

Letter to Editor / Research Letter

# SCREENING EVALUATION SYSTEM – EUROPE (SESy\_Europe) MET SKIN CANCER SCREENING

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## SUMMARY

Skin tumors are the most frequent malignancies in the white population worldwide and have reached the proportion of an epidemic disease. Since non-melanocytic skin cancers can be cured when timely detected, given that still malignant melanoma may have good prognosis if early diagnosed, and considering the key role of primary care in cancer screening advising and implementation, the international PACMeR study group (trial\_01.3) adjourned SESy\_Europe database in a version comprehensive of skin-malignancies screening indexing. The novel database provides standardized pre-codified translations of 2,331 parameters in eight languages (English, French, German, Greek, Italian, Romanian, Spanish and Turkish) and records the time elapsed from last skin examination, cause and frequency of skins examinations and stratifies skin cancer risk patterns by a systematic registering of risk factors.

A comprehensive indexing of skin cancer screening practices among European countries may in fact turn helpful in programming future health policy and tailoring interventions.

*Key words:* skin cancer, melanoma, screening

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## SESy\_EUROPE. WHAT IS NEXT?

Cancer is the second cause of death among developed countries. Screening procedures and tumor-free lifestyles had been therefore developed to reduce the related mortality. Due to the cost of screening programs and considering that both diagnostic efficacy and cost-effectiveness vary consistently among screening tests, the monitoring of early diagnostic procedures is required in order to tailor health-policy planning.

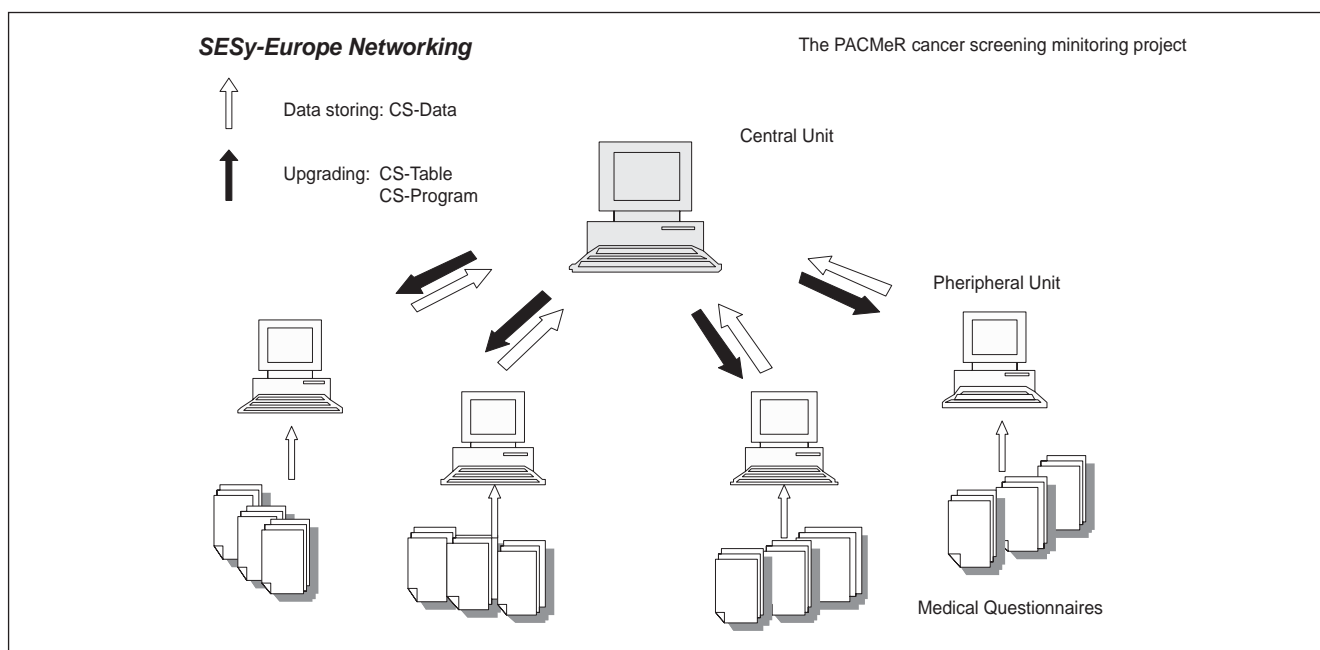
Furthermore, the European health sanitary systems are not homogeneous due to the different economic backgrounds and the different languages spoken in each nation. In order to bridge the European cancer screening experiences in a comprehensive standardized survey of screening patterns in 2002 we developed a database named Screening Evaluation System – Europe (SESy\_Europe) (1). SESy\_Europe is a multilanguage 3 component database (2) dedicated to cross-sectional surveys for

