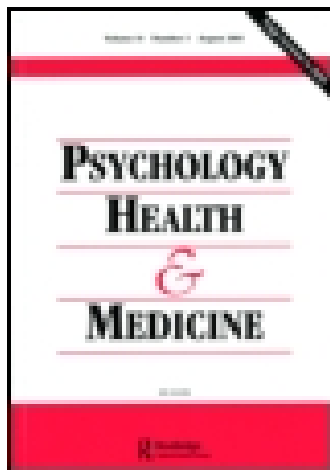


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### Being on sick leave due to heart failure: self-rated health, encounters with healthcare professionals and social insurance officers and self-estimated ability to return to work

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## Being on sick leave due to heart failure: self-rated health, encounters with healthcare professionals and social insurance officers and self-estimated ability to return to work

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Younger people with heart failure often experience poor self-rated health. Furthermore, poor self-rated health is associated with long-term sick leave and disability pension. Socio-demographic factors affect the ability to return to work. However, little is known about people on sick leave due to heart failure. The aim of this study was to investigate associations between self-rated health, mood, socio-demographic factors, sick leave compensation, encounters with healthcare professionals and social insurance officers and self-estimated ability to return to work, for people on sick leave due to heart failure. This population-based investigation had a cross-sectional design. Data were collected in Sweden in 2012 from two official registries and from a postal questionnaire. In total, 590 subjects, aged 23–67, responded (response rate 45.8%). Descriptive statistics, correlation analyses (Spearman bivariate analysis) and logistic regression analyses were used to investigate associations. Poor self-rated health was strongly associated with full sick leave compensation (OR = 4.1,  $p < .001$ ). Compared self-rated health was moderately associated with low income (OR = 2.6,  $p = .003$ ). Good self-rated health was strongly associated with positive encounters with healthcare professionals (OR = 3.0,  $p = .022$ ) and to the impact of positive encounters with healthcare professionals on self-estimated ability to return to work (OR = 3.3,  $p < .001$ ). People with heart failure are sicklisted for long periods of time and to a great extent receive disability pension. Not being able to work imposes reduced quality of life. Positive encounters with healthcare professionals and social insurance officers can be supportive when people with heart failure struggle to remain in working life.

**Keywords:** adults; cross-sectional studies; heart failure; return to work; sick leave

### Introduction

A number of studies have found that younger people with heart failure (HF) perceive self-rated health (SRH) as poorer than older people (Chamberlain et al., 2014; Iqbal, Francis, Reid, Murray, & Denvir, 2010; Moser et al., 2013; Sacco, Park, Suresh, & Bliss, 2014). It has also been described that depression is associated with HF, especially in younger persons and in women (Dekker, Peden, Lennie, Schooler, & Moser, 2009; Moraska et al., 2013; Sacco et al., 2014). In addition, depression has been described as

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a risk predictor for hospitalizations (Chamberlain et al., 2014; Gottlieb et al., 2004; Moraska et al., 2013) and high mortality (Jiang et al., 2001; Moser et al., 2013; Rodriguez-Artalejo et al., 2005). Depression and low mood in people with HF can express itself in terms of sadness, anxiety, lack of energy, negative thinking and losses due to not being able to work (Dekker et al., 2009). In addition, the condition can, among other things, lead to decreased sexual intimacy, a sense of worthlessness because of inability to work, dullness, guilt, dependency on other people and unsatisfactory understanding about the condition. Moreover, living with HF can contain experiences of abandonment from healthcare providers (Nordgren, Asp, & Fagerberg, 2007; Sacco et al., 2014). Thus, living with HF implies suffering and limitations (Nordgren et al., 2007).

