

Audit of the Care Pathway for Gynaecological and Breast Cancer Patients Monitored at the Jeanne Ebori Foundation Mother-Child University Hospital (Gabon) in 2025

Buambo Gauthier Regis Jostin^{1*}, Bang Jacques Albert², Eya Ama Mve Robert², Assoumou Obiang Pamphile², Nyngone Solenne², Edzo Mvono Irene², Ntsame Elsy Juvette², Retno Retno², Mbang Ondo Marie Cyrielle², Minto'o Junior², Mewie Anouchka², Minkobame Ulysse², Makoyo Opheelia², Meye Jean François²

¹Faculty of Health Sciences, Marien Ngouabi University, Brazzaville, Congo

²Department of Gynecology and Obstetrics, CHUME Jeanne EBORI, Libreville, Gabon

Email: *buambogauthier@yahoo.fr

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Abstract

Introduction: Given their prevalence, often late diagnosis, lack of organised screening and poor treatment, gynaecological and breast cancers are therefore real public health problems in Africa. **Method:** An audit was conducted from 1 to 7 March 2025 in the Gynaecology Department at the Mother-Child University Hospital, Jeanne ÉBORI Foundation, comparing the information collected in medical records with the department's planned standards. The audit focused on patients followed for gynaecological or breast cancer in 2024. The Fleiss kappa coefficient was used to measure agreement between participants' responses, setting a probability threshold of less than 5% and a 95% confidence interval. **Results:** A high level of agreement was noted between the responses, reflecting substantial agreement among the doctors interviewed ($K = 0.69$; 95% CI (0.59 - 0.79); $p < 0.001$) regarding the standardisation of care. Analysis of 60 files (*i.e.* 64.5% of all patients followed for gynaecological or breast cancer, $N = 93$) after reaching saturation revealed imprecise risk factors in 83.3% (50/60), the non-recording of biopsy results in 8.3% (5/60) and an absence of clinical and anatomopathological staging in 26.8% (15/56) and 33.3% (20/60), respectively. **Conclusion:** To ensure quality of care and guarantee good information management, the department must implement patient data management software, including a standardised clinical record. Alternatively, a standard medical record template for cancer could be developed and made available to users.

Keywords

Gynecological and Breast Cancers, Audit, Surgical Management, Libreville

1. Introduction

Gynaecological and breast cancers are clonal proliferations of abnormal cells with cytonuclear atypia [1]. They are associated with a loss of normal tissue architecture and signs of invasion of surrounding structures [1]. These cancers develop at the expense of cells in the female genital organs and the mammary gland. These cancers are the most common in women and the leading cause of cancer death [2] [3]. According to updated estimates from the International Agency for Research on Cancer (IARC) and GLOBOCAN in 2022, they were ranked 1st, 3rd, 5th and 7th among cancers in women, respectively, with 2,295,686 cases of breast cancer (46.8%), 661,021 cases of cervical cancer (14.1%), 420,242 cases of endometrial cancer (8.4%) and 324,398 cases of ovarian cancer (6.6%) [2]. In Gabon in 2022, breast cancer was the most prevalent female cancer, accounting for 28.5% of cases, followed by cervical cancer (23.9%), ovarian cancer (5.7%), liver cancer (5.4%), and colorectal cancer (3.9%) [3]. However, in terms of lethality, cervical cancer was the second leading cause of cancer-related death (139 cases or 12.7%), after liver cancer (146 cases or 13.3%), followed by breast cancer (113 cases or 10.3%) [3] [4]. Gynaecological and breast cancers therefore constitute a significant public health issue in Africa due to their prevalence, late diagnosis, lack of organised screening and management [2] [3]. Several authors and learned societies have issued recommendations on the management of gynaecological and breast cancers, including detailed and well-codified diagnostic and therapeutic procedures [5]-[8]. In sub-Saharan Africa, the management of these cancers is still plagued by procedural issues and is incomplete in several countries due to limited resources (diagnostic equipment, specialised medication, radiotherapy and oncological surgery). In Gabon, gynaecological and breast cancer management is carried out in Libreville, with collaboration between the Gynaecology-Obstetrics departments and the Akanda Cancer Institute. The patient pathway is clearly defined, and decisions are made collectively in multidisciplinary consultation meetings. In this context, we evaluated the diagnostic and therapeutic management of gynaecological and breast cancers at the Gynaecology Department of the Mother and Child University Hospital (CHU-ME) Jeanne Ebori Foundation, one of the major sites involved in the management of these cancers since 2019. This evaluation was conducted using a quality approach to contribute to the improvement of women's health. This study aimed to analyse the care pathway for patients with gynaecological or breast cancers at the CHU-ME Jeanne Ebori Foundation.

