

ΜΕΛΕΤΗ

ΔΗΜΗΤΡΙΟΣ ΜΠΑΤΑΚΗΣ - ΚΩΝΣΤΑΝΤΙΝΟΣ ΖΗΣΗΣ



## MALIGNANT NEOPLASMS IN WOMEN. THE COURSE OF MORTALITY AND INCIDENCE RATES IN EUROPEAN COUNTRIES





## **MALIGNANT NEOPLASMS IN WOMEN. THE COURSE OF MORTALITY AND INCIDENCE RATES IN EUROPEAN COUNTRIES**

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**Summary:** In the present research, extensive reference will be made in the epidemiological condition of malignancies in women. Moreover, the causative factors which contribute to the appearance of cases will be analysed and, finally, some conclusions will be made as well as suggestions, regarding mostly prevention. In general, health indicators in terms of cancer are better than the rest of Europe. However, there is a steady mortality rate and a rise in incidence. It is, undoubtedly a pandemic which is getting out of control.

Key-words: Cancer, Incidence, Mortality, Greece, Europe

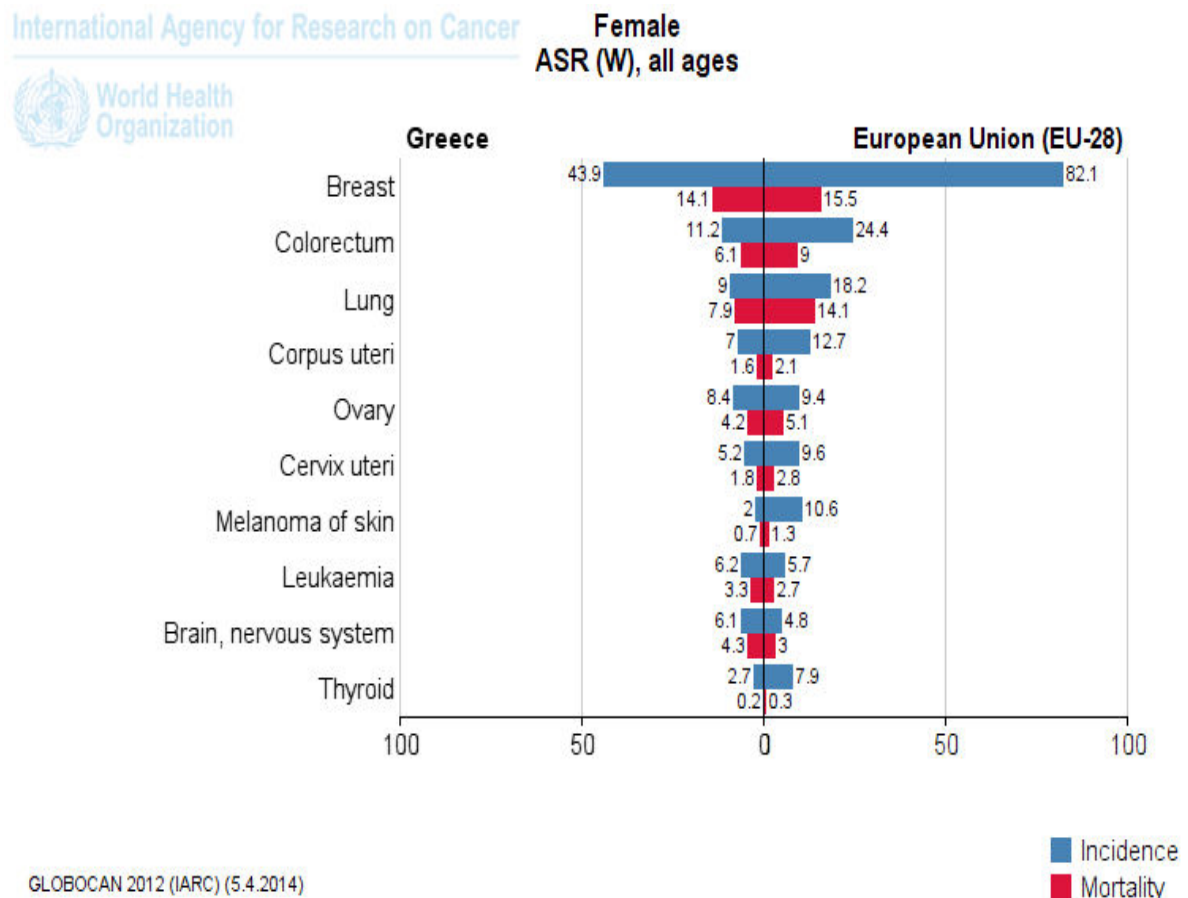


**Introduction:** Health indicators reflect the health needs of a population, but, also, set the foundations for mapping new health policies with the aim of social progress. Undoubtedly, the subject of neoplasia has stimulated interest for several researchers, organizations and governments in the past years mainly because it has now reached pandemic