronicity and recency. Body areas are defined by a drawing only in the latter version of the scale (Questionnaire II). Validation studies of the questionnaires have provided support to the sensitivity of the SNQ as a measure of musculoskeletal symptoms [141]. Presence of pain in one or more areas was scored, and number of days troubled by such pain over the last thirty days was given in case of positive pain response in any area of the body. (Papers IV and V, Table 1).

Marital status was classified as Unmarried, Married, Widow/Widower, Divorced, and Separated (weighted by 1-5, respectively).

Education was defined as primary school-, secondary school, high school, and college/university less than 4 years and 4 years or more (weighted by 1-5, respectively).

5. STATISTICAL ANALYSES

All statistical analyses were performed using the Statistical Package for the Social Sciences, the Windows version, 6.1, 7.5, 8.0, 9.0 and 10.0.

5.1 Indexes, factor analyses and reliability tests

Confirmatory factor analysis (Principal Component Analysis) were performed and scores on items in all factors were summarised to form an overall index score in each case. Alpha values (Cronbach) on internal consistency for the indexes of anxiety and depression, fatigue, the complaint of pain as well as QoL, GRWA, ADS-active and ADS-passive were calculated (Papers I-V, Table 1).

5.2 Descriptive statistics

Means and standard deviations were calculated for index scores on Anxiety, Depression, Fatigue, Pain (overall) and pain in Neck/shoulders, Back, Arms/legs as well as Duration of pain (break out year) and Age involved the whole patient sample of Paper I (Table 2) and for all the parameters involved in Paper II (Table 2). Means and standard deviations for the same indexes in four subgroups of fibromyalgia patients, formed by a split-plot combination of high versus low scores on anxiety and depression, were also calculated (Papers 1 and IV, Table 4 and 5, and Paper V Table 6). Missing data account for some variation in Ns. Prevalence scores on fibromyalgia in men and women, for age cohorts and for subjects without and with co-morbidity are given in Paper V (Table 2).

5.3 Correlations

Coefficients of correlation are given for bivariate relations between age, duration of disease and index-scores on Fatigue as well as Pain. They were computed for the total sample as well as for sub-samples organised according to the split-plot criteria of high versus low scores on Anxiety and Depression (Papers I and IV, Table 3, 6 and 7, Paper V, Table 5). Coefficients of correlation were also computed for scores on pain in neck/shoulders, arms/legs and back pain in these four sub-samples (Papers I, IV and V, Table 7 and 8). Pearson's product-moment coefficients of correlation were computed to assess relations between Quality of life, Subjective work ability, Discomfort due to physical and non-physical activities, Anxiety and Depression (Paper II, Table 3) and between all lifestyle variables, subjective work ability, discomfort due to

physical and nonphysical activities, anxiety, and depression as well as employment status (Paper III, Table 3).

5.4 The independent samples t-test

Initial analysis of means and standard deviations for index scores and t-scores for Anxiety, Depression, Fatigue, overall Pain last year, overall Pain last month and pain last month in Neck/shoulders, Back Arms/legs as well as Duration of pain (break out year) and Age involved the survey sample without and with co-morbidity (Paper IV, Table 2). The same analysis was performed for males versus females in addition to marital status and education (Paper V, Table 3).

5.5 ANOVA, ANCOVA, Multiple Classification Analysis (MCA), MANCOVA, Multiple regression, logistic regression and discriminant analysis

Analysis of variance (ANOVA) tested associations of anxiety and depression as well as their interaction, with pain and fatigue (Paper I, Table 5). An alternative approach involved covariates (ANCOVA) to eliminate potential confounding effects of age and duration of the disease upon the relations of anxiety and depression with levels of pain and fatigue (Papers I and IV, Table 5, Paper V, Table 6). Multiple classification analysis (MCA) was applied to control for order of entry of the covariates and factor main effects. A multivariate approach also involved analyses of covariance (MANCOVA) to eliminate potential confounding effects of age and duration of the disease upon the relations of anxiety and depression with Quality of life, Subjective work ability, activity-related Discomfort and Lifestyle in Paper II, Tables 5 and 6.

Hierarchical regression analyses involved anxiety and depression [block 1], the lifestyle variables of regular meal, physical activity, smoking, and alcohol consumption [block 2] and the indexes of subjective work ability, as well as activity-related discomfort [block 3] in testing the effects of perceived physical function limitations on employment status (Paper III, Table 4).

A logistic regression analysis included all males and females and tested relations of selected variables (anxiety, depression, fatigue, pain last year, pain last month, age, duration of disease) with sex as the dependent variable using forward (conditional) stepwise Wald tecnique (Paper V, Table 9). Finally,

discriminant analysis was adopted to test which variables that explained status from co-morbidity (Paper IV).

6. SUMMARY OF PAPERS I-V

Papers I, II and III

The study of members of the Norwegian Fibromyalgia Association (N=322) in the two counties of Troendelag (Papers I, II and III) was undertaken in order to explore the relationship of anxiety and depression with two major symptoms of fibromyalgia, pain and fatigue (Paper I). The significance of anxiety and depression in quality of life, functional disability and lifestyle among these patients was also explored (Paper II) and a similar analysis was applied to employment status (Paper III).

Papers IV and V

The Nord-Trøndelag Health Study (The HUNT Study) provided the data for Papers IV and V. The purpose of this epidemiological study was to replicate findings among fibromyalgia support group members (Paper I) in a large-scale population which also permitted the assessment of effects of somatic co-morbidity upon pain and fatigue and the prevalence of fibromyalgia (Paper IV). It also permitted prevalence estimates and a focused study of fibromyalgia in men as well as possible differences between males and females in the role of anxiety and depression as related to pain and fatigue (Paper V).

Paper I

Kurtze N, Gundersen K T, Svebak S. **The role of anxiety and depression in fatigue and patterns of pain among subgroups of fibromyalgia patients.** *British Journal of Medical Psychology* 1998; 71: 185-194

Background

The role of psychogenic factors such as anxiety and depression in fibromyalgia patients is controversial. Anxiety and depression are major indicators of psychological distress. They may interact to mediate symptom severity, or their relationship may be additive in nature as related to symptom severity. A study of subgroups of fibromyalgia patients permits analysis of the significance of anxiety and depression for patterns of pain and fatigue.

Aim

This study explored the relationship of anxiety and depression with two major symptoms of fibromyalgia, pain and fatigue, among female fibromyalgia patients (N=322).

Methods

Due to colinearity between anxiety and depression scores, extreme-groups were defined according to high versus low anxiety and depression scores. Two thirds of the initial sample were excluded by this approach which permitted a two by two factorial split-plot ANOVA for the assessment of main effects and the interaction of anxiety and depression upon pain and fatigue.

Results

Results stated independent, additive, effects of anxiety and depression upon levels of pain and fatigue, whereas interaction between anxiety and depression failed to significantly explain symptom differences among the participants. Correlational analyses indicated widespread pain among the low anxiety subgroups. In contrast, widespread pain was not indicated among anxious patients with low scores on depression.

Conclusion

The findings support the hypothesis that (1) anxiety and depression are independently associated with severity of pain symptoms in fibromyalgia, and that (2) patients with high anxiety and low depression may communicate to the medical doctor in ways that involve a risk of diagnosing fibromyalgia when the criterion of widespread pain is not supported. These conclusions were confirmed by results from ANCOVAs that permitted more extensive control of colinearity among variables.

Paper II

Kurtze N, Gundersen K T, Svebak S. **Quality of life, functional disability and lifestyle among subgroups of fibromyalgia patients:** The significance of anxiety and depression. *British Journal of Medical Psychology* 1999; 72: 471-484

Background

The significance of depression has long been acknowledged in fibromyalgia, but the role of anxiety is still not understood. Results from several studies suggest that fibromyalgia adversely affects quality of life to an extent not previously recognised. Therefore, more research is needed to settle this issue. Functional disability is one of the major outcomes of the fibromyalgia syndrome, affecting the patient's home, recreational and working life. Factors that may influence the level of functional disability in fibromyalgia are still not well explored.

Aim

This study explored the significance of anxiety and depression in quality of life, functional disability and lifestyle among fibromyalgia patients.

Methods

Functional disability was defined by subjective work ability and activity-related discomfort. Lifestyle was reflected in habits of physical activity, regularity of meals, smoking and patterns of drinking coffee and alcohol. Members of two county divisions of fibromyalgia support groups (N=322) were investigated. Due to colinearity between anxiety and depression scores, extreme-groups were defined according to high versus low anxiety and depression scores. Two thirds of the initial sample were excluded by this approach which permitted a two by two factorial split-plot MANCOVA for the assessment of main effects and the interaction of anxiety and depression, upon quality of life, functional disability and lifestyle.

Results

Main effects of Anxiety and Depression were significant for index scores on activity-related discomfort, subjective work ability and quality of life, whereas depression was also significantly associated with regularity of meals. Anxiety and depression interacted to yield relatively high consumption of coffee and cigarettes among the anxious and depressed subgroup, and this effect emerged only after the elimination of the confounding effects of age and duration of the fibromyalgia disease.

Conclusion

The additive effects of depression and anxiety upon quality of life, subjective work ability and activity-related discomfort may reflect a causal relationship that should be explored in future research. Depression appeared to be correlated with consumption of coffee and cigarettes. At this point one should keep in mind that the present design is cross-sectional. Conclusions about causal roles for anxiety and depression are therefore only tentative.

Paper III

Kurtze N, Gundersen K T, Svebak S. **The impact of perceived physical dysfunction, health-related habits, and affective symptoms on employment status among fibromyalgia support group members.** *Journal of Musculoskeletal Pain* 2001; 9 (2): 39-53

Background

Little is known about the significance of lifestyle components and activity-induced pain in differences of work capacity and employment status among fibromyalgia patients.

Aim

This study was designed to investigate the impact of perceived physical limitation, affective symptoms, pain, and lifestyle habits on employment status among members of a fibromyalgia support group.

Methods

322 female members of the Fibromyalgia Association in two Norwegian counties were surveyed. Perceived limitations of physical function, habits of daily living, affective symptoms and current work status were assessed by validated questionnaires. The dependent variable, employment status, was dichotomised as employed or unemployed. When testing the effects of perceived physical function on employment status, structured hierarchical regression analyses were executed blockwise to eliminate confounding effects from lifestyle habits and the affective symptoms of anxiety and depression.

Results

The subjects' perceived physical limitation was the best "predictor" of employment status. Affective symptoms contributed also significantly to employment status. There was no contribution from lifestyle habits or perceived pain to the explained variance of employment status.

Conclusion

The results of this study of female members of a fibromyalgia support group highlight the importance of perceived physical limitations in their ability to maintain employment. It is somewhat surprising that the data failed to support a unique role for lifestyle habits or pain.

Paper IV

Kurtze N, Svebak S. **Fatigue and patterns of pain in fibromyalgia: Correlations with anxiety, depression and co-morbidity in a female county sample.** *British Journal of Medical Psychology*; 2001; 74: 523-537.

Background

Prevalence data on fibromyalgia vary across different populations. Fibromyalgia patients are probably not a psychologically homogeneous group. It is therefore a current need to study potential sources of diversity, including the severity of fatigue and pain in subgroups of fibromyalgia patients with high versus low levels of anxiety and depression. The importance of physical co-morbidity in fibromyalgia has come into focus in recent years and may also contribute to symptom severity as well as to anxiety and depression.

Aim

The aim of the present study is to estimate the prevalence of fibromyalgia and the influence of co-morbidity upon the association of anxiety and depression with fatigue and patterns of pain, among a county population of females who claim the diagnosis of fibromyalgia was given to them by their doctor.

Methods

Participants were recruited from the Nord-Trøndelag Health Study (The HUNT Study) in Norway (N=92936). The participants were females who reported being given the diagnosis of fibromyalgia by their doctor (N=1816). They were divided into one sample without (N=977), and another with co-morbidity (N=839). Due to colinearity between anxiety and depression, extreme-groups were defined according to high versus low anxiety and depression scores. About four fifths of the initial sample were excluded by this approach which permitted a two by two factorial split-plot ANCOVA (covariates: age and duration of fibromyalgia) for the assessment of unique effects and the interaction of anxiety and depression upon pain and fatigue.

Results

Overall prevalence was 3.2 % (95 % CI 3.07-3.33, missing 9.7 % included) with 5.2 % (95 % CI 4.97-5.43) for females and 0.9 % (95 % CI 0.79-1.01) for males. Results from the sample without co-morbidity (N=977) supported the idea of independent partial correlations of anxiety and depression with pain and fatigue. A different trend was indicated in the co-morbidity sample (N=839) where fatigue was only significantly associated with depression, whereas pain was associated with anxiety. The idea of widespread pain in fibromyalgia was consistently supported only in participants without co-morbidity who scored low on anxiety. Age, incident pain and depression contributed to a discriminant function reflecting status of co-morbidity due to positive status among older individuals with relatively high pain and depression scores.

Conclusion

The present findings support the use of criteria for defining subgroups of fibromyalgia patients according to the distinctions of high versus low levels of depression and anxiety as well as to the status of co-morbid medical conditions. With comorbidity, the additive effect of anxiety and depression upon symptom severity was absent. This effect appeared to be due to a specific association of depression with fatigue and of anxiety with pain.

Paper V

Kurtze N, Svebak S. **A county population of males given the diagnosis of fibromyalgia: Comparison with women of pain, fatigue, anxiety and depression**. *Submitted for publication*

Background

Fibromyalgia is held to be uncommon in men. Therefore, data on the characteristics and severity of the disease in men are limited.

Aims

The purpose of this study is to estimate the prevalence and to explore the relationship of anxiety and depression with pain and fatigue in males given the diagnosis of fibromyalgia, and to investigate differences in the role of anxiety, depression and co-morbidity between males and females with fibromyalgia in an adult county population.

Methods

Participants were recruited from the Nord-Trøndelag Health Study in Norway (N=92936). Two thousand and ninety-three participants were included in the study. They reported being given the diagnosis of fibromyalgia by their doctor (277 males, 1816 females). Among these, 135 males and 977 females emerged with no co-morbidity, and 142 males and 839 females reported co-morbidity. Data were gathered by questionnaires. Extreme-groups were defined according to high versus low anxiety and depression scores. This approach permitted a two by two factorial split-plot ANCOVA for the assessment of unique effects

and the interaction of anxiety and depression upon pain and fatigue (covariates: age, duration of fibromyalgia).

Results

Overall prevalence was 3.2 % (95 % CI 3.07-3.33, missing 9.7 % included) which obscured a highly biased sex difference with 5.2 % (95 % CI 4.97-5.43) for females and 0.9 % (95 % CI 0.79-1.01) for males (see also Paper IV). Significant partial correlations were found in males of anxiety and depression with fatigue, and extremity pain was associated with anxiety. Males scored higher than females on depression, whereas females scored higher than males on anxiety and pain. The odds of being female increased by 1.20 (95 % CI 1.08-1.32) when a participant reported enduring pain last year, and by 1.12 (95 % CI 1.02-1.22) with anxiety, whereas it dropped to 0.85 (95 % CI 0.77-0.93) with depression.

Conclusion

For males, significant partial correlations of anxiety and depression with fatigue were found, and pain reflected anxiety. Males scored higher than females on depression, whereas females scored higher than males on anxiety and pain.

7. DISCUSSION

Discussion addresses diagnosis, methodological considerations and discussion of main results.

7.1 Diagnosis

To become a member of the Norwegian Fibromyalgia Association, a doctor must verify the diagnosis of fibromyalgia. In the epidemiological survey of the county population, in contrast, the participants themselves reported being given the diagnosis of fibromyalgia by their doctor. In the first case, the validity of the diagnosis is dependent upon the knowledge of criteria and diagnostic skills of the physician. In the latter case, the diagnosis is more vulnerable to psychological characteristics of the study participants.

Ideally, all the patients in this thesis should have been given their diagnosis according to the current ACR-criteria [2]. Diagnosis based on symptoms alone may have low specificity. However, also the skilful application of ACR-criteria, identification of fibromyalgia will vary with the palpation pressure applied to tender points. Tender points are palpated bilaterally at each site with a recommended pressure of 4 kg/cm^2 applied by use of the thumb or the first two fingers. Most patients with fibromyalgia have tender point thresholds around 2 kg/cm^2.

Theoretically, dolorimetry has been thought of as being more objective because the dolorimetric examination is less influenced by examiner characteristics. Cott and co-workers [142] compared the reliability of dolorimetry versus digital palpation. Their findings indicate that digital and dolorimeteric procedures (pressure algometry) are equally reliable, although they have poor concurrent validity for defining tender points in the fibromyalgia syndrome. Various instruments have been used in dolometry, the most common of which is a spring-loaded balance or an electric palpometer [143]. With an objective procedure, it is assumed that different physicians will arrive at the same diagnosis, and the diagnosis will be reasonably stable over time. However, specific training of diagnostic skills will reduce interobserver variations in pressure used in tender point examinations. To prevent drift into error these skills should be periodically refreshed [144].

There has been no opportunity to verify the diagnosis of fibromyalgia in the present thesis. Correspondingly, the transition from acute pain to chronic pain could not be investigated. Part of this transition involves initial localised or regional pain that tends to invade more body parts within a few months to

several years after onset. Fibromyalgia is an example of these dynamic phenomena [145], which may present complicating circumstances in the assessment of a potential musculoskeletal pain disorder.

7.2 Methodological considerations

The epidemiology of fibromyalgia has revealed that chronic pain is common and that some of these pain problems are due to fibromyalgia. Between 10 % and 12 % of the general population has chronic widespread pain [13,146]. In a general population sample, Croft et al. [146] reported prevalence rates of 11.2 % for chronic widespread pain, 43 % for regional pain, and 44 % for no pain. Some investigators have suggested that chronic musculoskeletal pain can be assessed along a continuum where chronic widespread pain and fibromyalgia are the most severe clinical manifestations [147].