2. Methods

This audit of the care approach for patients treated for gynaecological and breast

cancers in 2024 was conducted from 1 to 7 March 2025 in the Gynaecology Department at the Jeanne Ebori Foundation University Hospital-Metropolitan Hospital (CHU-ME). The study compared the information collected in medical records with the department's planned standards.

The target population consisted of obstetrician-gynaecologists in the gynaecological and breast cancer unit.

To this end, a self-administered questionnaire was carried out with four out of five doctors in the aforementioned unit. The questionnaire contained closed dichotomous, multiple-choice and short-answer open questions. A data collection sheet was also prepared.

The questionnaire covered governance, facilities, resources and activities in order to establish care standards for gynaecological and breast cancers in the department. After analysing patient files, the data collection sheet was used to gather information.

The following variables were studied: age; reason for consultation; risk factors; comorbidities; description of lesions; search for lymphadenopathy; request for and transcription of the morphological assessment; performance of a biopsy; transcription of the morphology and histology results; clinical classification; transcription of the minutes of the multidisciplinary consultation meeting; operability assessment; summary of the operative report; transcription of the final histology results; description of continuation of care; and patient outcomes. Each variable was assigned a number: 0 if absent from the file; 1 if present; or 2 if not sought as irrelevant. Consequently, each file consisted of a series of numbers corresponding to a specific numerical code. This enabled us to gradually identify the saturation point of our sample.

Microsoft Excel 10 and DATATab software were used for statistical analysis. The Fleiss Kappa coefficient was used to measure agreement between responses from different participants, setting a probability threshold of less than 5% and a confidence interval of 95%.

3. Results

After reaching saturation, we analysed 60 patient records for gynaecological (cervical, endometrial and ovarian) or breast cancers, out of a total of 93 records (64.5%). By dividing the analysed records into 6-record intervals, the sample saturation point was reached between the 42nd and 48th records (**Figure 1**).

A reliability analysis was performed on the responses of the four interviewees. Fleiss's Kappa showed significant concordance between the responses, reflecting substantial agreement between the interviewees ($K = 0.69$; 95% CI: 0.59 - 0.79; $p < 0.001$). Points of disagreement concerned:

- the existence and disclosure of documents detailing patient flow (three out of four);
- the existence of specialised oncology qualifications among members of the care team (3/4);

- the performance of breast ultrasounds in the department (2/4);
- the practice of fine needle aspiration biopsy (3/4).

The results of comparing medical records according to clinical, paraclinical and therapeutic indicators or standards are presented in **Figures 2-4**.

4. Discussion

Like most developing countries, Gabon has long been marked by a high incidence of cancer cases, late diagnosis, heavy and aggressive treatments, insufficient technical facilities, and a poor prognosis. This situation has made cancer control a priority, necessitating the implementation of national policies.

