



CVD Programmes Reduce Deaths Over 40-Year Period



A 40-year experiment targeting cardiovascular factors, conducted in a rural Maine county, demonstrated significant reductions in hospitalisation and death rates, according to a new study.

The study, published in the *Journal of the American Medical Association*, shows that changes in smoking, cholesterol control and other behaviours lead to an accumulative decrease in hospital treatment and death.

In the late 1960s, local community groups in Franklin County, Maine, saw an epidemic of cardiovascular problems affecting their community, and set prevention of those problems as a priority. With help from a community action agency, a non-profit medical practice, and the Franklin County hospital, Franklin County established the community-wide Franklin Cardiovascular Health Program (FCHP) in 1974. The programmes targeted hypertension, cholesterol, and smoking, as well as diet and physical activity.

Researchers studied the effects of the programmes from 1970 to 2010, and compiled decades of research into a single database. The current analysis included residents of Franklin County (in 1970, it had a population of 22,444), used the preceding decade as a baseline, and compared Franklin County with other counties and state averages.

The results were astounding.

In its first 4 years, FCHP screened nearly half of all adults in the county. Individuals with hypertension showed significant movement from detection to treatment and blood pressure control; the proportion in control increased from 18.3 percent to 43.0 percent from 1975 to 1978.

When the programmes introduced cholesterol screening in 1986, FCHP was able to reach 40 percent of county adults within 5 years, half of whom had elevated cholesterols. Over subsequent decades, cholesterol control had an absolute increase of 28.5 percent, from 0.4 percent to 28.9 percent, from 1986 to 2010.

After initiation of community anti-smoking projects, quitting rates improved from 48.5 percent to 69.5 percent, significantly higher than the rest of the state, until Maine's overall quit rate later increased.

Between 1994 and 2006, Franklin County hospitalisation costs were less than expected. Franklin County saved \$5,450,362 in total hospital charges for residents, per year.

Best of all, after being above the state mortality rate average in the 1960s, Franklin County rates sunk below the state average for almost all of 1970 to 2010.

Lead researchers Darwin Labarthe and Jeremiah Stamler, of the Northwestern University Feinberg School of Medicine in Chicago, were pleased with the findings.

"The experience in Franklin County suggests that community health improvement programmes may be both feasible and effective," the authors wrote. "This may be especially true in socio-economically disadvantaged communities where the needs are the greatest, as the increasing association of lower household income with higher mortality in Maine suggests.

"Further studies are needed to assess the generalisability of such programmes to other U.S. county populations, especially rural ones, and to other parts of the world."

The complete report and findings were published in the 13 January issue of JAMA.

Source: [JAMA](#)

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