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An Educational Intervention for Skin Cancer Prevention With Hospital Staff: Pilot Project for System Change

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Purpose: The purpose of this project was to design, implement, and evaluate an educational intervention provided to health care professionals using the Sun Smart U Curriculum created by the Skin Cancer Foundation (2017).

Methods: Using a pretest-posttest design with a convenience sample (N=40), this intervention targeted the health professionals and staff from a residential/acute care facility caring for pre-adolescent, adolescent, and adult populations. Aims of this project included: (1) the staff's baseline level of knowledge regarding sun protective behaviors using the Sun Smart U Curriculum, (2) the staff's level of knowledge regarding sun protective behaviors post educational intervention using the Sun Smart U Curriculum, (3) the staff's intent to change behavior; and, (4) the feasibility of implementing behavior change within the organization.

Results: Parametric summary statistics were used to report pretest-posttest survey data. The Continuing Professional Development-Reaction (CPD-R) tool (Légaré et al., 2017) was used to measure intent to change sun protective behaviors. The CPD-R is reported as a valid and reliable tool (Cronbach's coefficients for constructs varied from 0.77 to 0.85) for assessing the impact of CPD activities on the behavioral intentions of healthcare providers. Results from this project indicate a significant increase in test scores from pretest to posttest knowledge (95% CI, Cohen's $d=0.463$, $p=0.006$). The majority of participants would encourage the children to use sunscreen at the facility (100%), and 98% indicated the organization would support the behavior change; however, 35% indicated likeliness to personally use sunscreen and/or sun prevention methods at the facility. Participants with a higher level of education were significantly more likely to engage in sun protective behaviors ($\chi^2=35.50$, $df=20$, $p=0.018$).

Conclusion:

In summary, this study addressed two important necessities in skin cancer prevention: the need for a staff intervention to improve knowledge regarding sun safe behaviors, and an educational intervention targeting health care professionals' intent to change behaviors. A pre-determined curriculum was used to compare hospital staff's baseline level of knowledge to posttest results regarding sun protective behaviors after an educational intervention. Although staff indicated a significantly higher level of knowledge post intervention, future dissemination of research would recommend a 3 to 6-month follow-up evaluating actual changes in behavior. Those individuals with a higher level of education indicated a likeliness to engage in sun protective behavior. This may imply a further need for targeting those individuals with lower education and socioeconomic status to encourage skin screening and sun protective behavior changes resulting in lower morbidity and mortality of melanoma skin cancer. Health care professionals would benefit from specific sun protective education to improve both personal health and patient care practices.

Title:

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Keywords:

educational intervention, skin cancer prevention and sun protection

Abstract Summary:

This study describes implementation of an educational intervention with health care professionals using a predetermined curriculum. Implementing a pretest-posttest design, this study addressed two important necessities in skin cancer prevention: (1) the need to improve knowledge regarding sun safe behaviors, and (2) health care professionals' intent to change those behaviors.

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Author Summary: Dr. Amy Bruce is the Associate Director of Nursing Programs for the University of Charleston, in Charleston, WV. She has authored in two international journals including the *International Journal of Telemedicine and Telecare* and the *International Journal of Nursing Science* regarding her doctoral work with Melanoma

Skin Cancer and Sun Prevention Behaviors. Dr. Bruce received a Proclamation regarding her work in Melanoma prevention, and presented at the WV Rural Health Conference in October 2019.