Little is known about sick leave for people with HF. However, in a general population, SRH is associated with number of sick days, long-term sick leave, disability pension and mortality (Eriksson et al., 2008; Halford et al., 2012; Henderson, Stansfeld, & Hotopf, 2013; Swedish Council on Technology Assessment in Health, 2004). Immigrants, people with a low level of education or lower income are more likely to become long-term sick listed. Gender is another factor associated with long-term sick leave (Allebeck & Mastekaasa, 2004). In addition, high age and the individual's sick leave history affect the ability to return to work (RTW) (Lidwall, 2014). Encounters between healthcare professionals and sick-listed people are another aspect, which can have significance for sick-listed persons' ability to RTW (Lynoe, Wessel, Olsson, Alexanderson, & Helgesson, 2011; Mussener, Svensson, Soderberg, & Alexanderson, 2008).

In Sweden, people whose work capacity is reduced due to illness are entitled to sick leave compensation from the social insurance system. The Social Insurance Agency can entitle the sick-listed individual full or partial sickness benefit. People unlikely to work again can be awarded partial or full-time disability pension, known as sickness compensation.

The aim of this study was to investigate associations between SRH, mood, socio-demographic factors, sick leave compensation, encounters with healthcare professionals (HCPs) and social insurance officers (SIOs) and self-estimated ability to RTW, for people on sick leave due to HF.

## **Methods**

### ***Design***

This was a population-based study with a cross-sectional design.

### ***Sample***

The target group in this study was people with HF entitled to sick leave compensation from the Swedish Social Insurance Agency. Eligibility criteria:

- People registered under the diagnosis I50 HF in the Swedish Social Insurance Agency's sick leave registry.
- People entitled to sick leave compensation at any time during the period of 1 March 2012–31 May 2012.

The identified target group comprised 1351 individuals.

**Data collection**

Data were collected from three sources: (1) The Swedish Social Insurance Agency's sick leave registry (diagnosis; sick leave spells; amount of sick leave compensation; and, what kind of sick leave compensation the individuals had been entitled to during the period 1 January 2010–31 August 2012); (2) Statistics Sweden's population register (sex; year of birth; age at the end of 2012; marital status, country of birth; education; and annual income); (3) A postal survey questionnaire which contained questions about encounters with HCPs and SIOs. The responders were asked to consider encounters with HCPs and SIOs and to answer 'Yes' or 'No' regarding whether they had experienced positive or negative encounters. They were also asked to rate how positive and negative encounters impacted on their ability to RTW ('Self-estimated ability to return to work'; here labelled S-RTW). They could choose from five response options ranging from 'Facilitated very much' to 'Impeded very much'. There were also two single-question measures of SRH. One measure was non-comparative (here labelled 'SRH') which contained five response options ranging from 'Very good' to 'Very poor'. During analysis, the responses were dichotomized to 'Fair/good/very good' and 'Poor/very poor'. The second measure included a comparison with others of the same age (here labelled 'C-SRH') with reply alternatives: Better, Equal and Worse. During analysis, the responses were dichotomized to 'Better/equal' and 'Worse'. A single-question measure of mood was also included. The responders were asked to answer 'Yes' or 'No' to the question: 'Have you ever in the past 12 months, been in a low mood and/or had less interest in activities for most of the day for at least two consecutive weeks?'

Statistics Sweden sent out the postal questionnaire and two reminders by mail. The responders were asked to answer the questionnaire and return it to Statistics Sweden. The returned questionnaires were registered and scanned by Statistics Sweden.

**Data analysis**

A total of 590 individuals (aged 23–67 years, mean 58.2, median 60.0, SD = 6.8) responded to the questionnaire (Table 1). The overall response rate was 45.8%. Compared with the study population, the responders were predominantly women, married, older, Swedish-born or had high incomes.

Data were checked for quality, processed and whenever necessary grouped or dichotomized in order to prepare for statistical analysis in SPSS. Descriptive statistics were used for frequency distributions. Correlations between variables were investigated using Spearman bivariate analysis. Next, significantly correlated variables were analysed in logistic regression in order to identify which factors contributed to the associations. The significance level was set at .05.

