



Developing a simplified model for safety management system in African transport companies

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Background

Road crashes represent a serious public health problem. Recent data shows that 1.35 million people die each year on the world's roads, and between 20 and 50 million people sustain non-fatal injuries (WHO, 2022). Low- and middle-income countries are the main locations for RS problems globally, standing for 93% of traffic fatalities, a share which is completely out of proportion if accounted for their populations and vehicle fleets (Academic Expert Group, 2020). Previous studies from the US and Europe indicate that traffic accidents account for between 20% and 40% of work-related accidents in industrial countries and employees driving at work seem to be more accident prone than other employees (ETSC, 2009; (Driscoll et al., 2005). We have no reason to believe that the situation is different in African countries.

Nævestad et al. (2022) estimates that up to 48% of deaths/serious injuries in accidents involving heavy goods vehicles can be avoided if more companies introduce safety management measures. Despite the potential, existing research shows that Norwegian and European transport companies have only to a limited extent introduced measures to increase road safety (Nævestad et al 2015). This is probably related to the size of the companies and the fact that the results of the measures, for example for safety and economy, are not well known (Nævestad et al. 2018). Based on this, Nævestad et al (2018) has developed a simplified evidence-based safety management strategy for small road transport companies, which is called the Safety Ladder for safety management. The Safety Ladder has been validated in empirical studies of safety culture, safety management and accident risk in Norwegian companies (Nævestad et al 2020) and it is adopted in the Norwegian action plan for road safety. The Safety Ladder is a simplified version of ISO:39001, involving a stepwise adoption of measures, based on economic and professional resources.

Aim

The aims of the present study are to adapt the Safety Ladder for safety management to the African context.

Method or methodological issues

The study is based on three methodological approaches. The first is a literature review of safety culture and safety management, safety challenges and framework conditions of African transport companies. The second is interviews with stakeholders in African transport companies. The third is a survey comparing safety management practices, safety culture and accident risk in transport companies in Norway and Ghana. The survey measures implementation of Safety Ladder practices. Analyses will compare relationships with organisational safety culture and accident risk, to signify the key safety management practices in African transport companies.