Although the 1990 ACR-criteria were proposed as classification criteria for fibromyalgia, they also appear to be useful in the diagnostic process of quantitative pain evaluation. ACR-90 found that two of these features, widespread pain and 11 of 18 tender points, best separated fibromyalgia patients from others with chronic musculoskeletal pain. Fibromyalgia is not a disorder of exclusion because classification of fibromyalgia occurs regardless of any other concomitant medical condition [98]. However, the ACR-criteria were developed in the clinic for distinguishing patients with pain symptoms and negative rheumatic status from rheumatic pain. The ACR- criteria have been further validated in a population survey to distinguish individuals with chronic musculoskeletal pain from those with pain due to fibromyalgia [13]. In the presence of 11 or more tender points and widespread pain, fibromyalgia is diagnosed according to the American College of Rheumatology (ACR) Criteria [2]. Patients who have less than the required number of tender points may also be diagnosed as having fibromyalgia, provided they have widespread pain and many of the characteristic symptoms of the syndrome [95]. Throughout the last twenty years just how many tender points and how many sites should be examined has been a matter of investigation. The ACR-criteria was succeeded by the so-called 'Copenhagen declaration' [45]. While these research-guided definitions did improve reliability, the reasoning behind the development of the ACR-criteria as well as the Copenhagen declaration was circular in nature with no independent evidence for the validity of the concept of fibromyalgia [148].

The recruitment procedures applied in the present thesis are dependent upon indirect information on the status of fibromyalgia. Despite this vulnerability, two circumstances appear to provide support to the view that the majority of

both populations actually have met criteria of fibromyalgia. One relates to prevalence ratios and the other is due to the underlying diagnostic criteria.

The prevalence of fibromyalgia in the present county population was 3.2 % including males, with 5.78 females per male. The present ratios fell close to ratios for prevalence of fibromyalgia reported in another general population study [13] where the overall prevalence of fibromyalgia was 2.0 %, with 3.4 % for women and 0.5 % for men. We therefore assume that the participants drawn from the county population study may actually represent a fairly valid population of people with fibromyalgia. However, the members of the Fibromyalgia Association needed their doctor to verify the diagnosis in order to obtain their membership status. They may, therefore, be a more valid sample of fibromyalgia than are the males and females from the HUNT-sample.

Differences in the diagnostic criteria have profound impact upon prevalence [149]. In chronic pain there is often a disproportionate relationship between intensity of the nociceptive stimulus and the intensity of the reported pain. Most general practitioners have no systematic education regarding the complex process of nociception in fibromyalgia. This circumstance may invite a tendency for adopting a psychiatric explanation of the patient's pain symptoms when it is not justified [150]. In lack of objective diagnostic criteria, many clinicians find it difficult to accept fibromyalgia as a somatic disease entity [151]. Prevalence figures of disorders due to pain will always depend upon a subjective representation, but this fact is no evidence in itself for any psychiatric disorder [152]. Fibromyalgia is obviously not a discrete disease entity, but appears to be part of a continuum from no muscle pain to severe pain with tender points [7,153,154] and psychiatric variables such as anxiety and depression may or may not act as complicating disease factors. This point is supported by results from the factorial split-plot analyses in the present thesis.

A central feature of the fibromyalgia construct is "widespread pain". The ACR-criteria claim that widespread pain is pain above the waist (upper segment), as well as below the waist (lower segment), axial-skeletal pain, and pain in the left and the right side of the body [2]. Patients with high pain thresholds may not report pain at all despite that pain is reported when trigger points are compressed. Even patients with low tolerability may, in the face of what will turn out to be widespread pain, begin reporting pain in only one or two sites emphasising the most bothersome regions. A pain diagram of the body is helpful when asking: "Do you have pain in your feet, ankles, knees, legs ....etc.". Reported pain is a reflection of both tolerability and psychological status [14].

Patients whose pain is determined by psychological factors often present disturbances such as depression and anxiety [155]. It is important to distinguish fibromyalgia from depression and anxiety diagnostically, but this is difficult in light of that such psychological problems may be implicated in the fibromyalgia symptomatology itself [56]. Most previous studies of psychiatric patients utilised no measure to control for pain. Pain is an important determinant of both the physician's and the patient's assessment of health status independent of psychiatric morbidity. Consequently, pain may act as a confounding noise factor in anxiety and depression, and the latter conditions may act as confounding noise factors in the assessment of any pain disorder.

Research on criteria for defining the fibromyalgia syndrome has generally recruited 'normals' or patients with rheumatic diseases as control subjects, and the outcome of this research has provided evidence in support of fibromyalgia as a discrete entity [156]. Results from some epidemiological studies suggest, however, that fibromyalgia may be the end of a continuum of psychological distress [7,13,156]. In fibromyalgia almost all assessments rely on self-report where validation is difficult or impossible. Controversy prevails to some extent in relation to criteria for the diagnosis, potential pathophysiology, and treatment [157]. For the time being, there is no indication that these controversies will substantially alter established diagnostic criteria even when research may provide a more accurate understanding of the pathophysiology and its treatment.

7.3 Discussion of main results

The findings suggested differences among subgroups of individuals with fibromyalgia, distinguished by measures of anxiety and depression as related to fatigue and patterns of pain. The results from Paper I and from Paper IV (sample without co-morbidity) indicated independent, additive, effects of anxiety and depression upon levels of pain and fatigue, whereas interaction between anxiety and depression failed to significantly explain symptom differences among the participants. This consistent finding emerged both in the population of female members of the Fibromyalgia Association and in the county population of females. Therefore, both pain and fatigue appeared to be adversely affected by anxiety as well as depression in females given the diagnosis of fibromyalgia. For males (Paper V), the additive effect of anxiety and depression was significant for fatigue only, and failed to explain severity of pain. Instead, anxiety and depression interacted to define the more severe pain in extremities among males with relatively high pain scores on both anxiety and depression.

There is no obvious explanation at hand for this gender difference in the present results. However, these gender differences may be related to previously reported differences in clinical pain experience where women presented more severe and frequent pain as well as pain of longer duration than did men [116]. In the general population, it has been reported that fatigue, sleep disturbance and pain are more prevalent in women than in men [120]. Future research may find a causal link with the fact that scores on depression were higher in the males, and females scored higher on anxiety as well as pain last year (Paper V).

Results from several studies suggest that fibromyalgia adversely affect quality of life to an extent not previously recognised [68]. Results from Paper II stated additive effects of depression and anxiety also upon quality of life, subjective work ability and activity-related discomfort with no significant interaction among the females. Quality of life appeared to be reduced, and functional disability increased with relatively high scores on anxiety and depression.

This is not a surprising finding, however, because any chronic disease may show such correlations with quality of life and functional disability. The dynamics of these relations may be triggered by the disease and its inherent pain. The subsequent anxiety and depression, then, mediate an aggravating effect of the disease upon quality of life and functional disability. The additive effects of depression and anxiety upon quality of life, subjective work ability and activity-related discomfort may reflect a causal relation-ship that should be explored in future research.

Moreover, a lifestyle defined by irregular meals was prevalent among depressed patients. In this way, depression was reflected in a well-known effect upon appetite and eating habits that is not unique in fibromyalgia. Anxiety and depression interacted to yield relatively high consumption of coffee and cigarettes among the anxious and depressed subgroups (Paper II). This association may reflect a dysfunctional way of coping with pain as well as dysphoria among those with the more severe pain. Both coffeine and nicotine are drugs that stimulate activation of nervous tissue including the central nervous system and its pain processing pathways.

In Paper III the additive effect of anxiety and depression significantly impacted employment status despite that a contributing role for each of them could not be significantly defined. Beyond anxiety and depression, only subjective work ability defined employment status in a multivariate analysis. These findings may reflect an indirect effect of anxiety and depression upon pain and fatigue, as reported in Paper I, and a subsequent effect upon subjective work ability.

This indirect effect, then, should not be influenced by lifestyle variables because they failed to explain employment status.

People with fibromyalgia report reduced work capacity and general functional disability [158,159]. However, functional disability has remained largely unexplored [158], despite the fact that such disability is one of the major outcomes of the fibromyalgia syndrome. Regarding the reliability and validity of assessments and diagnosis in the setting of compensation and work disability no research has been published [160], although studies regarding functional limitations and disability of the fibromyalgia syndrome imply that the consequences are considerable [158,160-163]. Everyday activities such as carrying objects, climbing stairs, running and so on are also difficult or impossible for fibromyalgia patients [55,164,165]. Little is known about the significance of activity-related discomfort in differences of work capacity. The findings in the present thesis cast doubt upon simplistic associations between lifestyle or activity-related discomfort and employment status in fibromyalgia patients.

In Paper I, only those participants with low anxiety scores reported a pattern of pain that suggested widespread pain. This finding was supported also in the county sample of females (Paper IV) where status of co-morbidity proved to be of importance: The idea of widespread pain in fibromyalgia was consistently supported only in participants without co-morbidity who also scored low on anxiety. In the male sample (Paper V), in contrast, correlational analyses indicated widespread pain last month for all male subgroups except among those scoring low on anxiety and high on depression. Again, this gender difference suggests that the roles of anxiety and depression are different for males and females with fibromyalgia. In light of the fact that males with fibromyalgia have rarely been recruited in research on the nature of this disease, the present findings of gender differences in the role of anxiety and depression may prove to be of particular importance to future research on the psychobiology of fibromyalgia. The role of depression should be viewed in light of the fact that epidemiological surveys in the general population have found lifetime prevalence rates of major depression to be higher among females than for males. Research on depression in fibromyalgia, has lead to the concept of an "affective spectrum" which should be kept in mind during the diagnostic process [166]. Taken that males scored higher than females on depression in the county sample of individuals given the diagnosis of fibromyalgia by their doctor, future research should address the possibility of a diagnostic bias toward fibromyalgia in depressed males. Alternatively, males who meet ACR-criteria of fibromyalgia may turn out to be more depressed

than females who meet these criteria, and the difference may be of causal importance as well as of importance to the disease process beyond pain and fatigue, including also gender-specific effects upon employment status and consequences of co-morbidity.

8. CONCLUSIONS

The answers to the research questions addressed in the present thesis are indicated in the following conclusions:

1. The findings support the assumption that (1) anxiety and depression are independently associated with severity of pain and fatigue in fibromyalgia, and that (2) patients with high anxiety and low depression may communicate to the medical doctor in ways that involve a risk of diagnosing fibromyalgia when the criterion of widespread pain is not supported. These conclusions were supported by results from ANCOVAs that permitted more extensive control of colinearity among variables.

2. The additive effects of anxiety and depression upon quality of life, subjective work ability and activity-related discomfort may reflect a causal relationship. At this point one should keep in mind that the present design is cross-sectional. Conclusions about causal roles for anxiety and depression are therefore only tentative.

3. The results from the sample of members in the fibromyalgia support group organisation highlight the importance of perceived physical limitations in their ability to maintain employment. It is somewhat surprising that the data failed to support a role for lifestyle habits or pain in employment status.

4. The present findings support the use of criteria for defining subgroups of fibromyalgia patients according to the distinctions of high versus low levels of depression and anxiety, as well as to the status of co-morbid medical conditions. The overall prevalence was 3.2 % with 5.2 % being females.

5. The analyses supported the assumption of an additive effect of anxiety and depression upon fatigue in males. They suggest a greater role of anxiety in females, as opposed to a greater role of depression in the disease process among males given the diagnosis of fibromyalgia by their doctor. The overall prevalence was 3.2 % with 5.2 % being females and 0.9 % being males.

9. FUTURE RESEARCH

The results from this thesis indicate a need for careful differential diagnosis of anxiety and depression. Their significant associations with presenting pain patterns offer no simple support for the assumption of widespread pain, and future research should address their causal role that may be different in males and females.

The additive effects of depression and anxiety upon quality of life, subjective work ability and activity-related discomfort may reflect a causal relationship that should be investigated in future research.

Factors that actively contribute to the fibromyalgia syndromes-related inability to work are still obscure. Further exploring of lifestyle factors is needed.

Further studies should address the possibility of different gender disposition for biological mechanisms in pain sensitisation and of sex role related to effects of ergonomic as well as emotional load that may be reflected in anxiety and depression.

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Appendix I

NORD-TRØNDELAGS-
FORSKNING

SPØRREUNDERSØKELSE BLANT MEDLEMMER I FYLKESLAG AV NORGES FIBROMYALGI FORBUND I NORD- OG SØR-TRØNDELAG

Denne spørreundersøkelsen blir gjennomført i samarbeid med Institutt for biologi og medisinsk psykologi, Universitet i Bergen og Institutt for sosialforskning (INAS), Oslo. Andre viktige samarbeidspartnere er pasientorganisasjonen, AOF avd. Nord-Trøndelag og SME, Sosialdepartementet.

Hensikten med undersøkelsen er bl.a. å bedre livssituasjon og livskvalitet for mennesker med fibromyalgi. Det er derfor viktig at alle tilsendte svarer så utfyllende som mulig på spørsmålene. Svar etter beste skjønn og ut fra egne meninger.

ALLE OPPLYSNINGER VIL NATURLIGVIS BLI BEHANDLET KONFIDENSIELT OG ANONYMT!

Prosjektet ønsker imidlertid å komme tilbake til hver enkelt med et spørreskjema senere for å få et lengre perspektiv på undersøkelsen.

Frankert svarkonvolutt er vedlagt.

På forhånd takk for din hjelp!

Nanna Kurtze
prosjektleder

Dato for utfylling: ..../....

BAKGRUNN
(Spørsmål 1 - 12)

1. KJØNN

☐ 1 Mann
☐ 2 Kvinne

2. FØDSELSÅR: 19 .....

3. SYKMELDING

a) Er du sykmeldt?

☐ 1 Ja
☐ 2 Nei

Dersom nei, gå videre til spørsmål 5.

b) *Dersom ja,*
Når begynte inneværende sykmeldingsperiode? Dato: ..../.... 19 ....

4. BEHANDLING

a) Hvor ofte har du vært hos behandlende lege i inneværende sykmeldingsperiode?

☐ 1 ca. 1 gang pr. uke
☐ 2 ca. 1 gang pr. mnd
☐ 3 sjeldnere

b) Hvor ofte har du vært hos spesialist i inneværende sykmeldingsperiode?

☐ 1 ca. 1 gang pr.uke
☐ 2 ca. 1 gang pr.mnd
☐ 3 sjeldnere

c) Hvor mye fysioterapi har du hatt i inneværende sykmeldingsperiode?

☐ 1 Ingen behandlinger
☐ 2 1-12 behandlinger
☐ 3 Over 12 behandlinger
☐ 4 Over 24 behandlinger
☐ 5 Over 48 behandlinger

d) Har du i inneværende sykmeldingsperiode vært til alternativ medisinsk behandling?

☐ 1 Ja
☐ 2 Nei

5. BOSTED

a) I hvilken kommune har du fast bopel? .....

b) Bor du i tettsted eller i spredt bebyggelse?

☐ 1 Tettsted
☐ 2 Spredt bebyggelse

6. SIVILSTAND

☐ 1 Ugift
☐ 2 Gift
☐ 3 Samboer
☐ 4 Enke-/enkemann
☐ 5 Skilt
☐ 6 Separert

7. ANTALL BARN

a) Hvor mange barn har du? .....

b) Hvor mange av barna er under 18 år? .....

8. BOSITUASJON

Bor du alene eller sammen med andre?
Kryss av for de du bor sammen med. (Her kan du sette flere kryss)

☐ Bor alene
☐ Ektefelle eller samboer
☐ Foreldre eller svigerforeldre
☐ Andre voksne personer
☐ Barn under 5 år
☐ Barn 6 - 15 år
☐ Barn over 15 år

9. UTDANNING

Hvilken allmennutdanning har du fullført?

- ☐ 1 7-Årig Folkeskole eller kortere
- ☐ 2 1-Årig Framhaldsskole eller fortsettelsesskole
- ☐ 3 2-Årig Framhaldsskole eller fortsettelsesskole
- ☐ 4 9-Årig Grunnskole
- ☐ 5 Folkehøyskole, 1-årig kurs
- ☐ 6 Real- eller middelsskole, grunnskolens 10. år
- ☐ 7 Folkehøyskole, 2-årig kurs
- ☐ 8 Yrkesskole, fagskole
- ☐ 9 Artium, eksamen ved økonomisk gymnas, allmennfaglig studieretning ved videregående skole
- ☐ 10 Universitet eller høyskole
- ☐ 11 Uoppgitt eller annen utdannelse

10. YRKESFORHOLD

a) Hva er (var) ditt hovedyrke? .....

b) Kan du kort beskrive dine arbeidsoppgaver i dette yrket?

. .....

c) Hvor lenge har du vært i dette yrket (antall år)? .....

11. ØKONOMI

Hvordan er den nåværende økonomiske situasjon for din husholdning?

- ☐ 1 Penger/inntekter strekker ikke til
- ☐ 2 Må bruke av sparepenger for å greie meg/oss
- ☐ 3 Greier meg/oss akkurat med de inntekter jeg/vi har
- ☐ 4 Greier meg/oss så bra at jeg/vi kan spare litt
- ☐ 5 Greier meg/oss så bra at jeg/vi kan spare temmelig mye

12. INNTEKT

a) Hva er din samlede bruttoinntekt per måned? ..... kr

b) Hva er din ektefelles/samboers bruttoinntekt per måned? ..... kr

ARBEIDSSITUASJON
(Spørsmål 13 - 17)

13. ARBEID

Er du i arbeid for tiden?
(Sett kryss i bare en rute)

- ☐ 1 Ja, heltidsarbeid (utenom husarbeid)
- ☐ 2 Ja, deltidsarbeid (utenom husarbeid)
- ☐ 3 Ja, deltids husarbeid
- ☐ 4 Nei, ikke i arbeid

Dersom du er i arbeid, gå videre til spørsmål 15.

