

**BIOGRAPHICAL SKETCH**

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NAME: Chibuike Ogwuegbu Chigbu

eRA COMMONS USER NAME (credential, e.g., agency login): COCHIGBU

POSITION TITLE: Professor of Obstetrics and Gynaecology, Consultant Gynecological Oncologist

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Port Harcourt, Nigeria	MBBS	02/1997	Medicine & Surgery
University of Nigeria Teaching Hospital Enugu Nigeria	Residency	04/2009	Obstetrics & Gynecology
Frauenklinik der Technische Universität Munich Germany	Clinical Training	04/2009	Gynecological Oncology
University of Salford United Kingdom	MSc	06/2015	Project Management
University of Liverpool, United Kingdom	PGA	11/2016	Clinical Research Management
Ludwig-Maximilians-Universität Munich Germany	PhD	11/2018	Medical Research- International Health

**A. Personal Statement**

I received my basic medical training and residency in Obstetrics and Gynecology in Nigeria. Subsequently, I received a subspecialty training in Gynecologic Oncology in Germany and a postgraduate training in project management, clinical research management and international health from British and German Universities. I have worked as a consultant Gynecological Oncologist at the University of Nigeria Teaching Hospital since 2010 and have overseen the cervical cancer prevention unit of the hospital since 2011. I have over 10 years' experience in gynecological oncology research, and I am the leader of the Female Reproductive Health Oncology Research Group of the University of Nigeria Nsukka. I was the PI on two funded research projects supported by the National Cancer Institute (NCI/AORTIC-funded BIG CAT grant on the assessment of the Impact of 'See and Treat' Approach Using Visual Inspection with Acetic Acid) and the American Society for Clinical Oncology Conquer Cancer Foundation (ASCO funded International Innovation Grant on the impact of community health educators on uptake of cervical and breast cancer prevention services in Nigeria). I was a co-investigator on the NCI/AORTIC-funded BIG CAT grant on ablative treatment for cervical precancer and the ASCO-funded International Innovation Grant on Enhancing Palliative Care in rural southeast Nigeria. Since the past 11 years, my research focus has been on gynecological cancer prevention with special focus on cervical cancer prevention in low- and middle-income settings. I received the University of Nigeria Nsukka's Emeritus Professor Nwokolo award for research and academic excellence in 2012 for my contributions to research in the University. I have laid the groundwork for the proposed project by conducting research that determined effective cervical cancer screening strategies in resource-constrained settings that formed part of the basis for current recommendations on cervical cancer screening in low- and middle-income countries as documented in the highlighted publications below. I have also published research works on cervical precancer treatment in low-income settings that formed part of the basis for the current recommendations on cervical precancer see-and-treat approach for low- and middle-income countries. One of the goals I set to achieve in my gynecological oncology career is to develop a critical mass of gynecologic oncology specialists to spear-head global best practices and undertake practice-changing research in gynecological oncology in Nigeria. To this end, I initiated a collaboration with the

International Gynecological Cancer Society (IGCS), the Swansea Gynecological Oncology Center/the Swansea Bay University Health Board, United Kingdom, and the University of Nigeria Teaching Hospital, for sub-specialty mentorship and fellowship training in Gyne-Oncology. In this collaboration, Nigerian Gynecologists will be trained and certified as Gynecological Oncologists after a 2-years rotation under my leadership as the local supervisor and the mentorship of the foreign collaborators. This training program will provide a good platform that will aid the NISA-SOAR Center in achieving some of its specific aims. The experience I have gathered over the years as a member of the expert consultative think-tank of the West African Health Organization (WAHO) on developing the road map for cervical cancer control in the ECOWAS region and a member of the West African College of Surgeons committee on the development of the Gynecological oncology sub-specialty curriculum will be harnessed to ensure the success of the NISA-SOAR Center. Alongside the MPIs Ezeanolue and DeVoe, I will lead the Research Capacity Building Core

Ongoing and Recently completed projects I would like to highlight include:

**ASCO International Innovation grant**

Onyeka (PI)

14/04/2017 – 05/04/2018

Enhancing palliative care in rural southeast Nigeria: use of a mobile APP for symptom management

*Role: Co-investigator*

**NCI/AORTIC BIG CAT Grant**

Onwudiwe (PI)

01/07/2013 – 29/09/2018

Cold coagulation versus cryotherapy for immediate treatment of women who test positive to visual inspection with acetic acid (VIA) and visual inspection with Lugol's iodine (VILI) in rural African settings.

