EM8910: Toronto Star, July 20, 1989, page A3

Aspirin cuts heart attack risk by half in healthy men over 50, study shows

BOSTON (AP-Reuter) – Healthy men over age 50 appear to cut their risk of heart attacks in half if they take an Aspirin every other day, although there is no clear evidence that younger men are helped, a study concludes.

A preliminary version of the research was widely publicized a year and a half ago when it found a dramatic reduction in heart attacks among regular Aspirin users.

Now, a more detailed analysis of that voluminous research data suggests that the benefits of Aspirin are most noticeable in older men, who are also at highest risk of heart trouble.

The research, called the Physicians' Health Study, was directed by Dr. Charles Hennekens of Brigham and Women's Hospital in Boston and published in the current issue of *The New England Journal of Medicine*.

Over-all, the study found that men who took a single Aspirin every other day had a 44 per cent reduction in their risk of heart attacks. However, the benefits were limited to those over age 50, who cut their risk about in half.

"We have a clear-cut, conclusive benefit on reducing a first heart attack," said Hennekens.

He said people should not start taking regular Aspirin unless they consult first with a doctor or other health professional. In helping make a decision, doctors should consider a patient's other risk factors, such as blood pressure, cholesterol level and family history of heart disease.

Aspirin – the common name for acetylsalicylic acid or ASA – works by making the blood less likely to clot. Heart attacks usually occur when clots form in the coronary arteries, choking off the heart's blood supply.

In Canada, Aspirin is a trademark of Sterling Drugs Ltd.

Heart disease

In an accompanying editorial, Dr. Valentin Fuster and others from Mount Sinai Medical Center in New York wrote that "Aspirin appears to be beneficial in the prevention of a first myocardial infarction (heart attack), at least in men over the age of 50, and it has its largest effect in those with uncontrolled risk factors.

"Given the available data, it now seems reasonable to advocate the use of Aspirin in a dose of 160 to 325 milligrams a day" in patients with clinical symptoms of heart disease, the three doctors said in the editorial.

Among other findings:

☐ Aspirin users were slightly more likely to have strokes, but the number was too small to be statistically meaningful;

☐ There was no over-all decrease in cardiovascular deaths among those taking Aspirin, but the study would have had to continue to the year 2000 or beyond to show any impact on mortality;

☐ The benefits of Aspirin appeared to be greatest among those with low cholesterol levels – below 160.

The study, sponsored by the U.S. National Institutes of Health, involved 22,071 male doctors who took 325 milligrams of Bufferin ASA, supplied by Bristol-Myers Co., or a placebo, every other day.

The doctors were given packs of pills and randomly assigned to take Aspirin, beta carotene or the placebo, a neutral substance.

The final results include a detailed analysis of all physicians until Jan. 25, 1988, when doctors were informed whether they had been assigned to the Aspirin or placebo group.

After an average follow-up time of five years, the study said that heart attacks among physicians taking aspirin was 44 per cent lower than those taking the placebo, slightly lower than the 47 per cent reduction in risk reported last year in the preliminary report.

The two groups had virtually identical rates of gastrointestinal upsets and ulcers, both of which are frequently associated with higher rates of Aspirin use.

The article EM8910 reprinted above is used in Figure 9.18 of the STAT 220 Course Materials and in Figure 10.2 of the STAT 231 Course Materials.