

UNIVERSIDADE CATÓLICA PORTUGUESA

The application of social marketing to skin cancer prevention: the case of Portugal

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por

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Resumo

O objetivo desta tese de mestrado é compreender a influência de campanhas de marketing social na prevenção do cancro da pele, com foco em Portugal, com o caso da APCC (Associação Portuguesa de Cancro Cutâneo).

Em primeiro lugar, foi realizada uma revisão de literatura sobre marketing social para compreender o seu conceito, evolução, aplicações e ferramentas para estudar a mudança de comportamentos. A revisão de literatura versou também o tema do cancro da pele, para perceber o que é o cancro da pele, que tipos existem, de forma a contextualizar o tema. Além disso, foram também destacadas as campanhas de prevenção de cancro da pele em Portugal com o caso da APCC.

Em segundo lugar, foram recolhidos e analisados dados através de uma combinação de pesquisa primária (entrevistas a pessoas envolvidas nas campanhas da APCC) e pesquisa secundária (análise de dados de questionários sobre comportamentos de prevenção do cancro da pele realizados em campanhas da APCC).

Por fim, foi apresentado um *brief* para uma campanha de marketing social, com a apresentação de recomendações sobre a segmentação, os objetivos de comunicação e a estratégia do marketing mix para futuras campanhas de prevenção do cancro da pele a serem implementadas em Portugal.

Palavras-chave: marketing social, prevenção do cancro da pele, marketing-mix, mudança de comportamento, plano de marketing social

Abstract

The objective of this master thesis is to understand the influence of social marketing campaigns on skin cancer prevention, focusing on Portugal with the case of APCC (Associação Portuguesa de Cancro Cutâneo).

Firstly, it was conducted a literature review on social marketing to understand its concept, evolution, applications and tools to study behavior change. The literature also included the topic of skin cancer, to comprehend what it is and its types, providing background on the topic. Moreover, there was a focus on skin cancer prevention campaigns, zooming in on Portugal with the case of APCC.

Secondly, data was collected and analyzed through a combination of primary research (interviews to people involved in APCC campaigns) and secondary research (analysis of data of surveys about skin cancer prevention behaviors conducted in APCC campaigns).

Finally, it was presented a social marketing campaign brief, providing recommendations on segmentation, communication objectives and marketing mix strategy for future skin cancer prevention campaigns to be implemented in Portugal.

Keywords: social marketing, skin cancer prevention, marketing-mix, behavior change, social marketing plan

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Chapter 1: Introduction

This master thesis examines the influence of social marketing campaigns on the prevention of skin cancer, zooming in on the case of Portugal. The number of skin cancer cases in Portugal has increased significantly over the past years and changing sun-related behaviors still remains a challenge, especially among adolescents. What makes skin cancer prevention so relevant is the fact that skin cancer is mostly preventable, as long as individuals follow certain behavioral guidelines to reduce the risks of being exposed to sun (Koch *et al.*, 2016). Social marketing is a process that applies marketing principles and techniques to create, communicate, and deliver value in order to influence target audience behaviors that benefit society as well as the target audience (Cheng, Kotler, & Lee, 2011). In order to successfully change behaviors, the use of well-designed social marketing campaigns could make a positive impact on behavior change.

There haven't been many efforts within the field of social marketing concerning sun safety, when comparing to health issues as smoking, drugs, diet and responsible drinking. Moreover, the negative effects of sun exposure on health have increased significantly in the past decades. As a consequence, the promotion of sun-protection, through effective social marketing campaigns, has become more and more relevant, especially among adolescents since they have been described as at-risk populations. Bearing this in mind, the research question of this thesis is "What is the influence of social marketing campaigns on skin cancer prevention?".

In order to answer the research question, this master thesis begins with a Literature Review on the concepts of social marketing and skin cancer. To understand what social marketing is, it was included an analysis of its concept and evolution over time, of its applications to relevant issues and what tools exist to study behavior change, with special emphasis on the Health Belief Model. After that, the focus was on providing background on skin cancer, including what is skin cancer, its various types and skin cancer prevention, making reference to initiatives developed in Australia, Europe and finally, zooming in on the case of Portugal. The analysis of the impact of social marketing campaigns in Portugal focused on the case of APCC (Associação Portuguesa de Cancro Cutâneo) and on their efforts to raise awareness concerning skin cancer prevention.

The next chapter will describe the Methodology used, as well as, explain how the data was obtained. It was chosen a combination of primary research, by conducting interviews to people involved in APCC campaigns and secondary research, analyzing data of the surveys about skin prevention behaviors conducted in the APCC campaigns.

Then, the chapter of Data Analysis will present the results of the surveys made during the APCC campaign and the insights gathered from the analysis of the interviews.

After that, the chapter of the Social Marketing Brief will include recommendations on objectives, segmentation and marketing mix strategy for future social marketing campaigns with the goal of changing adolescents sunrelated behaviors.

Finally, in the Conclusion chapter, the conclusions will be drawn, the main ideas highlighted, the limitations presented, and future research proposed.

Chapter 2: Literature Review

2.1 Social marketing

2.1.1 Concept and evolution

"Why can't you sell brotherhood like you sell soap?". This is what D. Wiebe asked back in 1952 (Kotler & Zaltman, 1971) when he tried to understand why it was so easy to sell products as soap, but so difficult to change people's behaviors. If we make a quick comparison to modern days, for instance, "Why can't you sell health behaviors like you sell Cappuccinos?". The adoption of the behavior would simply be the obvious choice for the individual, without having to make a conscious and complex decision about it. Social marketing tools and techniques help us create a "brand" for a social or health behavior, so that people feel attracted to adopt that behavior (Weinreich, 2010).

In order to fully understand what social marketing is, we need to go back to its roots and study its evolution. The first time the concept "social marketing" came to light was in the article of Kotler and Levy's in 1969, "Broadening the Concept of Marketing". The authors rethought what marketing was about and realized "marketing is a pervasive societal activity that goes considerably beyond the selling of toothpaste, soap and steel" (Kotler & Levy, 1969:10). Bearing this in mind, the authors suggested that marketers should take a step further and try to use the traditional marketing mix to the marketing of social programs. Another interesting idea pointed out by the authors were the two meanings of marketing: one that is related to selling, influencing and persuading; and other that concerns serving and satisfying human needs (Kotler & Levy, 1969).

Later, in 1971 Kotler and Zaltman deepened the study and knowledge of social marketing, defining it as "the design, implementation, and control of programs

calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research" (Kotler & Zaltman, 1971:5). Moreover, the authors mentioned that the key idea of marketing concerns the principle of exchange, that is, the acknowledgement that there ought to be a well-defined benefit for the customer if change is to occur (Gordon, McDermott, Stead, & Angus, 2006). According to the authors, social marketing "offers a useful framework for effective social planning at a time when social issues have become more relevant and critical" (Kotler & Zaltman, 1971:12). Indeed, if marketing people are well trained in issues as market analysis, consumer needs, product development and distribution channels, why not use this extremely useful knowledge for the successful change of behaviors that are good for the society as a whole? This is why marketing is a good fit for social causes. 48 years later, this idea is still valid, social issues are still extremely important and require social planning and strategy (Kotler & Zaltman, 1971). Over the years, several social causes such as reducing the tobacco use, promoting physical activity and drink driving, have turned to social marketing to overcome these issues (Cheng *et al.*, 2011).

According to Cheng *et al.* (2011), social marketing is a process that applies marketing principles and techniques to create, communicate, and deliver value in order to influence target audience behaviors that benefit society as well as the target audience. This definition focuses once again on the use of the traditional marketing 4P's, but it also focuses on behavioral change and influencing behaviors for the good. Social marketing is focused on population-based behavior change, as it targets aggregated behavior change, meaning the focus of the campaigns are priority segments of the population and not individuals. This behavior change might be related to a product adoption and use, the access to certain services or the adoption of health protective/preventive behaviors (Lefebvre, 2011). Moreover, the targeted behavior should be obtained voluntarily, rewarding good behavior and not punishing bad behavior (Silva &

Silva, 2012). They also claim that, usually, social marketing campaigns focus on changing the behavior of target audience regarding four behavioral changes:

- 1- Accept a new behavior
- 2- Reject a potential undesirable behavior
- 3- Modify a current behavior
- 4- Abandon an old undesirable one

It is interesting to see the evolution of the traditional marketing mix to the social marketing mix (Weinreich, 2010). The traditional marketing mix, the "4P's" of marketing includes: Product, Price, Place and Promotion. Kotler & Zaltman (1971) took a step forward with social marketing adding four more P's: Publics, Partnership, Policy and Purse strings. Zooming in on the additional P's, Publics refers to the different groups the message will be addressing, and the need to adapt the message to fit the needs of each public. Partnership has a relevant role because often the issues addressed are complex and require partnership with local authorities, for example, to increase its impact. Often Policy change is needed, and media advocacy programs can be an effective complement to a social marketing program. Purse strings regard the need of the funds provided by sources such as foundations, governmental grants or donations (Weinreich, 2010).

2.1.2 Applications

Over the years, social marketing efforts have focused on four main areas: health promotion, injury prevention, environmental protection and community mobilization (Kotler & Lee, 2008). Health promotion-related behavior issues that could benefit social marketing comprise, for instance, tobacco use, teen pregnancy, HIV/AIDS, diabetes, oral health, among many other examples. Injury prevention-related behavior issues that could also benefit from social marketing include for example, drinking and driving, seatbelts, suicide, domestic violence, school violence, and others. Concerning the third area, environmental protection-related behavior, we can name a few issues that could profit from social marketing, such as, waste reduction, forest destruction, water conservation, toxic fertilizers, and others. Finally, in what concerns community mobilization-related behavior issues, organ and blood donation, voting, animal adoption and literacy are a few issues that could use social marketing (Kotler & Lee, 2008).

