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Quality of life in patients with Chronic heart failure

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Abbreviation

No	symbol	name
1	A ₂	Aortic component of second heart sound
2	ACEI	Angiotensin converting enzyme inhibitor
5	ALT	alanine aminotransferase
6	ANP	atrial natriuretic peptide
7	ARB	angiotensin receptor blocker
8	AST	aspartate aminotransferase
9	AVP	Arginine vasopressin
10	BB	Beta blocker
11	B.H	By himself
12	BNP	Brain natriuretic peptide
13	CHF	chronic heart failure
14	CNP	C type natriuretic peptide
15	DM	diabetes mellitus
16	D.S	Drug sponsor
17	ESC	European society of cardiology
18	ECG	electrocardiogram
19	EDD	End diastolic diameter
20	EDV	end diastolic volume
21	EF	Ejection fraction
22	ESD	End systolic diameter
23	GDS-SF	Geriatric Depression Scale—Short Form
24	GIT	Gastrointestinal tract
25	HF	heart failure
26	HI	Health insurance
27	HRQoL	health-related quality of life
28	HS	Highly specific

Abbreviation

No	symbol	name
29	HTN	Hypertension
30	I.H.D	Ischemic heart disease
31	KCCQ	Kansas City Cardiomyopathy Questionnaire
32	LDH	lactic dehydrogenase
33	LHFE	Minnesota Living with Heart Failure questionnaire
34	LL	Lower limb
35	LVD-36	left ventricular dysfunction questionnaire
36	LVD	Left ventricular dysfunction
37	LV	left ventricle
38	MI	myocardial infarction
39	MS	Marital state
40	NHP	Nottingham Health Profile
41	NS	Non specific
42	NYHA	New York Heart Association
43	QoL	Quality of life
44	P ₂	pulmonary component of second heart sound
45	RAAS	rennin angiotensin aldosteron system
46	S	specific
47	S ₃	third heart sound
48	SD	standard deviation
49	SF-36	36 short question form
50	SIP	Sickness Impact Profile
51	SPSS	statistical program for social science

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INTRODUCTION

Chronic heart failure is the disease of millions of people. As advances in treatment have prolonged life in patients with heart failure, Greater attention was turned to improve the quality of life. Heart failure has implications on the quality of life for any age range (**Saccomann et al., 2007**).

Clinical trials of patients with heart failure generally measure Patient's symptoms using New York Heart Association (NYHA) classification. Recent studies have begun to examine the relationship between patients' symptoms, depression and quality of life in patient with heart failure. In patients with chronic heart failure, depression is common and is associated with poor quality of life (**Bekelam et al., 2007**).

The influence of depression on symptom perception and prognosis in congestive heart failure is well known (**Holzapfel et al., 2007**).

AIM OF THE WORK

Is to identify the impact of chronic heart failure on patient's quality of life.

CHAPTER 1

CHRONIC HEART FAILURE

Introduction:

H eart failure is a complex clinical syndrome, most simply defined as cardiac dysfunction associated with symptoms. Chronic heart failure (CHF) is a common debilitating illness, associated with a high mortality. **(McMurray ,et al., 2000).**

The syndrome of heart failure results in significant impairment of quality of life, more so than with many other chronic diseases **(Dargi, et al., 1994).**

And is associated with high morbidity and mortality. Heart failure frequently occurs in the setting of preserved left ventricular (LV) ejection fraction **(Dougherty, et al.,1984), (Ramachandran, et al.,1995).**

I –Epidemiology of chronic heart failure

Heart failure is a relatively common disorder. It is estimated that 4.6 million persons in the United States are being treated for heart failure, with 550,000 new cases diagnosed each year **(Massie, et al., 1997).**

The prevalence of heart failure increases dramatically with age, occurring in 1 to 2 percent of persons aged 50 to 59 and up to 10 percent of individuals

older than the age of 75 (**Ho KK, et al.,1993**), (**Massie, et al.,1997**).

