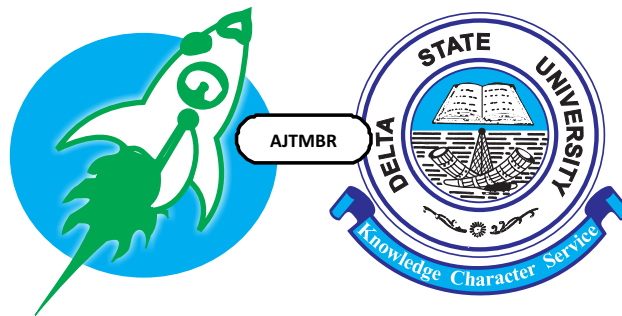



African Journal of Tropical Medicine and Biomedical Research (AJTMBR)



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Pattern of Female Genital Tract Malignancies at Delta State University Teaching Hospital, Oghara, Nigeria

Esemuede O¹, Okbionkpamwonyi O^{1,2}, Abedi HO^{1,2}

Abstract

Introduction: Cancers of the female genital tract contribute significantly to cancer-related morbidity and mortality globally. The pattern and distribution of these malignancies vary from region to regions.

The objective of this study was to determine the incidence, pattern of presentation and distribution of the different types of genital tract malignancies in Delta State.

Materials and Methods: It was a cross sectional descriptive study of gynaecological malignancies managed at the Delta State University Teaching Hospital, Oghara from January 2013 to December 2015. Case notes of all patients seen with gynaecological malignancies confirmed histo-pathologically during the studied period were retrieved. The required information was extracted from the case notes.

Results: A total of 3964 patients were seen at the gynaecological clinics during the period and 137 of these patients had gynaecological malignancies, with incidence of 3.5% of total gynaecological patients. Cervical cancer accounted for 68.42% of the cases. This was followed by ovarian cancer, comprising 15.79% and endometrial cancer, 12.78%. Vulvar cancer and choriocarcinoma were least occurring, accounting for 1.5% each. The mean age of all patients with genital tract malignancies was 51.26 ± 13.2 years. The mean ages of patients with cervical, ovarian and endometrial cancers were 42.70 ± 3.15 , 61.52 ± 6.82 and 58.76 ± 5.57 years respectively. The mean parity was 5.62 ± 1.74 .

Conclusion: Cervical cancer was the most common female genital malignancy and a higher proportion of the patients were grandmultiparous women with postcoital bleeding being the most common clinical presentation.

Keywords: Pattern, Female genital tract, Malignancy, Oghara, Nigeria

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INTRODUCTION

Malignancies of the female genital tract are major public health issues and contribute significantly to cancer-related morbidity and mortality globally.¹ The burden of gynaecological malignancies in developing countries including Nigeria is enormous and it poses a significant

challenge to the health systems where poor awareness and late presentation prevail.²

Gynaecological malignancies account for about 10% of all newly diagnosed female malignancies and 12% of all female cancer deaths worldwide.² Most female genital tract malignancies have

worldwide distribution, but the distribution and frequency vary from one region to the other.³ These variations may be attributed to different environment, life style, genetic and socioeconomic background.³ The proportion of cancers in the females which are of genital tract origin range from as high as 31.6% to 35.0% in sub-Saharan Africa and as low as 12.7% to 13.4% in North America and other developed nations where health-seeking and organized screenings methods have greatly improved.⁴

Cervical cancer is the most common female genital cancer in the developing countries including Nigeria.⁵ In Nigeria, it is the most common cancer of the female genital tract, accounting for 74.4%, 73.2%, 73.1% and 73.6% of female cancers in Benin City, Ibadan, Ilorin and Port Harcourt respectively.^{6,7} It is the second most female common malignancy after breast cancer.⁸ Chronic infection with human papilloma virus (HPV) is known to induce pre-malignant change in the cervical cells and ultimately cervical cancer in a few years, with a host of multiple risk factors.^{9,10}

