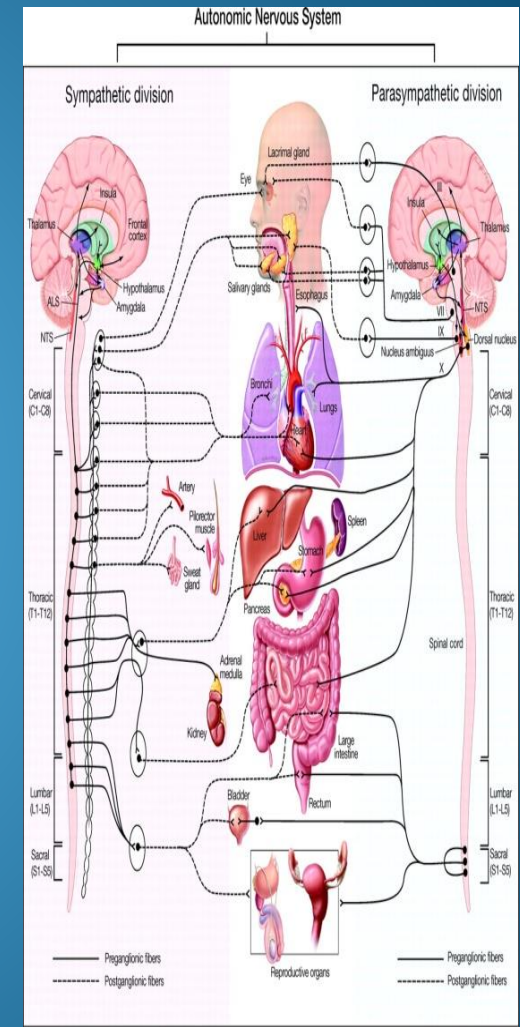


Psychosomatic Medicine I & II

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Intended Learning objectives

- By the end of this lecture, a student should be able to:
 - ❖ Understand relevant concepts related to psychosomatic medicine which resides at interface of physical and mental illnesses.
 - ❖ Appreciate that accurate diagnosis and treatment of depression in medically ill pts improves quality of life, enhances engagement in treatment, decreases symptom quantity and severity, and decreases cost utilization, morbidity and mortality.
 - ❖ Acquire preliminary skills to evaluate and intervene adequately to manage somatic symptoms and related disorders.

Introduction (psychosomatic medicine)

- ❑ Psychosomatic medicine is the subspecialty of psychiatry whose practitioners have particular expertise in the diagnosis and treatment of psychiatric disorders and difficulties in complex medically ill patients (Gitlin et al. 2004)
- ❑ Psychosomatic medicine resides at the interface of physical and mental illness.
- ❑ The clinical practice of psychosomatic medicine is sometimes called consultation-liaison psychiatry (CLP)
- ❑ Since 2001, Psychosomatic medicine has become a subspecialty recognized by the *American Board of Medical Specialties*

- 
- ❑ Medical factors/illnesses may affect individual vulnerability, course, & outcome of ANY psychiatric disorder.
 - ❑ Psychosocial factors/illnesses may affect individual vulnerability, course, & outcome of ANY type of disease.
 - ❑ Psychological factors may operate to facilitate, sustain, or modify the course of medical disease , even though their relative weight may vary...
-
- from illness to illness !..
 - form one individual to another !..
 - between 2 different episodes of the same illness in the same individual! .

Illness Vs. Disease

□ Illness:

- The response of the individual and his/her family to symptoms
- Subjective !, psychosocial, cultural, religious factors

□ Disease:

- Defined by physicians and associated with pathophysiological processes and documented lesions
- Objective !

□ Implications !!

Illness Behavior

❑ The manner in which individuals monitor their bodies, define and interpret their symptoms, take remedial actions, and utilize the health care system

❑ Variety of factors

❑ Achievement of objectives

❑ Abnormal illness behavior:

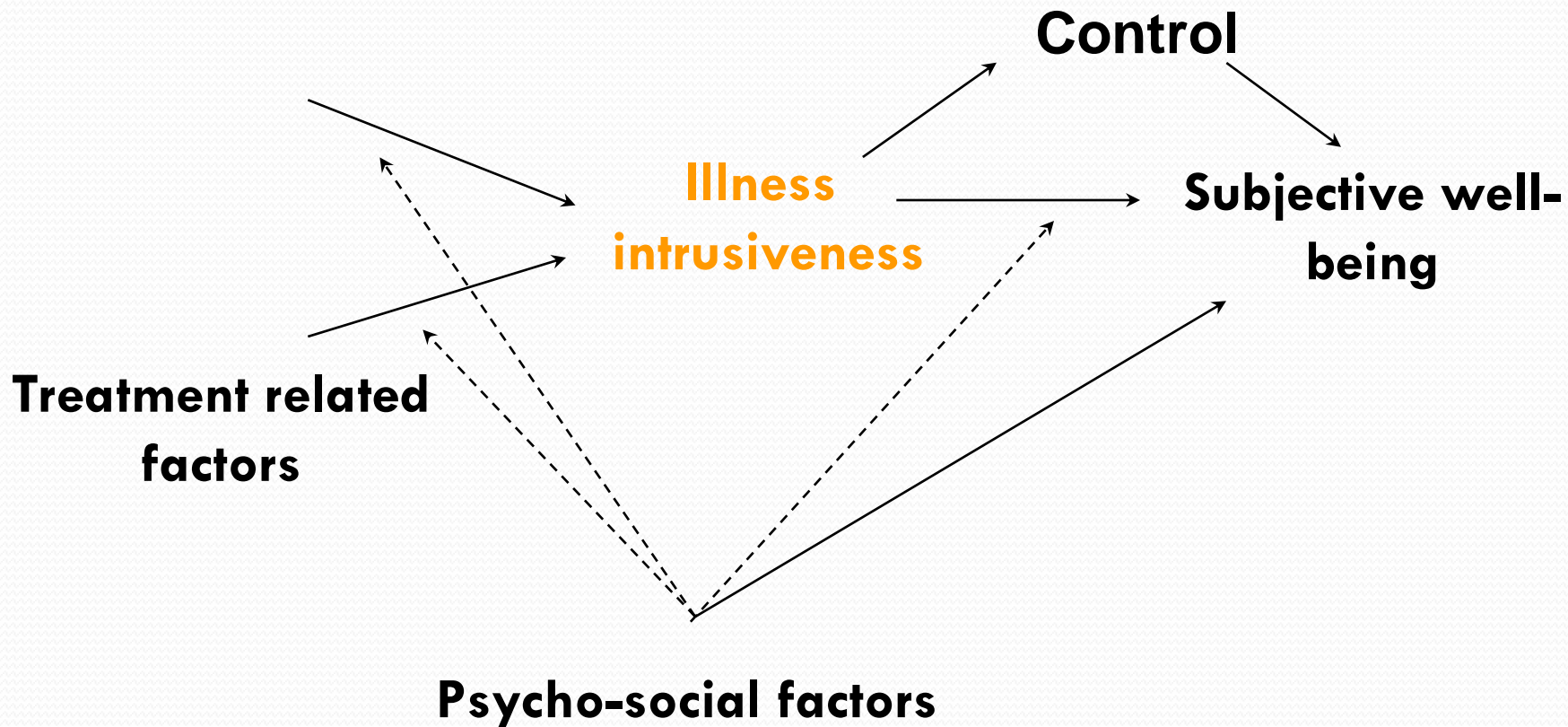
Inappropriate or maladaptive mode of perceiving, evaluating or acting in relation to one's own health status

Illness affirming.....illness denying



Quality of life and illness Intrusiveness (G. Devins, 1994)

Disease related factors



Example of psychosocial factors affecting a medical condition (CHD)

According to The Interheart study, the population attributable risk factor for MI of Hypertension was 17.9% , while the **psychosocial risk factors**, were responsible about :

