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## Determinants of fertility differentials in Burundi: Evidence from the 2016-17 Burundi Demographic and Health Survey

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**Background:** Although fertility control remains a major priority for the Burundian government and most of its partners, few studies on Burundi's fertility determinants are available to guide interventions. To address this gap, our study aims to examine the most factors influencing fertility differentials in Burundi by using the latest Burundi Demographic and Health Survey data.

**Methods:** using data from the 2016-17 Burundi Demographic and Health Survey, one-way analysis of variance was performed to describe variations in mean number of children ever born across categories of correlate variables. Then univariable and multivariable Poisson regression analyses were carried out to identify the most factors influencing fertility differentials in Burundi.

**Results:** In our sample, the total number of children ever born ranged from 0 to 15 children by women with a mean number of 2.7 children ( $\pm 2.8$  SD). Factors such as urban residence (aIRR 0.769, 95% CI: 0.739 - 0.782,  $p = 0.008$ ), increase in the level of education of both women and husbands (aIRRs of 0.718, 95% CI: 0.643 - 0.802,  $P < 0.001$  and 0.729, 95% CI: 0.711 - 0.763,  $p < 0.001$  respectively), No history of infant mortality experience (aIRR 0.722, 95% IC: 0.710 - 0.734,  $p < 0.001$ ) and increase in age at first marriage or first birth (aIRRs of 0.864, 95% CI: 0.837 - 0.891,  $P < 0.001$  and 0.812, 95% CI: 0.781 - 0.845,  $p < 0.001$  respectively) are associated with a low fertility rate while factors such as residence especially in Southern region (aIRR 1.129, 95% IC: 1.077 - 1.184,  $p < 0.001$ ), women and husband's agricultural profession (aIRRs of 1.521, 95% CI: 1.429 - 1.568,  $P < 0.001$  and 1.294, 95% CI: 1.211 - 1.316,  $p < 0.001$  respectively), household poverty (aIRR 1.117, 95% IC: 1.080 - 1.155,  $p < 0.001$ ), lack of knowledge of any contraceptive methods (aIRR 1.502, 95% IC: 1.494 - 1.564,  $p < 0.001$ ) and Non-use of modern contraceptive methods (aIRR 1.583, 95% IC: 1.562 - 1.607,  $p < 0.001$ ) are associated with a high fertility rate.

**Conclusion:** The results of this study suggest that actions aimed at promoting education in general especially female education, improving child survival, women's socioeconomic status, agriculture mechanization and increasing number and scope of family planning services, could help reduce Burundi fertility rate.

### Biography

Jean Claude NIBARUTA, currently a Doctor( Ph.D) in Public Health in Higher Institute of Health Sciences -Hassan First University of Settat(Morocco). He has completed BSC in Anesthesia and Intensive care, BSC in Public Health, MPH and PhD Student in public health, Maternal and child health promotion, Center for Doctoral Studies, Laboratory of Health Sciences and Technologies, Higher Institute of Health Sciences Hassan First University of Settat / Morocco.

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