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Epidemiological Data on Cancer in Morocco: About 8194 Cases From 2000 To 2016.

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Abstract: *Any prevention policy can not be implemented without epidemiological studies. Without the epidemiological surveillance, it is impossible to put in place a cancer control plan adapted to our region. The objective of this work is to describe a cancer disease with an increasing incidence and which is becoming a serious public health problem. The parameters studied are age, sex, type of cancer and date of reporting of the disease. This epidemiological study shows that males are more affected than females, accounting for 60.3% and 39.7%, respectively, with a sex ratio equal to 0.65 (chi-square = 841.63, p≥0.0001). The most affected age groups are the [45-65 [years and ≥65 years. These two age groups represent 85% of the study population with an average age of 61.55 ± 19.98 years. The most common cancers in women are breast cancer followed by cervical cancer. For men, it is prostate cancer followed by lung cancer. Blood cancers also affect the age group [45-65 [without distinction between the two sexes.*

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I. Introduction

Cancer is a global public health issue, affecting all categories of the world's population regardless of age, gender or socio-economic status, in 2012, 14.1 million new cases of cancer And 8.2 million people died (1). The frequency of cancers could increase with 20 million new cases per year in 2020 [2]. In Morocco, cancer is a major public health problem. According to data from the Cancer Registry of the Greater Casablanca Region (CRCR), the annual national incidence of cancer is estimated at 101.7 new cases per 100 000 inhabitants, corresponding to 30 500 new cases of cancer each year.

II. Patients And Methods

This is a descriptive cross-sectional study involving 8194 cancer patients treated and monitored at the Mohamed V flap military training hospital during the period 2000 to 2016. The parameters studied are age, sex , Type of cancer and date of reporting.

III. Results

In Morocco, cancer plays an increasingly important role in health concerns. It is the second leading cause of death in our country after cardiovascular disease [2]. Among the 61950 chronic patients attending the Mohamed V Flap Medical Training Hospital during the period 2000 to 2016, we recorded 8194 cancer patients, which represents 13.2% of chronic diseases after hypertension (17, 6%) and diabetes (17.5%), with an average prevalence of 482 cases per year (Figure 1). In this sample, men are more affected than women, with 60.3% and 39.7% respectively, with a sex ratio of 0.65 (chi-square = 841.63, p≥0.0001) (Figure 2). The most affected age groups are the [45-65 [years and ≥65 years. These two age groups represent 85% of the study population with an average age of 61.55 ± 19.98 years (Figure 3). There is a statistically highly significant association between age and sex of cancer patients with a Pearson chi-square test = 497,039, p≥0,0001, (Figure 4). For young adults, it is mostly women who are most affected by cancer and for the elderly it is the men who are most affected by cancer.

Concerning the association between the different types of cancer and the sex of the patients, it was found that there was a statistically highly significant association (chi-square = 841.63, p≥0.0001), the most prevalent Men are prostate cancer (36%), followed by lung cancer (27%). In women, the most frequent cancers are breast cancer (43%), followed by cervical cancer (14%). There is also a statistically highly significant association between cancer types and the age of chi-square patients = 1597,671, p≥0,0001). Prostate cancer affects the age group ≥ 65 years and lung cancer affects the age range [45-65 [. In women, the most common

cancers, breast cancer and cervical cancer, occur in the age group [45-65 [. Blood cancers also affect the age group [45-65 [without distinction between the two sexes.

IV. Discussion

Cancer by its frequency has become a major public health problem. Of the 8194 cancer patients, we found a male predominance, whereas in the general population, it is the women who are most affected, this can be explained by the fact that the Military Instruction Hospital Mohamed V de Rabat receives mainly military patients and their families, and the majority of the military are men. In our study we found that there is a statistically highly significant association between age and onset of disease with an average age of 61.55 ± 19.98 years, these results are similar to those of The literature, indeed age is the most important factor, with an incidence curve that increases with age [4]. As far as children are concerned, the majority especially the age group [0-5 [are transferred to the rabid child hospital.

