Researcher says press misrepresented aspirin study

Dangers of daily aspirin ignored by drug makers, media

TALLAHASSEE, Fla. — A major medical study on the use of aspirin to prevent heart disease was reported inaccurately by the national press, a Florida State University (FSU) researcher has found.

"The possible implications of the manner in which the five largest newspapers reported the study are such that individuals may have started taking aspirin regularly to prevent heart attacks, a practice which can lead to serious health consequences such as strokes," said researcher Fred Molitor, who holds a Ph.D. in communication from FSU.

"Not all the blame for the inaccurate portrayal of the aspirin study should be placed on journalists," Molitor said. His research highlights the particular difficulty for reporters when presenting highly technical science news on deadline and suggests ways in which medical journals could be more helpful to journalists.

On Jan. 28, 1988, The New England Journal of Medicine published the preliminary results from a controlled experiment finding that male physicians who took aspirin had half the number of heart attacks as a group that didn't take it.

Aspirins not recommended

Because of limitations in methodology and because those taking the aspirin suffered more strokes, the *Journal* editor and the report's authors concluded that the public should not start taking aspirin to prevent heart disease.

But Molitor's detailed study, published in *Health Communication* shows that's not what was reported by the nation's five largest newspapers — and not the message conveyed by the 10 aspirin companies who quickly began advertising campaigns based on the news.

Molitor catalogued errors of omission, sensationalism and generalization in news stories carried in the five newspapers in 1988 with a circulation of more than 1 million: The Wall Street Journal, USA Today, New York Daily News, Los Angeles Times and The New York Times. He found that:

- Those papers omitted important information about male physicians who were excluded from the study those who'd had a stroke, heart attack or cancer or who already were taking aspirin, or who couldn't tolerate it.
- Reporters left out that the study participants were a highly select population they were not typical of the average American doctor, much less the average American male. For example, 29% of American men smoked but only 11% of the study participants smoked.

Two newspapers omitted the finding that more strokes occurred in the treatment group. Only two news stories warned readers of the consequences associated with aspirin use, such as strokes and gastrointestinal discomfort and bleeding. None of the five newspapers mentioned a similar experiment reported in the *Journal* article in which British doctors found aspirin had no effect on heart attacks but did increase strokes.

Press distorted study results

Most importantly, the newspapers generalized that the findings could be applied to their readers even though the *Journal* report actually said the results "do not demonstrate the value and safety of aspirin in the general population."

For example, USA Today generalized the results to apply to "most men," "some women," "healthy people" and "most healthy middle-aged men," Molitor said. The front-page headline said: "Aspirin halves your risk of heart attack."

Because aspirin is inexpensive and readily available, many Americans may not have bothered to seek professional advice, Molitor said. Though some did consult their physicians, many medical doctors may have prescribed the drug based solely on the media's accounts, he said.

Other researchers have found some media reports on cancer, herpes and AIDS to be misrepresented, Molitor said, but those topics are covered frequently enough that missteps are corrected. The results of the aspirin study, however, were a one-time major news event.

Molitor contends that the *Journal*, as the source of the information, was ultimately responsible for what was communicated to the public. It was clear, for example, that aspirin companies had been preparing for release of the study for some time.

Ads drowned out truth

"The advertisements certainly would not have contained information that the FDA would later consider detrimental to the public's health," he said, "if the scientists required that they have some say in the ad copy before they released the findings to the aspirin makers."

At the time of the original report, U.S. News and World Report had its own theory about why the true story never made headlines. "Within days of the release of the first heart-attack study... cautionary flags were raised," the magazine reported in its April 18, 1988 issue. "If people embraced aspirin too enthusiastically, might its risks outweigh benefits for many of them?... But that message seemed to be drowned out by a national ad campaign, kicked off by aspirin makers the day after the study came out, which shouted the benefits of the drug to those at risk for heart attacks."