

## Who discovers the cutaneous melanoma\* *Quem descobre o melanoma cutâneo\**

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**Abstract:** BACKGROUND - In Brazil, it is still unknown who first discovers the cases of cutaneous melanoma. The understanding of our "finding patterns" could be used as a basis for public education programs and healthcare professional training.

OBJECTIVE - To determine the role of patients in detecting lesions by themselves.

METHODS - One hundred and nine patients were interviewed. The patients had a diagnosis of cutaneous melanoma and were regularly seen at the Melanoma Unit of Hospital Santa Casa de Misericórdia, in São Paulo. Other variables were considered to evaluate possible influences in the results: sex, age, marital status, schooling, family history of melanoma, site of the primary lesion and knowledge about skin cancer.

RESULTS - Out of 109 interviewed patients, 54% had the lesion detected by themselves. Of those, 62% were female, 51% were aged under 60 years, 90% had no family history of melanoma, 78% had no knowledge about skin cancer, 59% were married and 52% concluded up to primary education. Out of the remaining 50 patients, 24% had their lesions detected by health professionals, 10% by their wives, 1% by their husbands and 11% by other people.

CONCLUSION - Fifty-four percent of patients detected the lesion by themselves, and roughly 25% had the lesion detected by a lay person. These results are similar to those reported in the literature of developed countries. The clientele evaluated is attended by public healthcare services and the results lead to the conclusion that some influence of public health campaigns could already be noticed in Brazil.

Keywords: Diagnosis; Epidemiology; Melanoma

**Resumo:** FUNDAMENTO - No Brasil não se sabe quem descobre os casos de melanoma cutâneo. A compreensão dos "modelos de descoberta" poderia servir de base para os programas de educação pública e do profissional de saúde.

OBJETIVO - Determinar o papel dos pacientes em encontrar suas próprias lesões.

MÉTODOS - Foram entrevistados 109 pacientes com diagnóstico anterior de melanoma cutâneo, acompanhados na Unidade de Melanoma da Santa Casa de Misericórdia de São Paulo. Outras variáveis foram anotadas para avaliar suas possíveis influências no resultado da descoberta: sexo, idade, estado civil, escolaridade, antecedente familiar de melanoma, localização da lesão primária e conhecimento sobre câncer da pele.

RESULTADOS - Dos 109 pacientes, 59 (54%) notaram a própria lesão. Deles, 62% eram mulheres, 51% menores de 60 anos, 90% sem antecedentes familiares de melanoma, 78% negavam conhecimento sobre câncer de pele, 59% eram casados, 52% cursaram apenas a escola primária. Os demais 50 pacientes tiveram sua lesão descoberta em 24% dos casos por profissionais de saúde, 10% pela esposa, 1% pelo marido e 11% por outras pessoas.

CONCLUSÃO - 54% dos pacientes notaram sua própria lesão, que em cerca de 25% foi descoberta por leigos. Esses resultados são semelhantes aos da literatura dos países desenvolvidos. A clientela avaliada foi do tipo assistencial, e com esse resultado é possível acreditar que, no Brasil, alguma influência das campanhas públicas de saúde já pode ser notada.

Palavras-chave: Diagnóstico; Epidemiologia; Melanoma

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Conflict of interest: None

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## INTRODUCTION

Over the last years, the primary prevention of cutaneous melanoma in Brazil has been heavily conducted from the epidemiological standpoint by campaigns that promote skin cancer management.<sup>1</sup> The incidence of this disease can be certainly reduced if the population is aware of its risk factors, both related to genetic predisposition as well as to environmental factors.<sup>1,2</sup> Early diagnosis is another important factor related to secondary prevention.

Skin melanoma usually presents a long superficial growth stage. During this period, the tumor cells are restricted to the epidermis; therefore, this marks the moment in which diagnosis is considered early and plays a key role for non-invasive treatment, resulting in cure and decreased mortality.<sup>3</sup>

Cutaneous skin melanoma is the skin disease that can be seen by many individuals; however, it is still unknown who first identify these lesions in Brazil as well as the role played by patients in finding them. Knowledge could be a factor used to assess the current population awareness regarding this problem and provide guidelines for further public health campaigns.

In order to answer those questions, the authors conducted a research at the Melanoma Unit of the Dermatology Clinic of the Medicine Department at the *Santa Casa de Misericórdia de São Paulo*. Patients who had been previously diagnosed with melanoma were studied in order to find out the conditions in which they had identified the disease. This study also aimed to discuss its results and compare them to the literature.

