QUALITY OF LIFE, QUALITY OF CARE, AND PATIENT SAFETY

COMPARISON OF DIFFERENT SUN-SAFETY EDUCATION INTERVENTIONS IN CHANGING SUN EXPOSURE AND PROTECTION PRACTICES IN A GENERAL DERMATOLOGY CLINIC: A PILOT STUDY.

Panteha Eshtiaghi [(1)] - Touraj Khosravi-hafshejani [(1)] - Gulaab Sara [(1)] - Harvey Lui [(1)] - Sunil Kalia [(1)]

University Of British Columbia, Department Of Dermatology And Skin Science, Vancouver, Canada [(1)]

Introduction: Sun-safety education is a strategy to reduce the risk of skin cancer. Active learning, compared to passive learning, has demonstrated superior knowledge acquisition and has higher utility. Additionally, the L*a*b* colour system can be used to quantify skin colour. Therefore, the study objective was to compare the effectiveness of different education modalities in changing patient reported sun-exposure, sun-protective behaviors, and skin colour.

Methods: From May to June 2018, 73 participants recruited at a general dermatology clinic were arbitrarily allocated to receive sun-safety education through one of 3 modes: interactive online module, video or no education. A baseline Sun-Exposure and Behaviour Inventory (SEBI) questionnaire was administered to all participants and colorimetry readings of sun-exposed and sun-protected areas were taken. Patients were followed 8 and 16-weeks after the initial visit where a modified SEBI was administered and serial L*a*b* measurements were taken. The change in SEBI scores and L*a*b* measurements (Euclidean distance = ΔE) between the initial and follow-up visits were analyzed.

Results: There were no statistical differences in the baseline characteristics, SEBI scores and L*a*b* measurements between the three groups. At 8 weeks post intervention, participants in the online module and video groups had significantly improved SEBI scores compared to control (median scores: -42.5 and -12.5 versus 15, respectively; $p<0.05$, Kruskal-Wallace). At 16 weeks, only the module group showed significant improvement in SEBI scores compared to control (median scores: -20 versus 17, respectively; $p<0.05$, ANOVA). There was no statistical difference in skin-colour (ΔE or ΔL) between the three groups at 8 or 16-week follow-up time points.

Conclusions: Self-reported sun-protective behavioral changes were only maintained at

16-weeks with interactive online module education. However, these changes did not correlate with significant skin color changes. Interactive strategies should be explored further to promote patient behaviour that translates to long-lasting objective changes in sun-protection.