Zooming in on health promotion, social marketing has provided public health professionals with an effective approach for developing programs to promote healthy behaviors. Successful examples than can be named are the promotion of mosquito nets in Nigeria, the tuberculosis prevention and treatment in Peru and the contraceptive social marketing attempts in India (Cheng *et al.*, 2011). Another good example is the socially-marketed rapid diagnostic tests and ACT (artemisinin combination therapy) in Cambodia. This social marketing program included promotional materials, guidelines for health providers, wholesale and retail price levels, distribution of Malarine and Malacheck, methods for monitoring and evaluating. The main goal of this program was to influence the behavior of providers and consumers through the development and promotion of key messages using a wide range of media. The authors that analyzed this program, concluded that it is essential to have a complete communication strategy and a well-grounded supply of products, paying attention to the geographical reach of both aspects (Yeung, Patouillard, Allen, & Socheat, 2011).

2.1.3. Tools for studying social behavior changes

It is important to keep in mind that, as far as social marketing is concerned, the focus should be placed on behaviors. As previously stated, the change of behavior should be voluntary; there should be a balance between rewarding the good behavior and not punishing bad behavior; the reward might not be immediate but postponed; the principals and techniques proposed by commercial marketing should be used; and society, as a whole, is the big winner in this process (Kotler & Lee, 2008).

If marketers want to encourage a behavior, they could follow the four principles (EAST): make it Easy, Attractive, Social and Timely (Behavioral Insights Team, 2014). These are principles for applying behavioral change. Easy, means to control the power of the "default" options individuals usually choose, reduce the "hassle factor" of taking up a service (reduce the effort required to perform an action) and simplify messages. Marketers should make it Attractive in order to attract attention and design rewards and sanctions for maximum effect. Make it Social, concerns showing that most people perform the desired behavior, using the power of networks and encouraging people to make a commitment to others. Finally, the Timely factor is related to the prompt of people when they are likely to be most receptive, the consideration of the immediate costs and benefits and the helping of people plan their response to events (Behavioral Insights Team, 2014).

Over the years, different authors have expressed interest in creating tools to be used in behavioral change., one of the most relevant tools is the Health Belief Model. The Health Belief Model provides a framework for considering behaviors and interventions, as well as, their associated behavioral changes (Brennan, Binney, Parker, Aleti, & Nguyen, 2014). It considers that there is a better chance that people will change a health-related behavior if they feel that a threat to their health can be avoided by changing their behavior; if they feel that the benefit of their action is superior to the perceived barriers; and if they feel that the change can be made successfully.

This thesis will be guided by the Health Belief Model, as it concerns a healthrelated behavior of a health issue (skin cancer). According to the Health Belief Model, the variables that guide health actions, as shown in table 1, are: (i) **Perceived susceptibility** to a health threat: people won't change their behavior unless they believe they are at risk. E.g.: Adolescents who don't think they're at risk of skin cancer are unlikely to change their sun protection behaviors;

(ii) **Perceived severity** of contracting an illness or condition: the probability that a person will change his/her health behaviors to avoid a consequence depends on how serious he or she considers the consequence to be. E.g.: If adolescents don't believe that skin cancer is dangerous, it's unlikely they will change their sun protection behaviors;

(iii) **Perceived benefits**, the perception that the advocated health measures are effective in reducing the risk: if there isn't a benefit, a reward, it's hard to persuade people to change a behavior. E.g.: adolescents probably won't stop going to the beach at dangerous hours if they don't think that doing so will improve their lives in some way.

(iv) **Perceived barriers**, the perception of physical and psychological barriers to the recommended action: many people don't change their health behaviors because they believe the process will be too difficult, it can cost effort, time and money. E.g.: If a group of friends always goes to the beach at 1 p.m., it's hard for one member to take an opposite position and go at 5 p.m.

(v) Cues to action: external events that cause a desire to make a health change.E.g.: Adolescents seeing a skin cancer prevention campaign offering hats might convince them to wear a hat to the beach.

It is also important to mention the concept of self-efficacy. It regards a person's belief in his/her ability to make a health-related change and be successful on it. If people believe they can change something, it's more likely they will succeed on it (Cody & Lee, 1990).

8

Concept	Definition
Perceived	Perception of the likelihood of experiencing a
Susceptibility	condition that would adversely affect one's health
Perceived	Beliefs a person holds concerning the effects a given disease or condition would have on one's state of
Seriousness	affairs: physical, emotional, financial, and psychological
Perceived	
Benefits of	The extent to which a person believes there will be benefits to recommended actions
Taking Action	benefits to recommended actions
Perceived	The extent to which the treatment or preventive
Barriers to	1
Taking Action	expensive, unpleasant, painful, or upsetting
Cues to action	Types of internal and external strategies/events that
	might be needed for the desired behavior to occur f Model Adapted from Kotler and Lee (2009)

Table 1 - Health Belief Model. Adapted from Kotler and Lee (2009)

There are two main criticisms to this model. Firstly, there isn't a clear explanation of the relationships between the model variables and it wasn't given a definition for each of its components. Secondly, the model doesn't mention relevant causes of health behavior change, as for example, the positive effects of negative behaviors and social influence. Due to this, the model has been considered incomplete (Brennan et al., 2014).

2.2. Skin cancer

2.2.1. Background: skin and UV rays

The largest organ in the human body is the skin. Skin is what protects our internal organs from damage, heat and infection (Crowley & Murphy, 2015). Therefore, skin is the organ which is most exposed to sunlight, with all of good and bad that comes with it. Solar radiation, in particular, ultraviolet radiation B is important for the human body to receive appropriate doses of vitamin D, which is fundamental for bone calcification. However, in excessive doses this radiation might have negative impacts, such as skin cancer, cataracts and photoaging (Rodrigues *et al.*, 2014). Skin damage from sunlight is caused by the exposure of the skin to ultraviolet rays (Cody & Lee, 1990).

It is important to clarify that the sun produces two different types of UV radiation: Ultraviolet A rays (UVA) and Ultraviolet B rays (UVB). UVA rays cause early aging of the skin and skin cancer; UVB rays cause sunburn, chronic skin damage, preliminary stages of cancer and, eventually, skin cancer itself (figure 1).

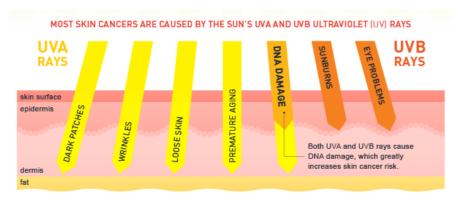


Figure 1 - UVA and UVB ultraviolet rays. Source: Solbari

The ultraviolet rays are strongest from 11 am to 3 pm (Crowley & Murphy, 2015). In order to have a better-informed population regarding ultraviolet rays, many countries, Portugal included as we can see in figure 2 (through IPMA -

Instituto Português do Mar e da Atmosfera), have begun to display the UV index next to the regular weather forecast. The UV index (figure 3) is an international scientific measure of the level of ultraviolet radiation from the sun. The range of the index is from 1 - 11, being 1 the index with less risk and 11 the index with higher risk of skin damage (Euromelanoma, 2018).



Figure 2 - UV index in Portugal. Source: IPMA website

Figure 3 - The UV Index. Source: Skin Cancer Foundation

2.2.2. Skin cancer: types

There are two types of skin cancer: non-melanoma skin cancers and malignant melanoma (figure 4). The first one includes basal cell carcinoma, which is the most common and least dangerous form of skin cancer and squamous cell carcinoma, which is the second most common form of skin cancer. Although, these two forms of skin cancer seldom are fatal, they do require appropriate treatment, such as surgical removal. Malignant melanoma is the most dangerous form of skin cancer. It is less usual than non-melanoma skin cancers, nevertheless, it represents the major cause of death from skin cancer (World Health organization, 2018).



Figure 4 - Skin cancer types. Source: APCC website

2.2.3 Skin cancer: causes

According to the Skin Cancer Foundation, one person dies of melanoma every hour (Skin Cancer Foundation, 2018). Indeed, skin cancer is the most common cancer in the world. The main cause of skin cancer is unsafe or excessive exposure to sun's UV rays (present in the sunlight and sunbeds), that penetrate and damage skin over the years (Euromelanoma, 2018). As reported by the Irish Cancer Society, it is estimated that 80-90% of all cases of skin cancer are caused by the UV rays of the sun, and due to this, these cancers could be prevented if people had more appropriate behaviors towards the sun. The other 20-10% are caused by genetic susceptibility, exposure to toxic substances or by having a condition that weakens the immune system.

2.2.4 Skin cancer: incidence

As claimed by the American Cancer Society (2018), Melanoma is more than 20 times more common in whites than in African Americans. Overall, as we can see in figure 5 through the analysis of the different countries, the lifetime risk of getting melanoma is about 2.6% (1 in 38) for whites, 0.1% (1 in 1.000) for blacks, and 0.58% (1 in 172) for Hispanics.

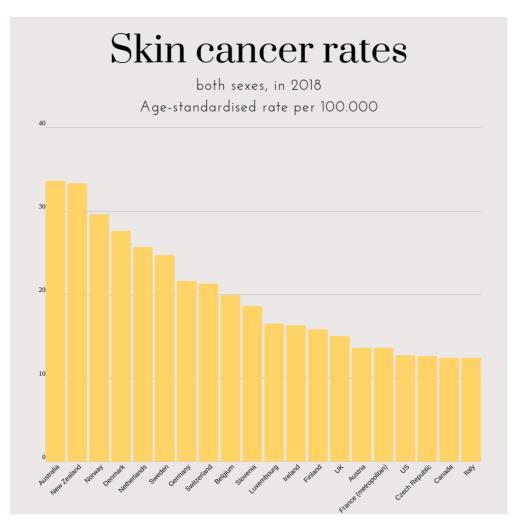


Figure 5 - Skin cancer rates in 2018. Own elaboration. Source: World Cancer Research Fund

The risk of melanoma increases as people age, as we can see in figure 6. The average age of people when it is diagnosed is 63. But melanoma is not uncommon even among those younger than 30, young men aged 15 to 39 are 55 percent more likely to die from the disease than women of the same age. In fact, it's one of the most common cancers in young adults (especially young women). There is a trend that as children grow older, they tend to adopt riskier behaviors towards the sun. For example, the fact that a tanned skin is valued among this age group, influences the amount of time they are exposed to the sun. Moreover, this age group is influenced by current trends, fashion and group of friends. This explains the fact the most popular sun protection method among adolescents are sunglasses, as then can be considered "trendy" and a fashion accessory (Rodrigues et al., 2014).



