



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Dr. Samar Lecture – Chronic Diseases2

Section:4

Record: # 33

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- **In the previous lectures, we said that the burden of non-communicable diseases is increasing globally (including Jordan of course)- and this is due to the increase in life expectancy.**
- **The burden of non-communicable diseases is an emerging problem in the world. Thus, they must be prioritized.**
- **Although the burden of non-communicable diseases is increasing globally, we still have other prioritized issues such as: Maternal and child health, especially in the developing countries.**
- **There are many diseases that aren't considered as communicable, but they're certainly harmful and chronic and may lead to years of loss. (Health is power, and healthy people will contribute more towards the development of their countries).**
- **Many patients come to PHC clinics with frequent symptoms such as headache, back pain, etc. then they end up being diagnosed with depression. We call these symptoms "PSYCHOSOMATIC", i.e. psychological symptoms by which the body expresses itself in a physical way.**

- Chronic Diseases 2:
- Disability or chronicity may be the outcome of many of these chronic diseases and they will not be accounted for by using the mortality indicators as the only indicators for chronic and degenerative diseases :

Examples :

- 1- Musculo-skeletal problems (**especially among elderlies**)
- Arthritis and osteoarthritis which may reach in old age a prevalence of 600/1000 persons, and over 300/1000 persons in males.
- Rheumatoid arthritis
- Low back pain
- Foot problems in old age

- Scoliosis in children (we have to deal with it lifelong)
- Congenital hip dislocation (Nowadays they're able to limit the disability by new techniques)
- Osteoporosis (especially among women)
- 2- Neurological disorders
- Cerebral palsy (A chronic problem especially among children but some may live up to 20-30 years old)
- Mental retardation
- Epilepsy (comes in attacks) and other seizure disorders
- Headache and migraine

- Multiple sclerosis: An autoimmune potentially disabling disease of the central nervous system, by which the immune system attacks the protective sheath (myelin) that covers nerve fibers and causes communication problems between your brain and the rest of your body. Eventually, the disease can cause permanent damage or deterioration of the nerves. It hits the golden age, i.e. the attacks may start early among 20-years old patients.

- Alzheimer and dementia- Alzheimer is accompanied with psychiatric symptoms such as depression.
- Parkinson disease- usually accompanied with depression.
- 3- Psychiatric disorders: Depression, Compulsive Obsessional Neuroses and **Schizophrenia**.
- 4- Other disorders – cataract, glaucoma - (في كبار السنّ)
- 5- Vision and hearing disorders - (في كبار السنّ)
- 6- Genetic disorders – Down's syndrome ,Cystic Fibrosis- the patient lives with the problem

• Neurosis:

- The diseases by which the patient knows that he's ill and suffers.
- Some common examples: Anxiety and **Obsessive-compulsive disorder (OCD)**.
- **OCD- IS VERY SERIOUS AND MAY END UP WITH SUICIDE IF NOT TREATED AND CONTROLLED.**

• Psychosis:

- The patient doesn't know that he's ill and isn't aware about the disease.
- Example: Schizophrenia, a serious problem, by which the patients experience hallucinations and aren't aware about their disease. Fortunately, it's being controlled nowadays.
- Neurosis is more common than psychosis
- Some types of depression can be classified as neurotic, others are psychotic

- **Glaucoma**: Increase in the eye pressure that may cause blindness.
- **Cataract**: clouding of the normally clear lens of your eye. For people who have cataracts, seeing through cloudy lenses is a bit like looking through a frosty or fogged-up window. Nowadays, they're treating it with laser.
- **(APPROXIMATELY 60%-70% OF ELDERLIES HAVE PROBLEMS IN THEIR EYES RELATED TO CATARACT).**

Epidemiology of Mental Diseases

- After cardiovascular disorders, mental illness is the second leading cause of disability and premature mortality. The burden of mental disorders is more than 15% of the overall burden of disease from all causes and is even greater than the burden associated with all forms of cancer.
- **Burden= Many disabilities are related to it**

- Mental disorders affect hundreds of millions of people and, if left untreated, create an enormous toll of suffering, disability and economic loss. Yet despite the potential to successfully treat mental disorders, only a small minority of those in need receive even the most basic treatment..

