erature Analysis and Retrieval System Online, Excerpta Medica Database, Cumulative Index to Nursing and Allied Health literature, King's Fund, Allied and Alternative Medicine, Psychological Information Database, Applied Social Sciences Index and Abstracts, Ageline, Social Services Abstracts and British Nursing Index from earliest to November 2017. The PRISMA statement was used to guide the process. Observational, interventional and qualitative studies were included in the review and their methodological quality was assessed by two researchers using the Johanna Brigg Institute Checklists.

Results: Twenty-two studies, which were published in 2007 to 2016 (12 cross sectional; 5 cohort; and 5 qualitative) were included. Measurement of workplace limitation varied largely amongst the studies. High pain intensity, decreased physical functioning, physically demanding jobs, lack of opportunities to re-train, and lack of co-worker support were identified as important workplace factors associated with loss of productivity, and both presenteeism and absenteeism were predictive of job disruption and premature work loss. Function was identified as an important mediator of the impact of pain on work productivity, with physiotherapy and exercise classes that target pain and physical function³ and maximising work place support⁴ being recommended to prevent or reduce loss of work productivity. Qualitative studies emphasised the significance of physical environments, and social networks and support, recommending interventions to target individual needs to prevent future work loss.⁵

Conclusions: There is a wide range of scientific literature to suggest working people with OA are experiencing work instability due to pain, reduced physical functioning, activity limitation, and lack of co-worker and workplace support, placing them at increased risk of work disability. However, the measurement of workplace limitation varies greatly in this literature, making it hard to conduct empirical comparisons. Due to the temporal and biopsychosocial nature of work disability, there is a need for longitudinal studies to investigate the links between workplace factors and the onset and persistence of work instability in people with OA. Additionally, future qualitative studies should explore the role of personal and psychological factors, such as an individual's self-efficacy and coping skills, and the employer's perspectives on the provision of workplace support, to establish whether these potentially modifiable factors could influence work outcomes in people with OA.

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AB1424-HPR CORRELATES OF SLEEP IN RHEUMATOID ARTHRITIS: A SYSTEMATIC REVIEW

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Background: Over 50% of those with a diagnosis of Rheumatoid Arthritis (RA) experience poor sleep quality.^{Scott 2010} This may result in altered health-related quality of life in addition to decreased daytime function.

Objectives: The aim of this systematic review is to identify and compile an account of the correlates of poor sleep in those with RA.

Methods: Two reviewers carried out literature searches of nine electronic databases. Literature was chosen based on the application of eligibility criteria, implementation of quality assessment and in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Moher et al 2009

Results: Fifteen full-text studies were included in the review – fourteen of cross-sectional design, and one randomised controlled trial (RCT). This included 3283 participants with a diagnosis of RA in accordance with the American College of Rheumatology criteria. The outcome measures included in the literature were largely heterogeneous in nature and therefore a meta-analysis was deemed to be unsuitable.

Conclusions: There is evidence within the literature to suggest that interactions between pain, fatigue, depression and functional ability play a role in sleep quality in those with RA. However, longitudinal data is

required in order to determine the directionality of these relationships. The most prominent correlate of poor sleep is pain, with twelve studies identifying a positive association between the two variables. Conflicting evidence exists with regard to the association between sleep quality and disease activity, RA medications and patient demographics.

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HPR Interventions (educational, physical, social and psychological)

AB1425-HPR THE EFFECTS OF AEROBIC EXERCISE TRAINING ON PAIN AND DISABILITY FROM OSTEOARTHRITIS OF THE KNEE IN POSTMENOPAUSAL WOMEN

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Background: The prevalence, incidence and severity of osteoarthritis (OA) increases in women after menopause. It was indicated that, loss of oestrogen at menopause period was related to the increase in the risk of OA development. It was well documented that aerobic exercise training has positive effects on knee osteoarthritis symptoms and menopausal symptoms however we did not found study on the effects of aerobic training in postmenopausal women with knee osteoarthritis.

Objectives: Objective of this study was to evaluate the effects of aerobic exercise training on pain and disability in postmenopausal women with knee osteoarthritis

Methods: The study was approved by the Kirikale University Ethic Committee. 50 voluntary postmenopausal women aged 48–78 years, with stage 2–3 knee OA according to the Lawrence classification were recruited to the study. The clinical information (age, menopause age, duration of OA, etc.) of the patients were questioned.

The cases were randomly divided into two groups as control which was performed combine physiotherapy and treatment group. Combine physiotherapy lasted three weeks and included hot pack, short wave diathermy, transcutaneous electrical nerve stimulation (TENS) and home exercises. After completed treatment, physiotherapist asked the patients to perform home exercises two times every day in three weeks period.

In the treatment group, in addition to combine physiotherapy, walking training on the treadmill performed 5 days/week during 6 weeks. The training intensity was 50–70 maximal heart rate (220-age). 40 min total exercise duration, consisted of a five minute warm-up and cool-down, 30 min brisk walking.

Both groups were evaluated before and after 6 six weeks the treatment. Visual Analogue Scale (VAS) was used to the pain evaluation. Functional ability was assessed by Western Ontario and McMaster Osteoarthritis Index (WOMAC).

Statistical analyses were performed using SPSS version 16 software.

Results: It was not observed significant difference on age, body mass index, menopause age, menopause duration and VAS value, WOMAC scores (subscales of pain, stiffness and physical function) before the treatment. ($p > 0.05$).

After the treatment, VAS value, WOMAC all subscales' scores were significantly different in favour of treatment group ($p < 0.05$). It was found that, VAS value and WOMAC all subscales' scores improved in both groups after the treatment ($p < 0.05$).

Subscales of WOMAC' scores and VAS value showed a significant increase that corresponds to a large effect ($d > 0.8$) in the treatment group. In the control group, only VAS value showed a significant increase that corresponds to a large effect ($d > 0.8$), other increases on WOMAC subscales that corresponds to small and moderate effects ($d = 0.38–0.58$).

Conclusions: Aerobic exercise training which added to the combined physiotherapy may contribute to decrease of pain and disability in postmenopausal women with knee osteoarthritis.