14. Hvis du ikke er i arbeid, er det på grunn av:
(Sett kryss i bare en rute)

- ☐ 1 Arbeidsløshet, permittering
- ☐ 2 Trygd
- ☐ 3 Alderspensjon
- ☐ 4 Utdanning eller militærtjeneste/siviltjeneste
- ☐ 5 Annet

15. ARBEIDSTID
(Gjelder ditt vanlige arbeid uavhengig av om du er sykmeldt/trygdet nå)

a) Hvor mye overtid har du i fast arbeid (antall timer)? .....

b) Hvor mye overtid har du i annet arbeid (antall timer)? .....

c) Er din totale arbeidstid siste halvår

- ☐ 1 Mindre enn før
- ☐ 2 Likt som før
- ☐ 3 Mer enn før

16. ARBEIDSSITUASJON/ARBEIDSMILJØ

(Gjelder ditt vanlige arbeid uavhengig av om du er sykmeldt/trygdet nå)

	Nesten hele tiden	Ca. 3/4 av tiden	Ca. halv-delen av tiden	Ca. 1/4 av tiden	Svært lite	Nei/ aldri
a) Arbeider du med gjentatte og ensidige bevegelser?	☐	☐	☐	☐	☐	☐
b) Arbeider du i stillinger som gir konstant belastning på ryggen?	☐	☐	☐	☐	☐	☐
c) Arbeider du i blant med hendene løftet i høyde med skuldrene eller høyere?	☐	☐	☐	☐	☐	☐

	Ja, minst 20 ganger pr dag	Ja, 5-19 ganger pr dag	Ja, 1-4 ganger pr dag	Nei
d) Må du daglig løfte noe som veier mer enn 20 kg, og i tilfelle hvor mange ganger pr dag?	☐	☐	☐	☐

e) Opplever du arbeidet ditt som fysisk belastende?
- ☐ 1 Ja
- ☐ 2 Noe
- ☐ 3 Nei

g) Opplever du arbeidet ditt som psykisk belastende?
- ☐ 1 Ja
- ☐ 2 Noe
- ☐ 3 Nei

17. HVORDAN TRIVES DU ALT I ALT MED ARBEIDET DITT?

- ☐ 1 Veldig godt
- ☐ 2 Ganske godt
- ☐ 3 Godt
- ☐ 4 Ikke særlig godt
- ☐ 5 Dårlig

HELSEPROBLEM
(Spørsmål 18)

18. HELSEPROBLEM SISTE 30 DØGN

På denne siden nevnes noen vanlige helseplager. Vi vil be deg om å vurdere hvert enkelt problem/symptom og oppgi i hvilken grad du har vært plaget av dette i løpet av de siste 30 døgn.

Eksempel:
Hvis du føler at du har vært endel plaget med hodepine siste mnd., og varigheten av plagene var ca. 1 uke, fylles dette ut på følgende måte:

Nedenfor nevnes noen alminnelige helseproblemer *Fyll ut rubrikkene*	*0: ikke plaget* *1: litt plaget* *2: endel plaget* *3: alvorlig plaget*	*Plagene varte (antall dager)*
a) Hodepine	*2*	*7*

Nedenfor nevnes noen alminnelige helseproblemer *Fyll ut rubrikkene*	0: ikke plaget 1: litt plaget 2: endel plaget 3: alvorlig plaget	Plagene varte (antall dager)
a) Hodepine		
b) Nakkesmerter		
c) Smerter øverst i ryggen		
d) Smerter i korsrygg		
e) Smerter i armer		
f) Smerter i skuldre		
g) Smerter i føttene		
h) Migrene		
i) Fordøyelsesproblemer		
j) Søvnproblemer		
k) Tretthet		
l) Svimmelhet		
m) Angst		
n) Nedtrykthet, depresjon		

19. PROBLEMER

Nedenfor er en liste over noen problemer og plager. Kan du for hver av dem si om du de siste 14 dagene ikke var plaget, eller om du var litt, ganske mye eller veldig mye plaget. Husk å sette ett kryss utfor hver plage.

	Ikke plaget	Litt plaget	Ganske mye plaget	Veldig mye plaget
a) Plutselig frykt uten grunn				
b) Stadig redd eller engstelig				
c) Matthet eller svimmelhet				
d) Nervøsitet, indre uro				
e) Hjertebank, hjerteslag som løper avgårde				
f) Skjelving				
g) Føler deg anspent eller oppjaget				
h) Hodepine				
i) Anfall av angst eller panikk				
j) Så rastløs at det er vanskelig å sitte stille				
k) Mangel på energi, alt går langsommere enn vanlig				
l) Lett for å klandre deg selv				
m) Har lett for å gråte				
n) Dårlig matlyst				
o) Søvnproblemer				
p) Følelse av håpløshet mht. framtida				
q) Nedtrykt, tungsindig				
r) Følelse av ensomhet				
s) Følelse av å være lurt i en felle eller fanget				
t) Mye bekymret eller urolig				
u) Uten interesse for noe				
v) Følelse av at alt er et slit				
w) Følelse av å være unyttig				

MUSKELPLAGER og SMERTER
(Spørsmål 20 - 21)

20. MUSKELPLAGER

a) Når begynte dine plager? (oppgi årstall) 19 .....

b) Har du vært sykmeldt for samme eller lignende plager tidligere?

☐ 1 Ja
☐ 2 Nei

Dersom nei, gå videre til spørsmål 20d.

c) *Hvis ja*, oppgi antall ganger

☐ 1 1 gang
☐ 2 2 - 5 ganger
☐ 3 6 - 10 ganger
☐ 4 Flere enn 10 ganger

d) Er det noen i din slekt som har/har hatt lignende plager som deg?

☐ 1 Ja
☐ 2 Nei
☐ 3 Vet ikke

e) Tar du medisin for muskelplagene?

☐ 1 Ja
☐ 2 Nei

f) Tar du medisin for annet enn muskelplagene?

☐ 1 Ja
☐ 2 Nei

g) Har du ryggplager?

☐ 1 Ja
☐ 2 Nei

21. SMERTESKALA

For hver av de beskrevne aktiviteter skal du med ett kryss angi hvor mye smerte aktiviteten gjennomsnittlig er forbundet med idag. (Du ser bort fra særlig uttalt eller vedvarende aktivitet)

AKTIVITET	Ingen smerte	Noe smerte	Sterk smerte	Nærmest utålelig smerte	Utålelig smerte, uforenelig med aktivitet
a) Gå					
b) Sitte					
c) Bøye seg					
d) Stå					
e) Sove					
f) Løfte					
g) Løpe eller jogge					
h) Gå i trapper					
i) Bære					
j) Skyve og dra					
k) Kjøre bil					
l) Påkledning					
m) Lesing					
n) Se på TV					
o) Husarbeid					
p) Hagestell					
q) Sportsaktiviteter					
r) Arbeid					

22. ARBEIDSEVNE

Her følger noen spørsmål om hvordan dine plager påvirker din arbeidsevne. På hvert spørsmål ber vi deg sette ett kryss i den rubrikken som du synes passer best for deg. Du er sikret full anonymitet.

a) I hvor stor grad er din evne til å utføre ditt vanlige arbeid nedsatt som følge av de plagene du har/er sykmeldt for?

☐ 1 Svært stor
☐ 2 Stor
☐ 3 Nokså stor
☐ 4 Ikke særlig stor
☐ 5 Ubetydelig

b) I hvor stor grad er din evne til å utføre annet arbeid nedsatt som følge av de plagene du har/er sykmeldt for?

☐ 1 Svært stor
☐ 2 Stor
☐ 3 Nokså stor
☐ 4 Ikke særlig stor
☐ 5 Ubetydelig

c) Hvor mange av dine aktiviteter og gjøremål er berørt av de plagene du har/er sykmeldt for?

☐ 1 Svært mange
☐ 2 Mange
☐ 3 Nokså mange
☐ 4 Noen få
☐ 5 Ingen

d) Hvor alvorlige er de plager du har/er sykmeldt for i forhold til ditt velvære og helse?

☐ 1 Svært alvorlig
☐ 2 Alvorlig
☐ 3 Nokså alvorlig
☐ 4 Ikke særlig alvorlig
☐ 5 Ubetydelig

e) Har du andre plager som i tillegg påvirker ditt velvære og helse i betydelig grad?

☐ 1 Ja
☐ 2 Nei
☐ 3 Vet ikke

f) Hvis du fortsetter i arbeid, hvilken effekt vil det ha på dine plager?

☐ 1 Forverre tilstanden
☐ 2 Forsinke helbredelsen
☐ 3 Ikke noe effekt
☐ 4 Litt gunstig effekt
☐ 5 Svært gunstig effekt

23. HAR DU NOEN GANG VÆRT UTSATT FOR ULYKKE SOM SKULLE MEDFØRE FYSISKE PLAGER I LANG TID (skade du merker i det daglige nå for tiden)?

☐ Ja, *nemlig* .....
☐ 2 Nei

24. HVILKE FORHOLD GJØR/GJORDE SMERTENE VERRE?

Ranger fra 1-3 det som gjør/gjorde smertene verre - IKKE KRYSS

... Smertene er uavhengig av ytre forhold
... Stor mental belastning
... Perioder med mye stress
... Lett fysisk anstrengelse
... Kraftig fysisk anstrengelse
... Varme
... Kulde
... Fuktig vær (regn, sludd)
... Mye støy
... Skarpe lyder
... Sterkt lys

MEDISIN/PLAGER
(Spørsmål 25 - 27)

25. HVOR OFTE HAR DU BRUKT AVSLAPPENDE/BEROLIGENDE MEDISIN ELLER SOVEMEDISIN DEN SISTE MÅNEDEN?

☐ 1 Daglig
☐ 2 Hver uke, men ikke hver dag
☐ 3 Sjeldnere enn hver uke
☐ 4 Aldri

26. HAR DU I LØPET AV SISTE MÅNED VÆRT PLAGET AV NERVØSITET?
(irritabel, urolig, anspent eller rastløs)

☐ 1 Nesten hele tiden
☐ 2 Ofte
☐ 3 Av og til
☐ 4 Aldri

27. SØVNPROBLEMER

a) Har du i løpet av siste måned hatt innsovings- eller søvnproblemer?

☐ 1 Nesten hver natt
☐ 2 Ofte
☐ 3 Av og til
☐ 4 Aldri

b) Har du innsovningsvansker på grunn av smerte?

☐ 1 Ja
☐ 2 Nei

c) Våkner du på grunn av smerte?

☐ 1 Ja
☐ 2 Nei

FRITID
(Spørsmål 28 - 30)

28. FØLER DU AT DU HAR EN MENINGSFULL FRITID?

☐ 1 Ja
☐ 2 Bare delvis
☐ 3 Nei

29. FRITIDSAKTIVITETER

Driver du med noe av dette i fritiden?
(Sett ett kryss pr. aktivitet)

	Aktiv deltaker	Tilskuer	Deltar ikke
a) Kulturaktiviteter (teater, film, kino o.l.)			
b) Idrettsaktiviteter			
c) Friluftsliv			
d) Organisasjonsaktiviteter (humanitære, politiske ..)			
e) Lokalmiljøaktiviteter m.m.			
f) Andre aktiviteter, nemlig			

30. SYNES DU AT DU FÅR DYRKET DINE EVENTUELLE INTERESSER (HOBBIER) GODT NOK?

☐ 1 Ja
☐ 2 Bare delvis
☐ 3 Nei

FYSISK AKTIVITET og FYSISK FORM
(Spørsmål 31 - 37)

(Med fysisk aktivitet mener vi her trim, mosjon, trening og forskjellige idretter, som f.eks. ski, svømming, tur o.l.)

31. OMTRENT HVOR OFTE DRIVER DU VANLIGVIS NOEN FORM FOR FYSISK AKTIVITET SOM TRIM, MOSJON, TRENING OG FORSKJELLIGE IDRETTER?

- ☐ 1 Mer enn 4 ganger i uka
- ☐ 2 2 - 4 ganger i uka
- ☐ 3 1 gang i uka
- ☐ 4 Sjeldnere enn 1 gang i uka
- ☐ 5 Aldri eller nesten aldri
- ☐ 6 Uaktuelt, driver ikke med trening eller mosjon

32. OMTRENT HVOR MANGE TIMER DRIVER DU FYSISK AKTIVITET SOM TRIM, MOSJON, TRENING OG FORSKJELLIGE IDRETTER I LØPET AV EN UKE?

- ☐ 1 Mer enn 4 timer
- ☐ 2 2-4 timer
- ☐ 3 Mer enn 1 time, men mindre enn 2 timer
- ☐ 4 Omtrent 1 time
- ☐ 5 Mindre enn 1 time
- ☐ 6 Uaktuelt, driver ikke med trenning eller mosjon

33. NÅR DU DRIVER FYSISK AKTIVITET SOM TRIM, MOSJON, TRENING OG FORSKJELLIGE IDRETTER, BLIR DU DA VANLIGVIS ANDPUSTEN, SVETT ELLER SLITEN?

- ☐ 1 Hver gang
- ☐ 2 Ofte
- ☐ 3 Av og til
- ☐ 4 Sjelden eller aldri
- ☐ 5 Uaktuelt, driver ikke med trening eller mosjon.

34. HAR DU DREVET NOEN FORM FOR FYSISK AKTIVITET SOM TRIM, MOSJON, TRENING ELLER FORSKJELLIGE IDRETTER I LØPET AV DE TO SISTE MÅNEDENE?

- ☐ 1 Ja
- ☐ 2 Nei

35. TAR DU PÅ DEG TRENINGSTØY NÅR DU SKAL TRENE/MOSJONERE?

- ☐ 1 Alltid
- ☐ 2 Av og til
- ☐ 3 Aldri
- ☐ 4 Uaktuelt, driver ikke med trening eller mosjon

36. HAR DU TRENT (MER ENN 45 MIN/UKE) INNEN NOEN AV DISSE IDRETTSKATEGORIENE SISTE ÅRET?

Feil! Bokmerke er ikke definert.	Nei, ikke trent	1 gang pr. uke	2 ganger pr. uke	3 ganger/flere pr. uke
a) Ballspill				
b) Løpe/jogge				
c) Ski				
d) Svømming				
e) Aerobic/dans				
f) Grunntrening/i helsestudio				
g) Sykling				

37. HVORDAN VIL DU KARAKTERISERE DIN FYSISKE FORM?

☐ 1 Meget god
☐ 2 God
☐ 3 Verken spesielt god eller spesielt dårlig
☐ 4 Dårlig
☐ 5 Meget dårlig

38. FORM I FORHOLD TIL VANLIG

a) Er din fysiske form dårligere enn vanlig? ☐ 1 Nei ☐ 2 Ja

Hvis ja, i hvilken form er du?

☐ Svakhet, tretthet
☐ Nedsatt kondisjon
☐ Ør, ustø
☐ Dårlig matlyst
☐ Vet ikke
☐ Annet

b)Er din psykiske form dårligere enn vanlig? ☐ 1 Nei ☐ 2 Ja

Hvis ja, i hvilken form er du?

☐ Psykisk tretthet
☐ Deprimert, nedstemt
☐ Dårlig hukommelse, konsentrasjon
☐ Irritert, utålmodig
☐ Vet ikke
☐ Annet

LIVSSTIL
(Spørsmål 39 - 47)

39. KOSTHOLD

Hvor ofte spiser du til vanlig disse måltidene?
(Sett ett kryss for hver linje)

	Hver dag	4-6 dager i uka	1-3 dager i uka	Sjelden/ aldri
a) Frokost				
b) Formiddagsmat/niste				
c) Middag				
d) Kvelds				

40. DRIKKEVARER

Hvor ofte drikker du vanligvis noe av dette?
(Sett ett kryss for hver linje)

	Hver dag	4-6 dager i uka	1-3 dager i uka	Sjelden/ aldri
a) Lettmelk				
b) Skummet melk				
c) Helmelk				
d) Juice				
e) Cola/brus				
f) Vann				
g) Saft				
h) Kakao				
i) Kaffe				
j) Te				

41. KAFFE

Hvor mange kopper kaffe drikker du i løpet av en dag?

- ☐ 1 Drikker ikke kaffe
- ☐ 2 1-2 kopper
- ☐ 3 3-5 kopper
- ☐ 4 6-10 kopper
- ☐ 5 Mer enn 10 kopper

42. HVOR OFTE SPISER DU VANLIGVIS NOE AV DETTE?
(Sett ett kryss for hver linje)

A. BRØD/BAKEVARER	Hver dag	4-6 dager i uka	1-3 dager i uka	Sjelden/ aldri
a) Kneip				
b) Grovt brød (mørkt)				
c) Fint brød (lyst)				
d) Loff				
e) Grove rundstykker				
f) Fine rundstykker				
B. FRUKT/GRØNNSAKER				
a) Frukt				
b) Grønnsaker				
C. FISK/KJØTT				
a) Fisk som torsk/sei				
b) Fisk som oppdrettsørret/-laks				
c) Fisk som sild/makrell				
d) Kjøtt som svin, sau, lam				
e) Kjøtt som storfe (f.eks okse)				
f) Kjøtt som vilt (f.eks elg)				
g) Kjøtt som fjærkre (f.eks kylling)				
D. GODTERIER				
a) Sjokolade				
b) Potetgull				
c) Peanøtter				
d) Andre søtsaker				
e) Gatekjøkkenmat				

E) Er du vegetarianer (spiser bare plantekost, ikke kjøtt og fisk)?

☐ 1 Ja
☐ 2 Nei

43. TOBAKK

a) Hvor mye røyker du i løpet av en uke?

- ☐ 1 Røyker ikke
- ☐ 2 Røyker, men ikke daglig
- ☐ 3 Røyker daglig mindre enn 10 sigaretter
- ☐ 4 Røyker daglig 10-19 sigaretter
- ☐ 5 Røyker daglig 20-59 sigaretter
- ☐ 6 Røyker daglig 60-120 sigaretter
- ☐ 7 Røyker daglig mer enn 120 sigaretter

b) Bruker du annen form for tobakk (cigarillos, cigarer, snus, skråtobakk e.l)?

- ☐ 1 Ja, hver dag
- ☐ 2 Ja hver uke, men ikke hver dag
- ☐ 3 Ja, men sjeldnere enn hver uke
- ☐ 4 Nei, aldri

I tilfelle ja, nemlig .....

44. ALKOHOLBRUK

Omtrent hvor mange ganger har du drukket alkohol i løpet av den siste måneden?

- ☐ 1 Mer enn 4 ganger i uka
- ☐ 2 2-4 ganger i uka
- ☐ 3 1 gang i uka
- ☐ 4 1 gang hver 14. dag
- ☐ 5 Mindre enn 1 gang hver 14. dag
- ☐ 6 Ingen ganger

45. ØL

Hvor mange flasker øl drikker du vanligvis pr. uke?

- ☐ 1 0 flasker
- ☐ 2 1-2 flasker
- ☐ 3 3-4 flasker
- ☐ 4 5-9 flasker
- ☐ 5 10-24 flasker
- ☐ 6 Mer enn 24 flasker

46. VIN

Hvor mange flasker vin drikker du pr. uke?

