

Letter to the Editor

Knowledge, attitudes and behaviours towards sun exposure in Chilean students

V. Zemelman¹, M. A. Castrillon¹, D. Castro¹, C. Y. Valenzuela²

¹Department of Dermatology, Faculty of Medicine, University of Chile, Santiago, Chile, and ²Human Genetics Program, ICBM, Faculty of Medicine, University of Chile, Santiago, Chile

To the Editor,

The last decades have witnessed an increase in the incidences of skin cancer throughout the world. In Chile, a recent study showed that the mortality rates from malignant melanoma increased by 14% between 1988 and 1998 (1) and the skin cancer incidence rates increased by 101% between 1992 and 2001 in Santiago's hospitals (2). This may be explained by an increased exposure of individuals to UV radiation, mainly due to the hole in the ozone layer and also due to an increase in leisure time and the desire to possess a suntan. In order to reduce the incidence of skin cancer, it is important to educate young people about the danger of excessive sun exposure. The purpose of this study was to analyse the awareness, knowledge and attitudes of Chilean health university students towards sun exposure and sun protection. A total of 265 students (120 males and 145 females), average age 20.1 years, from Santiago, Chile (32°S), were recruited for this study. A suitable questionnaire of multi-choice questions comprising items examining awareness, knowledge and sun protection measures was constructed. The test was pre tested on a smaller number of students. Some of the questions had more than one answer. The survey was carried out between the months of August and November (winter–spring). The statistical analysis was performed by a χ^2 test for heterogeneity. The distribution of Fitzpatrick skin type was: 7.9% skin type I, 41.1% type II, 28.7% type III, 21.1% type IV, 1.1% type V and 0 type VI. In relation to knowledge, a great number of students (99.6%) were aware of the link 'sun–skin cancer'; however, regarding the question on 'suntan and health', only 26.4% declared that a suntan is harmful for health, 87.2% considered it attractive and 22.3% of the students thought that getting a suntan is healthy. Furthermore, 21.1% of the students thought that getting a suntan is attractive, but it is also harmful for the health. In relation to the use of

sunbed, 4.9% reported to have used a tanning bed once: 8.3% females and only 0.8% males ($P < 0.05$). Regarding the question 'If you have free access to the tanning bed, would you use it, knowing that you may suffer from skin cancer in the future?', 16.2% of the students said that they would use it, 23% being females and 8.3% males ($P < 0.05$). In relation to sunburns, 85% of the students reported having been burnt once, 27.2% reported having been burnt five or more times in their life. 21.1% of the students reported having been burnt last summer. Regarding sun protection behaviour, in answer to the question 'If you have to go out in the summer day at the peak sunlight, what do you do?', 82.2% of the students reported seeking the shade, 37% reported wearing sun glasses, 36% reported using sunscreen, only 9.4% reported wearing protective clothing and 4.2% reported taking no sun protection measures. Concerning the use of sunscreen, 23.0% reported using it only on the hot days in the summer, 55.8% declared using it only when going to the beach or to outdoor swimming pools and 9.8% declared never using sunscreen. A significantly higher number of females used sunscreen.

Our students are well aware of the sun–skin cancer correlation (99.6%); however, in contrast, they seemed unaware of the link between suntan and disease; only 26.4% of the students declared that suntan is harmful for the health. Moreover, 22% of the students thought that getting a suntan is healthy. Also, getting a suntan was so important for the students in terms of being more attractive that 16.5% of them reported that they would use a sunbed knowing that they may have skin cancer in the future. This may be due partly to the fact that these students are sceptical of scientific findings or being attractive is so important for them that they are prepared to take the risk. Only 4.9% of our students declared having used a sunbed, a much lower incidence than the 47%

reported in the United States (3). Concerning sunburns, 21.1% of the students reported having been burnt last summer, a smaller percentage than the 57.5% reported in the United States (4) and that reported in the United Kingdom (5); this may be explained by the darker skin of our students. Regarding sun protection, seeking the shade was the most popular sun protection measure (82.2%), higher than that reported in other countries (6, 7). Sunscreen use was higher in females than in males ($P < 0.05$), similar to other countries. These results indicate that Chilean young people are partially aware of the risk of excessive sun exposure, but they are not taking suitable sun protection measures. This study confirms the results of other investigations in young people from other countries (8, 9). So far, skin cancer campaigns in Chile have not successfully changed the sun habits in the younger population. Future skin cancer prevention campaigns should emphasize further education directed towards young people in order to improve their sun protection behaviour.

Conflicts of interest

None declared.

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Corresponding author:

V. Zemelman

Department of Dermatology

Faculty of Medicine

University of Chile

Santiago

Chile

e-mail: vzemelma@redclinicauchile.cl