

The Importance of Support for Cardiac Patients, as a Means of Reducing Post-MI Hospitalizations Due to Panic Attacks

Talya Miron-Shatz, PhD. Associate Prof. Ono Academic College

CEO, co-founder, Buddy&Soul, talya@CureMyWay.com

Introduction

We examine a digital support intervention for men recovering from a heart attack (MI), delivered in a medical vs. non-stigmatized context, and which determinants facilitate engaging with and effective use of the intervention to reduce ER and cardiologist visits and readmissions due to panic attacks, to encourage improved exercise and eating habits, reduced stress, improved relationship with family caregivers and more.

Patients recovering from MI face psychological issues such as stigma and low self-efficacy (Croog, 2013, Galick et al., 2015). Stigma has a direct impact on physical and psychological outcomes (Quinn & Earnshaw, 2011), including reducing access to healthcare professionals. Self-efficacy determines whether coping behavior will be initiated and sustained when facing obstacles (Bandura, 1977). It can bring health improvements and better compliance during rehabilitation (Maeda, 2013; Fan, 2014; Riegel, 2011; Barnason, 2012; Shively, 2013).

Digital health holds much promise (Becker et al., 2014). Indeed, online support for MI survivors has been shown to be effective (Hamm et al., 2013).

We propose to examine a novel approach, based on psychological principles. Our intervention can be delivered at the hospital, upon discharge, or at home, as support of home/rehabilitation care.

Methods



We propose a theory-based innovative examination of patients' psychological needs, in terms of self-efficacy, stigma, and identity preservation in support interventions for patients. No work has yet refined the emotional and informational context of intervention delivery and its effect, both on patients' need fulfillment, and on how patients perform and engage with rehabilitative interventions.

We address this important gap, using qualitative and quantitative methods, content analysis of existing interventions, semi-structured patient interviews, and an experiment on the way interventions regarding recovery from heart attack (myocardial infarction, MI) are delivered to patients, and examines patient engagement, satisfaction, and propensity to follow up on the interventions, and the ensuing sense of self-efficacy.

Results

Existing sources of support, such as WebMD or Heart.org are medical-oriented, and therefore (a) may be perceived as stigmatizing, and (b) pay little attention to psychological issues.

Indeed, preliminary results indicate that existing websites do not provide MI patients with the psychological support they need, in a non-stigmatized manner (see Table 1).

The study will pit existing forms of content delivery against Buddy&Soul, a comprehensive, non-stigmatized platform.

We seek the collaboration of cardiologists and devices (sensors to track related parameters such as stress, smoking etc.) in order to examine the effect on medical outcomes and re-admission.

Table #1 Type of online support offered for MI patients on top-popularity English websites

Website	Avoiding Stigma (medical)	Enhancing Patient's Identity	Promoting Self-Efficacy
1. American Heart Association	NO	NO	YES
2. NHS	NO	NO	YES
3. Cleveland Clinic	NO	NO	NO
4. WebMD	NO	NO	NO
5. FamilyDoctor.org	NO	NO	NO

Conclusions

Buddy&Soul, a comprehensive, non-stigmatized platform catered toward enhancing self-efficacy in MI patients may result in increased ongoing patient engagement with support interventions. This may improve medical outcomes and reduce the rate of readmissions due to panic attacks in MI patients.

Bibliography

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.

Barnason, S., Zimmerman, L., & Young, L. (2012). An integrative review of interventions promoting self-care of patients with heart failure. *Journal of clinical nursing*, 21(3-4), 448-475.

Becker, S., Miron-Shatz, T., Schumacher, N., Krocza, J., Diamantidis, C., & Albrecht, U. V. (2014). mHealth 2.0: experiences, possibilities, and perspectives. *JMIR mHealth and uHealth*, 2(2).

Croog, Sydney H. "Recovery and rehabilitation of heart patients: Psychosocial aspects." *Handbook of psychology and health* 3 (2013): 295-334.

Fan, X., & Lv, F. (2014). Psychosocial factors associated with self-efficacy for managing chronic disease in patients with chronic heart failure. *European Journal of Cardiovascular Nursing*, 1474515114566157.

Galick, Aimee, Elizabeth D'Arrigo-Patrick, and Carmen Knudson-Martin. "Can Anyone Hear Me? Does Anyone See Me? A Qualitative Meta-Analysis of Women's Experiences of Heart Disease." *Qualitative health research*(2015): 1049732315584743.

Maeda, U., Shen, B. J., Schwarz, E. R., Farrell, K. A., & Mallon, S. (2013). Self-efficacy mediates the associations of social support and depression with treatment adherence in heart failure patients. *International journal of behavioral medicine*, 20(1), 88-96.

Quinn, D. M., & Earnshaw, V. A. (2011). Understanding concealable stigmatized identities: The role of identity in psychological, physical, and behavioral outcomes. *Social Issues and Policy Review*, 5(1), 160-190.

Riegel, B., Lee, C. S., & Dickson, V. V. (2011). Self care in patients with chronic heart failure. *Nature reviews cardiology*, 8(11), 644-654.

Shively, M. J., Gardetto, N. J., Kodiath, M. F., Kelly, A., Smith, T. L., Stepnowsky, C. & Larson, C. B. (2013). Effect of patient activation on self-management in patients with heart failure. *Journal of Cardiovascular Nursing*, 28(1), 20-34.