

## RESEARCH BRIEF

# Does Knowledge Influence Melanoma-Prone Behavior? Awareness, Exposure, and Sun Protection Among Five Social Groups

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**Purpose/Objectives:** To examine melanoma-related knowledge, sun exposure, and sun protection to determine whether increased awareness is associated with a reduction in risk.

**Design:** Quantitative/empiricist study conducted by purpose-designed mailed questionnaire.

**Participants:** Consultant oncologists at one teaching hospital in London, England; specialist registrars (oncologists in training) contacted through a London-based educational group; oncology-trained nursing staff from oncology departments at two London teaching hospitals; medical students; general (nononcology) nurses; and members of the lay public from one London teaching hospital.

**Setting:** Two teaching hospitals in London, both registered cancer centers that possess specialist departments of oncology and are staffed by clinical and medical oncologists.

**Methods:** Anonymous, self-completion, mailed questionnaire.

**Research Variables:** Sun exposure; use of sun protection and avoidance; knowledge of the biologic effects of sun exposure, moles, and malignant melanoma; melanoma-prone behavior.

**Findings:** No significant differences were found in sun exposure or melanoma-prone behavior across the five groups studied. No correlation existed between knowledge and melanoma-prone behavior. Differences in knowledge and protection scores were demonstrated across all groups and were statistically significant, but they did not translate into changes in exposure or behavior scores.

**Conclusions:** Public health policy that seeks to reduce the incidence of melanoma is based on the false premise that increasing awareness of melanoma risk will reduce melanoma-prone behavior. Increasing awareness of the risks of sun exposure may improve the use of sun protection, but it does not reduce melanoma-prone behavior, even among specialist healthcare professionals.

**Implications for Nursing:** This study provides a new epidemiologic tool for nurses working in the specialty.

### Key Points . . .

- ▶ Knowledge of the potential harm of sun exposure does not translate into reduced sun exposure.
- ▶ Improved knowledge of the risks of sun exposure is associated with improved sun protection, but the extent of sun exposure still means no improvement in melanoma-prone behavior.
- ▶ The assumption by government and public health bodies that improving awareness of the risks of sun exposure will reduce the incidence of malignant melanoma probably is incorrect.

that increased awareness will lead to a change in behavior and reduce the incidence of malignant melanoma. Evidence exists, however, that increased knowledge does not lead to a change in sun-seeking behavior. If this is so, then this entire segment of public health policy is predicated on a false assumption.

The objective of this research was to study healthcare professionals (including specialists in oncology and general RNs without specialist oncology training), medical students, and lay people for differences in sunbathing, use of sun beds and sunscreen, and concern about and knowledge of risk factors for malignant melanoma. The study further aimed to examine differences in these variables between those reporting high-risk melanoma-prone behavior and those reporting low-risk behavior.

### Background

Early studies examining psychosocial factors in sunbathing and sunscreen use in the United States reported that sun

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The role of sun exposure in the pathogenesis of malignant melanoma is accepted. A change in sun-seeking behavior is, therefore, a key objective of the United Kingdom government's cancer-reduction strategy. Stated aims include increased awareness by individuals of their skin cancer risk factors and changes in behavior by those at high risk to use sun protection and limit their sun exposure and that of their children (Anonymous, 1998). The implication is