# A SURVEY ABOUT THE PERCEPTION OF CANCER RISK ON A SAMPLE OF UNIVERSITY STUDENTS IN VERONAAND PALERMO 

Marinella Puleo - Enza Sidoti - Maria Tatiana Benigno - Laura Leonardis - Alessandra Lo Piccolo Giuseppe Tringali<br>University of Palermo - Department of Hygiene and Microbiology - Polyclinic (Head: Prof. F. Aiello)

[Una indagine sulla percezione del rischio oncologico in un campione di studenti universitari di Verona e Palermo]

## RIASSUNTO

Ogni anno nel mondo si ammalano di tumore maligno circa dieci milioni di persone e questa percentuale tende ad aumentare. La prevenzione è attualmente l'arma di lotta più efficace, che consente di ottenere i risultati più significativi.

In questo lavoro è stata condotta un'indagine in due gruppi di studenti universitari rispettivamente di Palermo e di Verona sulla percezione del rischio tumorale quale premessa per la relativa acquisizione di consequenziali comportamenti e corretti stili di vita.

SUMMARY

About ten million people each year are diagnosed as having cancer, and this number is increasing.

Prevention is, at present, the only possible strategy to fight cancer and to obtain significative results.

An investigation was carried out in this work, on a sam ple of university students in Verona and Palermo about the per ception of cancer risk as necessary premise to acquire conse quential correct behaviours and life stiles.

## Introduction

Cancer is considered as old as humanity or much older but it is beyond any doubt that it has reached with all its variants a larger epidemic dimension in the twentieth century. The data are alarming: every year in the world about 10 million people are affected by cancer and this percentage is going to increase. Cancer affects any age group but it appears more frequently in the older years. By the way, in the graphic $n .1$, it is interesting to notice the incidence rate of cancer in the 30 -year period 1970/2000.

Among the hundreds of types, the lung, breast and prostate cancers are responsible for a quarter of the new cases recorded every year and, each of them, for almost $30 \%$ of new cases in both males and females in the world (Graphics 2,3,4).

In graphic 2 it is shown the incidence rate ( $\mathrm{x} 10^{5}$ ) of lung cancer in the 30 -year period 19702000. In the graphics 3 and 4 it is shown the relati-
ve incidence rate of prostate and breast cancer (x10 ${ }^{5}$ ) in the same period.


Graphic 1: Incidence for all types of cancer for 100,000 people worldwide

They are also the cause of $50 \%$ of mortality for cancer in both sexes in the world.

Against the growing incidence rates, it is important to highlight that there is a meaningful increase of survival in all the above-mentioned types of cancer (graphics 5, 6,7).

This is due to both therapeutic improvements and early diagnosis but mainly to a development of


Graphic 2: Incidence of lung cancer for 100,000 people in the 30-year period 1970-2000 worldwide

Incidence of prostate cancerfor 100,00 people worldwide


Graphic 3: Incidence of prostate cancer for 100,000 people in the 30-year period 1970-2000 worldwide preventive measures. In fact, the battle against cancer is at present focused on prevention especially for those types which have a limited possibility for treatment and definite recovery.


Graphic 4: Incidence of breast cancer for 100,000 in the period 30-year 1970-2000 worldwide


Graphic 5: Survival rate for lung cancer (standardized for 100,000 worldwide)

Prevention, in fact, is the most effective weapon to achieve the most successful results. Appropriate measures of prevention and specific programmes of information and health promotion are the most effective means in the battle against cancer as they aim at encouraging prevention and, as a result, correct lifestyles.


Graphic 6: Survival rate for breast cancer (standardized for 100,000 worldwide)


Graphic 7: Survival rate for breast cancer (standardized for 100,000 worldwide)

Therefore, in this article we have carried out a survey on two groups of university students from Palermo and Verona regarding the perception of cancer risk among youngsters and their proper behaviour and lifestyles.

## Materials and methods

For the survey's purpose a definite questionnaire has been prepared (composed of 14 multiple choice questions). The questionnaire has been handed out to a sample of 220 university students from Palermo and Verona, 140 females and 80 males with the average age of 22,5 .

## Results

$22 \%$ of students from Verona and $8 \%$ of students have not answered to the question no. 1 (what health means), according to the concepts stated by the World Health Organization. The risk of lung cancer (question no. 2) is associated with smoking by $86 \%$ of Verona students and $81 \%$ of Palermo students, but $13 \%$ of students from Verona and $18 \%$ from Palermo refer to the use of alcoholic and to passive exposure.