- **In Jordan, people aren't fully aware about the importance of mental health. In addition to missing counseling. That's also similar to the situation in developing countries regarding mental health- "The stigma of mental disorder". As a result, the numbers of people with mental disorders mainly depression are always underestimated. There aren't many reported cases.**
- **That's not the situation in the developed countries, where counseling and psychiatry in general are given special importance.**

Mental health as part of primary :health care

- Mental health care is a basic and essential building block for ensuring life-long good health. Multipurpose health workers, family doctors and general practitioners need to become increasingly better able to recognize any potential mental impairment or brain disorder in order to provide quality care .
- Patients may come with symptoms like headache , but unfortunately we miss the diagnosis of anxiety and depression for example.

- To ensure that basic mental health services are available to all people, even the most vulnerable and deprived groups, in the past two decades the WHO Regional Office for the Eastern Mediterranean collaborated with almost all countries of the Region to prepare national mental health programmes .

- Integrating mental health services into primary care is the most viable way of closing the treatment gap and ensuring that people get the mental health care they need.
- Primary care for mental health is affordable, and investments can bring important benefits. (World Health Organization (WHO) and the World Organization of Family Doctors (Wonca))

- This report on integrating mental health into primary care, which was developed jointly by the World Health Organization (WHO) and the World Organization of Family Doctors (Wonca), presents the justification and advantages of providing mental health services in primary care. At the same time, it provides advice on how to implement and scale-up primary care for mental health, and describes how a range of health systems have successfully undertaken this transformation.

* Family physicians (Primary health care) diagnose 60%-70% of depression cases, whereas psychiatrists deal with severe cases that may end up with suicide attempts.

*The patient is usually more satisfied with the family physician.

- As this report will show, treating mental disorders as early as possible, holistically and close to the person's home and community lead to the best health outcomes. **In addition, primary care offers unparalleled opportunities for the prevention of mental disorders and mental health promotion,** for family and community education, and for collaboration with other sectors.

- The implementation of these programs have been carried out in different degrees in the countries of the Region .

Primary care and mental health

- **1 in 4 people** seeking primary health care services have a significant mental health condition. **(25%)**

Spitzer, *JAMA* 1999; Kessler, *Arch Gen Psych* 2005

- **>50%** of people treated for depression receive all treatment in primary care.

Katon, *Arch Gen Psych* 1996

- Only **41%** with mental health conditions receive any treatment. (in the developed world, but in our countries the number of treated cases is even lower)

Wang, Lane, Olfson et al; *Arch Gen Psych*, 2005

- Management of common chronic illnesses often includes a need for changes in behaviors (e.g., diet & exercise).
- People's life problems and stresses affect their health and their health care.

Why primary care is best for detection of mental health problems

- Primary care setting is convenient for psychiatric consultation for many reasons:
 - Usually primary care physicians are well known to patients .
 - No stigmatization .
 - Proximity of the primary care centers .
 - Physical symptoms are common in psych. disorders specially, anxiety & depression .

Depression



Depression

- Depression is one of the most commonly encountered chronic conditions in PCS.
- Almost 75% of pts. Who seek help for depression do so in primary care .
- In spite of that depression is still under-recognized and under-treated, due to different reasons involving, pt.& doctors ...
- Treatment with antidepressants should continue for at least six months in the beginning. Other patients may need it for the whole life.

