

Prevention of Skin Cancer by Reducing Exposure to UV Light through Sun-Safety Interventions Oriented to Children's Parents or Caregivers

Skin cancer is the most common cancer in the United States. The strongest, preventable risk factor for developing skin cancer is exposure to the sun's ultraviolet (UV) rays. However, at least 50% of children as well as adults do not protect themselves adequately from UV exposure. While knowledge of the risk of sun exposure and the use of sunscreen and other forms of sun protection have improved over the past two decades, a gap still exists between knowledge and behavior. The question is then, what are effective strategies to improve sun protective behaviors?

A systematic review of published studies, conducted on behalf of the Task Force on Community Preventive Services by a team of experts, found insufficient evidence (i.e. studies) to determine the effectiveness of interventions oriented to children's parents or caregivers in: 1) improving "covering up" behavior [i.e. wearing protective clothing such as a shirt, long pants, and hat], or 2) increase in shade use or staying out of the sun during peak UV hours]. Sunscreen use was considered a secondary outcome meaning that a change in sunscreen use alone would not result in a recommendation but it should have accompanied one of the two recommendation outcomes. It is important to remember that **this finding does not mean this intervention does not work**, but rather indicates that additional research is needed to determine its effectiveness.

Background on interventions oriented to children's parents or caregivers

- Interventions oriented to children's parents or caregivers are designed to increase knowledge; influence attitude, beliefs, and intentions; and change behavior of parents or caregivers (including teachers and coaches) and the children under their care.
- Single or multi-component interventions studied were mostly conducted in recreational settings and included one or more of the following:
 - surveys and questionnaires to assess knowledge, attitudes, beliefs, intentions and behaviors
 - educational brochures
 - newsletters, tip cards and postcard reminders at the end of summer
 - sun-safety lessons, interactive activities and incentives for parents and children
 - increasing available shaded areas
 - providing sunscreen
 - point-of-purchase prompts and discount coupons for hats, sun-safety logo t-shirts and sunscreen

Findings from the systematic review

Search results:

- 6000+ titles and citations screened
- 159 articles reviewed
- 85 studies included in one of the 9 intervention reviews conducted by the Task Force
- 9 qualifying studies
- In its review of available studies on the effectiveness of this intervention, nine (9) studies were identified that addressed the effectiveness of educational or policy approaches oriented to health care settings or providers in improving clients (i.e. patient) sun protective behaviors. These studies were not considered sufficient for the Task Force to base a recommendation, given limitations in study designs and execution as well as the small number of studies that measured key behavioral or health outcomes, such as improvements in knowledge and attitudes concerning sun protective behaviors among clients.
- There is some evidence of effectiveness regarding educational and policy interventions in recreational and tourism settings which are oriented to adults and caregivers.
- Additional detail regarding key components of research in this area that could be improved so as to increase the body of evidence of effectiveness is available as part of a broad set of research questions.

Action Items?

- Use this finding and suggestions for improvement in research components and contact information from [Cancer Control PLANET](#) to find local cancer prevention partners to conduct or seek resources for further research.

Publications:

- **MMWR/Recommendations and Reports** – Fall 2003. A summary report on findings.

The Guide to Community Preventive Services (Community Guide) provides recommendations on population-based interventions to promote health and to prevent disease, injury, disability, and premature death, appropriate for use by communities and healthcare systems. For more information about the Community Guide (including links to publications and a variety of resources) see www.thecommunityguide.org and for more information about Task Force findings on skin cancer prevention see www.thecommunityguide.org/cancer/

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