Fibromyalgia In Men

The abstracts in this collection have been selected by the National Fibromyalgia Partnership (NFP) from the extensive literature on fibromyalgia and related conditions so as to cover a wide range of subjects in limited space. Entries are included in alphabetical order by lead author. To obtain the full text of one or more of the articles to which these abstracts refer, visit a medical library, use a document delivery service, or check with your local library about an interlibrary loan of material. Some journals also offer article reprints for sale on their websites. Some may offer a free download of a given article. For more information on fibromyalgia or the NFP, visit: www.fmpartnership.org or send a self-addressed, stamped envelope to:

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BATMAZ I, SARIYILDIZ MA, DILEK B, INANIR A, DEMIRCAN Z, HATIPOGLU N, ATAR M, CEVIK R
Sexuality Of Men With Fibromyalgia: What Are The Factors That Cause Sexual Dysfunction?

The purpose of the present study is to compare male patients with the fibromyalgia syndrome (FMS) with healthy individuals in terms of the sexual function. For the purposes of this study, 37 sexually active male FMS patients and 30 healthy controls were enrolled. The demographic data of the patients were recorded, and the widespread pain observed in FMS was graded with the help of the visual analogue scale (VAS 0-100 mm). Sexual function was assessed according to the international index of erectile function (IIEF) scoring system. The disease-related quality of life was measured with the help of the Short Form-36 quality of life questionnaire (SF-36 QoL). Levels of anxiety and depression observed in the patients were graded through the Hospital Anxiety and Depression Scale (HADS). Patients with FMS had significantly lower scores in each of the five domains of the IIEF in comparison with the healthy control group ($p < 0.001$). Patients' age and widespread pain were negatively correlated with the IIEF scores ($p < 0.05$). The SF-36 scores (physical functioning, role limitations due to physical problems, pain and general health perception) were observed to be positively correlated with the IIEF scores ($p < 0.05$). No significant relationship has been observed between the scores obtained from the domains of IIEF and the psychological status ($p > 0.05$). FMS leads to an impairment in the sexual function in male patients, which is especially strongly associated with the age, widespread pain and the quality of life.
***Rheumatol Int* (2013 May) 33(5):1265-70.**

BUSKILA D, NEUMANN L, ALHOASHLE A, ABU-SHAKRA M
Fibromyalgia Syndrome In Men

OBJECTIVE: Fibromyalgia syndrome (FMS) is uncommon in men and data on its characteristics and severity are limited. The current study was undertaken to determine whether the clinical

characteristics and the spectrum of this disorder are similar in men and women. METHODS: Forty men with FMS were matched with 40 women by age and educational level. All subjects were asked about the presence and severity (assessed by visual analog scale) of FMS symptoms; a count of 18 tender points was conducted by thumb palpation, and tenderness thresholds were measured by dolorimetry. Psychological status was assessed by the anxiety and depression subscales of the revised Arthritis Impact Measurement Scales. Quality of life was evaluated by two scales, QOL-16 and SF-36, and physical function was measured by the Fibromyalgia Impact Questionnaire. RESULTS: Men with FMS reported more severe symptoms than women, decreased physical function, and lower quality of life. Women had lower tender thresholds than men; however their mean point counts were similar. CONCLUSION: Although FMS is uncommon in men, its health outcome in our study population was worse than in women. Further studies in larger samples and in diverse ethnocultural populations are needed to confirm this observation.
Semin Arthritis Rheum (2000 Aug) 30(1):47-51.

COHEN H, NEUMANN L, ALHOSSHLE A, KOTLER M, ABU-SHAKRA M, BUSKILA D
Abnormal Sympathovagal Balance In Men With Fibromyalgia

OBJECTIVE: It is possible that there are differences in clinical manifestations between men and women with fibromyalgia syndrome (FM), especially in autonomic dysfunction; we assessed the interaction between the sympathetic and parasympathetic systems in postural change in men with FM using power spectral analysis (PSA) of heart rate variability (HRV), and investigated the pathogenesis of the orthostatic intolerance. METHODS: We studied 19 men with FM and 19 controls matched for age and sex. A high-resolution electrocardiogram was obtained in supine and standing postures during complete rest. Spectral analysis of R-R intervals was done by the fast Fourier transform algorithm. RESULTS: PSA of HRV revealed that men with FM at rest are characterized by sympathetic hyperactivity and concomitantly reduced parasympathetic activity. During postural changes, male patients demonstrated an abnormal sympathovagal response. These results provide the physiological basis for the orthostatic intolerance in men with FM. CONCLUSION: This report of autonomic dysfunction in men with FM revealed an abnormal autonomic response to orthostatic stress. This abnormality may have implications regarding the symptoms of FM.
***J Rheumatol* (2001 Mar) 28(3):581-9.**

