



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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MONA MAGHRABY



A Study on Cases of Road Traffic Accidents (RTA) Referred to Ain Shams University Hospitals during Two Years (2017, 2018) Period: do Biomechanics Laws Help in Forensic Investigation of Injuries and Deaths?

Thesis

*Submitted for Partial Fulfillment of the Master's Degree
in Forensic Medicine and Clinical Toxicology*

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2021



وَقُلْ رَبِّ زِدْنِي عِلْمًا

طه: ١١٤

And Say: My Lord,
Increase me in
knowledge.

Quran 20:114

Acknowledgments

*First and foremost, I feel always indebted to **Allah** the Most Beneficent and Merciful.*

Words cannot express my deep gratitude and sincere appreciation for:

***Prof. Dr. Assem Hassan Abdel-Rahim Badawy.** professor of forensic medicine and clinical toxicology, faculty of medicine-Ain Shams University, for his continued guidance and an endless supply of fascinating ideas. His unassuming approach to research and science is a source of inspiration. This approach is reflected in his writing style, which is something I hope to carry forward throughout my career. I am so grateful and lucky to be under his supervision throughout this journey. Thanks for your patience, guidance, and support. I have benefited greatly from your wealth of knowledge and meticulous editing.*

***Dr. Rania Moustafa Hadhoud.** Lecturer of forensic medicine and clinical toxicology, Faculty of Medicine – Ain Shams University. I would like to express my great thanks for the attention she gave to this work from the very beginning to the very end of it. Her invaluable comments and remarks were of utmost importance to me. Her patience, enthusiasm, co-operations and suggestions made me present this research work*

to be produced in the present form. This research work would not have been possible without her stimulation, inspiration, and cooperation.

I also would like to thank all my respected teachers in the department of forensic and clinical toxicology and all the other members of the department. My friends who directly and indirectly provide me with inspiration and valuable suggestions during the course of this study.

I am grateful to my parents, whose constant love and support keeps me motivated and confident. My accomplishments and success are because they believed in me. Deepest thanks to my siblings for their unfailing support and continuous encouragement.

Finally, I owe my deepest gratitude to my husband. I am forever thankful for the unconditional love and support throughout the entire thesis process and every day.

Radwa Badr Hassan

Abstract

Background: Egypt loses about 12,000 persons every year because of road traffic accidents with mortality rate of 42 deaths per 100 000 populations. Little less than half (48%) of them are four-wheelers passengers and the fifth (20%) are pedestrians. The world health organization estimated that 50 million people are injured, and the worldwide annual road traffic deaths was 1.2 million and continues to rise steadily, reaching 1.35 million in 2016. **Aim:** This study aimed at determination of pattern and status of Road traffic accidents (RTA) injuries and deaths on an Egyptian sample. **Methods:** This is a retrospective study on cases of RTA admitted to the Emergency Department of Ain Shams University Hospitals during a two-year period starting from the first of January 2017 till the end of December 2018. **Results:** In the years 2017 and 2018, 1282 RTA patients were admitted to Ain Shams University Hospitals. The highest proportion of cases was from 20 - <30 years. Pedestrians were the most common victims. Almost all cases had the suitable radiological investigation according to the mode of injury, and 46.9% of the cases were presented with lower limb injuries. Most of the patients were treated surgically, and 42.1% of the cases stayed 6 days and more. Head injuries were the main cause of death. **Conclusion:** RTAs are a considerable problem threatening population safety. Most of Victims were males, in the productive age and pedestrians. Head injury is the most frequent cause of death. **Recommendation:** Nationally accepted, well-coordinated safety education programs are one of the fundamental steps leading to limiting the problem that costs huge mortalities, morbidities, and property damage.

Key words

RTAs, Egyptian sample, Medicolegal assessment.

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List of Abbreviations

Abb.	Full term
BAC	Blood Alcohol Content
BoS	Base of support
CAPMAS	Central Agency for Public Mobilization and Statistics
CoG	Centre of gravity
CT- scan	Computed Tomography scan
EU	European Union
FAST	Focused abdominal sonogram for trauma
GH	Golden hour'
HC	Human Capital
IPA	Injury pattern analysis
MPH	Miles per hour
NHTS	National Highway Traffic Safety Administration
OOP	Out of pocket
REC	Research Ethics Committee
ROM	Range of motion
RTA	Road traffic accidents
RTIs	Road Traffic Injuries
SSRIs	Selective serotonin reuptake inhibitors
WTP	Willingness to Pay