THE GLOBAL BURDEN OF DISEASE

a review of

The Global Burden of Disease: a comprehensive assessment of mortality and disability from diseases, injuries , and risk factors in 1990 and projected to 2020.

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One of the aims of the study was to develop "comprehensive internally consistent estimates of how many people died of each major cause in 1990 worldwide". Deaths were classified into:

- Group I: Communicable, maternal, perinatal and nutritional conditions;
- Group II: Noncommunicable diseases; and
- Group III: Injuries.

A total of 107 individual causes of death were included in the analysis. Road crashes obviously fall within group 3 above. The project then developed a demographic data set which included information on population size and the distribution of deaths for each region. To estimate the number of deaths by cause, various sets of data were used.

The study found that, in 1990, one death in 10 was from Group III causes.

Table 2 in the report (shown below) shows the ten leading causes of death for 1990.

	Developed Regions				**Developing Regions**		
		Deaths (000s)	Cumulative %			Deaths (000s)	Cumulative %
	All causes	10912			All causes	39554	
1	Ischaemic Heart disease	2695	24.7	1	Lower respiratory infections	3915	9.9
2	Cerebrovascular disease	1427	37.8	2	Ischaemic Heart Disease	3565	18.9
3	Trachea, bronchus and lung cancer	523	42.6	3	Cerebrovascular disease	2954	26.4
4	Lower respiratory infections	385	46.1	4	Diarrhoeal diseases	2940	33.8
5	Chronic obstructive pulmonary disease	324	49.1	5	Conditions arising during the perinatal period	2361	38.7
6	Colon and rectum cancers	277	51.6	6	Tuberculosis	1922	43.4
7	Stomach cancer	241	53.8	7	Chronic obstructive pulmonary disease	1887	46.1
8	Road traffic accidents	222	55.8	8	Measles	1058	48.7
9	Self-inflicted injuries	193	57.6	9	Malaria	856	50.9
10	Diabetes mellitus	176	59.2	10	Road traffic accidents	777	52.8

According to the report, “Worldwide in 1990, about 5 million people died of injuries of all types, two-thirds of them men. Most of these deaths are heavily concentrated among young adults. In this age-group, road traffic accidents, suicide, war, fire and violence all figured within the ten leading causes of death.

Among 15 - 44 year olds, road traffic accidents were found to be the leading cause of death for men and fifth most important for women.

Some of the data presented in the report are in terms of the years of life lost. This allows public health researchers to identify those causes that account for premature death. Injuries mainly affect the younger element of society, so, for example, road traffic accidents may account for a greater percentage of years of life lost than they do for percent of total deaths.

The global burden of disease report is important as it firmly establishes road traffic accidents as a health problem, especially in terms of years of life lost. The report states that for men aged 15 - 44, road traffic accidents are the biggest cause of ill-health and premature death worldwide, and the second biggest in the developing regions, surpassed only by depression”. The authors also suggest that “the high toll of road traffic accidents in developing regions has received little attention from public health specialists in the past”.

In making projections for 2020, the researchers used a set of models. They suggest that “because of the growth of the adult fraction of the population, the burdens of several important types of injury are also likely to increase”. They expect road traffic accidents to rise accordingly and could rise to third place from ninth worldwide (in terms of lost years of life).

The Global Burden of Disease is available from:

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