Figure 6 - Skin cancer by sex. Own elaboration. Source: The Skin Cancer Foundation

As claimed by the American Academy of Dermatology (2018) skin cancer costs are significant as about 4.9 million U.S. adults were treated for skin cancer each year from 2007 to 2011, for an average annual treatment cost of \$8.1 billion, as we can observe in figure 7. According to Duarte *et al.* (2018), for a 5 years studied period of public hospital costs, skin cancer (malignant melanoma) amounted a total of 19.1 million \in , corresponding to an average yearly total amount of 3.8 million \in . The authors also draw attention to the fact that there should be made assertive political decisions on redirecting funds for skin cancer prevention because the number of skin cancer cases has been increasing and substantial healthcare resources are consumed in public hospitals for skin cancer management.

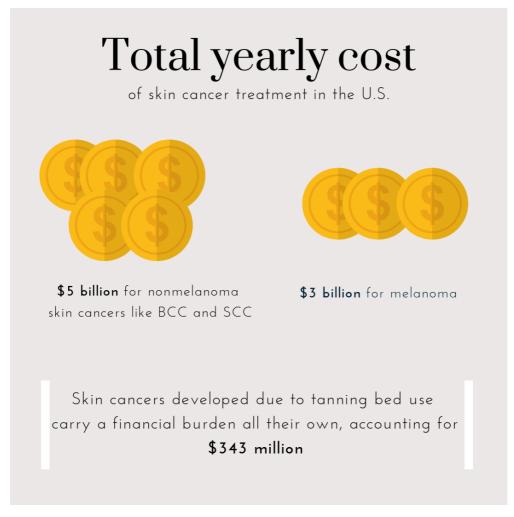


Figure 7 - Skin cancer Total yearly cost. Own elaboration. Sources: American Journal of Preventive Medicine, Journal of Cancer Policy

2.2.2 Skin Cancer Prevention: Background

What makes skin cancer prevention so important is the fact that skin cancer in mostly preventable, as long as, individuals follow certain behavioral guidelines that reduce the risks of being exposed to the sun (Koch *et al.*, 2016). There are two levels of skin cancer prevention: primary prevention that concerns the change of behaviors towards sun exposure such as wearing hats, long-sleeved clothes, sunscreen, playing in the shade among others; and secondary prevention that includes self-examination and getting a medical appointment (Seité, del Marmol, Moyal, & Friedman, 2017). The UV protection effect of sunscreen can be seen in figure 8.

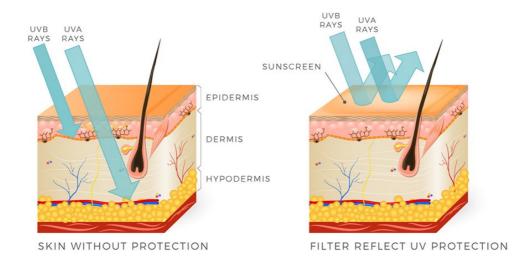


Figure 8 - Sunscreen UV protection. Source: myDoc Urgent care

There haven't been many efforts within the field of social marketing concerning sun safety, when comparing to health issues as smoking, drugs, diet and responsible drinking. Sun safety requires initiatives that go beyond increasing awareness of the risks supporting and maintaining changes to behavior (Peattie, Peattie, & Clarke, 2001). In fact, the negative effects of sun exposure on health have increased significantly in the past decades (Rodrigues et al., 2014). According to the World Health Organization, each year about 232.000 new cases of melanoma are diagnosed around the world, making it a quite relevant health issue (Seité et al., 2017). In fact, skin cancer is the most diagnosed cancer among Caucasians (Koch et al., 2016). As a consequence, the promotion of sun-protection has become more and more relevant, especially among children and adolescents since they have been described as at-risk populations for the development of skin cancer in later life due to their high rates of sunburn. As a matter of fact, from a prevention point of view, the investment in skin cancer prevention campaign can be seen as a triple goal situation: change people's behaviors, reduce melanoma rates and bring a positive return on investment to the government.

2.2.3 Skin Cancer Prevention: The Australian case

Concerning skin cancer prevention, Australia was certainly a pioneer. They have promoted social marketing campaigns to raise awareness of skin cancer prevention since 1980. This happened because Australia has the highest rates of skin cancer in the world. These high rates can be explained mainly by two factors: Australia has high ambient UV radiation levels and has a predominately susceptible fair skinned population (Sinclair & Foley, 2009). Over the years, it has been registered an increased awareness about the dangers of overexposure to the sun, an improvement in the sun protection behaviors and a decrease in skin cancer rates (Sinclair & Foley, 2009). The most used method of sun protection among children, adolescents and adults is sunscreen (Stanton, 2004). Moreover, there has been a rising trend of staying inside in order to avoid sun exposure, as well as, the benefit of staying in the shade (in schools for example) (Koch et al., 2016). Authors as Koch, Stanton, Sinclair & Foley agree that new approaches should be specifically target at adolescents and they ought to be frequently redesigned and updated to catch the interest of the younger audience. Adolescents tend to be less likely to engage in sun-protective behaviors, when comparing with adults, sun protection is a low-priority issue for this group. Being cautious regarding the sun, does not match the "independent" and "free" attitude of the adolescents.

Their first successful campaign was "slip, slop, slap" in 1980. Even though it is a campaign with many years, it still remains very present and is recognized by many Australians. The campaign promoted by the SunSmart program consisted of a cartoon that sang a catchy jingle, saying that in order for people to be safe while in the sun, all they had to do was "Slip on a shirt, Slop on the sunscreen, Slap on a hat" (figure 9) (Ken Peattie *et al.*, 2001).



Figure 9 - Slip, slop, slap original ad in 1980. Source: SunSmart website

The SunSmart program aims to influence the environment and legislative context, individual's knowledge and behavior. In order to achieve its goals, the program uses paid and unpaid media, in addition to promoting activities in different places, such as schools (figure 10), workplaces, community groups and leisure facilities. This proved to be a great way to reach different targets in a very intimate way, influencing community advocates, for example parents that can influence policy making in schools (Sinclair & Foley, 2009). In figure 11, we can see an example of an outdoor ad (paid media) targeting adolescents.



Figure 10 - SunSmart program at schools. Source: SunSmart website



Figure 11 - SunSmart program outdoor ad. Source: SunSmart website

2.2.4 Skin Cancer Prevention: The European case

Focusing on Europe, there is the example of Euromelanoma (private entity), a skin cancer prevention program led by a network of dermatologists. Euromelanoma is a skin cancer education and prevention campaign that started in 1999 in Belgium, and currently has 37 participating countries (Annex I). Its main objective is to improve the primary and secondary prevention of melanoma in Europe. In order to achieve this objective, the campaign promotes two initiatives: dissemination of information about skin cancer to the general public and the offer of skin examinations to a large audience to improve early detection of skin cancer (van der Leest *et al.*, 2011). Keeping in mind the objective previously mentioned, we can say that the ultimate goal of this campaign is to reduce the burden of skin cancer in the European society. Each year, Euromelanoma launches a new promotional campaign to raise awareness of skin cancer which is used by the participating counties with some adaptations (translation to the native language of the country, for example).

The promotion of Euromelanoma includes public announcements, mass media advertising (figure 12), educational events that focus on explaining what the risk factors are, what are the warning signs people should be aware of, the dangers of overexposure to the sun and, finally, good methods of photoprotection. In terms of media vehicles, the campaign uses brochures, leaflets and posters for mass advertising, as well, as a website translated in various languages (Annex II). Moreover, the free screening events are very important to detect melanoma cases at an early state and to identify high risk individuals, such as individuals with fair skin or with family history of melanoma.



Figure 12 - Mass media advertising example

After a decade of campaigns (2000-2010), the participating countries agree that Euromelanoma has been successful in raising the awareness of the population about skin cancer risk and prevention, the importance of the role of dermatologists and the increased involvement of mass media in education and preventive events. Challenges were also mentioned by the authors, including the difficulty in reaching high-risk populations for the screening and also in maintaining the interest of dermatologists to participate in the campaign over the years (Stratigos *et al.*, 2012).

2.2.4 Skin Cancer Prevention: The Portuguese case

Zooming in on the case of Portugal, skin cancer is the ninth most common cancer in Portugal (Pinheiro *et al.*, 2003). There are mainly two NGOs (Nongovernmental organization) in Portugal that promote skin cancer prevention campaigns: the Portuguese Cancer League (Liga Portuguesa Contra o Cancro) and the Skin Cancer Portuguese Association (Associação Portuguesa de Cancro Cutâneo - "APCC").

The Portuguese Cancer League promotes activities during the summer including, activities in children's park to raise awareness about the dangers of overexposure to the sun without appropriate sun protection, as well as, other promotional activities in several beaches in Portugal (Portuguese Cancer League website, 2018).

2.2.4.1 The case of Portugal: APCC

In this thesis, the focus will be on APCC, that has done promotional activities since 2003 to raise awareness to this issue, through the distribution of various communication materials, such as, flyers (figure 13), books, hats and shirts (figure 14) targeting different groups, an educational book (figure 15) "Play and Learn with Jo Spots" ("Brinca e Aprende com o Zé Pintas"), educational sugar packets, placement of muppies/outdoors (figure 16) in the main cities, campaigns in schools, beaches, among other activities (APCC website, 2018). Additional examples of the communication materials can be found in Annex III.