How to improve detection & treatment

- Improving attitudes and knowledge of care providers.
- Screening for depression(PHQ9).
- Patient education about depression.
- Collaboration with special psych. centers.
- *** The Hamilton Depression Rating Scale (HAM-D) has proven useful for many years as a way of determining a patient's level of depression before, during, and after treatment.**

Medical consultation

- It has been shown that :
 - Having a mental illness increases the likelihood of a person going to his doctor
 - 25% of consultations can be regarded as attributable to psychiatric morbidity .
 - The majority of people with psychiatric disorders present with somatic symptoms
 - The most common disorders are anxiety and depression .
 - Psychiatric disorders are more common in women than in men .

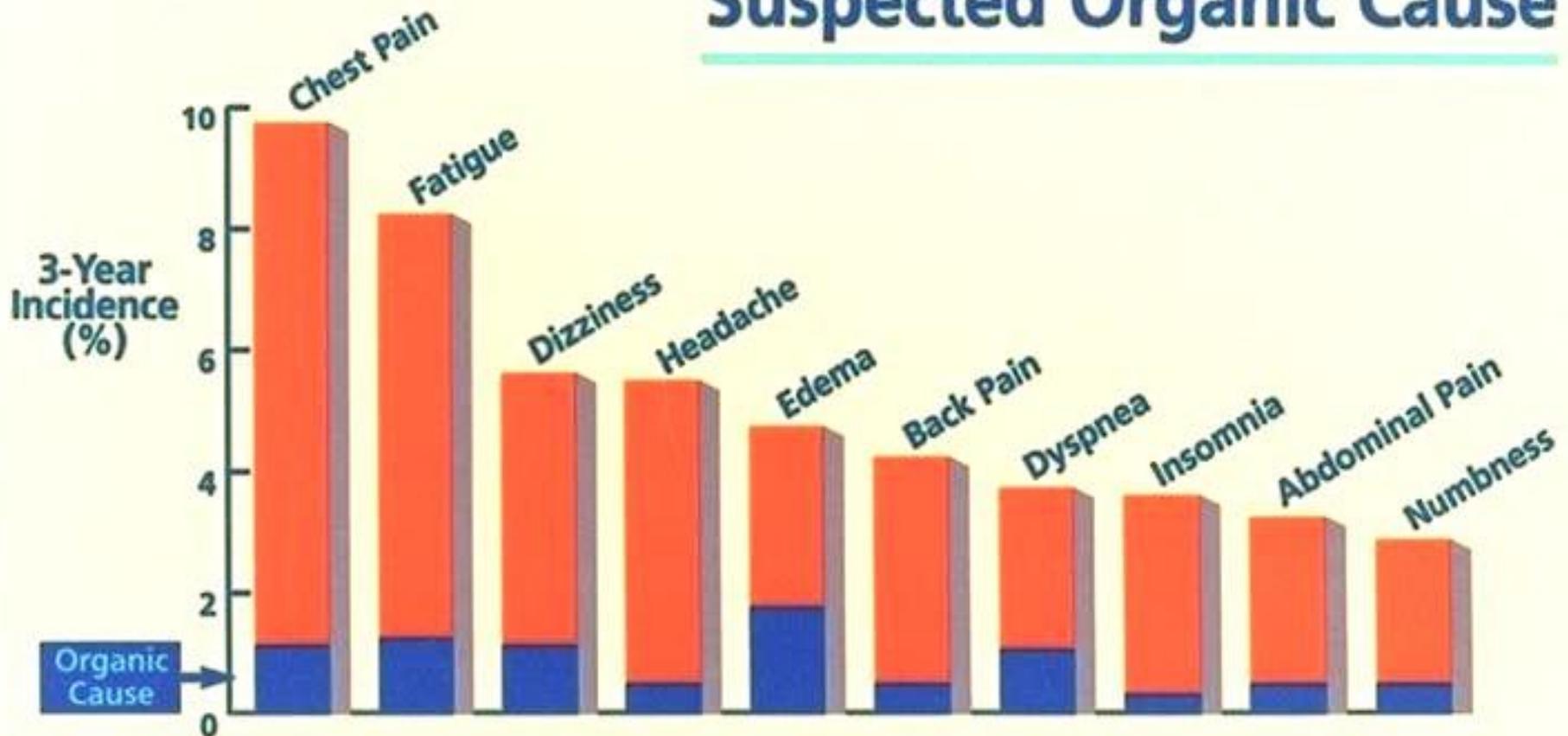
Detection Of Psych. Disorders In P C

- Patients who's problems are detected are usually those with obvious features of psychiatric disorders.
- People who present with physical symptoms are more likely to be missed
- Patients with physical and psych. disorders are likely to have their psychiatric disorder missed .
- Pt. may fail disclose distress due to he/she believe
 - psychiatric disorders are sign of weakness
 - Doctors do not deal with psychiatric problem .
 - Doctors do not have the time or inclination to help .
 - The somatic problems are not caused by stress
 - Doctors don't need to know the persons emotional problems .
 - Doctors will reject their emotional difficulties .