Since 2006, Gabon has had a National Cancer Control Plan which aims to

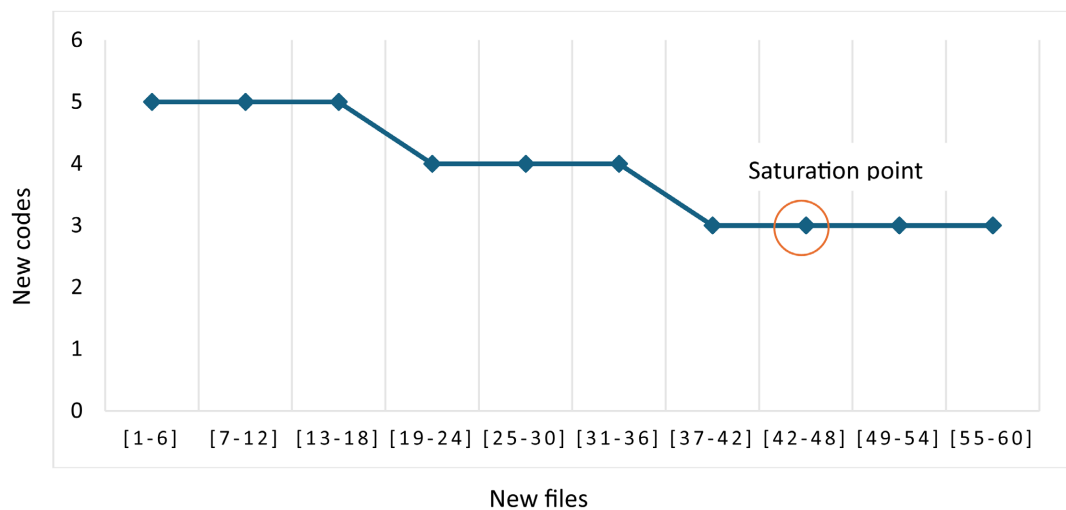


Figure 1. Sampling saturation.

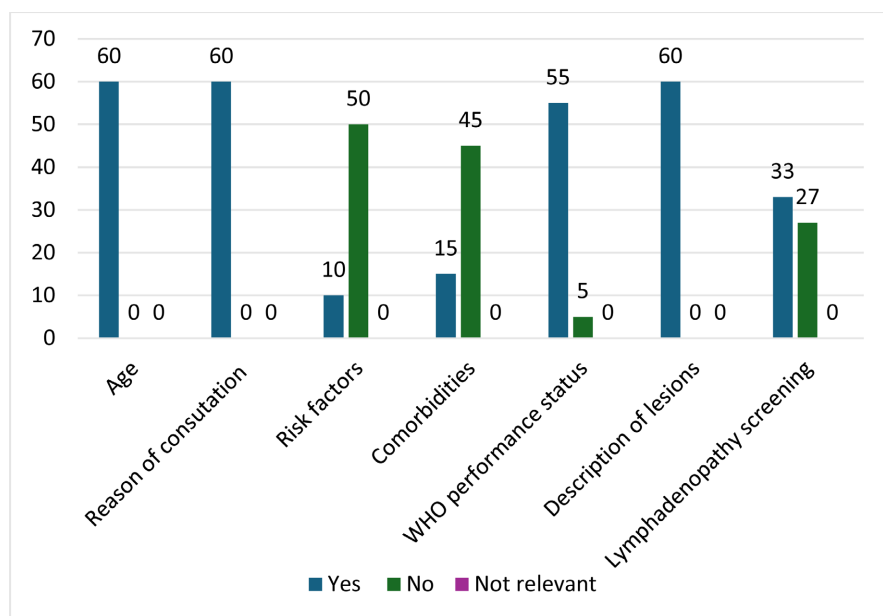


Figure 2. Comparing medical records against clinical standards.

