Sun Protection Behaviors and Prevalence of Skin Cancer among Migrant and Seasonal Farmworkers in Eastern North Carolina

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Introduction
Ultraviolet radiation (UVR) exposure is a key risk factor for both melanoma and non-melanoma skin cancer. To reduce UVR exposure, organizations in the United States, such as the American Cancer Society, recommend the use of protective clothing and sunscreen. Farmworkers are an important occupational group to target for skin protection because they spend a large amount of their work time exposed to UVR from the sun.

Materials and Methods
This pilot study evaluated farmworkers working in agriculture in rural, eastern NC. It used a cross-sectional study design in which 158 farmworkers completed a behavioral survey followed by a physical screening for skin cancer. The interview questionnaire contained questions about work activities, behavior and perceptions of using sun protection when working outdoors. The physical exam included a full body exam for skin cancers.

Objectives
Hispanic farmworkers are an important occupational group to target for sun safety because they represent a vulnerable population that spends a large amount of their work time exposed to UVR from the sun.

Results
Participants were primarily male (99.4%), of Hispanic/Latino origin (98.1%) and between the ages of 19 and 45 (78.7%). The majority had seen a doctor during the preceding year (69.0%) but did not have health insurance (93.4%). In general, participants typically spent 9-12 hours in the sun per work day (84.5%), did not use sunscreen consistently (97.3%), but did wear long sleeves (85.8%), long pants (98.1%), and a hat (92.8%). However, hats typically failed to shade the entire face or the ears; appropriately protective hats were only worn by 27.3% of participants. Participant screenings yielded no skin cancer diagnoses, however a wide array of other untreated conditions were identified among the group including seborrheic keratosis, acne, and eczema.

Conclusions
These findings suggest that while new skin cancers were not identified in this small sample of participants, the group continues to have high risk exposure to UVR. They also tend not to have adequate information about their risks or sufficient information or tools to alleviate them. Additional studies with larger population samples are warranted as well as evaluation of intervention methods for educating farmworkers on UVR exposure risk and ways to alleviate it.