



Partnership in Development Research

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Data base on Road Accidents in Cairo Ambulance Department

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Introduction and Research problem:

Cairo Ambulance Department is one of the vital facilities that lack proper documentation. Large amounts of data are recorded in the department primitively, which makes it difficult to put it into statistical use. On the other hand, if this data is handled properly, we can learn vital information that can be used to modernize and develop the facility. Officials can be notified of the places where accidents tend to take place more and of reasons behind the accidents in order to take the appropriate decisions.

This study seeks to establish an ambulance data base for road accidents in order to update the ambulance information system. Data will be collected on types of casualties and their degree as well as how soon the accident was reported after it took place.

Objectives:

- Devise a computer-based information system for road accidents, using currently registered data and introducing other modifications.
- Analyze the data statistically
- Present a report including the statistical analysis to decision makers in the ministry of health and other competent ministries to implement the recommendations of the study in Cairo and possibly in other governorates.

Methodology:

The study was conducted in all 85 branches of ambulance departments in Cairo governorate in addition to the main control room in the ambulance main premises. Information was collected on the different aspects of road accidents that need to be examined such as the date and time of the accident, the reporting entity, where the

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accident took place, description of the accident, response to the reporting, information on the ambulance car that performed the service and information on the casualties. A numbered form with a code was designed and classified in accordance to the data required to be collected. It is entitled the Road Accidents Data Form.

Findings:

First: Findings of the data base

- An adequate number of ambulance workers were trained on the technique of data collection
- All individuals who provide ambulance service were made aware of the new additional information to be collected such as the time it took to get to the hospital, the brand of the colliding car, degree of casualty, the response of the public and assistance offered to the victims.
- A code- book was prepared for the data on road accidents.
- A user- friendly program was prepared to enter and store data on the computer
- The Principal Investigator is ready to offer technical assistance should the ministry of health decide to endorse it.

Second: Findings of the statistical analysis of data collected in April, May and June 2004:

Information on dates and times of accidents: Data of the three months showed great similarity. Most accidents took place on Thursday (16.4%); less accidents took place between 2 and 7 am and more accidents tend to take place other times of the day.

- Reporting entity: 54% of the reporting is done by the public; 73% use cellular phones and 59% report the accidents using the 123 line. (emergency headquarters).
- 50% of the accidents take place in the eastern parts of Cairo. Maadi and Nozha are among the neighborhoods where more accidents tend to take place (12% and 10% respectively). Cairo Ismailia desert road has the highest percentage of road accidents (32%).
- Description of the accident: Cars hitting people is the most common kind of accidents particularly on highways, except for tunnels.
- Response to accidents: on average it takes 5.68 minutes to get to the location of the accident after reporting.
- Ambulance vehicles performing the service: 19% of the vehicles are affiliated to the Intensive Care Units.

-Casualties: the age group 21 to 25 is the most common (22%); males constitute 82%; bruises on different parts of the body are common (19%); the most common public reaction is gathering in the accident place and trying to move the victims particularly those who have lost consciousness.

Recommendations:

- Urge officials to use the advanced data collection technique and storing data in order to analyze it and enhance the performance level of the ambulance department.
- Expand the system by collecting information on other types of ambulance service.
- Upgrade the technical capacity of ambulance workers by increasing the number of training session.
- Increase preparedness especially during official holidays when accidents tend to take place more frequently.
- Increase the number of service cars on the Maadi, Nozha, Helwan line where accidents tend to happen most frequently.
- Keep the Free Emergency Service on cellular phones.
- Raise awareness on TV on how to deal with victims of road accidents until the arrival of ambulance cars.

About the Author

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About the Program

The Egyptian Partnership in Development Research Program aims to inform development policies and strategies by linking those who conduct research with those who can utilize its findings to promote development in local communities. It promotes a research agenda which is responsive to the needs and priorities of local communities. The program is characterized by a multi-disciplinary, demand-driven, and participatory approach. The program began in Egypt in 1999. The program is directed by an Advisory Board of prominent members who are concerned with development issues.

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