OSD prevention: why? A European and global perspective

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Introduction

In Europe, occupational skin diseases (OSD) – mainly irritant and allergic contact dermatitis of the hands – constitute currently up to 40% of all work-related illnesses causing extensive suffering for affected workers. Due to emerging new workplace hazards and demographic change OSD are likely to increase over the next years. The annual costs incurred by OSD are estimated to exceed by far 5 billion € in the EU due to medical treatment, sick leave and loss of productivity.

Results

Recent studies have demonstrated that dermatological intervention can save OSD patients’ health and jobs, and avoid individual suffering as well as reduce costs for society. A longitudinal study carried out in Germany with severely OSD affected workers showed that due to an interdisciplinary in-patient prevention scheme 80% of patients were still working 3 years after the measure and sick leave was substantially reduced (total cohort: N=1,409). Similar results were obtained from a randomized nationwide follow up study of initial cases of contact dermatitis receiving outpatient skin protection seminars and regular outpatient treatment by the local dermatologists (N=1,600). However, as yet, insurance systems in many countries do not neither enable specific dermatological intervention nor specific preventive measures. Since 2010 the EADV ‘healthy skin @work’ campaign aims at raising awareness at the primary prevention level, and also to improve options for medical care for affected individuals, and coordinate scientific efforts. This dermatological initiative is also an official partner of the ‘Healthy workplaces campaign’ by the European Agency for Safety and Health at Work (EU OSHA).

Discussion

In various European countries OSD specific centers have been or are being implemented (e.g. Austria and Denmark) geared at applying specifically tailored measures for OSD patients. In Germany on the other hand, where since 2009 the ‘Week of Occupational skin Diseases (WOOD)’ has been carried out, a 30% increase of OSD notifications could be observed, which will help tackle the under-reporting. At the same time, costs for job-retraining have substantially decreased due to earlier and more effective preventive intervention.
dermatitis, their skin condition were evaluated by a dermatologist/allergologist and by TEWL (trans-epidermal water loss) measurements. Information on skin disease, occupational and non-occupational exposure were recorded using a standardized questionnaire. Workers participated to a second control after 3 months, to verify the effectiveness of the training.

Results 80 workers with an occupational hand dermatitis accepted to participate to a training course and 62 (77.5%) completed the 3 months follow-up. Symptoms improved after the training for the 73% of subjects that adhered to suggestions and followed recommendations and for the 38% of workers that partially followed recommendations (p<0.01). TEWL values improved at the end of follow-up, confirming the positive effect of protective measurements suggested on skin barrier function.

Discussion Our intervention was effective, leading to a reduction in clinical signs of dermatitis in people that strictly adhere to recommendations and followed recommendations and for the 38% of workers that partially followed recommendations (p<0.01). TEWL values improved at the end of follow-up, confirming the positive effect of protective measurements suggested on skin barrier function.

Introduction The high prevalence of hand dermatitis in nurses is attributed to frequent hand washing with soap and infrequent use of hand moisturisers. We tested the hypothesis that a behavioural change programme (BCP) coupled with hand moisturisers, can reduce the prevalence of hand dermatitis in at-risk nurses over a 12-month period.

Methods We conducted a cluster randomised design at 35 sites. We recruited two groups of at-risk nurses:

a. first year student nurses with a history of atopic tendency; b. intensive care unit (ICU) nurses.

The BCP was offered to participants at intervention plus sites only and participants were asked to form implementation intentions for performing each hand care behaviour in the workplace. Student nurses were provided with personal supplies of hand creams and ICU nurses encouraged to make use of the moisturisers on the wards. All participants, including those at intervention light sites, were provided with an advice leaflet on optimal hand care. Participants had their hands photographed at baseline and 12 months and these were objectively assessed by a dermatology research nurse and two dermatologists. We also measured changes in hand dermatitis, beliefs and behaviours and collected health economic data.

Results Overall the results indicate that the intervention had a positive (but not statistically significant at 5% level) effect in reducing the prevalence of hand dermatitis compared to usual care and had a positive effect in changing behaviours and beliefs associated with dermatitis prevention. The BCP was also found to be of low cost to implement. (Please note, final results were not available by the abstract submission date but will be provided to the Secretariat in due course).

Discussion A hand-dermatitis prevention BCP plus optimal provision of hand moisturisers has been shown to be effective in reducing hand dermatitis in nurses.