## PATIENTS AND METHODS

Following the approval of the Ethics Research Committee of the *Santa Casa de Misericórdia de São Paulo*, 109 interviews were conducted by telephone with patients who had been diagnosed with melanoma and were followed-up at the Melanoma Unit of the Dermatology Clinic of the *Santa Casa de Misericórdia de São Paulo*. These patients had been diagnosed between January 1999 and August 2004. They were asked to inform who first found the skin lesion. The possible author of that identification, in addition to patients themselves, included healthcare professionals, spouse and others.

The following variables were also studied: sex, age (under and over 60 years), marital status, schooling, family history of melanoma, awareness of skin cancer and the site of the primary lesion – considering that it is difficult to locate the lesions in the back and in the posterior region of lower limbs. Then the patients were divided in two groups: those who had self-identified their lesion and those whose lesion

had been found by other individuals (healthcare professionals, wife, husband and others) – and these groups were examined separately to evaluate the possible influence of these variables in the results. Temporal items (age, marital status, schooling etc) were those presented at the time of diagnosis. Only patients who provided complete data were included in the study.

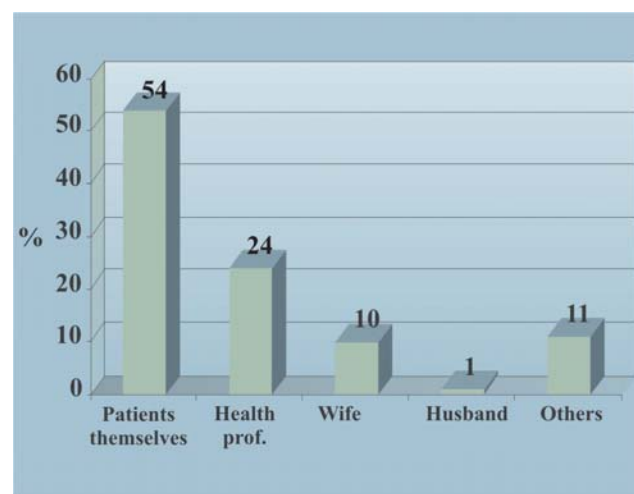
Statistical analysis: the variables were presented in contingency tables with their relative (%) and absolute (n) frequencies. The chi-square or the likelihood ratio test was used to evaluate the association of these variables with the group of patients who had self-identified the lesion. P values <0.05 were considered statistically significant.

## RESULTS

Out of the 109 patients interviewed, 59 (54%) stated that they had first identified their own lesion, 26 (24%) were informed by healthcare professionals, 11 (10%) by the wife, 01 (1%) by the husband and 12 (11%) by other individuals. There was no significant difference between the identifications made by patients themselves and the other groups (Graph 1).

When sex distribution was analyzed, 37 (63%) of 59 (54%) of patients who had self-identified their diagnosis were women. In the group who had their lesions found by other individuals, the number of women was 26 out of 50 (52%) (Table 1).

**GRAPH 1:** Distribution of answers to the question 'who identified your melanoma?' made to 109 patients diagnosed from January 1999 to August 2004, at the Melanoma Unit, Dermatology Clinic, Santa Casa de São Paulo



As for age distribution, 30 patients (51%) out of 59 (54%) who had self-identified the lesion and 14 (28%) out of the group of 50 patients (46%) who had their lesions found by other individuals were aged 60 years or younger (Table 1). These percentages were statistically significant ( $p = 0.015$ ).

As for marital status, in the group of patients (59) who had self-identified the melanoma, 35 (59%) were married, 13 (22%) had widowed; 7 (11%) were single and 4 (8%) were divorced (Table 1).

Among the group of married patients, 66% of women versus 42% of men stated that they had self-identified their lesion; 21% of women vs. 29% of men had their lesions found by healthcare providers; 3% of women vs. 29% of men by their spouses, and 10% of women by other people, which was not observed among men (Graph 2).

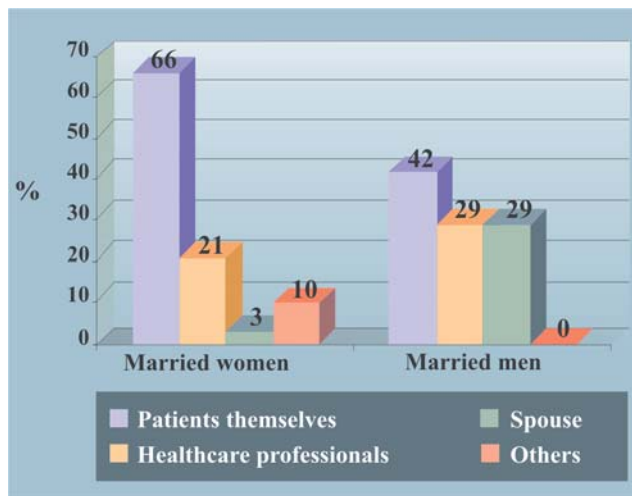
Level of schooling is the same among those who stated that they had found their own lesion compared to those who had it found by others ( $p = 0.432$ ) (Table 2).

