

# Skin Self-Examination in Patients at High Risk for Melanoma: A Pilot Study

Deborah L. Phelan, RN, BSN, OCN®, Susan A. Oliveria, SCD, Paul J. Christos, MPH, MS, Stephen W. Dusza, MPH, and Allan C. Halpern, MD

**Purpose/Objectives:** To compare the effect of providing high-risk patients with standard brochures versus personalized photo books as part of a comprehensive nursing intervention on knowledge, awareness, and confidence with skin self-examination (SSE) performance, as well as compliance in performing SSE.

**Design:** Randomized intervention design.

**Setting:** The Lawrence E. Rockefeller Ambulatory Outpatient Cancer Center at Memorial Sloan-Kettering Cancer Center in New York, NY.

**Sample:** 100 patients at high risk for melanoma.

**Methods:** Patients completed a baseline questionnaire before their initial photographs were taken and at the end of a nurse-teaching intervention at the clinic.

**Main Research Variables:** Skin cancer knowledge, awareness, and self-confidence in SSE.

**Findings:** A two-way analysis of variance with repeated measures was performed to examine differences within and among groups in relation to knowledge, awareness, and confidence. The group-time interaction was not significant. In group A (nursing intervention with photo book), 10% of the patients at baseline reported performing SSE three or more times during the prior four months. Mean knowledge scores, awareness, and confidence scores all increased. In group B (nurse-teaching intervention using brochures only, without a photo book), 20% reported practicing SSE three or more times during the prior four months. Mean knowledge, awareness, and confidence scores increased.

**Conclusions:** The main difficulty that patients experience with self-detection of melanoma is their limited recall of skin appearance; therefore, photographic records may be the most effective aid for detecting changes at longer intervals. The use of a photo book may help to diminish that difficulty.

**Implications for Nursing:** This study supports the fact that education can increase knowledge, awareness, and confidence regarding SSE, which is consistent with the findings of other investigators. Therefore, nurses should incorporate teaching patients how to perform SSE into their practice and recognize that personal involvement in health care has become a dominant theme in the cancer education literature in recent years. With this new emphasis, important self-care activities, such as testicular self-examination, breast self-examination, and now SSE, are being stressed because early detection has shown favorable effects in improving the prognosis of cancer.

The estimated incidence and mortality of melanoma in 2003 are 54,200 and 7,600, respectively (Jemal et al., 2003). Rigel and Carucci (2000) estimated that 1 in 74 people would develop a primary malignant melanoma during his or her lifetime. The five-year survival for melanoma is determined by extent of disease: 80% for stage I or II localized, 47% for stage III regional disease, and 12% for stage IV distant metastasis (Balch et al., 2001).

## Key Points . . .

- ▶ The primary screening modality for early detection of skin cancer is an annual examination by a dermatologist.
- ▶ This study supports the fact that education can increase knowledge, awareness, confidence, and compliance regarding skin self-examination (SSE).
- ▶ Nurses should incorporate teaching patients to perform SSE into their practices.

Medical experts almost universally have accepted that over-exposure to sunlight, especially when it results in sunburn and blistering, is the principal cause of melanoma. Numerous banal and dysplastic nevi are important risk markers for melanoma (Tucker et al., 1997). Repeated medical and industrial x-ray exposure and scarring from diseases or burns also are important risk factors. Understanding these risk factors has permitted the identification of a high-risk cohort to be targeted with efforts in prevention and early detection (Halpern, 2000; Tucker et al.). A system for identifying those at greatest risk allows practitioners to focus screening efforts and more effectively decrease morbidity and mortality (McEldowney, 1996).

Being examined annually by a dermatologist is the primary screening modality for early detection of skin cancer (Halpern, 2000). The examination may include whole body

*Deborah L. Phelan, RN, BSN, OCN®, is the chief of dermatologies nurse in the Department of Dermatology and Susan A. Oliveria, SCD, is an assistant attending epidemiologist in the Department of Epidemiology, both at Memorial Sloan-Kettering Cancer Center in New York, NY. Paul J. Christos, MPH, MS, is a lecturer in the Department of Public Health at Cornell University in Ithaca, NY. Stephen W. Dusza, MPH, is a biostatistician and researcher in the Department of Dermatology and Allan C. Halpern, MD, is chief of the Department of Dermatology, both at Memorial Sloan-Kettering Cancer Center. This research was supported, in part, by a research grant from Saint Vincent's Alumnae Association. (Submitted September 2002. Accepted for publication January 25, 2003). (Mention of specific products and opinions related to those products do not indicate or imply endorsement by the Oncology Nursing Forum or the Oncology Nursing Society.)*

Digital Object Identifier: 10.1188/03.ONF.1029-1036