DANNECKER EA, KNOLL V, ROBINSON ME
Sex Differences In Muscle Pain: Self-Care Behaviors And Effects On Daily Activities

Women have a higher prevalence of fibromyalgia and myofascial pain than men, but sex differences in muscle pain are inconsistently detected. We examined sex differences in ratings and effects of recalled and experimentally-induced muscle pain. In study 1 (n=188), participants completed a questionnaire about recalled muscle pain. In study 2 (n = 55), participants described muscle pain from an exercise stimulus across 3 days by telephone. Muscle pain ratings, self-care behaviors for muscle pain, and effects of muscle pain on activities were measured. No significant sex differences were found except that women tended to view exercise as more effective for decreasing muscle pain than men ($F(1, 187) = 5.43$, $P = .02$, eta(2) =03), fewer women performed exercise for induced muscle pain than men, and women's activity interference was significantly higher than men's at the third day after exercise ($F(2, 42) = 6.54$, $P = .01$, eta(2) = .14). These findings support the absence of meaningful sex differences in muscle pain ratings. However, additional investigations are needed that consider the daily activities completed by people and the prevalence and incidence of performing a wide range of self-care behaviors for pain. PERSPECTIVE: These studies support that sex differences

are not present in recalled and experimentally-induced muscle pain ratings. Therefore, we must be cautious about generalizing the musculoskeletal pain literature to muscle pain. Additional research is needed to interpret potential sex differences in self-care behaviors for muscle pain and activity interference from muscle pain.
***J Pain* (2008 Mar) 9(3):200-9.**

GREEN CR, HART-JOHNSON T
The Impact Of Chronic Pain On The Health Of Black And White Men

Persistent pain, disability, and depression are hallmarks for chronic pain. While disparities based upon race, gender, and class are documented, little is known about pain disparities in minority men. This investigation examines black (6.2%) and white (93.8%) men (N=1650) presenting for initial assessment at a tertiary care pain center. Racial comparisons utilized analysis of variance; all variables of interest were then placed in a theoretical model using path analysis. The model included race, age, education, neighborhood income, marital status, litigation, substance use, and high blood pressure as predictors and pain, depression, affective distress, posttraumatic stress disorder (PTSD), and disability as outcomes. Black race was associated with lower neighborhood income, education and marriage rates, and higher rates of litigation and high blood pressure. Black men also had higher pain (affective and miscellaneous), disability, and depression. Path analysis found black race was a direct predictor of greater pain, and through pain, was an indirect predictor of depression, affective distress, PTSD, and disability. Path analysis confirmed the complexity of relationships and supported using techniques to understand these relationships. Our data highlight disparities in the pain experience for black men. They also elucidate potential mechanisms through which disparities work in vulnerable and understudied populations.
***J Natl Med Assoc* (2010 Apr) 102(4):321-31.**

HEREDIA-JIMENEZ JM, SOTO-HERMOSO VM
Kinematics Gait Disorder In Men With Fibromyalgia

The aim of this study was to assess the kinematics disorder of gait in men with fibromyalgia. We studied 12 male with fibromyalgia and 14 healthy men. Each participant of the study walked five trials along a 18.6-m walkway. Fibromyalgia patients completed a Spanish version of Fibromyalgia Impact Questionnaire. Significant differences between fibromyalgia and control groups were found in velocity, stride length, and cadence. Gait parameters of men affected by fibromyalgia were impaired when compared to those of healthy group due to bradykinesia. According to previous studies to assess gait variables in female patients, the male with fibromyalgia also showed lower values of velocity, cadence, and stride length than healthy group but not reported significant differences in swing, stance, single, or double support phase.
***Rheumatol Int* (2014 Jan) 34(1):63-5.**

