

## Epidemiological Profile of Patients Operated for Gynecological and Breast Cancers at the University Hospital of Brazzaville

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### Abstract

**Objective:** Describe the epidemiological profile of patients operated for gynecological and breast cancers.

**Patients and Methods:** Retrospective study including patients operated at the University Hospital of Brazzaville for gynecological and breast cancers during the period from January 1, 2010 to December 31, 2016.

**Results:** Of the 492 patients identified, we retained 84 patients, i.e. an operating frequency of gynecological and breast cancers at the Brazzaville University Hospital of 17.07%. Breast cancers were the most operated on with a frequency of 54.4%, followed by cervix cancers with a frequency of 22.7%. Endometrial and ovarian cancers were the 3<sup>rd</sup> in the series with an operating frequency of 10.71% followed by cancers of the vulva with a frequency of 2.38% and that of the vagina at 1.19%. The majority of patients were married (51.19%), multigest (41.67%), multiparous (38.10%), living in Brazzaville (82.29%), being without profession (58.33%) and without any level study (41.66%) with an average age of 55.77 years and extremes between 27 and 81 years.

**Conclusion:** Breast cancers are the most frequent followed by those of the cervix, the operated patients are married and often without profession.

**Keywords:** Cancers; Breast; Cervix; Vulva; Vagina

### Introduction

Women's cancers are constantly increasing health problem with projections showing a worrying increase which could reach 11.5 million deaths by the year 2030 [1]. In Congo, the incidence of cancers is 49 per 100,000 inhabitants for female cancers, marked by the dominance of breast cancer, followed by cervix cancer [2]. Due to the significant progress made in medicine, the management of cancers is becoming multidisciplinary. The treatment requires prior complete exploration focused on the size of the tumor, axillary lymph nodes and

metastases. We conducted this study with the aim of studying the epidemiological profile of patients treated surgically for gynecological and breast cancers.

**Patients and Methods**

It was a descriptive cross-sectional study, which took place in the obstetrics gynecology department of the University Hospital of Brazzaville, from January 1, 2010 to December 31, 2016. The variables studied were epidemiological, clinical and histological. The information obtained about each patient was collected on a survey form based on the collection of medical records, hospitalization registers and operating reports.

**Results**

During the study period 84 cases of gynecological and breast cancers were operated on out of 9.944 gynecological surgical procedures, i.e. 0.84%, of which 492 patients for gynecological and breast cancer, i.e. a frequency of 17.07%. Among the patients listed, married women represented 51.19%, widows 29.77% and single 19.04%. They did not exercise any activity in 49 cases or %, exercised in the public and informal sector in respectively 14 or %, in the private and student sector in respectively 3 cases and retired in 1 case.

The characteristics of the patients and the cancers are represented by the tables 1-4.

Cancer	Average age (years)	Extremes (years)	Effective
Breast	51.78	[27-81]	44
Cervix	52.89	[28-79]	19
Endometrium	62.55	[53 -72]	9
Ovary	54.77	[39-74]	9
Vulva	59	[46-72]	2
Vagina	77	-	1

**Table 1:** Age distribution of patients operated for gynecological and breast cancers at the University Hospital of Brazzaville according to the site of the cancer.

Years	Breast		Cervix		Endometrium		Ovary		Vulva		Vagina	
	N	%	n	%	n	%	N	%	n	%	N	%
[26-35]	4	9.09	2	10.53	-	-	-	-	-	-	-	-
[36-45]	10	22.73	6	31.57	-	-	2	22.22	-	-	-	-
[46-55]	11	25	2	10.53	2	22.22	4	44.45	1	50	-	-
[56-65]	8	18.18	6	31.57	4	44.44	1	11.11	-	-	-	-
[66-75]	10	22.73	1	5.27	3	33.34	2	22.22	1	50	-	-
> 75	1	2.27	2	10.53	-	-	-	-	-	-	1	100
Total	44	100	19	100	9	100	9	100	2	100	1	100

**Table 2:** Distribution of patients operated for gynecological and breast cancers according to location and age groups.

Gestality	Breast		Cervix		Endometrium		Ovary		Vulva		Vagina	
	n	%	n	%	n	%	n	%	n	%	n	%
Nulligest	2	4.55	1	5.26	1	11.11	-	-	-	-	-	-
Primigest	6	13.63	-	-	1	11.11	2	22.22	1	50	-	-
Paucigeste	5	11.36	7	15.78	-	-	1	11.11	-	-	-	-
Multigesture	16	36.37	6	36.85	5	55.56	4	44.44	-	-	-	-
Great multigesture	15	34.09	8	42.11	2	22.22	2	22.22	1	50	1	100
Total	44	100	19	100	9	100	9	100	2	100	1	100

Table 3: Distribution of patients operated for gynecological and breast cancers according to gestality and cancer site.