- a) 5%
- b) 10%
- c) 15%
- d) 20%
- e) >30%

Stress Vs CHD

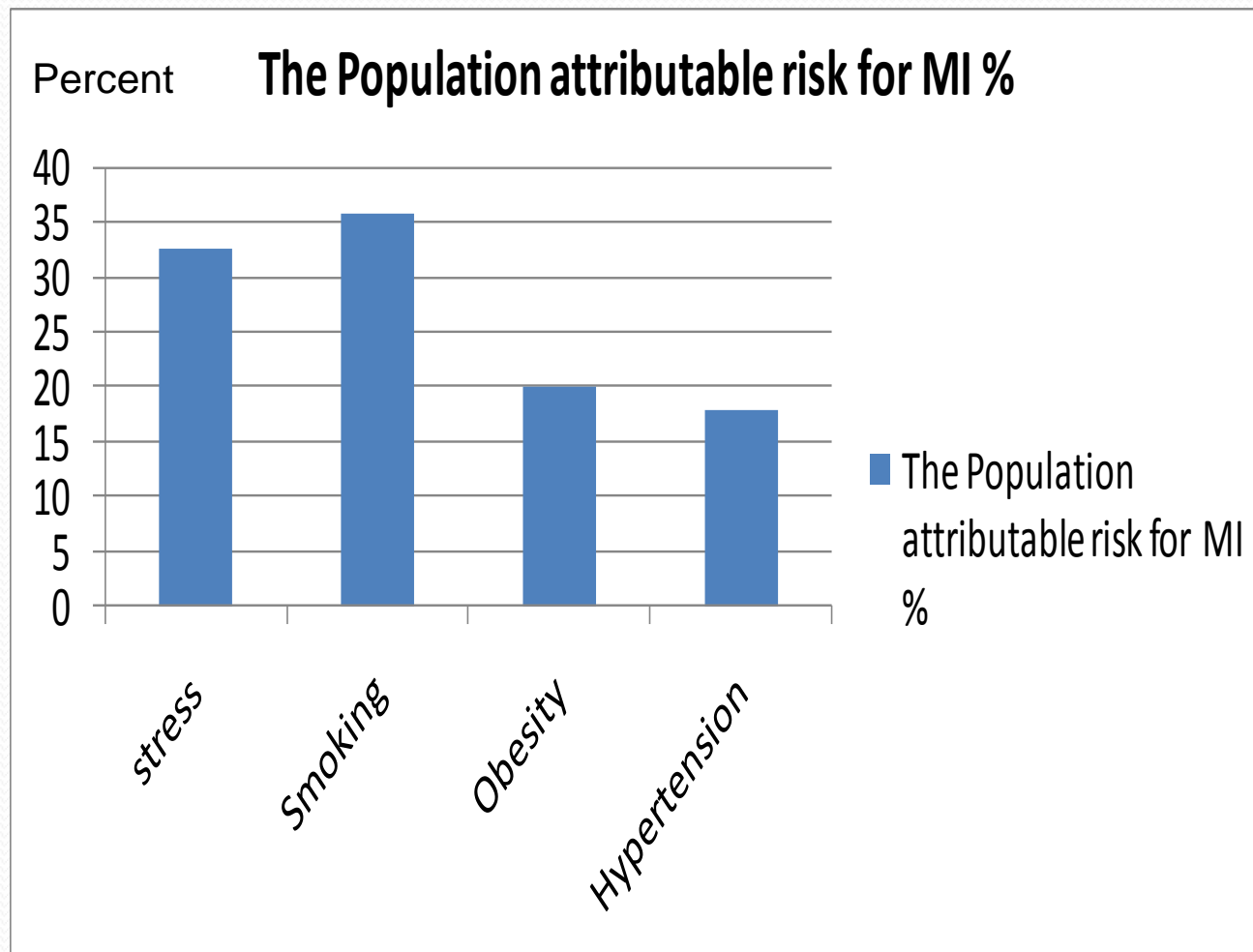
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- a) 5%
- b) 10%
- c) 15%
- d) 20%
- e) **>30%**

INTERHEART Study (EPIDEMIOLOGY, stress & CHD)

*Case control study of:
n > 29000 in
52 countries.

*Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. Yusef S et al. Lancet 2004



Advantages of psychosomatic medicine (CLP) service

- 1-Relieve symptoms of distress & improve the quality of life of some patient with serious diseases.
- 2- May improve the course and prognosis of several major medical illnesses
- 3-Cost-effective :
 - A- Reduce the length of hospital stay.
 - B-Reduce the number of unnecessary investigations (performed for physical symptoms that may actually reflect underlying psychological distress)..

Approach to referral to psychosomatic medicine

How to do it (effective psych. Consultation)

- 1-Review patient charts, asking nurses and physician.
- 2-Obtain good psychiatric history (paying attention to psychological & social factors).
- 3-MSE & MMSE if cognitive problem is suspected and possibly neuropsychological assessment.

Approach to referral to psychosomatic medicine

How to do it (effective psych. Consultation)

4-Making logical differential diagnosis among medical , neurological and psychiatric diseases (use multi-axial Dx.)

5-Investigate based on that.

6-Make treatment plan.

7-Follow up plan (as inpatient & outpatient).

8-Collaborate with both the patient and the referring team.

Primary VS secondary psychiatric disorders

Primary	Secondary
<p>Etiology is: Multi-factorial e.g. schizophrenia Major depressive disorder</p>	<p>Etiology : one diagnosable systemic medical disease, CNS disease or substance. e.g. Depression due to SLE Psychosis due to amphetamine</p>
<p>In medicine: like Essential hypertension</p>	<p>In medicine: like secondary HTN due to renal artery stenosis.</p>
<p>Clues suggestive of being primary :</p> <ul style="list-style-type: none">•Normal consciousness & vital signs.•Presence of :<ul style="list-style-type: none"><input type="checkbox"/> Auditory hallucinations<input type="checkbox"/>soft neurological signs<input type="checkbox"/>Young age onset	<p>Clues suggestive of being secondary:</p> <ul style="list-style-type: none">•Disturbance of consciousness or vital signs•Presence of :<ul style="list-style-type: none"><input type="checkbox"/> non-auditory hallucinations e.g. visual,<input type="checkbox"/>hard neurological signs<input type="checkbox"/>physical illness<input type="checkbox"/> old age onset

Medical illnesses that can induce secondary psychiatric disorders

Endocrine	Metabolic	Infectious	Autoimmune	CNS
Thyroid disorder > Hypo- > Hyper-	Hepatic disorder > Wilson's > Encephalopathy > Porphyria	> Neurocystercerosis > Tuberculosis (TB) > PANDAS > Neuroborriosis > Neurosyphilis > Herpes	> Systemic Lupus Erythematosus > Multiple Sclerosis > Pernicious Anemia (B12 def) > Addison's Disease (hypoadrenalism) > Grave's Disease (hyperthyroidism) > Fibromyalgia > PANDAS	Seizure DO > TLE > Frontal LE > Paraneoplastic Syndrome Dementia > NPH > Delirium Subdural hematoma Tumor Meningitis Encephalitis > Multiple Sclerosis NMS
Adrenal disorder > Hypo- > Hyper > Pheochromocytoma	Vitamin def > B-1 > B-12	> HIV Sepsis Malaria Legionnaire disease Typhoid Diphtheria Rheumatic fever Pneumonia UTI		
Parathyroid DO > Hypo- > Hyper	Electrolyte imbalances Hypoxia Lead toxicity			
Pancreatic DO > Hyperglycemia > Hypoglycemia > Pancreatic tumor				

Medications that can induce secondary psychiatric disorders

Prescription drugs

- Chemotherapeutic Rx's
- Immunosuppressants (e.g., cyclosporin [Gengraf, Neoral, Sandimmune])
- Antiviral Rx's (e.g., interferons)
- Antiparkinsonian Rx's
- Cardiovascular Rx's
- Thyroid Rx's
- Anticholinergic Rx's
- Corticosteroids
- Psychostimulants
- Sympathomimetics
- Sedative & CNS-depressants (e.g., barbiturates, benzodiazepines)
- Opioids

Clues Suggestive of Psychiatric disorder 2ndary to another medical condition (previously called "Organic" Mental Disorders)

● History:

□ Psychological symptoms occurring ...

