

**INFORMATION SYSTEMS AND THE EFFICIENCY OF DRUG SUPPLY
CHAIN OF RWANDA
A Case Study of District Pharmacies**

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ABSTRACT

The provision and distribution of drugs, medical consumables and medical equipment constitutes one of the essential support systems for delivering health services. The availability of medicines and consumables is one of the key components in accessing health services for the population. Drugs supply chain of Rwanda faces some challenges such as stock availability and stock expiries. To deal with these challenges, Logistics Management Information System (LMIS) tools were introduced since 2011 and currently used for management of drugs in District Pharmacies and Health Centers. The objective of the study was to find out the effect of information systems known as LMIS tools on the efficiency of drugs supply chain system of Rwanda. In this study, the researcher assessed whether LMIS tools provided added value chain on different activities of supply chain such as inventory management, quantification, distribution, reporting and proper management of waste. To assess the objectives of the study, a descriptive study was carried out in District Pharmacies of Rwanda. In Rwanda, there is 30 district pharmacies where by in each district pharmacy you find out at least a pharmacist, a data manager and a stock manager. This helped to determine the targeted population of 90 respondents corresponding to administration of three questionnaires per each District Pharmacy. To carry out the study, the researcher used a sample size of 75 respondents. Data were collected using structured questionnaire; To administer questionnaires, a stratified random sampling method was used. Data were analyzed and interpreted using likert scale. Before administer the questionnaires to the targeted population, they were tested for validity and reliability. The pretesting shown that validity was 4.22 and reliability was 0.81. After pretesting of the questionnaires, the researcher administered them to 75 respondents and only 67 handed back the filled questionnaires; this showed that the response rate was 90.5%. After analysis of data collected using frequencies and weighted mean, it was found that the respondents supported the formulated objectives. In general, the rate of responses to each objective was between 3.4 and 4.19. It was noted that the respondents agreed with the research questions and they supported the main objective of the study which was to find out the effect of information system to efficiency of drugs supply chain in Rwanda and District pharmacies in particular.