cancer screening monitoring among European countries whose characteristics has been previously presented (1). In its original version the database was focused on major “malignant killers” (breast, cervical, colorectal, lung, urinary tract, and prostate cancer early-detection practices) and targeted to the analysis of both cost-effective (eg. mammography, Papanicolaou smear, stool occult blood test) and not-recommended procedures (e.g. full chest radiography, urinalysis).

Despite skin malignancies were not included in the preliminary part of the project, the power of evidence make us to re-evaluate the initial database structure.

## THE POWER OF EVIDENCE

Skin cancers have reached the proportion of an epidemic disease (3). Non-melanocytic skin cancers (NMSC) and malignant



**Fig. 1.** *SESy\_Europe structure and networking.*

Medical records collected in each nation language may be recorded in national peripheral units in a standardized and codified form. The processes of data recording and data feasibility are facilitated by a user-interface (for data-managers) with combo-boxes items displayed in the each nation language. Codified data stored in the peripheral unit may be therefore centralized in the Central unit both in National and International settings. Central units have the possibility to decode and display data in any of the eleven languages, thus enhancing the feasibility of comparison of data coming from different countries in an international standardized fashion. Data coming from data-comparison and analysis will be of value for health policy evaluation and programming for both National and European public-health implementation. (Major details on database structure had been reported elsewhere: Mauri et al. J Exp Clin Cancer Res. 2004).

melanoma (MM) are the most frequent cancers in the white population worldwide (3). More than 90% of newly diagnosed skin cancers belong to the basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). These lesions, although they have low mortality rates, are a serious health problem because they progress insidiously, being detected late or “too late” with considerable loss of patients’ quality of life, high costs of medical treatment (e.g. plastic surgery), care (psychological support) and social problems. The low level of NMSC awareness in Europe has been recently well documented in literature (4, 5). Moreover, despite MM is quite rare, accounting for lower than 10% of skin malignancies, about 20–25% of patients will die of the disease because of its high metastatic potential. This problem is further aggravated by the rapid pace by which the incidence and the mortality of MM continue to grow up (6, 7).

## SESy\_EUROPE IMPLEMENTATION

Considering that non-melanocytic skin cancers can be cured when timely detected and that still MM may have good prognosis if early diagnosed in preventive campaigns (8) we adjourned SESy\_Europe database in a version comprehensive of skin-malignancies screening indexing. The novel database does not only record the intercourse from last skin examination, cause and frequency of skin examinations, but it still stratifies skin cancer risk patterns by a systematic registering of risk factors such as skin color, hair color, burn attitudes, tan attitude, childhood burns, spot changes, skin cancer family history, and patterns of usage of sun-protectant creams with related protection values. The new version of the database

has been developed with the same single-choice combo-boxes scheme of the original SESy\_Europe.

The newborn software has already been tested for its feasibility in data recording. Data storing with a nationwide sample of Hellenic individuals is actually ongoing as a part of PACMeR\_02 trial (indexing of cancer screening behaviors and practices of the Hellenic healthy adult population). Standardized pre-codified translations (ID-related) of 2,331 parameters had been adjourned for 8 languages of the database. Still translations in Polish, Russian and Bulgarian version are in advanced status of development.