- ☐ 1 0 flasker
- ☐ 2 0-1/2 flaske
- ☐ 3 1/2-2 flasker
- ☐ 4 3-6 flasker
- ☐ 5 Mer enn 6 flasker

47. BRENNEVIN

Hvor meget brennevin drikker du pr. uke?

- ☐ 1 O drinker
- ☐ 2 1-4 drinker
- ☐ 3 1/2 flaske
- ☐ 4 1-3 flasker
- ☐ 5 Mer enn 3 flasker

VENNER
(Spørsmål 48 - 51)

48. HENDER DET OFTE AT DU FØLER DEG ENSOM?

- ☐ 1 Meget ofte
- ☐ 2 Ofte
- ☐ 3 Av og til
- ☐ 4 Meget sjelden
- ☐ 5 Aldri

49. HAR DU VANLIGVIS MØTT FORSTÅELSE FOR DINE PROBLEMER?

- ☐ 1 Ja
- ☐ 2 Nei

I tilfelle JA fra hvem:

- ☐ 1 Familien
- ☐ 2 Venner/arbeidskamerater
- ☐ 3 Helsepersonell (lege, sykepleier o.l.)
- ☐ 4 Naboer
- ☐ 5 Andre
- ☐ 6 Ingen

50. SOSIAL STØTTE

Har du i løpet av de siste 14 dagene snakket med:

a) Noen i familien om gleder og sorger? ☐ 1 Ja ☐ 2 Nei

b) Noen i familien om helsespørsmål? ☐ 1 Ja ☐ 2 Nei

c) Andre, utenom familien om gleder og sorger? ☐ 1 Ja ☐ 2 Nei

d) Andre, utenom familien om helsespørsmål? ☐ 1 Ja ☐ 2 Nei

51. HVEM NYTTER DU HVIS DU PÅ GRUNN AV SKADE/SYKDOM TRENGER HJELP TIL DAGLIGDAGSE PRAKTISKE OPPGAVER?

☐ Foreldre/foresatte/søsken
☐ Kone/mann/samboer/barn
☐ Andre slektninger
☐ Venner/arbeidskamerater/naboer
☐ Andre
☐ Har ingen

52. HVEM NYTTER DU HVIS DU VIL SNAKKE OM DEG SELV OG/ELLER DINE PROBLEMER?

☐ Foreldre/foresatte/søsken
☐ Kone/mann/samboer/barn
☐ Andre slektninger
☐ Venner/naboer
☐ Andre
☐ Har ingen

53. ENDRING AV LIVSSTIL

a) Har du som følge av smerter/fibromyalgi endret livsstil?

☐ 1 Ja
☐ 2 Nei
☐ 3 Vet ikke

b) *Dersom ja*, hvilke forhold gjelder dette?
(Sett en ring rundt hver linje for det som best beskriver din situasjon)

a) Fysisk aktivitet:	Mer	Mindre	Uendret	Sluttet
b) Kosthold:	Bedre	Dårligere	Uendret	
c) Røyking:	Mer	Mindre	Uendret	Sluttet
d) Alkoholinntak:	Mer	Mindre	Uendret	Sluttet
e) Søvn:	Mer	Mindre	Uendret	
f) Familieliv:	Bedre	Dårligere	Uendret	Sluttet
g) Vennesamvær:	Flere	Færre	Uendret	Ingen
h) Sosial aktivitet:	Bedre	Dårligere	Uendret	Sluttet
i) Selvbilde:	Bedre	Dårligere	Uendret	

LIVSSKVALITET
(Spørsmål 54 - 59)

54. HVORDAN FØLER DU DEG FOR TIDEN?
(Sett en ring rundt det tallet som best beskriver din situasjon

a) Betydningsløs	1	2	3	4	5	6	7	Nyttig
b) Meningsløs	1	2	3	4	5	6	7	Meningsfull
c) Ideel	1	2	3	4	5	6	7	Uutholdelig
d) Skuffende	1	2	3	4	5	6	7	Oppmuntrende

55. LIVSTILFREDSSTILLELSE

(Gå gjennom uttalelsene nedenfor og sett en ring rundt det tallet som best beskriver din situasjon nå for tiden)

	Svært utilfreds stillende	Utilfreds-stillende	Nokså utilfreds-stillende	Nokså tilfreds-stillende	Tilfreds stillende	Svært tilfreds-stillende
a) Min helse er:	1	2	3	4	5	6
b) Min evne til å klare meg selv er:	1	2	3	4	5	6
c) Min yrkessituasjon er:	1	2	3	4	5	6
d) Min sosiale situasjon er:	1	2	3	4	5	6
e) Tilværelsen i sin alminnelighet er:	1	2	3	4	5	6
f) Min økonomi er:	1	2	3	4	5	6

56. ER DU VANLIGVIS GLAD ELLER NEDSTEMT?

- ☐ 1 Svært nedstemt
- ☐ 2 Nedstemt
- ☐ 3 Nokså nedstemt
- ☐ 4 Både- og
- ☐ 5 Nokså glad
- ☐ 6 Glad
- ☐ 7 Svært glad

57. NÅR DU TENKER PÅ HVORDAN DU HAR DET FOR TIDEN, ER DU STORT SETT FORNØYD MED TILVÆRELSEN, ELLER ER DU STORT SETT MISFORNØYD?

- ☐ 1 Svært fornøyd
- ☐ 2 Meget fornøyd
- ☐ 3 Nokså fornøyd
- ☐ 4 Både - og
- ☐ 5 Nokså misfornøyd
- ☐ 6 Meget misfornøyd
- ☐ 7 Svært misfornøyd

58. FØLER DU DEG STORT SETT STERK OG OPPLAGT, ELLER TRETT OG SLITEN?

- ☐ 1 Meget sterk og opplagt
- ☐ 2 Sterk og opplagt
- ☐ 3 Ganske sterk og opplagt
- ☐ 4 Både - og
- ☐ 5 Ganske trett og sliten
- ☐ 6 Trett og sliten
- ☐ 7 Svært trett og sliten

59. HAR DU I DET STORE OG HELE EN ROLIG OG GOD FØLELSE INNI DEG?

- ☐ 1 Nesten hele tiden
- ☐ 2 Ofte
- ☐ 3 Av og til
- ☐ 4 Aldri

OM DEG SELV
(Spørsmål 60 - 62)

60. HVA SYNES DU OM DIN EGEN VEKT?

- ☐ 1 Jeg veier for lite
- ☐ 2 Jeg veier omtrent passelig
- ☐ 3 Jeg veier for mye

61. ER DU VANLIGVIS TILFREDS MED HVORDAN KROPPEN DIN SER UT?

- ☐ 1 Nei, jeg ønsker store forandringer
- ☐ 2 Nei, jeg ønsker noen forandringer
- ☐ 3 Ja, jeg er middels tilfreds
- ☐ 4 Ja, jeg er meget tilfreds

62. HVA SYNES DU ALT I ALT OM DEG SELV?
(Sett en ring rundt det tallet som du mener karakteriserer deg)

a)	Beskjeden	1	2	3	4	5	Ubeskjeden
b)	Vennlig	1	2	3	4	5	Uvennlig
c)	Ledertype	1	2	3	4	5	Ikke ledertype
d)	Flink	1	2	3	4	5	Dum
e)	Populær	1	2	3	4	5	Upopulær
f)	Pliktoppfyllende	1	2	3	4	5	Ikke pliktoppfyllende
g)	Rolig	1	2	3	4	5	Urolig
h)	God i idrett	1	2	3	4	5	Dårlig i idrett

TIL SLUTT
(Spørsmål 63 - 66)

63. HAR DU FÅTT STILT DIAGNOSEN "FIBROMYALGI"?

☐ 1 Ja
☐ 2 Nei

I tilfelle ja

b) Skjedde det noen endringer i livssituasjonen din som du mener kunne være en medvirkende årsak til at du fikk fibromyalgi?

i) ☐ Endringer i familielivet, nemlig .....
ii) ☐ Endringer i sosialt liv, nemlig .....
iii) ☐ Endringer i arbeidslivet, nemlig .....
iv) ☐ Endringer i helsen, nemlig .....
v) ☐ Endringer i annet, nemlig .....

64. FORVENTNING TIL FRAMTIDEN

a) Hva mener du skal til for å leve bedre med smerte? (botemiddel)

.....
.....
.....

b) Hva mener du er med på å dempe smerte? (botemiddel/hjelp)

.....
.....
.....

65. HVILKE ENDRINGER MENER DU AT DU SELV KAN GJØRE FOR Å BEDRE DIN LIVSSITUASJON?

.....
.....
.....

66. ARBEIDSSITUASJON

a) Har du arbeid nå? ☐ 1 Ja ☐ 2 Nei

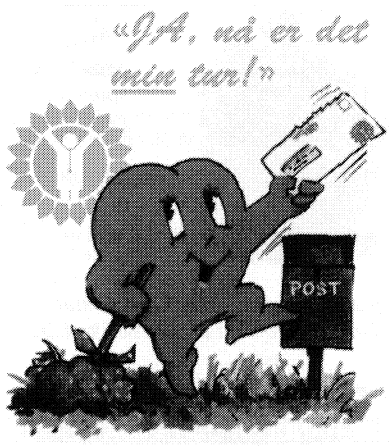
b) *Hvis nei*, hvor gode muligheter tror du at det er for å få arbeid senere?

☐ 1 Svært gode
☐ 2 Meget gode
☐ 3 Gode
☐ 4 Mindre gode
☐ 5 Dårlige

MANGE TAKK FOR OPPMERKSOMHETEN OG TÅLMODIGHETEN SOM MÅTTE TIL FOR Å BESVARE HELE DETTE SKJEMAET!

Appendix II

HELSEUNDERSØKELSEN
I NORD-TRØNDELAG



Personlig innbydelse

Spørreskjemaet er en viktig del av Helseundersøkelsen. Her finner du spørsmål om tidligere sykdom og om andre forhold som har betydning for helsa. Vennligst fyll ut skjemaet på forhånd og ta det med til Helseundersøkelsen. Dersom enkelte spørsmål er uklare, lar du dem bare stå ubesvarte til du møter fram, og drøfter dem med personalet som gjennomfører undersøkelsen. Alle svar vil bli behandlet strengt fortrolig.

Flere steder i skjemaet ber vi deg oppgi din alder da eventuell sykdom inntrådte. Hvis du ikke husker nøyaktig hvor gammel du var, skriver du et tall som er nærmest det du antar er korrekt.

Når resultatene fra undersøkelsen foreligger, vil det være enkelte som trenger ny undersøkelse hos egen lege. Dette vil du få beskjed om i det brevet som vi sender deg om dine resultater. Samtidig sender vi melding om resultatene dine til legen din. Det er derfor om å gjøre at du i rubrikken helt til slutt i skjemaet oppgir navnet på den allmennpraktiserende lege, kommunelege eller det helsesenter som du ønsker skal ta hånd om eventuell etterundersøkelse, og som vi skal sende resultatene til.

Med vennlig hilsen

Helsetjenesten i Nord-Trøndelag • Statens helseundersøkelser • Statens Institutt for Folkehelse

DET HANDLER OM HELSA DI

Hvordan er helsa di nå?

Bare ett kryss

Dårlig	12	☐ 1
Ikke helt god		☐ 2
God		☐ 3
Svært god		☐ 4

LUFTVEGSPLAGER

	JA	NEI
Hoster du daglig i perioder av året?		
Hvis JA:		
Er hosten vanligvis ledsaget av oppspytt? .. 14		
Har du hatt hoste med oppspytt i minst 3 mnd. sammenhengende i hvert av de to siste åra?		
Har du hatt noe anfall med pipende eller tung pust de siste 12 måneder? 16		

	JA	NEI	Alder første gang
Har du eller har du hatt astma? 17			år

	JA	NEI
Har du brukt eller bruker du astmamedisiner? 20		

HJERTE-KARSYKDOMMER, DIABETES

	JA	NEI	Alder første gang
Har du, eller har du hatt:			
Hjerteinfarkt 21			år
Angina pectoris (hjertekrampe) 24			år
Hjerneslag/hjerneblødning 27			år
Diabetes (sukkersyke) 30			år

Hva ble resultatet siste gang du målte blodtrykket ditt?

Bare ett kryss

Begynne med/fortsette med blodtrykksmedisin 33		☐ 1
Komme til kontroll, men ikke ta blodtrykksmedisin		☐ 2
Ingen kontroll og ingen medisin nødvendig		☐ 3
Har aldri fått målt blodtrykket		☐ 4

Bruker du medisin mot høyt blodtrykk?

Bare ett kryss

Nå	34	☐ 1
Før, men ikke nå		☐ 2
Aldri brukt		☐ 3

	JA	NEI	VET IKKE
Har en eller flere av foreldre eller søsken hatt hjerteinfarkt (sår på hjertet) eller angina pectoris (hjertekrampe)?			

STOFFSKIFTE

	JA	NEI	Alder første gang
Har du noen gang fått påvist:			
for høyt stoffskifte 36			år
for lavt stoffskifte 39			år
struma 42			år
annen sykdom i skjoldbruskkjertelen			år
Bruker du eller har du brukt noen av disse medisinene:			
Thyroxin 48			år
Neo-Mercazole 51			år
Er du operert i skjoldbruskkjertelen			år
Har du fått radiojodbehandling 57			år

MUSKEL/SKJELETT-PLAGER

	JA	NEI
Har du i løpet av det siste året vært plaget med smerter og/eller stivhet i muskler og ledd som har vart i minst 3 måneder sammenhengende? 60		

Hvis NEI, gå videre til neste side øverst.

Hvis JA, svar på følgende:

Hvor har du hatt disse plagene?

	JA	NEI
Nakke 61		
Skuldre (aksler)		
Albuer		
Håndledd, hender		
Bryst/mage 65		
Øvre del av ryggen		
Korsryggen		
Hofter		
Knær		
Ankler, føtter 70		

Hvis du har hatt plager i flere områder i minst 3 mnd. det siste året, setter du ring rundt det ja-krysset hvor plagene har vart lengst

Hvor lenge har plagene vart sammenhengende?

Svar for det området hvor plagene har vart lengst

Hvis under 1 år, oppgi antall mnd. . 71	Antall mnd.
Hvis 1 år eller mer, oppgi antall år.. 73	Antall år

Har plagene redusert din arbeidsevne det siste året?

Gjelder også hjemmearbeidende. Bare ett kryss

Nei/ubetydelig	I noen grad	I betydelig grad	Vet ikke
☐	☐	☐	☐

	JA	NEI	IKKE I ARBEID
Har du vært sykmeldt pga. disse plagene det siste året? 76			

	JA	NEI
Har plagene ført til redusert aktivitet i fritida?		

Har lege noen gang sagt at du har/har hatt noen av disse sykdommene:

		JA	NEI
Beinskjørhet (osteoporose)	78		
Fibromyalgi (fibrositt/kronisk smertesyndrom)			
Leddgikt (reumatoid artritt)			
Slitasjegikt (artrose)			
Bechterews sykdom	82		
Andre langvarige skjelett- eller muskelsykdommer			

Har du noen gang hatt:

		JA	NEI	Alder *siste* gang
Lårhalsbrudd	84			år
Brudd i håndledd/underarm	87			år
Nakkesleng (whiplash)	90			år
Skade som førte til sykehusinnleggelse				år

ANDRE PLAGER

I hvilken grad har du hatt disse plagene i de siste 12 månedene?

		Ikke plaget	Litt plaget	Mye plaget
Kvalme	96	☐	☐	☐
Brystbrann/sure oppstøt		☐	☐	☐
Diaré		☐	☐	☐
Treg mage		☐	☐	☐
Hjertebank		☐	☐	☐
Åndenød	101	☐	☐	☐

ANDRE SYKDOMMER

Har du eller har du noen gang hatt:

		JA	NEI	Alder første gang
Epilepsi	102			år
Psykiske plager hvor du har søkt hjelp				år
Kreftsykdom	108			år
Annen langvarig sykdom	111			

DAGLIGE FUNKSJONER

Har du noen langvarig sykdom, skade eller lidelse av fysisk eller psykisk art som nedsetter dine funksjoner i ditt daglige liv? 112

JA	NEI

Langvarig: minst ett år

Hvis JA:

Hvor mye vil du si at dine funksjoner er nedsatt?

		Litt nedsatt	Middels nedsatt	Mye nedsatt
Er bevegelseshemmet	113	☐	☐	☐
Har nedsatt syn		☐	☐	☐
Har nedsatt hørsel		☐	☐	☐
Hemmet pga. kroppslig sykdom.		☐	☐	☐
Hemmet pga. psykiske plager...	117	☐	☐	☐

MENN fortsetter øverst neste spalte

BESVARES BARE AV KVINNER

Hvor mange barn har du født? 118
Sett 0 hvis du ikke har født barn

Antall barn

Hvis du har født barn, besvar:

Alder

Hvor gammel var du da du fødte ditt første barn? 120 — år

Hvor gammel var du da du fødte ditt siste barn? 122 — år

Besvares ikke hvis du har født bare ett barn

Hvor gammel var du da du fikk menstruasjon? 124 — år

Sett 0 hvis du ikke noen gang har hatt menstruasjon

Fortsett neste spalte øverst

RØYKING

Røykte noen av de voksne hjemme da du vokste opp? 126

JA	NEI

Bor du, eller har du bodd, sammen med noen dagligrøykere etter at du fylte 20 år? 127

JA	NEI

Hvor lenge er du vanligvis daglig til stede i røykfylt rom? 128 — Antall timer

Sett 0 hvis du ikke oppholder deg i røykfylt rom

Røyker du selv?

		JA	NEI
Sigaretter daglig?	130		
Sigarer/sigarillos daglig?			
Pipe daglig?	132		

Aldri røykt daglig *(Sett kryss)* ☐

Hvis du har røykt daglig tidligere, hvor lenge er det siden du sluttet? 134 — Antall år

Hvis du røyker daglig nå eller har røykt tidligere:

Hvor mange sigaretter røyker eller røykte du vanligvis daglig? 136 — Antall sigaretter

Hvor gammel var du da du begynte å røyke daglig? 140 — Alder år

Hvor mange år tilsammen har du røykt daglig? 142 — Antall år

KAFFE/TE/ALKOHOL

Hvor mange kopper kaffe/te drikker du daglig?
Sett 0 hvis du ikke drikker kaffe/te daglig

		Antall kopper
Kokekaffe	144	
Annen kaffe	146	
Te	148	

Alkohol:
Er du total avholdsmann/-kvinne? 150

JA	NEI

Hvor mange ganger i måneden drikker du vanligvis alkohol? 151 — Antall ganger

Regn ikke med lettøl. Sett 0 hvis mindre enn 1 gang i mnd.

