

Epidemiology of Cancer in Rural Congo: Case of IME Kimpese Hospital, Democratic Republic of Congo

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Abstract

Background and aim: Cancer is a public health problem in developing countries. It is aggravated by diagnostic confirmation difficulties. The aim of this study was to determine the epidemiological profile of cancers in congolese rural areas.

Methods: This cross-sectional study included 914 patients for whom histopathology protocols were available. All protocols with benign diagnoses were excluded. Data were collected from the registers of the histopathological Department of IME-Kimpese Hospital from January 2008 to December 2013. Kimpese is a city located 220 km west of Kinshasa, the capital city of the Democratic Republic of the Congo. This hospital is one of the biggest hospitals in the Kongo-Central province with a capacity of 400 beds and houses the only provincial histopathology laboratory. The biopsy samples analysed in this laboratory came from various hospitals in the province. Pearson's Chi-square test was used to compare proportions and Student's t-test for the means. Logistic regression was used to find the risk degree of metastasis of each organ in multivariate analysis with calculation of the adjusted OR with 95% confidence interval. The p-value < 0.05 was the level of statistical significance.

Results: The mean age of patients was 55.2 ± 14.5 years, and 61.9% were women with a sex ratio of 2W/M. Ductal carcinoma (23.6%), squamous cell carcinoma (23.5%) and adenocarcinoma (23.1%) were the most common cancers. The majority of cancers infiltrated other organs (57.9%). According to age, ductal carcinoma was more prevalent in females between 40 - 49 years old ($p=0.002$) and prostatic carcinoma was more common in older patients aged 60 or above ($p \leq 0.001$). With regard to metastasized organs, inguinal lymph nodes had a 31-fold increased risk of metastasis ($p < 0.001$). This risk was multiplied by 6 for the liver ($p < 0.001$), by 3 for the bladder ($p = 0.015$), by 2 respectively for the ovaries ($p = 0.015$), and the bone ($p = 0.023$).

Conclusion: Cancer is more frequent in elderly women with a predominance of squamous and ductal carcinoma. The presence of a national cancer registry is necessary in the country for a good follow-up of cancer cases.