BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Ijeoma Uchenna Itanyi

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

POSITION TITLE: Assistant Professor, Department of Community Medicine, University of Nigeria, Nsukka

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 | Completion Date | FIELD OF STUDY |
|--|-------------|--------------------|---|
| University of Port-Harcourt, Rivers State, Nigeria | MBBS | 08/2005 | Medicine and Surgery |
| Johns Hopkins University, Bloomberg School Of Public Health, Maryland, USA | MPH | 05/2010 | Public Health/ Epidemiology and Biostatistics |
| World Bank Institute, USA | Certificate | 04/2011 | Health Economics |
| West African College of Physicians | Fellowship | 04/2016 | Community Medicine (Preventive Medicine) |

A. PERSONAL STATEMENT

I am a Nigerian and US-trained public health physician and epidemiologist, an Assistant Professor in the Department of Community Medicine at the University of Nigeria Nsukka (UNN), and the Program Manager and Training Lead for the Center for Translation and Implementation Research (CTAIR), UNN. My researches have focused on behavioural risk factors for non-communicable diseases (NCDs) among adolescents to inform early prevention interventions; understanding health systems bottlenecks to provision of quality healthcare; and the use of implementation science to deliver tailored health interventions for maternal and child health. My current research interests are prevention of NCDs, integration of NCD care into existing health systems in low and middle-income countries (LMICs), and digital health interventions to support patient management of NCDs. I have seven years virtual and face-to-face experience with teaching and mentoring undergraduate and postgraduate students, and resident doctors at UNN. My current role as the coordinator of undergraduate medical training in Community Medicine at UNN has given me extensive expertise in coordinating training programs. I also have proficiency in teaching assessment methods and assessment of research works in public health, given my responsibilities as the exam officer for undergraduate medical program in Community Medicine at UNN, and postgraduate external examiner at University of Cape Town, South Africa, respectively. I co-led the teams which developed the curriculum for UNN postgraduate program in Epidemiology, and the occupational health policy for University of Nigeria Teaching Hospital. I have received peer-reviewed research funding as PI for tobacco, cardiovascular disease and HIV research. I have also served as research coordinator in multiple NIH-funded research projects. I have received several scholarship awards including NIH Mentored Research Award, University of Cambridge Training Award for chronic disease research in Africa, and Early Career Epidemiologist Award by International Epidemiological Association Council.

- 1. **Itanyi IU**, Onwasigwe CN, McIntosh S, Bruno T, Ossip D, Nwobi EA, Onoka CA, Ezeanolue EE. Disparities in tobacco use by adolescents in southeast, Nigeria using Global Youth Tobacco Survey (GYTS) approach. *BMC Public Health*. 2018; 18(1):317. doi: 10.1186/s12889-018-5231-1. PMID: 29510706. PMCID: PMC5840734.
- 2. Ezeanolue EE, Iheanacho T, Adedeji IA, **Itanyi IU**, Olakunde B, Patel D, Dakum P, Okonkwo P, Akinmurele T, Obiefune M, Khamofu H, Oyeledun B, Aina M, Eyo A, Oleribe O, Oko J, Olutola A, Gobir I, Aliyu MH, Aliyu G, Woelk G, Aarons G, Siberry G, Sturke R; Nigeria Implementation Science Alliance.

Opportunities and challenges to integrating mental health into HIV programs in a low- and middle-income country: insights from the Nigeria implementation science Alliance. *BMC Health Serv Res.* 2020;20(1):904. doi: 10.1186/s12913-020-05750-0. PMID: 32993621; PMCID: PMC7526407.

3. Gbadamosi SO, **Itanyi IU**, Menson WNA, Olawepo JO, Bruno T, Ogidi AG, Patel D, Oko JO, Onoka CA, Ezeanolue EE. Targeted HIV testing for male partners of HIV-positive pregnant women in a high prevalence setting in Nigeria. *PLoS One.* 2019;14(1):e0211022. doi: 10.1371/journal.pone.0211022. PMID: 30699160. PMCID: PMC6353157.