- New onset psychiatric symptoms presenting after age 40.
- During the course of a major medical illness which had impaired some organ function (e.g., neurological, endocrine, renal, hepatic, cardiac, pulmonary).
- While taking medications/illicit substance, he had psychoactive effects.

□ Family history of:

- -ve for primary psychiatric illness..
- +ve for medical disease that may present with psychiatric symptoms e.g.:
 - Degenerative or inheritable neurological disorders (e.g., Alzheimer's disease, Huntington's disease)
 - Inheritable metabolic disorders (e.g., DM, Pernicious Anemia, Porphyria)

Clues Suggestive of Psychiatric disorder 2ndary to another medical condition

- **Clinical Exam:**

- Abnormal vital signs.

- Evidence of organ dysfunction, focal neurological deficits.

- Eye exam:

- Pupillary changes—asymmetries

- Nystagmus (often a sign of drug intoxication)

- Presence of altered states of mind, LOC, mental status changes, cognitive impairment; episodic, recurrent, cyclic course

- Presence of visual, tactile or olfactory hallucinations

- Signs of:

- Cortical dysfunction (e.g., dysphagia, apraxia, agnosia)

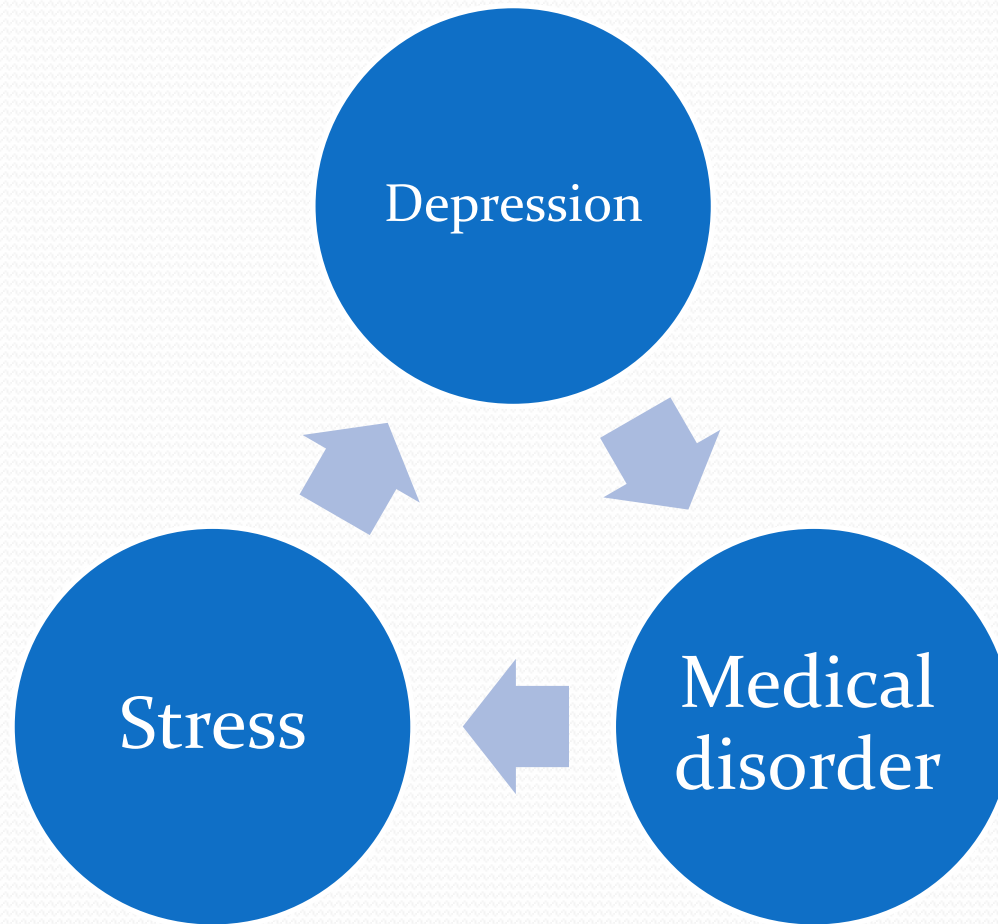
- Diffuse subcortical dysfunction

(e.g., slowed speech/mentation/movement, ataxia, incoordination, tremor, chorea, asterexis, dysarthria)

Investigations to suggest secondary psychiatric disorders

- **Hormonal levels**
- **CBC**
- **Chemistry panel**
- **Thyroid Function Test**
- **Screening test for syphilis (VDRL or RPR)**
- **HIV serology for high risk patients**
- **B12 and folate**
- **Urinalysis (with protein and glucose levels)**
- **Toxicology screening**
- **Urine for uroporphyrins and porphobilinogen**
- **Serum ceruloplasmin**
- **Chest X-ray**
- **ECG**
- **EEG**
- **CT/MRI**

Depression & medical illnesses



The global burden of disease, 1990–2020

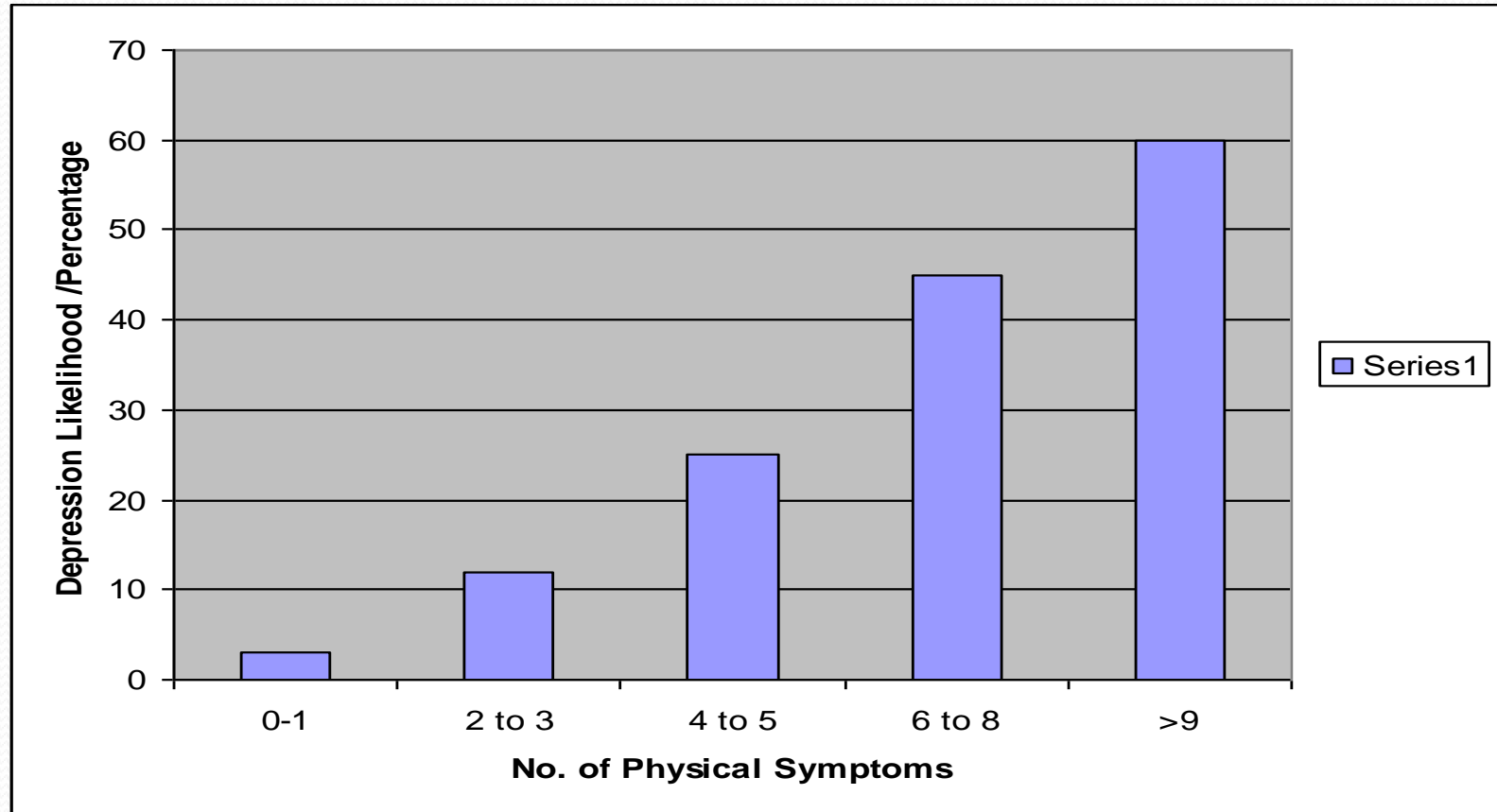
-
- Lower Respiratory Infections
 - Diarrheal Diseases
 - Perinatal conditions
 - Depression
 - Heart Diseases
 - Cerebrovascular D/O
- Heart Diseases
 - Depression
 - Traffic accidents
 - Cerebrovascular D/O
 - COPD
 - Lower Respiratory Infections