Ovarian cancer is one of the female genital tract malignancies that is associated with high mortality.⁸ About 75% of the patients with ovarian cancer present with advanced stages due to non-specific symptoms of the disease and failure to detect the tumour early, poor accessibility due to the peculiar position of the ovary and absence of definitive screening tools.⁸ Endometrial cancer is the third commonest gynaecological cancer in the developing countries, though it is becoming the most common of the gynaecological malignancies in the developed world.^{11,12} It is commoner in the post menopausal women, with peak incidence being 58-60 age group.⁶

Vulva, vaginal and Primary Fallopian tube

cancer are rare cancers accounting for less than 5% of gynaecological malignancies.^{13,14,15} However, histologic, molecular, and genetic evidence shows that as many as 80% of tumors that were classified as high-grade serous carcinomas of the ovary or peritoneum may have originated in the fimbrial end of the fallopian tube.¹⁶

This study is a retrospective review of the female genital tract malignancies that were diagnosed, histo-pathologically confirmed and managed at the Delta State University Teaching Hospital, Oghara (DELSUTH) over a 3 year period. The study therefore aims to determine the incidence, clinical pattern of presentation and the distribution of female genital tract malignancies in DELSUTH, Oghara, Nigeria. It therefore sorts to add to already existing knowledge on the subject matter in the region.

MATERIALS AND METHODS

This was a cross sectional descriptive study of female genital tract malignancies at the department of Obstetrics and Gynaecology of Delta State University Teaching Hospital, Oghara, Delta State, and covered a period of 3 years from January 1, 2013 to December 31, 2015. The case notes of patients managed for female genital tract malignancies were retrieved from the medical records department and relevant data were extracted. The search spanned records from the gynaecological clinics, gynaecological wards and theatre registers. All cases of female genital tract malignancies diagnosed clinically, radiologically or surgically and confirmed by histo-pathological examinations were included in this study.

Permission to access hospital records and data for this study was obtained from the hospital management and ethical approval was obtained from the hospital's Health Research and Ethics

Committee.

The data extracted included; socio-demographic characteristics (age, parity, marital status and socio-economic status), presenting complaints, diagnosis, stage of the disease and the management offered. The patients socio-economic status classification was done using the scheme proposed by Oyedeji, based on the educational attainment and occupation.¹⁷ Data collected were coded and analysed by simple descriptive statistics using statistical package for social science (SPSS) version 22, IBM Company. The results were expressed in simple descriptive statistics using mean, standard deviations, frequency and percentages, in tables and compared to other reports where appropriate.

RESULTS

There were 3964 patients seen at the gynaecological clinics during the period, 623 of these patients were admitted into the gynaecological ward and 137 patients had histopathologically diagnosed female genital tract malignancies during the period, accounting for 3.5% of total gynaecological patients seen in the hospital clinics and 22.0% of patients admitted into the wards respectively. One hundred and thirty three (133) case folders of 137 cases were available with complete information data extraction and analysis, given a retrieval rate of 96.35% and these formed the basis for further analysis.

The age range of the patients that had genital tract malignancies was between 29 to 84 years with a mean age of 51.26 ± 13.2 years. The mean age of patients that had cervical cancer was 42.70 ± 3.15 years. Forty eight (36.36%) of these patients were in the age group of 40-49 followed by 32 (24.24%) each in 30-39 and 50-59 age groups respectively. The mean age of patients with ovarian cancer was 61.52 ± 6.82 years and

11 (52.38%) of these patients were aged 60 years and above. Majority of the patients with endometrial cancer were post menopausal with a mean age of 58.76 ± 5.57 years. Eleven (64.71%) of patients with endometrial cancer were between 50-59 years and 5 (29.41%) were more than 60 years old.

