Does a Program that Focuses on Lifestyle Changes Reduce Heart Disease Risk Factors in a Rural Community in Appalachian Kentucky?

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What was the research about?
The risk of heart disease in rural Appalachian Kentucky is among the highest in the country. Risk factors for heart disease include having high blood pressure, eating unhealthy foods, being overweight, not exercising, smoking, and feeling depressed. Many people here have more than one risk factor. The chance of developing heart disease is higher in this part of the country, in part because many people don't know much about these risks. They also have limited access to health care.

This study compared two ways to help people reduce their risk of heart disease. All people in the study got referrals to doctors they could see regularly. Half of the people also went to small-group classes taught by trained health workers from the community. The classes focused on healthy choices that people can make to reduce their risk for heart disease. The research team wanted to learn whether providing these classes was better at helping people reduce their risk for heart disease than only referring people to a doctor.

What were the results?
People who went to classes and got a referral to a doctor reduced their risk for heart disease more than people who got only a referral to a doctor. Those who went to classes had greater reductions in

- Blood pressure
- Cholesterol
- Weight
- Smoking
- Feelings of depression
- Overall risk of heart disease

Attending group classes didn't change people's reports on their quality of life.

In both groups, satisfaction with health care increased from the start to the end of the year-long study.

Who was in the study?
The study included 352 men and women who were at least 21 years old. The people in the study lived in rural Appalachian Kentucky. They didn't see a doctor regularly before the study. They had more than one of the following risk factors for heart disease: high blood pressure, high cholesterol, type 2 diabetes, overweight or obesity, depression, and not enough exercise.

What did the research team do?
The team assigned people to one of two groups by chance. The team referred people in both groups to doctors to get advice for reducing their chances of
developing heart disease. One group also attended six classes taught by trained health workers from their community. Health workers talked about eating a healthy diet, getting more exercise, reducing stress, quitting smoking, and managing other health problems.

At the start of the study and again 4 and 12 months later, people filled out surveys. The surveys asked about people's quality of life, their overall risk for developing heart disease, and their satisfaction with their health care. The team also looked at peoples' health records for blood pressure levels, cholesterol levels, weight, reports of depression, amount of exercise, and smoking status. The team compared the results from the two groups.

Community members, business owners, church leaders, and healthcare providers from Appalachian Kentucky helped plan the study. This group also helped find people to join the study.

What were the limits of the study?
The research team followed people in the study for only one year. People may have returned to unhealthy lifestyles after the study was over. The study included only people who were at risk for heart disease in rural Appalachian Kentucky. Results may vary in other areas.

Future research could follow people for more than one year. Studies could also look at offering classes taught by trained health workers in other rural and low-income communities.

How can people use the results?
Communities in rural areas may consider having trained health workers from the community provide health classes like those used in this study to help people reduce their risk of heart disease.

To learn more about this project, visit www.pcori.org/Moser101.