

Arthritis (RA) group with a clinical classification category of CCC 202. They were matched with an equal number of respondents without RA as controls in order to minimize the sample selection bias, using Greedy Match Propensity Score Matching. Pre-disposing, enabling and need variables were matched using Chi-square tests for categorical variables and t-tests for continuous variables in SAS, version 9. Health-related quality of life instruments used were the Physical Component Summary (PCS-12) and the Mental Component Summary (MCS-12) of the SF-12 Health Survey and the EuroQol 5D index. T-tests in STATA (R) were used to measure group differences. **RESULTS:** Patients were statistically matched on nine of ten variables. The mean (SE) PCS-12 scores for the RA and Non-RA groups were 34.25 (1.03) and 45.46 (1.07). The mean (SE) MCS-12 scores for the RA and Non-RA groups were 47.50 (1.01) and 51.14 (0.83). The mean (SE) EQ-5D index scores for the RA and Non-RA groups were 0.74 (0.02) and 0.86 (0.01). All lower scores were significant at an a priori alpha value of 0.05. **CONCLUSIONS:** Lower scores on all measures indicate that non-institutionalized adults with self-reported Rheumatoid Arthritis (RA) have a significantly lower health-related quality of life.

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EVALUATION OF FIBROMYALGIA PATIENTS IN A CLINICAL SETTING: A LITERATURE REVIEW. CAROLINE P. LOBO, BS, ANDREA PFALZGRAF, PHD, DUQUESNE UNIVERSITY, PITTSBURGH, PA, USA

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Fibromyalgia syndrome (FMS) is a multi-symptom disorder primarily characterized by pain. In addition to pain, other symptoms include fatigue, irritable bowel disorder, psychological disturbances like anxiety, depression, cognitive dysfunction etc. The ambiguity of the symptoms and their overlapping nature with other rheumatic disorders poses a huge problem in diagnosis. Meanwhile, patient's quality of life (QoL) is compromised and deteriorates further. Hence, a thorough exploration in a clinical setting is necessary. Generic instruments lack specificity, while the burgeoning symptom specific instruments present great respondent burden. Validated disease-specific instruments seem to offer the best medium for complete evaluation of FMS patients. **OBJECTIVES:** To identify available validated disease-specific instruments to enable a comprehensive evaluation of fibromyalgia patients in a clinical setting. The objective of this review is to provide clinicians and researchers with summarized information on the available instruments and aid them in diagnosis of this disorder. **METHODS:** A comprehensive literature review from January 1990 to June 2011 was conducted with the combination of following key words fibromyalgia, disease-specific, questionnaires, instruments etc. 58 articles that dealt with disease-specific instruments in FMS were identified of which 9 articles were included in the final review. **RESULTS:** Only nine disease-specific instruments were identified in literature which can be classified as: a) Diagnostic tools (2 instruments); b) QoL evaluation tools (6 instruments); and c) Disease knowledge assessment tools (1 instrument). Most instruments possess strong psychometric properties that have been tested in fibromyalgia patients. This review describes the instruments with respect to their psychometric properties, strengths, and limitations. **CONCLUSIONS:** These instruments can serve as supplementary aids to researchers and clinicians for screening, evaluating, and monitoring FMS patients.

PMS57

TOWARDS PATIENT-CENTERED TELEMEDICINE DESIGN: ESTIMATING PATIENTS' PREFERENCES OF TELEMEDICINE EXERCISE SERVICES USING A CONJOINT EXPERIMENT

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OBJECTIVES: Telemedicine is considered a potentially efficient and effective way to provide physical exercise therapy. To foster uptake of telemedicine exercise services and to improve treatment compliance, it is important that services address patients' needs and preferences. Therefore, this study examines patients' preferences of different telemedicine exercise services using a conjoint experiment. **METHODS:** Implemented as part of a larger survey, preferences were estimated using a choice-based conjoint experiment, spanning six relevant attributes of telemedicine exercise services. Attributes were identified by means of qualitative interviews and an expert focus group and included a) exercise mode and location; b) presence of monitoring and feedback technology; c) counseling type; d) counseling frequency; e) flexibility of exercise hours; and f) willingness to accept as expressed in terms of a reduction in healthcare insurance premiums. Each patient was presented with 15 choice tasks, consisting of two exercise service profiles and an opt-out scenario. A bivariate probit regression analysis was used to estimate preferences. **RESULTS:** Hundred and three patients were included in the analysis after checking for patients' understanding of the questionnaire using a dominant option validity check. The most important attribute levels were individual exercise at gym, the use of monitoring and feedback technology, 100% face-to-face counseling, counseling every session, flexible exercise hours and 45% health care insurance reduction. Assistive telemedicine was preferred the most, over conventional treatment and home-based telemedicine. Home-based telemedicine was preferred the least and a health care insurance reduction of 181 euro would increase its utility to the level of conventional treatment. **CONCLUSIONS:** Results show that patient-centered telemedicine exercise services should integrate feedback and monitoring technology during treatment and emphasize the importance of supplementary face-to-face counseling sessions. Offering health care insurance reduction could be a way to further foster uptake of these future telemedicine services.