Figure 13 - APCC flyer. Source: APCC website

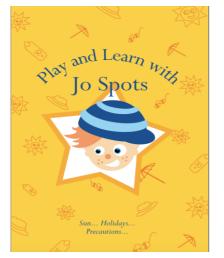


Figure 15 - Educational book "Play and Learn with Jo Spots". Source: APCC website

Figure 14 - Stand with APCC shirts, hats, flyers and posters. Source: APCC website



Figure 16 - APCC outdoor muppies. Source: APCC website

The sugar packets (figure 17) initiative consisted in a partnership between APCC and Delta Cafes during the summer of 2010, 2011 and 2012. During these three summers, 30 tons of sugar packets were manufactured with four key messages regarding sun exposure and were distributed in coffee shops and restaurants throughout Portugal. The messages focused on four key ideas: avoid sunburn and obtain sun exposure in moderation; use adequate sun protection during outdoor sports; avoid using sunbeds; and seek early diagnosis of skin

cancers (Correia, Correia, & Duarte, 2017). The placement of muppies/outdoors has been a recurrent communication vehicle used by APCC that since 2014, in partnership with the mayors of different cities, has placed muppies/outdoors near schools, universities, leisure and sports areas, near the beach, specially where there is a lot of movement of people. The muppies/outdoors usually contain visually appealing photos, with simple and straightforward messages, such as "Sun and Summer... Increased shadow, appropriate hour" (Correia *et al.*, 2009).

For 13 years, APCC has promoted a skin cancer campaign in Praia da Falésia in Vilamoura, Algarve, one of the busiest and most popular beaches for family holidays in Portugal. In this campaign, sun exposure behavior is analyzed comparing similar surveys made at the entrance of the beach. As a reward for answering the surveys, the respondents were awarded with hats, t-shirts, books and leaflets with relevant information about skin cancer prevention and sun protection (Duarte *et al.*, 2012).



Figure 17 - Sugar packets. Source: APCC website

Chapter 3: Methodology

3.1 Overview

In order to answer the research question "What is the influence of social marketing campaigns on skin cancer prevention?" a combination of primary and secondary research was chosen.

As stated by Strauss and Corbin (1990), qualitative research is "any kind of research that produces findings not arrived by means of statistical procedures or other means of quantification" (Strauss and Corbin, 1990:17). The focus of this type of research is understanding individuals' opinions, words and ideas, and not on numbers. Moreover, qualitative methods consider the personal level instead of the general level (Taylor and Bogdan, 1998). The nature of the research question has a strong influence on the choice of the research methodology. Even though this master thesis has a section of quantitative data analysis; its main purpose is to understand different perspectives the strengths and weaknesses of previous skin cancer campaign. In fact, qualitative methods are advisable for explorative studies. Due to this, the use of qualitative methods for primary research seemed a suitable choice (Strauss and Corbin 1990).

Within qualitative research, there are several methods that can be used, for instance, focus group, interviews, case study research and interviews. In order to answer the research question of this thesis, interviews seemed the most appropriate method because through a semi structured interview it was possible to gather information on the topic, as well as, leave room for additional comments to collect useful insights (Bryman 2008). Moreover, this type of interviews gives an orientation to ensure that the main topics are addressed and simplifies the analysis of the interview according to the different categories. As it is not a structured interview, the interviewee feels comfortable to add any additional information that is relevant about the issue Pole and Lampard (2002).

Regarding secondary research, it was made an analysis of data of the surveys conducted in the APCC campaigns in Praia da Falésia, Vilamoura, in time frame 2007-2012 and 2015-2017. The data was provided by APCC. Using secondary date is less costly and provides quick access to relevant information. Nevertheless, the data was originally collected for different purposes, so it is not fully aligned with the research question structure (Hox & Boeije, 2005). As this master thesis aims to study the evolution of sun-related behaviors over the years, the use of secondary data was a good fit because the questions included in the survey were focused on sun-related behaviors, such as the use of sunscreen, hat, shirts and sunglasses. Following the data collection, a quantitative analysis of the evolution of each behavior was carried out.

In the final section of this mater thesis, there is a brief for a social marketing campaign to be developed in Portugal. This brief was developed bearing in mind the analysis of the data of the surveys conducted in the campaigns, as well as, the analysis of the interviews.

3.2 Research design

The interviews (Annex IV) had three main objectives, that can be found in table 2.

Objective 1	Understand which campaign activities made a perceived positive impact in the audience
Objective 2	Understand what the main difficulties during the campaign were
Objective 3	Collect recommendations for future campaigns

Table 2 - Objectives of the interviews

Concerning the size of the sample, the interviews were conducted to nine people who were involved in the APCC campaign in Vilamoura for one or more years (figure 18). Following the data collection, the analysis of the interviews was conducted providing insights on the three goals previously mentioned.

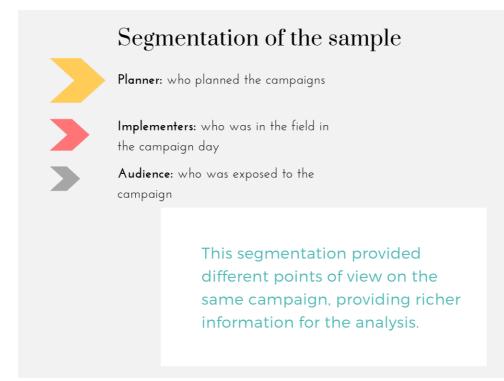


Figure 18 - Segmentation of the sample

As previously mentioned, it was made an analysis of data of the surveys (Annex V) conducted in the APCC campaigns in Praia da Falésia, Vilamoura, in time frame 2007-2012 and 2015-2017. However, it should be mentioned that in 2013 and 2014 there was no skin cancer prevention campaign in Praia da Falésia, Vilamoura, because APCC developed campaigns with different structures in Espinho and Figueira da Foz in those two years.

3.3 Data Collection

3.3.1 Campaign structure

The campaign promoted by APPC in Praia da Falésia (figure 19), in Vilamoura (figure 20) consists on a full day program, from around 8 a.m. to 9 p.m. During this day, a stand, posters, promotional and informational material, as well as, everyone involved (volunteers) are located in the main entrance of Praia da Falésia (figure 21). Additional photos can be found in Annex VI.



Figure 19 - Praia da Falésia, Vilamoura



Figure 20 - Vilamoura, Portugal



Figure 21 - APCC Campaign in Praia da Falésia, Vilamoura. Source: APCC website

The volunteers who usually participate in these campaigns are pharmaceuticals, medical doctors, medical school students and medical sales representatives. Concerning the location of the stand, it is a strategic one because everyone who is entering the beach has to pass through this entrance. Throughout the day, volunteers (implementers) conduct surveys to people entering the beach concerning sun-related behaviors, distribute informational flyers, offer free gifts and give advice to people on this topic. Additionally, during the morning there is also the participation of the main media (TV and radio) to give interviews and to promote the initiative. During the rest of the day, additional activities were made, such as, sweepstakes, running activities at the beach, presence of public figures, as soap opera actors and producers, running athletes (Annex VI).

3.3.2 Surveys

Concerning the format of the surveys (Annex V) conducted during the skin cancer prevention campaigns, it should be noted that they didn't have an exact similar structure throughout the time period under analysis. This explains the fact that not all questions have data on all the years under analysis. The surveys start with generic questions, such as gender and age, followed by questions about sun-related behaviors, for instance, the use of hat, shirt, sunglasses and sunscreen. The surveys were applied to people as they were entering the beach entrance, the volunteers approached them asking if they would be interested in answering a few questions and informed them they would have a gift in the end. The free gifts included the following items: hats, t-shirts, backpacks, balloons with protection symbols as hat, sunglasses, sunscreen, shirts. Another free gift that was targeted to children was the book "Brinca e Aprende com o Zé Pintas". This book had several editions over the last 15 years, with more than 500k books produced.

3.3.3 Sample

The sample of respondents was not homogenous during the years under analysis.

Year	2007	2008	2009	2010	2011	2012	2015	2016	2017
n	681	982	1.389	2.412	1.696	1.989	1.247	1.487	1.040

Table 3 - Sample of the campaign. Source: own elaboration on the basis of the data collected

3.3.3 Interviews

In order to get more comprehensive insights on the impact of previous skin cancer prevention campaigns promoted by APCC, nine interviews were made to people on three different levels/roles (table 4):

#	Role	Age	Gender	Occupation
1	Implementer	59	F	General Manager
2	Planner	40	F	Medical Doctor (Dermatologist)
3	Implementer	40	М	Office employee
4	Implementer	54	М	Medical sales representative
5	Planner	57	М	Medical Doctor (Dermatologist)
6	Planner	47	М	Medical Doctor (Dermatologist)
7	Audience	23	М	University student
8	Audience	16	F	High School student
9	Audience	19	F	University student

Table 4 - Profile of the interviewees. Source: own elaboration

These interviews proved to be quite helpful to have a better understanding on what were the main challenges over the years, what activities were better received by the audience and also to give space to suggestions for future campaigns. The interviewees at the planner and implementer level participated in the campaign since its first year (2003). The interviewees at the audience level participated in the campaign in 2016 and 2017.

Chapter 4: Data analysis

4.1 Analysis of the surveys data

In order to have a more accurate analysis of the evolution of behaviors during this period, the analysis was made based on percentages, rather than absolute numbers.

According to the solar clock (figure 22), produced by the APCC, the dangerous hours ("hora vermelha" - red hour) are from 12 p.m. – 4 p.m., the intermediate danger hours ("hora amarela" - yellow hour) are from 11 a.m. – 12 p.m. and from 4 p.m. – 5 p.m., and, finally, the appropriate/safe hours ("hora verde" - green hour) are before 11 a.m. or after 5 p.m.



Figure 22 - Solar clock. Source: APCC website

Behavior analysis time: Considering these three-time frames: 8 a.m. - 12 p.m., 12 p.m. - 4 p.m. and 4 p.m. to 9 p.m., as we can see in figure 24, over the years, around half of the sample was interviewed in the first-time frame, during the "green hour" (in the morning). This is a positive aspect because it means that more people entered the beach at an appropriate time, and less people entered

the beach during the more unsafe hours of the day, when the sun rays are more dangerous to the skin. There has been a rising trend of people entering the beach in the "green hour" (in the afternoon). It is relevant to say that during the summer months, mainly in July and August, when most young people go on vacation to Algarve, the Vilamoura Beach Bar "NoSoloÁgua" (figure 23) offers a wide range of sunset parties in Praia da Falésia. These events have attracted young people to come to the beach specially during the afternoon/sunset. Nevertheless, it is noticeable that most young people arrive at the beach during the "red hours", around 1 p.m. as they often wake up late and decide to go the beach to start the day.