The mean parity for patients with genital tract malignancies was 5.62 ± 1.74 . Majorities of patients with ovarian cancer, 9 (42.86%) were nulliparous. Most of the patients with cervical cancer were of low socio-economic class (classes 4 and 5). Thirty-nine (42.85%) were social class 5 and 28 (30.77%) were in class 4. Eight (38.10%) of patients with ovarian cancer were of socioeconomic class 5, 4 (19.05%) each were class 1 (upper class) and 3 respectively. Almost half of the patients with endometrial cancer, 8 (47.06 %) were in class 2. The patients with vulva cancer were in socioeconomic class 4 and 5 while the 2 patients with choriocarcinoma were in socioeconomic class 2 and 4. (table 1)

The study showed that the commonest genital tract malignancy was cervical carcinoma and it comprised of 91 (68.42%) of the cases. This was followed by ovarian cancer, 21 (15.79%) and endometrial cancer 17 (12.78%). Vulvar cancers and choriocarcinoma accounted for 2 (1.50%) each of the cases (figure 1). There were no cases of uterine sarcomas, vagina or fallopian tube cancers during the period.

Thirty-five (38.46%) patients with cervical cancer presented with post coital bleeding while majority of patients with ovarian cancer, 13 (61.91%) presented with abdominal swelling and abdominal pain. The most common presenting complaint in patients with endometrial cancer was post-menopausal bleeding as demonstrated in 12 (70.59%) of the patients. All the patients with vulva cancers and choriocarcinoma

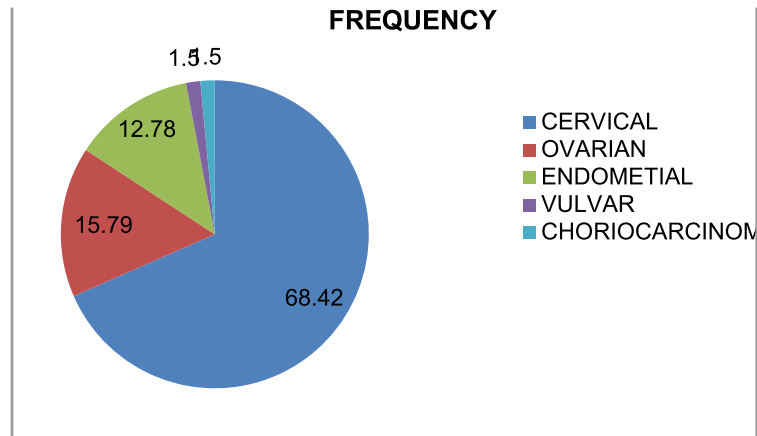
presented with vulva ulceration and recurrent bleeding per vaginum respectively. (table 2)

Majority of the patients with cervical cancer, 61(67.03%) presented with advanced disease; 11 (12.09%) presented with stage II disease, 31 (34.07) presented with stage III and 19 (20.88%) with stage IV. Eleven (52.38%) of

patients with ovarian malignancy presented with stage IV disease, while 7(33.33%) and 3 (14.29%) presented with stage III and stage II disease respectively. 7 (41.18%) of patients with endometrial cancer presented with Stage II disease while 8 (47.06%) were seen at Stage III. One (50.0 %) each of patients with vulva cancer presented with stages II and III disease respectively/(Table 3)

Table 1: Socio-demographic Characteristics of Patients with Genital Tract Malignancies.

