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From north to south: exploring Italian sun-exposure habits through the “Save your skin” campaign

Background: Sun exposure is the main external risk factor for skin cancer, affecting melanoma and non-melanoma differently. Although increased awareness of sun-induced skin damage and appropriate photoprotection has helped to reduce melanoma incidence, inadequate sun protection persists, influenced by geographical, social, and cultural factors. Italy's varying climates—from the colder north to the warmer south—impact sun exposure behaviours. **Objectives:** This study examined sun protection habits from the 2023 “Save your skin” campaign to identify at-risk groups and support targeted education. **Materials & Methods:** Participants completed anonymous questionnaires on sun exposure, sunscreen use, and skin cancer history. **Results:** Among 1,773 participants, 45% spent 2-4 weeks per year in the sun on holiday, 26% experienced occupational sun exposure, and 33% used tanning beds. Despite darker skin types, only 26% tanned easily; severe sunburn rates were consistent across regions. Central and southern participants reported more sun exposure on holiday than northern participants ($p < 0.001$); work-related sun exposure was more common in the south. Tanning bed use was higher in the north ($p < 0.001$). Although 62.46% always used sunscreen, only 32.51% applied it correctly. Misconceptions about sunscreen were widespread, and actinic damage was more frequent among those with lower photoprotection awareness. **Conclusion:** Inadequate sun protection is widespread in Italy, with regional differences in sun exposure and tanning bed use. Misconceptions about sunscreen are common, and the rate of proper application is low. The higher incidence of actinic damage among those with less photoprotection knowledge highlights the need for targeted education to improve sun safety and reduce skin cancer risk.

Key words: sun-exposure habits, skin protection, public health awareness, skin cancer prevention

Sun exposure is the primary exogenous risk factor associated with the development of cutaneous tumours [1, 2], with different risk profiles for melanoma and non-melanoma skin cancer [3]. Acquiring awareness of sun-induced skin damage and adopting proper photoprotection habits have been significantly linked to reducing melanoma incidence, as demonstrated by the experience developed from the Australian “Sun Smart” prevention campaign [4, 5], which also resulted in a significant improvement in sun exposure and photoprotection behaviours of the people involved [6]. Despite these advancements, many population groups continue to use inadequate protection measures during outdoor activities [7, 8], even when they belong to high-risk categories [9]. Various geographical, social, and cultural factors may influence these behaviours [10-12]. Additionally, differences in the distribution of risk factors and melanoma histopathological characteristics have been observed across different geographical regions [13]. In Italy, the need for tailored preventive programs is especially important, considering the country's diverse geographical and climatic variations; in general, northern Italy experiences colder climates, whereas central and southern Italy have a Mediterranean climate, with longer, warmer and drier summers. These climatic differences affect daily living and outdoor work routines, and

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many of the most populated cities are in the north, further complicating risk patterns.

In this study, hence, we analysed sun exposure and photoprotection habits of participants in the Italian “Save your skin” prevention campaign, conducted in May 2023, across northern, central, and southern Italy. Our goal was to identify population groups with inappropriate sun protection behaviours, allowing for the development of targeted educational initiatives.

Materials and methods

Patient enrolment and data collection

In May 2023, the Italian Society of Dermatology and Sexually Transmitted Diseases (SIDeMaST) organized the campaign “Save your skin”, involving 29 different centres across 13 Italian regions uniformly distributed between northern (11 centres from four regions), central (10 centres from five regions) and southern (eight centres from four regions) Italy. Details of participating centres can be found in *supplementary table 1*.

The primary goal of the campaign was to identify lesions that were suspected to be skin cancer, referring them for removal when necessary. A secondary objective was to raise public awareness about proper photoprotection habits. Participants completed a questionnaire that is used to gather information on sun exposure for work and/or recreational reasons, sunscreen use and/or other sun protection methods, sunbed usage, and history of previous sunburn. Demographic data, phototype, and knowledge about naevi and melanoma were also recorded, as well as personal or family history of skin cancer.

All the patients provided informed consent for data collection and processing, with anonymized data managed via REDCap (Research Electronic Data Capture) electronic data capture tools hosted at University of Eastern Piedmont.

Statistical analysis

A descriptive analysis was conducted considering subjects overall. Absolute and relative frequencies were reported for categorical variables while mean and standard deviation (SD) or median and interquartile range (IQR) were reported for numerical variables, as appropriate.

