

Effectiveness of Workplace Interventions for Treating Work-Related Rhinitis and Rhinosinusitis.

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ABSTRACT

INTRODUCTION: The impact of non-pharmacological interventions instituted at the workplace to alleviate symptoms and shorten the recovery process of work-related rhinitis and rhinosinusitis is not well-described. Workplace interventions for treating work related rhinitis and rhinosinusitis might be receiving, may be effective in alleviating symptoms. This review was conducted to assess the effects of workplace interventions on the severity of symptoms of rhinitis or rhinosinusitis. **METHODS:** MEDLINE, CENTRAL, EMBASE and PsycINFO using keywords and MeSH headings. Other databases searched were OSH UPDATE + FIRE, ClinicalTrials.gov and WHO International Clinical Trials Registry. Selection criteria: Randomised controlled trials, cluster-randomised controlled trials and controlled cohort before after studies. **RESULTS:** A total of 1506 records were screened and one study that recruited 80 office workers was eligible. The study examined the use of active air filter in the electrostatic cleaner in the office to see if it reduced nasal and sinus symptoms in the affected office workers. There were no clear differences in the severity of the airway symptoms, measured indirectly using a set of symptoms, in the participants who worked with active filter versus those without active filter (RR 0.68, 95%CI: 0.35, 1.32). When the participants' noses were examined closely for the size of congested area or volume, there were also no clear and consistent differences between the two groups of participants (RR 3.50, 95%CI: 1.30, 9.45). **CONCLUSION:** No clear conclusion can be made regarding the use of active filter in an electrostatic cleaner in the office in reducing the severity of rhinitis and/or rhinosinusitis among office workers.

KEYWORDS: workplace interventions, work-related rhinitis, work-related rhinosinusitis

Effects of IMB Based Lifestyle Intervention on Blood Pressure Among Pre-Hypertensive Patients in Maran, Pahang

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ABSTRACT

INTRODUCTION: Although evidence suggested that lifestyle interventions can reduce blood pressure, there is little information about feasibility of such interventions on pre-hypertensive patients using the Information, Motivation and Behavioural Skills Model. By introducing lifestyle modification using the IMB Model this may increase healthy behaviour practice and prevent elevation of blood pressure. **METHODS:** A cluster RCT was conducted at health clinics in Maran in which 410 participants from 10 clinics were randomly allocated into intervention and control group. The intervention arm received the lifestyle intervention and the control received the usual care. The primary outcome was change in SBP and DBP. Secondary outcome was changes in behavioural factors and IMB score. Non-parametric analysis was used to compare the median within and between groups at three months follow up. Multivariable analysis was analysed using GEE. **RESULTS:** At three months follow up there was reduction of 3.75mmHg of systolic blood pressure as compared to baseline ($p=0.01$) and sodium reduction by 68mg as compared to baseline ($p=0.001$). There were significant group changes in information, motivation and behavioural skills score ($p=0.001$). **DISCUSSION:** The intervention was effective in increasing knowledge, motivation and acquiring the behavioural skills on healthy lifestyle to reduce blood pressure but not able to look into the effectiveness of changes in SBP and DBP. Findings suggest that implementation of IMB based intervention has potential benefits, but present gaps based on the result of study. Further long-term research is needed to determine the effect on SBP and impact on pre-hypertension prevalence in Malaysia.

KEYWORDS: IMB Model, Pre-hypertension, lifestyle intervention, Adults, Malaysia