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Introduction

For many skin diseases, inequalities in care are a result of a lack of data on the disease prevalence, delays in diagnosis, and access to timely treatment which can be even more profound in low-income countries.

Estimates of skin disease prevalence are sparse throughout South Africa and particularly in rural areas.

The Eastern Cape is one of nine provinces in South Africa; it is an under-resourced province and the poorest in South Africa with high levels of poverty, illiteracy, and unemployment. Access to healthcare services and treatment is challenging for rural residents.

The aim of this study was to conduct the first-ever point-prevalence study of skin disease in South Africa, in two rural townships in the Eastern Cape.

Methods

SETTING

Community-based survey of two rural, neighbouring villages, Mtyholo Dlova and Mdolomba, conducted in December 2023. The community in the villages comprised of Xhosa people, a Bantu ethnic group native to South Africa.

DATA COLLECTION

House-to-house visits conducted by the international research team to collect household information and participant demographics. Clinical skin examinations were performed by dermatologists to diagnose any skin, hair, or nail conditions.

PARTICIPANTS

Across the two villages, 309 households were visited (94 in Mtyholo Dlova and 215 in Mdolomba) with data collected on 698 participants; 218 (31%) in Mtyholo Dlova and 480 (69%) in Mdolomba.

STATISTICAL ANALYSIS

Point prevalence of skin diseases and 95% confidence intervals (CI) estimated from the total surveyed population using the Binomial distribution.

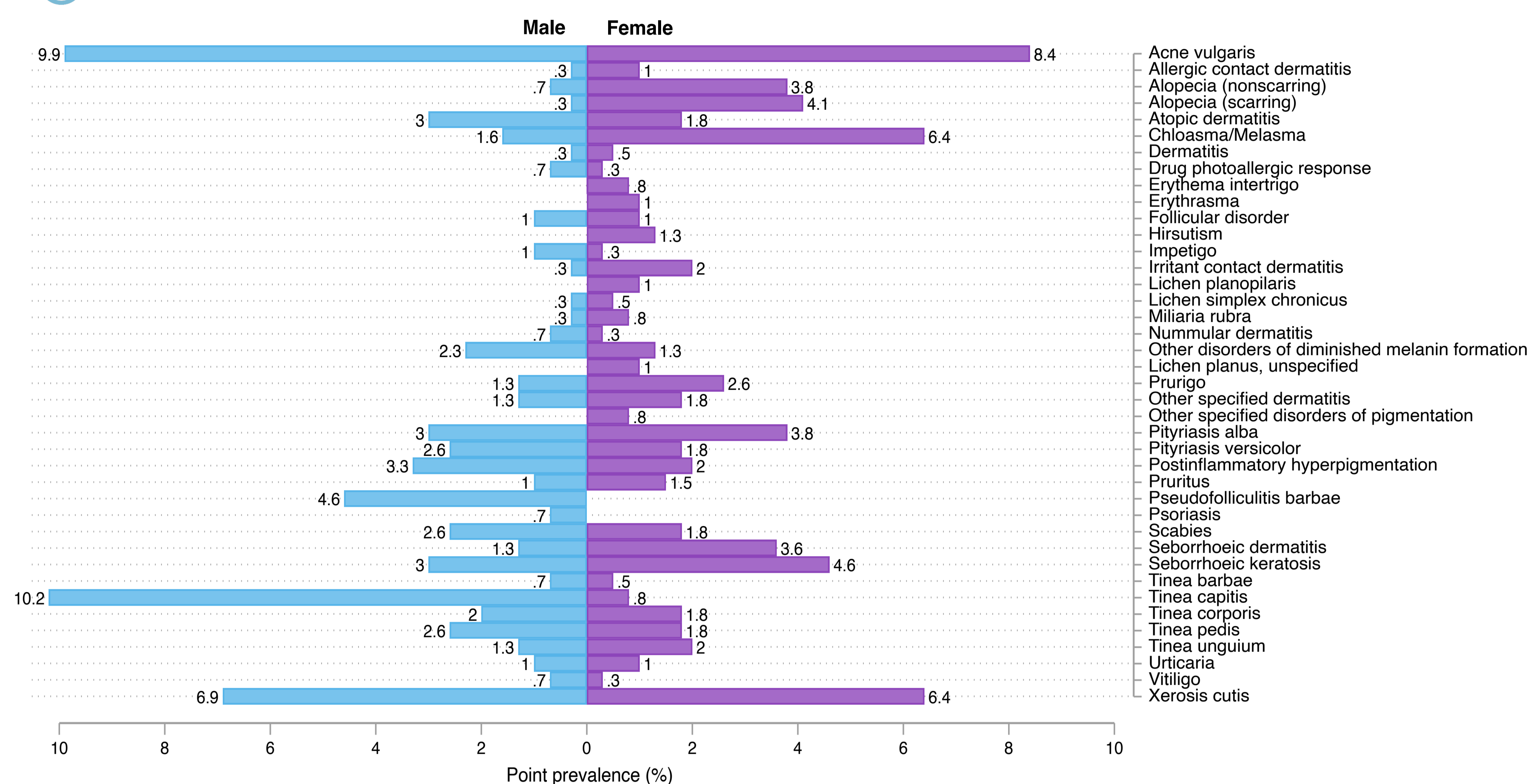
- Prevalence rates were stratified by village, sex, and age.

