

THE EPIDEMIOLOGY OF
ROAD TRAFFIC ACCIDENTS IN JORDAN

THESIS

SUBMITTED IN PARTIAL FULFILMENT FOR
THE DEGREE OF MASTER IN
" EPIDEMIOLOGY "

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
”وَقُلْ رَبِّ زِدْنِي عِلْمًا“
صَدَقَ اللَّهُ الْعَظِيمُ



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ABBREVIATION

R.T.A(s)	:	Road Traffic Accident(s).
Acc.	:	Accident.
Pop.	:	Population.
ECE	:	Economic Commission for Europe.
WHO	:	World Health Organization.
ICD	:	International Classification of Disease.
ACOG	:	American College of Obstetricians and Gynecologists .
J.D.	:	Jordanian Dinar.
Veh.	:	Vehicle
V.	:	Vehicle
Δ	;	Increase
Ped.	:	Pedestrian.
Obj.	:	Object.
Anim.	:	Animal
Occup.	:	Occupant.

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Introduction

INTRODUCTION

Accidents in general are very important causes of morbidity, mortality, and disability. Traffic accidents form a great proportion of accidents, and are considered a major cause of a serious economic loss to the community, in addition to numerous family tragedies.

The problem of traffic accidents on a large scale, has arisen for the first time in the present century. All other epidemics throughout history has been due to the onslaught of agencies external to men, principally the protozoa, bacteria, and viruses, but traffic accidents are caused by man himself.

The increase in traffic accidents and their resulting casualties is now considered a world-wide epidemic, but most developing countries are still not giving the problem the full attention.

Hobbs, (1974) stated that road traffic accidents cause 10 million casualties a year throughout the world, and a quarter of a million deaths. These figures may continue for more than 10 years.

Thus while medical science has conquered the ravages of many diseases, accidents have become a new epidemic

of a public health importance, calling for equal effort for control and prevention. Since traffic accidents are a preventable disease, and their resulting fatalities and injuries are avoidable health sequelae amenable to control measures.

World health Organization, (1985) stated that, accidents in general and traffic accidents in special, are important causes of death and disability, especially between productive young males in most of the countries, including Jordan leading to a large social and economic effort on these developing countries.

Compared with many other countries, including those in the Middle-East, Jordan has a serious road accident problem. The deaths due to road traffic accidents per 10,000 registered vehicles in Jordan was 100 in 1971, while in U.S.A. and U.K. in the year 1970, were 4.8 and 3.5 respectively. On the other hand, the rate in Tunisia, India, and Ethiopia for the year 1971 were 45, 42, and 207 respectively (**Ministry of Interior, Jordan, 1986**).

In Jordan, in 1962 road accidents ranked eleventh in importance, and accounted for only 1.3 percent of recorded deaths. In 1973 road accidents were the seventh most important cause of death, and accounted for 4.2

percent of all deaths recorded. In 1979 road accidents were the fourth most important cause of death, and caused over 5 percent of all deaths recorded. **(Ministry of Transport, Jordan, 1983).**

In Jordan, 1981 road traffic accidents were the fifth most important cause of death for all age groups, but by excluding young and elderly, road traffic accidents became the second most important cause of death for the age group 5-65 years, and came behind diseases of the circulatory system. This may compared to the situation in European countries where road accidents are the single most important cause of death for male adults between the ages of 18 to 40 years. **(Jordan Society for the prevention of R.T.As, 1985).**

Comparison were made of changes in death rates from categories of illness, disease, and from road accidents over the 17 years period from 1962-1980. Death rates from infectious and intestinal diseases decreased by over 90 percent. At the same time there was an upward trend in road accident fatality rates particularly during 1972 to 1980. Deaths per 10,000 pop. from road accidents increased by almost 60 percent between 1962 and 1980 see Fig.(1) **(Jacobs, 1982).**

In conclusion, R.T.As. in Jordan seems to be a public health problem, as it becomes worse from year to year, however, the size of the problem is not well defined. This stimulated the present study in order to find out the principal epidemiological feature of traffic accidents in Jordan, with a view of gauging the size of the problem and find^{ing} out suitable recommendations as to how the risks involved can be reduced.