B. POSITIONS AND HONORS

| Registrar, Department of Community Medicine, University of Nigeria Teaching Hospital |
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| Senior Registrar, Dept. of Community Medicine, University of Nigeria Teaching Hospital |
| Chief Resident, Dept. of Community Medicine, University of Nigeria Teaching Hospital |
| Instructor, Community Health Officers Training Program, University of Nigeria Teaching Hospital |
| Post-fellowship Senior Registrar, Dept. of Community Medicine, University of Nigeria Teaching Hospital |
| Research Associate, Research Resource Centre, College of Medicine, University of Nigeria (UNN) |
| Assistant Professor, Department. of Community Medicine, UNN |
| Assistant Coordinator, Undergraduate Medical training, Dept. of Community Medicine, UNN |
| Program Coordinator and Exam Officer, Undergraduate Medical training, Dept. of Community Medicine, UNN |
| Program Manager & Training Lead, Center for Translation and Implementation Research, |
| College of Medicine, UNN |
| Honorary Consultant, Dept. of Community Medicine, University of Nigeria Teaching Hospital |
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Other Experiences and Professional memberships

| 2012-2016 | Technical Consultant on health systems strengthening, DfID/Abt Associates, for Partnership for |
|-----------|--|
| | Transforming Health Systems in Nigeria |
| 2013-2016 | Alumni Mentor, MPH program, Johns Hopkins University, USA |
| 2013- | Certified Trainer on Integrated Management of Childhood Illnesses, FMOH, Nigeria |
| 2013- | Member, International Epidemiological Association |
| 2015 | Co-convener, Southeast Nigeria Health Summit on Universal Health Coverage |
| 2015-2016 | Co-Lead, Civil Society Scaling-Up Nutrition in Nigeria, Enugu State Chapter |
| 2015- | Treasurer, Association of Public Health Physicians of Nigeria, Enugu State Chapter |
| 2016-2017 | Member, State Committee on Food and Nutrition, Enugu, Nigeria |
| 2016 | Technical Consultant on nutrition, UNICEF, Nigeria |
| 2018- | Member, Society for Nicotine and Tobacco Research |
| 2018 | Technical Consultant on monitoring and evaluation of severe acute malnutrition, National Primary |
| | Health Care Development Agency, Nigeria |
| 2019- | External Examiner for MPH degree, University of Cape Town, South Africa |
| 2020- | Reviewer, Journal of Smoking Cessation |
| 2020- | Reviewer, Nigerian Journal of Clinical Practice |

Honors and Awards

| 1999-2005 | AGIP Undergraduate Scholarship Award, National Merit Category |
|-----------|--|
| 2001 | Honors Distinction (Biochemistry), MBBS degree, University of Port-Harcourt, Nigeria |
| 2005 | Outstanding Service Award, Federation of Catholic Medical and Dental Students |
| 2010 | Honors Distinction, MPH degree, Johns Hopkins University, Bloomberg School of Public Health, |
| | USA |
| 2015 | Medical Education Partnership Initiative-Nigeria Mentored Research Award funded by National |
| | Institutes of Health, USA |

- Training Award by University of Cambridge/African Partnership for Chronic Disease Research,
 - for capacity building for chronic disease research in Africa
- 2016 Fellow, West African College of Physicians
- 2017 Early Career Epidemiologist Travel Award to 21st World Congress on Epidemiology,
 - International Epidemiological Association Council

C. CONTRIBUTION TO SCIENCE

Identification of behavioural risk factors for non-communicable diseases (NCDs) among adolescents to inform early interventions for prevention of NCDs

My research on adolescent tobacco use in southeast Nigeria was the first study that comprehensively evaluated inequalities in adolescent tobacco use in Nigeria. We found higher use of all forms of tobacco in rural schools compared with urban schools, and demonstrated the need for tobacco control interventions to also target students in rural schools. We also identified risk factors for adolescent cigarette smoking, which could be targeted in tobacco control programs. These findings have influenced the Chairman of the state's legislature Health Committee to sponsor a bill for the state to adopt the national tobacco control law.