Logistic regression (odds ratio [OR], 95% CI) was used to assess likelihood of skin diseases in males and females and in adults (≥18 years of age) and children (<18 years of age).

Results

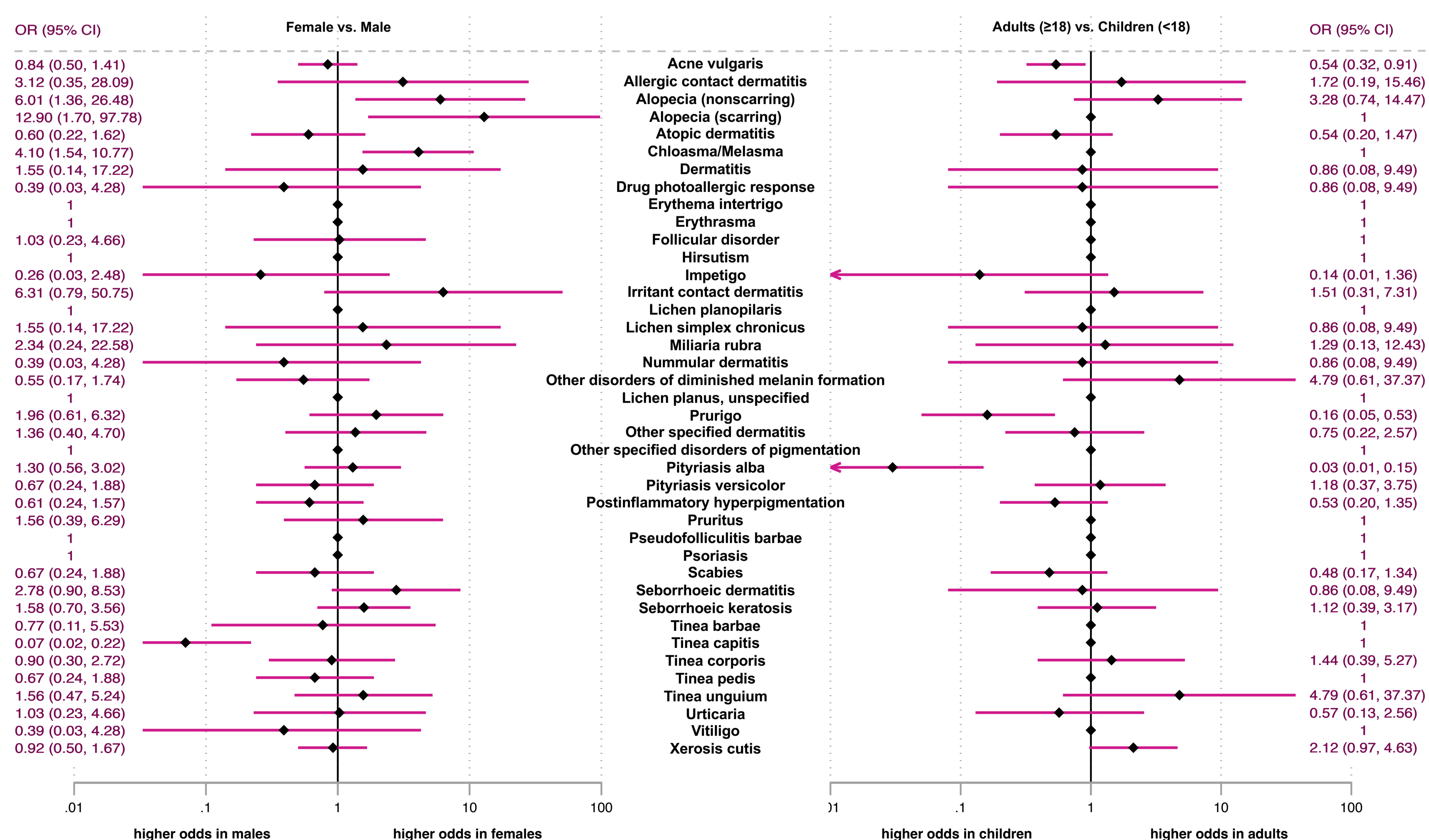
- Among the study population participants, 56% were female and the mean age was 37.4 ± 24.2 years with 30% aged <18 years.
- Participant characteristics were broadly similar in the two villages; most were unemployed or retired (56%), had never smoked (60%), and had never consumed alcohol (65%).

A Point prevalence of the main skin diseases, by sex



- Skin disease point prevalence was 62.9% (95% CI: 59.3-66.5)
- Most common skin diseases: acne vulgaris, xerosis cutis, tinea capitis, melasma, seborrhoeic keratosis, pityriasis alba, post-inflammatory hyperpigmentation, seborrhoeic dermatitis, scarring and non-scarring alopecia, atopic dermatitis, pityriasis versicolor, scabies, tinea pedis, and pseudofolliculitis barbae; Fig A.
- Skin disease was more prevalent in females than males; 65.8% (61.1-70.5) vs. 59.2% (53.7-64.7)
- Alopecia (scarring and non-scarring) and melasma were more common in females than males; Fig B.
- Tinea capitis, pseudofolliculitis barbae, and psoriasis were more common in males than females.
- In children, acne, prurigo and pityriasis alba were more common than in adults; Fig B.

B Association between skin diseases, sex and age



Discussion

This study provides information for the first time on how common skin disease is in this rural setting in the Eastern Cape. These findings should help inform on policy development and provision of resources in the region and highlight training opportunities for local community and healthcare workers.

