Integration of Psychological Services for Patients with Advanced Heart Failure

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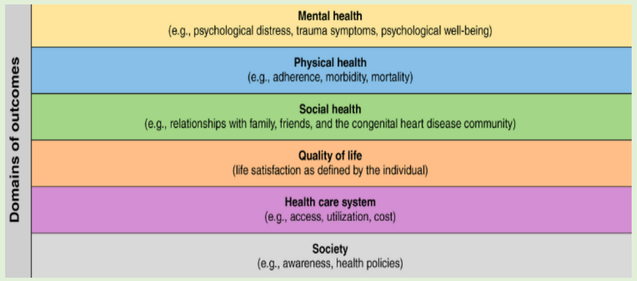
Introduction

- Psychology has an important role in the treatment for cardiovascular conditions (Vela & Carroll, 2023)
- Psychological and behavioral factors increase the risk of cardiovascular diseases (CVDs) and also worsen the prognosis among patients with CVDs.
  - High prevalence of depression, anxiety, and trauma
- Cardiac psychologists can address the following psychological/behavioral concerns that often accompany CVDs
  - Psychological concerns
  - Dietary/eating behaviors and sedentary lifestyles
  - Substance use
  - Sleep
  - Treatment adherence
- Advanced heart failure (AHF) patients have severe cardiac dysfunction often requiring a ventricular assistance device (VAD) or heart transplant.
  - Often accompanied with intensive care unit (ICU) hospital stays
- Past research has found effectiveness of the integration of cardiac psychology in both outpatient and inpatient consultation liaison services
- Timing of psychological interventions is important to consider and can also vary over the course of treatment and recovery
- Outcome domains important to consider (Kovacs et al., 2022)



Purpose of Study

- The purpose of this project was to identify the need for an integration of psychological services in the Cardiac ICU at URMC treating AHF patients.

Method

Used a semi-structured interview protocol and shadowing on the cardiac ICU unit with various providers to gather information about the perceived psychological need on the unit.

Providers interviewed/shadowed on cardiac ICU unit:

- Psychiatrist
- Physical Therapist
- Occupational Therapist
- Physician Associate
- Nurse Practitioner
- Registered Nurses (3)
- VAD Coordinator
- Program Manager
- Medical Intensivist

Pulled data from eRecord to gather information about VAD patients implanted between 02/07/22 – 01/12/23

Results

Major Themes	Examples	Potential interventions
Barriers to Patient Discharge	Inability to wean off ICU medications or ventilator support due to psychological distress	Reduce symptoms of anxiety and fear with cognitive behavioral therapy (CBT), relaxation techniques, mindfulness meditation
Patient Characteristics	Distrust in the healthcare system, Cultural considerations, Limited social support systems Pain and fatigue	Advocate for patients Educate the treatment team about psychosocial factors and health disparities
Complexity of Heart Failure	Medical trauma, long wait times for transplants, extended hospital stays from complications, recovery from multiple procedures	Motivational Interviewing (MI) Teaching coping skills Consistent psychological support
MH Concerns and Adjustment	Substance use disorders, mood disorders (particularly depression), trauma from being in the ICU, loss of control, independence and privacy, limited coping	MI CBT Teaching coping skills
Team Support	Supporting difficult conversations with patients and families, team conflict, poor interpersonal relationships at work, discomfort in new roles, managing high stakes situations, providers not understanding the limits of other provider roles, burnout	Guide and support providers in patient care Positive conflict resolution strategies and teaching communication skills Emotional support for providers Education about burnout and how to reduce the risk of it

Provider Quote: Adding Psychology Service to Team

"Oh my gosh. How incredible would that be after a terrible situation to have someone to just take off to the side and bounce ideas off of or come up with different ways of thinking...I cannot tell you how many times I've been doing a consult or a teaching session with a patient and said, 'if you feel like you need to talk about something, you certainly should. This is a huge change to go through and you don't have to be strong through the whole thing'. And then they'll open up and it's a huge release. I'm not equipped for this. I'm not a therapist, I don't know what I'm doing."

2022 VAD Patient Data N=47

Length of Hospital Stay	Range	Mean (SD)
	22-220 days	60.5 days (39.8)

Psychiatry Consults	% patients at least 1 visit	Range of visits
Transplant/VAD Eval	53	1-3
General Consults	38	1-9

Discussion

- This study found a need for psychology service integration at URMC's cardiac ICU
- The identified need for psychological service correlates with what psychology service could offer:
  - Access to psychological interventions for AHF patients in the ICU, such as addressing mood disorders, adjustment difficulties, and treatment adherence
  - Advocating for patients
  - Support and educating patients' loved ones
  - Guiding, supporting, and educating the treatment team
- Integration of psychological service could improve patient outcomes in various domains impacting prognosis (i.e., mental health, quality of life, etc.)
- AHF patients often have prolonged hospital stays which is a financial burden for various health systems.
- The integration of psychology service in cardiac ICUs could save health systems money by decreasing length of hospital stays, increasing treatment adherence, and treating mood disorders interfering with recovery

References

Kovacs, A.H., Brouillette, J., Ibeziako, P., Jackson, J. L., Kasparian, N. A., Kim, Y. Y., Livecchi, T., Sillman, C., & Kochilas, L. K. (2022). Psychological outcomes and interventions for individuals with congenital heart disease: A scientific statement from the American Heart Association. *Circulation: Cardiovascular Quality and Outcomes, 15*(8), https://doi.org/10.1161/HCQ.0000000000000110

Vela, A. M. & Carroll, A. J. (2023). Cardiac psychology: Psychosocial and behavior assessment and treatment for cardiovascular conditions. *Journal of Health Service Psychology, 49*(1), 21-32.