- Doctor who are better at detecting psychiatric disorders:
 - make early eye contact with the patient .
 - Clarify the person presenting complaint .
 - Show empathy .
 - Are sensitive to emotional cues .
 - Are less authoritarian .
 - Use appropriate psychiatric questions.
 - Make supportive comments .
 - Spend less time talking and less interruptions to patient, give less information at the beginning .

Important

3-Year Incidence of 10 Common Symptoms and Proportion of Symptoms with a Suspected Organic Cause



Kroenke K, Mangelsdorff AD. Common symptoms in ambulatory care: incidence, evaluation, therapy, and outcome. *Am J Med.* 1989;86:262-266.

**In the previous slide,
we have to know the
written symptoms**

How common are physical symptoms in the general population?

- 85-95% of community respondents experience a new symptom every 1-2 weeks
- Health maintenance organization (HMO) enrollees using a diary report a new symptom every 5-7 days
- Patients with anxiety/depression present a new symptom nearly every day

Stress and common symptoms

- Stress can cause physical symptoms (e.g., headaches) and perpetuate them.
- Stress lowers threshold for medical care seeking
- Stress makes us worry that an ambiguous bodily sensation is due to disease

Who goes to the primary care doctor with a common symptom?

- People with GI complaints¹, fatigue² or migraine headache³ in the community are significantly more likely to seek health care when they have psychological distress or a DSM disorder

