



## Research Article

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# Epidemiological profile of gynecologic breast cancer in Lubumbashi, case of the general reference hospital Jason Sendwe

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## Abstract

**Context:** Gynecological and breast cancers are a major concern for the international community because they represent a major cause of mortality and morbidity in women. However, their routine screening is not always common in our countries. **Objectives:** The purpose of this study is to determine the prevalence profile of gynecologic breast cancers at Jason Sendwe Hospital in Lubumbashi, Democratic Republic of Congo. **Methods:** This is a retrospective descriptive and analytical study covering a period from 2012 to 2016 in the gynecology department. **Results:** From 2012 to 2016, the incidence of gynecologic breast cancer was 9.3%. Married women were more affected (63.7%) than divorced and single people. Older women, who are in the menopausal phase, were the most affected as young women. There is a low frequency of endometrial cancers such as that of the ovary. **Conclusion:** This study highlighted the presence of gynecologic breast cancer cases at Jason Sendwe Hospital. This is an alert for the gynecology service, which should ensure systematic screening and care.

**Keywords:** Cancers, Breasts, Gynecology, Lubumbashi, DR Congo.

## INTRODUCTION

Worldwide, about 2 million gynecological cancers occur each year, accounting for almost 50 % of all female cancers. More than one million cases of breast cancer, 500 000 cases of cervical cancer, 200 000 cases of cancers of the uterus and 200 000 cases of other gynecological cancers (ovaries, vulva, vagina) [1,2].

These cancers result in 850 000 deaths, or 30 % of cancer deaths among women, of which more than 400 000 are due to breast cancer, 273 000 to cervical cancer, 50 000 to those of the body of the uterus and 125,000 to other gynecological cancers [3,4].

This panorama varies with the economic level of the different countries, both in terms of incidence, due to variations in etiological factors, and mortality, because of the differences in access to care. In countries with a high economic level, 64 % of global deaths from breast cancer and 69 % of those from cancers of the uterine body are due to their frequency in these countries; for the other gynecological cancers, the share of global mortality due to these cancers is 48 % and only 7 % for cervical cancers whose incidence in these countries is low [5,6].

Thus, the second most common cancer in women is observed in 90 % of cases in countries with low levels of development where most women have no access to preventive treatment through screening, or even to a diagnosis. Early allowing a cure [5,7].

Developing countries account for 72 % of all cancer deaths worldwide. This scourge is the third leading cause of death in these countries. Gynecological cancers account for 19 % of all cancers worldwide. In Africa the most common cancers of women are those of the breast and cervix.

Many factors can explain the evolution of the incidence of breast cancer: environmental exposure, lifestyle, characteristics of the history of reproductive life, screening, hormonal treatments. Recently, a decline in this incidence has been observed in the United States.

The role of hormone therapy in menopause (MMT) is discussed because of the rapid and massive

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reduction in their use following a study quantifying the risk of breast cancer in postmenopausal women using estrogens. In France, the incidence of breast cancer has been growing steadily for more than 20 years [5,8].

In all high-income countries, the increase in the incidence of breast cancer over the last thirty years, reaching more than 41 000 annual cases in France, makes this cancer the first cancer in women in terms of frequency and mortality, it has become a public health problem. Although mortality has been falling since 2000 due to advances in treatment and screening, breast cancer with about 11,000 deaths per year remains the leading cause of cancer death in women. Prevention poses many problems, the etiology of this cancer is multifactorial, it is based on the definition of individual risk indicators [1,9,10].

Except the rare cases (6 to 10% of cases) related to genetic predispositions, the assessment of risk is insufficient. Epidemiological evidence shows that rules of healthy living (avoiding sedentary lifestyle, obesity, alcohol abuse, smoking and uncontrolled use of hormones) should have a beneficial effect.

A modification of the genital life favoring a first early pregnancy, breast-feeding and more moderate prescriptions of the hormonal treatments of the menopausal symptoms could also reduce the incidence. Finally, an additional research effort oriented towards a better knowledge of human breast carcinogenesis should improve a targeted prevention of breast cancers [1,4,5].

This study aims to determine the epidemiological profile in the gynecology department at the Jason Sendwe Hospital in Lubumbashi, a city in the Democratic Republic of Congo.

**Table 1:** Distribution of gynecological breast cancers compared with other diseases

Diseases	Years											
	2012		2013		2014		2015		2016		Total	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Gynecologic breast cancer	20	9.2	08	3.9	26	12.9	26	14.4	11	6.7	91	9.3
Other pathologies	197	90.8	196	96.1	175	87.1	154	85.6	170	93.9	892	90.7
Total	217	100	204	100	201	100	180	100	181	100	983	100

**Table 2:** Distribution of gynecological and mammary cancers according to their marital status

Civil status	Endometrial cancer		Ovarian cancer		Breast cancer		Uterine cervix cancer		Other		Total	
	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)	N	(%)
Single	2	16.7	1	20	3	12.5	0	0	0	0	6	6.6
Divorced	2	16.7	2	40	5	20.8	16	34.1	2	66.7	27	29.7
Married	8	66.6	2	40	16	66.7	31	65.9	1	33.3	58	63.7
Total	12	100	5	100	24	100	47	100	3	100	91	100

Allemand *et al.* have shown that the incidence of breast cancer has been increasing in France for several decades with a 60 % increase in the standardized rate per 100,000 person-years between 1980 and 2000 [5]. The results of this study corroborate ours in the sense that the rates cancers seem to be growing as the years go by. This is probably due to the lack of attention to risk factors or the lack of preventive measures.