Figure 23 - NoSoloÁgua Beach Bar in Praia da Falésia. Source: Nosoloagua website

Gender: Figure 25 presents the data on gender. Over the years, the gender of the respondents has been balanced, with slightly more men than women. This shows that the data is diverse, with no gender bias. This is quite important so that we don't have biased data of what "most women do and think/do" or what "most men do and think/do".

Age: Figure 26 shows the data on age. Most people interviewed were over 41 years old, followed by the age group of 25 - 40 years old. These two age groups are usually the most responsive and "welcoming" to these surveys as they are more aware of health topics as skin care and skin cancer, so they are more willing to spend part of their time answering the survey and learning more about the

topic. The age group of 16 - 24 has increased its weight, while the age group of under 16 years old has remained relatively constant and without a relevant weight (always below 15% of the total respondents).

Use of hat: From the figure 27 we can see that most people (over 50% of the sample) didn't wear a hat when they went to the beach. In the last 3 years (2015-2017) the numbers have improved, showing a rise in the use of hats. However, the percentage of people who wear hats still remains below 40%. In this question, no differentiation was made regarding the type of hats used (cap, sun hat, panama, etc.).

Use of shirt: It can be seen in figure 28 that nearly a 100% of the respondents wore a shirt when going to the beach, with a significant increase in this percentage from 2009 (68%) to 2017 (94%). In order to differentiate the different type of the shirt worn (that is, the sleeve's length), another question was made to the respondents who were wearing a shirt regarding its length (figure 29). The most common answer was the shirt that covers the upper arms, also known as "t-shirt", with the exception of the year of 2015, when the most popular length was the one that covers the entire arm (long sleeve). Overall, the second most popular length is sleeveless, followed by long sleeved shirts. It should be noted that from 2015, the number of people wearing sleeveless shirts decreased, while the number of people wearing long sleeves increased.

Use of sunglasses: We observe from figure 30 that during the time frame under study, nearly 70% of respondents answered positively, meaning they wore sunglasses to the beach. This has remained constant throughout the years, with no significant change. It appears to be a well-received method of sun protection by the audience.

Use of sunscreen: As shown in figure 31, until 2010 around 50% of the respondents didn't wear sunscreen before going to the beach/pool. In 2011 and 2012, the use of sunscreen before going to the beach/pool registered an increase. However, from 2015 to 2017 the answers were quite balanced, with no significant

difference between those who already had sunscreen before entering the beach/pool and those who didn't. As illustrated in figure 32, the years analyzed, around 80% of the respondents said they had the intention of using sunscreen once they arrived at the beach/pool (usually after they find the spot where they want to stay and arrange the space). Nearly 20% of the respondents stated that they had no intention of using sunscreen while at the beach/pool.

Sunscreen SPF: Every sunscreen has a Sun Protection Factor associated (SPF). SPF is a measure of how well a sunscreen will protect skin from UVB rays. SPF 15 filters out approximately 93 percent of all incoming UVB rays, SPF 30 keeps out 97 percent and SPF 50 keep out 98 percent (Skin Cancer Foundation, 2018). Figure 33 shows that most of the respondents used sunscreen with SPF >30, which is a positive indicator, as it offers stronger sun protection. Secondly, the most used SPF is SPF 15-29, and finally, SPF<15. Over the years, there has been an increase on the percentage of people using sunscreen with SPF >30. Contrarily, the percentage of people using sunscreen with lower SPF is decreasing. This data shows a positive change of behavior.

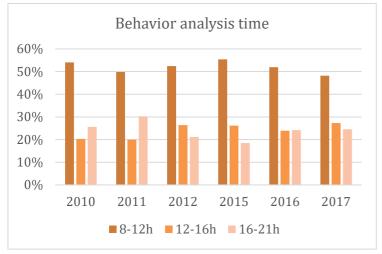


Figure 24 - Behavior analysis time. Source: own elaboration based on the data

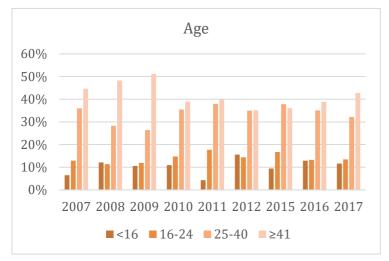


Figure 27 - Age. Source: own elaboration based on the data

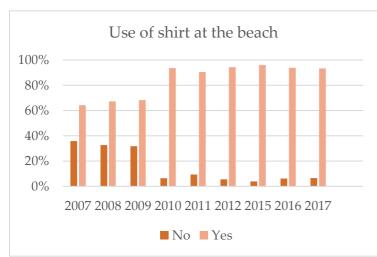


Figure 26 - Use of shirt at the beach. Source: own elaboration based on the data

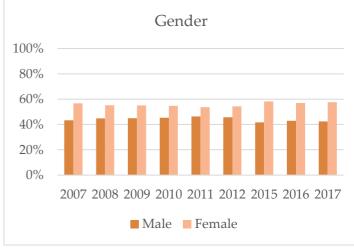


Figure 25 - Gender. Source: own elaboration based on the data

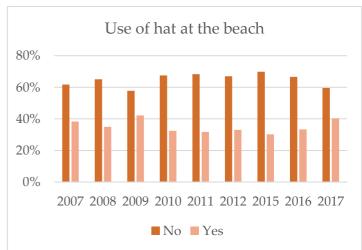


Figure 28 - Use of hat at the beach. Source: own elaboration based on the data

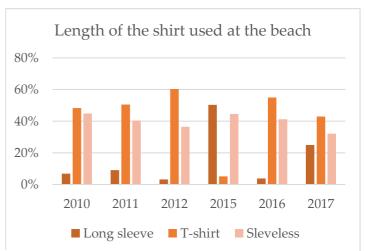


Figure 29 - Length of the shirt used at the beach. Source: own elaboration based on the data

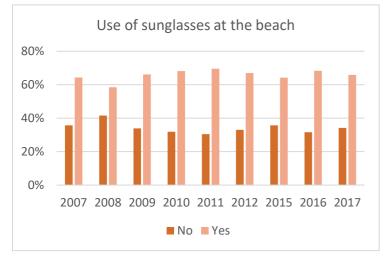


Figure 30 - Use of sunglasses at the beach. Source: own elaboration based on the data

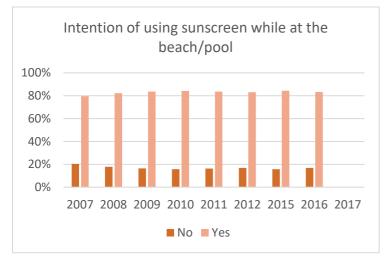


Figure 32 - Intention of using sunscreen while at the beach/pool. Source: own elaboration based on the data

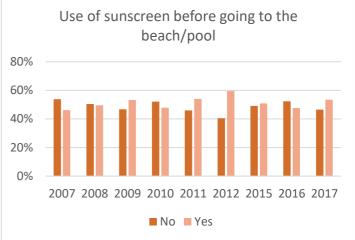


Figure 31 - Use of sunscreen before going to the beach/pool. Source: own elaboration based on the data

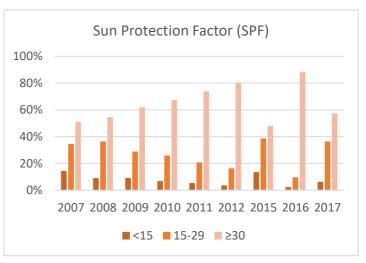


Figure 33 - Sun Protection Factor (SPF). Source: own elaboration based on the data

3.2 Analysis of the interviews

The output of the analysis of the interview were three tables that present the main topics mentioned in the interviews. For the purpose of this analysis the answers given by the planners and implementers were analyzed together as they had overlapping ideas and opinions. Below, in table 5, there is a summary of all the answers, followed by tables 6, 7 and 8 where it is presented more detailed information on each topic.

	Campaign activities that made a perceived positive impact in the audience	Challenges	Recommendations for the future
Planner & Implementer	- Free gifts - Leaflets - Posters - Surveys - Media - Public figures - Personalized advice - Solar clock	 Logistics Weather conditions Behavior change Adolescents Myths Pharmaceutical industry support Promotion of sweepstakes Skin screenings Geographic coverage 	 Diversification of campaign places Additional support by the authorities Volunteers clothing VAT reduction on sunscreens Partnership with other medical specialties Awareness campaign Social media
Audience	- Posters - Public figures - Personalized advice - Solar clock	- Survey duration - Social media - Posters format	- Social media - Live videos - Influencers - Workshops
Common	- Posters - Public figures - Personalized advice - Solar clock.	n/a	- Social media

Table 5 - Summary of the interview's analysis

3.2.1 Campaign activities that made a perceived positive impact in the audience

Campaign activities that made a perceived positive impact in the audience

Planner & Implementer

- **Free gifts:** Catch people's attention, arise their curiosity, attract more people to answer the survey because they feel their time is being rewarded; gifts (e.g. hats and shirts) appropriate to wear immediately at the beach.

- Leaflets: Different topics to different audiences, such as "Sun and Summer", "Sun and Sports" and "Sun and Work"; "everyone who stopped by our stand always took at least one leaflet that related more to its profile".

- **Posters:** Posters with more visual elements are more appealing; people usually stop by skimming through the information and ask additional questions about it.

- **Surveys:** People are happy to help and to find out more about the cause; some still try to escape because they worry the survey will take too much time.

- **Media:** Fundamental to disseminate the information to a large number of people and captivate the interest of the population to the campaign stand.

- **Public figures:** Sport athletes (Rosa Mota, Paulo Guerra), TV shows presenters (Jorge Gabriel), soap opera actors and soap opera directors; extremely important to increase the impact of the message and the interest not only of the people at the beach, but also, of the people at home watching the news report.

- **Personalized advice:** The opportunity of talking personally to a dermatologist is something appreciated because the audience is able to clarify information or ask for advice; the audience becomes more open to receive additional information when they have a specialist talking directly to them, giving them personalized advice.

- **Solar clock:** People are not indifferent to the it, they take a look at the clock and make some kind of comment, "Look, we're going to the beach at the green hour".

