

An assessment of the vehicle operations and transport services in RDHS office Colombo

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Abstract

Background: Colombo is the capital of Sri Lanka, RDHS Colombo has a large population to deliver healthcare services with their existing resources in a unique way when compared to other RDHS divisions in Sri Lanka. Vehicle Management Systems save time, money, and hassle. By optimizing the vehicle management system, we can gain a better operational view, improve patient care, eliminate inefficient vehicle use, prevent vehicle misuse and related resources and reduce downtime.

Objective: To analyse the existing system and challenges in vehicle operations and transport services in RDHS office, Colombo

Methods: This is a descriptive case study. The information to assess the structure and function of existing vehicle operations and transport services was gathered by interviewing key informants and desk review. Based on the assessment problems were identified and prioritized. Nominal group technique was adopted for prioritization.

Results: Six major problems were identified. Lack of training and education for drivers and non-implemented disciplinary procedures was selected as the problem for further analysis based on the weightage given by the members of the nominal group. It was given higher weightage due to the rising concerns about

the health hazards following accidents and vehicle repairs.

Conclusion: The study reveals that frequent changes in vehicle subject clerks may lead to a lack of supervision of drivers and there are no institutional guidelines for periodic staff training.

Recommendations: The study recommends preparing institutional policies on vehicle maintenance and providing training and education to drivers. In addition, it is suggested to appoint a disciplinary committee to expedite the disciplinary procedure following accidents and vehicle maintenance. It also recommended as a long-term solution to prepare a term of reference (TOR) on annual transfers of drivers for the ambulances and other vehicles based on vehicle maintenance, accident history, discipline and seniority and do periodic surveillance to ensure vehicle registration, renewing tax and insurance, maintain logbook and repair summary, and maintenance and accident summary and ensure disciplinary process.

Keywords: Vehicle Management System, Vehicle Maintenance, RDHS Colombo

Introduction

By optimizing the vehicle management system, we can provide gain a better operational view, can improve patient care, can eliminate inefficient vehicle use, can prevent vehicle misuse and related resources and can reduce downtime ^[1].

Being the capital of Sri Lanka, the Regional Director of Health Services (RDHS) Colombo has to cater for a large population to deliver healthcare services with their existing resources in a unique way while comparing other RDHS divisions in Sri Lanka. Quality Assurance (QA) in healthcare is to maintain high-quality healthcare services, through monitoring of its effectiveness [2].

An ineffective vehicle management system leads to rescheduled or missed appointments, delayed care, and missed or delayed medication use. These consequences may lead to poor health outcomes [3].

Type of Transport

In the RDHS office, there are various types of transport to carry out different types of functions.

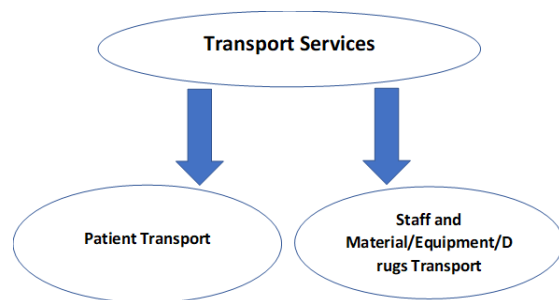


Figure 1: Transport Functions in RDHS office

Patient transfers between health facilities are carried out for many reasons. The risk is exponentially higher when ambulances transfer patients during the traffic comparing other districts.

Objective

To assess the existing system and challenges in vehicle operations and transport services in RDHS office Colombo

Methods

The information to assess the structure and function of existing vehicle operations and

transport services in RDHS office Colombo was gathered by interviewing key informants and desk review. Key informants were the Deputy RDHS, Administrative officer, Vehicle clerk/Development officer and a few Health Service drivers working in the RDHS office.

Based on the assessment problems were identified and prioritized. A nominal group technique was adopted for prioritization. A group of three Registrars of MD Medical Administration and three MOs attached to the RDHS office were asked to give their rating after brainstorming the scenario elicited from the assessment.

Situation analysis

The transport services can be divided into the availability of vehicles, manpower, infrastructure and maintenance & condemnation.

Availability of vehicles

There are altogether 33 ambulances and 98 other vehicles available at RDHS Colombo. The other vehicles are 30 Cabs, 09 Jeeps, 12 Vans, 19 three wheels, 07 Motor Bikes, 16 Lorries, 03 Crew cabs, 01 Bus and 01 Car. These vehicles are used to transport patients, staff, and drugs from institutions to other institutions to deliver healthcare services.

Manpower/Staffing

Out of 77 carders, there are only 61 drivers available. During the study period, the transport-related works have been overseen and coordinated by one development officer (DO). That officer was responsible for the overall transport-related management activities for all vehicles. DO was responsible for the deployment of

drivers' rosters and details of vehicles on requisition.

Infrastructure

It includes a Vehicle Park, workshop, and admin office.

Vehicle Park: There should be a designated parking area for the vehicles. The size depends on the number of vehicles. There should be a water supply and electrical points. The area must be properly secured. The cleaners must clean the vehicles daily. The in-charge transport must make sure that the vehicle is properly fuelled and greased and ready to take up at any time.