Sun risk behaviours and number of correct responses were then stratified by geographical area of origin (north, centre, south/islands), and significant associations were identified using the Chi-square or Fisher tests. In particular, we considered the following as sun risk behaviours: i) exposure on holiday for more than 30 days/year; ii) exposure at work for more than six hours/day; iii) recreational exposure for more than three hours/day; iv) occasional or no use of sunscreen; v) poor photoprotection in terms of use of less than two of the following: hat, sunglasses, T-shirt, shade; vi) history of severe sunburns; vii) use of sunbeds; viii) insufficient knowledge about sunscreen use; and ix) smoking. Finally, the presence/absence of actinic damage (solar lentigos and/or keratosis) was assessed in relation to age, geographical area, sun behaviour, and number of correct answers based on a questionnaire.

All analyses were performed using software SAS 9.4, and a significant *p* value threshold was considered at 0.05 (two tailed).

Results

Demographic and phenotypic characteristics

A total of 1,773 participants took part in the campaign. *Table 1* summarizes their demographic and phenotypic characteristics. The majority were female (67.17%; *n*=1191), the median age was 36 (IQR 28; 53), and 96.61% of participants (*n*=1708) were born in Italy, with a fairly even distribution between the north (28.02%), centre (24.25%), and south/islands (47.73%). Education levels

Table 1. Demographic characteristics of patients enrolled in the study.

| | North (n=476) | Center (n=412) | South and Islands (n=811) | p value |
|-------------------------------|---------------|----------------|---------------------------|---------------|
| Gender | | | | |
| Male | 120 (25.21) | 124 (30.10) | 264 (32.55) | 0.0210 |
| Female | 356 (74.79) | 288 (69.90) | 547 (67.45) | |
| Age, years (n=1631) | | | | |
| Mean (DS) | 40.08 (15.09) | 41.17 (15.16) | 39.56 (14.97) | 0.2234 |
| Median [Q1; Q3] | 35 [28;52] | 37 [29; 54] | 35 [28; 78] | |
| Min-max | 19-91 | 15-89 | 6-82 | |
| Eye colour (n=1689) | | | | |
| Green/blue | 142 (29.89) | 145 (35.37) | 206 (25.62) | 0.0058 |
| Light brown | 135 (28.42) | 102 (24.88) | 259 (32.21) | |
| Dark brown | 198 (41.68) | 163 (39.76) | 339 (42.16) | |
| Hair colour (n=1685) | | | | |
| Red | 2 (0.42) | 4 (0.98) | 9 (1.12) | 0.2781 |
| Blond | 56 (11.84) | 47 (11.52) | 84 (10.45) | |
| Brown | 387 (81.82) | 324 (79.41) | 634 (78.86) | |
| Black | 28 (5.92) | 33 (8.09) | 77 (9.58) | |
| Qualification (n=1692) | | | | |
| Lower secondary school | 51 (10.76) | 35 (8.54) | 76 (9.41) | 0.5422 |
| High school | 211 (44.51) | 183 (44.63) | 337 (41.71) | |
| Bachelor or master degree | 212 (44.73) | 192 (46.83) | 395 (48.89) | |

were generally high, with 90.48% having completed high school or a bachelor or master degree. The predominant phenotypes included dark features, with 79.35% having brown hair and 70.47% light or dark brown eyes. *Table 1* presents the demographic and phenotypic characteristics of participants, stratified by geographical area.

UV exposure habits and skin reaction

Table 2 summarizes the time spent in the sun reported by participants. Regarding holidays, only 588 participants (33.41%) spent less than two weeks per year in the sun; 798 (45.34%) spent two to four weeks a year in the sun, whereas the remaining 374 (21.25%) spent a period of time in the sun ranging between two and three months, or more.

In terms of sun exposure for work reasons, 26.39% indicated work-related sun exposure, with 425 (24.33%) spending less than four hours daily in the sun and 36 (2.06%) spending more than six hours. For recreational activities, 1,025 participants (59.01%) spent less than three hours per day in the sun, 216 (12.44%) between three and six hours, and 31 (1.78%) reported over six hours per day. Interestingly, 33.06% (574/1736) of participants reported using tanning beds. The mean age at first exposure to artificial UV sources was 22.29 (SD 7.08) years. Of these individuals, 55.87% used tanning beds for fewer than 10 sessions, 42.91% for 10 to 100 sessions, and seven participants (1.23%) for more than 100 sessions.

