



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

SUSTAINED REDUCTION OF SCABIES AND IMPETIGO TWO YEARS AFTER MASS DRUG ADMINISTRATION

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Background: The Skin Health Intervention Fiji Trial (SHIFT), a community intervention trial of mass drug administration (MDA) for scabies, was implemented to ascertain the efficacy and safety of two alternative regimens compared to standard care. SHIFT showed that scabies and impetigo prevalence reduced by 94% and 67% respectively, 12 months after ivermectin-based MDA. We now report on outcomes 24 months after MDA.

Objective: To assess the prevalence of scabies and impetigo after one round of MDA with oral ivermectin or topical permethrin compared to standard care treatment at 24 months.

Material and Methods: SHIFT randomly assigned three island communities to one of three interventions: standard care involving the administration of permethrin to people with scabies and their contacts, MDA of permethrin, or MDA of an ivermectin-based regimen. We measured the change in prevalence of scabies and impetigo from baseline to 24 months.

Results: The prevalence declined from 36.6 to 15.2% in the standard care group (relative reduction [RR] in prevalence, 59%; 95% CI, 43 - 72), from 41.7 to 13.5% in the permethrin group (RR 68%; 95% CI, 52 - 81), and from 32.1 to 1.9% in the ivermectin group (RR 89%; 95% CI, 76 - 99). The prevalence of impetigo declined in all groups with a greater reduction in the ivermectin group, dropping from 24.6% to 2.6% (RR 90%; 95% CI, 74 - 99).

Conclusions: The study was the first to compare MDA for scabies with the conventional approach of treating symptomatic cases and contacts, and the first to undertake a two year follow up. A single round of MDA, particularly in the ivermectin-based group, was effective for the control of scabies and impetigo out to 24 months, sustaining reductions previously





reported at 12 months. This finding has important implications for global scabies control strategies.