Lopez et al :*Global burden of disease and risk factors*, Oxford University Press, New York (2006)

Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010 (Whiteford, the lancet, 2013)

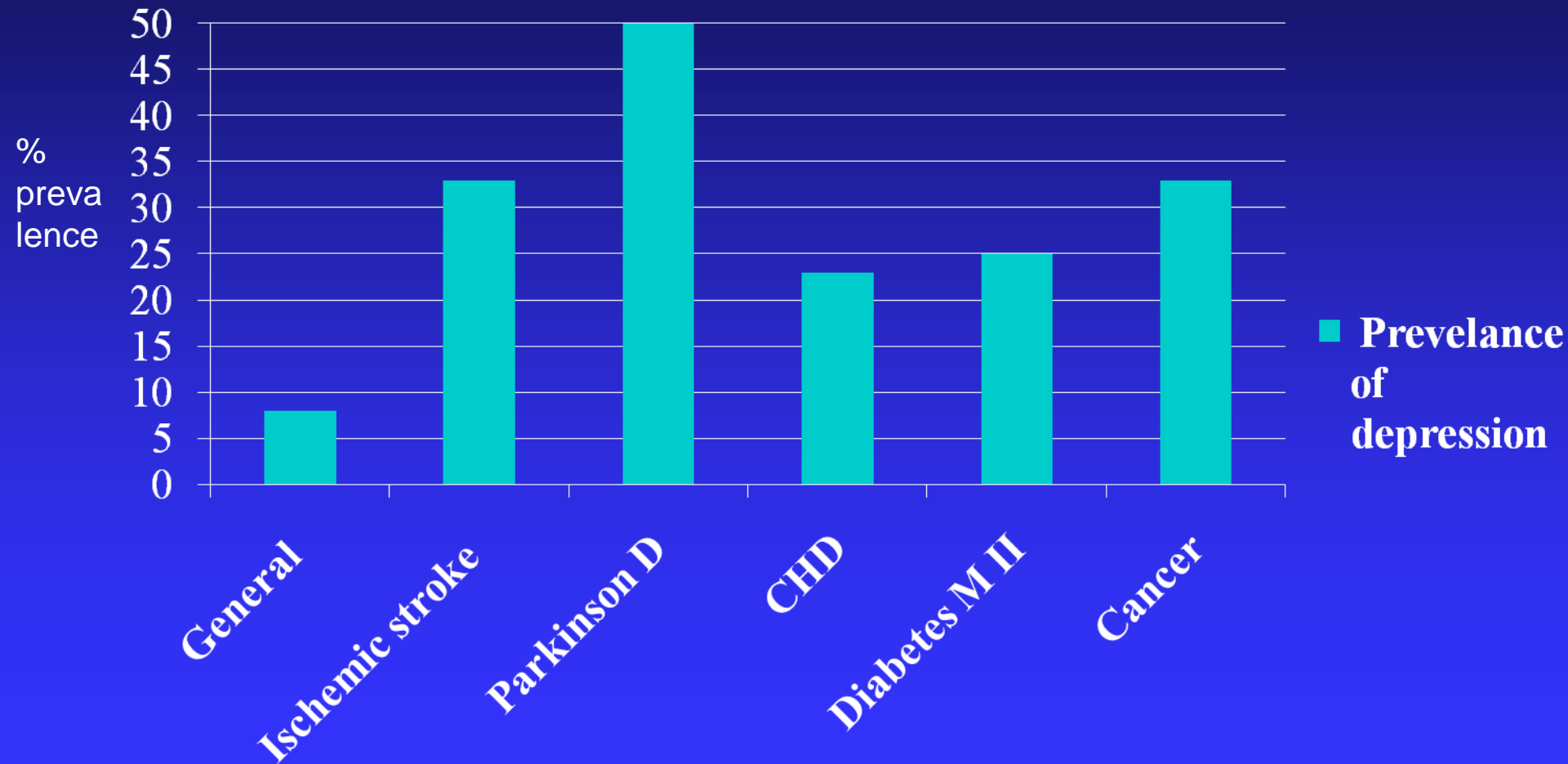
- As part of the GBD 2010, epidemiological data was collected for 20 mental and substance abuse disorders in 187 countries.
- In 2010, mental and substance use disorders accounted for 183.9 million DALYs or 7.4% of all DALYs worldwide.
- Mental and substance abuse disorders were the leading cause of non-fatal illness worldwide in 2010 (22.8%),
- The burden of mental and substance use disorders increased by 37.6% between 1990 and 2010.
- Depressive disorders were responsible for 40% of the burden of illness due to mental and substance abuse disorders.