**Ethical aspects**

Ethical approval was obtained from the Uppsala Regional Ethical Review Board (Ref. No. 2011/074). A supplementary letter contained information about the survey. The responders were informed that participation was voluntarily. Informed consent was obtained by return of the questionnaire.

**Results**

Most responders rated their general health as 'Fair'. However, on comparison with other people of the same age most responders rated their health as 'Worse'. A majority of the

Table 1. Frequency distributions for socio-demographic variables.

Socio-demographic variables	Responders <i>n</i> (%)
All responders	
Gender	590 (100.0)
Men	414 (70.2)
Women	176 (29.8)
Age, years	
23–59	269 (45.6)
60–67	321 (54.4)
Country of birth	
Sweden	491 (83.2)
Other	99 (16.8)
Marital status	
Married	316 (53.6)
Unmarried	150 (25.4)
Divorced/widowed	124 (21.0)
Level of education	
Compulsory school	145 (24.6)
High school	344 (58.3)
University	100 (16.9)
Income	
Low	108 (18.3)
Average	297 (50.3)
High	185 (31.4)

Table 2. Frequency distributions for self-rated health, compared self-rated health and mood in the past 12 months.

Variables	Frequency; <i>n</i>	Agree; % <sup>a</sup>
Self-rated health		
Very good	19	3.3
Good	117	20.4
Fair	264	46.1
Poor	143	25.0
Very poor	30	5.2
Total	573	100.0
Compared self-rated health		
Better	23	4.0
Equal	102	17.8
Worse	449	78.2
Total	574	100.0
<i>Low mood</i>		
Yes	310	54.3
No	261	45.7
Total	571	100.0

<sup>a</sup>Percentages of all responses.

participants had experienced low mood for at least one consecutive period of two weeks during the last 12 months (Table 2).

**Associations between socio-demographic factors and SRH, C-SRH and mood**

SRH significantly correlated with income ( $r_s = -.20, p < .001$ ), country of birth ( $r_s = .13, p = .002$ ) and education ( $r_s = -.09, p = .037$ ). Compared SRH correlated with income ( $r_s = -.15, p < .001$ ) and mood correlated with income ( $r_s = -.08, p = .043$ ), country of birth ( $r_s = .08, p = .042$ ) and age ( $r_s = -.12, p = .005$ ). The strongest association with significant odds ratio was found between C-SRH and low income (Table 3).

**Associations between sick leave compensation and health/mood***Self-reported sick leave compensation*

The self-reporting questions about full or partial sick leave compensation were answered by 262 responders (44.4%) (full sick leave compensation: 129; 49.2%; partial sick leave compensation: 133; 50.8%).

Self-reported full sick leave compensation was significantly correlated with SRH ( $r_s = -.27, p < .001$ ), C-SRH ( $r_s = -.11, p = .007$ ) and mood ( $r_s = .14, p = .001$ ). In logistic regression analysis, the strongest association with significant odds ratio was found between poor/very poor SRH and full sick leave compensation (OR 4.1, 95% CI 2.6–6.5,  $p < .001$ ).

*Registry-based sick leave compensation*

According to the Social Insurance Agency's sick leave registry, 367 (62.2%) of the responders had received sickness benefit and 367 (62.2%) had received sickness compensation.

Registry-based sickness benefit was significantly correlated with C-SRH ( $r_s = .08, p = .044$ ), while registry-based sickness compensation correlated with both SRH ( $r_s = .13, p = .002$ ) and C-SRH ( $r_s = .15, p < .001$ ). In logistic regression analysis, an

Table 3. Logistic regression models for associations between socio-demographic factors (independent variables) and self-rated health, compared self-rated health and mood (dependent variables).