As regards the association between the different types of cancers and the sex of the patients, we found that there is a statistically highly significant association, these results agree with those of the literature. The most common cancers in women are breast cancer followed by cervical cancer. The standardized incidence of breast cancer in the Moroccan population is 47 per 100 000 women and the standardized rate on the world population is 49.5 per 100 000 women, and there have been more than 1 million new cases of breast cancer In the world by year in 2002 of which more than half in the industrialized countries. [6]. Age is the most important risk factor for breast cancer [5], for sex, breast cancer is almost Exclusive of the woman, it is 100 times less frequent in the man [5]. Similarly, cervical cancer is the second female cancer in our population, this result is in line with the results of other studies, it is also the second female cancer in the world in terms of incidence. The standardized incidence on the Moroccan population is 14.1 per 100,000 women and the standardized incidence on the world population is 16.3 per 100,000 women [2].

The most common cancers in humans are prostate cancer and lung cancer. These results are similar to those of the literature. E effect, prostate cancer has become a prominent public health problem in recent years. The standardized incidence rate on the Moroccan population is 11.3 per 100,000 men. The standardized rate on the world population is 18.8 per 100,000 men. The specific rate of incidence of prostate cancer grows strongly with age, it is rare before the age of 50 years. This places him at the forefront of cancers in humans in France and in the world [7]. For sexe, prostate cancer is almost exclusively man [10]. Similarly for lung cancer, there is a statistically highly significant association between age and sex of patients and lung cancer. These results are similar to those of the literature. In fact, lung cancer is the most common cancer worldwide and is the leading cause of cancer death worldwide [7], with an incidence of 1.2 million new cases per year and 1.1 million people per year [8]. In terms of age, lung cancer affects the age range [45-65 [, which is consistent with data from the World Cancer Report [9].

V. Conclusion

Cancer is a multi-facet and multifactorial disease. It is a very complex pathology involving several determinants and risk factors. The analysis of epidemiological data is of great importance for the prioritization and decision-making of a cancer control program, in particular screening and early diagnosis programs for the control of cancers Such as prostate cancer, lung, cervical and breast cancer and subsequently lower mortality by this plague which is cancer.

Conflicts of interest :

No conflicts of interest.

Figures :

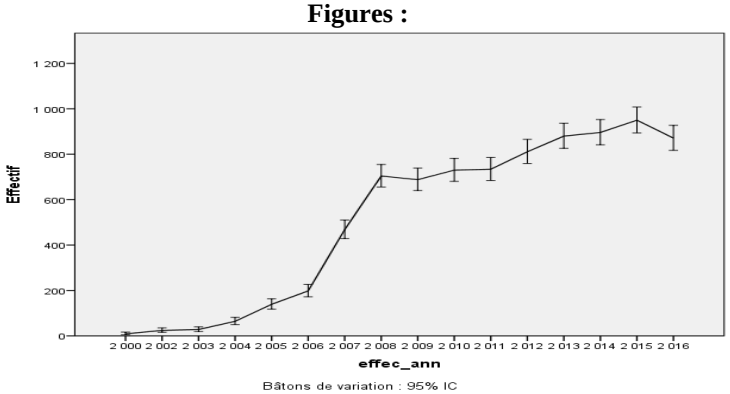

Figure 1: Cancer prevalence by years.