Audience

- **Posters:** People stopped to find out more about the topic of the poster or to take a better look at the pictures; curious about the cause and what is happening.

- **Public figures:** Rosa Mota presence caught the attention, to understand why she was there; public figures make the campaign more "appealing" because there is a chance for the audience to have a face to face conversation.

- **Personalized advice:** Offer solutions to sun-related questions or concerns of the audience, e.g. an interviewee was uncertain about what was the best fabric for clothes to wear while practicing sports in the sun, so he truly appreciated when he talked to the dermatologists in the stand and received useful advice on his worries.

- Solar clock: Easy tool to remind people of the best of the day to go to the beach.

Common

- Posters, public figures, personalized advice and solar clock.

Table 6 - Campaign activities that made a perceived positive impact in the audience

3.2.2 Challenges

Challenges

Planner & Implementer

- **Logistics:** Assemble the stand (tables, chairs, posters, mannequins, beach umbrella), in an appealing and not confusing way.

- Weather conditions: Extreme weather conditions (heat, wind) influence the number of people that go to the beach that day, influencing the number of people that answer the survey and are exposed to the campaign materials.

- **Behavior change:** "We are swimming against the tide" because people still find that being tanned is good and beautiful and have difficulty changing schedules and having appropriate sun-related behaviors; a large number of people might be aware of the problem, but they are still unwilling to change their behavior towards the sun.

- **Adolescents:** Hardest group to target because they are less willing to be involved in the campaign and to change their behaviors, particularly if that change influences their routines with their friends (e.g. going to the beach at a different time than their friends go is a significant barrier for adolescents).

- **Myths:** "Sun at the beach is more dangerous than elsewhere", many people still think that the sun is less dangerous at the park, at the pool, running or working outdoor, so they use less sun protection comparing to when they go to the beach.

- **Pharmaceutical industry support:** There is only support for sunscreen promotion and not for the use of appropriate clothing, hats or looking for places with shade.

- **Promotion of sweepstakes:** It doesn't work in a clear and functional way, because people might not be at the beach when the winner is announced.

- **Skin screenings:** Wrong impression by the audience that the campaign is a synonym of skin screenings or free consultations; the space of the stand doesn't offer the appropriate tools and light for the complete observation of the patients.

- **Geographic coverage**: Physical limitations as the campaign materials cannot reach people who are only in the swimming pools during summer; to fill this gap, in 2018 APCC chose to take a tour through Portugal with stops at river and coastal beaches.

Audience

- **Survey duration:** People were not aware of how long it would take to answer it; first instinct was to not to answer and say they were not interested in participating.

- **Social media:** No social media presence; difficult to keep track of what going on the stand, have access to the flyers, posters and additional advice after the campaign day.

- **Posters format**: Too much text, sometimes with a font size too small to be seen at a larger distance. With longer texts, they weren't willing to spend so much time reading them, they just read the titles and subtitles.

Common

- n/a

Table 7 - Challenges of the campaign

3.2.3 Recommendations for the future

Recommendations for the future

Planner & Implementer

- **Diversification of campaign places:** Raising awareness of sun care in different places (besides the traditional place, that is, the beach) is important to create involvement at a national level for further visibility and amplification of the message.

- Additional support by the authorities: With the pressure of the increasing number of skin cancers and the costs associated with it growing exponentially, there will be more political and social impact, drawing more attention to skin cancer related issues.

- **Volunteers clothing:** All the volunteers, in the day of the campaign, could add to the APCC shirts they usually wear a catchy phrase, a slogan, something that creates an identity and makes an impact.

- **VAT reduction on sunscreens:** Promotion of a petition to reduce the VAT on sunscreens, from the normal rate (23%) to the reduced rate (6%); inform the media about it to raise awareness.

- **Partnership with other medical specialties:** Partnerships with other medical specialties, e.g. ophthalmology; by having a space to ophthalmology materials, the campaign would have additional relevant content for the audience, raising awareness to the impact of sun exposure to the eyes.

- **Awareness campaign:** Higher focus on raising awareness for early diagnosis, that is, self-examination and guidance to family doctors.

- **Social media:** Invest on social media to reach better its audience and provide relevant content for its followers; improve APCC website to make it more responsive and user-friendly.

Audience

- **Social media:** Use of social media to give information on sun protection behaviors and to share content throughout the year, and not only, on the campaign day; fundamental networks: Facebook, Instagram and YouTube.

- **Live videos:** Create engagement and create curiosity about the campaign; good tool to attract more people to the campaign location and it also helps people that can't be physical present in the location to feel part of the campaign.

- **Influencers:** Invite influencers that match the target audience characteristics to the campaign day and ask them to make posts about sun protection behaviors before/after the campaign.

- **Workshops:** To explain more complex information (e.g. self-examination and the amount of sunscreen to apply), medical doctors could do live demonstrations of these topics addressing the doubts of the audience.

Common

- Social media

Table 8 - Recommendations for the future

Chapter 4: Discussion/Social Marketing Plan Brief

4.1 Problem definition

The incidence of melanoma (most dangerous skin cancer type) has increased over the years in Portugal. Currently, it is estimated that its incidence is 10 new cases per 100.000 inhabitants, per year, which means 1.000 new cases, per year, and there is the expectancy that this number will increase in the next years (APCC website, 2018). This behavior needs to be changed because skin cancer can, in fact, be prevented, if sun-protection behaviors are followed. There are key preventive behaviors to promote such as the use of sunscreen, wide-brimmed hat, shirts that covers the skin and staying out of the sun during peak sunlight hours. Regular skin screenings can identify potential pre-cancerous or cancerous moles from growing and becoming deadly. These behaviors can take place anywhere outside, when the person is exposed to the sun: at the beach (river or ocean), pool, outdoor workout, parks, among other activities.

4.2 Segmentation and Target Audience

By targeting behavior change at an individual level, peer influence may occur, leading to a meaningful change in the society at large (global audience).

The target audience for this campaign are teenagers/young adults, with ages between 16 – 24 years old who live in Portugal. This segment is characterized by being both male and female, tech-savvy, with an active lifestyle enjoy spending time outside, like to hang out with friends, value making the most out of their holiday period, pay attention to trends, value their peer's opinion and value their looks/appearance/beauty.

4.3 Communication objectives/ Goals and Objectives

The goal of the campaign is to improve adolescent's (16-24 years old) sunrelated behaviors.

- **Objective 1:** To increase by 10% the number of adolescents who report going to the beach/pool at appropriate time ("green hours");
- **Objective 2:** To increase by 20% the number of adolescents who report using sunscreen every time they are exposed to the sun;
- **Objective 3:** To increase by 15% the number of adolescents who report using clothing that covers their skin when going to the beach/pool (such as long-sleeved shirts, wide brimmed hats).

4.4 Marketing Mix – The 8 P's

4.4.1 Product:

Core product: reduce skin cancer

Actual product: wear sun protection, seek shade and reduce intentional tanning

Augmented product: use of sunscreen, hats, sunglasses and shirts

Figure 34 - Product levels

4.4.2 Price:

The costs that the target audience associated with the product are not having a tan, the augmented products will cost money (sunscreen, hats), and the audience (adolescents) is price sensitive and the fact that the audience will not be able to go the beach when the rest of their peers go ("when *everyone* goes").

4.4.3 Place:

The main places where the campaign will be developed are the busiest beaches in Portugal, both river and ocean, pools and outdoor parks. Adding to these physical spaces, it is very important that the campaign has an online presence, particularly in social media.

4.4.4 Promotion:

In order to most reach the most target audience members effectively and efficiently, the campaign needs to be present in the communication channels that the target audience pays the most attention and trust the most.

4.4.4.1 Offline strategy

In the offline strategy, it is recommendable to use posters with strong visual appeal, clean look, simple and easy to understand taglines. Figure 35, 36 and 37 are good sources of inspiration for the creation of new posters. It is important that when the target audience is passing by, they feel curious about the content and see that the content is relevant for them.



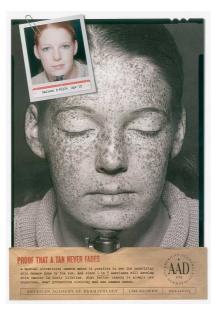


Figure 35 - Example 1 of a campaign poster. Source: CDC website



Figure 36 -Example 2 of a campaign poster. Source: AAD website

Figure 37 - Example 3 of a campaign poster. Source: ACS website

The use of free gifts is recommendable as it has proven in the past to cause a positive reaction on the audience. It's important that gifts act as cues to action to behavior change. For instance, by offering APCC's hats and shirts (that include sun behavior related slogans, figure 38), the audience will immediately have the means to wear appropriate sun protection clothing. Moreover, offering sunscreen samples could also be a good way to convince people to apply sunscreen even if they didn't bring their own sunscreen to the beach.



Figure 38 -Examples of APCC's hats and shirts

Moreover, the use of technology is highly attractive to adolescents and sometimes they just "need to see to believe". By using UV cameras (add a UV photography compatible lenses to a camera) in the campaign, the effect of UV rays is directly visible on the skin and shows that sun protection makes a genuine difference, as you can see at the moment if you are using the sufficient amount of sunscreen on your face and body (figure 39). Moreover, UV cameras allow the audience to see changes on the skin that they have never seen before, freckles, wrinkles, moles, skin tags (figure 40 and 41). Figure 42 shows how the skin looks without sunscreen and how it looks after the application of sunscreen Using this tactic, the adolescents would be able to see by themselves the power of sunscreen, sunglasses to protect them against UV rays.

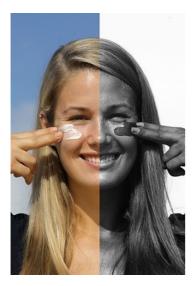


Figure 39 - UV camera example 1. Source: Nivea website



Figure 40 - UV camera example 2. Source: Daily mail website





Figure 41 - UV camera example 3. Source: Nivea website

Figure 42 - UV camera example 4. Source: CMPF website

With an informational tone, it would be recommended to organize workshops in the campaign days that focus on explaining and simplifying more complex measures for the audience. For instance, some topics that could be addressed are: "Which is the best sunscreen for my skin?" (figure 43), "How to apply sunscreen?" (figure 44) and "Step by step demonstration of skin self-exam" (figure 45).