VARIABLE	TYPES OF CANCER (Frequency%)				
	CERVICAL CANCER (n=91)	OVARIAN CANCER (n=21)	ENDOMETRIAL CANCER (n=17)	VULVAL CANCER (n=2)	CHORIOCARCINOMA (n=2)
AGE					
20-29	2(2.20%)	1(4.76%)	-	-	-
30-39	23(25.27%)	-	-	-	2(100%)
40-49	31(34.07%)	2(9.53%)	1(5.88%)	-	-
50-59	23(25.27%)	7(33.33%)	11(64.71%)	-	-
≥60	12(13.19%)	11(52.38%)	5(29.41%)	2(100%)	-
PARITY					
0	1(1.10%)	9(42.86%)	3(17.64%)	-	-
1	4(4.40%)	4(19.05%)	-	-	-
2	3(3.30%)	1(4.76%)	-	2(100%)	-
3	6(6.59%)	-	-	-	1(50.00%)
4	17(18.68%)	-	1(5.88%)	-	1(50.00%)
≥5	60(65.93%)	7(33.33%)	14(82.35%)	-	-
SOCIO-ECONOMIC STATUS					
CLASS 1	4(4.40%)	4(19.05%)	1(5.9%)	-	-
CLASS 2	8(8.79%)	3(14.29%)	8(47.06%)	-	1(50.00%)
CLASS 3	12(13.19%)	4(19.05%)	3(17.65%)	-	-
CLASS 4	28(30.77%)	2(9.52%)	3(17.65%)	1(50.00%)	1(50.00%)
CLASS 5	39(42.85%)	8(38.10%)	2(11.76%)	1(50.00%)	-

Figure 1: Relative Frequencies of Genital Tract Malignancies.**Table 2: Clinical Presentation Of Different Genital Tract Malignancies**

PRESENTING SYMPTOMS	CERVICAL CANCER	OVARIAN CANCER	ENDOMETRIAL CANCER	VULVAL CANCER	CHORIOCA RCINOMA
POSTCOITAL BLEEDING	35(38.46%)	-	-	-	-
ABNORMAL OFFENSIVE VAGINAL DISCHARGE	21(23.08%)	-	-	-	-
POSTMENOPAUSAL BLEEDING	23(25.27%)	-	12(70.59%)	-	-
IRREGULAR/RECURRENT VAGINAL BLEEDING	-	-	-	-	2(100.0%)
ABDOMINAL PAIN ALONE	12(13.19%)	-	5(29.41%)	-	-
ABDOMINAL SWELLING + PAIN	-	13(61.91%)	-	-	-
ABDOMINAL SWELLING	-	8(38.57%)	-	-	-
TOTAL	91(100.0%)	21(100.0%)	17(100.0%)	2(100.0%)	2(100.0%)

Table 3: Stage at Presentation

STAGE AT PRESENTATION	CERVICAL CANCER	OVARIAN CANCER	ENDOMETRIAL CANCER	VULVAL CANCER	CHORIOCARCINOMA
STAGE I	-	-	2(11.76%)	-	1(50.0%)
STAGE II	11(12.09%)	3(14.29%)	7(41.18%)	1(50.0%)	1(50.0%)
STAGE III	61(67.03%)	7(33.33%)	8(47.06%)	1(50.0%)	-
STAGE IV	19(20.88%)	11(52.38%)	-	-	-
TOTAL	91(100.0%)	21(100.0%)	17(100.0%)	2(100.0%)	2(100.0%)

FIGURE 1: RELATIVE FREQUENCIES OF GENITAL TRACT MALIGNANCIES.

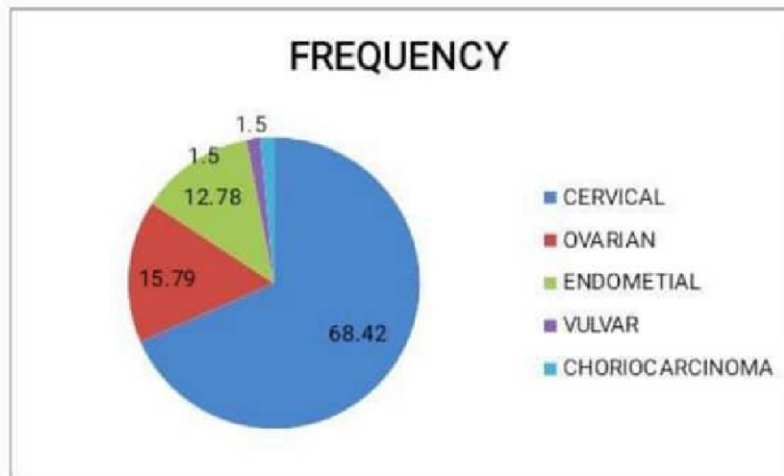


TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS OF PATIENTS WITH GENITAL TRACT MALIGNANCIES.