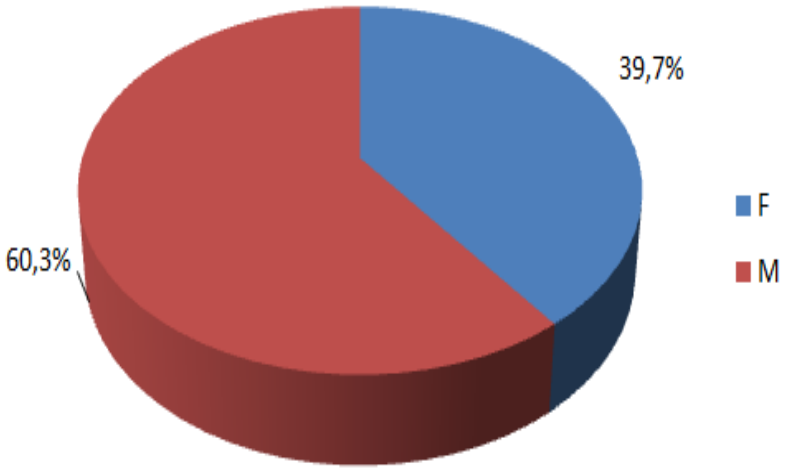

Figure 2: Cancer distribution by sex

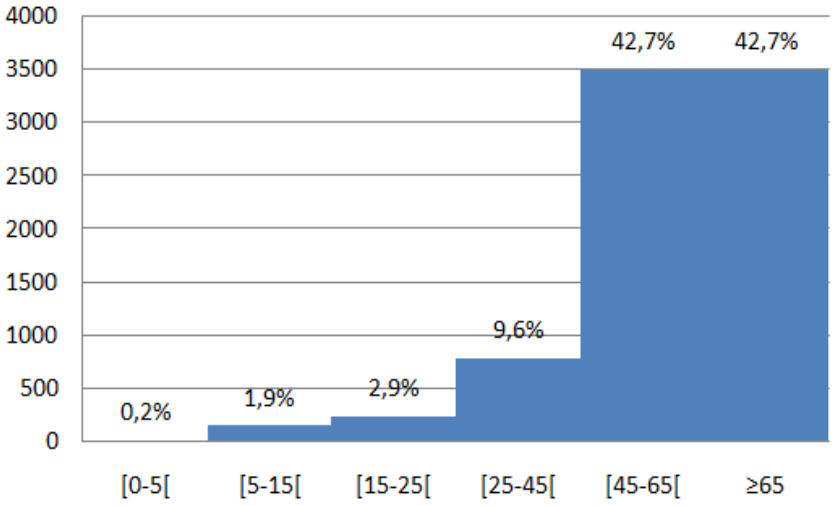

Figure 3: Cancer distribution by age rang.

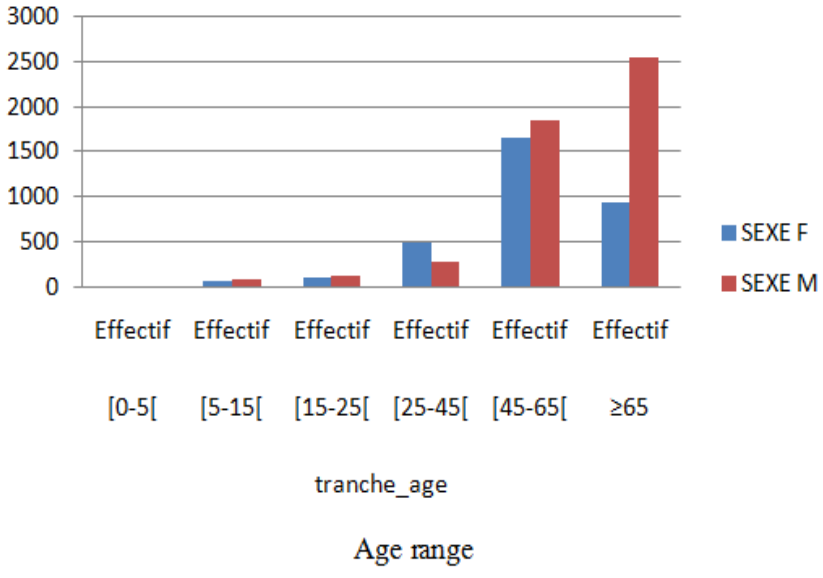

Figure 4: Cancer distribution by sex and age of patients.

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