

PREVALENCE OF CERVICAL CANCER IN ABUBAKAR TAFAWA BALEWA  
UNIVERSITY TEACHING HOSPITAL BAUCHI, NIGERIA: A 3-YEAR REVIEWUmma Hani Ja'afaru<sup>\*</sup>, Rukaiyah Dawud Miko<sup>1</sup>, Habibah Ismail Ibrahim<sup>1</sup>, Suwaiba Adam Ayuba<sup>1</sup><sup>\*</sup><sup>1</sup>Department of Obstetrics and Gynaecology, Atbuth Bauchi.**\*Corresponding Author: Umma Hani Ja'afaru**

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**ABSTRACT**

**Background:** Cervical cancer is the fourth most frequently diagnosed cancer of women worldwide, and the most prevalent cancer in half of the sub Saharan African Countries. It is a preventable disease hence availability of organised screening programmes will reduce the burden. The aim of this study is to determine the prevalence of cervical cancer and histological types in ATBUTH, Bauchi. **Methods:** This was a cross-sectional study of cervical cancer at the Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria over a 3 year period. Relevant data was obtained from case notes, Gynaecology ward and histopathology department records. Data was analysed and presented using simple percentages, frequency tables and chart. **Results:** Over the study period, there were 1437 admissions in the Gynaecology ward of which 197 were gynaecological cancers, of the cancers, 94 were cervical cancers were studied. Cervical cancer accounted for 6.54% of all gynaecological admissions and 47.7% of all gynaecological cancers. The mean age at presentation was 55.4±15.8 years. Most (26.9%) patients presented in their 5th decade and were postmenopausal (61.6%). Educational level was poor as majority (80.8%) had no formal education. 76.9% attained coitarche at less than 18 years of age. The most common histological type was squamous cell carcinoma (80.8%) while the rare adenoid cystic carcinoma accounted for 7.7%. **Conclusion:** Cervical cancer is common and factors which play a great role in the prevalence of the disease include age, parity, menopausal status, coitarche and educational status. A rare histological type was also seen in this study.

**KEYWORDS:** cervical cancer, screening, histology.**INTRODUCTION**

Cancer is a collection of disorders involving aberrant cell growth with potentials to invade or spread to other part of the body, in contrast with benign tumours which do not spread.<sup>[1]</sup> Various strains of human papilloma virus (HPV) and sexually transmitted diseases play a key influence in the development of cervical cancer.<sup>[2]</sup> HPV is the leading cause of cervical cancer and it is predicted that over 75% of sexually active women and men may get a genital HPV infection at some point in time.<sup>[3]</sup> Globally, cancer is considered the second leading cause of death after cardiovascular diseases with an estimate of 9.6 million deaths in 2018 alone.<sup>[4]</sup> In 2018 it was estimated that there were approximately 570,000 new cervical cancer cases worldwide, with 80% of these occurrences happening in low- and middle-income countries.<sup>[4]</sup> Cervical cancer is the fourth most frequently diagnosed cancer of women worldwide, and the most

prevalent cancer in half (23/46) of the countries in subSaharan Africa (SSA) (but second in frequency to breast cancer overall). Cervical cancer is the second most frequent cancer in Nigeria among female population, second only to breast cancer [2-3].<sup>[4,5]</sup> The burden of sickness carried by women with Cancer of the Cervix in northern Nigeria is similar to that borne by women in other developing nations, it is still too high; and the only remedy to this is adoption of early screening programs and immunization.<sup>[6]</sup> In addition, concerted efforts are needed to secure extension of health insurance coverage for cancer therapy and increase in availability of radiotherapy service as a means of minimising waiting periods. Data addressing burden of sickness borne by women affected with carcinoma of the cervix has been mostly anecdote.<sup>[2]</sup> Papanicolaou (Pap) smear cytology utilised in finding and detection of cervical lesions has aided in attaining huge reduction in the burden of cancer

of the cervix especially in industrialised countries.<sup>[7]</sup> Other less invasive procedures have also been developed for quick screening of cancer of the cervix such as Visual Inspection with Acetic Acid (VIA) and Visual Inspection with Lugol's Iodine (VILI) for screening and secondary preventive approach for sexually active women.<sup>[7,8]</sup> The present study aimed at examining the prevalence of cervical cancer among women in Bauchi, Northeastern Nigeria.

## MATERIALS AND METHODS

This was a descriptive cross sectional study of cervical cancer cases seen at the Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Nigeria over a 3 year period between 1st January 2020 and 31st December 2022. The case notes of patients were obtained from Medical Records department and additional data was obtained from Gynaecology ward and histopathology records. The following data were retrieved from the case notes: age, ethnic group, parity, educational status, age of coitarche, menopausal status,

and histology. Analysis consisted of comparison of group rate using simple percentages and frequencies.