HIRSH AT, WAXENBERG LB, ATCHISON JW, GREMILLION HA, ROBINSON ME
Evidence For Sex Differences In The Relationships Of Pain, Mood, And Disability

Disability demonstrates strong univariate associations with pain and negative mood. These relationships are more complex at the multivariate level and might be further complicated by sex differences. We investigated sex differences in the relationships of pain and negative mood to overall disability and to disability in specific functional domains. One hundred ninety-seven consecutive

patients with low back, myofascial, neck, arthritis, and fibromyalgia pain were recruited from university pain clinics and completed measures of disability and negative mood. Overall disability and disability in voluntary activities were significantly associated with pain and negative mood (factor score) for both sexes. Significant sex differences emerged in the strength of the disability-mood relationship, with women evincing a stronger relationship. Disability in obligatory activities was also significantly related to pain and negative mood for both sexes; however, there were no sex differences in the strength of these relationships. Mediation analyses indicated that, in men, negative mood partially mediated the relationship between pain and both overall disability and disability in voluntary activities; mediation was not supported for disability in obligatory activities. In women, negative mood fully mediated the relationship between pain and all 3 types of disability. These data suggest that disability is more directly related to pain in men. In women, the effect of pain on disability appears to operate through negative mood. PERSPECTIVE: Results of this study demonstrate that sex differences exist in the relationships of pain, mood, and disability. Men and women might thus benefit from treatment interventions that differentially target these variables.
***J Pain* (2006 Aug) 7(8):592-601.**

PAULSON M, NORBERG A, SODERBERG S

Living In The Shadow Of Fibromyalgic Pain: The Meaning Of Female Partners' Experiences

The aim of this study was to elucidate the meaning of being a female partner living with a man with fibromyalgic pain. Fourteen partners were interviewed about the meaning of their experiences, using a narrative approach. A phenomenological hermeneutic method, inspired by the French philosopher Ricoeur, was used to interpret the interview text. The structural analysis is presented in three major themes: struggling to give support and comfort, struggling to keep going on, and experiencing lack of understanding and support. The findings elucidate that the meaning of living with a man with fibromyalgic pain meant living a life strongly influenced by the man's illness and in the shadow of the man's pain. Taking daily life for granted was interrupted and restricted family and social life. Prominent in this study was the frustration partners felt as a result of men's reluctance to communicate. This led to feelings of being excluded from men's emotions. The responsibility day in and day out meant that women's own caring and tenderness were replaced, which brought about an almost constant sense of fatigue. Women became drained by the long duration of men's illness. This gave them a feeling of being alone, although they were a couple. Gaining comfort outside the family helped partners to reach a new insight and appreciation for life, which was viewed from a renewed perspective. This involved feelings of both togetherness and separateness in the relationship. The findings also consider the lack of support from the health care system for female partners living with men with fibromyalgic pain.
***J Clin Nurs* (2003 Mar) 12(2):235-43.**

PAULSON M, DANIELSON E, SODERBERG S

Struggling For A Tolerable Existence: The Meaning Of Men's Lived Experiences Of Living With Pain Of Fibromyalgia Type

Chronic pain is a major health problem in Sweden because of its consequences in daily life. Fourteen men with fibromyalgia-type pain were interviewed regarding their experiences. A phenomenological hermeneutic method was used to interpret the transcribed interviews. Three major themes emerged: experiencing the body as an obstruction, being a different man, and striving to endure. Overall, the meaning of men's lived experience of chronic pain was experienced as change in the body, self, and relationships. Striving to live life required achieving balance during both calm and difficult phases of

the illness--struggling for a tolerable existence. Information from this study could provide guidelines for health care staff members to give empathic and supportive care to men living with a long-term illness.
***Qual Health Res* (2002 Feb) 12(2):238-49.**

RICO-VILLADEMOROS F, CALANDRE EP, RODRIGUEZ-LÓPEZ CM, GARCÍA-CARRILLO J, BALLESTEROS J, HIDALGO-TALLÓN J, GARCÍA-LEIVA JM
Sexual Functioning In Women And Men With Fibromyalgia