- Itanyi IU, Onwasigwe CN, Ossip D, Uzochukwu BSC, McIntosh S, Aguwa EN, Wang S, Onoka CA, Ezeanolue EE. Predictors of current tobacco smoking by adolescents in Nigeria: interaction between school location and socioeconomic status. *Tobacco Induced Diseases*. 2020; 18:13. doi: 10.18332/tid/117959. PMID: 32180690. PMCID: PMC7067232.
- 2. <u>Itanyi IU</u>, Onwasigwe CN, McIntosh S, Bruno T, Ossip D, Nwobi EA, Onoka CA, Ezeanolue EE. Disparities in tobacco use by adolescents in southeast, Nigeria using Global Youth Tobacco Survey (GYTS) approach. *BMC Public Health*. 2018; 18(1):317. doi: 10.1186/s12889-018-5231-1. PMID: 29510706. PMCID: PMC5840734.

Health systems research to understand bottlenecks to provision of quality health services in low resource settings

My work in the field of health systems has examined barriers to provision of quality health services in Nigeria and investigated treatment outcomes of different types of care. We identified opportunities and challenges to integrating mental health into existing HIV programs in Nigeria; findings which could guide policymakers and healthcare providers in addressing the burden of mental co-morbidities and improving treatment outcomes among people living with HIV in Nigeria. Our feasibility study on training of traditional bone setters (TBS) by orthopaedic surgeons found willingness of TBS to accept training support from orthoapedic surgeons, and orthopaedic surgeons to provide training support to TBS respectively. This intervention could help to fill the gap in primary fracture care in Nigeria and reduce its complications. In another study, we found that treatment outcomes of patients treated for tuberculosis using a 6-month regimen were better than with an 8-month regimen, supporting the new WHO-recommended guidelines for optimal TB treatment.

- Ezeanolue EE, Iheanacho T, Adedeji IA, Itanyi IU, Olakunde B, Patel D, Dakum P, Okonkwo P, Akinmurele T, Obiefune M, Khamofu H, Oyeledun B, Aina M, Eyo A, Oleribe O, Oko J, Olutola A, Gobir I, Aliyu MH, Aliyu G, Woelk G, Aarons G, Siberry G, Sturke R; Nigeria Implementation Science Alliance. Opportunities and challenges to integrating mental health into HIV programs in a low- and middle-income country: insights from the Nigeria implementation science Alliance. BMC Health Serv Res. 2020;20(1):904. doi: 10.1186/s12913-020-05750-0. PMID: 32993621; PMCID: PMC7526407.
- 2. Onyemaechi N, **Itanyi IU**, Ossai O, Ezeanolue EE (2020). Can traditional bonesetters become trained technicians? Feasibility study among a cohort of Nigerian traditional bonesetters. *Human Resources for Health*. 2020; 18(1):24. doi: 10.1186/s12960-020-00468-w. PMID: 32197617. PMCID: PMC7085192.
- 3. Ekenna A, **Itanyi IU**, Nwokoro U, Hirschhorn L and Uzochukwu B. How ready is the system to deliver primary health care? Results of a primary health facility assessment in Enugu State, Nigeria. *Health Policy and Planning*. 2020; (Accepted for publication in press).
- 4. Omotowo BI, Itanyi I, Ndibuagu EO, Agunwa CC, Obi IE, Idoko AC, et al. Comparative study of six-

month and eight-month treatment of new smear positive tuberculosis cases at a tertiary health facility in Enugu, South-Eastern Nigeria. *Int J Med Health Dev.* 2019; 24:78-84. doi: 10.4103/ijmh.IJMH_24_19.

Use of implementation science to deliver tailored health interventions in resource-limited settings My work has contributed to the use of tailored implementation strategies to deliver HIV and Hepatitis B testing for early diagnosis and prevention of mother-to-child transmission of these infections in rural settings in Nigeria where health facility utilization is low. This provides the opportunity for early interventions to reduce child morbidity and mortality in resource-limited settings.

