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Prevention of Skin Cancer by Reducing Exposure to UV Light through Educational and Policy Approaches Oriented to Health Care Settings and Providers

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 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 educational and policy approaches 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 to decrease exposure to harmful UV light which are oriented to health care settings and providers. 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 educational and policy approaches oriented to health care settings or providers

- Interventions oriented to health care settings or providers are designed to increase sun protective behaviors, and counseling behaviors of providers (e.g. physicians, nurses, physician assistants, medical students, and pharmacists), with the ultimate aim of improving the knowledge, attitudes, and sun-protective behaviors of clients.
- Single or multi-component interventions were applied in a range of health care settings (i.e. pharmacy, drugstore, clinic, physician's office, and medical schools) and included a range of activities including:
 - Provider education sessions
 - Internet-based education
 - Videos
 - Role-modeling

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
- 11 qualifying studies
- In its review of available studies on the effectiveness of this intervention, eleven (11) 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 behavior. 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 rather than providers.
- How can this intervention be implemented with minimal administrative burden and little disruption to the primary mission of the health care setting?
- 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 broader set of research questions.

Action Items

- Use this finding and suggestions for improvement in research components and contact information from [Cancer Control PLANET](http://cancercontrolplanet.cancer.gov) (<http://cancercontrolplanet.cancer.gov>) 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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