# Epidemiological Features of Skin Cancer in the Herzegovina-Neretva Canton

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#### SUMMARY

The skin cancer disease spreads every day in the world. According to statistics of World Health Organization about 3 million people get one kind of malign skin cancer. Even 160 000 people get some malignant melanoma and about 40 000 people die because of the same disease. The skin tumors are the most frequent tumor. The prevalence increases every year. The main reason for getting skin cancer is UV radiation, in most cases from the sun, and also from using some sources of UV radiation such as the sun-lamps, solarium use, use of some creams or lotion for skin. The skin absorbs UV radiation and after certain time the damage cannot be undone which leads to malignancy. The persons who had sun-bums in their childhood, persons who are often exposed to the sun, person who have fair skin, persons who have bright eyes or hair and persons in whose family tradition somebody had the moles or some other malign tumor are more susceptible to skin cancer. The Public Health Organization of Herzegovina-Neretva Canton has managed the Register of skin cancer since 1999. In the recent 10 years in Herzegovina-Neretva Canton there were 307 persons who had skin cancer and this cancer is the second most occurring in the Canton. In 2008, 46 persons (women 28, men 18) were newly diagnosed with skin cancer and 4 persons died. Keywords: skin cancer, UV radiation, Hercegovina-Neretva Canton, BiH

## 1. INTRODUCTION

The occurrence of malignant skin tumors is constantly growing in the world. According to the World Health Organization, about 3 million people a year get sick from some form of malignant skin tumors. Even 160 thousand of people get sick from malignant melanoma, a disease that annually kills 40 thousand people.

Over 90% of cases of skin cancer occur on surfaces that are regularly exposed to sunlight or ultraviolet light.

The skin is variously sensitive to ultraviolet radiation: uncovered body parts are found to be less sensitive than covered by the suit, dorsal parts than volnar ones. It is interesting that the children and the elderly are less sensitive than middle-aged persons and that woman are more sensitive than men.

Skin cancer is the most widespread of all forms of cancer. Malignant skin cancer usually is on the backs in case of men or on feet in case of women. Annual rate of all forms of skin cancer is increasing from year to year, indicating a general concern. The main reason for getting skin cancer is ultraviolet radiation, commonly from the sun, but can also arise from the use of different sources of ultraviolet radiation, such as lamps for tanning or going to a solarium and a variety of creams or lotions to get darker skin. Ultraviolet spectrum of sunlight is the main cause of all types of skin cancer including melanoma. Other risk factors include a genetic tendency (skin cancer is more common in people with light skin, blue or green eyes, blond or red hair).

# 2. GOAL

With our work we want to show the number of affected residents in the area of the Herzegovina-Neretva Canton with skin cancer in the last ten years.

#### 3. METHODOLOGY

The research is made by retrospectively–descriptive method. We used available data from the annual rating of health status of the population of the Institute of Public Health of Herzegovina-Neretva Canton and the Department of Epidemiology and Social Medicine.

The results are compared, analyzed statistically and displayed in text and graphics.

### 4. RESULTS

There are several types of skin cancer from those who barely can give metastases to those most dangerous and life-threatening.

Basocellular cancer is the most common type of skin cancer, but fortunately, it is the least dangerous and rarely gives metastases.

Squamous cell carcinoma is another type of skin cancer. Usually occurs on the lower lip, face and ears. Sometimes it is expanding into the environment including the regional lymph glands and internal organs.

Melanoma is the most dangerous form of skin cancer. Occurs most rarely but it frequency of occurrence increased enormously in recent years. Melanoma is certainly the most dangerous skin cancer, but it should be noted if it is found in the early period, it can be fully healed. Quickly spread and gives metastases

Register for malignant diseases in the Department of Public Health of the Herzegovina-Neretva Canton exist for almost eleven years in accordance with the legal obligation to register people who suffer from these diseases. From year to year we work on improvement of the registration system.

Since 1998 since register of malignant neoplasms exist from the skin cancer got sick a total of 307 persons. Skin cancer in Herzegovina-Neretva Canton in the total number of patients during the last three years takes high third place.

Analysis by gender indicated that more women 167 (54%) got sick than man 140 (46%) (Figure 1).

Observing the age structure shows that the largest number of patients is older than 65 years where we found 171 (56%) persons. At age the age from 55 to 64 years there is 61 (19%) persons, from 45 to 54 years 44 (15%) persons, from 35 to 44 years 31 (10%) persons. Among persons

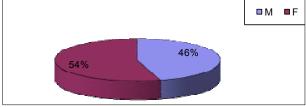


Figure 1. Percent of patients with skin cancer according to gender in Herzegovina-Neretva Canton

younger than 35 years of age there wasn't neither one case of disease (Figure 2). The largest number of patients is from area of Mostar 160 (52%), Konjic 47 (15%), Capljina 36 (12%), Citluk 24 (8%), Stolac 15 (5%), Jablanica and Prozor 9 (3%) with minimum of reported cases from the municipality of Neum 7 (2%) (Figure 3). During last three years the number of lethal outcomes due to malignant neoplasms of skin cancer from 2006–2008 is 11. The largest number of deaths is in the Mostar and Konjic 5 Neum 2, Jablanica and Capljina by 1 case (Figure 4). During the 2008 of skin cancer 46 people got sick. From the total number of patients in four cases was a lethal outcome.

# 5. DISCUSSION

Tumors of the skin today represent one of the most common forms of cancer with over one million affected

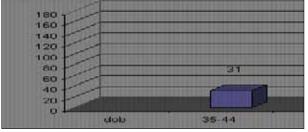


Figure 2. Number of patients with skin cancer according to age groups

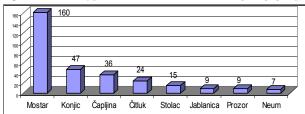


Figure 3.number of patients according to municipalities of Herzegovina-Neretva Canton

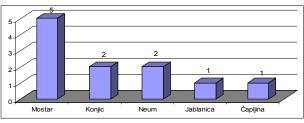


Figure 4. Number of lethal outcomes due to skin cancer in period 2006 – 2008

during one year. Most usual place for occurrence is areas that are regularly exposed to sunlight or ultraviolet light.

Third place among all malignant neoplasms in the Herzegovina-Neretva Canton takes skin cancer. The total number of patients during the last ten years was 307.

Looking at the gender structure women get affected more often than men (54%). The largest number of affected persons is at age over 65 (171). In Mostar the largest number of patients is registered (160) in comparison to other municipalities.

## 6. CONCLUSION

Occurrence of malignant diseases has multiple causes, and their appearance affects a large number of risk factors. A large number of cancer skin disease can be cured if detected in due time so work on the early detection is of exceptional importance. Work on the prevention of malignant diseases and skin cancer does not give quick results, and often these prevention programs are not attractive. Skin cancer prevention programs and their effects should be considered in the long term, and prevention programs should be the most important tasks of any government program because in this way there is a significant influence on improving the health of the population.

Prevention measures should include the entire society because in this way it can lead to a real reduction in the number of people with this disease. Screening and early detection of skin cancer can significantly affect the reduction in mortality. Prevention of skin cancer is certainly the most desirable weapon against this disease. It is known that a large number of skin cancers can be cured if diagnosed in due time.

For now, in our Canton, there is no organized implementation of preventive measures, as well as work on the screening and early detection of malignant diseases, which will certainly be very important to introduce in the future.

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