Among the group who had self-identified the lesion, 10% of them had family history of melanoma vs. 16% in the other group, with no statistically significant difference between them ( $p = 0.365$ ) (Table 2).

There was no association between the site of the lesion (how easy it was to see it) and the person who identified the lesion ( $p = 0.614$ ) (Table 2).

When awareness of skin cancer by the sample studied was examined, 46 (78%) out of 59 (54%) of patients who affirmed that had noticed their lesion denied awareness of the subject as compared to 37

**GRAPH 2:** Distribution of 67 married patients, per sex and identification of melanoma, diagnosed from January 1999 to August 2004, at the Melanoma Unit, Dermatology Clinic, Santa Casa de São Paulo



(74%) of patients from the group who had their lesion noticed by others ( $p = 0.628$ ) (Table 2).

**DISCUSSION**

Because it is easy to identify cutaneous melanoma, many different individuals might be involved in identifying it. In our series, approximately half of the melanomas (54%) were identified by patients themselves; however, in one fourth of the cases, the lesion was found by their spouses, another family member or by a friend. In the other one fourth, the lesion was found by a healthcare professional during physical examination. These results are affected by some factors that should be discussed. First, it should be enhanced that these numbers are very close to those found by Koh et al. in a similar study conducted with 216 patients with melanoma in the Boston region, USA.<sup>4</sup>

Public health campaigns aim to avoid the disease (primary prevention) and also to draw attention to early diagnosis (secondary prevention). Thus it is very important to record that approximately 75% of cases were found by laymen (patients themselves, spouse, other family member or friend) (Graph 1). Somehow this could reveal the effects of the skin cancer management programs conducted, nationwide, by the Brazilian Society of Dermatology as of 1999.<sup>1</sup>

The literature shows that women are much more engaged in finding melanoma (both in themselves as well as in others) than men.<sup>4-8</sup> In spite of that, in our series, there was no statistically significant difference. Since these data were not assessed from the

**TABLE 1:** Distribution per sex, age and marital status of the group of patients who identified their melanoma and of the group whose lesion was identified by others

| Variable       | Patients themselves (n=59) |    | Others (n=50) |    | p     |
|----------------|----------------------------|----|---------------|----|-------|
|                | N.                         | %  | N.            | %  |       |
| Sex            |                            |    |               |    |       |
| Female         | 37                         | 63 | 26            | 52 | 0.259 |
| Male           | 22                         | 37 | 24            | 48 |       |
| Age            |                            |    |               |    |       |
| ≤60 years      | 30                         | 51 | 14            | 28 | 0.015 |
| > 60 years     | 29                         | 49 | 36            | 72 |       |
| Marital status |                            |    |               |    |       |
| Single         | 07                         | 11 | 04            | 08 | 0.912 |
| Married        | 35                         | 59 | 32            | 64 |       |
| Widow(er)      | 13                         | 22 | 11            | 22 |       |
| Divorced       | 04                         | 08 | 03            | 6  |       |

**TABLE 2:** Distribution per family history of melanoma, visualization of lesion, awareness of skin cancer and schooling of the group of patients who identified their melanoma and of the group whose lesion was identified by others. There was no statistical significant difference between the groups

| Variable                   | Patients themselves (n=59) |    | Others (n=50) |    | p     |
|----------------------------|----------------------------|----|---------------|----|-------|
|                            | N.                         | %  | N.            | %  |       |
| Family history of melanoma |                            |    |               |    |       |
| Yes                        | 06                         | 10 | 08            | 16 | 0.365 |
| No                         | 53                         | 90 | 42            | 84 |       |
| Visualization of lesion    |                            |    |               |    |       |
| Difficult                  | 29                         | 49 | 27            | 54 | 0.614 |
| Easy                       | 30                         | 51 | 23            | 46 |       |
| Awareness of skin cancer   |                            |    |               |    |       |
| Yes                        | 13                         | 22 | 13            | 26 | 0.628 |
| No                         | 46                         | 78 | 37            | 74 |       |
| Schooling                  |                            |    |               |    |       |
| Primary                    | 31                         | 53 | 26            | 52 | 0.432 |
| Secondary                  | 03                         | 05 | 06            | 12 |       |
| High school                | 09                         | 15 | 03            | 06 |       |
| College/university         | 06                         | 10 | 05            | 10 |       |
| Illiterate                 | 10                         | 17 | 10            | 20 |       |

timeline standpoint, it is fearsome to make any interpretation, that is, if we state that men are paying more attention now, we could infer that women worsened their observation skills.

