Reducing Skin Infections in Aboriginal Communities
Project 41: East Arnhem Healthy Skin Project

What’s the project about?
The East Arnhem Healthy Skin Project (EAHSP) aimed to reduce the prevalence of scabies, skin sores and tinea in five remote Aboriginal communities, as these conditions are endemic in children aged under 15 years. Skin infections are most commonly due to Group A streptococcal bacteria. These have been linked with outbreaks of acute post streptococcal glomerulonephritis (kidney disease) and very high rates of rheumatic fever and rheumatic heart disease. Indeed, Indigenous Australians have one of the highest rates of rheumatic heart disease and renal disease in the world. To reduce the prevalence of skin infections the EAHSP conducted a comprehensive healthy skin program that included annual mass community scabies treatment days, and routine screening and treatment of skin infections.

Who’s involved?
- Aboriginal communities in the East Arnhem region, NT
- Menzies School of Health Research
- Murdoch Childrens Research Institute
- NT Department of Health and Community Services (NT DHCS)
- Australasian College of Dermatologists
- The University of Melbourne
- Rio Tinto Aboriginal Foundation
- Ian Potter Foundation
- CRC for Aboriginal Health
- Office of Aboriginal and Torres Strait Islander Health (OATSIH)

Outcomes
- The chart audit component of the study identified a previously undocumented burden of scabies and skin sores starting within the first few months of life. As a result, community workers have become more involved with screening and education in the baby clinics as well as continuing their work in the community.
- Skin sore prevalence reduced substantially over the three-year study period from 46.1% in the first 18 months to 27.6% in the last 18 months. The reduction in skin sores was evident for all age groups but remains unacceptably high.
- Scabies prevalence remained constant over the three-year study period at 13.5%. Additional work undertaken with CRCAH support showed low levels of treatment uptake were a contributing factor to ongoing scabies transmission and suggests that this was probably also the case during annual mass community scabies treatment days.
- In households where there was a person with scabies, almost 10% of susceptible individuals acquired scabies during a four-week follow-up period. There were very low levels of treatment uptake reported among household contacts (44%), but those individuals who did not acquire scabies were almost 6 times more likely to belong to a household where everyone in the house had used the scabies treatment cream.
- The study was the first to monitor tinea prevalence over time in Aboriginal children in the NT finding an average monthly prevalence of 15.3%.
Implications of findings for policy and practice

Recommendations from this study include:

- Appropriate prevention and treatment strategies should encompass the first months of life.
- Alternative treatment regimes for scabies, i.e. ivermectin.
- Improved treatment options for skin sores, i.e. short course oral antibiotics as opposed to penicillin injections.
- Increase in health practitioners’ knowledge of tinea diagnosis and treatment.
- Incorporation of community workers in clinic staff numbers to target specific health areas.

In addition, it is crucial to continue efforts to address the underlying causes of these extremely high rates of skin infections: overcrowding, difficulties with sanitation, poor educational outcomes and continuing socioeconomic disadvantage.

The program was conducted over three years from September 2004 to August 2007.

A formal training program in Healthy Skin was developed and made available to all community workers throughout north-east Arnhem Land with funding support from OATSIH. Provided in both ‘on-the-job’ and ‘off-the-job’ components, the training covers not only health promotion material in scabies, streptococcal skin sores and associated chronic diseases, but also basic research skills. The training met the requirements for formal recognition towards a qualification in Aboriginal and/or Torres Strait Islander Primary Health Care.

Community workers undertaking the Healthy Skin course in 2006. Eleven workers were each credited with four units of competency towards Certificate II & III in Aboriginal and/or Torres Strait Islander Primary Health Care (units HLT21307, HLT33207) and Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice (HLT43907).

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