Approximately 80 percent of all heart failure admissions occur in patients older than 65; as a result, heart failure is the leading discharge diagnosis in persons aged 65 years or older in the United States (**Rich, et al., 1999**).

Despite a steady decline in the incidence of coronary artery disease and stroke, both the incidence and prevalence of heart failure continue to rise. Between 1985 and 1995 the number of heart failure hospitalizations increased by 51 percent (**Haldeman, et al., 1999**).

This trend may be due in part to the aging of the population and in part to the improved survival of patients with cardiovascular disease. Heart failure has an enormous economic impact on the U.S. health care system, owing to direct medical costs, disability, and loss of employment. Estimated treatment costs in 1994 were \$38 billion; of which \$23 billion were spent on hospitalizations. The cost of hospitalizations for heart failure is twice that for all forms of cancer and myocardial infarctions combined (**O'Connor, et al., 1994**).

In a cross-sectional study in primary care in Scotland (1999–2000), the incidence of heart failure was 2/1000 people, increasing to 90/1000 among patient over the age of 85–years (**Murphy, et al., 2004**).

The Rotterdam Study (1989–2000) reported prevalence rates of between 6.5% and 7.0% in a population over the age of 55 years (**Bleumink, et al., 2004**).

The prevalence of heart failure is also increasing as the population ages and the proportion of the population over the age of 65 increases (**Butler, et al., 1997**).

International estimates of the prevalence of heart failure are more common. The most recent data for the United Kingdom indicated that the prevalence of heart failure is about 3% in people aged 45 years or more, with two-thirds of these cases confirmed using a combination of echocardiography and clinical examination and the remainder with suspected CHF (**Davies et al., 2001**).

Lifetime Risk of Heart Failure

The Framingham study reported that the lifetime risk of developing heart failure was 20% at age 40 (**Lloyd-Jones, et al., 2002**).

The Rotterdam Study reported lifetime risk of developing heart failure of 33% for men and 29% for women at age 55 (**Bleumink, et al., 2004**).

Hospitalizations for Heart Failure

Heart failure is characterized by high rates of hospital admission in most Western countries **(Ghali, et al., 1990), (McMurray et al., 1993)**.

In the USA, it is estimated that there are about 900,000 hospital admissions with a primary diagnosis of heart failure each year and about 2.6 million admissions for heart failure as a primary or secondary diagnosis. Heart failure is the most common diagnosis in patients over the age of 64 years hospitalized in the USA **(Rich, et al., 1997)**.

Readmissions for worsening heart failure are common following first admissions for heart failure, reported at about 30% in Scotland at 12 months **(McMurray, et al., 1993)**.

And about the same proportion in the USA within 6 months **(Haldeman, et al., 1999)**.

The cost of heart failure is high due largely to the large number of hospitalizations. **(McMurray, et al., 1998)**.

Hospital admissions associated with heart failure constitute 1–2% of total annual health spending in most

developed nations(**McMurray ,et al., 1993**), (**Doughty, et al.,1995**), (**Tavazzi, 1998**).

Mortality

The population based burden of CHF mortality cannot be studied from conventional mortality statistics based on primary cause of death (**Goldacre, et al., 2005**).

It is less likely that CHF has entered on death certificates as the underlying cause of death. For example in the UK, the death certificate forbids heart failure to be entered as the underlying cause of death as it is considered to be a ‘mode of death’ (**Cowie, et al., 1997**).

Burden of disease

There is a lack of published data on the international burden of CHF. The global burden of disease study did not include CHF in the cardiovascular diseases category (**Mathers, et al., 2003**).

Instead the study investigators classified ‘congestive heart failure’ under coronary heart disease and ‘cardiomyopathy’ under inflammatory heart disease. Thus extraction of information on the burden of CHF from the global burden of disease study is not possible. However, the lifetime risk of developing heart failure has been estimated at around 20% for Western countries (**Mirzaei, et al., 2007**).