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Skin health and protection at work in Croatian beautician apprentices

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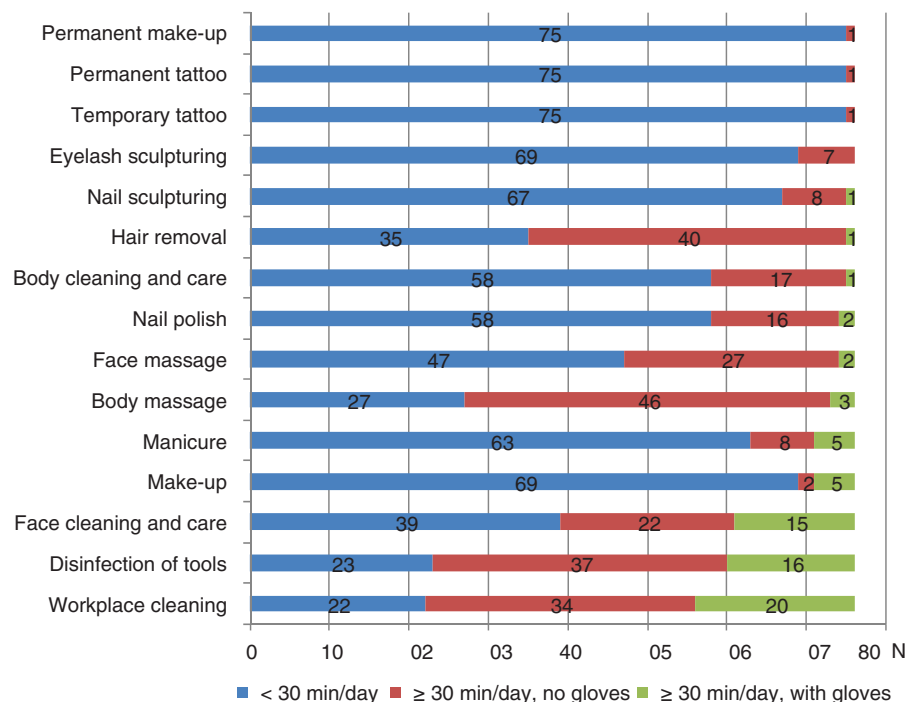
Beauticians are recognized as being at risk regarding the development of occupational skin diseases, mainly allergic contact dermatitis, with acrylates and methyisothiazolinones being the most frequently found occupational allergens (1–4). Little is known about behaviour at work regarding safety and the prevalence of skin symptoms in beautician apprentices. This article describes skin protective measures and the prevalence

and severity of skin symptoms among Croatian beautician apprentices.

Methods

Ethical approval for this study was granted by the Ethics Committee of the Institute of Medical Research and Occupational Health, Zagreb, Croatia.

Fig. 1. Work tasks and use of protective gloves in 76 beautician apprentices. The bars represent the number of apprentices performing a task for <30 min per day (with or without gloves), and performing a task for ≥30 min per day, with or without gloves.



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Data on work tasks and the use of protective gloves during practical training, and on the frequency of hand washing in a single day, were collected with a questionnaire designed as a modification of the EvaHair questionnaire (5) in 76 final-year beautician apprentices (median age 17 years, range 16–19 years; response 79%) after receipt of signed informed consent from the apprentices (and from their parents for those aged <18 years). The skin of the hands was examined by occupational physicians using the validated Osnabrück Hand Eczema Severity Index (OHSI), as described previously (6, 7). Descriptive data analysis was performed with STATA/SE 11.2 for Windows.

Results and Discussion

Beautician apprentices were engaged in practical work at school and salons for, on average, 12 days per month (range 5–15 days), 7 h per day (range 6–8 h). The majority of them performed their work tasks without gloves, including nail polishing and sculpturing (Fig. 1). Cleaning of the workplace was the most frequent reason for wearing gloves, but in only 20 (26%) apprentices.

Washing hands >20 times per day was identified in 20 (26%) apprentices. Skin changes were clinically observed in 27 (36%) apprentices. Erythema ($n=23$), scaling ($n=9$), infiltration ($n=9$) and fissures ($n=3$) were the observed symptoms, with the OHSI score ranging from 1 to 7.

The results indicate risky behaviour at the workplace and a subsequent considerable frequency of mild irritant skin symptoms in final-year beautician apprentices, with similar prevalence and severity of symptoms as previously found in a comparable group of hairdresser apprentices (7). This emphasizes the need to strengthen our knowledge about skin hazards and safety behaviour at work for beauticians.

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