ABSTRACT

Supply Chain Management is the process which creates a product or a service from raw materials to final product that is consumed by the consumer. In this process the product, information and the finance flow occurs both in forward and backward directions (Mentzer *et al.*, 2001). Supply Chain is a life cycle processes involving physical goods, information, and financial flows whose objective is to satisfy end consumer requisites with goods and services from diverse, connected suppliers (Ayers, 2001). Drugs are an essential component for running the health care institutions at National and Provincial levels. The success of drug management cycle in the health care institutions will depend upon the ability to reliably and consistently supply the standard quality medicines at affordable rates to health care facilities at all the levels of healthcare system (Javid Iqbal, Geer and Dar, 2018). In Sri Lanka, public health sector which is mainly divided to line ministry and provincial ministry health care institutions, which receive drugs through Medical Supply Division (MSD) and Regional Medical Supply Division (RMSD) respectively. Medical Supply Division

(MSD) is the focal point for supplying of drugs throughout the country (Ministry of

Health Nutrition and Indigenous Medicine, 2018). The pharmacists play a major role in Drugs Supply Chain Management (Avinash Verma, 2018), and the knowledge gap affects Medical Supply Chain Management (WHO Regional Office for Africa, 2004), (Avinash Verma, 2018), (International Pharmaceutical Federation, 2018). This research project was carried out with the objective to strengthen the Drug Supply Chain Management, through an intervention of improving the Knowledge and

Attitude on Drug Supply Chain Management among Pharmacists, in Colombo South Teaching Hospital. This research project was carried out in three phases, with the alignment of project cycle steps which are Initiation, Planning, Execution and Closure and they were included into these three

phases. In the Phase I the problems and gaps were identified as initiation and planning for conduction of the project was done. Execution or the implementation is done in the Phase II. Closure of the research project and evaluation of results were done in Phase III.

Key Informant Interviews and Focus Group Discussions were done to gather qualitative data. Questionnaire and Check List was used to gather quantitative data.

Monthly estimation of Drugs, Forecasting the drugs requirement, Calculating the Annual Drugs requirement, Ordering the drugs, Receiving the Drugs, Quality checks, Dispensing, Keeping inventories and record keeping, Handling the Medical Supply Management Information System were satisfactory both in before and after the intervention. But the Store management, internal distribution to wards and units, and local purchase of drugs were improved after the intervention.

The overall pharmacists knowledge on Supply Chain Management, have improved in post intervention compared to pre intervention at a very significance level ($p < 0.001$). The overall pharmacists attitudes have significantly improved in the post intervention compared to pre intervention at $p < 0.001$ level. In-patient services have improved in Post intervention compared to pre intervention at p values ranged from < 0.001 to 0.002. Patient satisfaction and percentage of drugs received also significantly improved in post intervention compared to pre intervention at $p < 0.001$ significance level. Radar diagrams on store management showed that there is an improvement in post intervention compared to pre intervention.

Improving the Knowledge and Attitudes on Drug Supply Chain Management among Pharmacists, is an effective intervention to strengthen the Drug Supply Chain Management at Institutional Level.

Key Words: Drugs Supply Chain Management, Pharmacists, Knowledge, Attitudes