EXECUTIVE SUMMARY

Transport plays a critical role in the effective and efficient delivery of health care. It enables people to access services and health workers to reach communities.The lack of transport to ensure time-outs transfer of patients between levels of healthcare and for delivery of medicines vaccines and other essential equipment is a community heard cry from health care workers. Maintaining a proper vehicle management system at Regional Director of Health Service (RDHS) Hambantota is very important to ensure an uninterrupted health care delivery throughout the district.

This quasi experimental research project was carried out at RDHS Hambantota with the intention of identifying the gaps in the current vehicle management, maintenance and operating system and improves the effectiveness of management of vehicles. The project was carried out in three stages.The pre intervention phase aimed at identifying the existing situation and gaps in the vehicle management system, using both qualitative and quantitative techniques. Key informant interviews, focus group discussions, self administered questionnaires and secondary data collection conducted revealed that delays in vehicle maintenance management and operation process due to existing vehicle management procedures.

It was revealed that inadequate staff training regarding proper fleet management, lack of technical knowledge of drivers, absence of preventive maintenance schedule and poorly managed vehicle inventory system led to inefficient in vehicle management at RDHS Hambantota. Furthermore, documentation delays, non availability of past vehicle repair and maintenance records which are necessary for administrative and financial decision-making contributed to delayed vehicle repair process and irregular preventive maintenance.

In the second phase of study, based on above gaps, interventions were designed and implemented. Digital platform created through establishing a data base for the transport section of RDHS Hambantota, helped to maintenance, management and operations of the vehicles. It consisted of different -sections for vehicle profiles, monitoring, managing preventive maintenance and inventory, identifying and analyzing high cost vehicles, developing reports for regular complaints and monitor vehicles used.

Training programmes were conducted for drivers and office staff regarding the vehicle management information system and workshops conducted for drivers on motor mechanical technology, vehicle maintenance and repairs. Inadequate knowledge of administrative staff and drivers was improved by introducing best practices guideline and preventive maintenance checklist and process books.

In the third phase of the study, post interventional assessment was conducted using the same techniques used in pre interventional phase. Post interventional qualitative results indicated that the availability of the online and offline digital platform for vehicle management improved the transport related processes, streamlined the vehicle management operations and maintenance improved the accountability of the relevant officers and their decision making process. Availability of information in turn improved the coordination and this was evident by the post interventional survey results, where all drivers and management staff were well aware about vehicle maintenance and operation schedules. Improved the satisfaction towards contribution of high authority of RDHS was improved. The level of satisfaction improved from 16% to 61.67%.

It further revealed that oraganisational leadership towards vehicles management is improved significantly at the 0.000 level. It is evident that after the interventional phase, the systematic improvement of the data management, inventory management and vehicle operations and feedback mechanisms improved. Significance test statistics reveal that the average time for documentation process at RDHS improved from 16.52 days to 3.56 days at $p<0.0001$ level. Vehicle availability increased from 62% to 81%, utilisation improved from 68 % to 76% and performance improved from 69 % to 84% at RDHS Hambantota.

It is concluded that the implementation of the multifaced and package of interventions implemented in this project was effective in improving the vehicle management at RDHS. It is recommended to improve the online system further by adapting the experience gained throughout the intervention phase and expand the project to the other healthcare institutions.

Key Words: ***Fleet Management Information System, Inventory Management System, Key vehicle performance Indicators***