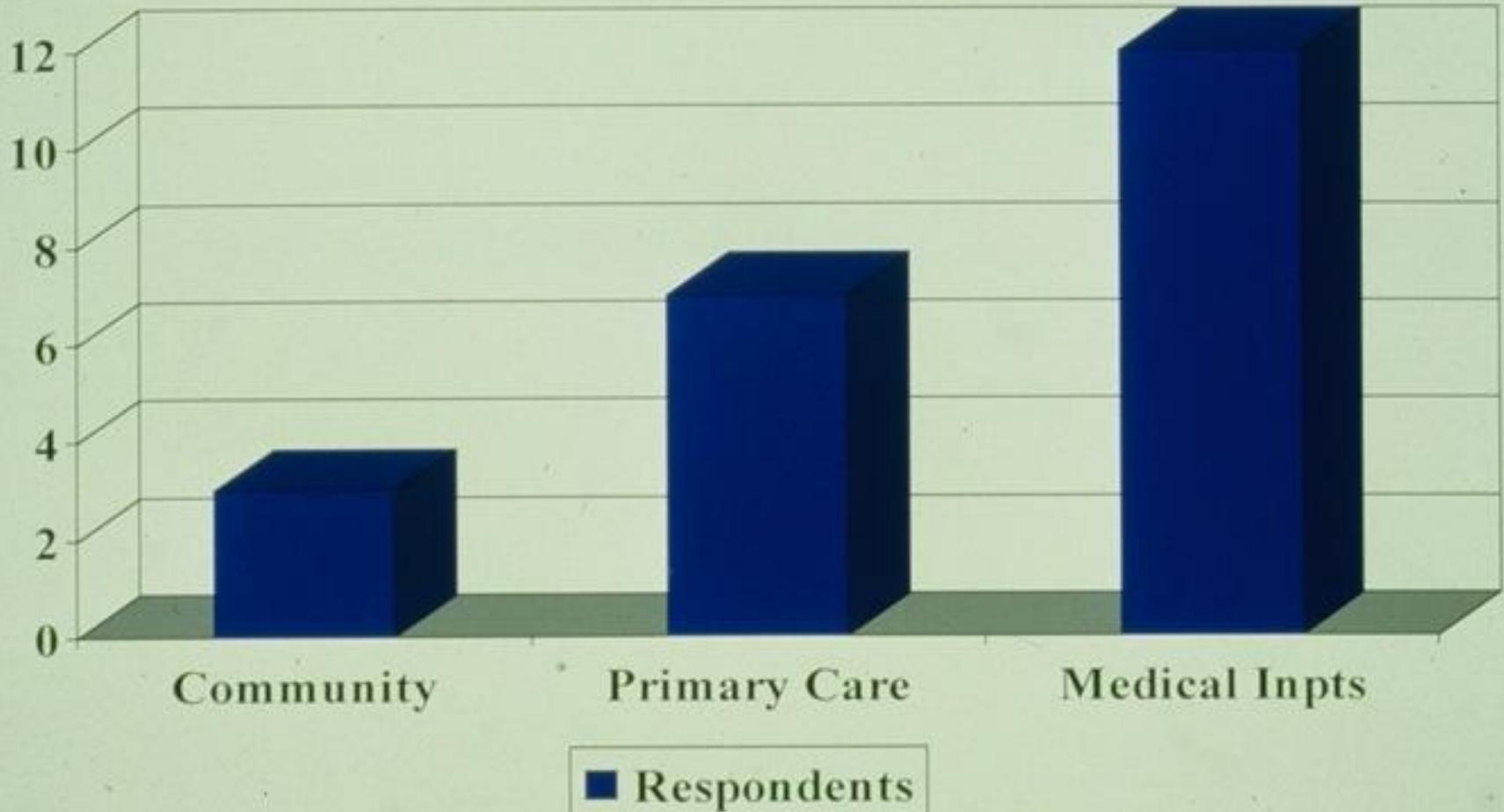
¹Drossman et al, 1998 Walker et al,1992

²Walker et al, 1993

³Stewart et al, 1992

Important

Prevalence of Major Depression in 3 populations



- In contrast to normal sadness, severe depression, also called major depression, can dramatically impair a person's ability to function in social situations and at work. People with major depression often have feelings of despair, hopelessness, and worthlessness, as well as thoughts of committing suicide.
- It may be caused as a result of a tragic life event, e.g. the death of someone who is very close to the patient. But the patient will overreact here more than anyone else.
- (major depression=exaggerated reaction/getting the blues/the psychotic one)

- Minor depression is the other type, it is less severe than the major one.
- Surveys indicate that people commonly view depression as a sign of personal weakness, but psychiatrists and psychologists view it as a real illness. In the United States, the National Institute of Mental Health has estimated that depression costs society many billions of dollars each year, mostly in lost work time.

PREVALENCE

- Depression is one of the most common mental illnesses. At least 8 percent of adults in the United States experience serious depression at some point during their lives, and estimates range as high as 17 percent.

PREVALENCE

- Primary Health Care Physicians are the diagnosticians at the front line of the health services, and untreated depression has come to be viewed as a major public health problem.

In Arab world

Communities in Arab world show depression ranging from 13% to 32%.

Highest rate 32% was recorded in Lebanese women after the civil war.

Urban population in Dubai and Cairo showed lower rates 12% and 16% respectively.

- The illness affects all people, regardless of sex, race, ethnicity, or socioeconomic standing. However, women are two to three times more likely than men to suffer from depression. Experts disagree on the reason for this difference. Some cite differences in hormones, and others point to the stress caused by society's expectations of women.