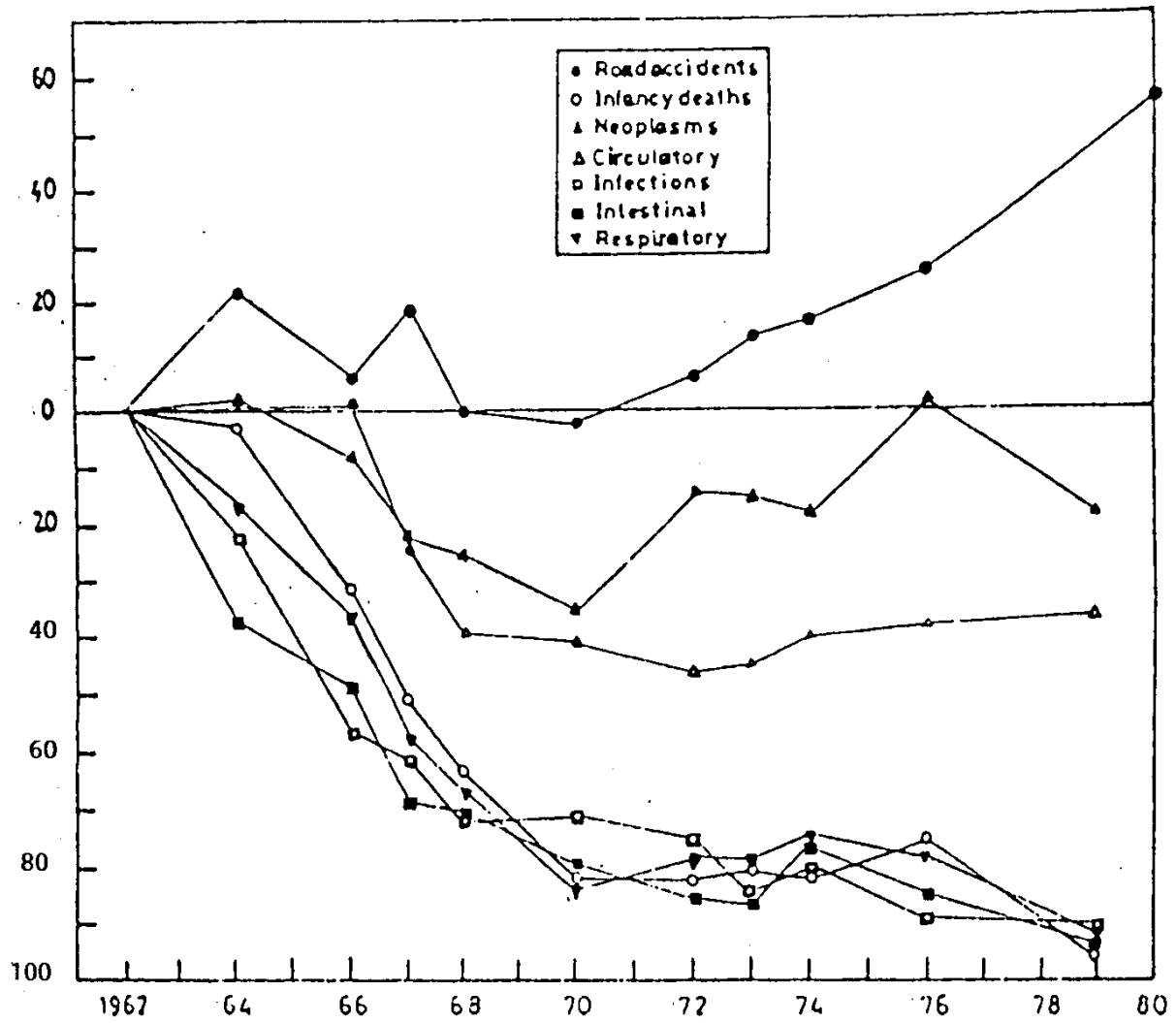


Fig. (1): Causes of death in Jordan 1962 to 1979 percentage of change over base year 1962.

OBJECTIVES OF THE STUDY

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Immediate Objectives

To find out the principal epidemiological features of traffic accidents in Jordan in term of agent, host, and environmental factors with a view of gauging the size of the problem.

Ultimate Objectives

1. To provide base line data for future evaluation of preventive measures.
2. To use international rates, to ascertain comparison of Jordan to other countries.
3. To offer specific recommendations, as to how the risks involved in traffic accidents in Jordan, can be reduced.

Review of Literature