A prospective study of scabies outbreaks in ten residential care facilities for the elderly in South-East England, 2014-15

Jackie A Cassell MD1, Ananth Nalabanda MRCGP1, Stefania Lanza MA1, Jo Middleton BSc1, Michael G Head PhD2, Jennifer Bostock MA3, Kirsty Hewitt MSc4, Christopher Iain Jones PhD1, Charles Darley FRCP (UK)1, Simran Karir MSc1, Stephen L Walker MRCP (UK)1

1Department of Primary Care and Public Health Medicine, Brighton & Sussex Medical School 2Faculty of Medicine, University of Southampton 3Institute of Psychiatry, Psychology & Neuroscience, King’s College 4Public Health England 5London School of Hygiene & Tropical Medicine

Acknowledgements:
Public Health England and Health Protection Teams (Kent, Surrey, Sussex; Essex; South West London), care home staff & residents

Introduction
Sarcoptes scabiei is a mite which is transferred from skin to skin. Scabies is a significant problem in UK residential care facilities (RCF) for the elderly, where outbreaks are common and difficult to control. They typically last for several months and diagnosis is often substantially delayed (1). Clinical presentations in the elderly are poorly understood. We studied scabies outbreaks in RCFs to investigate the clinical signs and risk factors in this population.

Results
• We examined 230 residents at 10 RCFs between 03/02/2014-11/02/2015. Their median age was 87 years, 76% were female, and 68% had dementia. 61 (27%) had scabies (13% definite); 41% with burrows, 51% had not reported symptoms.
• Dermoscopy identified the mite in 7 cases (11.5%), skin scrapings in 3. We diagnosed a median 6 cases/RCF. Examination only of uncovered areas of the body (hands, lower legs) would have missed a high proportion of cases.
• Dementia was strongly associated with scabies (OR=2.4, 95% CI 1.4-4.1).
• No new cases were identified at the second visit (median interval 44 days), 10 cases still had scabies (2 probable, 8 possible).

Discussion
Scabies diagnosis is difficult in this population; over half of cases were asymptomatic, and dermoscopy and skin scrapings were of limited diagnostic value. Our study is the first to confirm that dementia is a risk factor for scabies in this group. Careful examination of elderly residents of RCFs with suspected scabies outbreaks is important, particularly those with dementia, as they may have no obvious clinical signs.

Management guidelines vary substantially (3). We are consulting on potential for national guidelines and developing educational materials for professionals and the public.

To get involved contact j.middleton@bsms.ac.uk or kirsty.hewitt@phe.gov.uk

References:

While this case of crusted scabies should be easier to diagnose, the appearance of scabies in the elderly is usually much more subtle and easily missed. Covered parts of the body need to be examined carefully by an experienced clinician.

These papules on the trunk have been scratched. They are easily confused with other irritant conditions.