GLOVE-RELATED LATEX ALLERGY AMONGST NURSING STAFF IN GOVERNMENTAL HOSPITALS, THAILAND

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Objectives Using powdered latex gloves (PLG) can cause health problems amongst healthcare workers. Replacement of PLGs with powder-free or non-latex gloves can reduce the incidence of these problems. However, in Thailand PLGs are still widely used as they are cheaper than alternatives. This may result in continuing health problems within the workforce. The aim of this study was to determine the prevalence of latex allergy and to determine important risk factors for latex allergy specifically in Thai nurses.

Methods A cross-sectional study was conducted amongst nurses in three governmental hospitals. Nurses completed a questionnaire addressing occupational, health and lifestyle factors. Serum specific IgE antibodies to natural rubber latex (NRL) were quantified and if the result were positive the nurses was considered sensitised. Water-extractable protein content of different PLGs used was also quanified by a modified Lowry method.

Results 917 nurses participated (response rate 67.8%). 95% of nurses wore PLGs at work and 17.2% reported adverse reactions to NRL gloves. 4.3% of nurses were sensitised to latex. The prevalence of latex sensitisation was associated with the PLG protein content in the different hospitals. Using more than 15 pairs of PLGs per day was associated with reported adverse symptoms to NRL gloves (OR 1.82, 95% CI 1.15 to 2.88).

Conclusions Prevalence of latex sensitisation in this study was higher than in previous studies in Thailand and was associated to protein content in NRL gloves. These results supported the need to reduce latex exposure in hospital workplaces.