Prevalence of hypertension in Rwandan population using Gibbs method

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Abstract:

Hypertension in Africa was estimated at 30.8% in 2010 with a dramatic increase in some regions ranging between 36.2% -77.3% (Adeloye Basquill, 2014). In Rwanda, the prevalence of hypertension was estimated to 15.0% in 2015, (Nahimana et al., 2017). In Rwanda, there is no model that can help decision-makers to know the behavior of hypertension in the future. The objective of this study was to predict the prevalence of hypertension in Rwanda for 10 years using the Markov Chain Monte Carlo method and other related diseases. Data used were from , Gibbs method for sampling helped to find the transition matrix. It was found that the prevalence of hypertension, tobacco use, overweight, obesity, and another subject will be predicted 17.82%, 26.26%, 17.13%, 4.80%, and 33.99% in 2025 respectively. This implies that Rwanda needs to take the measure of healthy diets and physical exercises to prevent and reduce the prevalence of the diseases.

2. "Innovation and Firms' Performance in the Rwandese Manufacturing Industry. A firm Level Empirical Analysis By", August 2018.

3. "Effect of Financial Risk Management on the Performance of Insurance Companies in Rwanda (2015-2019)", January 2020, SSRN Electronic Journal, DOI: 10.2139/ssrn.3597471

8th World Congress on Hypertension, Cardiology, Primary Health and Patient Care, June 18-19, 2020 Webinar

Biography:

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Speaker Publications:

1. "Determinants of Capacity Utilization of Food and Beverage Manufacturing Firms in Rwanda: Do Tax Incentives Matter?", January 2018, SSRN Electronic Journal, DOI: 10.2139/ssrn.3217757