

## National healthy skin guidelines for Indigenous Australians: the impact of dog health programs requires evaluation

TO THE EDITOR: Skin disease contributes to the health disadvantage of Indigenous Australians, and the recent publication of the healthy skin guidelines is welcome.<sup>1</sup> Scabies is a significant health problem for some remote Indigenous communities, and the healthy skin guidelines describe a series of community-based scabies control programs. These programs resulted in initial reductions in prevalence of scabies, but they were not sustained, as human scabies was eventually reintroduced.<sup>1</sup>

The guidelines used a systematic literature review to ensure that all relevant research was included. However, since the review of scabies was limited to studies of human scabies, implications of canine scabies may have been overlooked.<sup>2,3</sup> Therefore, a statement such as “dog control programs are of no benefit to the community control of human scabies infestations” requires scrutiny.

Canine scabies mites are distinguishable from human scabies mites by

genotyping.<sup>4</sup> Clinically, canine scabies can cause a transient human infestation, with no ongoing transmission cycle. The lesions of canine scabies occur primarily on body areas that have been in contact with dogs, and are intensely itchy after a shorter period compared with lesions of human scabies. The infestation is self-limiting unless the person is reinfested.<sup>5</sup>

As with human scabies, the intense itch from infestation by canine scabies can lead to scratching and skin trauma, providing an entry point for bacterial infection. Complications such as post-streptococcal glomerulonephritis and chronic renal disease can also arise from canine scabies. Moreover, outbreaks of scabies in humans can be caused by repeated transmission of canine scabies.<sup>5</sup> Management of people affected by canine scabies includes treatment of affected dogs and their contacts.<sup>3</sup>

Comprehensive dog health programs provide broad-based community benefits, including reduced injuries from dog attacks, improved community and workplace safety, reduced sleep disturbance from barking and fighting dogs, and enhanced dogs' appearance, behaviour and wellbeing. Dogs are

considered family members in some Aboriginal and Torres Strait Islander communities, sharing housing, bedding and food; hence, human and dog health and wellbeing are intimately linked.

No trials have yet examined the impact of dog health programs on scabies transmission in humans or other health outcomes in the remote Indigenous communities where scabies is a public health problem.<sup>2</sup> Without evidence from trials, the impact, or lack thereof, of dog health programs on human health is speculative.

Rosalie Schultz<sup>1,2</sup> 

<sup>1</sup> Centre for Remote Health, Flinders University, Alice Springs, NT.

<sup>2</sup> Cooperative Research Centre for Remote Economic Participation, Ninti One, Alice Springs, NT.

Rosalie.Schultz@flinders.edu.au

**Acknowledgements:** I thank Bonny Cumming, Project Officer at Animal Management in Rural and Remote Indigenous Communities (AMRRIC), for her contribution to this work.

**Competing interests:** Rosalie Schultz is a member of the AMRRIC Board. ■

doi: 10.5694/mja2.50118

© 2019 AMPCo Pty Ltd

References are available online.

- 1 Australian Healthy Skin Consortium. National healthy skin guideline for the prevention, treatment and public health control of impetigo, scabies, crusted scabies and tinea for Indigenous populations and communities in Australia. 1st ed. Perth: Telethon Kids Institute; 2018. <https://infectiousdiseases.telethonkids.org.au/siteassets/media-images-wesfarmers-centre/national-healthy-skin-guideline-1st-ed.-2018.pdf> (viewed July 2018).
- 2 Smout F, Schrieber L, Speare R, Skerratt LF. More bark than bite: comparative studies are needed to determine the importance of canine zoonoses in Aboriginal communities. A critical review of published research. *Zoonoses Public Health* 2017; 64: 495–504.
- 3 Aydingöz İE, Mansur AT. Canine scabies in humans: a case report and review of the literature. *Dermatology* 2011; 223: 104–106.
- 4 Walton S, Choy J, Bonson A, et al. Genetically distinct dog-derived and human-derived *Sarcoptes scabiei* in scabies-endemic communities in Northern Australia. *Am J Trop Med Hyg* 1999; 61: 542–547.
- 5 Heukelbach J, Feldmeier H. Scabies. *Lancet* 2009; 367: 1767–1774. ■