Likelihood of Depression Increases with No. of Physical Symptoms at Presentation



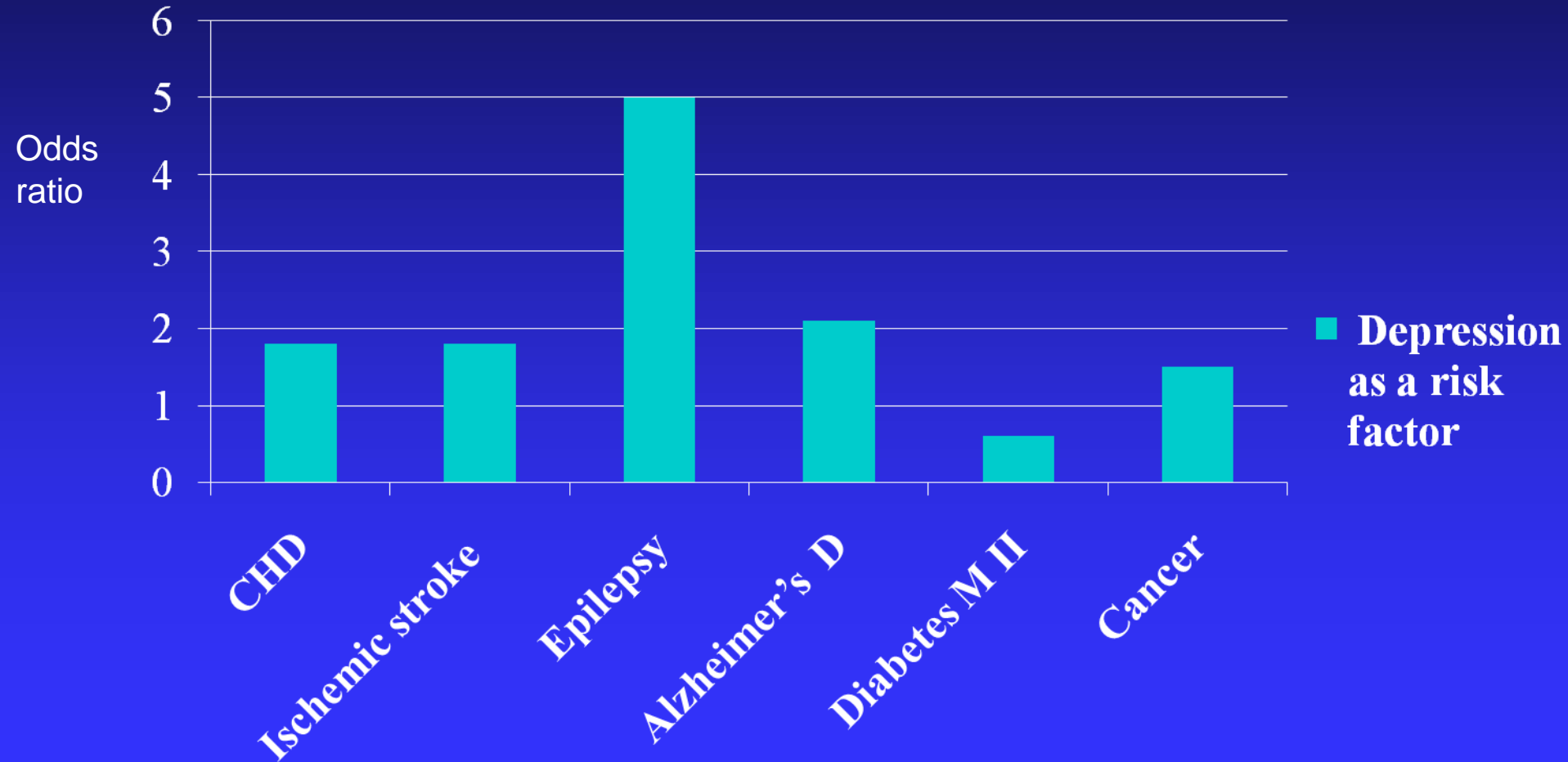
Kroenke K, et al. Arch Fam Med 1994

Epidemiology of depression in some medical illnesses



Depression as a risk factor for the development of medical illness

(CANMAT, ANNALS OF CLINICAL PSYCHIATRY 2012;24(1):82-90)



Depression plus Medically illness

Is it serious?

- ❑ Poor outcomes of the medical illness
- ❑ Increased mortality in cardiovascular disease, stroke, diabetes, and ?cancer
- ❑ Chronic medical conditions and depression are interrelated and that treatment of one condition can affect the outcomes for the other.
- ❑ Worse adherence to medical regimens, tobacco smoking, sedentary lifestyle, and overeating.
- ❑ Increased functional disability, decreased self-care.
- ❑ Four to five times greater levels of morbidity, premature mortality, health services use and health care expenditures compared to non- depressed patients with no GMC.

Pathophysiology : mediating factors between Depression/Stress & medical illnesses

□ Physiological:

- ❖ hyperactivity of the hypothalamic- pituitary- adrenal (HPA) axis.
- ❖ immune activation with release of proinflammatory cytokines.
- ❖ activation of the sympathetic nervous system.

□ Behavioural:

- ❖ Physical inactivity.
- ❖ Smoking.
- ❖ High carbohydrate & high fat diet.
- ❖ Poor adherence to medications.
- ❖ Social isolation.

Dsm-5 criteria for major depression (physical & psychological symptoms)

Depressed mood and or loss of interest or pleasure (pervasive for 2 weeks)

&

4 of the following (3 with both depressed mood and loss of interest or pleasure)

Physical

1. Sleep disorder
2. Appetite/weight change
3. Fatigue
4. Psychomotor retardation/agitation

Psychological

1. Low self-esteem/guilt
2. Poor concentration/indisidiveness
3. Thoughts of death/suicidal ideation
4. Depressed mood
5. Loss of interest/pleasure

Diagnostic Approach in the Medically Ill:

•**Inclusion** approach: “count” all physical symptoms as part of depression even if possibly explained by the medical illness (to give patients, the benefit of doubt, by treating serious disabling illness like depression).

DIFFERENTIAL DIAGNOSIS

- 1) Depressive disorder due to another medical condition.
- 2) Substance-induced depressive disorder, iatrogenic versus other illicit substances.
- 3) Bipolar I/II disorder, most recent episode depressed.
- 4) Major depressive disorder(uni polar).
- 5) Persistent depressive disorder (Dysthymia).
- 6) Adjustment disorder with depressed mood (common in medical setting).



Examples of Depression in medically ill patients

EPIDEMIOLOGY (depression & coronary heart disease)

Depression has repeatedly been found to predict :

- ✚ early-onset CHD.
- ✚ post-MI mortality (1.5- 5.07 times risk), esp. severe and chronic types.
e.g. **(HAM-Depression) scale** score in first 2 weeks post CHD event predict 7 years mortality risk.
- ✚ increased CHD symptoms(chest pain, fatigue).
- ✚ noncompliance on exercise/medication/smoking .

Glassman AH , et al ,Psychiatric characteristics associated with long-term mortality among 361 patients having an acute coronary syndrome and major depression: seven-year follow-up of SADHART participants, Arch Gen Psychiatry, Sep 2009

Keteyian SJ. Cardiovascular symptoms in coronary-artery disease patients are strongly correlated with emotional distress.] Psychosomatics,2008

Pathophysiology (depression & CHD)

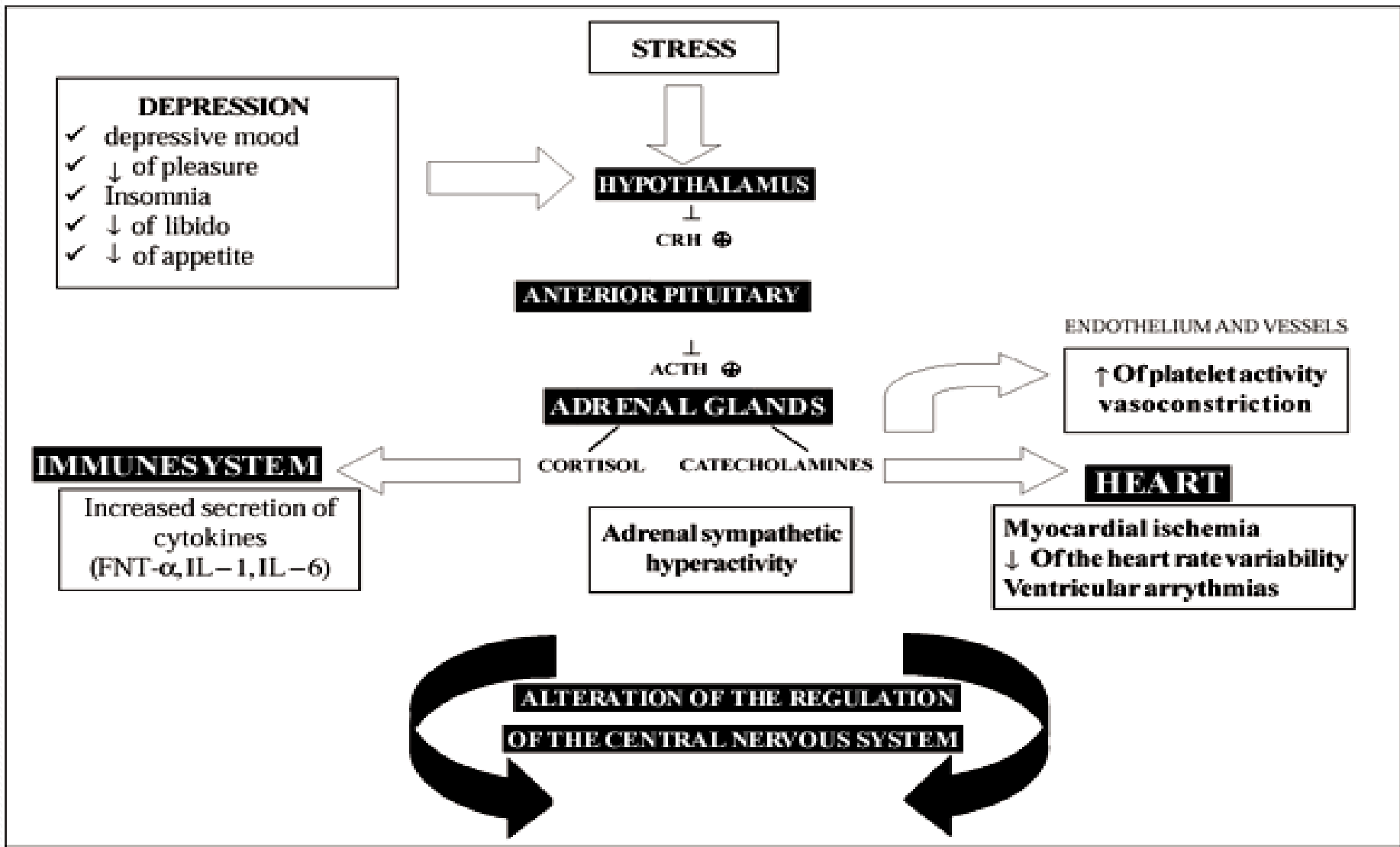




Fig. 1 - Relation between major depression and cardiovascular disease

Post-stroke depression

- ❑ After stroke, 25 to 40% of patients meet criteria for Depression.
- ❑ Studies in the 80's and 90's demonstrated that post-stroke depression (PSD) was associated with left frontal brain lesions, worse physical and cognitive recovery, and increased mortality.
- ❑ These depressions were shown to be treatable with antidepressants and successful treatment led to both improved recovery and survival.
- ❑ There have now been RCTs showing PSD may be treated and prevented effectively with citalopram, nortriptyline, or reboxetine.

