

# Sun-Protective Behaviors

## An educational intervention with hospital staff aimed at skin cancer prevention in children

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**BACKGROUND:** Melanoma incidence and mortality rates are predicted to steadily increase. Sun protection is important during early development because of the potential for overexposure to ultraviolet radiation while outdoors.

**OBJECTIVES:** The purpose of this project was to design, implement, and evaluate an educational intervention provided to healthcare professionals (HCPs) with the intention of influencing the behaviors of child populations served.

**METHODS:** The project evaluated HCPs' baseline knowledge about sun-protective behaviors, their level of knowledge regarding sun-protective behaviors postintervention, their intent to change behavior, and the feasibility of implementing behavior change within the organization.

**FINDINGS:** Pre- to post-test knowledge significantly increased. All participants reported that they would encourage children's sunscreen usage, and 98% reported that they would support the behavior change; however, 35% indicated likelihood that they would personally use sunscreen or sun-protection methods.

### KEYWORDS

skin cancer; prevention; educational intervention; system change

### DIGITAL OBJECT IDENTIFIER

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**CHILDHOOD IS AN IMPORTANT TIME FOR POSITIVE BEHAVIORS** to be introduced. Healthcare professionals working directly with children and adolescents are positioned to affect behavior change. Melanoma is responsible for more than 9,000 new skin cancer deaths every year, with incidence and mortality rates predicted to steadily increase in the United States through 2030 (Guy et al., 2015). The annual cost of treating skin cancer is about \$8.1 billion in the United States; \$3.3 billion of that estimation is attributed to melanoma (Rogers, Weinstock, Feldman, & Coldiron, 2015). Data related to pediatric diagnoses of melanoma are particularly concerning. According to the Children's Hospital of Philadelphia (2019), melanoma is responsible for as much as 3% of all pediatric cancers. Ferrari et al. (2005) reported that childhood melanoma is often misdiagnosed as pigmented lesions; therefore, there is a delay in treatment as much as 40% of the time.

The most common cause of melanoma is overexposure to ultraviolet (UV) radiation, and the U.S. Department of Health and Human Services (2014) declared UV radiation as a human carcinogen. Although much of the exposure previously had come from natural sunlight, there was a significant increase of melanoma reported because of indoor tanning exposure (U.S. Department of Health and Human Services, 2014). Studies have shown that more than 419,000 cases of skin cancer annually in the United States were linked to indoor tanning, with 6,200 reported as melanomas (Wehner et al., 2014). Sun damage is cumulative, and 23% of lifetime exposure occurs by age 18 years (Godar, Urbach, Gasparro, & Van der Leun, 2003).

The American Society for Dermatologic Surgery ([ASDS], 2013) issued a white paper position statement on sunscreen use in schools. The position statement encouraged statewide policies that would allow students to apply, carry, and store sunscreen for personal use in school, as well as supported educational initiatives designed to encourage and promote safe, smart sunscreen use among all students. According to the ASDS (2013), major barriers to sunscreen use in schools were the lack of physician support allowing students to apply, carry, and store sunscreen for personal use, and potential policies prohibiting sunscreen from being given to students by school district officials (otherwise opposed by a parent or guardian). According to the Skin Cancer Foundation (2019c), one blistering sunburn during childhood or adolescence