Abstract: The symbolic representation of a disease is related to personal perceptions and cultural background. In the present study, the authors evaluate the population knowledge and fears related to skin and other prevalent or severe diseases. This survey was based on a semi-structured form to investigate demographic aspects, dermatologic consultations, fears and knowledge of 19 dermatoses and 11 prevalent or severe diseases. We interviewed 302 people, of which 54% were women and the mean age was 39 years. Some fears of dermatoses surpass those of severe diseases. Skin cancer and total alopecia disclosed fears similar to that of myocardial infarction.

Keywords: Dermatology; Fear; Knowledge; Skin diseases; Social stigma

The symbolic representation of diseases is related to personal perceptions and to the religious and cultural background of the social group in which it is inserted. Although we recognize more than 2000 dermatologic diseases, and more than 30% of health-care clinics consultations evidence some dermatologic complaint, little information is given to the population regarding the semiotic representation of skin diseases.

The skin is a large organ and an important medium to establish individual relationships with society. Visible dermatologic diseases can inflict social stress and impact on the patient’s quality of life, no matter the degree of severity or symptomatology involved.

Some failure in recognizing a dermatosis and delay in starting treatment can be caused by the patients’ fear or shame. An assessment of the population stigmas regarding skin diseases can give some guidance to more efficient strategies for public education and health promotion. In the present work we focus on the population awareness related to skin diseases, previous dermatologic consultations, and habits of photoprotection.

We carried out a population inquiry directed to adult and adolescent passersby from Botucatu, Sao Paulo - Brazil. Interviews were made using a semi-structured form to evaluate fears and knowledge of
the names of dermatoses and severe or prevalent diseases. The project was approved by the ethical board of the institution (131/11).

The fear scores (huge, big, moderate, low, and no-fear) were tabulated and graphically represented by their frequencies. The patterns of diseases with similar fears were defined by examining the dendrogram (Ward analysis). Data were evaluated according to sex, age, and level of education by multivariate models. Significance level was set at two-tail p<0.05. Sample size was defined after a pre-test with 150 individuals (quota sampling). Interviews were conducted between May and October/2011 in the main streets of the city, at different scheduled times and days of the week. We interviewed 302 passersby, 54% were female and the mean age was 39 years. The skin diseases that were spontaneously most remembered as feared were: skin cancer (66%), vitiligo (5%), leprosy (2%), and psoriasis (1%). Fear perceptions are presented in figure 1. Skin cancer, total alopecia, vitiligo, syphilis, and leprosy were the dermatoses which presented higher fear scores. The dendrogram evidences groups of diseases with similar patterns. Interestingly, psoriasis and vitiligo resulted in a degree of fear similar to those of hypertension and diabetes; erysipelas were like osteoporosis; leprosy and syphilis were comparable to hepatitis; total alopecia and skin cancer have a degree of fear similar to that of myocardial infarction (Figure 2).

When analyzing the fears of all skin diseases, scores were higher for women (p <0.01) and lower for the elderly (p <0.05). The lack of knowledge regarding the names of dermatologic diseases (10.7%) was higher than that for other diseases (3.0%) (p <0.01), especially psoriasis (61.9%), vitiligo (37.4%), erysipelas (37.4%), syphilis (19.2%), and leprosy (13.2%). Males (OR = 2.0), the less educated (OR = 0.8), and the youngest (OR = 0.9) were associated with the least knowledge related to names of skin diseases (p <0.01).

The report of dermatologic consultations was more frequent in women (61.1% vs. 39.3%, p <0.01) and people of light phenotypes (58.6% vs. 39.7%,

![Figure 1: Fears related to skin diseases and other prevalent or severe diseases](http://example.com/figure1.png)
p<0.01), regardless of patient age (p>0.1). After multivariate adjustment, the female sex (OR=2.3) and light phenotype (OR=2.0) remained significant (p<0.01). Daily sunscreen use was mentioned more frequently in women (34.6% vs. 12.1%, p<0.01), among those who had already visited a dermatologist (35.7% vs. 12.2%, p<0.01) and light phenotypes (45.4% vs. 10.4%, p<0.01). When adjusted by multivariate analysis, the use of daily sunscreen was independently associated (p<0.01) with female sex (OR=3.1) and previous consultation with a dermatologist (OR=3.2), but not with light phototype (p=0.08). Older (OR=1.1), more educated individuals (OR=1.3), and women (OR=3.2) were associated with having previously consulted a dermatologist (p<0.01), regardless of their skin phototype.

Our results have shown that the population is characterized by a significant lack of knowledge related to dermatologic diseases. In addition, some dermatoses inflict disproportional fears concerning their severity, and a few overwhelming fears of severe systemic diseases.

The promotion of a better population awareness regarding common dermatoses can be a public health strategy aiming at an early recognition and adequate treatment. Furthermore, it supports the process of publicizing dermatology (as a specialty) and its importance to society.

The fear of dermatoses which are spontaneously remembered (e.g. cancer, leprosy, and vitiligo) reinforce the fact that media exposure of those diseases can highlight the importance of dermatology. Moreover, strategies of mass publicity (e.g. TV, radio, and Internet) can promote population knowledge and, consequently, demystification of diseases and social prejudices.

The fact that women reported higher fear scores of dermatoses can be explained by the special importance of visual appearance in that group. Greater knowledge was also identified in that group, which can be supported by greater scores of fear and higher number of women in dermatologic consultations.

Women also referred more prevalent everyday sunscreen use than men, as well as those who have consulted a dermatologist, suggesting the potential of dermatologic consultation on habit modification.

The important visual component inflicted by dermatoses makes an impact on the population, generates social stigma and can favor the efficiency of educational campaigns, which should focus also on illiterate people, young people, and men. The main limitation of the present study is related to the sample composed exclusively of healthy passersby from a city in the interior. Nevertheless, the quota sampling ensured suitable representativeness of the different strata: sex, scholarship, age-group, and skin phototype.

In conclusion, a fraction of the population is not well informed about dermatologic diseases, and consequently some dermatoses inflict remarkable fear on the population. Educational policies can promote the population’s skin health by increasing information, providing more accurate diagnosis and decreasing prejudice.

FIGURE 2: Dendrogram (Ward’s method) of fear of disease scores.
REFERENCES


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