Despite the predominance of darker eye and hair colours, only 25.75% of participants reported tanning easily, while the rest reported limited or no tanning: 2.27% never tanned, 33.29% tanned poorly, and 38.70% tanned only after sunburn. Severe sunburn was reported by

42.31% in the north, 49.75% in the centre, and 43.38% in the south and islands, with no statistically significant differences between regions.

By stratifying participants based on the geographical area of residence, we observed significant differences in annual photo exposure duration and “high-risk” behaviours across the different Italian climatic areas. The percentage of participants who declared that they had spent more than 30 days of holiday in the sun rose from 13.32% in the north, to 23.79% in the centre, and 25.22% in the south/island, with a statistically significant difference ($p<0.001$). Also, sun exposure for work or recreational reasons was more frequent in the south, as detailed in *table 3*, although in this case the differences were not statistically significant.

Conversely, the use of tanning beds was significantly higher in the north compared to the centre and south/islands ($p<0.001$).

Sun protection behaviour

Sun protection measures reported by participants are summarized in *table 4*. A total of 1,098 subjects (62.46%) indicated that they always applied sunscreen, while 589 (33.50%) applied it sometimes, and only 71 (4.04%) never used it. However, many participants who claimed to use sunscreen did not apply it correctly. Specifically, 199 (18.92%) applied it only in the morning and 511 (48.57%) applied it less than twice a day, while only 342 (32.51%) adhered to the recommended reapplication every two hours. Regarding sunscreen strength, 68.36% ($n=953$) reported using high-protection products, while the remainder used medium (283, 20.23%), medium/low (135, 9.68%), or low-protection (24, 1.72%) products. The majority (1,095, 69.26%) reported purchasing

Table 2. Time in the sun declared by campaign participants.

| | North (n=476) | Center (n=412) | South and Islands (n=811) | p value |
|---|---------------|----------------|---------------------------|-------------------|
| Days (per year) in the sun on holiday (n=1686) | | | | |
| <15 days/year | 182 (38.48) | 133 (32.28) | 245 (30.59) | <0.0001 |
| 15/30 days/year | 228 (48.20) | 181 (43.93) | 354 (44.19) | |
| 31-60 days/year | 48 (10.15) | 69 (16.75) | 150 (18.73) | |
| 61-90 days/year | 8 (1.69) | 18 (4.37) | 42 (5.24) | |
| >90 days/year | 7 (1.48) | 11 (2.67) | 10 (1.25) | |
| Time in the sun at work (n=1674) | | | | |
| Never | 378 (80.08) | 294 (72.41) | 564 (70.85) | 0.0037 |
| <4 hours/day | 88 (18.64) | 105 (25.86) | 209 (26.26) | |
| >6 hours/day | 6 (1.27) | 7 (1.72) | 23 (2.89) | |
| Time in the sun for pleasure (n=1737) | | | | |
| Never | 120 (25.37) | 103 (25.62) | 226 (28.68) | 0.2863 |
| <3 hours/day | 294 (62.16) | 242 (60.20) | 440 (55.84) | |
| 3-6 hours/day | 54 (11.42) | 50 (12.44) | 103 (13.07) | |
| > 6 hours/day | 5 (1.06) | 7 (1.74) | 19 (2.41) | |

Table 3. High-risk photoexposure habits by geographic area.

| | North (n=476) | Center (n=412) | South and Islands (n=811) | p value |
|---|---------------|----------------|---------------------------|-------------------|
| High-risk sun exposure habits | | | | |
| | N (%) | | | |
| >30 days/year in the sun on holiday (n=1686) | 63 (13.32) | 98 (23.79) | 202 (25.22) | <0.0001 |
| >6 hours/day in the sun for work reasons (n=1674) | 6 (1.27) | 7 (1.72) | 23 (2.89) | 0.1255 |
| >3 hours/day in the sun for recreational reasons (n=1663) | 59 (12.47) | 57 (14.18) | 122 (15.48) | 0.3346 |
| Tanning beds (n=1663) | 228 (48.41) | 144 (35.91) | 185 (23.39) | <0.0001 |

medium-sized (100-200 mL) sunscreens and the mean number of tubes purchased was 1.66/year, with a median content of 150 mL. The main reason for not applying sunscreen in subjects who never use it was discomfort due to greasy skin (209, 31.67%).

Other sun protection methods were also assessed. The most commonly used method was wearing sunglasses (1,215, 71.55%), followed by seeking shade (1,026, 61.29%). Fewer participants reported wearing hats (485, 31.29%) or T-shirts (254, 16.49%) for protection.