Hvor mange glass øl, vin eller brennevin drikker du vanligvis i løpet av to uker?

Regn ikke med lettøl.
Sett 0 hvis du ikke drikker alkohol 153

Øl	Vin	Brennevin
glass	glass	glass

FYSISK AKTIVITET

I FRITIDA

Hvordan har din fysiske aktivitet i fritida vært det siste året? *Tenk deg et ukentlig gjennomsnitt for året.*

Arbeidsveg regnes som fritid

		Timer pr. uke: Ingen	Under 1	1-2	3 og mer
Lett aktivitet *(ikke svett/andpusten)*	159	☐	☐	☐	☐
Hard fysisk aktivitet *(svett/andpusten)*	160	☐ 1	☐ 2	☐ 3	☐ 4

UNDER ARBEID

Hvis du er i lønnet eller ulønnet arbeid:

Hvorledes vil du beskrive arbeidet ditt?
Bare ett kryss

For det meste stillesittende arbeid
(f.eks. skrivebordsarbeid, montering) 161 ☐ 1

Arbeid som krever at du går mye
(f.eks. ekspeditørarb., lett industriarb., undervisning) ☐ 2

Arbeid hvor du går og løfter mye
(f.eks. postbud, pleier, bygningsarbeid) ☐ 3

Tungt kroppsarbeid
(f.eks. skogsarbeid, tungt jordbruksarb.,tungt bygningsarb.) ☐ 4

Bla om!

HVORLEDES FØLER DU DEG?

Har du de siste to ukene følt deg:

	Nei	Litt	En god del	Svært mye
Trygg og rolig? 162	☐	☐	☐	☐
Glad og optimistisk?	☐	☐	☐	☐
Har du følt deg:				
Nervøs og urolig?	☐	☐	☐	☐
Plaget av angst? 165	☐	☐	☐	☐
Irritabel?	☐	☐	☐	☐
Nedfor/deprimert?	☐	☐	☐	☐
Ensom? 168	☐	☐	☐	☐
	1	2	3	4

*Her kommer noen flere spørsmål om hvorledes du føler deg. For hvert spørsmål setter du kryss for ett av de fire svarene som best beskriver dine følelser **den siste uka.** Ikke tenk for lenge på svaret - de spontane svarene er best*

Jeg gleder meg fortsatt over ting slik jeg pleide før 169
Avgjort like mye ..... ☐ 1 Bare lite grann ..... ☐ 3
Ikke fullt så mye ..... ☐ 2 Ikke i det hele tatt ..... ☐ 4

Jeg har en urofølelse som om noe forferdelig vil skje 170
Ja, og noe svært ille .... ☐ 1 Litt, bekymrer meg lite . ☐ 3
Ja, ikke så veldig ille ... ☐ 2 Ikke i det hele tatt ..... ☐ 4

Jeg kan le og se det morsomme i situasjoner 171
Like mye nå som før .... ☐ 1 Avgjort ikke som før .... ☐ 3
Ikke like mye nå som før ☐ 2 Ikke i det hele tatt ..... ☐ 4

Jeg har hodet fullt av bekymringer 172
Veldig ofte ..... ☐ 1 Av og til ..... ☐ 3
Ganske ofte ..... ☐ 2 En gang i blant ..... ☐ 4

Jeg er i godt humør 173
Aldri ..... ☐ 1 Ganske ofte ..... ☐ 3
Noen ganger ..... ☐ 2 For det meste ..... ☐ 4

Jeg kan sitte i fred og ro og kjenne meg avslappet 174
Ja, helt klart ..... ☐ 1 Ikke så ofte ..... ☐ 3
Vanligvis ..... ☐ 2 Ikke i det hele tatt ..... ☐ 4

Jeg føler meg som om alt går langsommere 175
Nesten hele tiden ..... ☐ 1 Fra tid til annen ..... ☐ 3
Svært ofte ..... ☐ 2 Ikke i det hele tatt ..... ☐ 4

Jeg føler meg urolig som om jeg har sommerfugler i magen 176
Ikke i det hele tatt ..... ☐ 1 Ganske ofte ..... ☐ 3
Fra tid til annen ..... ☐ 2 Svært ofte ..... ☐ 4

Jeg bryr meg ikke lenger om hvordan jeg ser ut 177
Ja, har sluttet å bry meg ☐ 1 Kan hende ikke nok .... ☐ 3
Ikke som jeg burde ..... ☐ 2 Bryr meg som før ..... ☐ 4

Jeg er rastløs som om jeg stadig må være aktiv 178
Uten tvil svært mye ..... ☐ 1 Ikke så veldig mye ..... ☐ 3
Ganske mye..... ☐ 2 Ikke i det hele tatt ..... ☐ 4

Jeg ser med glede frem til hendelser og ting 179
Like mye som før ..... ☐ 1 Avgjort mindre enn før . ☐ 3
Heller mindre enn før ... ☐ 2 Nesten ikke i det hele tatt ☐ 4

Jeg kan plutselig få en følelse av panikk 180
Uten tvil svært ofte ..... ☐ 1 Ikke så veldig ofte ..... ☐ 3
Ganske ofte ..... ☐ 2 Ikke i det hele tatt ..... ☐ 4

Jeg kan glede meg over gode bøker, radio og TV 181
Ofte ..... ☐ 1 Ikke så ofte ..... ☐ 3
Fra tid til annen ..... ☐ 2 Svært sjelden ..... ☐ 4

UTDANNING

Hvilken utdanning er den høyeste du har fullført?

Grunnskole 7-10 år, framhaldsskole, folkehøgskole ..... 182 ☐ 1
Realskole, middelskole, yrkesskole, 1-2 årig videregående skole..... ☐ 2
Artium, øk.gymnas, allmennfaglig retning i videregående skole ..... ☐ 3
Høgskole/universitet, mindre enn 4 år ..... ☐ 4
Høgskole/universitet, 4 år eller mer ..... ☐ 5

ARBEID

Hva slags arbeidssituasjon har du nå?
Ett eller flere kryss

Lønnet arbeid ..... 183 ☐
Selvstendig næringsdrivende..... ☐
Heltids husarbeid ..... ☐
Utdanning, militærtjeneste ..... ☐
Arbeidsledig, permittert..... ☐
Pensjonist/trygdet..... 188 ☐

Hvor mange timer lønnet arbeid har du i uka? ..... 189 Antall timer

Har du skiftarbeid, nattarbeid eller går vakt?

JA	NEI

ALT I ALT

Når du tenker på hvordan du har det for tida, er du stort sett fornøyd med tilværelsen eller er du stort sett misfornøyd?
Bare ett kryss

Svært fornøyd ..... 192 ☐ 1
Meget fornøyd ..... ☐ 2
Ganske fornøyd..... ☐ 3
Både/og..... ☐ 4
Nokså misfornøyd ..... ☐ 5
Meget misfornøyd..... ☐ 6
Svært misfornøyd..... ☐ 7

DIN LEGE

Hvis denne helseundersøkelsen viser at du bør undersøkes nærmere, hvilken allmennpraktiserende lege/kommunelege ønsker du skal foreta undersøkelsen?
Skriv navnet på legen her: 193

Ikke skriv her

Takk for utfyllingen!

Nok en gang:

Velkommen til undersøkelsen!

IE 332 5201 - 50.000 - 09.96

Appendix III

THE HEALTH SURVEY
IN NORD - TRONDELAG

"Yes, now it's my turn!"

Personal invitation

The questionnaire is an important part of the Health Survey. Here you will find questions about your previous illnesses and other conditions of importance for your health. Please complete the form and take it with you to the health examination.
If any questions are not clear, leave them until you attend, and discuss them with the staff who examine you. All answers will be treated in strict confidence.
At several places on the form, we ask you to give your age when the illness occurred. If you do not know exactly how old you were, give a figure that is closest to what you think is correct.
When the results of the examination are available, there will be some people who will need to be re-examined by their own doctor. You will be informed of this in the letter which we send with your results. At the same time, we shall notify your own doctor of your results. That is why, in the section at the very end of the questionnaire, you are asked to give the name of your general practitioner, community doctor or health centre at which you wish any follow-up examination to be carried out, and the name of the person to whom we should send the results.

Yours sincerely,
The Nord-Trondelag Health Service - The State Health Examiners - The State Institute for Public Health

THIS IS ABOUT HOW YOU FEEL

How do you feel at present
Just one cross

- Poorly
- Not very well
- Well
- Extremely well

RESPIRATORY DISORDERS

YES NO

Do you cough every day during certain periods of the year?
If YES:

- Is the cough usually accompanied by expectoration?
- Have you had a cough with expectoration for at least 3 consecutive months in each of the last two years?

Have you had any attacks with whistling or difficult breathing in the last 12 months?

YES NO Age first time

Have you had or do you have asthma Years
Have you used or do you use asthma medication? YES NO

CARDIOVASCULAR DISEASES, DIABETES

YES NO Age first time

Have you had, or do you have: Years

- A myocardial infarction
- Angina pectoris (heart cramp)
- A stroke/brain haemorrhage
- Diabetes (sugar disease)

What was the result the last time your blood pressure was measured?
Just one cross

- Began/continued with blood pressure medication
- Come for check-up, but am not taking blood pressure medication
- No check-up and no medication necessary
- Have never had blood pressure measured

Are you taking medication for high blood pressure?

Just one cross

No
Did previously, but not now
Have never taken it

YES NO DON'T KNOW

Has one or more of your parents or siblings had a myocardial infarction (heart attack) or angina pectoris (heart cramp)?

METABOLISM

YES NO Age first time years

Have you ever had:

too high a metabolism
too low a metabolism
goitre
other disease of the thyroid gland

Are you using or have you ever used either of these medicines:

Thyroxin
Neo-Mercazole

Have you had a thyroid gland operation?
Have you had radio-iodine treatment?

MUSCULO-SKELETAL DISORDERS

During the last year, have you had pain and/or stiffness in the muscles and limbs which has lasted for at least 3 consecutive months? YES NO

If NO, go on to the next section.
If YES, answer the following:

Where did you have these complaints? YES NO

Neck
Shoulders
Elbows
Wrists, hands
Chest/stomach
Upper part of back
Lumbar region
Hips
Knees
Ankles, feet

If you had complaints in several areas for at least 3 months in the last year, put a ring round the yes-cross for which the complaints lasted longest

How long did the complaints last?

Answer for the area where they lasted longest Number of months

If less than 1 year, give the number of months

Number of years

If 1 year or more, give the number of years

Have the disorders reduced your level of work in the last year?
Also applies to those working at home. Just one cross.

No, not significantly | To some degree | Significantly | Don't know

YES NO NOT IN WORK

Have you been certified sick on account of these complaints during the last year?

YES NO

Have the complaints led to reduced leisure activity?

Has the doctor ever said that you have/have had any of these diseases? YES NO

- Bone deficiency (osteoporosis)
- Fibromyalgia (fibrositis/chronic pain syndrome)
- Arthritis (rheumatoid arthritis)
- Wear and tear arthritis (arthrosis)
- Bechterew's disease
- Other long-term skeletal or muscle diseases

Have you ever had:	YES	NO	Age last time years
Fracture of the femur			
Fracture of the wrist or forearm			
Neck injury (whiplash)			
Damage which led to hospitalisation			

OTHER COMPLAINTS

To what degree have you had these disorders in the last 12 months?	Not at all	Slightly	Very much
Nausea			
Heartburn/regurgitation of acid			
Diarrhoea			
Feeling of heaviness in the stomach			
Palpitations			
Breathlessness			

OTHER DISEASES

Have you ever had:	YES	NO	Age last time years
Epilepsy			
Mental disorders for which you sought help			
Cancer			
Other long-term disease			

EVERYDAY FUNCTIONS

Have you any long-term disease, damage or injury of a physical or mental nature which impairs your functions in your everyday life? YES NO
Long-term: at least a year

If YES
How much would you say that your functions are impaired? Slightly Moderately Severely

- Your movement is restricted
- You have impaired vision
- You have impaired hearing
- You are restricted on account of physical disease
- You are restricted on account of mental illness

MEN continue after the next section

TO BE ANSWERED BY WOMEN ONLY

How many children have you had? Number of children
Put 0 if you have had no children

If you have had children, answer: Age

How old were you when you had your first child? years

How old were you when you had your last child?
Do not answer if you have only had one child

How old were you when you started menstruation?
Put 0 if you have never menstruated

Continue in next section

SMOKING

Did any of the adults at home where you grew up smoke? YES NO

Do you live, or have you lived, with any daily smokers after you were 20 years old? YES NO

How long are you usually in a smoky room each day? Number of hours
Put 0 if you are never in a smoky room

Do you smoke yourself? YES NO

- Cigarettes daily?
- Cigars/cigarillos daily?
- Pipe daily?
- Have never smoked daily *(Put a cross)* □

If you formerly smoked, how long is it since you stopped? Number of years

If you smoke daily now, or smoked previously:

How many cigarettes do you smoke or did you usually smoke daily? — Number of cigarettes

How old were you when you started smoking? — Age (years)

How many years altogether have you smoked daily? — Number of years

COFFEE/TEA/ALCOHOL

How many cups of coffee/tea do you drink daily?
Put 0 if you do not drink coffee/tea daily — Number of cups

Filter coffee

Other coffee

Tea

Alcohol
Are you a complete teetotaller? — YES NO

How many times a month do you normally drink alcohol? — Number of times
Do not include low-alcohol beer. Put 0 if less than once a month.

How many glasses of beer, wine or spirits do you usually drink in the course of two weeks?

	Beer glasses	Wine glasses	Spirits glasses
Do not include low-alcohol beer *Put 0 if you do not drink alcohol*			

PHYSICAL ACTIVITY

DURING LEISURE TIME

How has your leisure-time physical activity been this last year?
Think of a weekly average for the year.

The way to work is counted as leisure time

	Hours per week			
	None	Less than 1	1-2	3 or more
Slight activity *(no sweating or being out of breath)*				
Hard physical activity *(sweating/out of breath)*				

AT WORK
If you are in paid or unpaid work:

How would you describe your work?
Just one cross

Mostly sedentary work
(e.g. at a desk, on an assembly line)

Work which requires that you walk a lot
(e.g. delivery work, light industrial work, teaching)

Work where you walk or lift a lot
(e.g. postman, nurse, building work)

Heavy physical work
(e.g. forestry work, heavy agricultural work, heavy building work)

HOW DO YOU FEEL?

In the last two weeks, have you felt:

	No	A little	A good deal	Very much
Confident and calm?				
Happy and optimistic?				
Have you felt:				
Nervous and restless?				
Troubled by anxiety?				
Irritable?				
Down/depressed?				
Lonely?				

*Here are a few questions about how you feel. For each question, put a cross for one of the four answers which best describes how you have felt **in the last week**. Do not think too long about the answers - the spontaneous answers are best.*

I am happy about things that concern me

Just as much	Only a little
Not quite as much	Not at all

I have the feeling that something dreadful will happen

Yes, very much	A little, I don't worry much
Yes, but not so very much	Not at all

I can laugh and see the funny side of situations

As much as before	Not as much as before
Not quite as much as before	Not at all

I have a head full of worries

Very often	Now and again
Quite often	Once in a while

I am in a good mood

Never	Quite often
Sometimes	Mostly

I can sit in peace and quiet and know I am relaxed

Yes, quite clearly	Not so often
Usually	Not at all

I feel as though everything is slowing down

Almost all the time	From time to time
Very often	Not at all

I feel anxious, as though I have butterflies in my stomach

Not at all	Quite often
From time to time	Very often

I no longer care about how I look

Yes, I have stopped caring	Maybe not enough
Not as much as I should	I care as much as before

I am restless, as though I must be active all the time

Very much	Not so very much
Quite a lot	Not at all

I look forward to events and things

As much as before	Less than before
Rather more than before	Almost never

I can suddenly get a feeling of panic

Very often	Not very often
Quite often	Never

I can enjoy good books, radio and TV

Often	Not so often
From time to time	Very seldom

EDUCATION

What is your highest level of education?

Basic school, 7-10 years, 'continuation school', 'folk high school'
Secondary school, middle school, vocational school, 1-2 year higher school
Matriculation, junior college, general course in higher school
College of advanced technology/ university, less than 4 years
College of advanced technology/ university, 4 years or more

WORK

What kind of work situation do you have?
One or more crosses

Paid work
Self-employed in business
Full-time housework
Training, military service
Unemployed, certified unfit for work
Retired/on Social Security

How many hours of paid work do you have a week? Number of hours

Do you work shifts, at night, or as a watchman? YES NO

ALL IN ALL

When you think of how you are at present, are you generally happy with life, or are you generally unhappy?
Only one cross

Extremely happy
Very happy
Quite happy
Both happy and unhappy
Fairly unhappy
Very unhappy
Extremely unhappy

If this health examination shows that you should be examined more thoroughly, which general practitioner/community doctor would you like to carry out the examination?

Write the doctor's name here

Do not write here

Thank you for completing this questionnaire.

Once more:
Welcome to the examination!

NORD-TRØNDELAG

HEALTH EXAMINATION

Appendix IV

hunt

Helseundersøkelsen i Nord-Trøndelag

SKJEMA FOR KVINNER 20–69 ÅR

Takk for frammøtet til undersøkelsen!

Vi vil også be deg fylle ut dette spørreskjemaet. Opplysningene vil bli brukt i større forskningsarbeider om forebyggende helsearbeid. Noen av spørsmålene likner på spørsmål du har svart på i det skjemaet du fylte ut heime og leverte ved frammøte til helseundersøkelsen. Det er likevel viktig at du svarer på alle spørsmålene også i dette skjemaet. Det utfylte skjemaet returneres i vedlagte svarkonvolutt. Porto er betalt.