The concept of primary prevention (question no. 3) is clear to $95 \%$ of Palermo students and $83 \%$ of Verona students. $66 \%$ and $81 \%$ of Verona and Palermo groups state to smoke (question no. 4) and
$87 \%$ of them both from Palermo and Verona affirm that to quit smoking is an important measure of prevention against lung cancer.


Almost all the students have unclear ideas about screening, especially related to lung cancer (question no. 6) and to prostate cancer with only $50 \%$ of the answers correctly orientated (question no. 14). $74 \%$ and $84 \%$ of the students from Verona and Palermo have a correct information on food. Half the students ( $46 \%$ and $48 \%$, question no. 8) does not know much how to prevent breast cancer as well as when to start prevention (question no. 10), although almost everyone indicates a possible risk even at a younger age (question no. 9). $72 \%$ and $79 \%$ of students do not perform any measures of prevention (question no. 11).


The knowledge of prostate cancer, the identification of subjects at risk and the possibility for prevention from the answers, seem to be vague: $65 \%$ and $88 \%$ of students from Verona and Palermo state
that they do not have any knowledge of prevention on this (questions no. 12-13).


In youropinion, which are the screening examinations for lung cancer?


## Considerations and conclusions

The referred data allow to point out how little young people know about prevention. This is much clearer concerning the oncology part which is the topic of this survey. The answers to the questions no. 4 and 5 are meaningful as they show that despite $87 \%$ of young people are aware that no-smoking prevents cancer, $66 \%$ and $81 \%$ declare that they smoke.

Young people do not know enough about breast and prostate cancer prevention. Regarding breast

cancer, the data on which it is important to think about are the statements by the youngsters (56\%) who ignore any form and measure of prevention for the above-mentioned form of cancer (question no. 8 ) and $55 \%$ and $80 \%$ of them who think it affects people over 40 years (question no. 10).


Finally, questions no. 12, 13, 14 show that despite the majority of young people has indicated the men over 50 years as subjects with the major risk of prostate cancer, at the same time, $88 \%$ and $66 \%$ acknowledge to disregard whether and how it may be prevented. As a conclusion, there is a lot to do for a good culture of prevention and it is important to invest on education as a means to promote health among young people.


## Bibliografia

1) Dodick DW., Thunderclap headache. Headache, 2002; 1. Bianco A. R., Manuale di Oncologia clinica, Mograll-hill, 2003.
2) Bleslow N.E., Day, N.E., et. all., Statistical methods in cancer research: the design and analysis of cohort stu dies, Lyon, Franc. International Agency for Research on Cancer , IARC scientific Publication n. 82, 352-357, 2003.
3) Jemal A., Thomas A., Murray T. E Coll., Cancer stati stics 2002, N. Engl. J. Med., 23-47; 52, 2002.
4) Boice J.D., Blettner M., Auvinet A., Epidemiologic stu dies of man and women, Am J Epidemiol; Vol. 96 N.2, 37-44, January 21, 2004.
5) Bonadonna G., Robustelli Della Cuna G., Valegussa P., Medicina Oncologica, Masson, Milano, 2003.
6) Boubia S., Barthes F. L., Danel C., Riquet m., Peripheral intrapulmonary lymph node metastases of small-cell lung cancer, Ann Thorac Surg., Marzo 2004.
7) Brouwer I.A., Katan M.B., Zock P.L., Dietary alphalinolenic acid associated with reduced risk of fatal coronary heart disease, but increased prostate cancer risk: a meta-analysis. J. Nutr, Aprile 2004.
8) Greenler R.T., Hill-Harmon M.B., Murray T. E Coll., Cancer Statistics 2001, CA Cancer J. Clin. 51, 15-36, 2001.
9) Marcus PM., Bergstralh E.J., Fagerstrom RM., Williams D., Lung cancer mortality in the Mayo lung project: impact the extended follow-up, J. Nat. Cancer Inst.,92; 1308-1315, 2000.
10) Ryes Lag., Eisner M. P., Kosary C. L., et al., SEER Cancer Statistics research 1973-1997, Am. J. Epidemiology, 288. 154-156, 2000.
11) De Angelis R., Francisci S., Tendenze recenti della sopravvivenza per tumore in Italia ed in Europa: lo stu dio EUROCARE-3, ISS: 16 (12), 109-115, 2003.
12) WHO, National Cancer control Programmes, Policies and managerial guidelines, Genova, 2000.
13) Woloshin S. et al., Cancer and run, CACancer J. Clin., 2004.
14) Ziviz P., Esame PSA e carcinoma prostatico maligno. Dibattito, Corriere Salute, Gennaio 2004.

## Request reprints from:

Dott. EnZA SIDOTI
Dipartimento di Igiene e Microbiologia
Policlinico
Via del Vespro, 133
90127 Palermo
(Italy)

