

Road Traffic Accident (RTA) and Injuries: Police Data Source and Their Potential for Monitoring trends and Risk Factors

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Introduction

- RTI results in 1.2M deaths 50M injuries annually worldwide (*WHO 2009*)
 - 50% among youth and young adults
- Mortality rate is higher in LIC than HIC
 - 20 VS 10.3 per 100000 (*WHO 2009*)
- Tanzania – increasing trend over time
 - In 1996 PSV accounted for 41% of RTI
 - In 2010 motor bike accounted for 37.2%

Police data system

- Main source of RTI and RTA information
 - Health system and Police force
- Police data source
 - Most widely used in Description of RTA and RTI
 - Has also used to describe possible causes of RTA
- Intervention targeting modifiable factors from RTA and RTI
 - Reliable secondary data source for evidence
 - Complementing data systems

The problem

- Observed increase in accident trend
 - Increase in related injuries
- Evidence needed for effective preventive interventions and control
- On-going effort in setting surveillance in health system
- Two systems are not integrated
- Need arises for understanding police data source

The aim

Explore police data sources and their potential for monitoring road traffic injuries trends and risk factors

1. To describe the police road traffic injury data system
2. To determine the usefulness of the police data in monitoring road traffic injury magnitude and trends

Study design and setting

- Qualitative method
 - Key informant interview
 - Review of system documents and tools
- Quantitative methods
 - Secondary data review
 - Review of accident reports
- Study site
 - National, Regional, District level
 - Coast region and its district – case study

Data collection

- System description
 - Enquiring for any system official document and review
 - Review of system operation and structure
 - Listing of stakeholders and their responsibilities
- System evaluation
 - Usefulness, Timeliness, Sensitivity,
 - Data completeness and coverage
 - Flexibility

General results

- A total of 25 Key informants were interviewed
 - 2 at national level, 1 Regional, 22 district level
- 4 out of 6 district visited in regional level
 - 5 police posts visited
- Summary report for 2002 to 2012 reviewed (national)
- 2012 summary reviewed at Regional level
- 46 randomly selected accident reports reviewed

System Operations

- No formal established system and operation
- System operates traditionally with verbal orders
 - No system operational manual/document
- ***“There is no any formal system that exist, the data collection with the police has been done in a traditional way with all the structure and functional directions been given and passed over verbally”*** Injury FP – National level

Stakeholders

- Governmental and Non governmental Stakeholders
 - Tanzania National Road (TANROADS)
 - Surface and Marine Transportation Regulatory Authority body
 - Institutes of Transportation, Vocational Education
 - Insurance Companies, Bureau of standards
 - Bus owners association, Private companies and FBO

Data Management

- No available tool for primary accident data collection
 - Report prepared in plain papers, format known
- Formal Tool for Summary preparation – PF212
- Data storage and Transfer – Paper based
 - National level – Electronic form
- Analysis and reporting frequency – Monthly
 - Number of accident, injuries, deaths, vehicle type and victim type

