# Attitudes and behaviours regarding sun exposure of China Population

# Data from the All Skins-All Colors-All Dermatoses: the ALL PROJECT

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### INTRODUCTION & OBJECTIVE

Overexposure to ultraviolet (UV) radiation is the main preventable cause of skin cancer. Limited information is available regarding sun protection behaviour in patients in China. The aim of this study was to aims to investigate the level of awareness on the risks related to sun exposure, attitude towards sun protection and sun protection behaviour in China Population.

### MATERIAL & METHODS

The questionnaire gathered information about the patients' demographic and socio-demographic profiles. The patients were asked to specify the times of exposure to the sun, the notion of knowledge of the recommendations of the public health experts who advise against exposure between 11 am & 4 pm, the reasons for which they were exposed to the sun at these times and the use or not of sun protection products. It was asked to specify the motivations given by the users and the justifications delivered by the non-users of sun protection products.

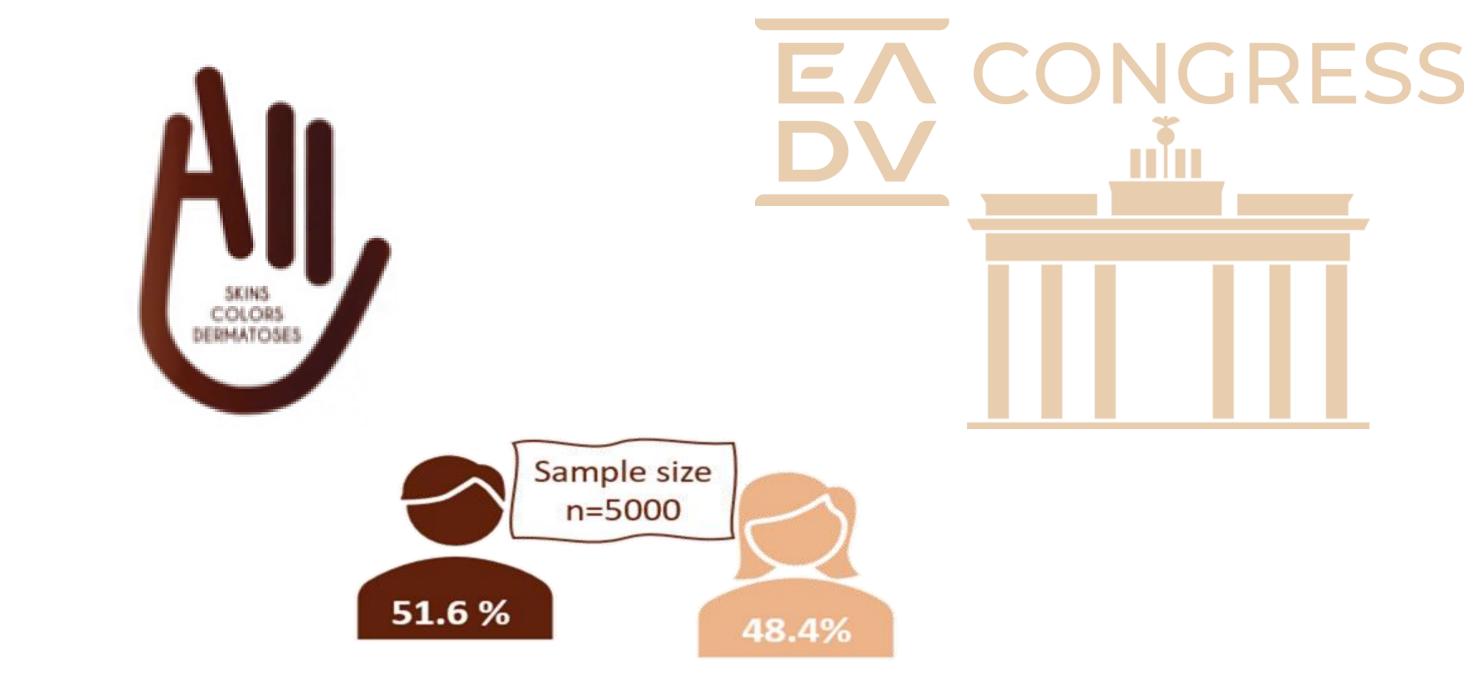
### RESULTS

A population of 5000 was selected, including 2581 (51.6%) males and 2419(48.4%) females respectively (mean age 39.89+/-13.69. (16-89 years). 22.1% of respondents reported no sun exposure & 1934(38.7%) respondents reported that they were exposed to the sun between 11am and 4pm.

