

Department of Public Health Sciences  
Division of Social Medicine  
Karolinska Institutet, Stockholm, Sweden

# **Workplace violence in the road passenger transport sector in Maputo City, Mozambique: Extent, causes, consequences and prevention**

AKADEMISK AVHANDLING

som för avläggande av medicine dokorsexamen vid Karolin Institutet  
Offentlien försvaras i Aulan, Plan 2 Norrbackahuset, Karolinska Institutet

Onsdagen den 1 juni, 2011 kl. 13.00

av

Maria Tereza Couto



## **Karolinska Institutet**

***Handledare:***

Professor Per Tillgren  
Karolinska Institutet

Docent Maja Söderbäck  
Mälardalens högskola, Västerås

Professor emeritus Leif Svanström  
Karolinska Institutet

**Fakultetsopponent:**

Docent Gunilla Kranz  
Institutionen för medicin, Enheten för  
socialmedicin, Göteborgs Universitet,  
Sahlgrenska Akademin

**Betygsnämnd:**

Professor Ragnar Andersson  
Karlstad Universitet

Docent Giorgio Grossi  
Stokholm Universitet, Stockholm

Docent Héléne Sandmark  
Mälardalens högskola, Västerås

## ABSTRACT

**Background:** Every year millions of workers around the world are victims of workplace violence (WPV). Globally, WPV is a major occupational health and safety hazard, and it has been regarded as a public health problem. There is no WPV preventive program specifically designed for low-income countries (LICs). WPV preventive intervention models usually come from high-income countries (HICs), and they may not be sustainable, feasible or effective in other settings. With regard to WPV, there is a need better to understand its extent, nature, risk factors, causes, consequences and means of prevention, especially in LICs. The overall aim of this thesis is to study WPV in the road passenger transport sector in Maputo City, Mozambique.

**Methods:** Four studies were conducted. In studies I-III the design was cross-sectional. A random sample of 504 participants was selected from a register of 2,618 transport workers in the road passenger transport sector. Data were collected using a structured questionnaire covering socio-demographic characteristics, access to information, literacy level, occupational experience, organizational changes, work environment, work conditions, health conditions, quality of life, and WPV and its consequences. Data were analyzed using Chi-square test, Student's t-test, linear logistic regression, and multivariate logistic regression. In Study IV the design was qualitative. Participants were purposefully selected among drivers and conductors identified in the quantitative investigation, reported in Study I, as victims of WPV, all with six or more years of experience in the road transport sector. Data were collected in semi-structured interviews. The open questions covered individual views on causes of WPV and suggestions for its prevention, based on the interviewees' experiences of WPV while on duty. Thirty-two transport workers were interviewed. The data were analyzed using qualitative content analysis.

**Results:** Study I showed a life-time prevalence of physical and or psychological WPV of 77.4%, and one of 64.3% over the past 12 months. Among road passenger transport workers, individual risk factors were illiteracy and long occupational experience. Work-related risk factors were high work demand, holding a supervisory position, and having the occupation of bus driver or conductor. Study II identified the consequences of WPV, which included sick leave 20.1%, physical injuries: mild 22.8% and severe 9.0%; financial loss 28.7%, and emotional reactions ranging 27.5% and 55.6%. Exposure to workplace violence was significantly associated with low quality of life. In Study III the prevalence of severe burnout was found to be 3.6%, and of mild burnout 30.1%. WPV was also significantly associated with burnout. Workers lacking social support following WPV showed a higher degree of burnout than co-workers who had received support after an episode of violence. In Study IV it was found that the triggers and causes of WPV included fare evasion, disputes over revenue due to owners, alcohol abuse, overcrowded vehicles, and unfair competition for passengers. There were failures to meet passenger expectations, e.g. the by-passing of bus stops, the shortening of bus routes, and displays of disrespect, e.g. transport workers being rude to passengers, and robberies. Proposals for prevention included the provision of formal, practical and moral education to workers, employers and members of the community. In addition to education, it was suggested that WPV could be prevented by control, e.g. the recording of vehicle mileage, and by conflict avoidance through managing specific situations and behaviors, and identifying particular passengers. Finally, there were proposals for a specific institution to adjudicate between workers and employers when revenue demanded was not handed over.

**Conclusions:** The thesis illustrates that WPV is a common phenomenon and occurs wherever workers are on duty. The studies reveal prevalence, risk factors, consequences, and views of drivers and conductors on causes and means of prevention in relation to WPV in the road passenger transport sector in Maputo City, Mozambique. Finally, a need was detected for development of a framework for WPV prevention program in the road passenger transport sector. Such a framework should include primary, secondary and tertiary preventive interventions at individual, organizational and community levels.

**Keywords:** Workplace violence, transport sector, bus driver, taxi driver, burnout, quality of life, workplace violence prevention.