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BURDEN OF DISEASE IN PATIENTS WITH DIAGNOSED RHEUMATOID ARTHRITIS IN BRAZIL: RESULTS FROM 2011 NATIONAL HEALTH AND WELLNESS SURVEY (NHWS)

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OBJECTIVES: Rheumatoid arthritis (RA) is an incapacitating disease with prevalence estimates ranging from 0.5% to 1% in Brazil, which demands early diagnose and adequate treatment to slow down its progression. This study is aimed to assess co-morbidity, quality of life (QoL), work/productivity loss, and medical resource utilization in patients diagnosed with RA in Brazil. **METHODS:** A total of 12,000 individuals' (age 18+) self-reported data were collected from 2011 National Health and Wellness Survey (NHWS) in Brazil, a cross-sectional representative sample of the adult population. QoL was measured by the physical component score (PCS) and mental component score (MCS) of the Short Form-12 (SF-12). Loss of work/productivity was measured by the validated Work Productivity and Activity Impairment instrument. Medical resource utilization was measured by health care provider utilization, emergency room visits and hospitalization in the past 6 months. **RESULTS:** Of the 12,000 respondents, 65 (0.5%) had been diagnosed with RA, from which 58.0% were female. 45% of RA diagnosed group reported RA related problems once a month or less, 27% say their problems occur daily, and 28% experience problems more often than once per month, but not daily. On average, RA patients have been diagnosed for 14 years. RA diagnosed group was more likely to suffer from the co-morbidities of pain (59% vs.23%) and fibromyalgia (11% vs.1%), was more likely to visit an emergency room in the past 6 months (41% vs.21%), presented lower mean PCS scores (40% vs. 50%) and had higher percentages of absenteeism (9.2% vs.6.5%), presenteeism (43.3% vs 14.5%), work productivity loss (47% vs.18.5%) and activity impairment (46.9% vs.20.3%) when compared to the group not diagnosed with RA. All mentioned differences were statistically significant ($p < 0.05$). **CONCLUSIONS:** Based on results from the Brazil NHWS, patients diagnosed with RA suffer from impairment in QoL, work/productivity loss and more co-morbidities. Findings indicate there is still an unmet medical need in RA patients in Brazil.

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BURDEN OF DISEASE IN WOMEN WITH OSTEOPOROSIS IN BRAZIL: RESULTS FROM 2011 NATIONAL HEALTH AND WELLNESS SURVEY (NHWS)

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OBJECTIVES: Poor nutrition, low dietary calcium intake, vitamin D deficiency, insufficient exercise, smoking and alcohol usage are modifiable risk factors that directly affect bones and are associated with osteoporosis. In Brazil, there are no solid estimates of the magnitude of the condition, due to being a country with a very heterogeneous racial, cultural and economic background. This study is aimed to assess co-morbidity, quality of life (QoL), work/productivity loss, and medical resource utilization in women with osteoporosis in Brazil. **METHODS:** A total of 12,000 individuals' (age 18+) self-reported data were collected from 2011 National Health and Wellness Survey (NHWS) in Brazil. QoL was measured by the physical component score (PCS) and mental component score (MCS) of the Short Form-12 (SF-12). Loss of work/productivity was measured by the validated Work Productivity and Activity Impairment instrument. Medical resource utilization was measured by health care provider, emergency room visits and hospitalization in the past six months. **RESULTS:** Of the 6017 female respondents, 179 (3.0%) were diagnosed with osteoporosis (with or without osteopenia) and 156 (1.8%) were diagnosed with osteopenia only. Average age for women diagnosed with osteoporosis/osteopenia was 59.6 years. Diagnosed osteoporosis/osteopenia group reported more co-morbidities (headache 44%, pain 36%, insomnia 26%, migraine 23%, depression 22%, arthritis 22%), lower mean scores of PCS (42.6 vs.47.33) and MCS (45.7 vs. 50.3), more patients visited healthcare providers (93% vs. 79%), and a higher percentage were using any cost-saving strategy (55% vs. 37%) over the past 6 months compared to non-osteoporosis/osteopenia group. Furthermore, osteoporosis/osteopenia group reported 35.8% impairment in daily activity compared to 23.0% in non-osteoporosis/osteopenia group. All comparisons were statistically significant at $p < 0.05$. **CONCLUSIONS:** Based on results from the Brazil NHWS, women diagnosed with osteoporosis/osteopenia suffer from impairment in QoL, work/productivity loss, greater usage of health care resources and more co-morbidities. Findings indicate there is still an unmet medical need in osteoporosis/osteopenia patients in Brazil.

PMS60

INFLIXIMAB THERAPY IMPROVES THE QUALITY OF LIFE OF ANKYLOSING SPONDYLITIS PATIENTS IN CHINA

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OBJECTIVES: To measure the quality of life (QoL) in ankylosing spondylitis (AS) patients treated with Infliximab in China. **METHODS:** Patients' self-reported data were collected from a longitudinal survey which was conducted between June 10, 2009 and October 18, 2011 in AS patients at 40 urban hospitals in 23 cities in China. QoL was measured by Short Form-12 (SF-12) and each follow-up visit up to 8 visits. **RESULTS:** Of the 609 survey respondents, 13.0% were treated with Infliximab (experienced-Infliximab group (EIG)) at baseline and follow ups, while 87.0% were not treated with Infliximab at baseline but went on Infliximab treatment at the follow ups (new-Infliximab group (NIG)). These two groups had no significant difference with respect to age, gender and duration. Comparing with those in the NIG at