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# Family Practice Forum

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## A Major Role for Family Medicine in the 1980s

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It is interesting to look at the 12 most common causes of death in the United States<sup>1</sup> (Table 1) and to speculate as to what new developments in medicine in the 1980s might reasonably be expected to have a significant impact on them. There are several observations that one can make from this table. If one goes as far down as the 12th ranked cause of death, ie, emphysema, there is no other single cause of death that accounts for as much as one percent of total deaths. It is also noteworthy that the top 12 causes comprise 85.7 percent of total deaths.

Let us now look individually at each of the causes of death. Certainly, myocardial infarction is the major cause of death in the diseases of the heart category. Deaths from myocardial infarction are already decreasing due probably to a number of factors, including early diagnosis and treatment of myocardial infarction, cardiac monitoring, dietary changes, increase in exercise, and coronary bypass surgery. It seems rather unlikely that new medications or surgical techniques will have much more of an impact on mortality from this disease in the next decade. There is a huge behavioral component in heart disease related to such factors as smoking, dietary habits, and exercise. It would seem that any significant effect on the mortality

rate from this disease is going to depend on a large scale alteration of lifestyles.

Deaths from cancer constitute 19.3 percent of total deaths. Cancer of the lung is already the most common cause of death from cancer in men and is expected to exceed cancer of the breast as the most common cause of death from cancer in women by 1983. It is exceedingly doubtful if any significant reduction in death from lung cancer is going to take place in the next decade by the development of new medications, diagnostic techniques, or surgical techniques. Cessation of smoking by large numbers of people would be much more likely to have significant impact on the mortality from this disease. It is also probable that greater attention to environmental and occupational exposures will have some impact on cancer deaths in the next decade.

The underlying causes of death from cerebrovascular disease are similar to those for diseases of the heart. Additionally, a reduction in hypertension should have a significant effect on death from cerebrovascular accidents. This is going to require even more extensive hypertension identification programs and, even more importantly, better patient compliance with respect to diet and drug therapy. Again, it would seem that changes in lifestyle and greater patient compliance are going to be major factors in the reduction of mortality from this disease. Currently available medications are very effective in lowering the mortality from hypertension, and it is rather doubtful that better medications will be a significant factor in further lowering the mortality

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**Table 1. Mortality for Leading Causes of Death: United States, 1975<sup>2</sup>**

| Rank | Cause of Death          | Number of Deaths | Death Rate Per 100,000 Population | Percent of Total Deaths |
|------|-------------------------|------------------|-----------------------------------|-------------------------|
|      | All Causes              | 1,892,879        | 888.9                             | 100.0                   |
| 1.   | Diseases of heart       | 716,215          | 336.2                             | 37.8                    |
| 2.   | Cancer                  | 365,693          | 171.7                             | 19.3                    |
| 3.   | Cerebrovascular disease | 194,038          | 91.1                              | 10.3                    |
| 4.   | Accidents               | 103,030          | 48.4                              | 5.4                     |
| 5.   | Influenza and pneumonia | 55,664           | 26.1                              | 2.9                     |
| 6.   | Diabetes mellitus       | 35,230           | 16.5                              | 1.9                     |
| 7.   | Cirrhosis of liver      | 31,623           | 14.8                              | 1.7                     |
| 8.   | Arteriosclerosis        | 28,887           | 13.6                              | 1.5                     |
| 9.   | Suicide                 | 27,063           | 12.7                              | 1.4                     |
| 10.  | Diseases of infancy     | 26,616           | 12.5                              | 1.4                     |
| 11.  | Homicide                | 21,310           | 10.0                              | 1.1                     |
| 12.  | Emphysema               | 18,795           | 8.8                               | 1.0                     |
| 13.  | Congenital anomalies    | 13,245           | 6.2                               | 0.7                     |
| 14.  | Nephritis and nephrosis | 8,072            | 3.8                               | 0.4                     |
| 15.  | Ulcers                  | 6,743            | 3.2                               | 0.4                     |
|      | Others and ill-defined  | 240,655          | 113.3                             | 12.8                    |

rate. Although effective in isolated cases, it is also unlikely that carotid artery bypass will have any appreciable effect on mortality.

Accidents are the fourth most common cause of death in the United States. A large proportion of these accidents are caused by automobiles and in particular by drunken drivers. Many other types of accidents are caused by carelessness. We need to educate our patients not to drink when they are going to drive. Changes in human behavior are the changes most likely to have any appreciable effect on death from accidents. In this connection, how many of us ask our patients if they routinely wear seat belts?

Influenza and pneumonia account for 2.9 percent of total deaths in the United States. Most of these deaths are in the older population. Concomitant chronic diseases are common in this age group. The principal effect that physicians can have on death from these diseases is by having their patients at risk receive influenza and pneumococcal vaccines.

Diabetes mellitus is the sixth most common cause of death in the United States. Current evidence would indicate that the cause of diabetes is

multifactorial. However, it is an observed fact that obese individuals are more likely to develop diabetes than individuals of normal weight. Still unsettled is the question of the relationship between control of the blood sugar and the incidence of complications from diabetes. However, patient education and a change in behavior are the main elements that will probably have any effect on the mortality rate from this disease in the next decade. It is exceedingly unlikely that medications or surgical procedures will have any significant effect on the mortality rate from diabetes.

Cirrhosis of the liver is caused almost exclusively by alcoholism. A reduction in alcoholism is the only thing that is going to reduce the mortality from this disease, which is largely behaviorally induced.

Arteriosclerosis is the eighth most common cause of death. It is becoming increasingly obvious that diet plays a significant role in this disease as does hypertension. Again, it is changes in lifestyle that will have any appreciable effect on this disease. It is difficult to conceive of new medications in the next decade having much of an impact on arteriosclerosis.

Suicide is obviously a behavioral problem. We need to find ways of identifying the suicidal patient earlier. Prevention will be the mainstay in combating this disease, although antidepressants are certainly a valuable therapeutic tool. Public and patient education would seem to be fruitful areas in which to concentrate our efforts in the future.

The tenth most common cause of death is disease of infancy. One would suspect that better immunization programs and earlier identification and treatment of disease would be the major factors in reducing mortality in this category.

Homicide is responsible for 1.1 percent of total deaths in the United States. The root cause of much of this mortality is societal in origin. One would suspect that there is relatively little impact that the medical profession alone is going to have on this serious problem.

The last cause of death in the top 12 causes is pulmonary emphysema. The vast majority of patients suffering from emphysema are responsible themselves for their disease by virtue of cigarette smoking. Physicians should be more active in getting their patients to stop smoking.

In summary, it seems obvious that if we, as health professionals, are going to have any impact on the major causes of mortality in our patients in the future, we are going to have to become much more involved in patient education and attempts to change the lifestyles of our patients. Medical education currently and in the past has been devoted almost exclusively to the diagnosis and treatment of disease. As family physicians we should be in the forefront in helping to educate our patients to live healthier, more productive, and longer lives. In order to accomplish this we will need to develop better methods for bringing about changes in lifestyles and human behavior.

#### References

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