e-SMART technologies may help young adults self-manage mental illness

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While many young adults will share the details of their daily lives with dozens - sometimes hundreds - of friends on Facebook, communicating with their health care providers about mental illness is another story.

"Roughly one in every five young adults between 18 and 25 has a mental illness," says Melissa Pinto-Foltz, a postdoctoral scholar and instructor at the Frances Payne Bolton School of Nursing at Case Western Reserve University. "Seventy percent of them don't receive treatment. Of those that do receive treatment, they have trouble managing the illness and often drop out of treatment early."

Getting individuals in this age group the adequate help and services they need inspired Pinto-Foltz's line of research that focuses on improving access to mental health services and the mental health self-management adolescents and young adults.

As a member of a group developing new patient communications tools, she saw potential for new computer-based techniques (e-SMART-MH) to reach young adults already tied to their technology devices.

"Young adults accept technology as part of their lives and are comfortable interacting with it. This project seemed like a natural extension of what they are already doing every day," Pinto-Foltz said.

The group set out to construct and test a computer program called Electronic Self-Management Resource Training to Reduce Health

Disparities (e-SMART-HD). The goal is to improve provider-patient communications and, consequently, improve how people manage their health.

Young adults are a particular concern, says Pinto-Foltz.

As young adults head off to college and are immersed in a new environment, they gain independence, and parental oversight is lessened. With this independence, they are required to manage mental illness independently, and they struggle. Young adults must manage stigma associated with mental illness, stay on medications and keep medical appointments in order to optimize mental health.

The eSMART-HD technology simulates patient-provider dialogues, creating a virtual world that can teach patients how to interact with virtual health care providers that include nurses, counselors and doctors.

What the individual sees on the computer monitor is a world similar to that seen through a camera lens; the patient is present but unseen on the screen. There are avatars (virtual health care providers) in a virtual environment interacting with them.

The avatars will be used as virtual health care providers and mimic the facial expressions, language, and gestures common to real providers. The technology guides the patient through interactions with virtual providers, and whenever the communication hits a rough spot, virtual coaches pop up to guide the patient.

John Clochesy, the Independence Foundation Professor at the nursing school, originally developed the precursor to e-SMART-MH, called e-SMART-HD, with funding from the National Institutes of Health.

The development of e-SMART-MH, Pinto-Foltz's research project is

being funded by a one-year, $7,500 grant from the American Nurses Foundation and the Midwest Nursing Research Society.

The next step in developing eSMART-MH involves Pinto-Foltz and her team examining the acceptability of eSMART-MH with a small number of young adults who are 18-25 years of age.

From this data, the eSMART-MH may be tweaked.

Then the team will recruit 40 participants newly diagnosed with depression or anxiety from area health organizations and a college campus to assess the effectiveness of the e-SMART-MH. Half the group will be randomly assigned to use e-SMART-MH, and the other half will be given more standard interventions of screen information from videos and mental health literature.

"Our goal is to teach young adults how to interact with their health care providers to get what they need to manage mental illness," says Pinto-Foltz.

She adds: "Young adults do not have to struggle with mental illness. We want to see young adults get the help they need to feel better. "

This project is part of the research program at the National Institute of Nursing Research/National Institute of Health-funded SMART Center in the nursing school to find ways to help individuals manage their chronic illnesses.

Provided by Case Western Reserve University

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