How does depression affect self-care?

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Patient from the clinic

“Now you want me to exercise and keep myself on a fluid restriction and a sodium restricted diet. At the same time I have to adjust to my medication scheme. But I don’t want the disease dominate my life. I think sometimes you should stretch the rules a bit.”

“I find that as I get a bit sicker, I get more depressed along with that. It reminds me of the disability that I have...
Content

- Self care
  - Definition
  - How can we approach it
  - How can we measure it

- Depression
  - Definition
  - Prevalence
  - Consequences

- Relationship between Self-care and Depression
  - Research data
  - Implications
Definition of Self care

Decision-making *process* that patients use in choice of behaviors that maintain physiological stability (symptom monitoring and treatment adherence) and the response to symptoms as they occur.

Riegel, 2004
Decision-making process

Requires that patients

1. Recognize a change;
2. Evaluate this change;
3. Decide to take action;
4. Implement treatment strategy;
5. Evaluate the response to the treatment.
Decision-making process

Requires that patients

1. Recognize a change; **Increase edema**
2. Evaluate this change; **worse, weight gain?**
3. Decide to take action; **extra diuretic dose**
4. Implement treatment strategy; **when, how much**
5. Evaluate the response to the treatment. **Helpful?**
Self care behaviours in HF

The behavior that a patient with HF undertakes to care for himself to promote health and well being

- Adherence to medication
- Monitoring and interpreting symptoms
- Adherence to diet and fluid restrictions
- Exercise
- Alcohol restriction and smoking cessation
- Daily weighing
- Seeking assistance when symptoms occur

Jaarsma, 2000; Riegel, 2001
Self-Care of Heart Failure Model

Self-Care Maintenance

Self-Care Management

Symptom monitoring and treatment adherence

Symptom Recognition

Symptom Evaluation

Treatment Implementation

Treatment Evaluation

Self-Care Confidence

Riegel, 2004
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Riegel, 2004
Self care

Self care maintenance

- Medication adherence
- Dietary adherence
- Routine exercise
- Symptom monitoring
- Immunization upkeep
Self-Care of Heart Failure Model

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Riegel, 2004
Self care

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Self care management

- Symptom recognition
- Symptom evaluation
- Symptom treatment
- Evaluate treatment effectiveness
How can we measure Self care

European Self Care Behavior Scale

- 9 item scale rated on a 5 point likert scale
- (1 = Completely agree; 5=completely disagree)
- Total score (0-45)
- Subscale consulting behavior (4 items, 0-24)

‘if shortness of breath increases I contact my doctor or a nurse’

Jaarsma, 2009
Self-care of Heart Failure Index (SCHFI)

'Scores reflecting

- Self care maintenance
- Self care management
- Confidence with Self care

Responses are transformed to 100 points each

Scale score of 70 or higher is adequate self care

Riegel, 2004
What complicates Self care?

- **Comorbid conditions** (multiple medication)
- **Anxiety** (less motivated, difficulty coping with changes)
- **Impaired cognition** (less knowledge, deficits in memory)
- **Sleep disturbances** (contribute to problems with cognition)
- **Poor health literacy** (understand basic health information)
- **Problems with health care system** (poor guidelines)

*AHA, 2009*
What about depression?

Can it complicate Self care?
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Definition of depression

At least 5 of the following symptoms. Must be present during the same 2 week period. Must represent a change from a previous level of functioning.

- Depressed mood
- Loss of interest or pleasure in almost all activities
- Significant weight loss (when not dieting), weight gain, change in appetite.
- Insomnia or hypersomnia (excess sleep)
- Fatigue or loss of energy
- Feelings of worthlessness
- Impaired ability to concentrate or indecisiveness

...
**Prevalence of depression**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart failure</td>
<td>39%</td>
</tr>
<tr>
<td>Elderly</td>
<td>18%</td>
</tr>
<tr>
<td>Healthy elderly</td>
<td>14%</td>
</tr>
<tr>
<td>Cancer</td>
<td>20%</td>
</tr>
<tr>
<td>Lung disease</td>
<td>25%</td>
</tr>
<tr>
<td>Post MI</td>
<td>20%</td>
</tr>
</tbody>
</table>

*Jiang, 2001; Faris, 2002; Lesman 2006; van Melle, 2002; Schoevers, 2000*
Depression in HF patients

CES-D ≥ 16

Lesman et al., 2007
Depression in HF patients

CES-D ≥ 16

P < 0.001

Lesman, 2007
Consequences of depression

In HF patients

- Two-fold increase in ER visits
- 29% increase in health care costs
- Decrease in quality of life and functional decline
- Higher readmission rates, longer hospital stay
- Higher mortality

Fulop, 2003; Lesman, 2009; Sullivan, 2004; Vaccarino, 2001
Impact depressive symptoms on outcome

Depressive symptoms related to outcome (p=0.02)

Lesman, 2009
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Is there a link with Self care?

On one hand:

Underlying reason for worse outcome in patients with depressive symptoms could be non compliance

(due to lack of self care behaviors......????)

DiMatteo, 2000; van der Wal, 2007
On the other hand...

Symptoms of depression might interfere with the ability to perform Self care

- Low energy levels
- Lack of motivation
- A sense of helplessness
- Cognitive dysfunction

Schweitzer et al. 2007
Depression???
Self care and depression

- **Diabetes**
  - Depression related to lower Self care behavior
    - Physical activity, Dietary behavior, Foot care, Self management of blood glucose behavior

- **CVD**
  - Depression related to lower compliance with dietary
  - Depression related to rapid relapse to smoking cessation
  - Depression related to non compliance with medication

*Egede 2010; Jerant, 2008; Thorndike 2008*
Heart failure

Depression might hinder Self care through

- Impaired cognition
- Social isolation
- Hopelessness
- Delay in seeking help or treatment

AHA scientific statement, Riegel 2009
Depression and non-adherence

- Overall compliance related to mental health
- Poor compliance in dietary recommendations
- Poor compliance in exercise recommendations
- More barriers to medication taking and diet
- Fewer benefits to medication
- Prone to non-adherence in alcohol and smoking restrictions

Patients with Heart Failure (n=958)

- Independent direct relationship between self care behavior and depression
- Delay time is higher in depressed compared to non-depressed HF patients (54 versus 120 hours)

Johansson, 2010 submitted
Implications for daily practice

- Decrease depressive symptoms
  - Be alert, ask about mental health (AHA routinely screening)
  - Treat patients according to psychiatric guidelines
  - Multi disciplinary approach

- Improve Self care
  - Improve knowledge (how to...)
  - Reinforce adherence behavior
  - Provide patients with positive experiences
  - Improve belief in self-efficacy (ability to perform certain behaviors)
  - Discuss personal barriers to adherence
  - Improve skills and resources
To conclude

Depression interferes with Self care in several ways

Research data on depression and Self care is scare

Most research focused on Self care and adherence

There is not a ‘one size fits all’ approach, but look for feasible and practical solutions to improve Self care