

IMPACT CASE STUDY

Improving treatment and outbreak management of scabies in care homes and other institutions

Introduction

Scabies is a contagious skin infestation which causes itch and distress, and can lead to serious secondary bacterial infections with long-term health impacts. Outbreaks are a public health problem in semi-closed institutions such as residential settings for elderly people, children and those with learning disabilities; migrant hostels and other settings for displaced persons; prisons; schools; hospitals. Around 250 institutional outbreaks are reported to public health teams in England every year.

Why was this work needed?

Before this work was carried out, there were two major barriers to improving patient care and controlling outbreaks:

- There was no UK national evidence-based guidance for outbreak management, which often resulted in inconsistent and ineffective management, with outbreaks in care homes especially sometimes lasting over a year.
- Oral ivermectin for scabies treatment was unlicensed in the UK. The only treatments available were topical creams that had limited efficacy and were logistically challenging. For example, in a care home outbreak all residents would need to be simultaneously stripped and covered in cream left on for 8-10 hours. At the same time, all bedding and clothes had to be washed and staff needed to self-treat. This was distressing, particularly for vulnerable groups requiring personal care such as those with dementia and needed to be repeated seven days later. Oral medication was available internationally, but not in the UK.

Impact

As a result of this NIHR ARC KSS work:

- In 2023, the UK Health Security Agency published the first ever national scabies outbreak guideline, including the use of ivermectin for scabies outbreak control.
- In 2023, Medicines and Healthcare Products Regulatory Agency then licensed ivermectin for scabies and in March 2024, oral ivermectin became available in the UK for scabies.

Research, implementation, and policy development by ARC KSS

The National Institute for Health and Care Research (NIHR) Kent, Surrey and Sussex (ARC KSS) studied how scabies spreads in places like care homes and migrant hostels, pinpointed the challenges in managing these outbreaks, and developed better tools and guidelines. With this knowledge, ARC KSS researchers advised health workers on controlling severe outbreaks and co-authored national guidelines with UK Health Security Agency, now used across the UK. The work also contributed to the UK licensing and availability of oral ivermectin for scabies.



"If you could use a pill [for the treatment of scabies] for everyone, that would so much easier."

Healthcare worker who had managed outbreaks in migrant settings

Introduction of evidence-base outbreak guidance and oral treatment is now aiding institutions manage outbreaks more effectively, and improving patient experience, particularly for vulnerable groups such as those with dementia. This is bringing down health and care costs by reducing how long outbreaks persist, and thus the number of affected residents and staff and the risk of onward transmission to other similar settings.

How this was achieved

To bring about this impact, the public health team at the the NIHR ARC KSS, who funded the work:



Locations of scabies outbreaks in migrant settings across Europe included in one of the project studies.

- Analysed reports of around 250 scabies outbreaks in care homes, hospitals, and other institutions in England, and categorised factors that can increase scabies transmission.
- Interviewed healthcare workers who had managed scabies outbreaks in refugee camps across 15 locations within seven European countries.
- Worked closely with national staff at the UK Health Security Agency (UKHSA) and local staff in Health Protection Teams on multiple outbreaks, including the first UK ivermectin mass treatment.

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- Contributed directly to a working group which wrote the first UK government scabies outbreak guidance.
- Advised a pharmaceutical company, aiming to make oral ivermectin licensed and available for scabies in the UK for the first time.
- Raised awareness by securing publicity in [The Lancet](#) (medical press) and the [Mail on Sunday](#).

What's next?

- The publication of a report on the UK's first ivermectin mass treatment in social care.
- An audit of the uptake and effectiveness of ivermectin in care home scabies outbreaks.
- A national service evaluation of scabies outbreak management in refugee/ migrant settings in the UK.
- The production of a video guide on how to best manage scabies outbreaks in refugee/ migrant setting.

Further information

- Book chapter: Middleton et al. 2023. [Scabies Management in Institutions](#) (In Fischer & Chosidow (eds.) Scabies. Berlin: Springer Nature. ISBN 978-3-031-26069-8).
- Article: Richardson... Middleton. 2023. [Scabies outbreak management in refugee/migrant camps in Europe 2014–2017: a retrospective qualitative interview study of healthcare staff experiences and perspectives](#) (BMJ Open Journal).
- Video: Middleton. 2024. [Controlling scabies outbreaks in social care, schools, refugee setting and other semi-closed institutions](#)