PSIWORLD 2013

Family support, positive thinking and spirituality correlates on psychologically distressed heart failure patients

Mohamed N.F. a, Azan A. b, Lebar O. a, Shaharom M.H. c, Peterson R.F. d

aSultan Idris Education University, 35900 Tanjung Malim Perak, Malaysia
bNational Heart Institute, No 145 Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia
cCyberjaya University College of Medical Sciences, Jalan Teknokrat 4, 63000 Cyberjaya Malaysia
dThe University of Adelaide, Adelaide, South Australia 5005 Australia

Abstract

This study sought to screen the psychological profile among Heart Failure (HF) patients in Malaysia. The Hospital Anxiety and Depression Scale (HADS) was administered to 211 HF patients. Later, qualitative interviews were used to gain an in-depth understanding of the prior findings. The study demonstrated that depression (6%) and anxiety (9%) are rare in the Malaysia HF populations. These results were explained through exploratory factors such as family support, positive thinking, and spiritual belief that emerged from the qualitative interviews. Prevalence of anxiety and depression among HF patients in Malaysia is lower compared to the Western population due to some motivating factors.

© 2014 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license. Selection and peer-review under responsibility of Romanian Society of Applied Experimental Psychology.

Keywords: Psychological distress; heart failure; spirituality; family support and positive thinking

1. Introduction

Heart failure (HF) is a major disease globally, and has been studied extensively as to how it is treated and managed. In Malaysia, HF is an important cause of hospitalization accounting for about 10% of all medical

* Nor Firdous Mohamed. Tel.: +6015-4811 7730; fax: +6015-4811 7297.
E-mail address: norfirdous@fppm.edu.my
admissions (The, Lim, Robiah, Azman & Thuraisingham, 1999). The prognosis for HF patients is poor, and far worse than some of the common cancers (Kannel, Castelli, McNamara, McKee & Feinleib, 1972). The one year mortality rate varies between 5% to 52% depending on the severity and the presence of co-morbidity (Academy of Medicine of Malaysia, 2007).

A recent study on mortality was conducted with 225 multi-ethnic HF in-patients in Singapore with a left ventricular ejection fraction of 40% or less and who were discharged alive. After five years, the survival and causes of death findings showed proportionally more Malay and Indian patients were admitted compared with Chinese patients. Surprisingly, the morbidity rate associated with HF is not only confined to physical symptoms but also significant psychological distress including anxiety and depression, due to changes in functional level, work status, and social relationships (Seow, Chai, Ping Lee, Chan, Kwok, Yeo & Chia, B, 2007). Malaysia is a multiracial developing country with three major ethnic groups (Malay, Indian and Chinese), however to date no studies have explored the psychological factors related to HF in these populations.

Recent self-reported findings suggest that between 25% and 50% of HF patients have anxiety, and 18% to 47% have depression. These percentages are dependent on their socio-demographic factors such as age, length of diagnosis and co-morbid conditions (Deville & McDongall, 2008; Dekker, Peden, Lennie, Schoolder & Moser, 2009). These factors may affect quality of life and potentially decrease the survival of HF patients (Sullivan et al., 2009). There is no published research which has investigated the psychological prevalence associated with HF patients in Malaysia. Hence, this pilot study was conducted to determine prevalence of anxiety and depression among multi-ethnic HF patients.

2. Materials and methods

2.1. Study design

A questionnaire based survey was used to establish a cross sectional view of the psychological prevalence of anxiety and depression among HF populations in the National Heart Institute, Malaysia. A semi-structured interview was then conducted with the aim to provide insight into the meaning of the psychological prevalence findings and the HF patients’ perceptions on their psychological wellbeing.

2.2. Subjects

HF inpatients were recruited from the National Heart Institute, Malaysia a tertiary hospital in West Malaysia. Patients were recruited over a period of four months and included multi-ethnic Malaysians (Malay, Chinese and Indian). Eligible study participants had (1) a cardiologist’s diagnosis of heart failure, (2) Classification of HF based on the New York Heart Association (NYHA) functional class of II, III and IV according to the cardiologist, (3) medical records showing measurement of left-ventricular ejection fraction of <40% documented by nuclear ventricular or echocardiography, (4) aged 18 years old and above, (5) and for female participants none were pregnant. Patients were excluded if (1) they were diagnosed of having cognitive impairment from their medical record, or (2) were unable to speak Malaysian language or English or (3) did not give informed consent.

2.3. Instruments

The Hospital Anxiety and Depression Scale (HADS) (Zigmond & Snaith,1983): This 14 item questionnaire assesses 2 subscales: anxiety and depression (7 items each). Scores of 8 to 10 on the anxiety and depression subscales indicate a borderline clinical status, and scores of >11 a moderate level of psychological distress which is regarded as psychiatric (or case) levels of anxiety and depression, comparable to clinical diagnostic interviews [9]. Previous studies support its 2-factor structure with a Cronbach alpha of 0.83 for the anxiety subscale, and 0.82 for depression (Bjelland, Dahl, Haug & Neckelmann, 1997). This study developed a Malaysia Language version of HADS which was translated and validated with a Cronbach alpha of 0.88 for anxiety and 0.79 for depression (Yusof, Low & Yip, 2011).
2.4. Data collection

The National Heart Institute Ethics Committee, Malaysia (IJNEC/ 03/2011) approved the study protocol. Patients were recruited during normal office hour visits. Those who gave written informed consent and fulfilled the inclusion criteria were asked to complete a socio-demographic questionnaire and the HADS questionnaire. Later, interviews were conducted individually in a private room at the respective ward using a semi-structured interview guideline to ensure reliability. The Principal Investigator completed the interviews in English, or Malay based on the patient’s preference. Interviews lasted approximately 60 to 90 minutes. Recruitment of participants continued until all emerging themes were saturated.

