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## Outdoor advertising as a way of skin cancer prevention

Dear Editor,

Skin cancer is the most common cancer in the world, and its main cause is unsafe or excessive exposure to ultraviolet (UV) radiation.<sup>1,2</sup> It is important to raise levels of literacy of the population on skin cancer and its prevention.

Several media vehicles can be used to disseminate information to the population, such as brochures, outdoor advertising, websites and social media, collaboration of public figures, and educational events. Outdoor advertising has a high impact, is noninvasive, has emerged as a main medium, and young people are more favorable to it.<sup>3</sup>

The Portuguese Skin Cancer Association (APCC) (www.a pcancrocutaneo.pt), with the support of the Portuguese Society of Dermatology and the Directorate-General for Health,



**Figure 1** Outdoor advertising, 2014: The Sun and the Skin. The sun is not only at the beach. *Also* in sports and at work. Icons of sun protection elements were used, self-examination was promoted with skin cancer pictures, and instructions to consult a dermatologist whenever in doubt.

promotes the use of posters and mupis (light box) outdoors since 2004, in order to alert the population toward UV radiation adverse effects and strategies of avoidance. From 2004 to 2011, the focus was primary prevention. Sentences like "Summer without scalding, sun with moderation, shadow as protection" and "Sports in Summer with good protection" were displayed on posters and outdoor advertising. The messages addressed various issues including appropriate hours of sun exposure, the role of UV radiation index, the importance of the shadow, the risk of reflecting surfaces, the use of clothes with proper fabric and design, hats, sunglasses, and the use of sunscreen (SPF 30+). Since 2012, the APCC has included images of the most common precancerous lesions (actinic keratoses) and the most relevant types of skin cancer (basal cell carcinoma, squamous cell carcinoma, and malignant melanoma) in order to promote secondary prevention.

The outdoor advertising distributed during the summer of 2014 (Fig. 1) focused on associating sun exposure to places other than the beach: "The sun and the Skin. The sun is not only (present) at the beach. (It is also present) in sports and at work...". Below this sentence, icons of other activities where people are exposed to UV radiation were displayed, such as practicing outdoor sports and outdoor professions. Moreover, it included a call-to-action sentence ("How to protect yourself") followed by icons of sun protection elements. The outdoor advertising also drive attention to the importance of self-examination, stating that "The skin cancer can be visible. Early diagnosis can allow its cure.", followed by images of the most common skin lesions. A final recommendation was added at the end: "If in doubt, do not hesitate and seek your dermatologist".

The total number of municipalities in Portugal is 308. From 2004 to 2020, the number of municipalities involved in the dissemination of posters and outdoor advertising increased with time (2004: 1 [city of Porto]; 2005: 11; 2006: 44; 2007: 49; 2008: 64; 2009: 76; 2010: 92; 2011: 93; 2012: 95; 2013: 95; 2014: 126; 2015: 97; 2016: 127; 2017: 131; 2018: 134; 2019: 149; 2020: 183). Since the beginning, both large and small municipalities (in terms of population), from the north to the south, participated actively in this initiative. In 2020, from the 57 municipalities with more than 50,000 residents (data from the National Institute of Statistics: INE June 19, 2019; national population of 10,276,617 inhabitants) in a total of 6,723,956 inhabitants, 47 municipalities participated, with a population of 5,474,976 inhabitants, that had access to this initiative under different forms of dissemination (mupis, posters, social networks, etc).

Australia's experience with media campaign that assessed sun protection attitudes and behaviors (SunSmart) has provided evidence of improvements in knowledge, behaviors, and speed of increase of skin cancer.<sup>4</sup> Portugal has been recognized for innovating public health campaigns like printing sun-safety messages on sugar packets.<sup>5</sup> Further studies are

still needed to ascertain the specific effect of these campaigns on adherence to primary prevention and early skin cancer diagnosis.

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## Hyperpigmentation as a guiding sign for the diagnosis of visceral leishmaniasis in a patient with human immunodeficiency virus (HIV)

Dear Editor,

Leishmaniasis is a disease caused by pathogenic protozoan parasites of the genus *Leishmania*. Visceral leishmaniasis (VL), also known as kala-azar, is the result of the dissemination of infected macrophages throughout the reticuloendothelial system. It is characterized by fever, weight loss, hepatosplenomegaly, and lymphadenopathy, among other signs. VL can also present with cutaneous manifestations, which can be specific (e.g. papules, nodules, and ulcers) or nonspecific