Socio-demographic factors	Self-rated health OR, 95% CI, p	Compared self-rated health OR, 95% CI, p	Mood OR, 95% CI, p
Income			
Low	1.7, 1.0–3.0, .046	2.6, 1.4–4.8, .003	1.5, .9–2.5, .112
Average	1.2, .7–3.1, .505	2.1, 1.4–3.3, .001	1.2, .8–1.7, .367
High	Ref	Ref	Ref
Country of birth		–	
Sweden	Ref	–	Ref
Other	1.9, 1.2–3.1, .007	–	1.5, .9–2.4, .093
Level of education		–	–
Compulsory school	1.6, .9–2.8, .147	–	–
High school	1.0, .9–2.8, .147	–	–
University	Ref	–	–
Age	–	–	
<60 years	–	–	1.6, 1.1–2.2, .007
≥60 years	–	–	Ref

association with significant odds ratio was found between registry-based sickness compensation and worse C-SRH (OR 1.1, 95% CI .7–1.6,  $p = .001$ ).

For responders entitled to sickness compensation, correlations between SRH and socio-demographic variables were estimated. SRH was significantly correlated with country of birth ( $r_s = .15$ ,  $p = .004$ ), income ( $r_s = -.16$ ,  $p = .002$ ) and age ( $r_s = -.16$ ,  $p = .008$ ). Associations with significant odds ratio were found between SRH and low income (OR 5.2, 95% CI 2.0–13.2,  $p = .001$ ) and average income (OR 2.5, 95% CI 1.4–4.7,  $p = .003$ ).

#### ***Associations between time with sick leave compensation and SRH, C-SRH and mood***

According to the Social Insurance Agency's sick leave registry, 184 (50.1%) of the responders had received sickness benefit for less than one year, 171 (46.6%) for 1 to 3 years and 12 (3.3%) for 3–5 years. Sickness compensation had been received by 35 (9.5%) of the responders for less than one year, 88 (24.0%) for 1 to 3 years and 244 (66.5%) for more than 3 years.

The time with registry-based sickness benefit was negatively correlated with SRH ( $r_s = -.31$ ,  $p < .001$ ) and C-SRH ( $r_s = -.24$ ,  $p < .001$ ). The time with sickness compensation was negatively correlated with SRH ( $r_s = -.11$ ,  $p = .035$ ). In logistic regression analysis, moderate associations with significant odds ratio were found between length of time with sickness benefit and poor/very poor SRH (OR 2.4, 95% CI 1.4–3.9,  $p = .001$ ) and worse C-SRH (OR 2.4, 95% CI 1.4–4.1,  $p = .003$ ).

#### ***Associations between positive encounters with healthcare professionals and social insurance officers and SRH, C-SRH and mood***

Almost all responders (569; 96.4%) had positive experiences of encounters with HCPs. Nearly three-quarters of the responders (434; 73.6%) had experienced encounters with SIOs as positive.

Positive encounters with HCPs were significantly correlated with SRH ( $r_s = .09$ ,  $p = .035$ ). However, positive encounters with SIOs did not correlate with SRH, C-SRH or mood. For responders with positive experiences of encounters with HCPs, correlations with socio-demographic factors were estimated. SRH was significantly correlated with country of birth ( $r_s = .12$ ,  $p = .004$ ), income ( $r_s = -.20$ ,  $p < .001$ ) and education ( $r_s = -.09$ ,  $p = .036$ ). Logistic regression showed a strong association between fair/good/very good SRH and positive encounters with HCPs (Table 4).

#### ***Associations between negative encounters with healthcare professionals and social insurance officers and SRH, C-SRH and mood***

One-fifth of the responders (117; 20.2%) had experienced encounters with HCPs as negative. One-third of the responders (176; 30.7%) had experienced encounters with SIOs as negative.

Negative encounters with HCPs were negatively correlated with SRH ( $r_s = -.13$ ,  $p = .002$ ) and mood ( $r_s = -.12$ ,  $p = .005$ ). In addition, negative encounters with SIOs were negatively correlated to SRH ( $r_s = -.16$ ,  $p < .001$ ) and mood ( $r_s = -.12$ ,  $p = .004$ ).