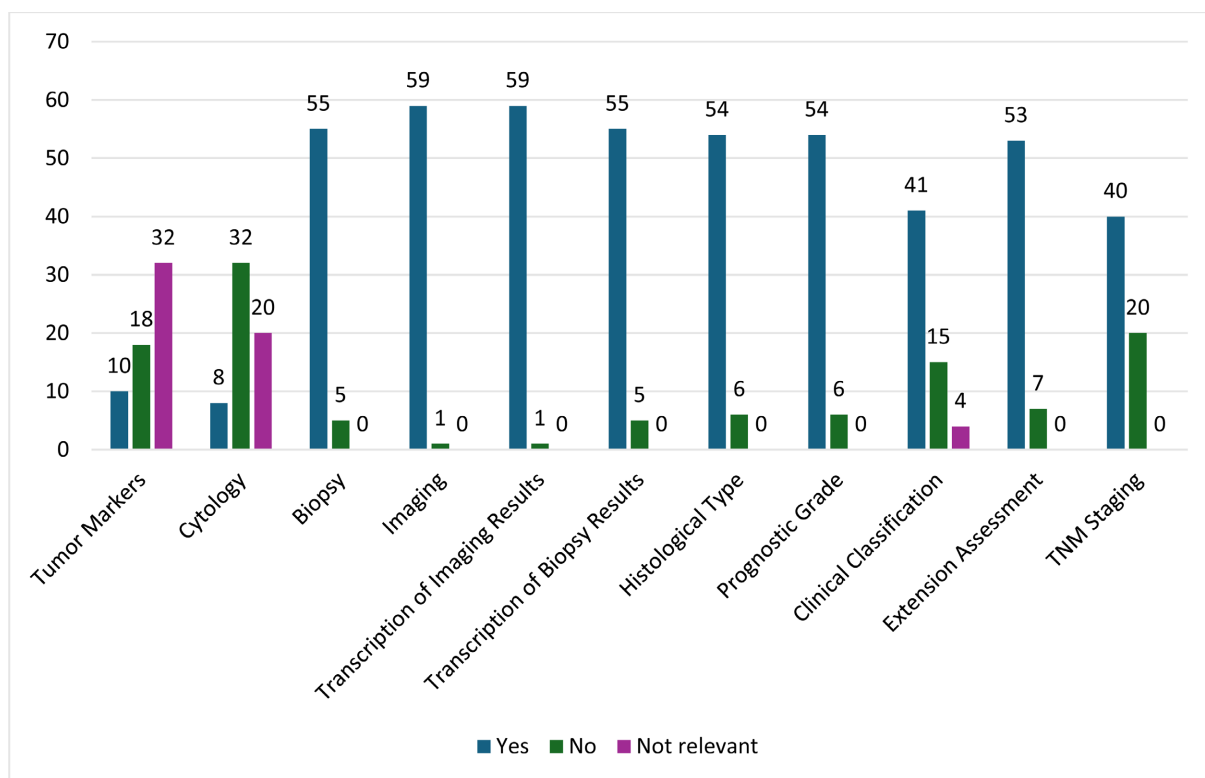


Figure 3. Comparing medical records with paraclinical standards.