VARIABLE	TYPES OF CANCER (Frequency(%))				
	CERVICAL CANCER (n=91)	OVARIAN CANCER (n=21)	ENDOMETRIAL CANCER (n=17)	VULVAL CANCER (n=2)	CHORIOCARCINOMA (n=2)
AGE					
20-29	2(2.20%)	1(4.76%)			
30-39	23(25.27%)				2(100%)
40-49	31(34.07%)	2(9.53%)	1(5.88%)		
50-59	23(25.27%)	7(33.33%)	11(64.71%)		
≥60	12(13.19%)	11(52.38%)	5(29.41%)	2(100%)	
PARITY					
0	1(1.10%)	9(42.86%)	3(17.64%)		
1	4(4.40%)	4(19.05%)			
2	3(3.30%)	1(4.76%)		2(100%)	
3	6(6.59%)				1(50.00%)
4	17(18.68%)		1(5.88%)		1(50.00%)
≥5	60(65.93%)	7(33.33%)	14(82.35%)		
SOCIO-ECONOMIC STATUS					
CLASS 1	4(4.40%)	4(19.05%)	1(5.9%)		
CLASS 2	8(8.79%)	3(14.29%)	8(47.06%)		1(50.00%)
CLASS 3	12(13.19%)	4(19.05%)	3(17.65%)		
CLASS 4	28(30.77%)	2(9.52%)	3(17.65%)	1(50.00%)	1(50.00%)
CLASS 5	39(42.85%)	8(38.10%)	2(11.76%)	1(50.00%)	

TABLE 2: CLINICAL PRESENTATION OF DIFFERENT GENITAL TRACT MALIGNANCIES.

PRESENTING SYMPTOMS	CERVICAL CANCER	OVARIAN CANCER	ENDOMETRIAL CANCER	VULVAL CANCER	CHORIOCARCINOMA
POSTCOITAL BLEEDING	35(38.46%)				
ABNORMAL OFFENSIVE VAGINAL DISCHARGE	21(23.08%)				
POSTMENOPAUSAL BLEEDING	23(25.27%)		12(70.59%)		
IRREGULAR/RECURRENT VAGINAL BLEEDING					2(100.0%)
ABDOMINAL PAIN ALONE	12(13.19%)		5(29.41%)		
ABDOMINAL SWELLING + PAIN		13(61.91%)			
ABDOMINAL SWELLING		8(38.57%)			
TOTAL	91(100.0%)	21(100.0%)	17(100.0%)	2(100.0%)	2(100.0%)

TABLE 3: STAGE AT PRESENTATION

STAGE AT PRESENTATION	CERVICAL CANCER	OVARIAN CANCER	ENDOMETRIAL CANCER	VULVAL CANCER	CHORIOCARCINOMA
STAGE I			2(11.76%)		1(50.0%)
STAGE II	11(12.09%)	3(14.29%)	7(41.18%)	1(50.0%)	1(50.0%)
STAGE III	61(67.03%)	7(33.33%)	8(47.06%)	1(50.0%)	
STAGE IV	19(20.88%)	11(52.38%)			
TOTAL	91(100.0%)	21(100.0%)	17(100.0%)	2(100.0%)	2(100.0%)

DISCUSSION

Patients with female genital tract malignancies constituted 3.5% of all patients seen at the gynaecological clinics in DELSUTH, South-South Nigeria during the period under review. This finding is similar to 4.6% reported by Ijaiya and Ibrahim in Ilorin.¹⁷ However, this finding is lower than 11.5% reported by Yakasai et al in Kano.¹⁴