Parity	Breast		Cervix		Endometrium		Ovary		Vulva		Vagina	
	n	%	n	%	n	%	n	%	n	%	n	%
Nulliparous	6	13.64	1	5.26	1	11.11	-	-	1	50	-	-
Primiparous	4	9.09	1	5.26	1	11.11	2	22.22	-	-	-	-
Pauciparous	12	27.27	3	15.78	-	-	2	22.22	-	-	-	-
Multipara	11	25	10	52.64	5	55.56	3	33.34	1	50	-	-
Grand multiparous	11	25	4	21.06	2	22.22	2	22.22	-	-	1	100
Total	44	100	19	100	9	100	9	100	2	100	1	100

Table 4: Distribution of patients operated for gynecological and breast cancers according to parity and cancer site.

## Discussion

### Breast cancer

We collected 84 cases of patients operated for gynecological and breast cancers over 6 years. Breast cancer is the first in our series with a frequency of 52.42%, which confirms its first place among female cancers, in agreement with the Brazzaville cancer registry [2] and certain authors [3-6]. As life expectancy varies from one country to another, the average age in our study is 57.78 years, a rate higher than that of Kemfang Ngowa [7] with 45.17 years and Nayama [8] 44, 23 years. On the other hand in the industrialized countries, the life expectancy being longer, the average age is between 60 and 70 years. Indeed, breast cancer is the prerogative of older women in developed countries. Among the operated patients, 54% had a low socioeconomic level. These results are similar to those of several studies in the sub-region [3,9]. As for the profession, we found that female executives are the least affected contrary to the literature [10] where women with a high standard of living have a risk multiplied by 2. Multiparity recognized as a protective factor against cancer has been found in the majority of our patients [11] unlike TonatoBagnan [3] with 35.3% of breast cancer in nulliparous women without valid explanation.

### Cervix cancer

Cervix cancer ranks second in our study with a percentage of 22.6%. Our results are similar to those of TonatoBagnan with 26.7% [3]. On the other hand, in the review of the literature, it ranks first among cancers according to Dem [12] and Sando [13]. The most representative age group is that of 36 - 45 years and that of 56 - 65 years. This can be explained by the precocity of sexual intercourse and by early marriages which put them in early contact with the human papilloma virus responsible for cancer. The socioeconomic level was low and multiparas were the most represented as found in the literature [3,11,12].

### Ovarian cancer

Ovarian cancer ranks third with a percentage of 10.7% after that of the breast and cervix as found in the literature [3,11] with 12% and lower than that found by TonatoBagnan [3] with 18.3%. The average age in our series is higher than those found by some authors [11,12] unlike others [7] with a younger age of 20 years reflecting an early onset of this cancer in this country. The most represented can be superimposed on those of Ahmadou Dhem [11] who finds that multiparous women have a higher risk of ovarian cancer than women having at least one pregnancy. The risk is all the lower as the number of pregnancies carried to term is high [2,3].

### Endometrial cancer

It also ranks third with ovarian cancer after breast and cervix cancer with a frequency of 10.7%. It is considered to be a disease of rich countries with maximum incidences in developed countries [13]. It ranks third among gynecological and breast cancers according to the Brazzaville cancer registry [2] and according to a study carried out in France. Our results can be superimposed on those of TonatoBagnan [3] with 9.57%, higher than those reported for the sub-region [3,8,11,12] which have respectively 2 and 3.3% unlike Niger [8] with 15%. The average age in our study was similar to that found in the literature [3,11,12], which confirms that endometrial cancer is the prerogative of the elderly.

### Vulvar and vaginal cancers

These are very rare female cancers. They represent respectively 2.4% and 1.2% of our series. The results are superimposable with those of TonatoBagnan [3] with 1.5% and they occupy the fifth and sixth ranks in our study.

### Conclusion

Breast cancer is the first gynecological and breast cancer to occur in women of various age groups and whose multiparity is considered a disadvantageous factor. Cervix cancer is the second most common, occurring in young women. Ovarian cancer affects multiparas.

### Conflict of Interest

None.

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