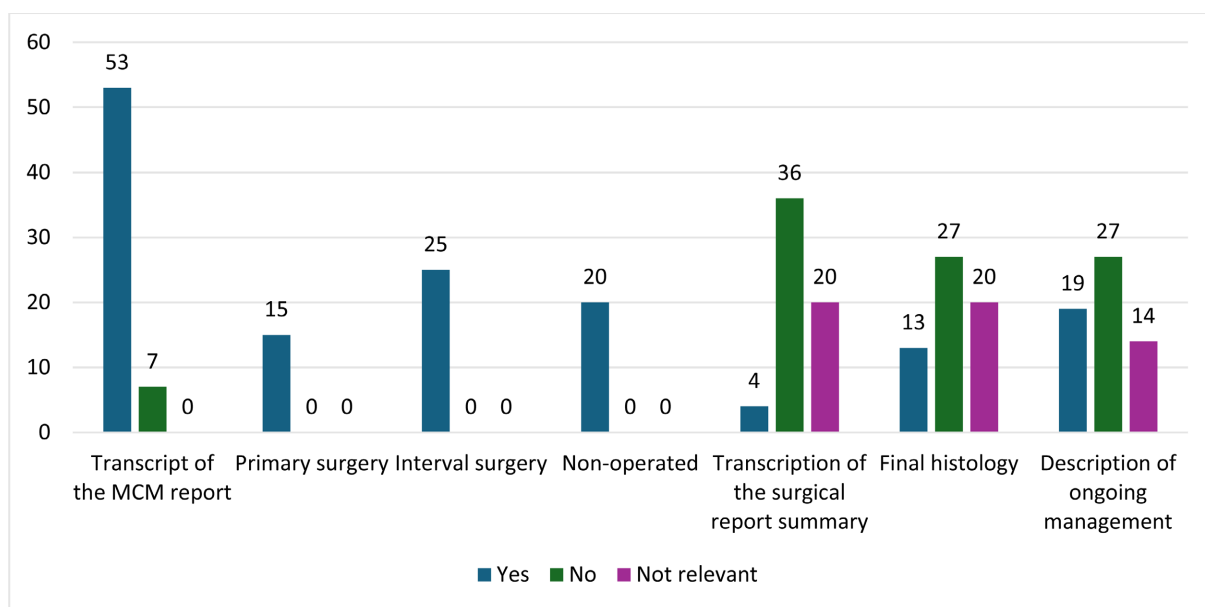


Figure 4. Comparing medical records with therapeutic standards.

reduce cancer-related mortality and morbidity. The plan covers several areas, including improving prevention, limiting sequelae, combating cancers with a poor prognosis and ensuring equitable access to care.

The establishment of the Libreville Cancer Institute (now the Akanda Cancer Institute) in 2012 has centralised and facilitated the identification and manage-

ment of most cancer cases in the country. In March 2025, Decree No. 0132/PR/MS on the organisation of the fight against cancer in the Gabonese Republic was published in Official Journal No. 59 TER on 20 March 2025. Article 2 stipulates that the National Health Policy provides guidelines for the fight against cancer, taking into account prevention, screening, early diagnosis, treatment, palliative care, and patient support. The plan also includes raising awareness and educating the population to reduce cancer-related mortality and morbidity.

Several other centres are involved in the management of gynaecological and breast cancers, depending on their diagnostic and therapeutic capabilities. These include the Internal Medicine department of the Military Hospital, the Gynaecology-Obstetrics departments of the CHUME Fondation Jeanne EBORI, the Libreville University Hospital, the Owendo University Hospital and the Military Hospital, as well as the Oncology and Radiotherapy departments of the Akanda Cancer Institute.

The gynaecology department at the CHUME Jeanne Ebori Foundation includes an oncology unit responsible for screening, diagnosing and surgically managing gynaecological and breast cancers. The objective of our study was to audit patient care in this unit using a quality approach. First, we identified the department's standardised procedures by interviewing key stakeholders. Then, we compared the information collected in medical records with standards.

An analysis of questionnaires distributed to four obstetrician-gynaecologist members of the unit revealed discrepancies regarding:

- 1) governance aspects related to the existence and disclosure of documents in the patient journey;
- 2) the profile of stakeholders (existence of a specialised qualification in oncological surgery); and
- 3) the unit's activities (ultrasound and fine needle aspiration biopsy). These findings reflect the organisational limitations of our services and the communication difficulties that can exist within them. While the agreement between the four respondents is significant ($K = 0.69$; 95% CI (0.59 - 0.79); $p < 0.001$), it remains below the threshold of 0.80 corresponding to perfect agreement for a team of fewer than five people.

Despite these results, there is agreement on the stages of diagnosis and patient management. These include clinical examinations such as identity checks, reasons for consultation, risk factors, comorbidities, general examinations, breast examinations and examinations of other body parts, as well as paraclinical examinations such as morphology and biology. Other stages include biopsy samples for histological purposes, extension assessment, a multidisciplinary consultation meeting and surgical treatment, either immediately or after neoadjuvant chemotherapy. However, a comparison of the information collected in the medical records with the management standards according to the aforementioned stages revealed inaccuracies in the risk factors, comorbidities and adenopathies in 83.3% ($n = 50$), 75% ($n = 45$) and 45% ($n = 27$) of cases, respectively. Gynecological and breast

cancers are diagnosed in a third of cases due to the presence of warning signs or as part of cervical and breast cancer screening [9].