Misconceptions about sunscreen use were prevalent. As noted in *table 4*, 461 participants (26.00%) believed sunscreen was unnecessary on cloudy days, 337 (19.01%) when staying under a beach umbrella, and 190 (10.72%) when walking or running outdoors.

Photoprotection habits were also analysed by geographical region, as shown in *table 5*. The highest rates of inconsistent sunscreen use were observed in the south/islands (317, 39.63%) and the north (185, 38.95%), both significantly higher compared to central Italy (130, 31.78%). Conversely, the use of other sun protection measures increased significantly from north to south. However, there were no substantial regional differences

in the proportion of individuals who did not consider sunscreen essential, with this concerning rate exceeding 50% across all regions.

Smoking, though not directly linked to skin cancer, was included as a risk behaviour. Smoking rates varied significantly by region, with 13.22% (n=62) in the north, 21.66% (n=86) in the centre, and 19.33% (n=149) in the south/islands (p=0.0029).

Actinic damage

Subjects with actinic damage made up 36.38% of the sample, with no significant differences across geographical areas (*table 6*). As expected, actinic damage statistically correlated with age and history of severe sunburns. Among “high-risk” sun exposure behaviours, a significant correlation (p>0.0001) was found with the use of sunbeds. Additionally, we analysed the relationship between actinic damage and participants’ knowledge of photoprotection. Actinic damage was significantly more common in individuals who answered fewer questions correctly, highlighting a lack of awareness about the risks associated with sun exposure.

Table 4. Sun protection measures declared by campaign participants.

| | North (n=476) | Center (n=412) | South and Islands (n=811) | p value |
|--|---------------|----------------|---------------------------|---------------|
| Use of sunscreen (n=1615) | | | | |
| No | 11 (2.32) | 16 (3.91) | 42 (5.25) | 0.0055 |
| Yes | 290 (61.05) | 279 (68.22) | 483 (60.38) | |
| Sometimes | 174 (36.63) | 114 (27.87) | 275 (34.38) | |
| Frequency of application (n=1052) | | | | |
| Every two hours | 102 (36.82) | 77 (28.52) | 150 (32.40) | 0.0067 |
| Twice a day | 129 (46.57) | 153 (56.67) | 209 (45.14) | |
| Only in the morning | 46 (16.61) | 40 (14.81) | 104 (22.46) | |
| SPF (n=1342) | | | | |
| Low | 6 (1.54) | 4 (1.17) | 14 (2.29) | 0.1380 |
| Medium | 95 (24.42) | 59 (17.30) | 116 (18.95) | |
| High | 250 (64.27) | 249 (73.02) | 420 (68.63) | |
| Medium/low | 38 (9.77) | 29 (8.50) | 62 (10.13) | |
| Size of sunscreens (n=1517) | | | | |
| Small (<100 mL) | 46 (10.55) | 45 (12.03) | 130 (18.39) | 0.0009 |
| Medium (100-200 mL) | 311 (71.33) | 261 (69.79) | 480 (67.89) | |
| Large (400-500 mL) | 79 (18.12) | 68 (18.18) | 97 (13.72) | |
| Number of tubes purchased/year (n=1494) | | | | |
| Mean (SD) | 1.67 (1.15) | 1.66 (1.07) | 1.64 (1.16) | 0.8941 |
| Reason not to use sunscreen (n=632) | | | | |
| “I want the fullest tan” | 20 (10.81) | 6 (4.62) | 43 (13.56) | 0.0224 |
| “I want a full vitamin D boost” | 20 (10.81) | 11 (8.46) | 38 (11.99) | 0.5539 |
| “I don’t like greasy skin” | 63 (34.05) | 39 (30.00) | 96 (30.28) | 0.6356 |
| “I don’t burn” | 19 (10.27) | 17 (13.08) | 39 (12.30) | 0.7080 |
| Other photoprotection habits | | | | |
| Wearing a hat (n=1532) | | | | |
| No | 166 (37.99) | 134 (36.91) | 317 (43.31) | 0.1084 |
| Sometimes | 146 (33.41) | 116 (31.96) | 200 (27.32) | |
| Yes | 125 (28.60) | 113 (31.13) | 215 (29.37) | |
| Sunglasses (n=1626) | | | | |
| No | 45 (9.70) | 42 (10.74) | 112 (14.53) | 0.0254 |
| Sometimes | 91 (19.61) | 58 (14.83) | 119 (15.43) | |
| Yes | 328 (70.69) | 291 (74.42) | 540 (70.014) | |
| Wearing a T-shirt (n=1476) | | | | |
| No | 205 (47.34) | 184 (53.33) | 401 (57.45) | 0.0084 |
| Sometimes | 155 (35.80) | 97 (28.12) | 196 (28.08) | |
| Yes | 73 (16.86) | 64 (18.55) | 101 (14.47) | |
| Staying in the shade (n=1603) | | | | |
| No | 31 (6.86) | 24 (6.25) | 71 (9.26) | 0.0042 |
| Sometimes | 165 (36.50) | 126 (32.81) | 206 (26.86) | |
| Yes | 256 (56.64) | 234 (60.94) | 490 (63.89) | |
| Reasons for not applying sunscreen | | | | |
| Swimming in the sea | 25 (5.25) | 31 (7.52) | 80 (9.86) | 0.0121 |
| Walking/running | 50 (10.50) | 50 (10.50) | 84 (10.36) | 0.6165 |
| Gardening | 38 (7.98) | 37 (8.98) | 43 (5.30) | 0.0330 |
| On short holidays | 11 (2.31) | 12 (2.91) | 23 (2.84) | 0.8184 |
| Cloudy weather | 121 (25.42) | 99 (24.03) | 224 (27.62) | 0.3680 |
| Staying under a beach umbrella | 87 (18.28) | 73 (17.72) | 159 (19.61) | 0.6888 |
| Adults | 1 (0.21) | 4 (0.97) | 6 (0.74) | 0.3340 |
| Elderly | 2 (0.42) | 3 (0.73) | 11 (1.36) | 0.2140 |