proportions. We could refer to cancer as “the disease of civilisation”. The presentation of data in this article relates to health indicators and, especially, malignant breast, ovary and endometrial growths, with mortality rates and incidence of the specific disease covering its longest part. It is important to mention that data from 1960 to 2010 is recorded from Greece and other countries in EU and Europe in general.

## 1. Mortality rate and incidence in all types of malignancies in women.

Greece shows stability with regards to death rate from all malignant neoplasms. 105 deaths were recorded for 1970 as well as for 2011. Hungary, which is the country with the most deaths in the European continent, presents a very high mortality rate.

Table 1: MORTALITY RATE AND INCIDENCE IN 10 MOST COMMON CANCERS, PER 100,000, IN 2012





## 2. Breast Cancer

Malignancy in European women is comparatively higher than those in Africa. In 2008, 450,000 women were diagnosed with breast cancer in Europe while 1,500,000 were diagnosed globally. Approximately  $\frac{1}{4}$  of them died. On the contrary, in 2012 there was a rise with 50,000 new cases since 2008.

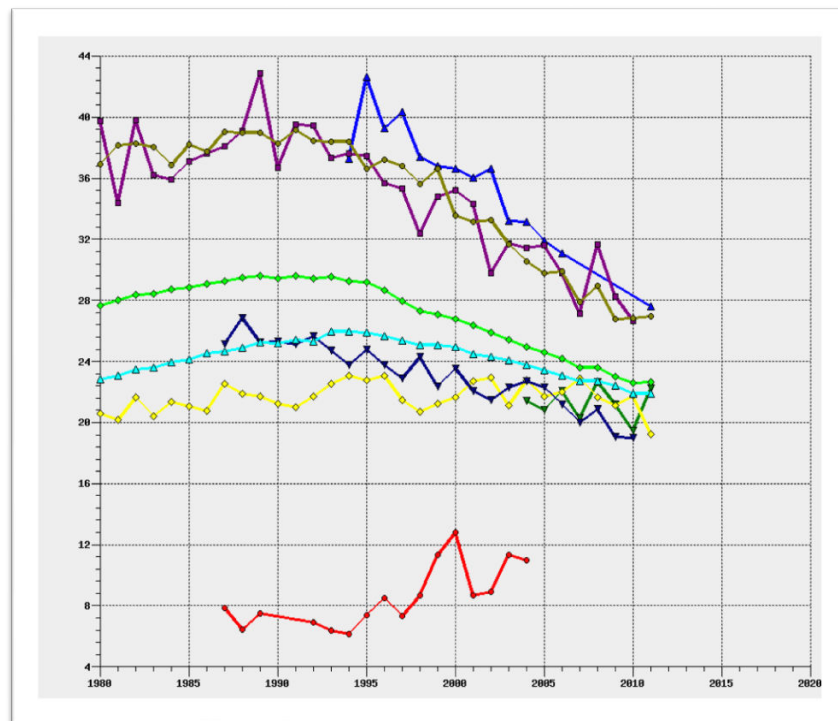


Table 2: Breast cancer mortality rate indicators, all age groups, per 100,000 women, yrs  
1960-2010