The most frequent reason for this risk behaviour was that it corresponded to the most convenient hours for their activities (20.6%), those when they were available (18.4%) and 14% said these were the most pleasant hours. Age less than 40 years (42.2% vs 34%. p<0.001) and gender (Male 41.7% vs Female 35.4%, p<0.001) are associated with a risk of exposure between 11 am & 4 pm. 44.4% (n=2219) of the respondents declared being aware of the recommendations of public health experts who advise against exposure between 11am & 4pm. Respondents who expose themselves between 11:00 am and 4:00 pm were as less informed of these recommendations as other patients (40.0% vs 47.2%, p<0,001). Among respondents who say they have been exposed to the respondents, 3050 /3895(78.3%) used sunscreen products during the sunniest period (25.8% every two hours). The motivation of those who use sun protection products is mainly the wish and to reduce the risk of sun burns (70.8%), to limit the acceleration of skin aging (57.9%). and to limit the risk of skin cancers (17.2%) (table 1). Even so, 25 % admit to using sun cream to spend more time in the sun. On the other hand, among those who say they expose themselves, 845 individuals (21.7%) replied that they do not apply sun protection products and 2044 (52.5%) that they do not apply sun cream as recommended. They explain their behaviour by the fact that they do not think about it (35.3%), they find it tedious (18.8%). While 12.7% find the products too expensive, 27.3 % think it's not useful!

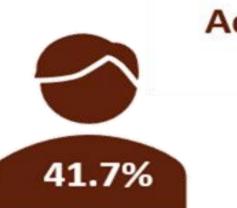
#### DISCUSSION

This is the first study to assess both sun exposure risk behaviours and sunscreen use in a representative China population. Despite widespread dissemination of public health messages about the importance of sun protection almost 38.7% of China adults do not protect themselves from sun exposure between &. It is interesting to note that these high-risk skin cancer patients were as well informed about sun protection recommendations as other patients. This suggests the need for an additional education program among these high-risk skin cancer patients to change their behaviour. Only 25.8% used sun protection products every 2 hours during the sunniest time. We have highlighted that the motivation of those who apply sunscreen products is the wish to reduce the risk of sunburn and to limit the acceleration of skin aging. Our study reported that patients do not apply sunscreen products most often because they do not think about it.. It is important to pursue an effective education policy on the effective use of sun protection. More targeted methods should be developed to prevent skin cancer.



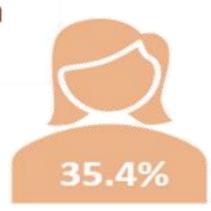
Say they have been exposed to the sun at least once in the last 12 months

77.9%



Admit to having been in the sun between 10am & 4pm

**38.7**%



76.6%

Figure 1: Why are public health messages not respected?



Table 1 Motivations of users and justifications of non-users of sun protection products

|   | Motivation                                    | N    | %     |
|---|---|------|-------|
| Rationale for respondents who use sunscreen products  N = 3050                      | To avoid sunburn                              | 2159 | 70,8% |
|   | To spend more time in the sun                 | 762  | 25,0% |
|   | Because of a history of sun burns             | 510  | 16,7% |
|   | As protection against accelerated skin aging  | 1767 | 57,9% |
|   | As protection against the risk of skin tumors | 524  | 17,2% |
|   | For other reason                              | 54   | 1,8%  |
| Rationale for respondents who do not use sunscreen products as recommended N = 2889 | The products are too expensive                | 368  | 12,7% |
|   | I don't think about it                        | 1021 | 35,3% |
|   | I don't think it is useful                    | 790  | 27,3% |
|   | It is too tedious                             | 544  | 18,8% |
|   | I didn't know about this recommendation       | 706  | 24,4% |