Alle opplysningene er underlagt streng taushetsplikt.

Vennlig hilsen

Helsetjenesten i Nord-Trøndelag

Statens Institutt for Folkehelse Statens helseundersøkelser

Hvis du ikke ønsker å besvare spørreskjemaet, sett kryss her og returner skjemaet. Da slipper du purring.

Jeg ønsker ikke å besvare skjemaet ○

UTFYLLING

Dato for utfylling av skjema: / 19 19

OPPVEKST

I hvilken kommune bodde du da du fylte 1 år?

*Hvis du ikke bodde i Norge, oppgi **land** i stedet for kommune.*

24

ARBEID

Nåværende eller tidligere arbeid:

Hva slags inntektsgivende arbeid har du og event. din ektefelle/samboer? *Hvis du/dere ikke har inntektsgivende arbeid nå: Oppgi det siste yrket.*

		Deg selv		Ektefelle/ samboer	
Spesialarbeider eller ufaglært arbeider	25	☐		☐	36
Fagarbeider, handverker, formann		☐		☐	
Underordnet funksjonær (f.eks. butikk, kontor, off. tjenester)		☐		☐	
Fagfunksjonær (f.eks. sykepleier, tekniker, lærer)		☐		☐	
Overordnet stilling i off. eller privat virksomhet		☐		☐	
Sjåfør	30	☐		☐	41
Gårdbruker eller skogeier		☐		☐	
Fisker		☐		☐	
Selvstendig i akademisk erverv (f.eks. tannlege, advokat)		☐		☐	
Annen selvstendig næringsvirksomhet		☐		☐	
Har ikke vært i inntektsgivende arbeid	35	☐		☐	46

Hvis du NÅ ikke har inntektsgivende arbeid eller du ikke har heltids husarbeid: Gå til BOLIG.

Har du i løpet av de siste 12 månedene hatt sykefravær:

		Ja	Nei
med egenmelding	47	☐	☐
med sykmelding fra lege	48	☐	☐

Hvis «Ja»: **Hvor lenge *tilsammen*?** *Bare ett kryss*

2 uker eller mindre	49	☐ 1
2-8 uker		☐ 2
Mer enn 8 uker		☐ 3

Har du i løpet av de siste 12 månedene vurdert å skifte yrke eller arbeidsplass? 50 Ja ☐ Nei ☐

Er arbeidet ditt så fysisk anstrengende at du ofte er sliten i kroppen etter en arbeidsdag? *Bare ett kryss* 51

Ja, nesten alltid ☐ 1 Ganske sjelden ☐ 3
Ganske ofte ☐ 2 Aldri, eller nesten aldri ☐ 4

Krever arbeidet ditt så mye konsentrasjon og oppmerksomhet at du ofte føler deg utslitt etter en arbeidsdag? 52

Ja, nesten alltid ☐ 1 Ganske sjelden ☐ 3
Ganske ofte ☐ 2 Aldri, eller nesten aldri ☐ 4

Hvordan trives du alt i alt med arbeidet ditt? 53

Veldig godt ☐ 1 Ikke særlig godt ☐ 3
Godt ☐ 2 Dårlig ☐ 4

BOLIG

Hvem bor du sammen med?

Ett kryss for hver linje og angi antall

		Ja	Nei	Antall
Ektefelle/samboer	54	☐	☐	
Andre personer over 18 år	55	☐	☐	
Personer under 18 år	58	☐	☐	

Hvor mange av barna har plass i barnehage? 61 Antall

Hvilken type bolig bor du i? *Bare ett kryss*

Enebolig/villa	63	☐ 1
Gårdsbruk		☐ 2
Blokk/terrasseleilighet		☐ 3
Rekkehus/2-4 mannsbolig		☐ 4
Annen bolig		☐ 5

Hvor stor er din boenhet? 64 kvm

		Ja	Nei
Er det heldekkende tepper i stua?	67	☐	☐
Er det heldekkende tepper på ditt soverom?		☐	☐
Er det katt i boligen?	69	☐	☐
Er det hund i boligen?		☐	☐
Er det andre pelskledde dyr eller fugler i boligen?		☐	☐

ØKONOMI

Mottar du noen av følgende *offentlige* ytelser?

		Ja	Nei
Sykepenger/sykelønn/rehabiliteringspenger	72	☐	☐
Ytelser under yrkesrettet attføring		☐	☐
Uførepensjon	74	☐	☐
Alderspensjon		☐	☐
Sosialstøtte		☐	☐
Arbeidsløshetstrygd		☐	☐
Overgangsstønad		☐	☐
Etterlattepensjon	79	☐	☐
Andre ytelser		☐	☐

Har det i løpet av det siste året hendt at husholdningen har hatt vansker med å klare de løpende utgifter til mat, transport, bolig og liknende? *Bare ett kryss* 81

Ja, ofte ☐ 1 Ja, en sjelden gang ☐ 3
Ja, av og til ☐ 2 Nei, aldri ☐ 4

VENNER

Hvor mange gode venner har du?

Regn med de du kan snakke fortrolig med og som kan gi deg god hjelp når du trenger det 82 Antall

Tell ikke med de du bor sammen med, men regn med andre slektninger

	Ja	Nei
Føler du at du har mange nok gode venner? 84	☐	☐

Hvor ofte tar du vanligvis del i foreningsvirksomhet som f.eks. syklubb, idrettslag, politiske lag, religiøse eller andre foreninger? 85

Aldri, eller noen få ganger i året ☐ 1 Omtrent en gang i uka ☐ 1
1-2 ganger i måneden ☐ 2 Mer enn en gang i uka ☐ 2

DER DU BOR

Svar ut fra nærmiljøet, dvs. nabolaget/grenda:
Ett kryss for hvert spørsmål

Jeg føler et sterkt fellesskap med de som bor her 86
Helt enig ☐ 1 | Delvis enig ☐ 2 | Usikker ☐ 3 | Delvis uenig ☐ 4 | Helt uenig ☐ 5

Selv om noen tar initiativ, er det ingen som blir med på det som settes i gang her 87
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Hvis jeg flytter herfra, vil jeg lengte tilbake 88
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Man kan ikke stole på hverandre her 89
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Når noe skal gjøres her, er det lett å få folk med 90
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Det er vanskelig å få kontakt med folk her 91
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Det er godt samhold her 92
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Ingen orker å ta initiativ til noe lenger her 93
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Folk trives godt her 94
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Folk her kan ha store problemer uten at naboen vet noe 95
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Det er alltid noen som tar initiativ til å løse nødvendige oppgaver her 96
Helt enig ☐ | Delvis enig ☐ | Usikker ☐ | Delvis uenig ☐ | Helt uenig ☐

Folk snakker lite med hverandre her 97
Helt enig ☐ 1 | Delvis enig ☐ 2 | Usikker ☐ 3 | Delvis uenig ☐ 4 | Helt uenig ☐ 5

SYKDOM I FAMILIEN

Kryss av for de slektningene som har eller har hatt noen av sykdommene. Kryss av for "ingen" hvis ingen av slektningene har hatt denne sykdommen: *Evt. flere kryss på hver linje*

	Mor	Far	Bror	Søster	Barn	Ingen
Hjerneslag eller hjerneblødning 98	☐	☐	☐	☐	☐	☐
Hjerteinfarkt før 60 års alder 104	☐	☐	☐	☐	☐	☐
Astma 110	☐	☐	☐	☐	☐	☐
Allergi 116	☐	☐	☐	☐	☐	☐
Kreftsykdom 122	☐	☐	☐	☐	☐	☐
Høyt blodtrykk 128	☐	☐	☐	☐	☐	☐
Psykiske plager 134	☐	☐	☐	☐	☐	☐
Osteoporose (benskjørhet) 140	☐	☐	☐	☐	☐	☐
Diabetes (sukkersyke) 146	☐	☐	☐	☐	☐	☐
Alder da de fikk diabetes 152	år	år	år	år	år	

Har du *selv* høysnue eller neseallergi? ..... 162 Ja ☐ Nei ☐

BRUK AV HELSETJENESTER

Har du i løpet av de siste 12 månedene vært hos:
Ett kryss på hver linje

	Ja	Nei
allmennpraktiserende lege (kommunelege, privatpraktiserende lege, turnuskandidat) 163	☐	☐
bedriftslege	☐	☐
lege ved sykehus (uten at du var innlagt)	☐	☐
annen lege	☐	☐
fysioterapeut	☐	☐
kiropraktor	☐	☐
homøopat 169	☐	☐
annen behandler (naturmedisiner, fotsoneterapeut, håndspålegger, "healer", "synsk", e.l.)	☐	☐

Har du vært innlagt i sykehus de siste 5 åra? ..... 171 Ja ☐ Nei ☐

ALKOHOL

Hvis du er totalavholdskvinne: Gå til KOSTHOLD.

Ett kryss for hver spørsmål

Har du noen gang følt at du burde redusere alkoholforbruket ditt? ..... 172 Ja ☐ Nei ☐

Har andre noen gang kritisert alkoholbruken din? ..... 173 Ja ☐ Nei ☐

Har du noen gang følt ubehag eller skyldfølelse pga. alkoholbruken din? ..... 174 Ja ☐ Nei ☐

Har det å ta en drink noen gang vært det første du har gjort om morgenen for å roe nervene, kurere bakrus eller som en oppkvikker? ..... 175 Ja ☐ Nei ☐

KOSTHOLD

Hvor mange måltider spiser du vanligvis daglig (middag og brødmåltid)? ..... 176 — Antall

Hvor mange dager i uka spiser du varm middag?

Hva slags type brød (kjøpt eller hjemmebakt) spiser du vanligvis? *Inntil to kryss*

Brødtypen ligner mest på 178	Loff	Fint brød	Kneipp-brød	Grov-brød	Knekke-brød
	☐	☐	☐	☐	☐

Hva slags *fett* blir vanligvis brukt i din husholdning?
Ett kryss for matlaging og ett kryss for brød

	Til matlaging 183	På brød 184
Bruker *ikke* smør eller margarin	☐ 1	☐ 1
Meierismør	☐ 2	☐ 2
Hard margarin	☐ 3	☐ 3
Bløt (soft) margarin	☐ 4	☐ 4
Smør/margarin blanding	☐ 5	☐ 5
Lettmargarin	☐ 6	☐ 6
Oljer	☐ 7	

MEDISINBRUK

Har du i deler av de siste 12 måneder brukt noen medisiner daglig eller nesten daglig? ..... 185 Ja ☐ Nei ☐

Hvis «Ja»:
Angi hvor mange måneder du brukte følgende medisiner: *Sett 0 hvis du ikke har brukt medisinene*

	Antall mndr.		Antall mndr.
smertestillende 186		hjertemedisin (ikke blodtrykksmedisin)	
sovemedisin 188		annen medisin	
beroligende medisin		*Kosttilskudd:*	
medisin mot depresjon		jerntabletter 202	
allergimedisin 194		vitamintilskudd	
astmamedisin 196		tran/fiskeoljer 206	

Hvor ofte har du brukt avslappende/beroligende medisin eller sovemedisin den siste måneden? 208
Daglig ..... ☐ 1 | Sjeldnere enn hver uke ☐ 3
Hver uke, men ikke hver dag . ☐ 2 | Aldri ..... ☐ 4

HODEPINE

Har du vært plaget av hodepine i løpet av de siste 12 måneder? 209
Ja, anfallsvis (migrene) ☐ 1
Ja, annen slags hodepine ☐ 2
Nei ☐ 3

Antall anfall siste 12 mndr. 210 ☐

Hvis «Nei»: Gå til MUSKEL-/SKJELETTPLAGER

Omtrent hvor mange dager i pr. måned har du hodepine?
Mindre enn 7 dager ☐ 1 7 til 14 dager ☐ 2 Mer enn 14 d. ☐ 3

Hvor lenge varer hodepinen vanligvis hver gang? 213
Mindre enn 4 timer ☐ 1 4 timer–3 døgn ☐ 2 Mer enn 3 døgn ☐ 3

Hvor ofte er hodepinen preget av eller ledsaget av:

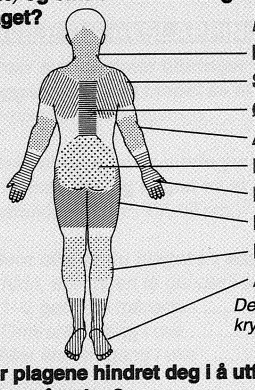
Ett kryss på hver linje	*Sjelden eller aldri*	*Av og til*	*Ofte*
bankende/dunkende smerte 214	☐	☐	☐
pressende smerte	☐	☐	☐
halvsidighet, alltid samme side	☐	☐	☐
halvsidighet, vekselvis h. og v. side	☐	☐	☐
smerter i «hele hodet»	☐	☐	☐
kvalme 219	☐	☐	☐
lys- og/eller lydskyhet	☐	☐	☐
forverring ved fysisk aktivitet	☐	☐	☐
synsforstyrrelser *før* hodepine 222	☐	☐	☐

Hvor mange tabletter/stikkpiller har du eventuelt brukt av disse medisinene *alt i alt i løpet av den siste måneden*?
Skriv 0 hvis du ikke har brukt medisinen.
Cafergot 223 ☐ Anervan 225 ☐ Imigran 227 ☐

MUSKEL-/SKJELETTPLAGER

Har du hatt plager (smerter, verk, ubehag) i muskler og/eller ledd i *den siste måneden*? 229 *Ja* ☐ *Nei* ☐

Hvis «Ja»: **Hvor har du hatt disse plagene** *(ett eller flere kryss)* **og omtrent hvor mange dager tilsammen var du plaget?**



Plager (Sett kryss)	Antall dager
Nakke 230	☐
Skuldre/aksler 233	☐
Øvre del av ryggen	☐
Albuer 239	☐
Korsryggen 242	☐
Handledd/hender 245	☐
Hofter 248	☐
Knær 251	☐
Ankler/føtter 254	☐

*Dersom flere kryss: Sett **ring** rundt krysset **der plagen var verst***

Har plagene hindret deg i å utføre daglige aktiviteter den siste måneden?

	Ja	*Nei*
I arbeidet 257	☐	☐
I fritida 258	☐	☐

SMERTER I BEINA

	Ja	*Nei*
Har du sår på tå, fot eller ankel som ikke vil gro? 259	☐	☐
Har du smerter i det ene eller i begge beina når du går? 260	☐	☐
Har du oppsøkt lege p.g.a. smerter i beina? 261	☐	☐

Hvis «NEI» på disse spørsmålene: Gå til MENSTRUASJON

	Ja	*Nei*
Kan du gå lenger enn 50 meter? 262	☐	☐
Forsvinner smerten når du står stille en stund? 263	☐	☐
Må du sette deg for at smerten skal gå over? 264	☐	☐

Hvor gjør det mest vondt? *Ett kryss* 265
Fot ☐ Legg ☐ Lår ☐ Hofte ☐

	Ja	*Nei*
Har du smerter i beina når du er i ro? 266	☐	☐
Er smertene verst når du ligger i senga? 267	☐	☐
Blir søvnen forstyrret av smertene? 268	☐	☐
Får du mindre vondt når beinet ligger høyt? 269	☐	☐
Får du mindre vondt når beinet ligger lavt, f.eks. om beinet henger utfor sengekanten? 270	☐	☐
Bedres smertene når du står opp og går litt? 271	☐	☐

MENSTRUASJON

	Ja	*Nei*
Har du menstruasjon fremdeles? 272	☐	☐

Hvis «Nei»: **Hvor gammel var du da den sluttet?** 273 ☐ år

	Ja	*Nei*	*Vet ikke*
Er du gravid nå? 275	☐	☐	☐
Har du innsatt spiral nå? 276	☐	☐	

Når hadde du siste menstruasjon? 277 *Dag Måned År* ☐☐ ☐☐ ☐☐☐☐
Husker du ikke dag, bare angi måned og år, husker du bare år, angi år.

Menstruasjonen din de siste 12 måneder:

Har du det siste året hatt regelmessige menstruasjoner?
At menstruasjonen har vart omtrent like lenge hver gang med omtrent like lange mellomrom 283 *Ja* ☐ *Nei* ☐ *Usikker* ☐

Hvor mange dager hadde du blødning siste gang du hadde menstruasjon? 284 *Antall dager* ☐

Hvor mange dager var du uten blødning mellom nest siste og siste menstruasjon? 286 *Antall dager* ☐

Har menstruasjonen din det siste året uteblitt i mer enn 3 måneder uten at du var gravid? 289 *Ja* ☐ *Nei* ☐

Hvis «Ja»: **Hvor mange måneder i trekk har du vært uten menstruasjonsblødninger?** 290 *Antall mndr.* ☐

Hvis «Ja»: **Oppsøkte du lege?** 292 *Ja* ☐ *Nei* ☐

Menstruasjonen tidligere (dvs. før de siste 12 månedene):

Har menstruasjonen din tidligere uteblitt uten at du var gravid? 293 *Ja* ☐ *Nei* ☐

Hvis «Ja»: **Hvor lenge og hvor ofte var den borte sammenhengende?** *Sett kryss eventuelt flere steder*

	1 gang	*2 ganger*	*Oftere*
3–6 måneder 294	☐	☐	☐
6–12 måneder	☐	☐	☐
Over ett år 296	☐	☐	☐

OPERASJONER I UNDERLIVET

	Ja	Nei	Vet ikke
Har du noen gang blitt operert i underlivet? 297	☐	☐	☐

Hvis «Ja»: **Kryss av for hver operasjon:**

	Ja	Nei	Vet ikke
Fjernet deler av eller bare én eggstokk 298	☐	☐	☐
Fjernet begge eggstokkene (totalt) 299	☐	☐	☐

Hvis du har fjernet begge eggstokkene, hvor gammel var du da? 300 ____ år

	Ja	Nei	Vet ikke
Operert for endometriose 302	☐	☐	☐
Sterilisert	☐	☐	☐
Utskraping fra livmor (sykehus)	☐	☐	☐
Fjernet hele livmoren 305	☐	☐	☐

Hvis du har fjernet hele livmoren, hvor gammel var du da? 306 ____ år

P-PILLER

	Ja	Nei
Har du noen gang brukt p-piller, minipiller inkludert? 308	☐	☐

Hvis «Ja»: **Hvor gammel var du første gang du brukte p-piller?** 309 ____ år

Hvor lenge har du brukt p-piller i alt? 311 ____ år

Hvis under ett år, antall måneder 313 ____ mndr.

