Authors reply to ‘Scabies control: the forgotten role of personal hygiene’, correspondence by Duncan Mara

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Authors reply to ‘Scabies control: the forgotten role of personal hygiene’, correspondence by Duncan Mara

Jo Middleton MRes\textsuperscript{1,2}, Jackie A. Cassell MRCP(UK)\textsuperscript{1,3}, Christopher. I Jones PhD\textsuperscript{1}, Stefania Lanza MA\textsuperscript{1}, Michael G. Head PhD\textsuperscript{4}, Stephen L. Walker MRCP(UK)\textsuperscript{5} on behalf of all the authors of Cassell, Middleton, Nalabanda, \textit{et al.} Scabies outbreaks in ten care homes for elderly people: a prospective study of clinical features, epidemiology, and treatment outcomes. \textit{The Lancet Infectious Diseases} 18;8. DOI: https://doi.org/10.1016/S1473-3099(18)30347-5

\textsuperscript{1}Department of Primary Care and Public Health, Brighton and Sussex Medical School, Falmer, UK \textsuperscript{2}School of Life Sciences, University of Sussex, Falmer, UK \textsuperscript{3}Public Health England South East, Horsham, UK \textsuperscript{4}Faculty of Medicine and Global Health Research Institute, University of Southampton, Southampton, UK \textsuperscript{5}Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, London, UK

Corresponding author

Jo Middleton, Department of Primary Care and Public Health, Brighton and Sussex Medical School, Room 319, Mayfield House, Falmer, BN1 9PH

Email: j.middleton@bsms.ac.uk Tel: +44 (0)1273 641025

Full addresses of all other authors

Professor Jackie A. Cassell, Department of Primary Care and Public Health, Brighton and Sussex Medical School, Room 318a, Mayfield House, Falmer, BN1 9PH, UK

Christopher. I Jones, Department of Primary Care and Public Health, Brighton and Sussex Medical School, Room 318, Mayfield House, Falmer, BN1 9PH, UK

Stefania Lanza, Department of Primary Care and Public Health, Brighton and Sussex Medical School, Room 319, Mayfield House, Falmer, BN1 9PH, UK

Michael G. Head, Clinical Informatics Research Unit, University Hospital Southampton Foundation NHS Trust, Southampton, SO16 6YD, UK

Stephen L. Walker, Faculty of Infectious and Tropical Diseases, London School of Hygiene & Tropical Medicine, Keppel Street, London WC1E 7HT, UK
Mara criticises us for not investigating whether scabies transmission in UK care homes is caused by inadequate washing of residents, and bemoans absence of discussion of a supposed “water-washed transmission route” of scabies in the wider literature. The sole reference Mara gives for this claimed transmission route is *Drawers of Water: Domestic Water Use in East Africa*,¹ in which scabies is classified as one of the “water-washed diseases”: “infections that decrease as a result of increasing the volume of available water”. However, its authors offer no citations or biological mechanism to substantiate this categorisation of scabies. Though one table states an 80% reduction in scabies morbidity could be expected from water supply improvement, the authors themselves say this is “largely guesswork”.

In contrast, multiple studies indicate scabies prevalence is probably uninfluenced by personal washing,²⁻⁴ including the observation that some coastal people with rigorous hygiene and access to water nevertheless have high scabies levels.² In trials of the effect of bathing, intentionally infested individuals either had baths daily or none for up to two months. Parasite rate increases didn’t differ,³ unsurprising given egg-laying females burrow under the skin surface.² Vigorous use of a scrubbing brush sometimes removed them, but only when violent enough to draw blood³; more extreme than “NHS-clean” requirements Mara suggests could reduce transmission, or development of crusted scabies. This view may arise from a taxonomically blind presumption that what is virucidal or bactericidal will be effective against mites. In experiments hand-washing and alcohol hand rubs have not reduced *S.scabiei* number or viability.⁵

Mara criticises the term ‘outbreak’, suggesting in care homes “the disease may be endemic”, and what is pertinent is what causes escalation to crusted scabies. However, crusted cases were only diagnosed in a minority of outbreaks, and *S.scabiei* cannot live long off-host,² so could only be “endemic” in a home *within* residents or staff. Mara implies this is an
undetected, normal state of affairs. This seems unlikely as contact rates would result in multiple cases, including amongst staff.

Mara suggests using “ethically-placed hidden cameras” to determine how often residents are bathed. We cannot imagine how to predict in which homes to place cameras prior to outbreaks. More importantly care homes are homes, it is unlikely such invasive data collection would be approved by a UK ethics committee.

More scabies research is needed. Proposals should include biologically plausible justifications of mechanism, and methodology that respects participant autonomy.

References