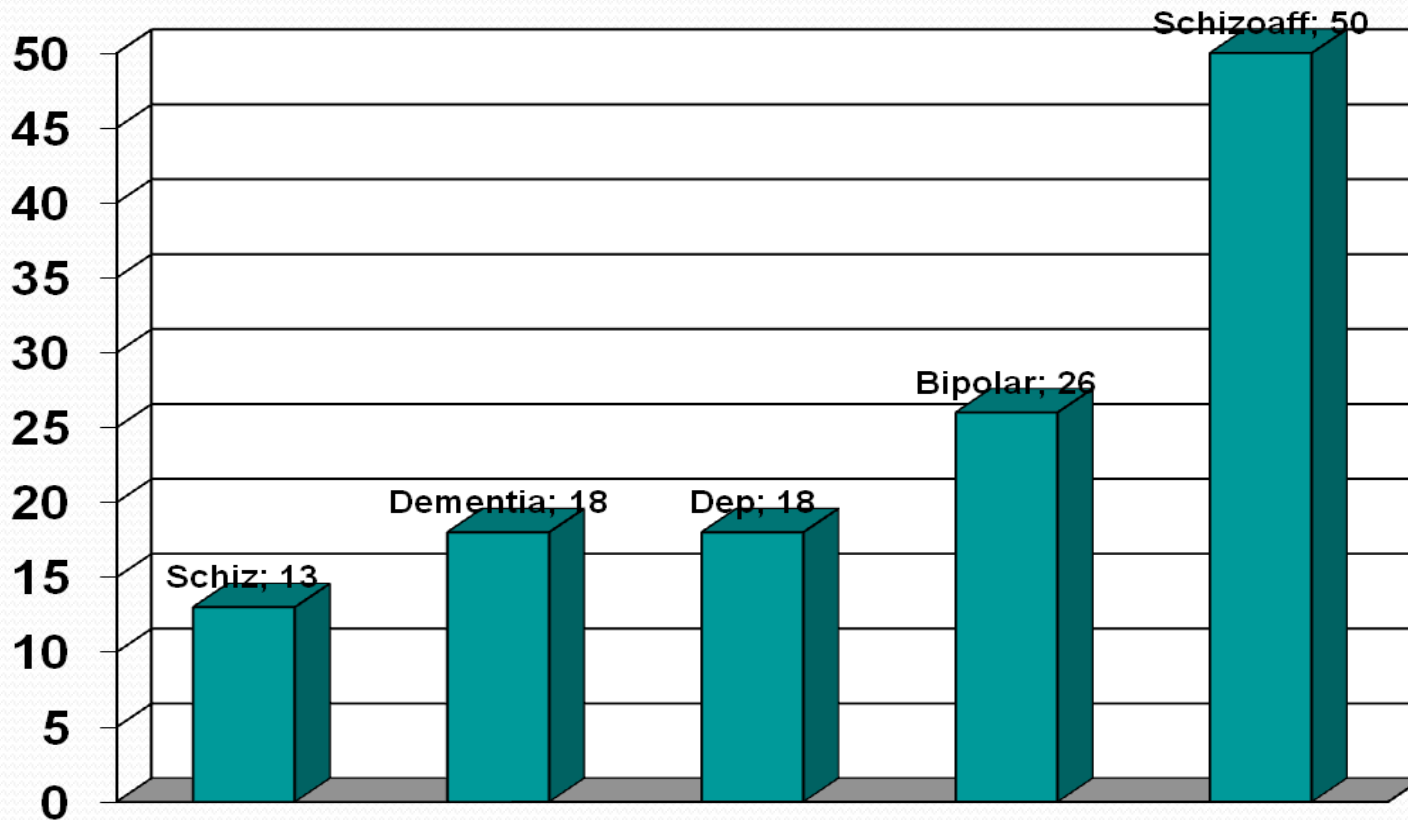
Post-stroke depression

- ❑ Later, antidepressants (ADs) shown to improve physical and cognitive recovery over 1 year independent of dep.
- ❑ Over 7 years, antidepressants shown to decrease mortality by 50% even among non-dep pts ...How?
- ❑ Inflammatory proteins are released both by stroke and depression and can have long lasting negative effects on brain function.
- ❑ ADs have been shown to decrease these
Inflammatory proteins  neurogenesis and
synaptogenesis  improved recovery and
decreased mortality following stroke.
- ❑ However, pts who take both NSAIDs & ADs should be monitored for intracranial hemorrhage.