## FOOD FOR THOUGHT FOR SCREENING IMPLEMENTATION IN PRIMARY CARE SETTING

The incidence of both melanoma and nonmelanoma skin cancer is increasing, and an accurate and timely diagnosis is important to reduce the morbidity and mortality associated with these malignancies. Despite of the evidence, traditional European national-scale early-diagnosis programs with active invitation (as it happens for cervical and breast cancer) are still lacking and skin cancer screening is “orphan”. Since primary care have a key role in both screening advising and implementation among asymptomatic individuals, its role in skin-health advising is crucial (9–11).

SESy\_Europe has expanded to include the oncoming challenge; skin cancer screening and prevention. Despite isolated new-born initiatives for skin malignancies monitoring are actually present in Europe both for NMSK and MM (12, 13), we believe that a comprehensive indexing of cancer screening practices

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(skin malignancies included) among European countries may be of help in programming future health policy and tailoring interventions.

## REFERENCES

1. Mauri D, Pazarlis P, Mauri J, Altinoz H, Rivas Flores FJ, Karentzou I, et al. SESy-Europe: a multi-language database dedicated to cancer screening monitoring. *J Exp Clin Cancer Res*. 2004 Sep;23(3):441-5.
2. Mauri J, Mauri D, Pazarlis P, Altinoz H, Rivas Flores FJ, Karentzou I, et al. PC 3-component database for community-based medical trials. A cost-effective solution for both voluntary associations and institutions of the Emerging World. *Gazz Med Ital - Arch Sci Med*. 2004 Oct;163(5):189-94.
3. Diepgen TL, Mahler V. The epidemiology of skin cancer. *Br J Dermatol*. 2002 Apr;146 Suppl 61:1-6.
4. MacKie RM. Awareness, knowledge and attitudes to basal cell carcinoma and actinic keratoses among the general public within Europe. *J Eur Acad Dermatol Venereol*. 2004 Sep;18(5):552-5.
5. Halpern AC, Hanson LJ. Awareness of, knowledge of and attitudes to nonmelanoma skin cancer (NMSC) and actinic keratosis (AK) among physicians. *Int J Dermatol*. 2004 Sep;43(9):638-42.
6. de Vries E, Coebergh JW. Cutaneous malignant melanoma in Europe. *Eur J Cancer*. 2004 Nov;40(16):2355-66.
7. de Vries E, Bray FI, Coebergh JW, Parkin DM. Changing epidemiology of malignant cutaneous melanoma in Europe 1953-1997: rising trends in incidence and mortality but recent stabilizations in western Europe and decreases in Scandinavia. *Int J Cancer*. 2003 Oct 20;107(1):119-26.
8. Marks R. Campaigning for melanoma prevention: a model for a health education program. *J Eur Acad Dermatol Venereol*. 2004 Jan;18(1):44-7.
9. Altman JF, Oliveria SA, Christos PJ, Halpern AC. A survey of skin cancer screening in the primary care setting: a comparison with other cancer screenings. *Arch Fam Med*. 2000 Nov-Dec;9(10):1022-7.
10. Kirsner RS, Mukherjee S, Federman DG. Skin cancer screening in primary care: prevalence and barriers. *J Am Acad Dermatol*. 1999 Oct;41(4):564-6.
11. Federman DG, Concato J, Caralis PV, Hunkele GE, Kirsner RS. Screening for skin cancer in primary care settings. *Arch Dermatol*. 1997 Nov;133(11):1423-5.
12. Revenga Arranz F, Paricio Rubio JF, Mar Vazquez Salvado M, del Villar Sordo V. Descriptive epidemiology of basal cell carcinoma and cutaneous squamous cell carcinoma in Soria (north-eastern Spain) 1998-2000: a hospital based survey. *J Eur Acad Dermatol Venereol*. 2004 Mar;18(2):137-41.
13. Nijsten T, Leys C, Verbruggen K, Verlinden V, Drieghe J, Stas M, et al. Case-control study to identify melanoma risk factors in the Belgian population: the significance of clinical examination. *J Eur Acad Dermatol Venereol*. 2005 May;19(3):332-9.

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