Prevalence

- Depression occurs in all parts of the world, although the pattern of symptoms can vary. The prevalence of depression in other countries varies widely, from **1.5 percent of people in Taiwan to 19 percent of people in Lebanon**. Some researchers believe methods of gathering data on depression account for different rates.

- A number of large-scale studies indicate that depression rates have increased worldwide over the past several decades. Furthermore, younger generations are experiencing depression at an earlier age than did previous generations.

- Social scientists have proposed many explanations, including changes in **family structure, urbanization, and reduced cultural and religious influences**

Prevalence of Depression

(very important)

- *In Jordan*
 - *A study published last year, done on Jordanian women reviewing PHC centers for different reasons showed a rate of 37% scored positively.*

Onset

- Although it may appear anytime from childhood to old age, depression usually begins during a person's 20s or 30s. The illness may come on slowly, then deepen gradually over months or years.
 - Depression is a disease of youths

Symptoms:

- *A) Appetite and Sleep Changes*

B) Changes in Energy Level

C) Poor Self-Esteem

CAUSES/Risk Factors

- **Some depressions seem to come out of the blue**, even when things are going well.
- *Others seem to have an obvious cause: a marital conflict, financial difficulty, or some personal failure.

- Yet many people with these problems do not become deeply depressed. Most psychologists believe depression results from an interaction between stressful life events and a person's biological and psychological vulnerabilities.

A) Biological/Genetic Factors

- Depression runs in families. By studying twins, researchers have found evidence of a strong genetic influence in depression. Genetically identical twins raised in the same environment are three times more likely to have depression in common than fraternal twins, who have only about half of their genes in common. In addition, identical twins are five times more likely to have bipolar disorder in common.

- These findings suggest that vulnerability to depression and bipolar disorder can be inherited. Adoption studies have provided more evidence of a genetic role in depression. These studies show that children of depressed people are vulnerable to depression even when raised by adoptive parents.

Genetic/Biochemical Factors

- Genes may influence depression by causing abnormal activity in the brain. Studies have shown that certain brain chemicals called neurotransmitters play an important role in regulating moods and emotions.

- Neurotransmitters involved in depression include norepinephrine, dopamine, and serotonin. Research in the 1960s suggested that depression results from lower than normal levels of these neurotransmitters in parts of the brain.

- Support for this theory came from the effects of antidepressant drugs, which work by increasing the levels of neurotransmitters involved in depression. However, later studies have discredited this simple explanation and have suggested a more complex relationship between neurotransmitter levels and depression.

- An imbalance of hormones may also play a role in depression. Many depressed people have higher than normal levels of hydrocortisone (cortisol), a hormone secreted by the adrenal gland in response to stress. In addition, an under active or overactive thyroid gland can lead to depression.

Medical causes

- A variety of medical conditions can cause depression. These include dietary deficiencies in vitamin B6, vitamin B12, and folic acid (see Vitamin); degenerative neurological disorders, such as Alzheimer's disease and Parkinson's disease ; strokes in the frontal part of the brain; and certain viral infections, such as hepatitis and mononucleosis.

- Many chronic diseases:
- Cardiovascular
- Diabetes
- Epilepsy
- Multiple Scleroses
- Rheumatoid Arthritis and others

B) Psychological Factors

- As a secondary to psychiatric illness especially Neurotic (Obsessive Compulsive Neurosis), or Affective Schizophrenia.

C) Stressful Events/Environmental

- Psychologists agree that stressful experiences can trigger depression in people who are predisposed to the illness. For example, the death of a loved one may trigger depression. Psychologists usually distinguish true depression from grief, a normal process of mourning a loved one who has died (Reactive Depression).

Gender

- In the United States, women are about as twice as likely as men to be diagnosed and treated for major depression. Approximately 20-25% of women and 12% of men will experience a serious depression at least once in their lifetimes. Among children, depression appears to occur in equal numbers of girls and boys. However, as girls reach adolescence, they tend to become more depressed than boys do. This gender difference continues into older age.