Data storage at regional level

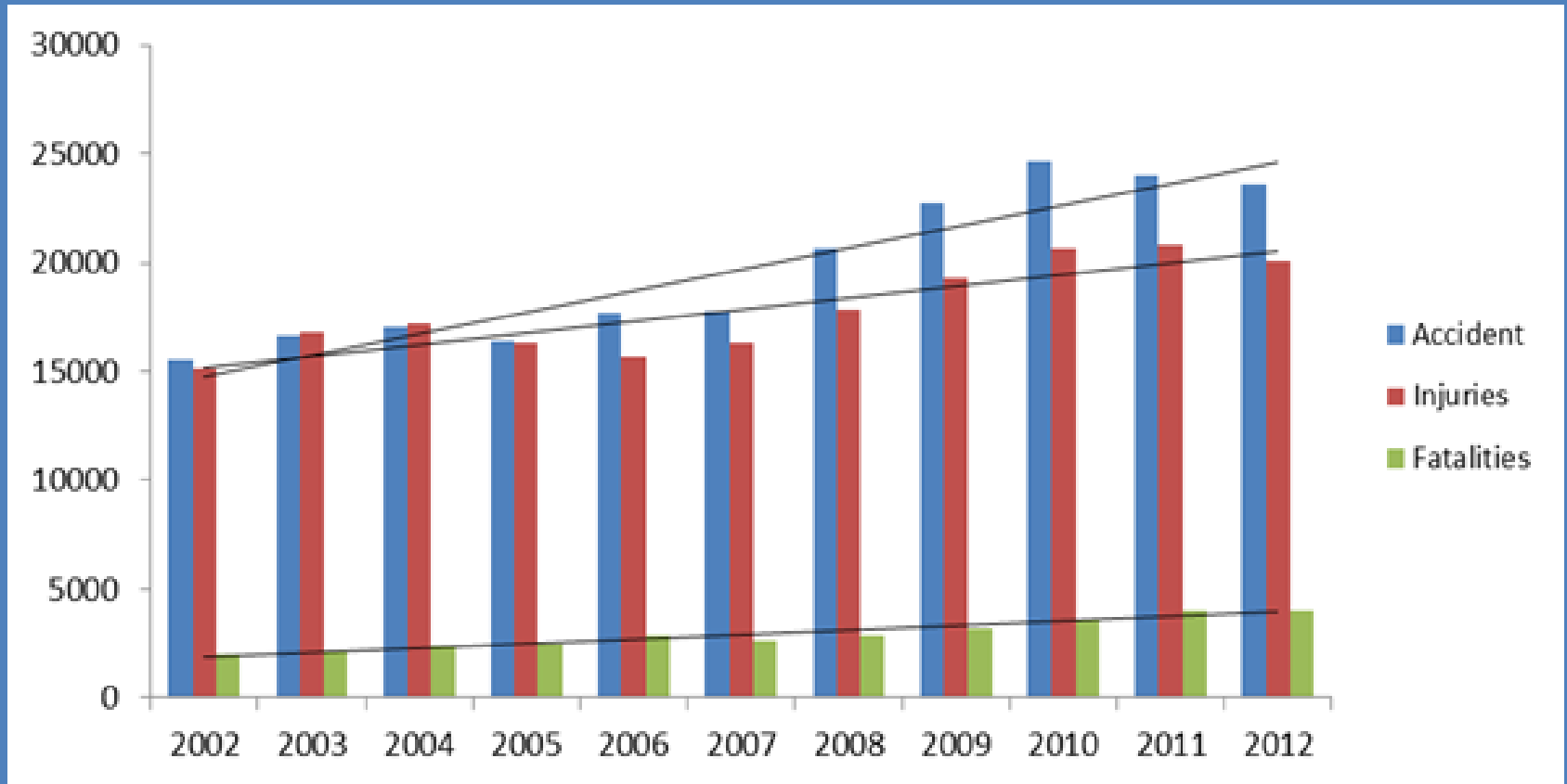


System resources

District	Police station	Motor Vehicle inspectors		Accident Investigative officers	
		Available number	Ideal number	Available number	Ideal number
Mkuranga	Mkuranga	1	3	5	5
Kisarawe	Kisarawe	0	2	5	5
Kibaha	Kibaha	3	3	2	5
Bagamoyo	Chalinze	1	5	5	5
Bagamoyo	Bagamoyo	1	3	4	4
TOTAL		6	16	21	24

