Preface

A community health needs assessment is a method of bringing together primary and secondary data related to the health of a community to create a more realistic picture of the health status of the residents of that community. Community health needs assessments can be superficial or they can by very comprehensive and take many months and tens of thousands of dollars to complete. The more thorough the health needs assessment the more accurate is the picture created of the health status of the residents. The more thorough the health needs assessment the more useful the information will be for establishing health priorities to improve the health problems in the community. Thus, this needs assessment has expended considerable time and resources to provide the best picture possible on the health issues affecting Allen County residents.

Leading Types of Death Versus Actual Causes of Death

The number of deaths in the United States increases each year, primarily due to population growth and the increasing age of the population. Government and health agencies track changes in death rates by examining changes in the "Leading Types of Deaths," that is the technique used in this needs assessment. Identifying the "Leading Types of Death" is a method of identifying the final pathological trauma (outcomes) from which Americans died (Table 1). However, these are not the "actual causes of death" (the major external modifiable factors that were actually the underlying insults to the body) that resulted in the premature mortality of Americans from the various types of death (Table 2).

Table 1
Leading Types of Death in the United States

Rank	Type of Death	No. of Deaths	Percent
1.	Heart disease	710,760	29.6 %
2.	Cancers	553,091	23.0 %
3.	Stroke (CVD)	167,661	7.0 %
4.	Chronic lower respiratory tract disease	122,009	5.1 %
5.	Unintentional injuries	97,900	4.1 %
6.	Diabetes mellitus	69,301	2.9 %
7.	Influenza and pneumonia	65,313	2.7 %
8.	Alzheimer disease	49,558	2.1 %
9.	Nephritis, nephritic syndrome, and Nephrosis	37,251	1.5 %
10.	Septicemia	31,224	1.3 %

Source: Mokdad AH, Marks JS, Stroup DF, & Gerberding JL. Actual causes of death in the United States, 2000. Journal of the American Medical Association 2004; 291:1238-1245.

Table 2 indicates that the "actual causes of death" are usually behaviors in which Americans engage in when they shouldn't, or do not engage in other behaviors when they should.

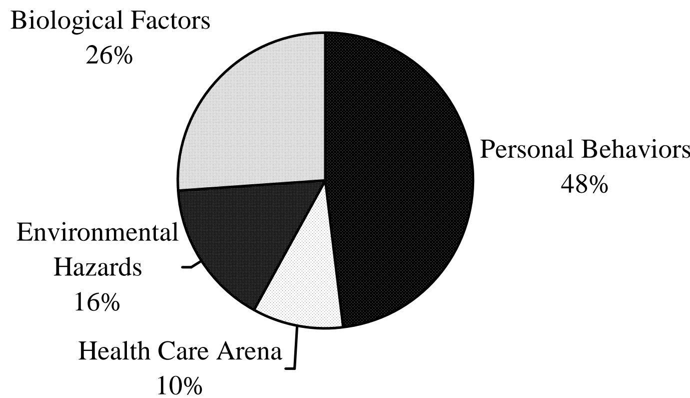
Preface

Table 2
Actual Causes of Death in the United States

Rank	Actual Cause	No. of Deaths	Percent
1.	Tobacco	435,000	18.1
2.	Poor Diet and Physical Inactivity	365,000	15.2
3.	Alcohol Consumption	85,000	3.5
4.	Microbial Agents	75,000	3.1
5.	Toxic Agents	55,000	2.3
6.	Motor Vehicle	43,000	1.8
7.	Firearms	29,000	1.2
8.	Sexual Behavior	20,000	0.8
9.	Illicit Drug Use	17,000	0.7

Source: Mokdad AH, Marks JS, Stroup DF, & Gerberding JL. Actual causes of death in the United States, 2000. Journal of the American Medical Association 2004; 291:1238-1245.

Figure 1 – Risks To Good Health



Source: LaLonde, M. A New Perspective on the Health of Canadians: A Working Document. 1974.

In other words, Figure 1 indicates that the leading causes of premature loss of life in America are due to personal behaviors which cause chronic diseases and injuries, not because of inadequate numbers of medical specialists or hospitals. The major chronic disease killers are heart disease, lung and breast cancer, strokes, chronic lung disease, diabetes, and chronic liver disease. Injuries would include both unintentional ones (also called accidents) and intentional ones (suicides and homicides). These forms of death are caused primarily by personal behaviors, induced in part by environmental factors (social, educational and economic).

The modern epidemics in America today are not going to be “cured” by high-tech medicine. Using unintentional injuries as an example, “when state-of-the-art ambulance systems and specialized trauma emergency rooms are put in place to get patients high-tech

Preface

medical care as quickly as possible, the number of injury deaths drops by only 8 percent..." In other words, even with the best care available, better than 90% of critically injured patients can not be saved!

Figure 1 indicates that changing the unhealthy behaviors of Americans is the most beneficial way of reducing premature mortality. In fact, Table 2 indicates that about 37% of US deaths are attributable to 4 behaviors: smoking, poor diet, physical inactivity, and alcohol use. For example, weight loss and exercise can reduce the progression of diabetes by 50%. Other examples of life-saving behaviors would include:

- About 20% of adults smoke, and one-third of smokers will die prematurely due to their smoking. Smoking cessation is beneficial at any age, yet only 28% of smokers are assisted by their physicians to quit smoking. If 90% of smokers were assisted to help quit then 42,000 fewer smokers would die each year. In contrast, if smokers continue to smoke and they develop lung cancer, 8 of 9 will die from their cancer, surgery and cancer treatments are of little benefit.
- Although aspirin is cheap and easily accessible, only about 40% of adults take aspirin daily or every other day. Encouraging age appropriate adults to take low-dose aspirin daily would lower the risk of heart disease. If 90% of adults took low-dose aspirin daily it would reduce the number of cardiovascular deaths by 45,000 a year.
- Fewer than 50% of adults are up to date with recommended colorectal cancer screenings. If we increased to 90% the portion of adults age 50 and older who were up to date with the recommended frequency of colorectal cancer screening we could save 14,000 lives each year.
- Between 5% and 20% of Americans get influenza each year. Most people will recover in less than 2 weeks, but more than 200,000 will need to be admitted to a hospital for treatment as a result of the flu and 36,000 people die annually from the flu. A little less than 40% of adults age 50 and older get vaccinated against influenza. If the vaccination rate for adults for influenza was increased to 90% 12,000 additional lives would be saved each year.