- Gbadamosi SO, Itanyi IU, Menson WNA, Olawepo JO, Bruno T, Ogidi AG, Patel D, Oko JO, Onoka CA, Ezeanolue EE. Targeted HIV testing for male partners of HIV-positive pregnant women in a high prevalence setting in Nigeria. *PLoS One*. 2019;14(1):e0211022. doi: 10.1371/journal.pone.0211022. PMID: 30699160. PMCID: PMC6353157.
- Adeyemi OA, Itanyi IU, Ozigbu CE, Stadnick N, Tsuyuki K, Olayiwola O, Ogidi AG, Eze C, Aarons GA, Onoka CA, Ezeanolue EE. Sero-prevalence and determinants of Hepatitis B among a cohort of HIV-infected women of reproductive age in Nigeria. *PLoS One*. 2020;15(9):e0236456. doi: 10.1371/journal.pone.0236456. PMID: 32941424; PMCID: PMC7498243.

D. RESEARCH SUPPORT

Active Grants

Elizabeth Glaser Paediatrics AIDS Foundation [0257A] Rakhmanina/Tiam (MPI) 12/2019-12/2021 Demographic, Clinical, and Laboratory Characteristics and Outcomes of Patients Who Ever Received Etravirine and/or Darunavir

Role: PI (Nigeria)

This is a multi-country study which purpose is to describe the demographic, clinical, and laboratory characteristics and treatment outcomes of HIV-infected children, adolescents and young adults who ever received the 3rd-line antiretroviral drugs, Darunavir and Etravirine.

Completed Grants

Research Resource Centre, College of Medicine, UNN Itanyi (PI)

10/2018-09/2019

Risk factors for cardiovascular diseases in northcentral Nigeria

The purpose of this study was to conduct secondary data analysis to determine the community prevalence and determinants of cardiovascular risk factors among participants in the Healthy Beginning Initiative program in Benue State. Nigeria.

Role: PI

NICHD

3R01HD087994

Ezeanolue (PI)

09/02/2016-03/31/2018

Men's Club: Impact of male partner involvement on initiation and sustainment of exclusive breastfeeding among HIV-infected postpartum women

The overall aim of this study was to assess the comparative effectiveness of a Men's Club intervention which comprised health education, motivational interviewing and post-delivery weekly phone calls for six weeks on initiation and sustainment of exclusive breast feeding by women postpartum. Participants were male partners of pregnant women.

Role: Study Coordinator

R01HD087994

Ezeanolue (PI)

5/1/2016-4/30/2018

NICHD

Intervention for Sustained Testing and Retention (iSTAR) among HIV-infected patients

The purpose of this study was to evaluate the comparative effectiveness of congregation, clinic and integrated case management-based intervention for sustainable testing and retention for linkage to care, engagement, retention and viral load suppression of women and children infected with HIV.

Role: Research Associate

NIH/Fogarty International Center

Point-of-Delivery Prenatal Test Results through mHealth to Improve Birth Outcome

The purpose of this study was to develop and evaluate a mobile health platform that includes a database, a smart card and mobile phone application to make maternal prenatal laboratory test results available at the point of delivery.

Role: Research Associate

Wellcome Trust, UK

Motala (Study PI), Oli (Site PI)

06/2013-05/2018

Burden, spectrum and aetiology of type 2 diabetes in sub-Saharan Africa

The overall aim of this study was to assess the burden and aetiological characteristics of type 2 diabetes in adults in sub-Saharan Africa using large-scale population-based approaches

Role: Site Coordinator

R24TW008878

Olaleye (PI)

04/2015-03/2016

NIH/Fogarty International Centre through the Medical Education Partnership Initiative-Nigeria

A comparative study on the prevalence and determinants of tobacco use among secondary school adolescents in urban and rural areas of Enugu State, Nigeria

The overall aim of this study was to compare the prevalence and determinants of tobacco use among adolescents attending secondary schools in urban and rural areas of Enugu State, Nigeria.

Role: PI

World Health Organization [Grant Number H15-TSA-019]

Onoka (PI)

02/2011 - 01/2013

The National Health Insurance Scheme in Nigeria: an analysis of enabling factors and constraints to adoption by sub-national governments

The purpose of this study was to understand why different state (sub-national) governments decided whether or not to adopt the formal sector program of the National Health Insurance Scheme for their employees.

Role: Research Coordinator