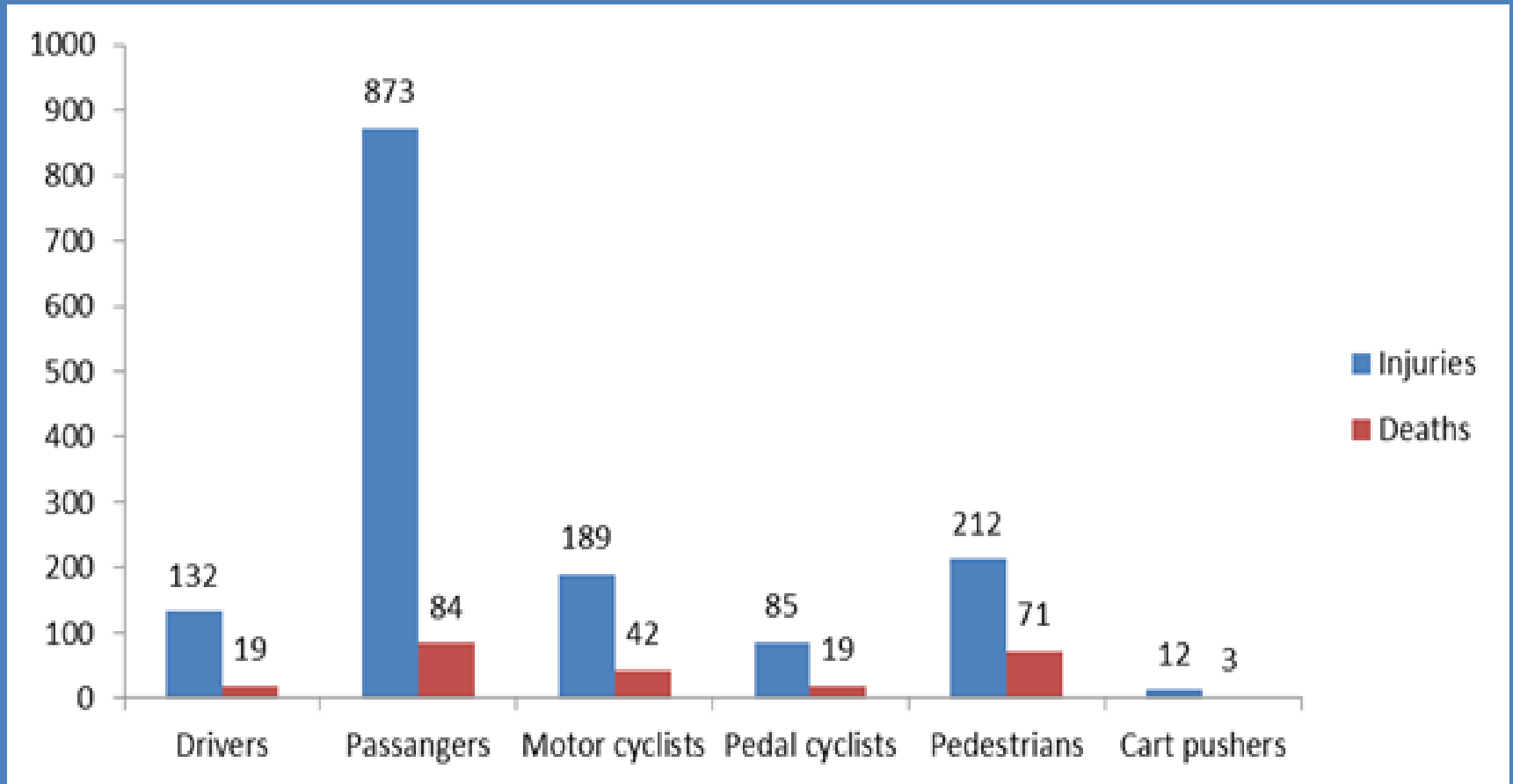
- No financial plan at all level of the system
- Inconsistent supply of consumables e.g. stationaries

Usefulness - Trend



- Increasing trend over time for past 10 years

Usefulness – Risk



- Passangers most vulnerable road users

Timeliness

- All reports (46/46) had dates for accident and report preparation
- 84% had time for scene and report preparation
 - Mean time between scene and report 2 hours
 - Range 0 hours to 5 days
- No recording system for dates report received at next level

Completeness and Coverage

- 43 out of 46 (93.5%) had all essential variables filled
- Missing variable- Medical information and possible cause of accident
- At national level – All regions reported in 2012
- At Regional level – all district reported in 2012

Sensitivity and Flexibility

- Sensitivity
 - Not evaluated due to difficult establishing comparison system
- Flexibility
 - Couldn't find a documented change to variables collected
 - Room for changes is available

CONCLUSION

- Police data source is potential for trend and risk establishment
 - Variables with wide range of information
 - Wide coverage and complete data at all level
- System has functioning structure with some operational challenges
 - Lack of system operational manual and inadequate operational resources

RECOMMENDATION

- Develop a system description manual
- System guidelines and SOP's
- Build capacity of the system in data management
 - Improve the data storage and reporting from paper to electronic
 - Formal data collection tool
 - Personnel training on basic statistics
- Ensure usage of information by active involvement of stakeholders

Thank you for your attention