

LEVEL AND PREDICTORS OF SELF-CARE BEHAVIORS (SCB) AMONG EDUCATED AND UN- EDUCATED HEART FAILURE (HF) PATIENTS IN KARACHI, PAKISTAN

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Background

Cardiovascular diseases cause:

- 16.7 million deaths per year, world wide
- 80% in low income developing countries
- 22% proportionate mortality in Pakistan

(WHO, 2005)

Cont'd...

Heart Failure

- A progressively worsening clinical syndrome, with decline in the cardiac Function
- A result of normal ageing process and final end point of all cardiac disorders
- Poor QOL and increase health care utilization
- “Self-care” a recommendation of AHA

(Klimm et al., 2012)

Self Care Behaviors (SCB)

Activities that individuals initiate and perform on their own, in the interest of maintaining life, health, continuing personal development, and well-being

(Reigel & Carlson, 2002)

Cont'd..

Self-care Behaviors (SCB)

Self maintenance

Medication

Fluid restriction

Diet regimen

Weight monitoring

Exercise

Self management

Symptom monitoring

Symptom management

Proactive help seeking

SCB in order of their adherence rates

- ▣ Medication adherence
- ▣ Fluid restriction
- ▣ Help seeking
- ▣ Exercise
- ▣ Following diet regimen
- ▣ Symptom/ weight monitoring and interpretation

(Artanian, et al., 2009; Kato et al., 2009...)

Factors affecting SCB

- Age
- Gender
- Experience of illness
- Literacy level of the patients
- Burden of comorbidity
- Marital status
- Social support
- Income
- Shared decision making by the patient and physician

- ▣ Health literacy is better among educated patients.
- ▣ Educated patients perform better self-management of their disease as compared to their uneducated counterparts.
- ▣ Educated patients had better communication with their physicians

- ▣ Education appeared to be a key predictor of self care among HF patients.
- ▣ Self care skills can only be acquired by the educated patients?
- ▣ what could be the mechanism of understanding of self-care among literacy and numeracy challenged population

Purpose

The study aimed to determine the level of self-care among educated and uneducated HF patients in Karachi, Pakistan.

Research Questions

- What is the level of self-care behaviors (SCB) among educated and uneducated HF patients in Karachi, Pakistan?
- What are the factors affecting the SCB of the educated and uneducated HF patients, in Karachi, Pakistan?

METHODOLOGY

Study Design

The study was cross sectional Analytical.

Sample

- 230 HF patients for quantitative survey

Study Settings

4 private tertiary care hospitals of Karachi

Recruitment of Study participants

Inclusion Criteria

- Left ventricle ejection fraction (LVEF) of $<45\%$
- Physician written diagnosis of HF
- Patient should have had at least one prior visit related to HF
- Patient should be a resident of Karachi
- Should not have any cognitive disability
- Could give informed consent
- Did not suffer from any untreated malignancy.
- Able to speak and understand Urdu language.

Ethical Considerations

- ▣ Approval was taken from AKUH ERC and research settings .
- ▣ Permission of the tool, used in the study from the original author was sought.
- ▣ Informed consent was obtained from each participant.

Data Collection

- ✓ Modified version of the European Heart Failure Self-care behavior questionnaire (EHFScB_9)
 - Orem Self-care Model
 - 9- item assessment of SCB, on a likert scale
 - Lower the score, better is the self care.
- ✓ Self-developed assessment checklist (clinical and demographic variables)

Socio-demographic Variables

Variable	Educated (n=115)	Un Educated (n=115)	P-Value
Age	58.03+/-13.54	58.81+/-10.54	0.62
Gender			
Males	79%	53%	
Females	21%	47%	
Marital Status			
Married	90%	95%	
Unmarried/divorced/single	10%	5%	
Average Monthly Income in PKR	52000+/-40000	23000+/-19000	0.000

Clinical Variables

Variables	Educated (n=115)	Un-Educated (n=115)	P-Value
Functional Class			
I	21%(24)	10%(11)	
II	39%(45)	45%(52)	
III	30%(34)	28%(32)	
IV	10%(12)	17%(20)	

	Educated (n=115)	Un Educated (n=115)
Self-Care	27.07 (7.11)	32.40 (5.31)

VARIABLES	Educated (n=115)		Un Educated (n=115)	
	B- Coeff Value	P-	β - Coeff Value	P-
Gender	-2.293	0.192	-0.781	0.430
Income	-0.000034	0.001	-0.000048	0.060
Chronicity of HF diagnosis	-0.006	0.097	-0.007	0.024
Age	-0.028	0.601	-0.050	0.314

Education Status

- ▣ Updated Knowledge
- ▣ Communication skills and its
management
- ▣ Ability to follow instructions
- ▣ Physician guided self adjustment of diuretics

Mere education is not a predictor
of SCB
Stromberg, 1999

Better SCB among educated as
compared to uneducated
counterparts
Rockwell & Riegel, 2001

Experience of Illness

**HELP SEEKING
BEHAVIOR**

▣ A learning Experience

Improved Self-Care

A

Positive association
between Experience
Adherence to SCB

Experiential learning is
common in most of the
Eastern and Western HF
Studies

(Carlson et al, 2001;
Riegel & Carlson, 2002;
Cameron et al., 2009

Experience is not a predictor of Self-care
(Kato et al., 2009)

Severity of symptom drives active self
care

(Rockwell & Riegel, 2001)

Financial Status

- ▣ Affordability for facility, or private
 - ▣ Quick access to
 - ▣ Despite absence and management
 - ▣ Unaffordability; A significant barrier to help seeking and medication compliance
- Prophylactic Medical help may not be a priority
 - Difference of insurance culture
 - Lower rates of help seeking than previous studies
- (Kato et al., 2009)

Health Care system

- ❑ Lack of communication between patients and physician.
- ❑ Free Access to tertiary Significant Facilitator of Patient Behaviors.
- ❑ Time consuming hospital visits
- ❑ Difficult accessibility
- ❑ Cost of the private health care facility

Scotto, 2005

Implications

Practice

- ▣ Initiation of Community based Services to improve accessibility.
- ▣ Development of Flexible HF management Programs
- ▣ Home based services would improve Patients' and their family's participation in HF management.
- ▣ Special Educational Sessions
Multiple teaching modalities

Implications

Research Implications

- ▣ Patient outcomes such as QOL, ER visits, and cost analysis are important to quantify.
- ▣ Exploration of self care practices will be helpful to develop educational programs within the cultural context

THANK YOU