1) Albania	5) Ireland
2) Cyprus	6) Sweden
3) Denmark	7) European Union



Northern European countries present a higher mortality rate in breast cancer. Ireland, Sweden and neighbouring Cyprus show high mortality rates, but a steady increase can be observed with the passing of the years. On the contrary, Albania presents exceptional levels with a very low mortality rate in breast cancer. Greece is more or less on the same level with the average of European Union and all 40 European countries

In terms of histology, the most common type of cancer in Europe is ductal carcinoma<sup>(2)</sup>.

## **2.1 Breast cancer preventive screening**

According to OECD data for 2010, only 1 out of 2 women aged 50-69 years old underwent breast cancer screening test in Greece, i.e. 49.5%. Conversely, in northern European countries and Cyprus, these percentages are much higher. Over 80% of women in Finland, Holland, Austria and even Slovenia have undergone some kind of breast screening test.

Finally, in other Balkan countries, such as Romania, Bulgaria and Latvia the percentages of women who have had breast cancer screening are disappointing and much lower than the average in European Union.



### **3. Endometrial cancer**

Uterine corpus endometrial cancer is the 6<sup>th</sup> most common cancer globally and 4<sup>th</sup> in Europe. 320,000 new cases were diagnosed worldwide in 2012. The highest mortality rate for 2011 appears in FYROM, with 29 new cases in that year whereas Luxembourg comes second with 24.2 cases.

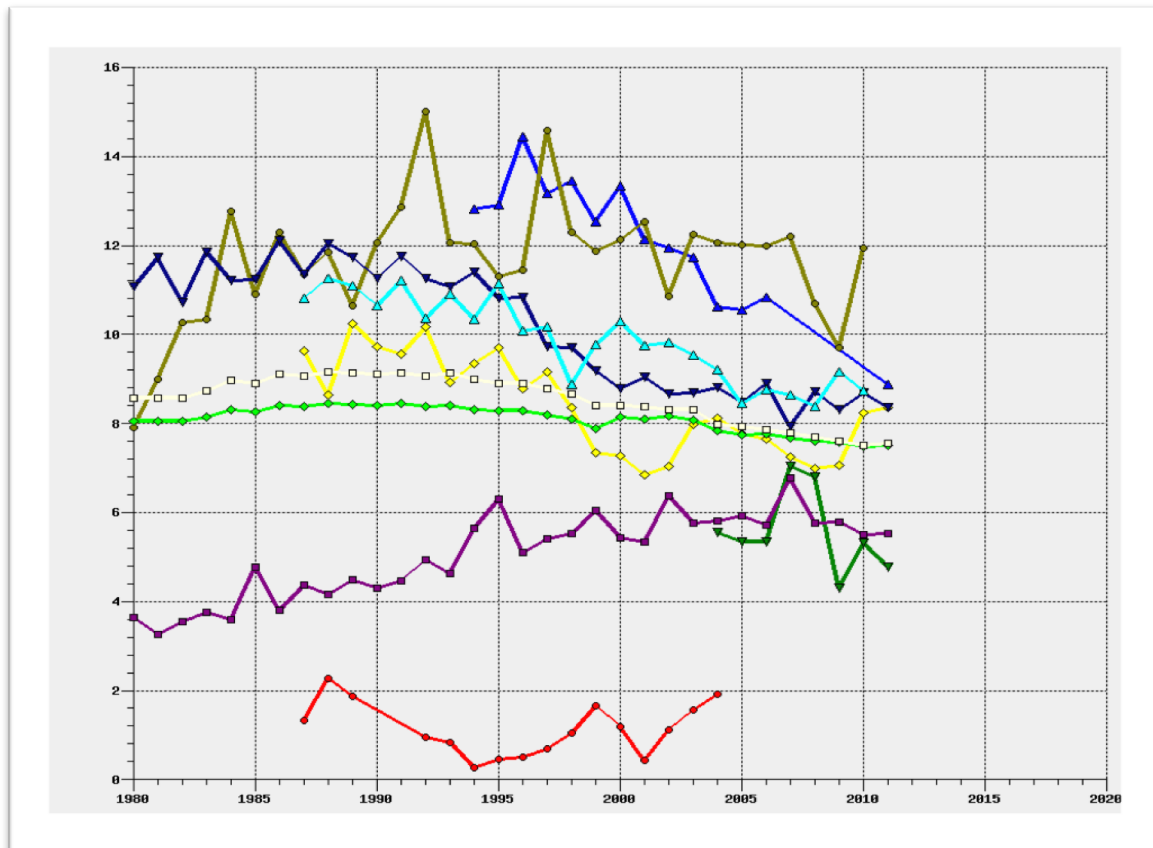
Endometrial cancer occurs mostly in older women. It is worth to note that 90% of cases in Europe involve women over 50.

