

## Primary schoolchildren's self-reported sun-related knowledge, attitudes and behaviours: a South African school-based study

Caradee Wright<sup>1</sup>, Patricia Albers<sup>2</sup>, Rietha Oosthuizen<sup>1</sup> and Nelvia Phala<sup>1</sup>

<sup>1</sup>Council for Scientific and Industrial Research, Climate Studies Modelling and Environmental Health, PO Box 395, Pretoria, South Africa, 0001.

<sup>2</sup> South African Medical Research Council, Environment and Health Research Unit, PO Box 87373, Houghton, 2041, South Africa.

**Objective:** To describe the self-reported sun-related knowledge, attitudes and behaviours of a sample of South African multi-ethnic primary schoolchildren and consider the roles of sex and skin type as well as school sun-related efforts.

**Methods:** A sample of 707 schoolchildren from 24 randomly selected government, urban schools in all nine provinces of South Africa were surveyed regarding their sun-related knowledge, attitudes and behaviours. A questionnaire, completed by school principals, was used to assess school sun policies, sun-relevant practices, physical shade provision, outdoor activity scheduling and curriculum content.

**Results:** The school response rate for principal and child participation was 66% (36 were invited (four from each province) and 24 schools participated). More than half (56%) of the children reported experience of sunburn last summer and a third stated that they had got a suntan. Many children believed that one could protect oneself from getting skin cancer by avoiding getting sunburnt (64.5%) and using sunscreen (65.4%). Children reporting to have white/light brown skin (69.3%) were more likely to agree that they used sunscreen to protect themselves from getting sunburnt compared to children having brown/dark brown/black skin (57.7%)( $p=0.004$ ). Few statistically significant differences were evident for child responses by sex. While all 24 schools reported that they did not have a written sun protection policy, various sun protection efforts, such as planting of trees for summer shade, were being made by some schools. School survey responses were evaluated according to 15 SunSmart Accreditation criteria, with schools assigned a score from 0 to 15. No school fully met all 15 accreditation criteria and the most common score was 5. Initial results suggest there was no relationship between a school's sun-related efforts and the knowledge, attitudes and behaviours of the children attending that school.

Conclusion: South African schoolchildren in urban government schools do know about sun protection and practice some positive sun behaviours; however, the reported occurrence of sunburn, a risk factor for skin cancer, was relatively high. South African primary schools are presently not adequately addressing sun protection among schoolchildren. Findings are important for the development of appropriate school sun protection and skin cancer awareness programmes in South Africa and other countries with similar multi-ethnic populations.