Global burden of Depression

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What is Depression?

- It is a concept that has been around for thousands of years
- Discussed as a disease concept even in ancient Mesoptamia and Greece second millenium BC
- Hippocrates (460 BC – 370 BC) The Father of Medicine
- He believed that diseases occurred naturally and not due to superstition or Gods
- Depression was originally called *melancholia*
Melancholia/Depression Today

- We now know that there are proven subtle brain changes in a person suffering from a clinical major depressive disorder
  - Neurochemical changes: loss of neurotransmitters serotonin and noradrenaline
Global burden of depression

- Over 300 million people are estimated to suffer from depression, equivalent to 4.4% of the world’s population.
- Depression is ranked by WHO as the single largest contributor to global disability
- 7.5% of all years lived with disability in 2015
- Depression is also the major contributor to suicide
- Globally, close to 800,000 suicides per year.
Depression as global health priority

• The number of persons with depression globally is rising, particularly in lower-income countries, because the population is growing

• Prevalence of depression likely to increase due to effects of globalisation and impact on traditional family structures

• Coping mechanisms are becoming more fragile for individuals and communities in the rapidly urbanising across Asia

• For women throughout the world, depression is the leading cause of disability
Contributions of non-communicable diseases to disability-adjusted life years

By the year 2030, depression is projected to be the largest contributor to the global burden of disease

- Cardiovascular disease (22%)
- Cancer (11%)
- Neuropsychiatric disorders (28%)
- Musculoskeletal disorders (4%)
- Respiratory disorders (6%)
- Digestive disorders (6%)
- Endocrine (4%)
- Other non-communicable diseases (7%)
- Sense organ impairment (10%)
- Schizophrenia (2%)
- Unipolar affective disorder (10%)
- Bipolar affective disorder (2%)
- Dementia (2%)
- Substance-use and alcohol-use disorders (4%)
- Other mental disorders (3%)
- Epilepsy (1%)
- Other neurological disorders (2%)
- Other neuropsychiatric disorders (3%)

Prevalence of depressive disorders (% of population), by WHO Region

- **AFRICAN REGION**
  - Female: 6%
  - Male: 4%
  - Both: 5%
- **EASTERN MEDITERRANEAN REGION**
  - Female: 5%
  - Male: 4%
  - Both: 4%
- **EUROPEAN REGION**
  - Female: 7%
  - Male: 3%
  - Both: 5%
- **REGION OF THE AMERICAS**
  - Female: 8%
  - Male: 3%
  - Both: 5%
- **SOUTH-EAST ASIA REGION**
  - Female: 3%
  - Male: 3%
  - Both: 4%
- **WESTERN PACIFIC REGION**
  - Female: 4%
  - Male: 3%
  - Both: 4%
- **WORLD**
  - Female: 4%
  - Male: 3%
  - Both: 4%
Suicide rate per 100,000 population

Source: WHO Global Health Estimates (http://www.who.int/healthinfo/global_burden_disease)
Globally suicide rate is 11.4/100,000, or one death every 40 seconds

Estimates rates of suicide by gender and age 2000 and 2012 in India

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of suicides (all ages), 2012</th>
<th>Crude all ages and age-specific suicide rates (per 100 000), 2012</th>
<th>Age-standardized suicide rates*** (per 100 000), 2012</th>
<th>Age-standardized suicide rates*** (per 100 000), 2000</th>
<th>% change in age-standardized suicide rates, 2000–2012</th>
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</thead>
<tbody>
<tr>
<td>both sexes</td>
<td>258 075</td>
<td>20.9 2.0 35.5 28.0 20.0 20.9</td>
<td>21.1</td>
<td>23.3</td>
<td>-9.2%</td>
</tr>
<tr>
<td>females</td>
<td>99 977</td>
<td>16.7 2.4 36.1 17.2 11.1 11.2</td>
<td>16.4</td>
<td>20.3</td>
<td>-19.1%</td>
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<tr>
<td>males</td>
<td>158 098</td>
<td>24.7 1.6 34.9 38.0 28.9 32.7</td>
<td>25.8</td>
<td>26.2</td>
<td>-1.6%</td>
</tr>
</tbody>
</table>
Socioeconomic costs of depression

• Despite known effective treatments, fewer than 50% globally receive treatments (in many countries, fewer than 10%) (WHO).

• Across the 36 largest countries in the world, it is projected that more than 50 million years of lost productivity are attributable to depression and anxiety disorders every year, at an estimated cost of US$925 billion.

• On the other hand, scaled-up treatment of depression can lead to large economic productivity gains of a net value of $230 billion (Chisholm et al, Lancet Psychiatry, 2016).
Socioeconomic costs of depression

- Direct health costs

- Indirect costs
  - Unemployment, absence from work, loss of productivity - presenteeism
  - Distress on marital, parental and social roles
  - Effects of suicide and other violent acts

- India has an estimated prevalence of 56.6 million (4.5% total population) with depressive disorders*

- Other epidemiological studies found overall prevalence of 15.9% (Poongothai et al, PloS One 2009)

- Total Years Lived with Disability (YLD) is >10 million (7.1% Total YLD)**

* Source: Global Burden of Disease study 2015 (http://ghdx.healthdata.org/gbd-results-tool)

** Source: Global Health Estimates 2015 (http://www.who.int/healthinfo/global_burden_disease/en/)
Who is affected by depression?

