EPIDEMIOLOGY OF TRAFFIC ACCIDENTS IN TEHERAN* II. AGENT: THE FAULTY DRIVERS

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ABSTRACT

Of the 5,655 accidents with casualty that had occurred during 1973 in Teheran, 4,936 or 87.3% were caused by the negligence on the part of the drivers. The most accident producing drivers were middle-aged men of 30–39 years, who had recently acquired driving permit and were wage earners as drivers in the city of Teheran. Alcohol intoxication as the cause of the accident had been recorded in only 0.12% of the cases. These and other results have been discussed.

INTRODUCTION

It is universally accepted that drivers are the most important element in causing an accident (1, 2). A study in Delhi in 1970 (3) showed that the fault of the motor driver has accounted for 96% of the road accidents. In our previous paper (4), we could show that 87.3% of the 5,655 accidents with casualty which had occurred in Teheran in 1973 were caused by negligence on the part of the drivers.

This paper aims to show the characteristics of such drivers.

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MATERIAL AND METHOD

Material and methods are described elsewhere (4). No attempt has been made to verify the judgement made by traffic police on the guilt or innocence of the accused.

RESULTS

Altogether, 4,936 drivers were identified as guilty in the accidents, of whom 95% were male and 78.53% had less than four years of driving experience. About 30% of the faulty drivers had drivers licence permitting them to operate private cars only which is the simplest driving permit available. About two thirds of the faulty drivers and 52.78% of the cars involved in the accidents have been private cars. The age distribution of the faulty drivers, and the immediate cause of the accidents are shown in Tables 1 and 2.

DISCUSSION

Although many factors are responsible for the occurrence of an accident, the drivers' role is of prime importance since they hold the potentially lethal instruments in their hands. Unfortunately, the data presented here suffers from two important shortcomings: 1) the incompleteness which in certain instances like the occupation and the driving experience scores over 70%, and 2) the lack of a precise denominator. The main reason for such incompleteness is the lack of scientific approach on the part of the people responsible for traffic and the control and prevention of road accidents. It seems that the important thing to them is the identification of the immediate cause and the guilty individual who is often the driver. Nevertheless, with the present data, a general picture could be identified.

The age distribution peaks at 30-39 years age group (Table 1). Such finding is not in agreement with other reports (1, 4, 5, 6) which assigns the bulk of accidents to the young drivers under 25. This information along with those of the driving experience of less than four years, the type of driving permit, and the stated occupation of the drivers at fault, may be a reflection of the socio-economic and cultural situation of Iran in the light of the recent extraordinary

economic boom. However, the most dangerous drivers in Teheran in 1973 were middle aged men who had recently acquired a driving permit and had chosen driving as their occupation.

The list of the most immediate causes of accidents (Table 2) is a sad testimony to the lack of discipline among the drivers. A very interesting and significant observation in this table is the very small number of accidents due to alcohol intoxication, which is considered as a highly important factor by many authors (7, 8, 9). It should be mentioned that the traffic police of Iran is not yet equipped with breathalyzers or other instruments to determine the blood alcohol level of the drivers and such accusations are usually made in cases of gross and well developed intoxications. Thus, there is good reason to expect that such figures are underestimates. However, since the time distribution of the accidents peaks at about 11 a.m.(4) it seems very unlikely that alcohol intoxication might have played a major role. We feel confident in assuming that the traffic accidents in the city of Teheran during 1973 have been mainly the result of crowdedness and the drivers' negligence. Other unpublished domestic evidence supports this assumption, and thus one could safely state that the road accidents in the city of Teheran are mainly due to the lack of discipline and law enforcement.

Table 1

Age Distribution of the Faulty Drivers in Traffic Accidents
Teheran, 1973

Age	Number	% total	% known
Under 17 18–19 20–24 25–29 30–39 40–49 50 and over Unknown	29 32 325 374 603 312 114 3,147	.59 .65 - 6.58 - 7.58 12.22 6.32 2.31 63.76	1.62 1.79 18.17 20.91 33.71 17.44 6.37
Total	4,936	100.0	100.0

Table 2
Distribution of the Faulty Drivers in Traffic Accidents
by the Cause of Collision
Teheran, 1973*

Cause	Number	Per Cent
Failure to give right of way to another car	1,429	28,95
Unauthorized turn	1,073	21,74
Negligence	839	17.00
Improper distance	371	7.52
Failure to give right of way to pedestrian	236	4.78
Failure to observe traffic lights	233	4.72
Unauthorized entry	157	3.18
Speeding	148	3.00
Neglecting stop sign	84	1.7
Mechanical fault	74	1.5
Passing	26	0.53
Driving while intoxicated by alcohol	6	0.12
Disobeying traffic police	5	0.1
Parking in no parking place	1	0.02
Others	254	5.15
Total	4,936	100.00

^{*} As determined by the traffic police.

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