When age was associated with identification of cutaneous melanoma, it was observed that the rate of self-identification was markedly higher for patients under 60 years compared to those who had it found by other individuals (Table 1, Graph 3). This is in accordance with the literature<sup>4</sup> and makes sense because it is expected that younger subjects turn more their attention to their own lesions. It is important to enhance the need to increase the focus on the elderly in skin cancer campaigns.

There was no statistically significant difference in marital status at the time of diagnosis when those who self-identified the lesion were compared to those who had it found by others (p= 0.912). However, when we classified married subjects by sex, we found that men benefited from it because women were more effective in finding their husbands' melanoma (29%), whereas the opposite happened only in 3% of cases (Graph 2). This result reinforces what the literature had already revealed.<sup>4,9</sup>

The literature refers better prognosis for the

outcome of melanoma in patients with longer schooling, which is related to early diagnosis.<sup>8</sup> Nevertheless, in this study, schooling assessment did not affect the results.

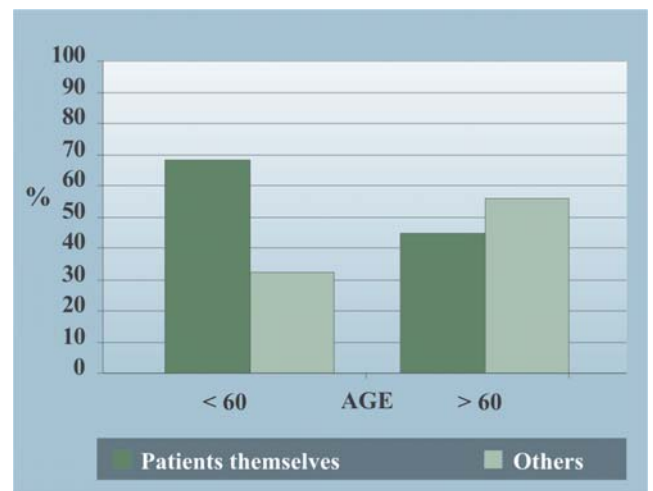
It would be expected that patients with family history of cutaneous melanoma were more attentive to finding their own lesions. However this did not happen. There were no statistical differences between the groups (p = 0.365). It is possible that this result is related to the fact that familial melanoma is less common (14/109).

In spite of being found on the outer part of the body, it can be difficult for patients to visualize cutaneous melanoma. It usually affects men's backs and women's legs.<sup>4,10</sup> There was no difference between those who self-identified it as compared to those who had it found by others in regard to the easiness to visualize the lesion (p= 0.614).

Results show that being knowledgeable about skin cancer did not necessarily increased self-identification of the lesion.

This study was carried out with a number of patients large enough to allow statistical analyses that resulted in several findings; however, this evaluation was conducted with a group that was already receiving care at a specific clinic. Therefore, the authors invite other groups to repeat the study in other sites because there is a tremendous population diversity in Brazil, both related to its geographical location as well as to socioeconomic brackets. A more comprehensive study would be extremely useful to provide guidance to further skin cancer prevention campaigns in this country.

**GRAPH 3:** Distribution per age of group of patients who identified their melanoma and the group of those whose lesion was identified by others. There was statistical significant difference between the groups (p = 0.015) for patients aged up to 60 years





**CONCLUSIONS**

In 75% of cases, the lesions were found by non-healthcare providers: patients themselves, spouse, other family member or a friend. Somehow this could be related to the skin cancer management programs conducted nationwide by the Brazilian Society of Dermatology since 1999.

Women were not more efficient in self-identifying their lesions than men, although the literature reveals the opposite.

Melanoma was significantly found by others in

patients older than 60 years. This enhances the need to increase the focus on the elderly in future skin cancer management campaigns.

Men benefited more from being married because women were much more effective in finding their husbands' melanoma (29%) than the other way round (3%).

Schooling, familial history of melanoma, easiness to visualize the primary lesion and awareness of skin cancer did not affect the identification of cutaneous melanoma. □

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