For responders who had experienced encounters with HCPs as negative, SRH significantly correlated with country of birth ( $r_s = .20$ ,  $p = .029$ ). Moreover, mood was negatively correlated with age ( $r_s = -.20$ ,  $p = .036$ ).



Table 4. Logistic regression models for: (1) Associations between self-rated health and mood (independent variables) and positive and negative encounters with healthcare professionals and social insurance officers (dependent variables). (2) Associations between socio-demographic factors (independent variables) and positive and negative encounters with healthcare professionals or social insurance officers (dependent variables).

	Positive encounters with healthcare professionals OR, 95% CI, p.	Negative encounters with healthcare professionals OR, 95% CI, p.	Negative encounters with social insurance officers OR, 95% CI, p.
Self-rated health <sup>(1)</sup>			
Fair/good/ very good	3.0, 1.2–7.8, .022	Ref	Ref
Poor/very poor	Ref	1.7, 1.1–2.7, .017	1.6, 1.1–2.4, .019
Country of birth <sup>(2)</sup>			
Sweden	1.8, 1.1–3.0, .013	Ref	Ref
Other	Ref	2.7, 1.1–7.0, .033	2.1, .9–5.1, .083
Income <sup>(2)</sup>		–	
Low	Ref	–	1.9, .7–4.7, .190
Average	1.5, .9–2.4, .105	–	1.0, .5–2.2, .961
High	1.8, 1.0–3.2, .037	–	Ref
Level of education <sup>(2)</sup>		–	–
Compulsory school	Ref	–	–
High school	1.5, .9–2.3, .091	–	–
University	1.5, .8–2.7, .199	–	–
Age <sup>(2)</sup>	–	–	
<60 years	–	–	2.1, 1.1–4.0, .025
≥60 years	–	–	Ref
Low mood <sup>(1)</sup>	–		
Yes	–	1.6, 1.0–2.6, .039	1.5, 1.0–2.2, .038
No	–	Ref	Ref
Age <sup>(2)</sup>	–		
<60 years	–	2.4, 1.0–5.4, .038	2.8, 1.5–5.4, .002
≥60 years	–	Ref	Ref

In responders who had experienced encounters with SIOs as negative, SRH significantly correlated with country of birth ( $r_s = .16$ ,  $p = .034$ ), income ( $r_s = -.21$ ,  $p = .006$ ) and age ( $r_s = -.18$ ,  $p = .022$ ) and mood was negatively correlated with age ( $r_s = -.24$ ,  $p = .001$ ). For responders who had experienced encounters with HCPs as negative, the strongest association was found between poor/very poor SRH and being born in other countries. For responders who had experienced encounters with SIOs as negative, the strongest association was found between low mood and being younger than 60 years of age (Table 4).

***Associations between the impact of positive encounters with healthcare professionals and social insurance officers on self-estimated ability to return to work and SRH, C-SRH and mood***

The question about how positive encounters with HCPs impacted on S-RTW was answered by 551 (93.4%) responders. Out of those, 255 (46.3%) agreed that positive encounters with HCPs facilitated their ability to RTW to a certain extent or very much. However, 258 responders (46.8%) answered that positive encounters had no impact on their ability to RTW. The impact of positive encounters with HCPs on S-RTW was significantly correlated with SRH ( $r_s = -.28, p < .001$ ), C-SRH ( $r_s = -.17, p < .001$ ) and mood ( $r_s = -.11, p = .014$ ). For responders who perceived that positive encounters with HCPs facilitated their S-RTW, SRH correlated with income ( $r_s = -.14, p = .032$ ). In addition, C-SRH was correlated with income ( $r_s = -.16, p = .011$ ). Logistic regression showed a strong association between fair/good/very good SRH and the impact of positive encounters on S-RTW (Table 5).