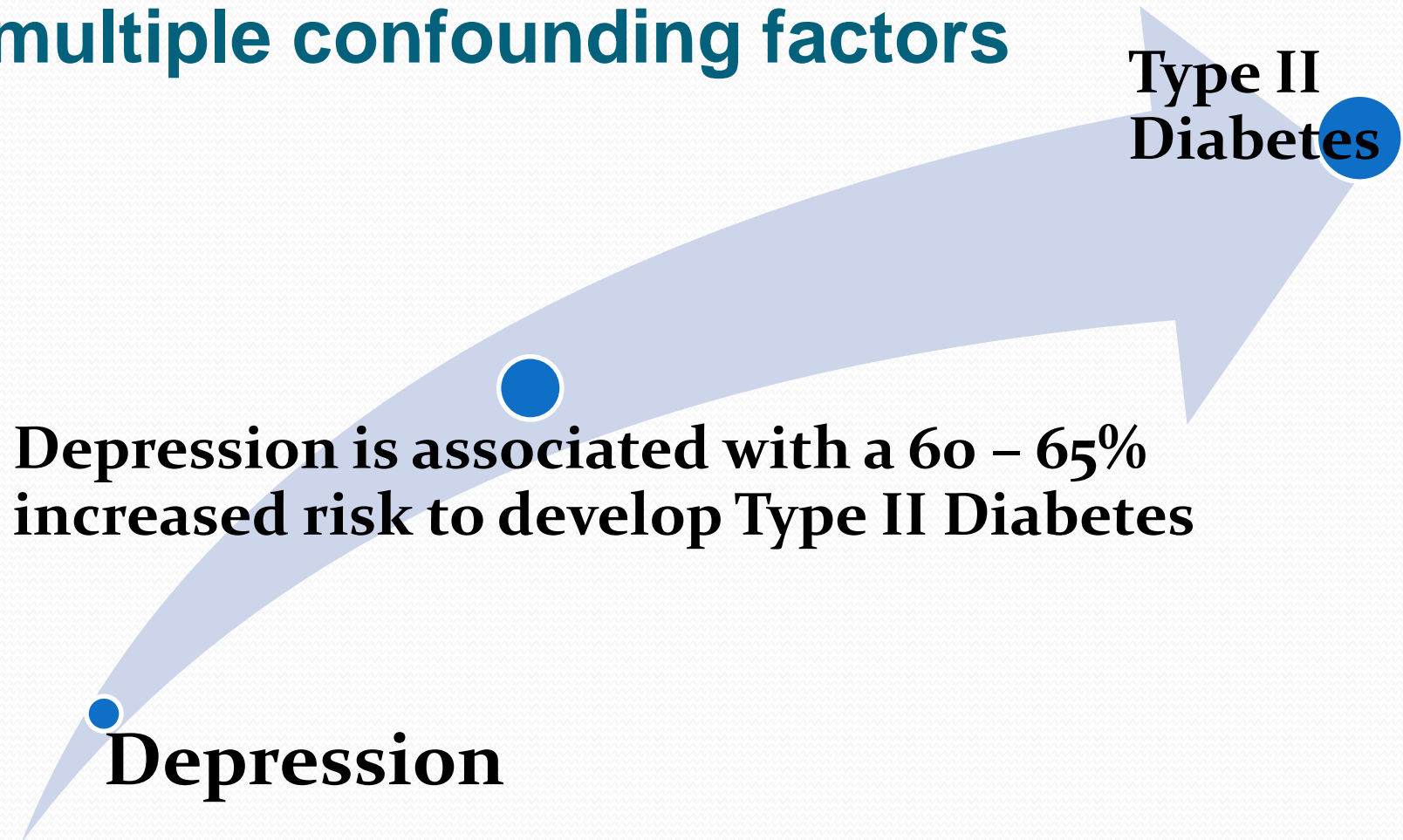


Depression & diabetes

Prevalence of Diabetes among patients with major psychiatric disorders

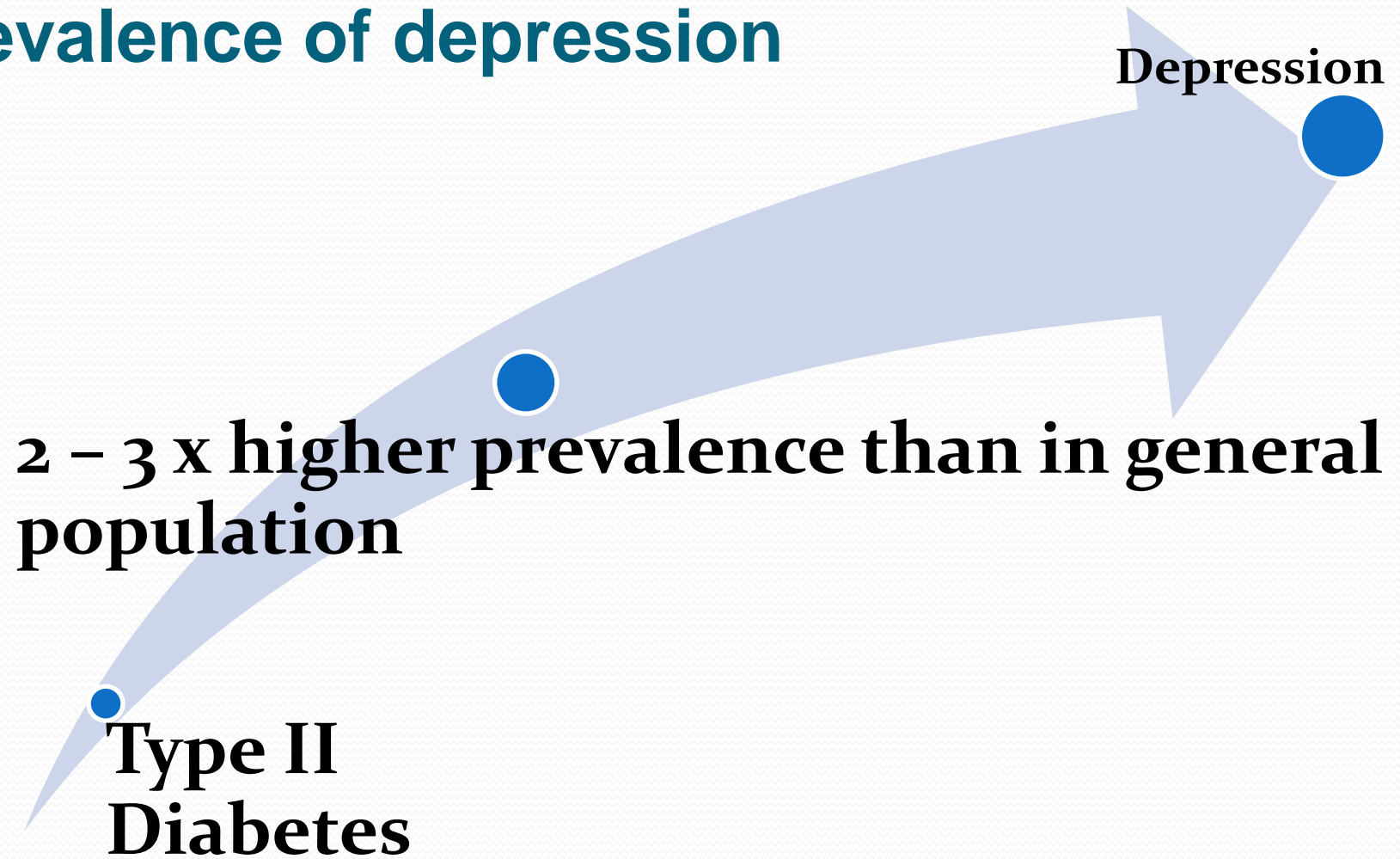


Bi-directional Relationship: Independent of multiple confounding factors

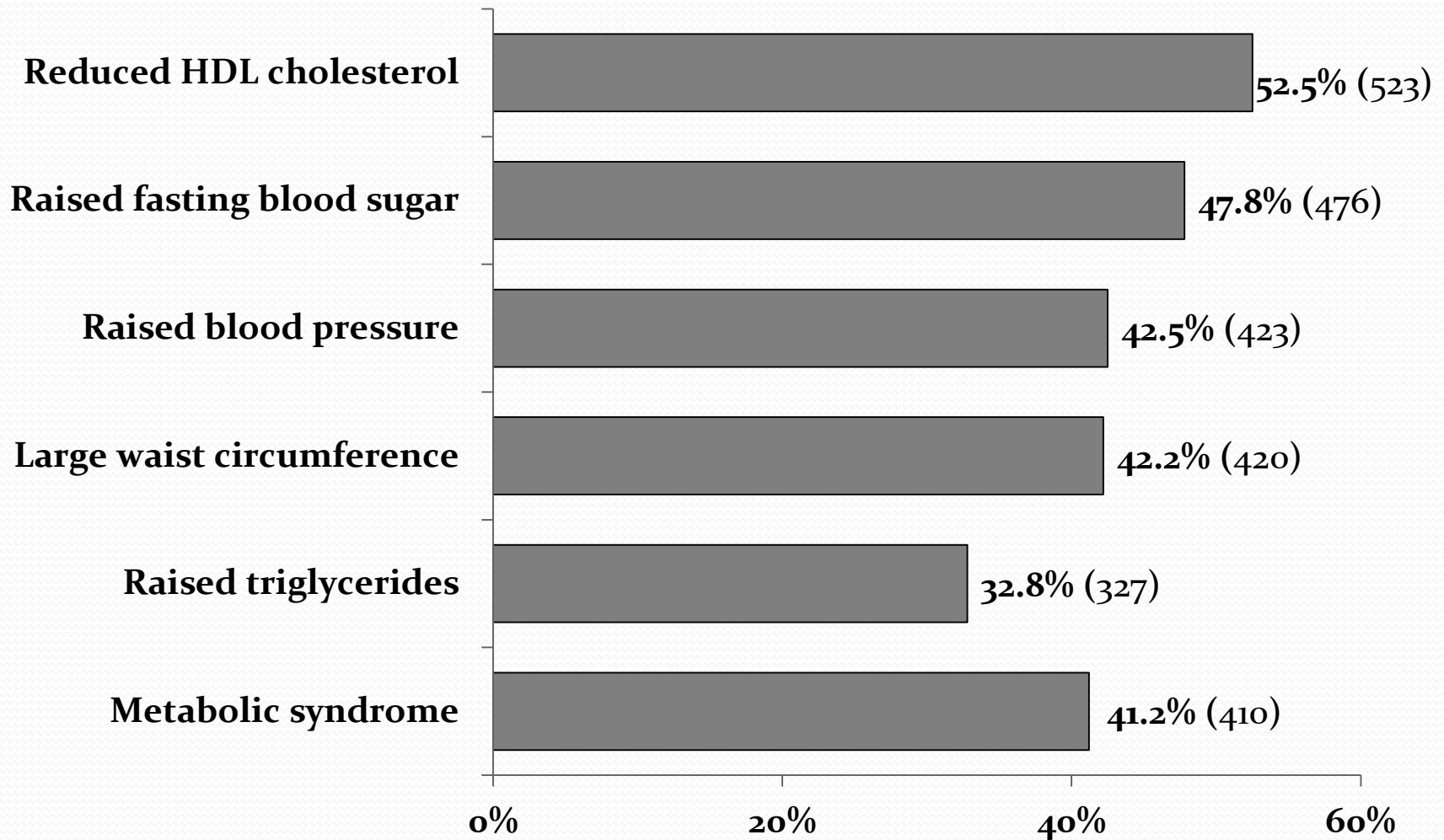


(Campayo et al. 2010; Mezuk et al. 2008; Musselman et al. 2003)