The Consequences of Misplaced Health Priorities

To maximize the health of citizens of a community, health professionals should pursue interventions in proportion to the ability of those interventions to improve the health of the community. A health intervention that is more effective than its alternative should receive more attention and resources, all else being equal. Inadequate decision making in establishing priorities can indirectly claim lives, contribute to the burden of disease in a community, and generate greater health care costs that would not occur if health intervention priorities were appropriately established for the community.

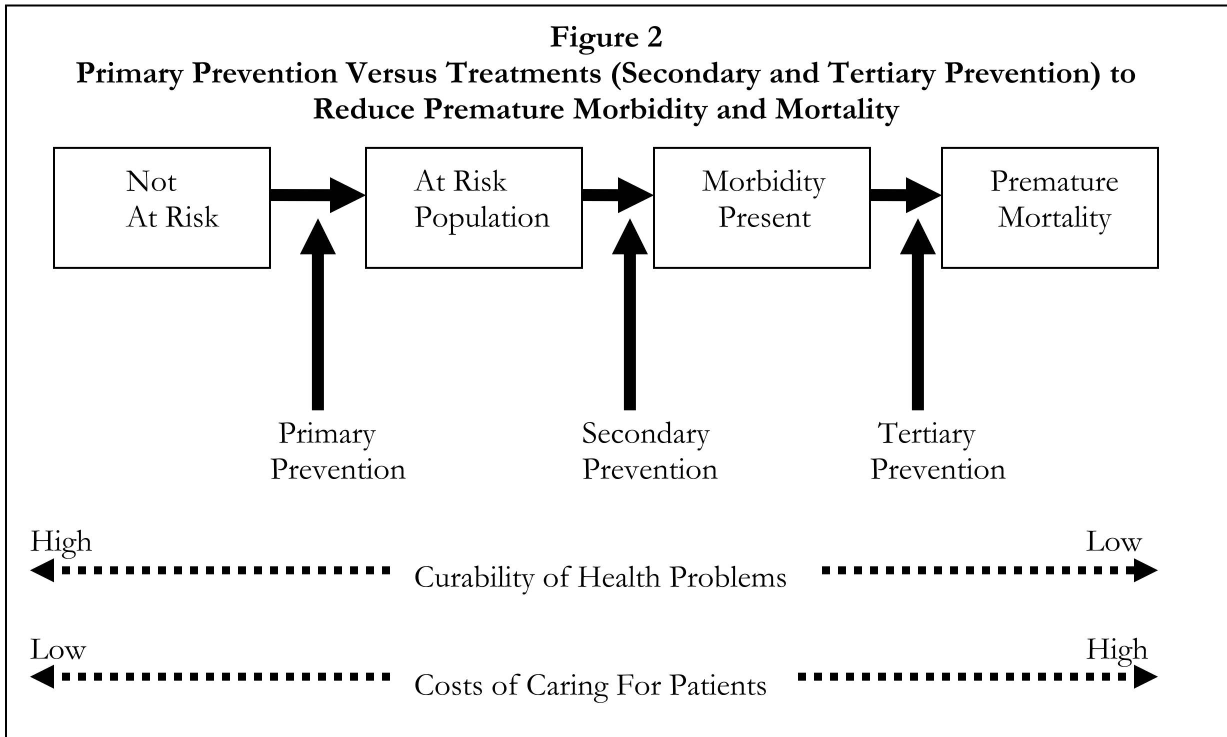
The effectiveness of available options for helping Americans live longer and have a better quality of life are often underappreciated. As an example, regular smoking cessation counseling would save America an estimated 1.3 million quality-adjusted life years (QALYs), whereas increased breast cancer screening would save an estimated 91,000 QALYs. A community that ignores these differences and provides few resources for smoking cessation and concentrates its resources on mammography screening can expect to reduce breast cancer deaths but ultimately more community members may die, primarily from smoking-related diseases. The point is that both interventions should be pursued, but giving

Preface

community resources in proportion to the benefit to be derived from each intervention would maximize the number of lives saved and will more likely reduce health care costs.

Primary prevention of a disease is more effective than treating the complications of a disease (secondary or tertiary prevention) (Figure 2).

Figure 2
Primary Prevention Versus Treatments (Secondary and Tertiary Prevention) to Reduce Premature Morbidity and Mortality



Unfortunately, the current health care enterprise concentrates the vast majority of its resources on late-stage disease. It has been estimated that only 2% to 3% of health spending goes to primary prevention. Unfortunately, society tends to under appreciate primary prevention through reduction of risk factors (unhealthy habits) and creating a health literate society. The propensity for spending resources on treatments but comparatively little on primary prevention plays a major role in why the United States was ranked by the World Health Organization 37th in health care systems out of 191 nations.

Identifying the threats to community health is but the first step in improving the health of the community. The more difficult step will be for wise strategists to establish a successful series of interventions in the face of competing agendas by a wide variety of agencies with self-interests.

James H. Price, PhD, MPH, FAAHB, FAAHE
Professor of Health Education
University of Toledo