It was reported that the most important aetiological factors contributing to cervical cancer in these women were early marriages, and early age of initiating coitus which were more common in the Northern part of the country like Kano. The study revealed that cervical cancer was the most common gynaecological cancer accounting for 68.42% of cases. This was followed by Ovarian 15.79% and endometrial 12.78%. Vulva and choriocarcinoma accounted for 1.5% each of the patients. This is similar to the findings reported by Yakasai et al in Kano, Udigwe et al in Nnewi, Okeke et al in Enugu.^{14,15,18}

This is also comparable with findings by Nkyekyer in Ghana and Taulo in Malawi.^{19,20} Kyari et al. in a study conducted in Maiduguri, northern Nigeria, reported a slightly higher incidence of 70.5% of cervical cancer.²¹ However, our finding is in contrast to the findings of Sobia et al in Pakistan where the most common gynaecological malignancy was ovarian cancer, followed by endometrial and then cervical cancer.²² The low prevalence of cervical cancer in the study by Sobia et al in Parkistan may be due to less smoking in ladies, adherence to social norms, religious practices and male circumcision.

The prevalence of cervical cancer in developing world is in contrast to what obtains in developed countries where endometrial cancer is more common. This is thought to be due to well established screening services for pre-malignant lesions of cervical cancer in the developed countries.⁷ The leading position of carcinoma of the cervix in this study indicates that the uptake of cervical cancer screening and treatment of

pre-malignant lesions of the cervix is far below optimal level in Nigeria. This is quite understandable with the absence of a national cervical cancer screening program. Furthermore, opportunistic screening for cervical cancer as practiced in many Centres including ours, has been shown not to impact on the population incidence of cervical cancer.²³ Opportunistic screening as practiced in our centre involves screening all women who come for gynaecological consultation in the hospital after proper counselling and obtaining informed consent. There were two cases of vulva cancer during the period under review. This is a rare cancer and it contributed 1.5% of genital tract cancers similar to 1.8% reported by Udigwe et al in Nnewi and Yakasai et al in Kano.^{14,15}

The mean age for gynaecological malignancies was 51.26 ± 13.2 years and the mean parity was 5.62 ± 1.74 . This was similar to the finding by Udigwe et al in Nnewi and Ijaiya and Ibrahim in Ilorin.^{15,17} Most of the patients with cervical cancer (34.07%), were in the age group 40-49 while 25.27% were in 30-39 and 50-59 age group respectively, thus further reaffirming the existing knowledge that cervical cancer is a disease of sexually active women with bimodal peak ages (4th and 6th decades).¹⁵ Sixty (65.93%) of patients with cervical cancer were 5 and above. This is similar to findings by Yakasai in Kano and Nkyekyer in Ghana.^{14,19} Eleven (52.38%) of the patients with ovarian cancer were 60 years and above. This is in-keeping with established knowledge that ovarian cancer is a disease of older woman with peak incidence at 67 years.²⁴ Most of the patients with endometrial cancer were in the age group 50-59 and 82.35% were Para 5 and above. This is similar to findings by Udigwe et al in Nnewi and Nkyekyer in Ghana.^{15,19} This contrasts the findings of Yakasai in Kano where mean age of the patients with endometrial cancer was 62 and mean parity was 4

and also current belief that endometrial cancer is a disease of the 7th decade and nulliparous women.^{14,15}

