Knowledge, behaviour and attitudes of patients with skin cancer towards national recommendations on sunlight exposure and vitamin D

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National guidance for achieving adequate vitamin D (VitD) status in the general population of the U.K. includes VitD supplementation for specified groups deemed at risk of inadequacy, and repeated brief exposures to summer sunlight. In contrast, those with a history, or at high risk, of skin cancer are advised to avoid sunlight exposure and employ ultraviolet protection, both of which impact on VitD status. These varied public health messages may cause confusion in patients with skin cancer. The aim of this study was to explore the knowledge, behaviour and attitudes of patients previously treated for skin cancer in relation to VitD and these public health recommendations. Patients previously treated for multiple basal cell carcinomas (n = 10; age range 40–82 years) at a dermatology centre were recruited to participate in focus group discussions. Ethical approval for the study and patient consent were obtained. Using a semistructured discussion format the following were explored: knowledge about VitD, patient behaviour with respect to sun avoidance and patient attitude towards the sun exposure guidance. Qualitative data analysis of discussion transcripts was performed via the principles of thematic analysis, utilizing the software programme MAXQDA11 (VERBI, Berlin, Germany). Pre-existing knowledge of VitD and its requirement for musculoskeletal health were limited. Most patients practised sun avoidance and expressed that they would be reluctant to increase their sunlight exposure. Despite this, most patients did not perceive VitD deficiency to be a significant risk to their own health and were not convinced to take VitD supplements. Patients on multiple oral medication cited this as a further reason for reluctance to add VitD supplements. Instead, patients felt that they could achieve adequate levels through dietary intake. However there was little understanding of the VitD content of specific food types. Education of patients with skin cancer is needed to address their low awareness of the health implications of low VitD status, their enhanced risk conveyed through sun avoidance and photoprotective measures, and the means for increasing oral intake. Reassuringly, patients currently seem unlikely to increase their sun exposure, despite varied public health messages. As few natural foods contain substantial VitD, supplements or alternatively fortified foods should be specifically recommended to patients with skin cancer practising strict photoprotection.

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