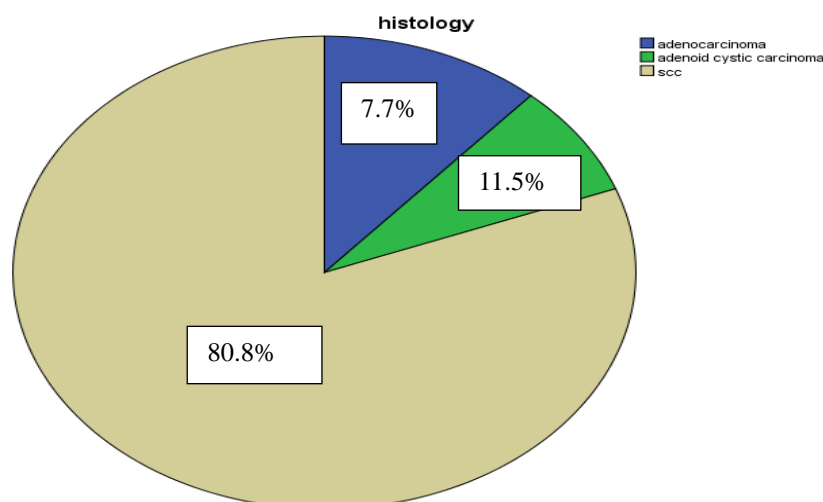
## RESULTS

Within the 3- Year period a total of 1437 admissions were made into the Gynaecology Ward. Of the admissions 197 were gynaecological cancers of which 94 were cervical cancers were studied. Cervical cancer accounted for 6.54% of all gynaecological admissions and 47.72% of all gynaecological cancers. Out of the cases 26 records were available for review giving a retrieval rate of 27.66%.

The mean age of women was found to be  $55.4 \pm 15.8$ . cervical cancer was found to be common between the age range of 51-60 years (26.9%), the average age of coitarche is  $15.96 \pm 3.41$  as depicted in the table below. Cervical cancer is more prevalent amongst women whom have delivered 5 to 9 times and 61.6% of postmenopausal women. Majority of the histological types are squamous cell carcinomas (80.8%) while 11.5% were adenocarcinomas.

**Table 1; Sociodemographic and clinical characteristics.**

Variable	Frequency	Percentage
<b>Age</b>		
<20	0	0.0
21-30	2	7.7
31-40	4	15.4
41-50	4	15.4
51-60	7	26.9
61-70	4	15.4
>70	5	19.2
<b>Ethnic group</b>		
Hausa	9	34.6
Fulani	8	30.8
Others	9	34.6
<b>Marital status</b>		
Married	21	80.8
Widowed	5	19.2
<b>Educational status</b>		
No formal	21	80.8
Primary	1	3.8
Secondary	2	7.7
Tertiary	2	7.7
<b>Coitarche</b>		
<18	20	76.9
$\geq 18$	6	23.1
<b>Parity</b>		
Nullipara	1	3.8
Para 1-4	6	23.1
Para 5-9	16	61.5
$\geq$ Para 10	3	11.5
<b>Menopausal status</b>		
Premenopausal	10	38.5
Postmenopausal	16	61.6
<b>Total</b>	<b>26</b>	<b>100.0</b>



**Figure 1; Histological pattern of cervical cancer.**

## DISCUSSION

In this study, cervical cancer was found to be more common within the age group of 51-60 years which is similar with findings by Osinachi et al.<sup>[9]</sup> The Mean age at presentation was 55.4 years; this is in keeping with findings of Adefuye et al.<sup>[10]</sup> and Okunade et al.<sup>[11]</sup> The prevalence of cervical cancer was found to be 47.7% which is lower compared to the study conducted by Usman et al.<sup>[12]</sup> in Maiduguri, Osinachi et al.<sup>[9]</sup> in Abuja, Okeke et al.<sup>[13]</sup> in Enugu, Sanni et al.<sup>[14]</sup> in Jos and Oguntayo et al.<sup>[15]</sup> in Zaria in Northern Nigeria but higher than findings by Kani et al.<sup>[6]</sup> in Jigawa, Northern Nigeria.

Cervical cancer has an increased risk with early age of sexual debut.<sup>[16]</sup> In this study majority (76.9%) of the cases attained coitarche less than 18 years of age which is higher than findings from the study by Yaya.<sup>[16]</sup> although they also found age of coitarche of less 19 years as most prevalent.

Postmenopausal women (61.6%) had the highest prevalence of cervical cancer in this study which is comparable with findings by Okunade et al.<sup>[11]</sup>

Squamous cell carcinoma constituted 80.8% of cervical cancer burden in this study, followed by adenocarcinoma (11.5%) and then adenoid cystic carcinoma (7.7%). Squamous cell carcinoma is the most common histological type found in most studies.<sup>[6,9,12]</sup> Adenoid cystic carcinoma of the cervix makes up less than 1% of all cervical carcinomas, making it an extremely uncommon malignancy and typically observed in postmenopausal women, and very few occurrences in women under 40 have been documented. It is generally a locally aggressive tumour and has a high propensity for local recurrence and distant metastasis.<sup>[17,19]</sup>

Despite being preventable cervical cancer remains the most prevalent gynaecological cancer in sub-Saharan Africa. This is attributed to poor access to cervical

cancer screening due to lack of organised screening programmes.

## CONCLUSION

In conclusion, this study revealed 47.7% prevalence of cervical cancer in Bauchi, a Northeastern state in Nigeria, with age, parity, age of coitarche and menopausal status playing great roles.

## RECOMMENDATION

Cervical cancer is preventable but is highly prevalent in the study area, screening and treatment of premalignant lesions should be prioritized in the environment.

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