Workshop: There are two choices here considering vehicle repairs, depending on the size of your institution. Larger institutions may decide to carry out servicing and repair work at an in-house workshop, while smaller institutions may choose to outsource to vehicle specialists/authorized agents ^[4].

The transport service must have a maintenance workshop, having facilities for minor repairs. The minor repairs are to be done by trained mechanics or either by cleaners/drivers/minor staff who are trained on this matter. The workshop must have adequate light, a vehicle washing facility, welding, and cutting facilities and tyre changing facilities. Major repairs are to be done in an authorized workshop and currently, all repairs are done in authorized workshops in RDHS vehicles.

Maintenance and condemnation.

Maintenance: It includes daily maintenance, annual maintenance contract, minor repairs, Breakdown maintenance in an authorized garage, daily wash along with water and proper drainage system, daily

inspection of the vehicle and checking of equipment.

Condemnation: There should be a committee appointed by the Provincial Director of Health Services (PDHS) or RDHS. The committee will adhere to government guidelines for condemnation of vehicles. The Mechanic engineer will conduct a thorough inspection during condemnation of vehicles. Recommendations for condemnation of vehicles will be based on the technical report provided by the mechanical engineer.

Vehicle operations and Responsible officers

Responsible of supervisor/Development officer: Vehicle registration - Supervise each vehicle and maintain the original book, logbook date of procurement, warranty period, breakdown period, type of breakdown, cost of repair, mileage recording, daily running chart and oil filling)

Storekeeper duties: He/ She needs to keep records of spares used, logbook and store book should tally, oil consumption details, service record of the vehicle, mileage record, mileage average, and condemned parts record should be kept.

Drivers: Each driver is assigned to a minimum of one vehicle and it's his responsibility to maintain it clean and safe and keep it ready for transport. Drivers will undergo a 2-year internal rotation based on their seniority, experience and discipline to the new station.

Identification of the problem and underlying causes

Based on the assessment the following problems were identified.

I. Incomplete registration of vehicles and pending updates on tax, insurance etc.

There is less motivation among drivers to inform the vehicle subject clerk to do it in time. Frequent changing of subject clerk also led to less supervision of the vehicle documents to renew annually.

II. Vehicle maintenance-related issues.

Drivers are not supervised by responsible staff grade officers and subject clerks due to covid-19 pandemic. Drivers were also not motivated or not rotated internally during the pandemic infection period. Each vehicle needs to do periodic maintenance every 5000 km which was not happened in the majority of vehicles in the RDHS Colombo.

III. Vehicle Repairs and procurement-related issues.

The mandate repairs of vehicles had to be done according to the approved list of garages, due to the unavailability of workshops belonging to the Ministry of Health. This process is complicated as it needs to adhere to procurement guidelines when selecting eligible mechanical support from external resources.

There was another issue related to vehicle repair is that minor repairs were carried out by drivers without informing to administration authority. For major repairs, there is a delay in getting approval due to the financial authority vested with RDHS, PDHS and the health secretary.

IV. Vehicle accident-related issues

The inquiries following an accident of vehicles are not completed therefore is a delay in disciplinary action. The drivers

who are awaiting the results of the inquiry are allowed to drive due to a shortage of drivers. There is a rule that an ambulance can be given to a driver who has completed a minimum of 5 years in health service. However, this practice is not seen in RDHS Colombo due to the above reasons.

V. Audit Inquires.

Due to lapses in supervision and low motivation of drivers, there is a high number of accidents. This also leads to an increased number of audit queries. Currently, there are 33 audit inquiries related to vehicle issues which were not resolved in RDHS Colombo

VI. Lack of training and education for drivers and non-implemented disciplinary procedures.

Due to COVID-19, there are no training programmes planned during the study period. In addition, frequent changes in the Head of Institution and vehicle subject clerk hinder the supervision of drivers. Due to that, they were demotivated and less responsible for their designated work. Furthermore, there are no institutional policies or guidelines for periodic staff training.

Selected problem

Lack of training and education for drivers and non-implemented disciplinary procedures was selected as the problem for further analysis based on the weightage given by the members of the nominal group. It was given higher weightage due to the rising concerns about the health hazards following accidents and vehicle repairs. Many emphasize that the solution to this problem is due to a lack of training and education for drivers.

Root cause analysis

Why-Why diagram is used to analyse the root causes for the lack of training and education for drivers and non-implemented disciplinary procedures (Table 1).

Conclusion

RDHS office, Colombo currently, needs immediate attention and solutions to address issues related to the lack of training and education for drivers and non-implemented disciplinary procedures faced by the vehicle operations and transport services.

The root cause analysis revealed that frequent changes in the head of the institution and vehicle subject clerk lead to a lack of supervision of drivers and there are no institutional guidelines for periodic staff training.

Implementation plan

Immediate actions

- i. Prepare a skill inventory of the drivers to do maintenance
- ii. Train master trainers among drivers and utilize them to train other drivers on vehicle maintenance, safe driving, etc.
- iii. Frequent Capacity building programmes of drivers with the help of relevant technical people.
- iv. Ambulance drivers should not be assigned to other vehicles except for ambulances.
- v. Conduction periodic review meetings to monitor the vehicle operations, vehicle transport services and audit queries.