The majority of patients with cervical cancer, 42.85% (39) were of the low socioeconomic status. This agrees with general knowledge that low socioeconomic factor is a risk factor for cervical cancer.²⁵ The most common presenting complaint from patients with cervical cancer was post coital bleeding and offensive vaginal discharge. This is similar to findings of Gaya et al in Kano.²⁵ Most of the patients with ovarian cancer presented with abdominal distension and pain. Most of the patients with ovarian and cervical cancer presented with advanced diseases. Eleven (52.38%) of patients with ovarian cancer presented with stage IV disease. It is a recognized fact worldwide that women with ovarian cancer present with advanced disease and this may be attributed to nonspecific symptoms and signs of early disease and this has an effect on survival. 87.91% of patients with cervical cancer presented with Stage III and IV disease and none presented with stage I disease. This is similar to findings of Yakasai et al in Kano.¹⁴ Late presentation by patients may be attributed to absence of established national cervical cancer screening programs, lack of awareness and a penchant to patronize unorthodox health practitioners.²⁶ The low socioeconomic status with associated low financial power may in turn delay presentation as health insurance is not widely available in developing countries.²⁴ This study shows consistency with general observation that patients with endometrial cancer present at an early stage; 52.94% in this study. This is similar to findings of Nkyekyer in Ghana.¹⁹

In conclusion, cervical cancer is the most common female genital tract malignancy in DELSUTH, Oghara followed by ovarian cancer, endometrial cancer and least common were

vulvar cancer and choriocarcinoma. Most of the patients with cervical cancer were in the 4th decade of life, with most patients presenting with advanced disease. The reduction of morbidity and mortality from cervical cancer involves early detection, treatment, and palliative care to facilitate comfort, dignity, autonomy, and personal rehabilitation and development, especially in the face of an incurable disease. Fortunately, this is possible because cervical cancer is a preventable disease.

REFERENCES

1. Iyoke C, Ugwu G. Burden of Gynaecological cancers in developing countries. *World Jour ObstetGynaecol.* 2013; 2(1): 1- 7.
2. Thirukumar M, Sinnathurai A. Gynaecological Malignancies Among a Representative Population of Batticaloa, Sri Lanka. *Cureus.* 2021; 13(1): e12947
3. Manzoor H, Naheed H, Ahmad K, Iftikhar S, Asif M, Shuja J. Pattern of gynaecological malignancies in south western region of Pakistan: An overview of 12 years. *Biomedical Reports.* 2017; 7(5), 487–491.
4. Aref-Adib M, Freeman-Wang T. Cervical cancer prevention and screening: The role of human papillomavirus testing. *The Obstetrician & Gynaecologist.* 2016;18:251–63.
5. Darre T, Kpatcha TM, Bagny A, Maneh N, Gnandi-Piou F. Descriptive Epidemiology of Cancers in Togo from 2009 to 2016. *Asian Pac J Cancer Prev.* 2017;18(12):3407-3411.
6. Saidu R, Ibrahim KO, Adesina K. A review of the the clinico-pathological presentation of cervical cancer in Ilorin, Nigeria. *Journal of Clinical Oncology.* 2011 20;29(15_suppl):e15516-.
7. Osinachi IF, Adewole N, Isah AD, Abdullahi HI, Agida ET. Pattern of gynaecological malignancies in a Nigerian tertiary hospital. *African Journal of Medical and Health Sciences.* 2020 Jun 30;19(3):29-35.
8. Christiana F, Hani G. Surgical and Medical Management of Epithelial Ovarian Cancer. In: Edmonds DK, editor. *Dewhurst's textbook of Obstetrics and Gynaecology.* 9th Ed. Oxford: Blackwell Science Publishers; 2018. P. 884-904.
9. Okunade KS. Human papillomavirus and cervical cancer. *Journal of Obstetrics and Gynaecology.* 2020 Jul 3;40(5):602-8.
10. Escobar N, Plugge E. Prevalence of human papillomavirus infection, cervical intraepithelial neoplasia and cervical cancer in imprisoned women worldwide: a systematic review and meta-analysis. *J Epidemiol Community Health.* 2020 1;74(1):95-102.
11. Chhikara BS, Parang K. Global Cancer Statistics 2022: the trends projection analysis. *Chemical Biology Letters.* 2023 2;10(1):451-.
12. Sean K.. Endometrial Ca. In: Keith D, Editor. *Dewhurst Textbook of Obstetrics and Gynaecology.* 9th Ed. Wiley Blackwell. 2018. P.876- 883.
13. Mack T.M., Cozen W, Quinn M.A. Epidemiology of cancer of the endometrium, ovary, vulva and vagina. In: *Gynecologic Oncology, Second edition,* Editors. Coppleson M, Monaghan J, Morrow P, Tattersal M. Churchill- Livingstone, New York; 1992. P; 31-54.
14. Yakasai I, Ugwa E, Otubu J. Gynaecological cancers in Aminu Kano Teaching Hospital: A 3 year review. *Niger J Clin Pract.* 2013; 16(1):63-6
15. Udigwe G, Umeononihu OS, Mbachu I. A review of the prevalence and pattern of presentation of gynaecological cancers in a tertiary hospital in Nnewi, South-East Nigeria. *OJM* 2011; 23(1): 12-16.
16. Berek JS, Renz M, Kehoe S, Kumar L, Friedlander M. Cancer of the ovary, fallopian tube, and peritoneum: 2021 update. *Int J*

