**Assessing outpatient care expenditures to inform universal coverage agenda: Baseline results from a quasi-experimental impact evaluation of a health systems strengthening project in the Democratic Republic of Congo**

**Samia Laokri1,2,3, Rieza Soelaeman4, David R. Hotchkiss1**

***1****Global Community Health and Behavioral Sciences, School of Public Health and Tropical Medicine, Tulane University, U.S.A*

***2****Belgian American Educational Foundation, Yale University, U.S.A*

***3****Health Policy and Systems – International Health, School of Public Health, Université Libre de Bruxelles, Belgium*

***4*** *Global Health Management and Policy, School of Public Health and Tropical Medicine, Tulane University, U.S.A*

*Author’s contact:* *slaokri@ulb.ac.be*

**Background:** In the DRC, households incur significant and likely burdensome out-of-pocket expenditures for health, with limited cost-sharing mechanisms available. However, there is limited evidence available with respect to disaggregated cost items incurred for outpatient care and factors of incurring atypically high costs.

**Aim:** To describe disaggregated primary care cost distributions and to investigate whether incurring excessive costs is associated with geographic location, health-seeking behaviors, health-system related indicators, or socio-economic characteristics of household members.

**Method:** As part of a quasi-experimental research study to assess the impact of the DFID-funded health systems strengthening project in DRC, a baseline population-based household survey was conducted in four provinces in 2014. The outpatient care module of the survey collected information on type, level, and utilization of outpatient care, accessibility to care, patient satisfaction, and out-of-pocket expenditures, among others. Wealth scores were derived using Principal Component Analysis. Excessive out-out-pocket expenditure for outpatient care was defined as spending greater than double the median cost. This threshold allows us to explore incidence and predictors of atypically high costs incurred by individuals. Cuzik’s test for wealth trend and multivariable logistic regression of excessive costs were performed. The logistic model selection was based on using the results of the univariate analysis using backward elimination. Any variable with a p-value less than 0.20 in univariate analysis was included in the multivariable model. Odds ratios are presented after testing covariance in explanatory variables.

**Result:** Of 2,427 individuals reporting an illness within four weeks of interview, 71.1% sought outpatient care with an average of 1.0 visit per episode of illness. The overall mean expenditure per visit was US$3.70 (95% IC US$3.20-4.10) and ranged from US$2.30 in Equateur to US$5.30 in Maniema/Orientale. Mean expenditure was US$5.90, 6.10 and 3.00 in the public, private and informal sectors, respectively. The equity ratio of medical and non-medical expenditures were respectively of 2.7 and 14.0 times greater among the wealthier (*p* <.001). Results from the multivariable model indicate that utilizing public sector medical services (versus private or informal sectors), urban location, residence in Maniema/Oriental, being in the wealthiest quintile, incurring days lost due to illness, and resorting to coping strategies were all predictors of having excessive costs(*p* <.001).

**Conclusion:** Overall and itemized outpatient expenditures significantly varied to a large extent across regions, wealth quintiles, and care-seeking pathways. Substantial cost-burden of illness associated to outpatient should be further documented and addressed to improve equitable access to primary healthcare and prepare universal coverage.

Keywords: Outpatient costs, Equity, Primary Health Care