The question about how positive encounters with SIOs impacted on S-RTW was answered by 480 responders (81.4%). Out of those, 174 responders (36.3%) agreed that positive encounters with SIOs facilitated their ability to RTW to a certain extent or very much. Then again, 285 responders (59.4%) answered that positive encounters had no impact on their S-RTW. The impact of positive encounters with SIOs significantly correlated with SRH ( $r_s = .24, p < .001$ ), C-SRH ( $r_s = .11, p = .020$ ) and mood ( $r_s = .16, p < .001$ ). For responders who perceived that positive encounters with SIOs facilitated their S-RTW, SRH was significantly correlated with income ( $r_s = -.14, p = .014$ ) and age ( $r_s = -.14, p = .016$ ). There was a moderate association between SRH and the impact of positive encounters on S-RTW (Table 5).

***Associations between the impact of negative encounters with healthcare professionals and social insurance officers on self-estimated ability to return to work and SRH, C-SRH and mood***

The question about how negative encounters with HCPs impacted on S-RTW was answered by 269 responders (45.6%). Out of those, 34 responders (12.6%) agreed that negative encounters with HCPs impeded their ability to RTW to a certain extent or very much. On the other hand, 221 responders (82.2%) answered that negative encounters had no impact on their ability to RTW. The impact of negative encounters with HCPs was not significantly correlated with SRH, C-SRH or mood.

The question about how negative encounters with SIOs impacted on S-RTW was answered by 314 responders (53.2%). Out of those, 53 responders (16.9%) agreed that negative encounters with SIOs impeded their ability to RTW to a certain extent or very much. Conversely, 240 responders (76.4%) answered that negative encounters had no impact on their ability to RTW. The impact of negative encounters with SIOs was not significantly correlated with SRH, C-SRH or mood.

## **Discussion**

The most important finding of this study was that a majority of the responders graded their health as worse when they compared themselves with other people of their own age. Another important finding was that many responders had experienced low mood for a consecutive period of at least two weeks during the last 12 months. In addition, there were significant associations between low mood and being aged less than 60 years.

Table 5. Logistic regression models for: (1) Associations between self-rated health and mood (independent variables) and impact of positive encounters with healthcare professionals and social insurance officers on self-estimated ability to return to work (dependent variables). (2) Associations between socio-demographic factors (independent variables) and impact of positive encounters with healthcare professionals/social insurance officers on self-estimated ability to return to work (dependent variables).

	Impact of positive encounters with healthcare professionals on self-estimated ability to return to work OR, 95% CI, p	Impact of positive encounters with social insurance officers on self-estimated ability to return to work OR, 95% CI, p
Self-rated health <sup>(1)</sup>		
Fair/good/very good	3.3, 2.1–5.1, <.001	2.2, 1.4–3.7, .002
Poor/very poor	Ref	Ref
Income <sup>(2)</sup>		
Low	Ref	Ref
Average	1.0, .3–3.3, .986	1.1, .6–2.0, .818
High	1.0, .3–3.3, .985	1.4, .7–2.8, .389
Age <sup>(2)</sup>	–	
<60 years	–	Ref
≥60 years	–	1.8, 1.1–3.0, .014
Compared self-rated health <sup>(1)</sup>		
Equal/better	1.7, 1.1–2.8, .022	1.4, .9–2.2, .174
Worse	Ref	Ref
Income <sup>(2)</sup>		
Low	Ref	–
Average	1.1, .4–3.2, .890	–
High	2.3, .8–6.6, .125	–
Low mood <sup>(1)</sup>		
Yes	Ref	Ref
No	1.0, .7–1.5, .918	1.3, .9–2.0, .192

A recent Canadian study of 519 patients with HF (mean age 73.3 years) found that 13% of the patients reported poor health and 32% reported fair health (Chamberlain et al., 2014). These results, thus, which included younger patients (mean age 58.2 years) indicate that younger people with HF have poorer health than older ones. This is well in line with previous research findings (Chamberlain et al., 2014; Iqbal et al., 2010; Moser et al., 2013; Sacco et al., 2014).