2.5. Statistical analysis

SPSS 19.0 were used for quantitative data analysis. Demographic data was analyzed descriptively and presented as frequencies. All semi-structured interviews were audio taped, transcribed verbatim and analyzed using thematic content analysis. These themes were then coded according to the categories based on the literature reviews and expert content opinion.

3. Results

3.1. Socio-demographic data

A total of 211 patients participated in the study and completed the questionnaires. The mean age of participants were 55.5 years old (SD = 3.18). Majority of the patients were Malays (n=148; 70.14%), and in total there were more males (n=150; 71.09%) than females (n=61; 28.92%). 83.4% of the patients were married and with 67.3% still receiving support from family.

3.2. Prevalence of anxiety and depression

Only 6.64% (n=14) of the in-patients and outpatients scored as depressed, while 9% (n=19) scored as anxious when assessed with the HADS. Furthermore, 2.37% (n=5) of the subjects had both anxiety and depression concomitantly (Table 1). The lower rates of anxiety and depression scores among HF patients might be explained through the themes which emerged from interviews with 19 patients. (See section 3.3).

<table>
<thead>
<tr>
<th>Variables</th>
<th>n (%)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>11 (5.21%)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>3 (1.42%)</td>
<td></td>
</tr>
<tr>
<td>Total Depression &gt; 11</td>
<td>14 (6.64%)</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Anxiety Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>9 (4.27%)</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10 (4.74%)</td>
<td>&gt; 0.05</td>
</tr>
<tr>
<td>Total Anxiety &gt; 11</td>
<td>19 (9%)</td>
<td></td>
</tr>
<tr>
<td>Having both anxiety and depression &gt; 11</td>
<td>5 (2.37%)</td>
<td>&lt; 0.05*</td>
</tr>
</tbody>
</table>

* X2 tests for independence; p< 0.05 = significant
3.3. Qualitative analysis themes

Three major themes emerged in the analysis of qualitative data. Family support was an important factor in patient’s well-being:

When I had short of breath, when I sit at place with my family I feel better (Indian)
My children will visit me every day even they are busy, I feel better when they are around (Malay)

A positive coping strategy was identified as a major theme. Typical comments in this theme include:

If we keep thinking about those worrying things, our life will be more deteriorated. For me, what ever happen, I just think once and settled. Previously, I think a lot but when the time comes, I just let go because sometime we are only paranoid about what will happen in the future, this kind of negative perception will lead to cognitive misconception and you’ll easily stress out. (Malay)
We don’t have to think too much about our illness, because it will be burden to us... (Indian)

The third theme was described as spirituality belief. Typical comments include the following:

God is great we can get more energy through meditate (Chinese)
Oh... faith! I believe that, you see in life we walk through so many stages, so at this stage, you know where all the organs will fail, I accept it. (Indian)

4. Discussion

Previous studies generally reported prevalence rates for depression ranging between 9% to 60% (Deville & McDongall, 2008; Sullivan et al., 2009) and anxiety ranging between 25%-50% in HF patients (Sullivan et al., 2009). Both depression and anxiety rates among HF patients in this current study appear much lower compared to the Western population. Factors such as family support, spirituality and a positive thinking coping strategy were identified from the qualitative interviews which might support the lower prevalence rates of anxiety and depression among HF patients in Malaysia. Family support was very crucial, and another study on social support has shown that single marital status was an independent predictor for hospital early readmission or death within 60 days (Löwe et al., 2004)

An earlier qualitative study reported that patients with HF with depressive symptoms described experiencing negative thinking which exacerbated their depressed mood (Levin & Vanderpool, 1987). This current study showed a low prevalence rate of depression might be due to the positive thinking perception among the HF patients. Furthermore, spirituality was identified as a conducive method to better health (King, Speck & Thomas, 1999). However there is an experimental study which assessed the role of spiritual belief in clinical outcomes of patients and shown that stronger spiritual beliefs is an independent predictor of poor outcome at 9 months admission duration (Dekker, Peden, Lennie, Schoolder & Moser, 2009). These findings differ from our study where almost 100% of the respondents reported spirituality beliefs were crucial towards their clinical improvement. By recognizing these psychological factors, patients’ psychological wellbeing and health perceptions towards improvement of their illness can be better understood, the disease prognosis would be determined, and therefore rates of hospital readmission possibly reduced. The limitations of our study included purposive sampling limitation, sampling bias and that the sample may not be representative of the entire population. Finally, this study was conducted at tertiary referral centre, and thus the sample of patients with HF did not represent the typical HF population seen by a general practitioner.

5. Conclusion

In conclusion, anxiety and depression symptoms are less common among HF patients in Malaysia. Family support, positive thinking and spirituality are important factors and useful to be considered as part of the parameters of interest in future studies.
Acknowledgements

The authors acknowledge financial support from Malaysia Ministry of Higher Learning Research Grant: RAGS 2013-0012-105-72 and Cyberjaya University College of Medical Sciences Research Grant: CRG/02/03/2012.

References