Long term actions

- i. Develop a term of reference on annual transfers of drivers for the ambulances and other vehicles based on vehicle

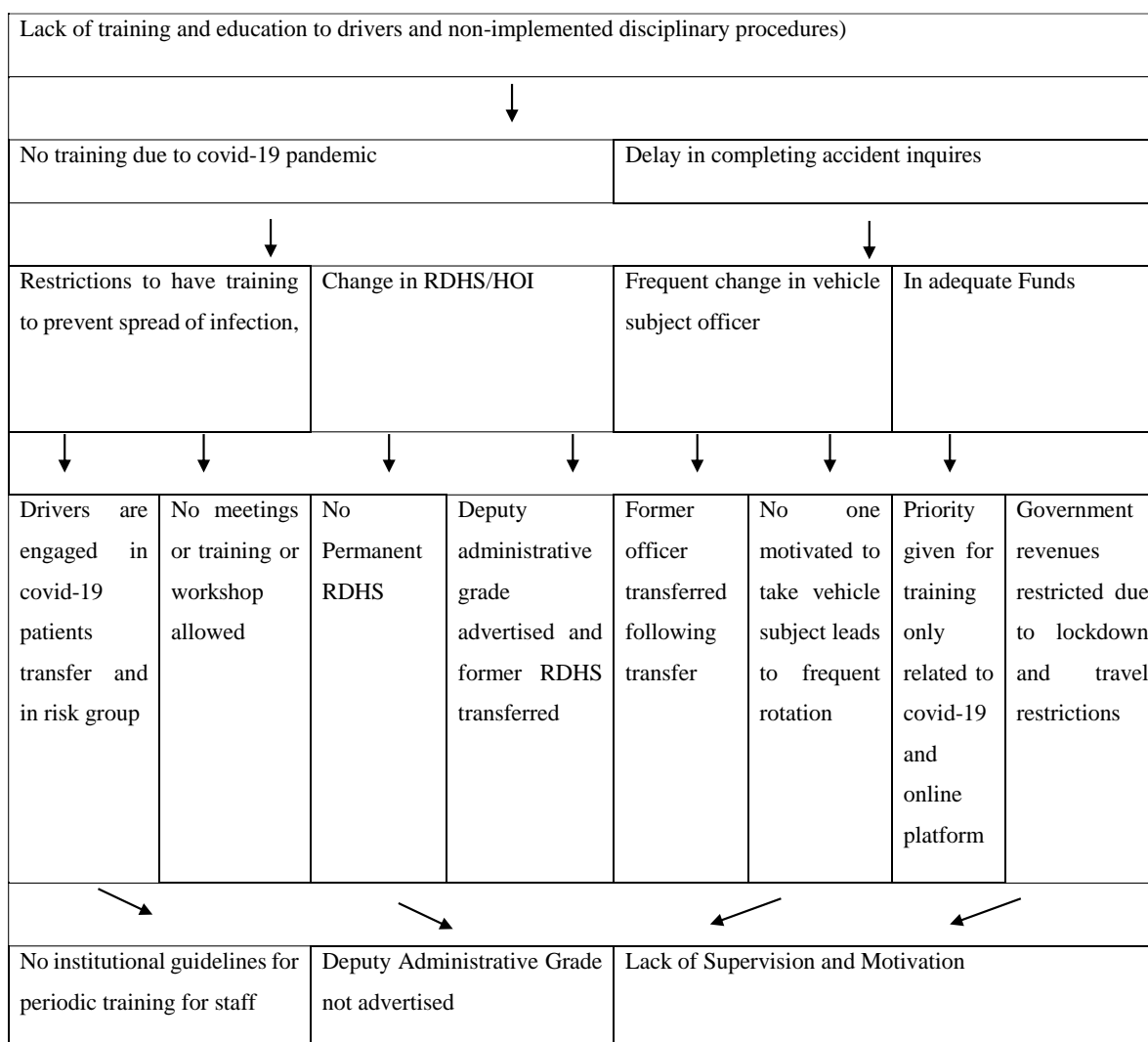
maintenance, accident history, discipline and seniority.

- ii. Conduct annual reviews of vehicle maintenance, accident and discipline procedures.
- iii. Periodic surveillance must be carried out to ensure vehicle registration, renewing tax and insurance, maintain logbook and repair summary, and maintenance and accident summary and ensure disciplinary process.

Recommendations

- I. Appoint an expert committee to prepare an institutional policy on vehicle maintenance and prepare SOPs for drivers to follow the policy, to maintain documents related to vehicle registration, renewing tax and insurance, maintain log book and repair summary, and maintenance and accident summary.
- II. A disciplinary committee should be formed to expedite the disciplinary procedure following accidents and vehicle maintenance.
- III. Needs regular capacity building sessions for drivers following the training need assessment.

Table 1: The root causes for Lack of training and education to drivers and non-implemented disciplinary procedures



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