Poor quality of life and depression in younger people with HF is assumed to be caused by a discrepancy between the person's perceptions of their functional status and their expectations, which can be more difficult for younger people to accept than for older people (Gottlieb et al., 2004). Younger people expect to remain active and maintain their social, domestic and work roles, but these expectations are negatively changed

by the limitations brought by the condition (Dekker et al., 2009; Moser et al., 2013), implying reduced self-esteem and a changed self-image (Nordgren et al., 2007). Previously, this discrepancy has been described in terms of 'Loss and Disappointment' (Moser et al., 2013).

These results showed moderate to strong associations between good SRH and the impact on self-estimated ability to work of positive encounters with HCPs and SIOs. Work is generally positive for people's health and well-being. Work, thus, fulfils important psychosocial needs for people's identity, social roles and social status (Waddell & Burton, 2006). Previously, it has been described that in order for people with HF to cope with the condition social support and medical resources should be used (Sacco et al., 2014). Negative thinking may be an important component of depression in people with HF (Dekker et al., 2009). Subsequently, interventions that assist patients to see new possibilities and to adopt new goals can be supportive for people with HF (Moser et al., 2013).

Perceptions of SRH and well-being are based on five interacting dimensions: physical, psychological, social, ecological and existential (Melder, 2011). All dimensions need to be considered in relation to people on long-term sick leave due to HF. However, on the basis of existing knowledge about younger people being more depressed than older, and that the cause for this is considered to be losses and disappointments, the existential dimension can have a more prominent role than usually considered. This dimension includes losses and changes which affect fundamental aspects of life (Melder, 2011). In addition, it includes experiences of a threatened existence (Melder, 2011), which has been previously described by people living with HF (Nordgren et al., 2007). People who are forced into new and less active roles due to illness and sick leave can have difficulties in letting go of their previous self-image implying reduced self-esteem (Jansson & Bjorklund, 2007; Lannerstrom, Wallman, & Holmstrom, 2013). Sick leave, then, implies personal challenges concerning health, work, relationships and economy. As a consequence, incapacity to work due to weakening health can lead to stigmatization and social exclusion (Jansson & Bjorklund, 2007).

These results showed that two-third of the responders received full or partial sickness compensation i.e. disability pension. Disability pension is a well-known factor for social isolation and exclusion (Vingard, Alexanderson, & Norlund, 2004). For many people with HF disability, pension can be a solution to work-related problems, but not for all. People with HF, as with many others, perceive work and working life as important aspects of life. These results also indicate that people who rated their health as poor or worse in comparison with other people of the same age received sickness benefit for longer periods of time than people who rated their health as fair or good. One explanation could be that long-term sick leave affects psychosocial conditions (Melder, 2011) which can hinder the patients from experiencing coherence, control or meaningfulness implying existential ill-being. In turn, the sick-listed person's perception of their general health is affected. Thus, people's perceptions of their health and consequences of long-term sick leave have public health relevance for prevention and for interventions.

In Sweden, all existing sick leave spells are registered by the Social Insurance Agency. Data, thus, from the two official registries in use are highly reliable. The postal questionnaire has been used in several population-based studies (Lynoe et al., 2011; Müssener, 2007; Mussener et al., 2008; Upmark, Borg, & Alexanderson, 2007; Upmark, Hagberg, & Alexanderson, 2011; Wessel, 2013; Wessel et al., 2013), implying high reliability and validity in data. However, there might be inaccuracies due to registration

procedures. Because of the low response rate these results should be interpreted cautiously.

To conclude, the sick leave and RTW process is a complex, multifaceted and dynamic problem which includes individual, structural and environmental aspects. As suggested by these results, positive encounters with both HCPs and SIOs can support people with HF in their efforts to remain in working life. However, HCPs and SIOs need to let patients/clients take responsibility and show them that they believe in what they say and in their ability to RTW. Moreover, HCPs and SIOs need to consider the existential dimension of patients/clients' SRH and well-being.

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