Prevalence of Depression in Adult Saudi Patients with Heart Failure

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King Abdulaziz Medical City
Cardiovascular diseases management program
Saudi Heart Association
22nd Annual Symposium

Disclosures: None
Cardiovascular Disease Management Program In KAMC

- Established in 2000.
- 4 programs:
  - Heart failure
  - Atherosclerosis
  - Cardiac diabetes education
  - Life style modification

Nurse led, cardiologist supervised, and target oriented program.
Background

Depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy, and poor concentration.
Background

♥ Depression can become chronic, lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities

♥ Most studies of depression in patients with heart failure have been carried out in developed countries and evaluated hospitalized patients
Prevalence of Depression in Patients with HF

♥ Hospitalized patients: 13% to 77.5%

♥ Out-patient (small studies): 13% to 42% and have not adequately accounted for the impact of age, race, or gender

J Am Coll Cardiol, 2004
Objectives

♥ To study the prevalence of depression in adult Saudi population with HF

♥ To identify factors that may affect prevalence of depression.
Methods

❤ A retrospective study of a prospectively collected data included the first 148 heart failure patients who completed the patient health questionnaire (PHQ9)
Methods

♥ Inclusion criteria

- All patients have a history of heart failure with documented ejection fraction of $\leq 40\%$

- All patients had at least one visit to the heart failure clinic from May 2010 to October 2010.
Methods

♥ Exclusion criteria

- Patients known to have clinical depression or treated for depression prior to enrollment in the program
Methods

- The questionnaire was carried out by nurses through confidential diagnostic interview.
- Medical and demographic data were obtained from the electronic computerized system.
- Depression assessment was carried out via a validated Arabic translated version of the Patient Health Questionnaire (PHQ).
PHQ

- PHQ-9 is a nine item depression scale

- Powerful tool for diagnosing depression, in addition to, selection and monitoring of anti-depression treatment

PHQ

- Validity of PHQ has been assessed against an independent structured mental health professional interview. PHQ-9 score $\geq 10$ had a sensitivity of 88% and a specificity of 88% for major depression.

- PHQ is easy to administer, accessible, free and is accepted culturally in our patient population.

Kroenke K, Spitzer RL, Williams JB; The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001 Sep;16(9):606-13
PHQ

NAME  John Q. Sample  DATE

Over the last 2 weeks, how often have you been bothered by any of the following problems?

<table>
<thead>
<tr>
<th></th>
<th>Little interest or pleasure in doing things</th>
<th>Feeling down, depressed, or hopeless</th>
<th>Trouble falling or staying asleep, or sleeping too much</th>
<th>Feeling tired or having little energy</th>
<th>Poor appetite or overeating</th>
<th>Feeling bad about yourself— or that you are a failure or have let yourself or your family down</th>
<th>Trouble concentrating on things, such as reading the newspaper or watching television</th>
<th>Moving or speaking so slowly that other people could have noticed—or the opposite—being so fidgety or restless that you have been moving around a lot more than usual</th>
<th>Thoughts that you would be better off dead, or hurting yourself in some way</th>
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</tbody>
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add columns:  +  +  +
TOTAL:  

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all
Somewhat difficult
Very difficult
Extremely difficult
## Baseline Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Total (n=148)</th>
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<tbody>
<tr>
<td>Mean Age (years)</td>
<td>61±11</td>
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<tr>
<td>Male Gender</td>
<td>72%</td>
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<tr>
<td>DM</td>
<td>68%</td>
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<td>HTN</td>
<td>68%</td>
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<td>BMI&gt;30</td>
<td>50%</td>
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<tr>
<td>Dyslipidemia</td>
<td>87%</td>
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Results

Total patients: 148 (72% males, 28% females)
PHQ results

- 68% No depression
- 21% Moderate to severe
- 6% Moderate
- 3% Moderate
- 2% Mild

Legend:
- Red: No depression
- Gray: Mild
- Orange: Moderate
- Yellow: Moderate to severe
- White: Severe
Results

Total 148 patients

- Females: 54% depressed
- Males: 24% depressed
Depression With Age

- Age ≤60: 36%
- Age >60: 26%
Prevalence of Comorbidities in None Depressed Patients

- DM: 40%
- HTN: 37%
- Dyslipidemia: 45%
- Obesity: 24%
Prevalence Of Comorbidities In Depressed Patients

- DM: 85%
- HTN: 77%
- Dyslipidemia: 88%
- Obesity: 69%
Results

- 32% of the total patients experience different degrees of depression

- Depressed patients tended to be younger

- Women were more likely (54%) to be depressed
Results

- Depression is more common in patients with other multiple co-morbidities like obesity, hypertension and DM.

OR

- Existence of multiple comorbidities in patient with HF make them more likely to have some degree of depression
Conclusion

❤ Depression is prevalent in adult Saudi patients with HF

❤ It is considerably higher in certain groups such as females, young age and patients with other multiple co-morbidities like obesity, hypertension and DM.
Thank You
Depression has a huge impact on individuals and society; with a lifetime prevalence of over 15%, depression will be the second leading illness in the world by 2020 as projected by the World Health Organization.