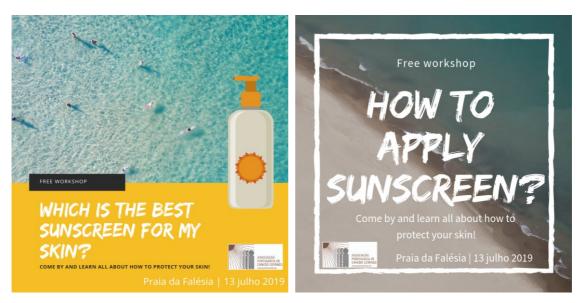


Figure 43 - Workshop "Which is the best sunscreen for my skin?". Source: own elaboration

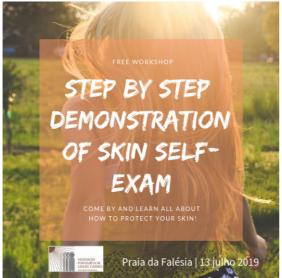


Figure 45 - Workshop "Step by step demonstration of skin self-exam". Source: own elaboration

4.4.4.1 Online strategy

In online strategy, it is essential to have a strong online presence, both on APCC website and social media. The website should be user friendly, with relevant content to the audience, which means, using video to transmit information about skin cancer: how to apply sunscreen, how to perform a "selfexam", UV index explained, among other topics. All the literature given at the

Figure 44 - Workshop "How to apply sunscreen?". Source: own elaboration

campaign should be uploaded to the website so that everyone has access to it. APCC should also create social media (Facebook and Instagram) profiles to create buzz and conversations with their followers. Relevant content should be posted regularly to stimulate sharing among the followers and to raise awareness throughout all the year, with particular incidence during summer, to the topic of skin cancer and sun-related behaviors. It would be interesting to see the combination of the offline and online strategy: during the campaign days, APCC could use the Instagram feature "live videos" (figure 46) to share with its audience what is happening in the campaign to raise awareness and curiosity.



Figure 46 - Instagram live video. Source: own elaboration

Moreover, APCC should post photos and videos of the campaign to increase its impact and broaden its audience. As it was seen in previous campaigns developed by APCC the presence of public figures is very appreciated. Bearing this in mind, APCC should find influencers that are close to the target audience and who share the values safe sun-related behaviors. For instance, a possible option could be the Portuguese blogger and Instagram influencer Anita da Costa is known for her healthy and active lifestyle, this includes careful skin care routines. Anita is also a big fan of the beach and the sun, having posted several photos with sun protection elements (hats, shirts, sunglasses, sunscreen), as it can be seen in figure 47 and 48.



Figure 47 - Influencer example 1

Figure 48 - Influencer example 2

This combination is fundamental so that the partnership doesn't look "forced". Influencers and micro-influencers have a strong power to influence, since the latter feel like influencers are someone "close to them", who they can relate to and follow as a model, their lifestyle, values, etc. Influencers could be present in the campaign days, where they would make Instagram stories, Instagram and Facebook posts raising awareness to the campaign. It is important that before and after the campaign the chosen influencers make posts regarding the campaign and certain sun-related behaviors to "prepare the audience" for the campaign day. Posts where they would show what sunscreen they use and how they apply

it, what do they wear when going to the beach and what is their "typical summer day routine" (figure 49) would be very helpful to give the audience closer "guidance" and a practical view of the behaviors APCC is promoting.



Figure 49 - Influencer post example. Source: own elaboration

4.4.5 Publics:

Concerning the external public, there should be a focus on the primary audience (target audience), the adolescents, but also on the secondary audience, people who influence the decision of the target audience, such as family, friends, bloggers and influencers. Regarding the internal public, it is fundamental that all the volunteers fully understand the objectives and tactics of the campaign.

4.4.6 Partnership:

APCC should establish partnerships to extend its resources and access to members of the target audience. It should be considered the possibility of teaming up with other organizations that have similar goals, such as the Portuguese Cancer League (Liga Portuguesa Contra o Cancro), or other medical specialties, as ophthalmology. Corporate partners such as Decathlon, Oito.Um, Uriage and La Roche-Posay (figure 50) should also be considered, as they also have interest in promoting sun protection behaviors.



Figure 50 - Potential corporate partners

The sporting clothes retailer, Decathlon, sells clothes and accessories with UV protection (figure 51). Other potential partners are textile factories that are currently investing in textiles innovation to produce sun protective clothing, such as the brand Oito.Um that produces clothing with UV Pro Technology that has UV protection which prevents the harmful action of ultraviolet rays on the skin (figure 52). Additionally, APCC should partner with Uriage and La Roche-Posay to obtain sunscreen samples to be distributed in the campaign. Both Uriage and La Roche-Posay would also benefit from this partnership, because the more aware people are of the dangers of sun exposure and benefits of the use of sunscreen, the more they will buy their products. At a later stage, we propose that APCC should take a step forward and try a different approach with its corporate partners, proposing a cause related marketing campaign. A cause related marketing campaign could bring multiple benefits for all parts involved: company, cause and the consumer. For instance, companies can have a new value proposition, as well as, have a potential increase on sales; the cause will have

additional funding, eventual recruiting of volunteers and increase their visibility; and consumers will fulfill the need to give by donating to a cause by purchasing something. An example of a cause related marketing campaign between APCC and Decathlon could be "For each t-shirt with UV protection sold in Decathlon, $0,5 \in$ would be donated to APCC".

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Figure 51 - Decathlon t-shirt with UV protection

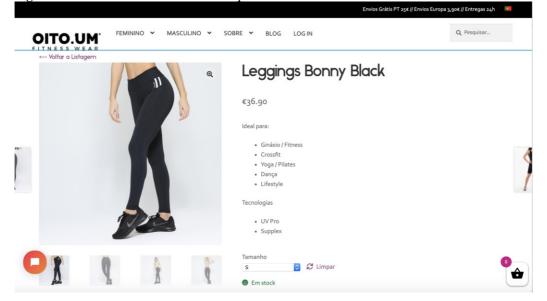


Figure 52 - Oito.Um leggings with UV protection

4.4.7 Policy:

Bearing in mind that the target audience is quite price sensitive, the reduction of the VAT rate applied to sunscreens from the normal rate (23%) to the reduced rate (6%) could make an impact in the use of sunscreens by the target audience.

4.4.8 Purse strings:

APCC can explore the opportunity of finding new corporate partners that also have interest in promoting sun protection behaviors, such as the use of sunscreen and clothes with UV protection. Some examples of companies that could help funding APCC are: Uriage, La Roche-Posay, Decathlon and Oito.Um.

Additionally, in Portugal, there is the possibility to donate part of your income tax (0,5% of the IRS paid) to an organization. Considering this, APCC could apply to become a certified entity by Portuguese Tax Authorities to be able to receive these donations, so that taxpayers could contribute to the cause that matters for them. In order to inform its audience, APCC should post on their Facebook page how to donate during the donation period (figure 53).



Figure 53 - APCC Facebook cover IRS donations

Chapter 5: Conclusion

Marketing is about much more than selling clothes or smartphones. Marketing gives marketers tools to do good for their community and for society, giving them power to change behaviors for good. In fact, it can make the difference when we want to change health behaviors, as overexposure to the sun.

The incidence of melanoma (most dangerous skin cancer type) has increased over the years in Portugal. Currently, it is estimated that its incidence is 10 new cases per 100.000 inhabitants, per year, which means 1.000 new cases, per year, and there is the expectancy that this number will increase in the next years (APCC website, 2018). This behavior needs to be changed because skin cancer can, in fact, be prevented, if sun-protection behaviors are followed. There are key preventive behaviors to promote such as the use of sunscreen, wide-brimmed hat, shirts that covers the skin and staying out of the sun during peak sunlight hours. Regular skin screenings can identify potential pre-cancerous or cancerous moles from growing and becoming deadly.

Social marketing offers key tools to design well-structured and effective campaigns that can influence people behaviors for the good. The use of social marketing to promote good behaviors towards the sun is imperative, specially targeting adolescents (at-risk group) who have shown greater resistance on behavior change so far.

The limitations of this thesis concern variety and scalability of the data under analysis. Firstly, this analysis was based on campaigns of the same entity. Secondly, the sample of the respondents didn't have the same size on every year analyzed. Thirdly, the number of interviews conducted might not be representative of the population that was involved in the campaigns.

In future studies, it would be recommended to design a survey that would meet the needs of the study and then, conduct the survey to the population. Moreover, it would be advisable to analyze what other initiatives are being promoted in Portugal regarding skin cancer, to find out if there are synergies that can benefit both the entities, and the society at large.

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Annexes

Annex I: Euromelanoma participating countries.

Source: Euromelanoma website, 2018

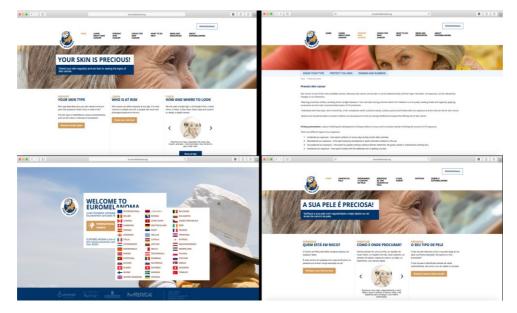
#	COUNTRY	CHAIR	FIRST EUROMELANOMA CAMPAIGN
	Armenia	A. Hayrapetyan	2016
	Austria	H. Pehamberger	2010
3.	Belarus	Alex Lukyanau	2017
4.	Belgium	T. Maselis	1999
5.	Bosnia & Herzegovina	H. Helppikangas	2011
6.	Bulgaria	N. Tsankov	2006
7.	Croatia	M. Šitum	2008
8.	Cyprus	A. Pallouras	2000
9.	Czech Republic	J. Hercogová	2000
10.	Denmark	-/-	2011
11.	Estonia	P. Konno	2011
12.	FYRoM (Macedonia)	Z. Zafirovic	2010
13.	Finland	L. Bouchard	2015
14.	Georgia	L. Mekokishvili	2012
15.	Germany	M. Reusch	2006
16.	Greece	Alexander C. Katoulis	2014
17.	Hungary	J. Oláh	2009
18.	Ireland	M. Murphy	2009
19.	ltaly	K. Peris	2010
20.	Latvia	R. Karls	2008
21.	Lithuania	M. Bylaite	2008
22.	Luxembourg	H. Dittmar	2004
23.	Malta	L. Scerri	2000
24.	Montenegro	Stilet	
25.	Norway	Jon Langeland	
26.	Poland	W. Placek	2006
27.	Portugal	O. Correia	2000
28.	Romania	A. Nicolescu	2006
29.	Russia	N. Potekaev	2007
30.	Serbia	L. Sekulic	2008
31.	Slovak Republic	J. Hegyi	2004
32.	Slovenia	L. Stojanovic	2008
33.	Spain	I. Longo	2000
34.	Sweden	Åsa Ingvar	2000
35.	Switzerland	K. Lapointe	2006
36.	Turkey	N. Onsun	2014
37.	Ukraine	O. Bogomolets	2009

Annex II: Euromelanoma communication materials

Advertising. Source: Euromelanoma website, 2018



Website. Source: Euromelanoma website, 2018







Como e onde procurar?