INTRODUCTION: Sexual dysfunction has been associated with several chronic pain conditions, including fibromyalgia. However, the literature on sexual functioning in patients with fibromyalgia is limited and restricted to female patients. AIM: The aim of our study was to evaluate sexual functioning in female and male patients with fibromyalgia compared with healthy controls. MAIN OUTCOME MEASURE: Sexual functioning was evaluated using the Spanish validated version of the Changes in Sexual Functioning Questionnaire (CSFQ). METHODS: We used baseline data from several studies performed in adult patients with fibromyalgia (American College of Rheumatology criteria) of both sexes in which sexual functioning was included in the clinical evaluation. As a control group, we selected an age-matched group of healthy subjects. We calculated the proportion of patients exhibiting sexual dysfunction (i.e., a CSFQ total score equal to or lower than 41 in females and 47 in males). CSFQ scores for patients and controls were compared, and the effect sizes for the difference of means were calculated. RESULTS: Our sample comprised 293 patients with fibromyalgia (276 females and 17 males) and 86 healthy controls (72 females and 14 males). The frequency of sexual dysfunction was significantly higher in patients with fibromyalgia than in controls for both females (86.9% vs. 23.6%; relative risk [RR] 3.7, 95% confidence interval [CI], 2.4-5.6) and males (76.5% vs. 6.7%; RR 11.5, 95% CI, 1.7-77.6). We found significantly worse sexual functioning for all dimensions in both female and male patients with fibromyalgia. Effect sizes for the difference in mean scores of the CSFQ were large overall and for all dimensions in both females and males. CONCLUSION: Our results show that sexual dysfunction is common in patients with fibromyalgia. The disease seems to deeply affect all dimensions of sexual functioning in both females and males.
***J Sex Med* (2012 Feb) 9(2):542-9.**

SALLINEN M, MENGSHOEL AM
"I Just Want My Life Back!" - Men's Narratives About Living With Fibromyalgia

BACKGROUND: Fibromyalgia is characterized by chronic widespread pain and an array of other symptoms. It is less common among men than among women and the results concerning the severity of men's symptoms are contradictory. The purpose of this study was to elucidate the impacts of fibromyalgia on men's daily life and work ability. METHODS: The data were collected through life story interviews of five men with fibromyalgia. RESULTS: The results of a narrative analysis are presented in a form of two model narratives: "Adjusting the life to match the illness" and "Being imprisoned by the pain". The first narrative is a description of finding a balance between the illness and wellness, whereas the second is an account of debilitating symptoms, unsuccessful treatment, and rehabilitation interventions. CONCLUSION: The results suggest that adjusting one's activities may help to manage the symptoms and to support work ability in many cases, but for some patients the experience of feeling healthy or pain free might be nothing but a fading memory. Narrative approach is well applicable to rehabilitation of patients with fibromyalgia: an illness narrative may help the patient and professionals to understand the situation better and to set realistic and relevant goals for

rehabilitation. Implications for rehabilitation In addition to chronic pain, men with fibromyalgia suffer from daytime tiredness and cognitive challenges that substantially interfere with their work ability and daily functioning. Vocational rehabilitation interventions, including e.g., adjustments of work tasks and hours, should be started early on to support work ability. The results indicate that psychosocial support is needed to improve health related quality of life of patients with severe and complex symptoms, especially if return-to-work is not an option. Men with fibromyalgia seem to lack peer support both in face-to-face groups and in on-line groups. "All-male" support groups could be explored in rehabilitation settings in the future. Using a narrative approach in rehabilitation might result in a shared understanding of the patient's situation. This could help the professionals to set more individual, realistic, and relevant goals for rehabilitation, which in turn might improve rehabilitation outcomes.

***Disabil Rehabil* (2017 Oct 26):1-8.**

STAUD R, ROBINSON ME, VIERCK CJ, PRICE DD

Diffuse Noxious Inhibitory Controls (DNIC) Attenuate Temporal Summation Of Second Pain In Normal Males But Not In Normal Females Or Fibromyalgia Patients