- Other stressful experiences may include divorce, pregnancy, the loss of a job, and even childbirth. About 20% of women experience an episode of depression, known as postpartum depression, after having a baby. In addition, people with serious physical illnesses or disabilities often develop depression

TREATMENT

- Depression typically cannot be shaken or willed away. An episode must therefore run its course until it weakens either on its own or with treatment. Depression can be treated effectively with **antidepressant drugs, psychotherapy, or a combination of both.**

Other Treatments

- **Electroconvulsive therapy (ECT)** can often relieve severe depression in people who fail to respond to antidepressant medication and psychotherapy. Regular aerobic exercise may improve mood as effectively as psychotherapy or medication. In addition, some research indicates that dietary modifications can influence one's mood by changing the level of serotonin in the brain.

- Despite the availability of effective treatment, most depressive disorders go untreated and undiagnosed. Studies indicate that general physicians fail to recognize depression in their patients at least half of the time. In addition, many doctors and patients view depression in elderly people as a normal part of aging, even though treatment for depression in older people is usually very effective.

Conclusion

- Of the estimated 17.5 million Americans who are affected by some form of depression, 9.2 million have major or clinical depression
- Two thirds of people suffering from depression do not seek necessary treatment.

- 80% Of all people with clinical depression who have received treatment significantly improve their lives.
- The economic cost of depression is estimated at \$30.4 billion a year but the cost in human suffering cannot be estimated

- Women experience depression about twice as often as men
- By the year 2020, the World Health Organization (WHO) estimates that depression will be the number two cause of "lost years of healthy life" worldwide

- According to the U.S. Centers for Disease Control and Prevention (CDC) suicide was the ninth leading cause of death in the United States in 1996
-

Recommendations

- Public education.
- Provision of relevant posters and leaflets in waiting rooms at PHC centers helps in **destigmatization of the disease.**

- Encourage patients to talk about their symptoms with their Family doctors.
- Recognition of depression by the patient and his or her family.

Training courses for Primary Health physicians to improve their diagnostic skills in depression to improve the recognition rate of depression in Primary Health Care Settings in Jordan is also recommended

PSYCHOLOGICAL MATERNAL MORBIDITY

- **Psychological morbidity**
- Postpartum emotional distress is fairly common after pregnancy and ranges from mild postpartum blues (affecting about 80% of women), to postpartum depression or psychosis. Postpartum psychosis can pose a threat to the life of the mother or baby.

Postpartum depression

- Postpartum depression affects up to 34 % of women and typically occurs in the early postpartum weeks or months and may persist for a year or more. Depression is not necessarily one of the leading symptoms although it is usually evident.

- . Other symptoms include exhaustion, irritability, weepiness, low energy and motivational levels, feelings of helplessness and hopelessness, loss of libido and appetite and sleep disturbances. Headache, asthma, backache, vaginal discharge and abdominal pain may be reported. Symptoms may include obsessional thinking, fear of harming the baby or self, suicidal thoughts and depersonalization.

- The prognosis for postpartum depression is good with early diagnosis and treatment. More than two-thirds of women recover within a year. Providing a companion during labour may prevent postpartum depression. Once established, postpartum depression requires psychological counselling and practical assistance.

In general:

- Provide psychological support and practical help (with the baby and with home care).
- Listen to the woman and provide encouragement and support. Assure the woman that the experience is fairly common and that many other women experience the same thing.
- Assist The mother to rethink the image of motherhood and assist the couple to think through their respective roles as new parents. They may need to adjust their expectations and activities.

- If depression is severe, consider antidepressant drugs, if available. Be aware that medication can be passed through breastmilk and that breastfeeding should be reassessed.
- Care can be home-based or can be offered through day-care clinics. Local support groups of women who have had similar experiences are most valuable

- Care of the baby can sometimes continue as usual. Prognosis for recovery is excellent but about 50% of women will suffer a relapse with subsequent deliveries.