*Role: Co-investigator*

**B. Positions, Scientific Appointments, and Honors**

**Positions, Scientific Appointments**

2021-present	Member, West African College of Surgeons committee on the development of the Gynecological oncology sub-specialty curriculum
2020-present	Member, TruScreen International Expert Advisory group on cervical cancer prevention
2020-Present	Professor, Obstetrics and Gynecology, College of Medicine, UNN
2020-Present	Associate Director, Institute of Maternal and Child Health, UNN
2019- present	External Examiner, PhD, University of Kwazulu-Natal, South Africa
2018-present	Member, West African Health Organization (WAHO) expert consultative group on cervical cancer elimination
2016-2018	Member, African Organization for Training and Research in Cancer (AORTIC) Education and Training Committee
2015-present	External Examiner, Master's Degree, University of Cape Town, South Africa
2013-2018	Associate Editor, BMC Women Health
2012-2018	Member, Editorial Board, World Journal of Obstetrics and Gynecology
2012-2014	Chairman, Medical Outreach Committee, Nigerian Medical Association, Enugu State
2012-Present	Honorary Consultant, Obstetrics and Gynecologic Oncology
2012-2015	Lecturer 1, Obstetrics and Gynecology, College of Medicine, UNN
2012	Visiting Fellow, Gynecological Cancer Center, Royal Hospital for Women, Randwick NSW Australia
2012- present	Member, American Society for Clinical Oncology (ASCO)
2011- present	Member, International Gynecological Cancer Society (IGCS)
2010- present	Member, African Organization for Research and Training in Cancer (AORTIC)
2009-present	Member, Society of Obstetrics and Gynecology of Nigeria (SOGON)
2009- present	Member, European Society of Gynecological Oncology (ESGO)
2009- 2012	Hospital Consultant Obstetrician/Gynecologist/Gynecologic-Oncologist, University of Nigeria Teaching Hospital, Ituku-Ozalla Enugu
2008-2009	Gynecologist, Frauenklinik der Technische Universität, Munich Germany

- 2002-2007 Resident Doctor in Obstetrics and Gynecology, University of Nigeria Teaching Hospital Enugu Nigeria.
- 1997- present Member Nigerian Medical Association (NMA)

### **Honors and Awards**

- 2018: John Sciarra Award for best article from Low- and Middle-Income countries in the International Journal of Gynaecology and Obstetrics.
- 2014: International Gynecological Cancer Society Young Doctors Travel Award
- 2012: International Gynecological Cancer Society Training Award
- 2012: Emeritus Professor Nwokolo Award for Research and Academic Excellence
- 2007: German Academic Exchange Services (DAAD) Scholarship for clinical training in Gynecological oncology
- 1992: Imo State Government Scholarship for Excellence in Tertiary Education

## **C. Contributions to Science**

### **1. Cervical cancer prevention in low-income settings:**

Through my research, I demonstrated that thermocoagulation offers lower cost and lower duration of treatment, less side effects and higher patient satisfaction than cryotherapy and should be the treatment of choice for cervical precancers in low-income countries. We showed that the see-and-treat model for cervical precancers offers the best cost-effective model for population cervical cancer prevention in resource-constrained areas. We demonstrated that using cryotherapy for population treatment of cervical pre-cancers in a see-and-treat model causes significant reduction in the population burden of cervical cancer. The adaptation of a simple diathermy machine for large loop excision of the transformation zone (LLETZ) of the cervix in cervical precancer treatment was proven to be as effective as the convention LLETZ machine.

- a. **Chigbu CO**, Onwudiwe EN, Onyebuchi AK. Thermocoagulation versus cryotherapy for treatment of cervical precancers: a prospective analytical study in a low-resource African setting. *J Obstet Gynaecol Res.* 2020 Jan;46(1):147-152. doi: 10.1111/jog.14139. Epub 2019 Oct 8. PMID: 31595603
- b. **Chigbu CO**, Onyebuchi AK, Nnakenyi EF, Egbuji CC. Impact of visual inspection with acetic acid plus cryotherapy "see and treat" approach on the reduction of the population burden of cervical preinvasive lesions in Southeast Nigeria. *Niger J Clin Pract.* 2017 Feb;20(2):239-243. doi: 10.4103/1119-3077.187315. PMID: 28091444
- c. **Chigbu CO**, Onyebuchi AK. See-and-treat management of high-grade squamous intraepithelial lesions in a resource-constrained African setting. *Int J Gynaecol Obstet.* 2014 Mar;124(3):204-6. doi: 10.1016/j.ijgo.2013.07.040. Epub 2013 Dec 4. PMID: 24377647
- d. **Chigbu CO**, Onyebuchi AK. Use of a portable diathermy machine for LEEP without colposcopy during see-and-treat management of VIA-positive cervical lesions in resource-poor settings. *Int J Gynaecol Obstet.* 2014 May;125(2):99-102. doi: 10.1016/j.ijgo.2013.10.023. Epub 2014 Feb 1. PMID: 24556087

### **2. Uptake of cervical cancer screening in southeast Nigeria:** We studied the uptake of cervical cancer screening in southeast Nigeria, determined the burden of the problem of low uptake of cervical cancer screening and the reasons behind it. We proffered practical solutions to the improve uptake of cervical cancer screening in southeast Nigeria.

