## HOW VALID IS A SKIN HEALTH QUESTIONNAIRE FOR OCCUPATIONAL SKIN SURVEILLANCE?

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10.1136/oemed-2011-100382.148

**Objectives** As part of a study evaluating the diagnostic accuracy of a teledermatologic tool for occupational skin surveillance we tested the validity of the standard UK Health and Safety Executive (HSE) skin health questionnaire against visual inspection by a trained occupational physician. Current self-reported symptoms were compared with the assessment by the physician carried out at the same time.

Methods Data were collected from 332 participants in four occupational groups (healthcare workers, hairdressers, engineering workers and nursery nurses) seen on one to seven occasions over a 7 month period. Overall 1212 sessions with valid questionnaire and visual inspection were gathered. Self-reported symptoms were compared against 'Dry skin' (minor dermatitis) and 'Dermatitis' from the visual inspection.

**Results** With visual inspection as diagnostic standard and a 37% point prevalence of hand dermatitis/dry skin at baseline (332) the HSE questionnaire showed a specificity of 82% (95% CI: 77 to 87%) and a sensitivity of 53% (95% CI: 44 to 62%). The positive and negative predictive values were 64% (95% CI: 54 to 73%) and 75% (95% CI: 69 to 81%) respectively and the  $\kappa$  showed a fair agreement at 0.37 (95% CI: 0.26 to 0.47). Applied to the total sample the results changed slightly with an increased positive predictive value (74%) and decreased sensitivity (49%).

**Conclusions** Our results show that the recommended questionnaire only identified two-thirds of workers with visible skin problems. The failure of the current HSE skin health questionnaire to recognise a large proportion of workers with skin disease may have important consequences in terms of early intervention and progression of dermatitis to more serious and disabling forms.