Implementing Sun Safety Policies and Education Programs in Primary Schools

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Problem

The increase in youth melanoma has continued to rise since 1981 at a rate of 3% per year (American Cancer Society, 2008). The decades of sun exposure places an individual at an increased risk for developing melanoma.

Background

According to Dorsey (2008), the lifetime risk of melanoma is increased fivefold when an individual has had three severe sunburns before the age of 18. Furthermore, by the age of 18, one has nearly 80% of lifetime sun exposure.

Children spend a majority of their time at schools outside of the home. Often time children are exposed to the harmful effects of the known carcinogen, solar ultraviolet (UV) radiation, during the time of the day that the sun is most harmful, which increases their opportunity and time for overexposure. It is estimated that four out of five cases of skin cancer can be prevented (World Health Organization [WHO], 2013). These precipitating factors led to the need to instill healthy lifestyle behaviors in children and support the need for school health prevention programs.

Literature Review

Programs that are focused on children, which are less resistant to change than adults, were noted to provide the greatest long-term benefit. The need to implement a school-based melanoma education and prevention program will directly affect patient outcomes.

Primary prevention measures for skin cancer should also be focused toward children. Children and young adults are not well-informed about skin cancer, nor is it included in the subject in their health courses. The implementation of programs in primary schools was noted to be an effective strategy on melanoma prevention.

Sun protection programs are urgently needed to slow the progression of skin cancer. Implementing sun exposure education, prevention, and protection programs will raise awareness and achieve changes in life style behaviors (World Health Organization [WHO], 2001). Childhood and adolescence are critical times for skin cancer prevention (Balk & Geller, 2008). Educating children on sun protective behaviors promotes health outcomes and reduce the incidence of morbidity and mortality associated with skin cancer.

The best practices for sun exposure education and prevention are based on the Centers for Disease Control (CDC, 2002), World Health Organization (WHO, 2001), and the Environmental Protection Agency (EPA, 2008).

The following are evidence-based best practices for preventing skin cancer which are relatively easy to adopt and incorporate into a daily routine when delivered in primary schools:

- Avoid excessive sun exposure , especially between the hours of 10 a.m. until 4 p.m.
- Wear sun protective hats, clothing, and sunglasses
- Apply sunscreen with a suitable high-protection factor
- Seek shade

Evidence-Based Practice

In 2002, the Centers for Disease Control (CDC) issued a publication of Guidelines for School Programs to Prevent Skin Cancer, which was used to guide implementation of the district wide sun safety education policy and program that is acceptable, accessible, and effective in ensuring the change in unhealthy sun exposure behaviors, practices, and environments.

Key elements for change:

1) Policy
2) Environmental change
3) Education
4) Family involvement
5) Professional development
6) Health services
7) Evaluation

Practice Change

In 2009, the School Board approved the implementation of a quality improvement project for a district wide sun safety policy. The Center for Disease Control's (CDC) Guidelines and the Environmental Protection Agency's (EPA) SunWise Program provided the foundational support for implementation in an effort to enhance the requirements of Florida State Statue Sunshine State Standards, which require public K-12 educational instruction for health; environmental health; injury prevention and safety; and prevention and control of disease.

The project proceeded in three phases; assessment of the district policies and resources, initiate SunWise program at piloted primary school and expand to other primary schools, and initiate a district wide sun-safety policy, and evaluation of the project. The focus was to promote health sun exposure behaviors and reduce the risk of skin cancer by implementing a district wide policy and sun exposure education, prevention, and protection program.

SunWise Tool Kit

The SunWise Tool Kit is a collection of cross-curricular classroom lessons about sun protection and the environment.

Teachers' help students develop skills that will help them think critically, work cooperatively, and solve problems creatively, thus enabling them to make sound decisions about their health and environment. Teachers are in an excellent position to model and reinforce healthy sun behaviors. The project was focused on equipping school personnel (particularly teachers) with a prepackaged tool kit to implement in the classroom.

Project Results

The educational instruction requirement was met through the district's effort to; provide and maintain safe physical and social environments, provide sun safety health education, involve family members in sun safety education, and support skin cancer prevention education and sun safety environments.

Teachers reported that implementation of the sun safety educational program produced many positive results for students and staff.

Of the seven primary schools within the district, one school has fully implemented the program, three have initiated the program, and the remaining three will initiated within the next school month.

Thus, of the 34 teachers at the school with full integration, 34l (100%) completed the Educator Survey Tool and reported that 561 students received the SunWise teaching. An average of 570 minutes (9.50 hours) was spent on SunWise activities in each classroom.

The children's overall satisfaction with the program was rank by the respondents and revealed a four on a Likert scale of one to five, with one being the least satisfied and five being the most satisfied. The teacher's overall satisfaction rating mirrored the children's result. The overall instructional level of the Tool Kit was scored at "about right" out of "too easy", "about right", or "too advanced". The majority of the activities selected by the teachers were in Science, Physical Education, Math, and Health. The survey revealed that the children's two favorite activities were the ultraviolet Frisbee and the Fable story. On the Likert Scale of one to five, with one being the least helpful and five being the most helpful, the SunWise Tool Kit was most helpful in helping students learn about the risk of overexposure to the sun, how to protect themselves from overexposure to the sun, and on learning about the risk of overexposure to the sun. Approximately 87% of the teachers reported that they shared materials with another faculty member.

Implications and Significance to DNP Practice

Implementing the sun protection education program in primary schools served as a vital venue for critical intervention points for improving health literacy among children. The program afforded children and parents the opportunity to make sound health decisions regarding sun exposure in their everyday life. The critical empowerment strategies increased children's control over their own health and provided them with the necessary skills to seek out information and take responsibility of their own health outcomes. Establishing policies and environments related to sun exposure in primary schools will continue to foster health literacy among our youth.

Programs that are focused on children, which are less resistant to change than adults, provide the greatest long-term benefit. Sun safety programs are urgently needed to slow the progression of skin cancer. Implementing sun safety education, prevention, and protection programs will raise awareness and achieve changes in life style behaviors (World Health Organization [WHO], 2013). Childhood and adolescence are critical times for skin cancer prevention (Balk & Geller, 2008). Educating children on sun protective behaviors promotes health outcomes and reduce the incidence of morbidity and mortality associated with skin cancer.