Considering the marital status of women, brides are more affected by gynec- mammary cancers with a frequency of 63.7% of cases; followed by divorcees (29.7%) and at the bottom of the scale, singles with 6.6% of cases (Table 2). The research of Sando *et al* (2014) shows that the risk of cervical cancer increases with the number of sexual partners, we believe that sexual activity among brides could partially

## MATERIAL AND METHODS

We used a retrospective method based on the collected files of patients in the departments of gynecology; these cards were used in the collection of data from 2012 to 2016.

### i. Study population

The research was conducted in the city of Lubumbashi in general, and the experiment was particularly conducted at the Jason Sendwe Reference General Hospital, which focused on women with gynecologic breast cancers.

### ii. Collection of data

Data was collected from the consultation forms and disease reporting registers; and the anthropometric age and marital status parameters were retained for all forms of cancer, including gynecologic, endometrial, ovarian, breast and cervix.

### iii. Analysis and data processing

The data was captured and analyzed statistically. Word processing, tables and graphs were done on Word, Excel and EPI info.

## RESULTS AND DISCUSSION

The incidence of gynecologic breast cancer is 9.3 % in the gynecology department, ie 91 patients out of 983 (Table 1). The year 2015 has a high frequency of 14.4 %, followed by 2014 with 12.9 % and the year 2013 has a low frequency of 3.9%. These figures show a growing trend over the years of the frequency of gynecologic cancers.

explain the high incidence of cancer in women married. Nkondjock *et al* show that the risk is increased among women whose husbands have been married several times or who have extra-marital partners [3].

Women aged between 44 and 55 years are more affected by gynec- mammary cancers with a frequency of 37.4% of cases, followed by those whose age varies between 32 and 43 years (23.1%) and 56 - 67 years (20, 8%) (Table 3). Age plays an important role for most authors.

Rocheffort *et al* and Sano *et al* have shown that the study of breast cancer by age shows two frequency peaks: a first peri-menopausal peak 40-50 years and a second postmenopausal peak 60-50 years [4,9]. 70 years ; this could justify our results, which show a good number of

women with cancer around 55 years old. According to most authors, breast cancer affects women between the ages of 30 and 70 [10].

**Table 3:** Frequency of gynecologic breast cancers by age

Age (years)	N	Frequency (%)
≤19	2	2.2
20–31	7	7.7
32–43	21	23.1
44–55	34	37.4
56–67	19	20.8
68–79	6	6.6
80–91	1	1.1
≥92	1	1.1
TOTAL	91	100

**Table 4:** Frequency of endometrial cancer by age

Age	N	Frequency (%)
≤32	4	33.3
33–51	4	33.3
52–70	3	25
≥90	1	8.3
Total	12	100

Our results show that endometrial cancer affects more women aged <32 years and those aged between 33 and 51 years; and is less common in women ≥ 90 years of age or 8.3% of cases (Table 4). Contrary to our results, Tonato Bagna *et al* and Sankaranarayan *et al* show that endometrial cancer predominates in postmenopausal women who are overweight and have never had children [2,8].

**Table 5:** Frequency of ovarian cancer by age

Age	N	Frequency(%)
≤ 22	1	20
23 – 39	0	0
40 – 56	3	60
≥57	1	20
Total	5	100

Our results show that ovarian cancer frequently affects women aged between 40 and 56 years old with 60% of cases and is less common in the elderly (20%) whose age is ≤ 22 years of age. in the oldest (20%) whose age is ≥ 57 years old (Table 5).

This type of cancer represents the fourth leading cause of female cancer death, it is too rare but with a poor prognosis [10]. The low frequency of this cancer in our study could be justified by the rarity of the latter.

**Table 6:** Frequency of cervical cancer by age

Age	N	Frequency (%)
≤ 26	1	2.1
27 – 38	6	12.8
39 – 50	8	17.0
51 – 62	23	48.9
63 – 74	5	10.6
≥ 75	4	8.5
Total	47	100.00

Our results show that cervical cancer is common among women aged 51 to 62 years old with 48.9% of cases, and is less common among those aged ≤ 26 years with 2.1% and those whose age is ≥ 75 years (Table 6). The literature shows that cervical cancer is most often caused by human papillomavirus. Risk factors include having first sexual intercourse at a young age, having multiple sexual partners, and smoking cigarettes [6,7].

## CONCLUSION

Gynecologic breast cancer is a public health problem in the city of Lubumbashi. Because It represents 9.3% of cases of cancer in women. The most common is cervical cancer with a frequency of 48.9%; follow-up of endometrial cancer (13.19%); ovarian cancer (5.49%).

The marital status of patients tells us that brides are more affected with a frequency of 63.7%; followed by divorcees (29.7%) and singles with 6.6% of cases. Married women seem to be the most exposed in most forms of these cancers as single people. With regard to the age / exposure to gynecologic-mammary cancers, it is older women and particularly menopausal women who are more exposed to these diseases.

This study shows that there are indeed cases of gynecologic breast cancer in the city of Lubumbashi; special attention should be paid to the prevention and management of these.

## Limitation of the Study

Our study experienced a limitation on sampling; this study will have to be considered in several health facilities in the city of Lubumbashi.

## Conflicts of Interest

There is no conflict of interest in this study.

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