Examine a suz pele uma vez por més para verificar se apresenta qualquer alteração ou mancha de aparéncia suspeita. O exame deverá incidir sobre todo o seu corpo, parte anterior e parte posterior, com particular cuidado nas áreas expostas ao sol. Coloque-se miserta de mão para ajudar a verificar as áreas máis díficas de visualizar.



Quem está em risco de cancro da pele?

O cancro da pele pode afetar qualquer pessoa, em qualquer idade. É mais comum em pessoas com mais de 50 anos ou pessoas que tiveram uma exposição prolongada ao sol.

Está em risco particularmente elevado se: • Tem pele clara ou é propenso a queimaduras solares

a queimaduras solares • Sofreu queimaduras solares na infância • Teve uma grande exposição ao sol (a trabalhar ou em lazer) sol (a trabaihar ou em lazer) - Faz exposições periódicas ao sol (por exemplo, nas férias) - Recorre a solários - Term mais de 50 'sinals'' (neco) no corpo - Term uma história familiar de cancro da pele - Term mais de 50 anos de idade - Term mais de 50 anos de idade

Foi submetido a um transplante de órgão

Esteja ou não num grupo de alto risco, há coisas simples que pode fazer de imediato para se protegar a si e à sua familia dos cancros da pele. Se conhecer os sinais e fizer um auto-exame com intervalos de 1 a 2 meses, pode impédir que uma lesão suspeita evolua e se torme mais grave ou invasiva.

O que fazer a seguir?

C SCUCII : O cancro da precose faz com que a obragatifica precose faz com que a obragatifica precose faz com que a obragatifica precose faz com que a veja muito elevada. Se encontar un necido superior de precedencia un dumino o tratamento é tando, a situação prote. Uamido o tratamento é tando, a situação prote. Outras complexeções e até mesmo à monte. Não deira que o tratamento reluza as hipóteses de um tratamento bem sucedido.

tratamento bem sucesido. As regras de ouro são: Nalo ignore o problema, à espera que ele passe volta roque à espera para ver como o problema volta ou serter esolvel- os ó por si Não assuma que "não deme ser nada de grave" Não pense que não é um assumo prioritano - Acima de tudo, não tenha medo de consultar o seu médico de familia ou dematologista

O cancro da pele é tratável se for diagnosticado numa fase precoce. Se tiver qualquer sinal que pareça suspeito, consulte imediatamente o seu médico.

Para mais informações sobre cancro da pele e como o prevenir e detetar, consulte www.euromelanoma.org/portugal ou www.apcancrocutaneo.pt

Almirall Avene BIO ERMA





EVITE A EXPOSIÇÃC EXAGERADA AOS RAIOS UV

ADDCACAS PORTUGUESA BE CENCER CULINED

CARACTERÍSTICAS Do melanoma

Geralmente, os sinais do nosso corpo têm uma aparência semelhante: a mesma forma, as mesmas cores, a mesma espessura. A aparência de uma lesão pigmentada deve ser considerada suspeita caso seja diferente das outras: conhecido como a regra do «patinho feio»









Todos temos sinais e manchas cutâneas. Fazem parte de um processo absolutamente normal de crescimento e envelhecimento. Contudo, por vezes, podem significar algo mais

AUTO-EXAME DA PELE:

AUTO-EXAME DA PELE: Examine a sua própria pele a dos seus familiares uma vez por más. Esteja atento à presença de sinais ou manchas que: • a nudem de tamanho, cor e/ou forma • pareçam diferentes dos outros • sejam aparentes dos outros • sejam apareso u descamativos • tenham várias cores • tenham ma septo perdiado • sangrem ou deitem liquido • tenham ma sento perdiado • paneqam uma ferida, mas não cicatrizam

Se notar dois ou mais destes sinais de aviso, não perca tempo. Consulte o seu dermatologista.





Se detectar uma mancha ou sinal supeito, procure o seu médico. O tratamento do cancro da pele deve ser efectuado o mais cedo possível. Por isso, em caso de divida, recorra ao seu dematologista imediatamente. Alguna doentes adam uma consulta aó para não normodarem o seu médico, ou porque não têm tempo, ou simplemente ficam de separa que o problema se resolva espontaneamente. Não deixo, seje qual for o motivo, de procurar a siguta de que necessita. Se tem uma leslo suspeita, o perigo que ele representa sumenta à medida que o tempo passa. Lembre-se que de sempre melhor prevenir do que remediar.

remediar. LEMBRE-SE Figue atento aos sinais de cancro da pele. Se encontrar na sua pele algum sinal ou mancha suspeitos, não perca tempo. Consulte imediatamente o seu dermatologista.

Para mais informações sobre sinais e manchas cutâneas, bem como os diferentes tipos e o que significam, vé a **www.apcancrocutaneo.pt**. ou **www.euromelanoma.org**.

AVOC Euromelanoma internacional

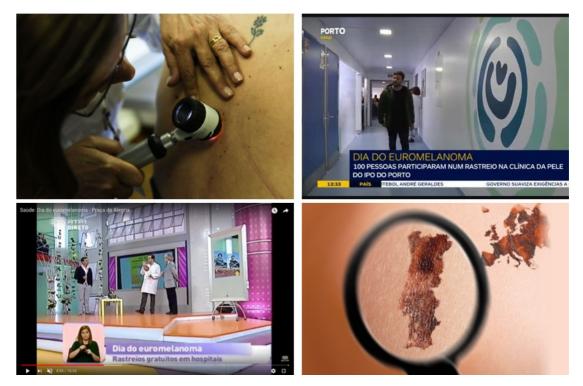




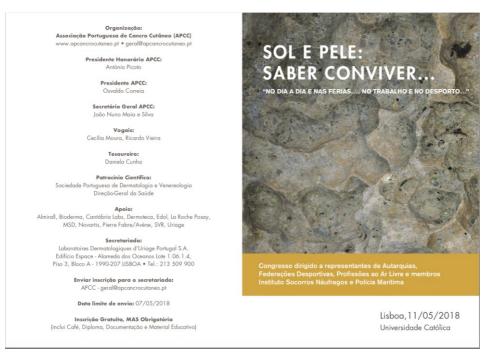


Free screening events. Source: Euromelanoma website, 2018 and APCC website,

2018



Educational events. Source: Euromelanoma website, 2018



SOL E PELE: SABER CONVIVER...

Dia 11, Maio 2018

13.00 h Abertura do Secretariado 14.00 h Inauguração do Congresso:

SPDV. Rep Diogo Cruz (DGS - Lisboa)

14.20 h Temperatura e Ultravioleta (UV). Evolução ao longo do ano. Que implicações?

14.40 h O Sol e a Pele. Benefícios, Prejuízos, como obter uma boa Proteção?

15.00 h Os Cancros da Pele. Da Prevenção Primária à Secundária.

15.20 h A Arquitetura, o Sol e os Espaços Sombra. Sidónio Pardal (Lisboa)

15.40 h Perguntas e respostas

16.00 h Intervalo (Café; Visita à Exposição: "A APCC e a Prevenção do Cancro da Pele")

16.40 h Comportamentos das Populações Portuguesas nas Praias. João Nuno Maia e Silva (Lisboa)

17.00 h O Desporto e a Proteção Solar. Basil Ribeiro (Porto) e Pedro Teixeiro (Lisboa); Testemunhos: Rosa Mota (Porto), Paulo Guerra (Lisboa)





Lisboa, 12/05/2018 Universidade Católica

Lisboa, 12/05/2018 Universidade Católica

Annex III: APCC communication materials.

Source: APCC website, 2018

Flyers



BIODERMA CHILINA MARCANA



ergentation March Land State And St apolo: BIODERMA DIFUNITE HARDEN



Book "Play and Learn with Jo Spots" ("Brinca e Aprende com o Zé Pintas") – full book not included in the following images.



Outdoor muppies:



Annex IV: Interview script

Entrevista Campanha de Prevenção Cancro da Pele APCC – Praia da Falésia, Vilamoura

- 1. Nome (opcional):
- 2. Idade:
- 3. Sexo:
- 4. Ocupação:
- Qual foi a sua função durante as campanhas de prevenção de cancro da pele?
- 6. Há quanto tempo é que participa nestas campanhas da APCC?
- 7. Durante a sua participação na campanha de prevenção de cancro da pele, quais foram as atividades promovidas que, para si, foram melhor conseguidas e quão bem considera que foram recebidas pela audiência?
- 8. Existe mais algum aspeto que considere que teve um impacto positivo na audiência que gostaria de acrescentar?
- 9. Relativamente à sua experiência, quais foram os principais desafios ou dificuldades sentidas durante as campanhas?
- 10. Gostaria de acrescentar algumas recomendações relativamente a futuras campanhas de prevenção de cancro da pele?

Annex V: Survey conducted in the APCC campaign in Praia da Falésia

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Annex VI: APCC campaign in Praia da Falésia – Vilamoura, Algarve.

Source: APCC website, 2018