However, the advantage of diagnosing it at an early stage is that there usually is good news. About 80% of diagnosed women go on with their lives normally. Finally, though, we should be worried by the fact that the mortality rate in Europe is constantly on the rise.





Table 3: Ovarian cancer mortality rate indicators, all age groups, per 100,000 women, yrs  
1960-2010



1) Albania

5) Greece

2) Cyprus

6) Sweden

3) Denmark

7) European Union

4) Finland

8) European Union

9) Europe



#### 4. Conclusion

In general, health indicators with regards to cancer are better than the rest of Europe. On the other hand, there is a steady mortality rate and a rise in incidence. It is also worrying that women's participation in screening programmes is far from satisfactory. The biggest problem in Greece is that there is no clear and detailed epidemiological profile due to registry errors and lack of differential diagnoses. The National Cancer Archive which has recently been developed has given rise to hopes for the correct registration of statistical data. Cancer is, without a doubt, a pandemic of uncontrollable proportions throughout Europe. Moreover, the future estimates of the World Health Organisation's International Agency for Research on Cancer are not optimistic. They predict a rise in both incidence and mortality rates in Greece. More specifically, there will be 1000 more cases in 2020 than in 2012. According to the Agency, the mortality rate will increase proportionately, with 12,238 deaths in 2020, instead of 11,000 deaths in 2012<sup>(8)</sup>.

Many factors contribute to this increase. Obesity, problematic access for specific population groups (Roma), and the model of western consumerism in nutrition are only some of them.

Women's participation in screening programmes for the HPV virus and in vaccinations is a positive contribution for fighting the virus. Most women, at some point in their life, will be infected with HPV<sup>(9)</sup>.



We should increase the participation of the population in screening programmes which must become available in every city in the country. Presently, there are certain programmes for which people have not even been informed. Regular cytological screening every 3-5 years can reduce the prevalence of cervical cancer up to 80%, according to the Hellenic Society of Clinical Cytology. High consumption of salt has been related to cancer. And of course, alcohol consumption has been proven in many cases to increase the possibility of cancer by 5%.

It is absolutely necessary to increase the number of health units provided by the Cervical and Breast Cancer screening programme. According to HCDCP (Hellenic Centre for Disease control and Prevention), 10 hospitals and 120 remote health centres participate in the programme. However, what is really important is to promote nationwide actions, interventions and Health Education projects in communities and schools to inform and educate the public. All screening tests should be run by centralized data systems so that participation indicators can be recorded and data can be more accessible for feedback purposes. Finally, monitoring, assessment, and evaluation of the screening programmes should take place regularly. Creating registries is an ideal solution. It is of utmost importance to map out a national action plan to curb obesity. According to research by the International Agency for Research on Cancer, obesity is closely related to the occurrence of cancer<sup>(7)</sup>.



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