- a. **Chigbu CO**, Onyebuchi AK, Egbuji CC, Ezugwu EC. Experiences and Unmet Needs of Women Undergoing Pap Smear Cervical Cancer Screening: Impact on Uptake of Cervical Cancer Screening in Southeastern Nigeria. *J Cancer Educ.* 2015 Mar;30(1):81-5. doi: 10.1007/s13187-014-0691-1. PMID: 24980966
- b. **Chigbu CO**, Aniebue UU. Why southern Nigerian women who are aware of cervical cancer screening do not go for voluntary screening. *Int J Gynecol Cancer.* 2011 Oct;21(7):1282-6. doi:10.1097/IGC.0b013e31822bd139. PMID: 21946294

- c. **Chigbu CO**, Aniebue UU. Non-uptake of colposcopy in a resource-poor setting. *Int J Gynaecol Obstet.* 2011 May;113(2):100-2. doi: 10.1016/j.ijgo.2010.11.017. Epub 2011 Feb 23. PMID: 21349518
- d. Obioha KC, Dim CC, Ugwu EO, **Chigbu CO**, Enebe JT, Ozumba BC. Acceptability and Outcome of Cervical Cytology in Postnatal Women and Other Nonpregnant Women in Enugu, Nigeria: A Cross-sectional Study. *J Clin Diagn Res.* 2020;14(4): QC07-10.

**3. Community mobilization for cervical cancer control and association between cervical neoplasia and contraceptives:** We determined the reasons for the perennial poor uptake of cervical cancer prevention services in Nigeria and proved that the poor uptake of cervical cancer prevention services in low-income countries can be reduced and cervical cancer uptake improved to optimum within the population using novel methods of cervical cancer awareness education. We demonstrated that our novel approach improved population uptake of cervical cancer screening from 3.2% to 67.6% and HPV vaccination from 0.9% to 33.2%. We also investigated the possibility of an association between cervical neoplasia and commonly used contraceptives in our environment and demonstrated that there is no association between the different contraceptives and cervical neoplasia.

- a. **Chigbu CO**, Onyebuchi AK, Onyeka TC, Odugu BU, Dim CC. *Int J Gynaecol Obstet.* 2017 Jun;137(3):319-324. doi: 10.1002/ijgo.12150. Epub 2017 Mar 31. PMID: 28295268
- b. **Chigbu CO**, Onyebuchi AK, Ajah LO, Onwudiwe EN. Motivations and preferences of rural Nigerian women undergoing cervical cancer screening via visual inspection with acetic acid. *Int J Gynaecol Obstet.* 2013 Mar;120(3):262-5. doi: 10.1016/j.ijgo.2012.10.011. Epub 2012 Dec 8. PMID: 23228820
- c. Ajah LO, **Chigbu CO**, Ozumba BC, Oguanuo TC, Ezeonu PO. Association of Intrauterine Device (IUD) and Cervical Neoplasia - A Study in a Poor Nigerian Population. *J Clin Diagn Res.* 2016 Jun;10(6):QC05-8. doi: 10.7860/JCDR/2016/18328.8049. Epub 2016 Jun 1. PMID: 2750435
- d. Ajah LO, **Chigbu CO**, Ozumba BC, Oguanuo TC, Ezeonu PO. Is there any association between hormonal contraceptives and cervical neoplasia in a poor Nigerian setting? *Onco Targets Ther.* 2015 Jul 27; 8:1887-92. doi: 10.2147/OTT.S86472. eCollection 2015. PMID: 26251619

#### **4. Cervical cancer and HIV; cytologic surveillance, obesity and cervical neoplasia**

I conducted studies on the epidemiology of obesity in southeast Nigeria and investigated the association between obesity and abnormal cervical cytology. I have also demonstrated that immediate referral for colposcopy for low grade cervical precancers may be preferable to conventional cytologic surveillance in low-income settings.

- a. **Chigbu CO**, Parhofer KG, Aniebue UU, Berger U. Prevalence and sociodemographic determinants of adult obesity: a large representative household survey in a resource-constrained African setting with double burden of undernutrition and overnutrition. *J Epidemiol Community Health.* 2018 Aug;72(8):702-707. doi: 10.1136/jech-2018-210573. Epub 2018 Mar 29. PMID: 29599385
- b. Ajah L, **Chigbu C**, Onah H, Iyoke C, Lawani O, Ezeonu P. Cytologic surveillance versus immediate colposcopy for women with a cervical smear diagnosis of low-grade squamous intraepithelial lesion in a poor setting in Nigeria. *Onco Targets Ther.* 2014 Nov 27;7:2169-73. doi: 10.2147/OTT.S70930. eCollection 2014. PMID: 25473299
- c. Okoro SO, Ajah LO, Nkwo PO, Aniebue UU, Ozumba BC, **Chigbu CO**. Association between obesity and abnormal Papanicolau(Pap) smear cytology results in a resource-poor Nigerian setting. *BMC Women's Health.* 2020 Jun 9;20(1):119. doi: 10.1186/s12905-020-00984-w. PMID: 32517800

**A full list of my published articles listed in Pubmed is available here:**

<https://pubmed.ncbi.nlm.nih.gov/?term=Chigbu+C>