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Using Electronic Health Promotion Interventions for Individuals Who Are Homeless: An Approach Whose Time Has Come

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Using Electronic Health Promotion Interventions for Individuals Who Are Homeless: An Approach Whose Time Has Come

Health care professionals are finding that advances in computer technology and the expanded use of the Internet hold significant promise for the provision of health services. One Internet application for health promotion is the concept of Interactive Health Communication (IHC), an adjunct to clinical practice that can be useful in disseminating quality health information, facilitating informed decision-making, offering peer support, and providing expert consultation to clients. IHC has been defined as the "interaction of an individual-consumer, patient, caregiver, or professional – with or through an electronic device or communication technology to access or transmit health information or to receive guidance and support on a health-related issue". 2

There are many new IHC websites, including CHESS, a comprehensive computer-based health resource to provide health enhancement (http://chess.chsra.wisc.edu/Chess/) and a new health promotion website for children (www.bam.gov) supported by the Centers for Disease Control and Prevention.

IHC is not usually thought of as a health support mechanism to address the chronic health issues of the homeless population. The homeless population typically has limited or misinformation about their health condition and its treatment, with particular difficulty in managing a chronic condition.³ However, there is emerging evidence to suggest that having access to the Internet and a well-designed interactive health communication program can provide significant benefits to economically disadvantaged populations.^{4,5} The homeless, an underserved population that has a large number of people with chronic health conditions and disabilities, typically has limited access to computers and knowledge of how to use them.^{6,7}

Over the past eight years, a team from the Center for Collaborative Research and the Departments of Occupational Therapy and Physical Therapy in the Jefferson College of Health Professions has been involved in projects to improve the life of homeless individuals in city housing programs. In a recent project, men who were trying to break the cycle of homelessness identified having access to and training in computers as their number one priority. As a result of that identified need, faculty and students created three computer labs in three housing programs designed to help homeless individuals make the transition to self sufficiency. These computer labs, which are now run by grant funds, have been one of the most widely used services in each of the housing programs.

Building upon that endeavor, the project team applied for and received a training grant for an e-health project from the Bureau of Health Professions in the U.S. Department of Health and Human Services to develop and implement a health promotion website, using interactive technology, in the three housing programs identified above. In cooperation with an advisory board that includes city policy makers, representatives from the Jefferson Community Health Division, The Salvation Army, Resources for Human Development, housing staff, and formerly

homeless individuals, two major goals are being addressed in this e-health project. These are to: 1) design and implement an effective and relevant e-health promotion website for homeless individuals with chronic health conditions and the staff serving this population; and 2) train interdisciplinary teams of students in the use of interactive health communication technology as part of community health initiatives. During the first year of the project, the team began building the infrastructure necessary for the project and worked with the first groups of students and residents in the beginning design of an interactive health communication website, tailored to the needs and literacy level of this population.

As a result of a formative evaluation of the first year of the e-health project, the team has identified some extremely positive outcomes. Students report that they have a much better understanding of the problems of underserved populations and feel comfortable addressing the health needs of the residents within the scope of their respective practices. The e-health project is now working on getting Internet access to each of the computer labs. Staff of the three housing sites report their excitement with the potential of the e-health project and a high interest level from the residents. Residents of the sites have begun to work with student teams in developing the prototype website, and interviews with other residents have attested to the potential usefulness of the site. Finally, a group of women in one of the housing programs has begun a small business initiative to raise funds in order to maintain Internet access after grant funding has expired.

While these initial observations of the project's development are positive, impact evaluation of IHC will be necessary once the website is fully developed and launched. The project team plans to assess the IHC program along several dimensions, particularly the impact of the website on knowledge, skills, behaviors and attitudes of residents, their change in health status and quality of life and, eventually, cost-effectiveness. However, the preliminary results suggest that this underserved population, who is making the transition to self-sufficiency, is highly motivated to have access to health care information.

References

- 1. Robinson TN, Patrick K, Eng TR, Gustafson D. An evidence-based approach to interactive health communication: a challenge to medicine in the information age. JAMA 1998;280:1265-1269.
- Eng TR, Gustafson DH, eds. Wired for health and wellbeing: the emergence of interactive health communication. Science panel on interactive communication and health. Washington, DC: US Department of Health and Human Services, U.S. Government Printing Office; 1999.
- 3. Plumb JD. Homelessness: reducing health disparities. Can Med Assoc J 2000;163:172-173.
- 4. Gustafson DH, Hawkins R, Pingree S, et al. Effect of computer support on younger women with breast cancer. Journal of General Internal Medicine 2001;16:435-445.
- 5. Bier M, Gallo M, Nucklos E, Sherblom S, Pennick M. Personal empowerment in the study of home Internet use by low-income families. Available at:

http://www2.educ.ksu.edu/projects/JRCE/v28-5/Bier/article/textonly.htm. Accessed 1996.

- 6. Eng TR, Maxfield A, Patrick K, Deering MJ, Ratzan SC, Gustafson, DH. Access to health information and support: a public highway or a public road. JAMA 1998;280:1371-1375.
- 7. Computer and Internet use among people with disabilities. Disabilities Statistics Center, University of California, San Francisco; 2000.
- 8. Swenson Miller K, Cornman-Levy D, Rose M, Lyons K, Damani S. Perceptions of needs identified through focus groups in urban homeless shelters and transitional housing programs. Boston, MA: American Public Health Association; 2000.

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