The initial diagnosis is clinical and marks the start of the care pathway for the person in whom cancer has been diagnosed. In our African context, where para-clinical examinations to confirm the diagnosis are sometimes lacking, it is necessary to search for and record all clinical elements that could point towards a cancer diagnosis. An incomplete medical history or truncated clinical profile would affect the staging of the cancer (due to a lack of precision regarding adenopathy) and the preventive strategies (e.g. genetic investigations and searches for other hormone-dependent cancers). The clinical stage of the cancer is thus determined using the international “cTNM” classification (c for clinical). This was reported in a quarter of cases, which constitutes a serious inadequacy that can delay the implementation of rapid, appropriate treatment strategies and worsen patients’ prognoses.

Regarding the paraclinical plan, the results of both the radiological and histological assessments were transcribed in the majority of cases. However, in a small proportion of cases, these results were not transcribed into the files, thus rendering them incomplete and truncating the information. The biopsy results were not transcribed in five cases.

Biopsies are mandatory in cases of clinical and/or radiological lesions that are suspicious of malignancy. The American College of Radiology recommends systematic biopsy in cases of breast cancer based on an ACR 4 or 5 radiological image [10]. For cervical cancer, biopsies are performed either directly during a speculum examination for macroscopic lesions or during colposcopy for cytological abnormalities (e.g. cervical smears) or positive visual tests (e.g. visual inspection with acetic acid and Lugol’s iodine solution) [5]. In cases of endometrial cancer, hysteroscopy is recommended for biopsy as it is associated with the highest diagnostic accuracy [7]. Histological results obtained after biopsy confirm the diagnosis and initiate the necessary extension assessment for classifying cancers.

Secondly, characterisation of the ‘pTNM’ stage (where ‘p’ stands for ‘histopathological’) enables confirmation of a malignant tumour diagnosis in anatomical and pathological terms. This diagnosis can be made either after a biopsy, once sufficient tissue has been removed, or during the first surgical procedure. The pTNM classification, as determined by the staging assessment, was found in half of the files in our study. Depending on tumour size (T), the presence of regional lymph node involvement (N), and/or metastases (M), the therapeutic approach will be discussed by various specialists at a multidisciplinary consultation meeting. The multidisciplinary consultation meeting report was transcribed in almost all cases (n = 53, or 88.3%). Of the 40 patients who underwent surgery, 36 (90%) had a summary of the surgical report in their file. However, the final histology results were included in only 27 files, representing 67.5% of patients who underwent surgery. This missing data could have influenced the quality of subsequent care and impacted patient monitoring.

Patients who did not undergo surgery and those who were to receive medical treatment (chemotherapy, hormone therapy, immunotherapy or radiotherapy) were subsequently monitored at the Akanda Cancer Institute. Transcribing clinical and paraclinical data into medical records is fundamental to patient health, research and evaluating our practices. Therefore, staff caring for patients must demonstrate greater rigour and vigilance in cancer diagnosis and data transcription. This will help to improve cancer management in our country.

Following treatment for gynaecological or breast cancer, lifelong medical follow-up is recommended. This typically consists of biannual gynaecological examinations for five years, followed by annual examinations. Monitoring during the first five years can be organised exclusively at the hospital or alternatively with city medicine.

5. Conclusion

The monitoring of patients for gynaecological and breast cancers in the Gynaecology Department of the CHUME Fondation Jeanne Ebori is well codified and standardised. However, it has been noted that the information in the files is incomplete, which reflects either non-compliance with standards or errors in transcribing information. To ensure quality of care and guarantee good information management, the department must implement software for managing patient data, including a standardised clinical record. Alternatively, a standard medical record template for cancer could be developed and made available to users.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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