Diffuse noxious inhibitory control (DNIC) is part of a central pain modulatory system that relies on spinal and supraspinal mechanisms. Previous studies have shown that fibromyalgia (FMS) patients are lacking DNIC effects on experimental pain, compared to normal control (NC) subjects. Because DNIC has a greater effect on second pain than on first pain, we hypothesized that wind-up (WU) of second pain should be attenuated by a strong conditioning stimulus. Thus, we compared DNIC's effect on WU in three groups of subjects: 11 NC males, 22 NC females, and 11 FMS females. To separately assess the contributions of distraction related mechanisms to inhibition of second pain, we designed the experiment in such a way that directed the subjects' attention to either the test or conditioning stimulus. Repeated heat taps to the thenar surface of the right hand were used as test stimuli to generate WU of second pain. Immersion of the left hand into a hot water bath was the conditioning stimulus. As previous experiments have shown, DNIC requires a strong conditioning stimulus for pain attenuation, which may be at least partly dependent on a distraction effect. DNIC significantly inhibited thermal WU pain in normal male subjects, but adding distraction to the DNIC effect did not increase the extent of this inhibition. In contrast, neither DNIC nor DNIC plus distraction attenuated thermal WU pain in female NCs. DNIC plus distraction, but not DNIC alone, produced significant inhibition of thermal WU pain in female FMS patients. Our results indicate that DNIC effects on experimental WU of second pain are gender specific, with women generally lacking this pain-inhibitory mechanism.

***Pain* (2003 Jan) 101(1-2):167-74.**

TAJAR A, O'NEILL TW, LEE DM, et al.

The Effect Of Musculoskeletal Pain On Sexual Function In Middle- Aged And Elderly European Men: Results From The European Male Ageing Study

OBJECTIVE: To determine whether musculoskeletal pain was associated with impaired sexual function in a population sample of middle-aged and older men. METHODS: The European Male Ageing Study (EMAS), a multicenter population-based study of men aged 40-79 years, was used to investigate this hypothesis. A questionnaire asked about the presence and duration of musculoskeletal pain, allowing subjects to be classified into 1 of 3 groups: those reporting chronic widespread pain (CWP), those reporting pain but not CWP ("some pain"), and those with no pain. Subjects completed a sexual function questionnaire from which 3 domains were considered: overall sexual functioning

(OSF), sexual functioning-related distress (SFD), and change in sexual functioning compared to 1 year ago (CSF). RESULTS. A total of 3206 men [mean age 60 (SD11) yrs.] had complete data on pain status. Of these, 8.7% had CWP and 50.34% had "some pain." Pain was associated with lower OSF, and higher SFD and CSF scores. After adjustment for putative confounding factors, the associations became non-significant with OSF and CSF but persisted for SFD. Associations between pain status and some items within the sexual functioning domains, including frequency of sexual intercourse, frequency of morning erections, sexual desire, and orgasm were also significant, although these associations varied by pain status. CONCLUSION: Musculoskeletal pain is associated with several aspects of sexual functioning. These relationships differ depending on the extent of the pain (chronic or not) and are also largely confounded by other health-related factors, primarily depression.
***J Rheumatol* (2011 Feb) 38(2):370-7.**

YUNUS MB, INANICI F, ALDAG JC, MANGOLD RF

Fibromyalgia In Men: Comparison Of Clinical Features With Women

OBJECTIVE: To describe possible differences between male and female patients with fibromyalgia syndrome (FM) in their clinical manifestations. METHODS: Five hundred thirty-six consecutive patients with FM (469 women, 67 men) seen in a university rheumatology clinic and 36 healthy men without significant pain seen in the same clinic were included in the study. Data on demographic and clinical features were gathered by a standard protocol. Tender point examination was performed by the same physician. Level of significance was set at $p < \text{or} = 0.01$. RESULTS: Several features were significantly ($p < \text{or} = 0.01$) milder or less common among men than women, including number of tender points (TP), TP score, "hurt all over," fatigue, morning fatigue, and irritable bowel syndrome (IBS). The total number of symptoms was also fewer among men and approached significance ($p = 0.02$) by parametric test, but reached significance ($p = 0.001$) by nonparametric analysis. All clinical and psychological symptoms as well as TP were significantly ($p< 0.01$) more common or greater in male patients with FM than healthy male controls, with the exception of IBS ($p = 0.03$). Patient assessed global severity of illness, Health Assessment Questionnaire disability score, and pain severity were similar in both sexes. CONCLUSION: Male patients with FM had fever [fewer?] symptoms and fewer TP, and less common "hurt all over," fatigue morning fatigue, and IBS, compared with female patients. Stepwise logistic regression showed significant differences between men and women in number of TP ($p < 0.001$).
***J Rheumatol* (2000 Feb) 27(2):485-490.**