Table 5. Photoprotection habits according to geographical area.

| | North (n=476) | Center (n=412) | South and Islands (n=811) | p value |
|---|---------------|----------------|---------------------------|---------------|
| Photoprotection habits | n (%) | | | |
| Poor use of sunscreen (n=1684) | 185 (38.95) | 130 (31.78) | 317 (39.63) | 0.0217 |
| Poor use of other protections (n=1670) | 62 (13.11) | 42 (10.42) | 69 (8.69) | 0.0443 |
| Belief that sunscreen is not essential (n=1699) | 239 (50.21) | 211 (51.21) | 421 (51.91) | 0.8403 |

Table 6. Factors related to the presence of actinic damage.

| | All (n=1773) | No actinic damage (n=1128) | Actinic damage (n=645) | p value |
|------------------------------------|--------------|----------------------------|------------------------|-------------------|
| Risk behaviour | N (%) | | | |
| History of severe sunburn (n=1729) | 775 (44.82) | 452 (40.87) | 323 (51.85) | <0.0001 |
| Use of sunbeds (n=1736) | 574 (33.06) | 323 (29.10) | 251 (40.10) | <0.0001 |
| Number of correct answers | | | | |
| 0 | 358 (20.19) | 202 (17.91) | 156 (24.19) | 0.0012 |
| 1 | 467 (26.34) | 287 (25.44) | 180 (27.91) | |
| 2 | 532 (30.01) | 351 (31.12) | 181 (28.06) | |
| 3 | 416 (23.46) | 288 (25.52) | 128 (19.84) | |
| Mean (SD) | 1.57 (1.06) | 1.64 (1.05) | 1.44 (1.06) | 0.5655 |
| Median [IQR] | 2 [1;2] | 2 [1;3] | 1 [1; 2] | |
| Age (n=1701) | | | | |
| <45 | 1099 (64.61) | 831 (76.52) | 268 (43.58) | <0.0001 |
| 45-65 | 474 (27.87) | 207 (19.06) | 267 (43.41) | |
| 65+ | 128 (7.52) | 48 (4.42) | 80 (13.01) | |
| Geographical area (n=1699) | | | | |
| North | 476 (28.02) | 298 (27.49) | 178 (28.94) | 0.5655 |
| Centre | 412 (24.25) | 258 (23.80) | 154 (25.04) | |
| South/Islands | 811 (47.73) | 528 (48.71) | 283 (46.02) | |

Discussion

Awareness of the risks associated with sun exposure and the adoption of correct photoprotection habits are fundamental aspects of primary prevention for skin cancers [4, 5]. However, demographic, educational, and social factors can influence sun-related behaviours [14], which must be carefully considered when designing prevention campaigns and identifying target populations. In this study, we analysed sun exposure and photoprotection habits based on data collected during the national Italian campaign “Save your skin,” stratifying the population according to different geographical areas. Our aim was to identify critical issues within specific groups to which targeted prevention programs can be directed.

