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**Title:** The prevalence of COPD in an African city: Results of the BOLD study, Ile-Ife, Nigeria

Dr. Daniel 19408 Obaseki danseki@yahoo.com MD <sup>1</sup>, Prof. Gregory 19409 Erhabor gregerhabor7@yahoo.com MD <sup>1</sup>, Prof. Peter 19410 Burney p.burney@imperial.ac.uk MD <sup>2</sup>, Prof. Sonia 19435 Buist buists@ohsu.edu MD <sup>3</sup>, Dr. Olayemi 19436 Awopeju yemijide@yahoo.com MD <sup>1</sup> and Ms. Louisa 24420 Gnatiuc I.gnatiuc2@imperial.ac.uk <sup>2</sup>. <sup>1</sup> Department of Medicine, Obafemi Awolowo University, Ile-Ife, Nigeria ; <sup>2</sup> Respiratory Epidemiology and Public Health, Imperial College London, London, United Kingdom and <sup>3</sup> Division of Pulmonary and Critical Care, Oregon Health and Science University, Portland, OR, United States .

**Body:** Background: Chronic Obstructive Pulmonary Disease (COPD) is an increasing public health problem worldwide. However there is gross paucity of spirometry-based general population data on its prevalence in sub-Saharan Africa. Methods: Using the Burden of Obstructive Lung Disease (BOLD) protocol and study design, we undertook a multistage population sample of adults aged 40 years and above in Ile-Ife, Nigeria. Post-bronchodilator spirometry was conducted and information on smoking history, biomass or occupational exposures and reported respiratory disease and symptoms were collected using standardized questionnaires. COPD was defined as post- bronchodilator FEV1/FVC below the lower limit of normal (LLN) (95th percentile) of the population distribution for FEV1/FVC. Population-weighted estimates were calculated for Ile-Ife population. Results: The prevalence of COPD using the modified Stage 1 criteria (post-bronchodilator FEV1/FVC<LLN), ranged from 5.2% in those aged 40-49 years to 11.0% in those aged 70 years and above. Overall, the estimate was 7.0%. For Modified Stage 2 COPD (post bronchodilator FEV1/FVC < LLN and post bronchodilator FEV1 < 80% predicted), the prevalence of COPD was 6.7%. 10.5% of the population had GOLD stage 2 and higher COPD (post-bronchodilator EV1/FVC<0.7 & FEV1 <80% predicted). 87% of the respondents were never smokers. The prevalence of self reported doctor-diagnosed chronic bronchitis, emphysema or COPD was 0.3%. Conclusion: COPD is hugely under diagnosed and consequently under treated in Ile-Ife, Nigeria.