Changes in sun protection behaviour after diagnosis of high-risk primary melanoma

Lena A von Schuckmann1,2, Louise F Wilson1, Maria Celia B Hughes3, Vanessa L Beesley1, Monika Janda3, Jolieke C van der Pols4, B Mark Smithers5, Kiarash Khosrotehrani6, Adele C Green1,7

1. Population Health Department, QIMR Berghofer Medical Research Institute, Australia
2. School of Public Health, The University of Queensland, Australia
3. School of Public Health, Queensland University of Technology, Australia
4. School of Exercise and Nutrition Sciences, Queensland University of Technology, Australia
5. Queensland Melanoma Project, Prinncess Alexandra Hospital, The University of Queensland, Australia
6. Experimental Dermatology Group, The University of Queensland Diamantina Institute, Australia
7. CRUK Manchester and Faculty of Biology, Medicine and Health, University of Manchester, Manchester, UK

Background

Melanoma survivors are at high risk of developing a second primary melanoma (Bradford et al 2010). Standard clinical recommendations about sun safety aim to minimise this risk, but longitudinal data are lacking after diagnosis in regard to patients’ compliance with sun protection advice.

Methods

We applied repeated measures latent class analysis to information collected via self-administered questionnaires about primary prevention behaviour at time of diagnosis and then six-monthly for two years after diagnosis from patients with clinical stage IB-II melanoma in Queensland, Australia (Smithers et al, 2015). Multivariable regression analysis was conducted to determine factors associated with behaviour trajectories after diagnosis.

Results

Among 448 male and 341 female melanoma patients, sunscreen use after diagnosis fell into three trajectories: ‘stable, never-use’ (26% males; 12% females), ‘stable, sometimes-use’ (35% males; 29% females) and ‘increased to often-use’ (39% males; 59% females). Most male melanoma patients reduced their weekend sun exposure (either ‘high to moderate’ (60%) or ‘moderate to low’ (18%) levels), although 22% remained ‘stable, high’. Among female patients, 33% reduced their weekend sun exposure (‘moderate to low’), with the remainder having trajectories of either ‘stable, moderate’ (48%) or fluctuating ‘moderate-high’ (19%). Male patients, smokers, those with lower education, with some tanning ability, or those who did not perform regular self skin-checks were more likely to have trajectories of inadequate sun protection.

Conclusion

Identifying melanoma patients with inadequate sun protection behaviours at diagnosis would assist clinicians to provide targeted education.

References