	Ja	Nei
Bruker du p-piller nå?	☐	☐

Hvilket merke bruker du? 316 ____

HORMONBEHANDLING

Utenom p-piller

Har du noen gang brukt medisiner som inneholder østrogen? Vanlige navn på slike medisiner er: Cyclabil, Estraderm, Kilogest, Ovesterin, Progynova, Trisekvens.

	Nå	Før	Aldri
Tabletter eller plaster 318	☐	☐	☐
Krem eller stikkpiller 319	☐	☐	☐

Hvis «Ja»: **Hvor gammel var du første gang du fikk østrogenmedisin, og omtrent hvor mange år brukte du slik medisin?**

	Din alder	Antall år
Tabletter eller plaster 320		
Krem eller stikkpiller 324		

Hvis du bruker østrogenmedisin nå, hvilket merke bruker du? 328 ____

PROBLEMER MED Å BLI GRAVID

	Ja	Nei
Har du noen gang prøvd i mer enn ett år å bli gravid? 329	☐	☐

Hvis «Ja»: **Hvor gammel var du første gang du hadde problemer med å bli gravid?** 330 ____ år

	Ja	Nei
Har du noen gang oppsøkt lege fordi du hadde problemer med å bli gravid? 332	☐	☐

GRAVIDITETER, FØDSLER OG AMMING

Hvor mange ganger har du vært gravid totalt?
Regn med ***alle*** *svangerskap, spontane eller selvbestemte aborter, så vel som fødsler (også dødfødsler)* 333 ____ ganger

Hvor mange barn har du født? 335 ____ barn

Fyll ut for hvert barn (de første 7) opplysninger om fødselsår og omtrent antall måneder du ammet hvert barn og antall måneder menstruasjonen din var borte etter fødselen (fylles ut også for dødfødte eller for barn som er døde senere i livet).

Barn	Fødselsår	Antall måneder med amming	Antall blødningsfrie måneder
1 336	19		
2 342	19		
3 348	19		
4 354	19		
5 360	19		
6 366	19		
7 372	19		

URINLEKKASJE

	Ja	Nei
Har du ufrivillig urinlekkasje? 378	☐	☐

Hvis «Nei»: Gå til KALK I KOSTEN ...

Hvor ofte har du urinlekkasje? 379
- sjeldnere enn en gang pr. måned ☐
- en eller flere ganger pr. måned ☐
- en eller flere ganger pr. uke ☐
- hver dag og/eller natt ☐

Hvor mye urin lekker du vanligvis hver gang? 380
dråper eller lite ☐ små skvetter ☐ større mengder ☐

	Ja	Nei
Har du lekkasje av urin i forbindelse med hosting, nysing, latter, tunge løft 381	☐	☐
Har du lekkasje av urin i forbindelse med plutselig og sterk vannlatingstrang? 382	☐	☐

Hvor lenge har du hatt urinlekkasje? 383
0-5 år ☐ 5-10 år ☐ Over 10 år ☐

	Ja	Nei
Har du søkt lege på grunn av urinlekkasje? 384	☐	☐

Hvordan opplever du lekkasjeplagene dine? 385 *Ett kryss*
- ikke noe problem ☐
- en liten plage ☐
- en del plaget ☐
- mye plaget ☐
- svært stort problem ☐

KALK I KOSTEN OG KOSTTILSKUDD

Hvor mange glass melk (alle sorter, også drikkeyoghurt) drikker du vanligvis daglig? *Bare ett kryss* 386
Ingen ☐ 1 — 1–2 glass ☐ 3
Mindre enn ett ☐ 2 — 3 eller mer ☐ 4

Hvor mange brødskiver med kvitost spiser du vanligvis daglig? *Bare ett kryss*
Ingen ☐ 1 — 1–2 skiver ☐ 3
Mindre enn en ☐ 2 — 3 eller mer ☐ 4

Bruker du vanligvis noen av disse kosttilskuddene?

	Ja	Nei
vitamin D-tilskudd 388	☐	☐
kalktabletter eller benmel	☐	☐

HUMØR OG TRIVSEL

Ett kryss på hver linje

Angi hvordan du har følt deg den siste måneden:	*Aldri*	*Noen ganger*	*Ganske ofte*	*For det meste*
i godt humør 390	☐	☐	☐	☐
i dårlig humør 391	☐	☐	☐	☐

Er du rask til å oppfatte et humoristisk poeng? 392	*Svært treg*	*Ganske treg*	*Ganske rask*	*Svært rask*
	☐	☐	☐	☐

Er du enig i at det er noe ansvarsløst over folk som stadig prøver å være morsomme? 393

Nei, slett ikke ☐1 Ganske enig ☐3
I noen grad ☐2 Ja, absolutt ☐4

Er du en munter person? 394

Nei, slett ikke ☐1 Ganske munter ☐3
I noen grad ☐2 Ja, absolutt ☐4

SINNE

Sett kryss på det svaret som best beskriver deg i forhold til de to påstandene nedenfor:

Jeg gir uttrykk for mitt sinne, og andre mennesker vet at jeg er sint 395

Nesten aldri ☐1 Ganske ofte ☐3
Noen ganger ☐2 Nesten alltid ☐4

Jeg koker av sinne, men jeg viser det ikke til andre 396

Nesten aldri ☐1 Ganske ofte ☐3
Noen ganger ☐2 Nesten alltid ☐4

HVILE OG AVSLAPPING

Hvor mange timer tilbringer du *vanligvis* i *liggende* stilling i løpet av et døgn?
(nattesøvn, middagshvil) 397 — Antall timer: ____

Hvor mange timer tilbringer du *vanligvis* i *sittende* stilling i løpet av et døgn?
(arbeid, måltider, TV, bil etc.) 399 — Antall timer: ____

Hvor ofte er du plaget av søvnløshet? 401

Aldri, eller noen få ganger i året ☐1
1–2 ganger i måneden ☐2
Omtrent 1 gang i uka ☐3
Mer enn en gang i uka ☐4

Har du siste år vært plaget av søvnløshet slik at det har gått ut over arbeidsevnen? 402	*Ja*	*Nei*
	☐	☐

Har du i løpet av siste måned hatt innsovningsproblemer? *Bare ett kryss* 403

Nesten hver natt ☐1 Av og til ☐3
Ofte ☐2 Aldri ☐4

Har du i løpet av siste måned våknet for tidlig og ikke fått sove igjen? *Bare ett kryss* 404

Nesten hver natt ☐1 Av og til ☐3
Ofte ☐2 Aldri ☐4

Har du i løpet av siste måned vært plaget av nervøsitet (irritabel, urolig, anspent eller rastløs)? 405

Nesten hele tida ☐1
Ofte ☐2
Av og til ☐3
Aldri ☐4

HVORDAN DU HAR HATT DET

Har det noen gang i løpet av ditt liv vært *sammenhengende perioder på 2 uker eller mer* da du:	*Ja*	*Nei*
følte deg deprimert, trist og nedfor 406	☐	☐
hadde problemer med matlysten eller spiste alt for lite	☐	☐
var plaget av kraftløshet eller mangel på overskudd	☐	☐
virkelig bebreidet deg selv og følte deg verdiløs	☐	☐
hadde problemer med å konsentrere deg eller vanskelig for å ta beslutninger	☐	☐
hadde minst tre av de problemene som er nevnt ovenfor samtidig 411	☐	☐

HVORDAN DU SER PÅ DEG SELV

Folk ser på seg selv på ulike måter. Kryss av for hvert utsagn hvor enig eller uenig du er. *Ett kryss på hver linje*

	Svært enig	*Enig*	*Uenig*	*Svært uenig*
Jeg har en positiv holdning til meg selv 412	☐	☐	☐	☐
Jeg føler meg virkelig ubrukelig til tider 413	☐	☐	☐	☐
Jeg føler at jeg ikke har mye å være stolt av 414	☐	☐	☐	☐
Jeg føler at jeg er en verdifull person, i allefall på lik linje med andre 415	☐	☐	☐	☐

	Ja	*Nei*
Synes du at du har funnet et virkelig betydningsfullt innhold i livet ditt? 416	☐	☐
Føler du at du lever fullt ut? 417	☐	☐

HVORDAN DU FØLER DEG NÅ

*Sett kryss i den ruta utenfor det svaret som best beskriver dine følelser **den siste uka.** Bare ett kryss*

Er du vanligvis glad eller nedstemt? 418

Svært nedstemt ☐1
Nedstemt ☐2
Nokså nedstemt ☐3
Både – og ☐4
Nokså glad ☐5
Glad ☐6
Svært glad ☐7

Har du i det store og hele en rolig og god følelse inne i deg? 419

Nesten hele tida ☐1
Ofte ☐2
Av og til ☐3
Aldri ☐4

Føler du deg stort sett sterk og opplagt, eller trøtt og sliten? 420

Meget sterk og opplagt ☐1
Sterk og opplagt ☐2
Ganske sterk og opplagt ☐3
Både – og ☐4
Ganske trøtt og sliten ☐5
Trøtt og sliten ☐6
Svært trøtt og sliten ☐7

Legg det utfylte spørreskjemaet i den vedlagte svarkonvolutten og postlegg den så snart som mulig!
Porto er betalt.

Hjertelig takk for hjelpa!

Steinkjer Trykkeri AS – 74 16 30 00

Appendix V

hunt

Health Survey in Nord-Trøndelag

QUESTIONNAIRE FOR WOMEN AGED 20-69 YEARS

Thank you for taking part in the survey!
We would also like to ask you to complete this questionnaire. The information will be used in further research work for preventive health care. Some of the questions are similar to questions which you answered on the questionnaire which you completed at home and took with you when you attended the health examination. It is also important that you answer all the questions on this questionnaire. The completed questionnaire should be returned in the enclosed envelope. The postage is paid.
All information will be treated in strict confidence.

Yours sincerely
The Health Service in Nord-Trøndelag
The State Institute for Public Health ***The State Health Surveyors***

If you do not wish to answer the questionnaire, put a cross here and return the form. You then slip through the net.

I do not wish to answer the questionnaire.

COMPLETION

Date of completion of the questionnaire: **19**

GROWING UP

In which town were you living when you were 1 year old?
*If you were not living in Norway, give the **country** instead of the town.*

WORK

Present or former work:
What kind of income-providing work do you and, if applicable, your husband/partner have? *If you/he does not have income-providing work at present, give the last kind of work.*

	You	*Husband/partner*
Labourer or unskilled worker		
Skilled worker, craftsman, foreman		
Non-professional occupation (e.g. shop, office, public service)		
Professional occupation (e.g. nurse, technician, teacher)		
Management position in public or private organisation		
Driver		
Farmer or forester		
Fisherman		
Independent in academic field (e.g. dentist, lawyer)		
Other independent occupation		
Have not been in income-providing work		

If you do not AT PRESENT have income-providing work or you are not a full-time housewife: Go to DWELLING

In the course of the last 12 months, have you had sick leave:	*Yes*	*No*
with self-certification		

with certification from the doctor

If Yes: **How long *altogether?*** *Just one cross*
- 2 weeks or less
- 2-8 weeks
- More than 8 weeks

In the course of the last 12 months, have you considered changing your work or job? *Yes* *No*

Is your work so physically strenuous that you are often exhausted after a working day?
Just one cross
- Yes, almost always
- Quite often
- Quite seldom
- Never, or almost never

Does your work require so much concentration and attention that you often feel exhausted after a working day?
- Yes, almost always
- Quite often
- Quite seldom
- Never, or almost never

Overall, how do you feel about your work?
- Very happy
- Happy
- Not especially happy
- Unhappy

DWELLING

Who do you live with?
One cross for each line and give the number *Yes* *No* Number
- Husband/partner
- Other people over the age of 18 years
- Persons below the age of 18 years

How many of the children have a place at play school? Number

In what type of dwelling do you live? *Just one cross*
- Single-family house/villa
- Farm
- Flat in block/terrace
- Terraced house/2-4 family house
- Other dwelling

How large is your dwelling unit? square metres

Yes *No*

Are there fitted carpets in the living room?
Are there fitted carpets in your bedroom?
Is there a cat in the home?
Is there a dog in the home
Are there other furry animals or birds in the home?

ECONOMY

Do you receive any of the following *public* benefits? *Yes* *No*

- Sickness benefit/sick pay/rehabilitation benefit
- Benefits under vocational retraining
- Disability pension
- Old age pension
- Social support
- Unemployment benefit
- Transitional benefit
- Widow's pension
- Other benefits

In the course of the last year, has it ever happened that the household has had difficulty in meeting the ongoing costs for food, transport, dwelling and similar? *Just one cross*

Yes, often — Yes, a rare occurrence
Yes, now and again — No, never

FRIENDS

How many good friends do you have? Number

Count those with whom you can chat with confidentially and who can give you good help when you need it.
Do not include those with whom you live, but include other relatives.

Do you feel that you have many good friends? *Yes* *No*

How often do you usually take part in social activities such as e.g. sailing club, athletic club, political association, religious or other associations?

Never, or only a few times a year — About once a week
1-2 times a month — More than once a week

WHERE YOU LIVE

Answer with regard to your environment, i.e. neighbourhood/group of farms
One cross for each question

I feel a strong sense of community with those who live here
Completely agree Partially agree Not sure Partially disagree Completely disagree

Even if someone takes the initiative, there is no-one who supports the person who gets things going here
Completely agree Partially agree Not sure Partially disagree Completely disagree

If I move from here, I shall long to come back
Completely agree Partially agree Not sure Partially disagree Completely disagree

One cannot rely on each other here
Completely agree Partially agree Not sure Partially disagree Completely disagree

If something has to be done here, it is easy to get people involved
Completely agree Partially agree Not sure Partially disagree Completely disagree

It is difficult to make contact with people here
Completely agree Partially agree Not sure Partially disagree Completely disagree

There is good solidarity here
Completely agree Partially agree Not sure Partially disagree Completely disagree

Nobody brings himself to take the initiative here
Completely agree Partially agree Not sure Partially disagree Completely disagree

People are well content here
Completely agree Partially agree Not sure Partially disagree Completely disagree

People here can have major problems without the neighbours knowing anything
Completely agree Partially agree Not sure Partially disagree Completely disagree

There is always somebody who takes the initiative in solving necessary tasks here
Completely agree Partially agree Not sure Partially disagree Completely disagree

People don't talk much to teach other here
Completely agree Partially agree Not sure Partially disagree Completely disagree

ILLNESS IN THE FAMILY

Put a cross for the relatives who have or have had any of the illnesses. Put a cross under „none" if none of the relatives has had these diseases: *Possibly several crosses on each line.*

	Mother	*Father*	*Brother*	*Sister*	*Child*	*None*
Stroke or cerebral haemorrhage						
Heart attack before the age of 60						
Asthma						
Allergy						
Cancer						
High blood pressure						
Mental disorders						
Osteoporosis (bone deficiency)						
Diabetes (sugar disease)						
Age at which s/he got diabetes						

Have you yourself got hay-fever or nasal allergy? *Yes* *No*

USE OF HEALTH SERVICES

In the course of the last 12 months, have you been to:

One cross for each line	*Yes*	*No*
general practitioner (community doctor, private doctor, locum)		
company doctor		
hospital doctor (without you being in hospital)		
other doctor		

physiotherapist
chiropractor
homoeopath
other treatment-provider (naturopath, reflexologist, layer on of hands, "healer", "visionary", etc.

Have you been in hospital during the last 5 years? *Yes* *No*

ALCOHOL

If you are a teetotaller, go to „EATING HABITS"

One cross for each question *Yes* *No*

Have you ever felt that you should reduce your alcohol intake?

Have other people ever criticised your use of alcohol? *Yes* *No*

Have you ever felt ill or guilty as a result of your use of alcohol? *Yes* *No*

Has having a drink ever been the first thing you have done in the morning in order to calm your nerves, cure a hangover or as a pick-you-up? *Yes* *No*

EATING HABITS

Number

How many meals do you usually eat each day (lunch and cold evening meal?

How many days a week do you have a warm midday meal?

What kind of bread (bought or home-made) do you usually eat? *Up to two crosses*

Most common type of bread	*Light rye bread*	*White bread*	*Wholewheat bread*	*Dark bread*	*Crispbread*

What kind of *fat* is usually used in your household?

One cross for cooking and one cross for bread	*Cooking*	*Bread*
Do *not* use butter or margarine		
Dairy-made butter		
Hard margarine		
Soft margarine		
Butter/margarine mixture		
Low-fat margarine		
Oils		

USE OF MEDICINES

In the course of the last 12 months, have you used any medicines daily or almost daily? *Yes* *No*

If Yes:

Indicate for how many months you used the following medicines:
Put 0 if you have not used the medicines

	No. of months		No. of months
pain-killers		heart medicine (not blood pressure medicine)	
sleeping tablets		other medicine	
tranquillisers		*Dietary supplements:*	
medicine for depression		iron tablets	
allergy medicine		vitamin supplements	
asthma medicine		cod-liver oil/fish oil	

How often have you used relaxing/calming medicine or sleeping tablets in recent months?

Daily
Every week, but not every day.
Less than every week
Never

OPERATIONS IN THE LOWER ABDOMEN

	Yes	*No*	*Don't know*
Have you ever had a lower abdominal operation?			
If Yes, **cross for each operation:**	*Yes*	*No*	*Don't know*
Removal of parts of or only one ovary			
Removal of both ovaries (totally)			

If you have had both ovaries removed, how old were you then? Years

	Yes	*No*	*Don't know*
Operation for endometriosis			
Sterilised			
D&C (in hospital)			
Removal of whole womb (hysterectomy)			

If you have had a hysterectomy, how old were you then?

CONTRACEPTIVE PILLS

	Yes	*No*
Have you ever used contraceptive pills, including mini-pills?		
If Yes, **How old were you the first time you took contraceptive pills?**		years
For how long did you take contraceptive pills altogether?		years
If less than 1 year, number of months		months
Are you still taking contraceptive pills?	*Yes*	*No*

Which brand do you take?