The 29 centres involved represented 13 of Italy’s 20 regions, distributed homogeneously across the three main geographical and climatic areas. Italy exhibits significant differences in territory and climate between the north, centre, and south, impacting daily life and work activities with cultural, social, and economic

relevance. The living environment is known to influence health status [15] through exposure to environmental contaminants, affecting stress levels and modifying access to healthcare [16]. In our previous paper [13], we demonstrated clinical and histopathological differences in melanoma distribution across the country, with higher incidence and lower age at diagnosis in northern Italy. A greater tendency toward intermittent sun exposure and sunburns may explain this phenomenon, although data from this campaign did not show statistically significant differences between geographical areas in patients who reported previous sunburns.

Overall, reported time spent in the sun was high throughout the country. However, we observed a significant increase in annual sun exposure duration and “high-risk” sun-related behaviours moving from the north to the south of Italy. Conversely, the higher number of diagnosed melanomas in the northern regions can be attributed to genetic and phenotypic differences, as well as different patterns of UV exposure. Notably, the percentage of patients who reported using tanning beds was significantly higher in the north. The

relationship between artificial UV exposure and skin cancer is well established [17], and our data indicate that artificial tanning is a common habit—declared by more than 33% of participants—with at least 10 tanning sessions for 43% with a median age of 22 years at first exposure. Therefore, it is essential to increase awareness of the risks associated with this practice, possibly through alternative strategies that resonate particularly with younger generations [18, 19].

Most respondents declared themselves aware of the need to consistently use photoprotective measures. However, incorrect photoprotection habits emerged among the majority, both in terms of sunscreen application frequency and the sun protection factor (SPF) used. Furthermore, when participants were questioned about the amount of sunscreen purchased each year, inconsistencies with previous statements emerged; the mean number of tubes purchased was 1.66 per year, with a median content of 150 mL—not enough for proper application. Reported photoprotection habits are therefore likely overestimated, making the real scenario even more concerning. A recent paper [20] reported that only 36% of American adults use sunscreen, although this percentage has significantly increased in the last 10 years. Similarly, in Australia—which has longstanding efforts to raise awareness about the risks of sun exposure—the use of photoprotection measures remains insufficient [21]. In our experience, the main reason for not applying sunscreen was discomfort due to greasy skin. Considering patient preferences in sunscreen formulation is a possible strategy to encourage its use among the population [22]. The availability of shade in public spaces and the use of protective clothing also play roles in reducing the incidence of skin cancer [21]. In our sample, staying in the shade was one of the most adopted protection measures against the sun (61.29%), along with wearing sunglasses (71.55%), whereas fewer people reported consistent use of hats and protective clothing. A previous study [12] demonstrated geographical differences in sunscreen use and other sun protection behaviours across the United States. When we stratified responses based on geographical area, we found that the largest percentages of people reporting inconsistent use of photoprotectors lived in the south and north, with statistically significant differences compared to central Italy. The poor habit of applying sunscreen in northern Italy may be due to the colder climate and fewer sunny days; however, this behaviour could contribute to the higher number of skin cancers diagnosed in this area. Conversely, the inadequate application of sunscreen in the south corresponds to greater use of other sun protection measures and may explain the lower incidence of skin cancer despite frequent sunny weather. This could also justify the lack of differences observed between northern, central, and southern Italy in the percentage of people with chronic actinic damage.

Chronic actinic damage was present in 36.38% of our population, and correlated with statistical significance not only with age but also with a history of severe sunburns and tanning bed use. In this subgroup, poor awareness of the potential risks associated with sun exposure was confirmed by the lowest number of correct answers when interviewed about photoprotection.

Conclusion

The experience from the Italian “Save your skin” campaign highlights inadequate knowledge in the field of photoprotection. This is probably even more concerning in the real-world context, since most participants had a high educational level and were proactive about health prevention. This, along with habits associated with intense sun exposure detected throughout the country, may explain the high incidence rate of skin cancers in Italy. Stratification based on geographical areas allowed us to identify distinctive features in UV exposure habits and protection measures, which must be considered when designing preventive and educational programs aimed at more effectively reaching the highest-risk categories. ■

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