ABSTRACT

The objective of this study was to apply Data Mining in the analysis of imports of pharmaceutical products in Kenya with the aim of discovering patterns of association and correlation among the various product groups. The RapidMiner Data Mining was used to analyze data obtained from the Pharmacy and Poison Board, the regulator of pharmaceutical products in the country, covering the period 2008 to 2010. The CRISP method was used to get a business understanding of the Board, understand the nature of the data held, prepare the data for analyze and actual analysis of the data. The results of the study discovered various patterns through correlation and association analysis of various product groups. The results were presented through various graphs and discussed with the domain experts. These patterns are similar to prescription patterns from studies in Ethiopia, Nigeria and India. The research will provide regulators of pharmaceutical products, not only in Kenya but other African countries, a better insight into the patterns of imports and exports of pharmaceutical products. This would result into better controls, not only in import and exports of the products, but also enforcement on their usage in order to avert negative effects to the citizens.