The answer is = Everybody

Can and does affect people of all ages, from all walks of life

Depression can affect whole society

The risk is higher among those affected by:

- Poverty, homelessness, unemployment
- Life events such as the death of a loved one or a relationship break-up
- Abuse including children, women and the neglected elderly
- Physical illness and alcohol and drug use
Features of Major Depressive Disorder (MDD)

• Classic Features
  – Anhedonia – no enjoyment
  – Sleep – especially early morning waking
  – Energy – low and/or fatigue
  – Guilt and worthlessness
  – Appetite/weight – usually loss of appetite
  – Psychomotor activity – usually retardation with slowed body movements, lack of facial expression, long latency of speech response
  – Suicide – thoughts and actions
  – Concentration – often impaired with memory complaints

• Other Features
  – Anxiety
  – Irritability and anger
  – Cognitive dysfunction

(From Lam RW, 2012)
Treatment of MDD

• Initial therapy consists of CBT and/or antidepressants
• Psychiatric referral/consult may be indicated
• Multiple reasons for failure
  – Poor drug adherence
  – Breakthrough symptoms while taking medication
  – Undiagnosed medical conditions
  – Comorbid disorders that affect treatment response
  – Comorbid psychiatric disorders
  – Side effects
  – Refractory patients

Depression in Primary Care

◆ One third of patients in general health care have psychological disorders.
◆ Depression is the most common psychological disorder in primary care (10-15%).
◆ Less than half received adequate assessment.
◆ Less than half of those diagnosed received adequate treatment.

• Indian patients with depression appear to have a high prevalence of physical or somatic symptoms
• Somatic symptoms such as body aches or vague pains are the one of commonest manifestations of depression in India.
• Pattanayak & Sagar, 2014
Barriers at the patient level

- lack of help-seeking behaviour
- limited public knowledge of the disorders
- stigma
Untreated depression illness burden:

- chronic disability
- poor quality of life
- increased co-morbidity, esp. substance abuse
- increased suicide risk
- higher relapse rate
- demoralization
- family stress, dysfunction and divorce
- greater treatment cost and utilization of resources
Mental health service provision for Depressive Disorders

1. Optimising screening for early identification and treatment of depression
2. Promoting best practice in management for specialist and primary care
3. Reduction of cultural barriers and stigma in accessing care
4. Process of referrals to specialists mental health care
5. Capacity to work with traditional health systems
6. Training in relapse prevention program
Community Support Groups

- MIND Australia
- Beyond Blue, Australia
- Tom MacKay – walked from Bekal, India’s west coast to Bay of Bengal along the east coast. Raised $13,000 for Beyond Blue, knows about mental health problems first hand
Depression Support and Suicide Prevention

• Young men especially are not good at expressing their emotions

• Now we have ‘R U OK Mate’ Day in Australia to encourage young men to talk about their feelings

Key public information *(beyondblue)*

1. Depression is a health problem
2. Depression is common and likely to affect every family
3. Depression is a community problem and calls for a community response
4. Those with depression need help to get care
5. Close family and friends need to recognise early signs of depression, eg
   - Failing at work or school
   - Social withdrawal
   - Increase alcohol abuse
Key strategies *(beyondblue)*

1. Coordinated national depression strategy
2. Participation by key political, media and community leaders to raise profile
3. Investment in primary care education programs
4. Population-based prevention and early intervention
5. Partnerships between health and education, business and community areas
6. Reform in mental health services and insurance schemes
Depression: what you should know
If you think you, or someone you know, might be suffering from depression, read on.

What is depression?

• Depression is an illness characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities, for at least two weeks.

• In addition, people with depression normally have several of the following: a loss of energy; a change in appetite; sleeping more or less; anxiety; reduced concentration; indecisiveness; restlessness; feelings of worthlessness, guilt, or hopelessness; and thoughts of self-harm or suicide.

• Something that can happen to anybody.

• Not a sign or weakness.

• Treatable, with talking therapies or antidepressant medication or a combination of these.

What you can do if you think you are depressed

• Talk to someone you trust about your feelings. Most people feel better after talking to someone who cares about them.

• Seek professional help. Your local health-care worker or doctor is a good place to start.

• Remember that with the right help, you can get better.

• Keep up with activities that you used to enjoy when you were well.

• Stay connected. Keep in contact with family and friends.

• Exercise regularly, even if it's just a short walk.

• Stick to regular eating and sleeping habits.

• Accept that you might have depression and adjust your expectations. You may not be able to accomplish as much as you do usually.

• Avoid or restrict alcohol intake and refrain from using illicit drugs; they can worsen depression.

• If you feel suicidal, contact someone for help immediately.

REMEmBER:
Depression can be treated. If you think you have depression, seek help.

www.who.int/depression/en

#LetsTalk

World Health Organization