



Pathways to Sustainability: Results of a Chronic Disease Self-Management Program in a Homeless Population

Linda Hulton, RN, PhD Professor of Nursing

Tammy Kiser, DNP Assistant Professor of Nursing

Sharon Zook, DNP, APRN, FNP-BC Professor of Nursing





Objectives



- By the end of this presentation the participant will be able to:
 - Describe the implementation and evaluation of the Chronic Disease Self-Management Program (CDSMP) with a homeless population
 - Discuss steps in the framework of Sustainability in Healthcare by Allocating Resources Effectively (SHARE) framework
 - Identify Doctor of Nursing (DNP) Essentials and Sub objectives that can be linked to this innovative community-based intervention.



Sustainability in Healthcare by Allocating Resources Effectively (SHARE Framework)

Step 1:Identify need for the change

Step 2:Develop proposal for change

SHARE

Step 3: Implement Change Proposal

Step 4: Evaluate
Outcomes of Change

Evidence-based Approach

Address System Issues

Use CBPR



Pilot Project Design



- Needs assessment and Literature review of Chronic Disease Self-Management Program (CDSMP) and homelessness
- IRB approval
- Non-experimental one group pretest/posttest design
- Homeless clients (n = 10) who were diagnosed with a chronic illness and resided at a faith-based shelter in a mid-Atlantic state.
- Funded by internal grant from the JMU School of Nursing





Implementation of CDSMP

- 6 weeks evidence based small group workshops developed at Stanford by licensed leaders with additional health coaching and case management
- Based on Social Learning Theory
- Outcomes Measured: self-rated health, health distress, self-efficacy, exercise behaviors, and communication with Health Care Providers
- Additional incentives: transportation, case management, refrigerator at shelter for snacks, "MyPlate", health coaching, field trip to grocery store, giftcard for completion



Results

Changes in Outcome Variables between Pretest/Posttest for Homeless

Construct	Pretest Mean	Posttest Mean	Other Populations with Chronic Illness*
Self-rated Health (1-5) ↓	3.6	3.3	3.29 (N = 51)
Heath Distress (1-5) ↓	3.2	2.0	2.04 (N = 51)
Fatigue (0-10) ↓	6.1	7.1	4.89 (N = 122)
Shortness of Breath (0-10) ↓	5.0	5.3	2.43 (N = 122)
Pain (0-10) ↓	7.0	8.0	4.36 (N = 122)
Exercise Behaviors (minutes/week) ↑ Stretching (Range 0 -180) Aerobic Exercise (Range 0 - 540)	62.5 135	65 192	40.1 (N = 1,127) 90.6 (N = 1,130)
Self-efficacy (1-10) ↑	3.6	7.0	5.17 (N = 605)
Communication with Healthcare Provider (0-5) ↑	1.6	2.6	3.08 (N =1,130)
Healthcare Utilization in past 6 months Healthcare Profession visit for physical health Emergency Department visits Times Hospitalized	8.6 1.2 .83	8.0 .80 .83	5.33 (N = 1,130) .40 (N = 1, 130) .23 (N = 1, 130)

[↑] indicates a higher score is better ↓ indicates a lower score is better

Parentheses after each variable gives the possible ranges of the scale

Barriers

- *Uniqueness of homelessness: transportation issues, nutrition, hygiene
- *Health Literacy

- *Comfort levels of providers and volunteers
- *Physical space at shelter site
- *Funding issues

Lessons Learned

- *Importance of Cost Analysis
- *Attrition rates with homeless
- *Need for case management services
- *Interprofessional communication
- *Expect the unexpected
- *Additional incentives are needed for this population (health coach, giftcards, field trips)





Implications for DNP Education

- DNP Essentials/Subobjectives:
 - Essential VI: Interprofessional Collaboration for Improving Patient and Population Outcomes
 - Essential VII: Clinical Prevention and Population Health for Improving Nation's Health
- DNP students have become certified CDSMP trainers as DNP practicum time
- Past and present DNP Projects are testing the CDSMP in Veteran's and Kurdish populations.
- 4 DNP students have completed a Health Policy Institutes with National Homeless Alliance non-profit agency in Washington DC.
- The project gave access to a growing high need population in a healthcare system and expanded community partnerships.
- Working with the homeless population takes advanced levels of problemsolving required for advanced nursing practice.
- Sustainability outcome: The faith-based shelter is now the setting for a new Interprofessional Clinic that includes undergraduate and graduate students from Nursing, Physician Assistant, and Dietetics

References

Baggett, T. P., O'Connell, J. J., Singer, D.E. & Rigotti, N. A. (2010). The unmet health care needs of homeless adult: A national study. American Journal of Public Health. 2010 July; 100 (7): 1326-1333.

Harris, C., Allen, K., Brooke V.,, Dyer, T., Waller, C., King, R., Ramsey, W., & Mortimer, D. (2017). Sustainability in healthcare by allocating resources effectively (SHARE) 6: investigating methods to identify, prioritize, implement, and evaluate disinvestment projects in local healthcare settings. BMC Health Services Research, 17 (370). DOI: 10.1186/s12913-017-2269-1.

Institute of Medicine. Living well with chronic illness: a call for public health action. Washington (DC): The National Academies Press. 2012. Retrieved from: http://www.iom.edu/Reports/2012/Living-Well-with-Chronic-Illness.aspx

Lorig, K., Sobel., D., Ritter, P., Laurent, D., & Hobbs, M. Effect of a self-management program for patients with chronic disease. Effective Clinical Practice, 2001 November-Decemberr; 4 (6): 246-262.

Lorig, K., Stewart, A., Ritter, P. Gonzalez, V., Laurent, D., & Lynch, J. Outcome Measures for Health Education and Other Health Care Interventions. Sage Publications: Thousand Oaks, CA, 1996.

Ory, M., Ahn, S., Jiang, L., et al., (2013). Successes of a national study of the chronic disease self-management program: Meeting the Triple Aim of Health Care Reform, Medical Care, 2013 November; 51(11): 992-998.

Smith, S.M., Soubhi, .H, Fortin, M., et al. Interventions for improving outcomes in patients with multimorbidity in primary care and community settings. Cochrane Database of Systematic Reviews. 2012. 18 (4). doi: 10.1002/14651858.CD006560.pub2.

Stanford Patient Education Research Center. Chronic disease self- management program (Better Choices, Better Health® Workshop), 2014. Retrieved from http://patienteducation.stanford.edu/programs/cdsmp.html

Weinstein, L. LaNoue, M., Plumb et al. A primary care-public health partnership addressing homelessness, serious mental illness, and health disparities. Journal of the American Board of Family Medicine, 2013. May-June; 26(3): 279-287.