HORMONE TREATMENT

Excluding contraceptive pills
Have you ever taken medicines which contain oestrogen? Common names of such medicines are Cyclabil, Estraderm, Kilogest, Oversterin, Progynova, Trisekvens

	Now	*Previously*	*Never*
Tablets or patches			
Cream or suppositories			

If Yes, **How old were you the first time that you were given oestrogen medicine, and for about how many years did you use such medicine?**

	Your age	*Number of years*
Tablets or patches		
Cream or suppositories		

If you are currently using oestrogen medicine, which brand are you using?

PROBLEMS IN BECOMING PREGNANT

	Yes	*No*
Have you ever tried for more than a year to become pregnant?		

If Yes, **How old were you the first time that you tried to become pregnant?** years

	Yes	*No*
Have you ever consulted a doctor because you had problems in becoming pregnant?		

PREGNANCY, BIRTHS AND BREAST-FEEDING

How many times in all have you been pregnant?
*Include **all** pregnancies, spontaneous or self-determined abortions, as well as births (including stillbirths)* times

How many children have you had? children

Complete for each child (the first 7) information on the year of birth and the approximate number of months that you breast-fed each child, and the number of months for which you had no menstruation after the birth (also complete for stillbirths and for children who died later in life)

Child	***Year of birth***	***Number of months breast-feeding***	***Number of months without periods***
1			
2			
3			
4			
5			
6			
7			

URINE LEAKAGE

Do you have leakage of urine (unintended amounts) at least twice a month? *Yes* *No*

If No, go to CALCIUM IN THE DIET

How often do you have leakage of urine?
- several times a month
- one or more times a week
- every day and/or night

How much urine usually leaks each time?
- drops or a little
- small spatters or more

Do you have leakage of urine in connection with *Yes* *No*
- coughing, sneezing or laughing
- lifting

Does you experience leakage of urine in connection with a sudden and powerful urge to urinate? *Yes* *No*

How do you find your leakage disorders? *Just one cross*
- not a problem
- a slight problem
- a moderate problem
- a great problem
- a very great problem

Have you consulted a doctor on account of leakage of urine? *Yes* *No*

CALCIUM IN THE DIET AND DIETARY SUPPLEMENTS

How many glasses of milk (all kinds, including drinking yoghurt) do you usually drink daily? *Just one cross*

None	1-2 glasses
Less than one	3 or more

How many slices of bread with white cheese do you usually eat daily? *Just one cross*

None	1-2 slices
Less than one	3 or more

Do you usually use any of these dietary supplements? *Yes* *No*
- vitamin D supplement
- calcium tablets or bone meal

HEADACHES

Have you been troubled by headaches in the last 12 months? Number of headaches in the last 12 months

Yes, in attacks (migraines)
Yes, other types of headaches

No
If No, go to MUSCULO-SKELETAL DISORDERS

About how many days per month do you have headaches?
More than 7 days 7 to 14 days More than 14 days

How long do the headaches last each time?
More than 4 hours 4 hours - 3 days More than 3 days

How often is the headache characterised by or accompanied by:

One cross for each line	*Seldom or never*	*Now and again*	*Often*
throbbing, thumping pain			
pressing pain			
one side of the head, always the same side			
one side of the head, alternating left and right sides			
pain in the "whole head"			
nausea			
sensitivity to light or noise			
aggravation on physical activity			
visual disorders *before* the headache			

How many tablets/suppositories of these medicines have you used *altogether in the last month*?
Put 0 of you have not used the medicines
Cafergot Anervan Imigran

MUSCULO-SKELETAL DISORDERS

Have you had disorders (pain, aching, discomfort) in the muscles/limbs in the *last 6 months?* *Yes* *No*

If Yes, **Where did you have these disorders** *(one or more crosses)* **and for about how many days altogether were you troubled?**

Disorders (put a cross)	Number of days
Neck	
Shoulders/upper arms	
Upper part of back	
Elbows	
Lower part of back	
Wrists/hands	
Hips	
Knees	
Ankles/feet	

*If there are several crosses, put a **ring** round the cross for which **the disorder was worst***

Did the disorders hinder you in carrying out your everyday activities in the last month?

	Yes	*No*
At work		
During leisure time		

VISION

Have you ever had any of the following eye conditions? *Yes* *No* *Don't know*
cataract
glaucoma (raised pressure in the eye)

Do you wear glasses? *Yes* *No*
Do you wear contact lenses?

Can you manage to read small print (such as this text):
without glasses/contact lenses/magnifying glass
with glasses/contact lenses/magnifying glass

Can you see long distance: *Yes* *No* *Don't know*
without glasses/contact lenses
with glasses/contact lenses

If you wear glasses or contact lenses, is this on account of:
short sightedness (minus glasses)
long sightedness (plus glasses)
old age (reading glasses)

How old were you the first time that you were prescribed glasses or contact lenses? years

MENSTRUATION

Do you still menstruate? *Yes* *No*

If No, **How old were you when your periods stopped?** Years

Are you pregnant at present? *Yes* *No* *Don't know*

Are you currently wearing a coil? *Yes* *No*

When did you last have a period? *Day* *Month* *Year*
If you don't remember the day, just give the month and year; if you only remember the year, give the year.

Your menstruation in the last 12 months:

Have you had regular periods during the last year? *Yes* *No* *Unsure*
I.e., the periods have lasted about as long each time with about the same time between them.

How many days did you bleed the last time you had your period? *Number of days*

How many days were you without bleeding between your last period and the one before that? *Number of days*

Have your periods stopped for more than 3 months during the last year without you being pregnant? *Yes* *No*

If Yes, **For how many months in a row were you without your periods?** *Number of months*

If Yes, **Did you consult a doctor?** *Yes* *No*

Earlier menstruation (i.e. before the last 12 months):

Did your periods ever stop without you being pregnant? *Yes* *No*

If Yes, **For how long and how often did they remain absent?**
A cross by several answers is possible

	Once	*Twice*	*More often*
3-6 months			
6-12 months			
More than a year			

MOOD AND WELL-BEING
One cross for each line

Say how you have felt in the last month:	*Never*	*Sometimes*	*Quite often*	*Mostly*
in a good mood				
in a bad mood				

Are you quick to understand a funny point?	*Very slow*	*Quite slow*	*Quite quick*	*Very quick*

Do you agree that there is something irresponsible about people who constantly try to be funny?

No, not at all	Quite agree
To some extent	Yes, absolutely

Are you a cheerful person?

No, not at all	Quite cheerful
To some extent	Yes, absolutely

TEMPER
Put a cross by the answer which best describes you in relation to the two statements below:

I give expression to my temper, and other people know that I am angry

Almost never	Quite often
Sometimes	Almost always

I boil with temper, but I don't show it to others

Almost never	Quite often
Sometimes	Almost always

REST AND RELAXATION

How many hours do you *usually* spend *lying down* in the course of 24 hours?
(night-time sleep, afternoon rest) Number of hours

How many hours do you *usually* spend *sitting down* in the course of 24 hours?
(work, mealtimes, TV, car, etc.) Number of hours

How often are you troubled by sleeplessness?

Never or a few times a year
1-2 times a month
About once a week
More than once a week

In the last year, have you been troubled by sleeplessness to such a degree that it affected your work? *Yes* *No*

Have you had problems in getting to sleep in the last month? *Just one cross*

Almost every night — Now and again
Often — Never

During the last month, have you ever woken too early and not been able to get back to sleep? *Just one cross*

Almost every night — Now and again
Often — Never

During the last month, have you been troubled by nervousness (been irritable, anxious, tense or restless)?

Almost all the time
Often
Now and again
Never

HOW YOU HAVE FELT

During your life, have there ever been periods of *2 consecutive weeks or more* when you:

	Yes	*No*
felt depressed, sad and down		
had problems with your appetite or ate too little		
were troubled by loss of energy or lack of spare energy		
really reproached yourself and felt worthless		
had problems in concentrating or difficulty in making decisions		
had at least three of the above-mentioned problems all together		

HOW YOU SEE YOURSELF

People see themselves in different ways. For each statement, put a cross to indicate how much or how little you agree with it. *One cross for each line.*

	Agree very much	*Agree*	*Disagree*	*Disagree very much*
I have a positive opinion of myself				
I feel really useless at times				
I feel that I have do not have much to be proud of				
I feel that I am a valuable person, at all events equal to others				

Do you think that you have found a really meaningful content in your life? *Yes* *No*

Do you think that you live life to the full?

HOW YOU FEEL AT THE PRESENT TIME

Put a cross in the square by the answer which best describes your feelings ***last week****. Just one cross.*

Are you usually happy or dejected?

- Very dejected
- Dejected
- Fairly dejected
- Both happy and dejected
- Fairly happy
- Happy
- Very happy

On the whole, do you feel calm and content?

- Almost all the time
- Often
- Now and again
- Never

On the whole, do you feel strong and in a good mood, or tired and exhausted?

- Very strong and in a good mood
- Strong and in a good mood
- Quite strong and in a good mood
- Both these things
- Quite tired and exhausted
- Tired and exhausted
- Very tired and exhausted

Place the completed questionnaire in the enclosed reply envelope and post it as soon as possible!

The postage is paid.

Many thanks for your help!

Dissertations at the Faculty of Medicine, NTNU

1977

1. Knut Joachim Berg: EFFECT OF ACETYLSALICYLIC ACID ON RENAL FUNCTION
2. Karl Erik Viken and Arne Ødegaard: STUDIES ON HUMAN MONOCYTES CULTURED *IN VITRO*

1978

3. Karel Bjørn Cyvin: CONGENITAL DISLOCATION OF THE HIP JOINT.
4. Alf O. Brubakk: METHODS FOR STUDYING FLOW DYNAMICS IN THE LEFT VENTRICLE AND THE AORTA IN MAN.

1979

5. Geirmund Unsgaard: CYTOSTATIC AND IMMUNOREGULATORY ABILITIES OF HUMAN BLOOD MONOCYTES CULTURED IN VITRO

1980

6. Størker Jørstad: URAEMIC TOXINS
7. Arne Olav Jenssen: SOME RHEOLOGICAL, CHEMICAL AND STRUCTURAL PROPERTIES OF MUCOID SPUTUM FROM PATIENTS WITH CHRONIC OBSTRUCTIVE BRONCHITIS

1981

8. Jens Hammerstrøm: CYTOSTATIC AND CYTOLYTIC ACTIVITY OF HUMAN MONOCYTES AND EFFUSION MACROPHAGES AGAINST TUMOR CELLS *IN VITRO*

1983

9. Tore Syversen: EFFECTS OF METHYLMERCURY ON RAT BRAIN PROTEIN.
10. Torbjørn Iversen: SQUAMOUS CELL CARCINOMA OF THE VULVA.

1984

11. Tor-Erik Widerøe: ASPECTS OF CONTINUOUS AMBULATORY PERITONEAL DIALYSIS.
12. Anton Hole: ALTERATIONS OF MONOCYTE AND LYMPHOCYTE FUNCTIONS IN REALTION TO SURGERY UNDER EPIDURAL OR GENERAL ANAESTHESIA.
13. Terje Terjesen: FRACTURE HEALING AN STRESS-PROTECTION AFTER METAL PLATE FIXATION AND EXTERNAL FIXATION.
14. Carsten Saunte: CLUSTER HEADACHE SYNDROME.
15. Inggard Lereim: TRAFFIC ACCIDENTS AND THEIR CONSEQUENCES.
16. Bjørn Magne Eggen: STUDIES IN CYTOTOXICITY IN HUMAN ADHERENT MONONUCLEAR BLOOD CELLS.
17. Trond Haug: FACTORS REGULATING BEHAVIORAL EFFECTS OG DRUGS.

1985

18. Sven Erik Gisvold: RESUSCITATION AFTER COMPLETE GLOBAL BRAIN ISCHEMIA.
19. Terje Espevik: THE CYTOSKELETON OF HUMAN MONOCYTES.
20. Lars Bevanger: STUDIES OF THE Ibc (c) PROTEIN ANTIGENS OF GROUP B STREPTOCOCCI.
21. Ole-Jan Iversen: RETROVIRUS-LIKE PARTICLES IN THE PATHOGENESIS OF PSORIASIS.
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23. Per I. Lundmo: ANDROGEN METABOLISM IN THE PROSTATE.

1986

24. Dagfinn Berntzen: ANALYSIS AND MANAGEMENT OF EXPERIMENTAL AND CLINICAL PAIN.
25. Odd Arnold Kildahl-Andersen: PRODUCTION AND CHARACTERIZATION OF MONOCYTE-DERIVED CYTOTOXIN AND ITS ROLE IN MONOCYTE-MEDIATED CYTOTOXICITY.
26. Ola Dale: VOLATILE ANAESTHETICS.

1987

27. Per Martin Kleveland: STUDIES ON GASTRIN.
28. Audun N. Øksendal: THE CALCIUM PARADOX AND THE HEART.
29. Vilhjalmur R. Finsen: HIP FRACTURES

1988

30. Rigmor Austgulen: TUMOR NECROSIS FACTOR: A MONOCYTE-DERIVED REGULATOR OF CELLULAR GROWTH.
31. Tom-Harald Edna: HEAD INJURIES ADMITTED TO HOSPITAL.
32. Joseph D. Borsi: NEW ASPECTS OF THE CLINICAL PHARMACOKINETICS OF METHOTREXATE.

33. Olav F. M. Sellevold: GLUCOCORTICOIDS IN MYOCARDIAL PROTECTION.
34. Terje Skjærpe: NONINVASIVE QUANTITATION OF GLOBAL PARAMETERS ON LEFT VENTRICULAR FUNCTION: THE SYSTOLIC PULMONARY ARTERY PRESSURE AND CARDIAC OUTPUT.
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37. Anna Midelfart: STUDIES OF THE MECHANISMS OF ION AND FLUID TRANSPORT IN THE BOVINE CORNEA.
38. Eirik Helseth: GROWTH AND PLASMINOGEN ACTIVATOR ACTIVITY OF HUMAN GLIOMAS AND BRAIN METASTASES - WITH SPECIAL REFERENCE TO TRANSFORMING GROWTH FACTOR BETA AND THE EPIDERMAL GROWTH FACTOR RECEPTOR.
39. Petter C. Borchgrevink: MAGNESIUM AND THE ISCHEMIC HEART.
40. Kjell-Arne Rein: THE EFFECT OF EXTRACORPOREAL CIRCULATION ON SUBCUTANEOUS TRANSCAPILLARY FLUID BALANCE.
41. Arne Kristian Sandvik: RAT GASTRIC HISTAMINE.
42. Carl Bredo Dahl: ANIMAL MODELS IN PSYCHIATRY.

1989

43. Torbjørn A. Fredriksen: CERVICOGENIC HEADACHE.
44. Rolf A. Walstad: CEFTAZIDIME.
45. Rolf Salvesen: THE PUPIL IN CLUSTER HEADACHE.
46. Nils Petter Jørgensen: DRUG EXPOSURE IN EARLY PREGNANCY.
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55. Eva Hofsli: TUMOR NECROSIS FACTOR AND MULTIDRUG RESISTANCE.
56. Helge S. Haarstad: TROPHIC EFFECTS OF CHOLECYSTOKININ AND SECRETIN ON THE RAT PANCREAS.
57. Lars Engebretsen: TREATMENT OF ACUTE ANTERIOR CRUCIATE LIGAMENT INJURIES.
58. Tarjei Rygnestad: DELIBERATE SELF-POISONING IN TRONDHEIM.
59. Arne Z. Henriksen: STUDIES ON CONSERVED ANTIGENIC DOMAINS ON MAJOR OUTER MEMBRANE PROTEINS FROM ENTEROBACTERIA.
60. Steinar Westin: UNEMPLOYMENT AND HEALTH: Medical and social consequences of a factory closure in a ten-year controlled follow-up study.
61. Ylva Sahlin: INJURY REGISTRATION, a tool for accident preventive work.
62. Helge Bjørnstad Pettersen: BIOSYNTHESIS OF COMPLEMENT BY HUMAN ALVEOLAR MACROPHAGES WITH SPECIAL REFERENCE TO SARCOIDOSIS.
63. Berit Schei: TRAPPED IN PAINFUL LOVE.
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1991

65. Kåre Bergh: APPLICATIONS OF ANTI-C5a SPECIFIC MONOCLONAL ANTIBODIES FOR THE ASSESSMENT OF COMPLEMENT ACTIVATION.
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67. Olbjørn Klepp: NONSEMINOMATOUS GERM CELL TESTIS CANCER: THERAPEUTIC OUTCOME AND PROGNOSTIC FACTORS.

68. Trond Sand: THE EFFECTS OF CLICK POLARITY ON BRAINSTEM AUDITORY EVOKED POTENTIALS AMPLITUDE, DISPERSION, AND LATENCY VARIABLES.
69. Kjetil B. Åsbakk: STUDIES OF A PROTEIN FROM PSORIATIC SCALE, PSO P27, WITH RESPECT TO ITS POTENTIAL ROLE IN IMMUNE REACTIONS IN PSORIASIS.
70. Arnulf Hestnes: STUDIES ON DOWN'S SYNDROME.
71. Randi Nygaard: LONG-TERM SURVIVAL IN CHILDHOOD LEUKEMIA.
72. Bjørn Hagen: THIO-TEPA.
73. Svein Anda: EVALUATION OF THE HIP JOINT BY COMPUTED TOMOGRAMPHY AND ULTRASONOGRAPHY.

1992

74. Martin Svartberg: AN INVESTIGATION OF PROCESS AND OUTCOME OF SHORT-TERM PSYCHODYNAMIC PSYCHOTHERAPY.
75. Stig Arild Slørdahl: AORTIC REGURGITATION.
76. Harold C Sexton: STUDIES RELATING TO THE TREATMENT OF SYMPTOMATIC NON-PSYCHOTIC PATIENTS.
77. Maurice B. Vincent: VASOACTIVE PEPTIDES IN THE OCULAR/FOREHEAD AREA.
78. Terje Johannessen: CONTROLLED TRIALS IN SINGLE SUBJECTS.
79. Turid Nilsen: PYROPHOSPHATE IN HEPATOCYTE IRON METABOLISM.
80. Olav Haraldseth: NMR SPECTROSCOPY OF CEREBRAL ISCHEMIA AND REPERFUSION IN RAT.
81. Eiliv Brenna: REGULATION OF FUNCTION AND GROWTH OF THE OXYNTIC MUCOSA.

1993

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