Can a Chronic Disease Diagnosis Motivate Healthy Lifestyle Changes?

According to the U.S. Census, an estimated 80% of adults 65 and older have at least one chronic disease, and about half have at least two. Some of the most common chronic diseases include diabetes, heart disease, cancer, lung disease, and stroke. These conditions can lead to disabilities which may impact people’s ability to live, work, and participate independently in their communities. People can reduce the impact of these chronic diseases by engaging in healthy behaviors as they age. These healthy behaviors can include exercising regularly, avoiding smoking and excessive drinking, and getting cholesterol and cancer screening tests to catch problems early. In a recent NIDILRR-funded study, a researcher looked at the effect of a new chronic disease diagnosis on health behaviors among middle-aged and older adults. The researcher wanted to see whether being diagnosed with a chronic disease might motivate people to improve their health behavior.

Under a fellowship from the NIDILRR-funded Northwestern University Advanced Rehabilitation Research Training (ARRT) program, the researcher looked at data from the U.S. Health and Retirement Study, a national survey of adults 50 years and older that tracks the participants’ health. The survey has collected data from participants since 1992. This study used a sample of data collected between 1996 and 2010. The study sample included 11,439 participants who were 50-80 years old and had no chronic diseases at the beginning of the study. The participants were interviewed once every two years and were asked if they had been diagnosed with diabetes, heart disease, cancer, lung disease, or stroke. The participants also answered questions about their health behaviors. They were asked about any unhealthy behaviors, such as whether or not they smoked or consumed too much alcohol (having more than one drink per day on average for women, having more than two drinks per day on average for men, or ever having more than three drinks in one day during the past three months). They were also asked whether they engaged in healthy behaviors such as vigorous exercise at least three times per week, and preventive healthcare like getting a flu shot, cholesterol test, prostate exam, or mammogram during the past two years. For participants who developed a chronic disease during the study period, the researcher looked at how many people changed their behavior within the two-year period after the diagnosis happened. The researcher looked for the changes that were beyond the natural behavior changes seen in people who did not report a chronic disease.

During the 14 years that this study covered, about 21% of the participants developed heart disease, 15% developed diabetes, 14% developed cancer, 9% developed lung disease, and 8% had a stroke. The participants who developed a chronic disease showed several improvements in their health behaviors.
• Quitting smoking: Participants were less likely to smoke cigarettes after being diagnosed with any of the diseases. The biggest change was seen for those who had lung disease: 40% of participants who developed lung disease were smokers before their diagnosis, but only 27% continued to smoke after the diagnosis.

• Cutting down on alcohol: Participants were more likely to decrease excessive drinking after being diagnosed with any of the diseases. For example, 13% of participants who developed a stroke engaged in excessive drinking before the diagnosis, but only 8% did after the diagnosis.

• Getting more preventive care: The participants who were diagnosed with diabetes, heart disease, cancer, or lung disease were more likely to get flu shots after being diagnosed than before their diagnosis. However, the participants who were diagnosed with stroke were no more likely to get a flu shot after receiving their diagnosis. The participants diagnosed with any of the diseases were more likely to get a cholesterol test after their diagnosis than they were before diagnosis, especially those with diabetes (89% after vs. 74% before) or heart disease (90% after vs. 76% before). Men were more likely to get a prostate exam after a diabetes diagnosis (78%) than before (70%), and more likely after a cancer diagnosis (81%) than before (70%). Women diagnosed with cancer were more likely to get a mammogram after the diagnosis (79%) than before (73%).

Some of the participants engaged in less healthy behavior after receiving their diagnoses. Specifically, the participants who had a stroke or were diagnosed with lung disease during the study period were less likely to engage in vigorous exercise on a regular basis after their diagnosis than before.

The author noted that being diagnosed with a chronic disease can present a “teachable moment” that may motivate people to improve their health behaviors and reduce the impact of disability. A chronic disease diagnosis may be a powerful reminder of one’s vulnerability and the value of promoting good health by avoiding substance use and getting preventive healthcare. However, a chronic disease diagnosis did not lead to increased exercising in this study. Further, the participants who were diagnosed with stroke or lung disease reduced their exercise behavior. People with some chronic diseases may have difficulties exercising due to new physical disabilities or fears of hurting themselves. Exercise programs customized to the needs of people with physical disabilities and health conditions may benefit these individuals.

According to the author, health promotion interventions may be especially effective for people who have just been diagnosed with a chronic disease. These individuals may be more motivated and willing to improve their health behavior to reduce the impact of their new disease or disability. Doctors may want to work with patients soon after they are diagnosed with a chronic disease to help them assess their risks and develop personalized wellness plans. Future research may be useful in determining whether existing health promotion programs are especially effective for
people who have just been diagnosed with a chronic disease, or to develop new programs for people with chronic diseases and disabilities.

To Learn More
The Rehabilitation Research and Training Center on Psychiatric Disabilities and Co-Occurring Disorders developed a decision aid which can help individuals and their care providers choose the right quitting aid: http://www.cmhsrp.uic.edu/download/Cess-Med-Flow-Sheet-Sept%202011.pdf

Living Well with a Disability is an evidence-based and field-tested curriculum to help people with disabilities and chronic conditions to make positive changes and maintain their health long-term. http://livingandworkingwell.ruralinstitute.umt.edu/living-well-program/

The Temple University Collaborative has two 8-week programs to increase physical activity: One using the community to increase physical activity and the other on adding recreation to your coping toolbox. These and more are available at http://tucollaborative.org/community-inclusion/resources/recreation-and-leisure-resources/

The Chronic Disease Self-Management Program was developed at Stanford University and is available through agencies and organizations across the US, as well as online: http://patienteducation.stanford.edu/organ/cdsites.html

To Learn More About this Study:

Research In Focus is a publication of the National Rehabilitation Information Center (NARIC), a library and information center focusing on disability and rehabilitation research, with a special focus on the research funded by NIDILRR. NARIC provides information, referral, and document delivery on a wide range of disability and rehabilitation topics. To learn more about this study and the work of the greater NIDILRR grantee community, visit NARIC at www.naric.com or call 800/346-2742 to speak to an information specialist.

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