- Gynecol Obstet. 2021;155(Suppl. 1):61–85.
17. Oyediji GA. Socio-economic and cultural background of hospitalized children in Ilesha. *Niger J Paediatr* 1985; 12:111-7.
 18. Ibrahim H, Ijaiya M. Pattern of gynaecological malignancies at the University of Ilorin Teaching Hospital, Ilorin, Niger. *Jour ObstetGynaecol* 2013;33(2): 194-6.
 19. Okeke TC, Onah N, Ikeako LC, Ezenyeaku C. The frequency and pattern of female genital tract malignancies at the University of Nigeria Teaching Hospital, Enugu, Nigeria. *Ann Med Health Sci Res* 2013; 3:345-8.
 20. Nkyekyer K. Pattern of gynaecological cancers in Ghana. *East Afri Med Jour* 2000; 77(10): 534-538.
 21. Taulo F, Malunga E, Ngwira A. Audit of gynaecological Cancers in Queen Elizabeth Central Hospital, Blantyre. *Malawi Med Jour* 2008;20(4):140-142.
 22. Kyari O, Ngadda H, Mairiga A. Malignant tumours of female genital tract in North Eastern Nigeria. *East Afri Med Jour*, 2004. 81(3);142-5.
 23. Sobia M, Nighat S, Khawa A, Adeela M. Patterns of Gynaecological Malignancies at a tertiary care Hospital. *Ann Saudi Med* 2006;26(5):382-384.
 24. Ruan G, Song Y, Dong B, Mao X, Lin F, Kang Y, Xu S, Chen X, Wu Q, Sun P. Cervical cancer screening using the Cervista high-risk human papillomavirus test: opportunistic screening of a hospital-based population in Fujian province, China. *Cancer Management and Research*. 2018; 4:3227-35.
 25. Gabra H, Blagden S .Epithelial Ovarian Cancer. In: Keith D, Editor. *Dewhurst Textbook of Obstetrics and Gynaecology*. 8th Ed. Wiley Blackwell. 2012; Pp 760- 776.
 26. Gaya SA, Yakasai IB, Muhammed AZ, Galadanci H, Garba DI. Cancer of the cervix in unscreened West African women. *Jour Basic Clin Reprod Sci*, 2012; 1: 44-8.
 27. Umanah N, Ugiagbe E, Olu-Eddo A. Female Genital Tract Malignancies InNiger Delta Region of Nigeria. *Ibom Med J*. 2013.6:23-28
 27. Berek JS, Renz M, Kehoe S, Kumar L, Friedlander M. Cancer of the ovary, fallopian tube, and peritoneum: 2021 update. *Int J Gynecol Obstet*. 2021;155(Suppl. 1):61–85.

Esemuede O, Okhionkpmwonyi O, Abedi HO. Pattern of Female Genital Tract Malignancies at Delta State University Teaching Hospital, Oghara, Nigeria. *Afr. J. Trop. Med. & Biomed. Res.* 2024; 7(2) 40-50
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