- **Postpartum psychosis**
- Postpartum psychosis typically occurs around the time of delivery and affects less than 1% of women. The cause is unknown, although about half of the women experiencing psychosis also have a history of mental illness.

- Postpartum psychosis is characterized by abrupt onset of delusions or hallucinations, insomnia, a preoccupation with the baby, severe depression, anxiety, despair and suicidal or infanticidal impulses.

- Lessen stress.
- Avoid dealing with emotional issues when the mother is unstable. If antipsychotic drugs are used, be aware that medication can be passed through breastmilk and that breastfeeding should be reassessed.

Dementia



- Dementia is defined as global impairment of cognitive function which interferes with normal activities.

- Impaired short and long-term memory and other cognitive functions (abstract thinking, judgment, speech, coordination, planning or organization)

- Alzheimer's accounts for most cases of dementia.
- 10-20% cases are attributed to vascular (multi-infarct) dementia
- Other causes-alcoholism, Parkinson, vit B12 deficiency, hypothyroidism, CNS infections, intracranial lesions

Prevalence of Dementia

- Increases steadily with age, roughly doubling every 5 years
- Common among institutionalized elderly
- Present in $\frac{1}{2}$ to $\frac{2}{3}$ of nursing home residents
- Family history associated with an increased risk of Alzheimer

Prevalence of Dementia

- disease progresses over a period of 2-20 years, causing increasing functional impairment and disability
- Care of the demented patient imposes an enormous psychosocial and economical factors.
- Alzheimer's burden on the family

Risk factors

- Age: Strongest risk factor particularly for ALZ d
- annual incidence 0.6% for age 65-69
- 1% for age 70-74
- 2% for age 75-79
- 3.3 % for age 80-84 and 8.4% for above 85
- 1/2-2/3 of nursing home residents

Risk factors

- Family history : Especially in relation to ALZ
D
- First degree relatives have 10-30%
increased risk for the disease
- Apolipoprotein E epsilon 4 genotype
predisposes to development of ALZD

Risk factors

- History of head trauma especially with the epsilon 4 allele
- History of low educational achievement
- Organic solvent exposure
- Female gender 16%/6%
- Relationship to blood pressure : a U shape association
- Hypercholesterolemia/role of statins
- Diabetes

Screening Tests

- Dementia is easily recognized in advanced stages, often overlooked in early stage
- Clinicians fail to detect 21-72% of patients with dementia esp. in early stages

- Routing physical examination and patient history not sensitive for dementia, especially if family members not present to corroborate patient self-report

Prevalence of Alzheimer

- Alzheimer's disease (AD) is the most common form of dementia. It represents a worldwide medical challenge affecting more than 18 million people; estimated to reach 34 million by the year 2025 .

- With over 1.5 million cases in the Arab world. Alzheimer's disease is a devastating illness which can affect all members of society

Conclusions and Recommendations

- Next to Cancer and AIDS, the highest medical budgets are allocated to Alzheimer's research. The Arab Conference on AD 2005 seeks to develop a regional and national plan to raise the level of awareness on AD and reach patients, caregivers, specialists, doctors, nurses, specialized international agencies and governmental and non-governmental organizations

• ملاحظة:

- نظرًا لضيق وقت المحاضرة لم تمرّ الدكتورّة على كافة المعلومات الموجودة في الملفّ، وأيضًا الأرقام.

- هناك بعض الأرقام قمت بتحديدّها باللون الأحمر لأنها ذُكرت خلال الشرح، ولكن هذا لا يعني أنّ الأرقام الأخرى غير المحدّدة بالأحمر غير مطلوبة، ولهذا علينا أن نمرّ على كافة المعلومات الموجودة بالملفّ.

the
struggle
you're in
today
is developing the
strength
you need for
tomorrow