Type II Diabetes is associated with higher prevalence of depression



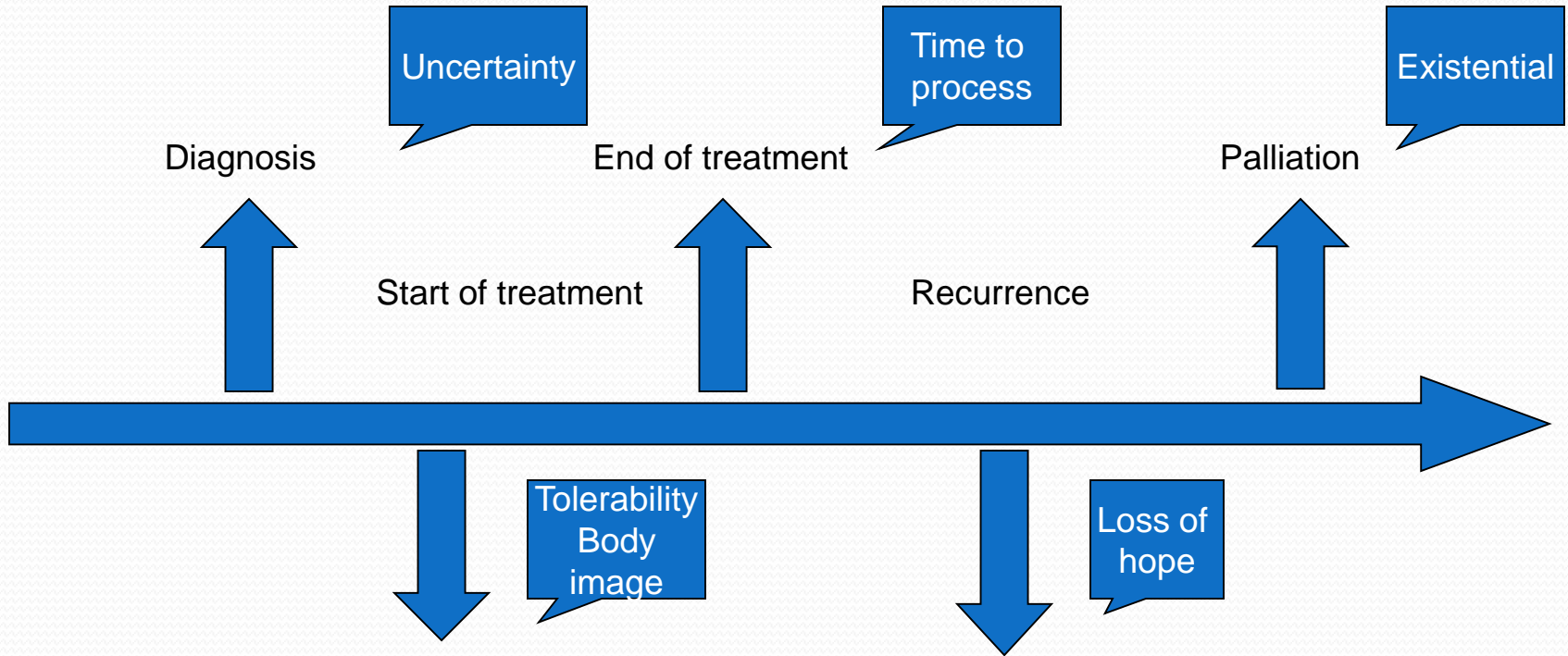
Prevalence of metabolic syndrome and its individual components among Saudi psychiatric patients (N=996) (Alosaimi FD, et al, 2016)



CANCER

- ❑ Many oncologists consider depression part of the illness and often conclude it therefore does not require treatment.
- ❑ Many also believe that if the cancer can be treated, then the accompanying depression will remit on its own.
- ❑ Many patients deal with the knowledge of having cancer through the expected grieving process. BUT , it may precipitates an episode of major depression in 25%.

Distress along the illness trajectory

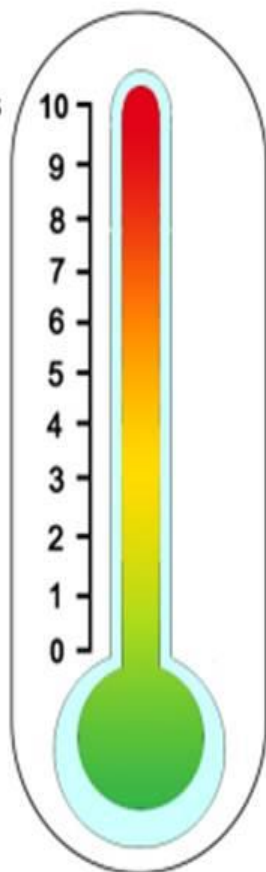


The Distress Thermometer

First please circle the number (0-10) that best describes how much distress you have been experiencing in the past week including today.

Second, please indicate if any of the following has been a problem for you in the past week including today. Be sure to check YES or NO for each.

Extreme Distress



No Distress

YES	NO	Practical Problems	YES	NO	Physical Problems
<input type="checkbox"/>	<input type="checkbox"/>	Child Care	<input type="checkbox"/>	<input type="checkbox"/>	Appearance
<input type="checkbox"/>	<input type="checkbox"/>	Housing	<input type="checkbox"/>	<input type="checkbox"/>	Bathing/dressing
<input type="checkbox"/>	<input type="checkbox"/>	Insurance/financial	<input type="checkbox"/>	<input type="checkbox"/>	Breathing
<input type="checkbox"/>	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	<input type="checkbox"/>	Changes in urination
<input type="checkbox"/>	<input type="checkbox"/>	Work/school	<input type="checkbox"/>	<input type="checkbox"/>	Constipation
			<input type="checkbox"/>	<input type="checkbox"/>	Diarrhoea
		Family Problems	<input type="checkbox"/>	<input type="checkbox"/>	Eating
<input type="checkbox"/>	<input type="checkbox"/>	Dealing with children	<input type="checkbox"/>	<input type="checkbox"/>	Fatigue
<input type="checkbox"/>	<input type="checkbox"/>	Dealing with partner	<input type="checkbox"/>	<input type="checkbox"/>	Feeling Swollen
<input type="checkbox"/>	<input type="checkbox"/>	Dealing with close	<input type="checkbox"/>	<input type="checkbox"/>	Fevers
<input type="checkbox"/>	<input type="checkbox"/>	Friend/relative	<input type="checkbox"/>	<input type="checkbox"/>	Getting around
			<input type="checkbox"/>	<input type="checkbox"/>	Indigestion
		Emotional Problems	<input type="checkbox"/>	<input type="checkbox"/>	Memory/concentration
<input type="checkbox"/>	<input type="checkbox"/>	Depression	<input type="checkbox"/>	<input type="checkbox"/>	Mouth sores
<input type="checkbox"/>	<input type="checkbox"/>	Fears	<input type="checkbox"/>	<input type="checkbox"/>	Nausea
<input type="checkbox"/>	<input type="checkbox"/>	Nervousness	<input type="checkbox"/>	<input type="checkbox"/>	Nose dry/congested
<input type="checkbox"/>	<input type="checkbox"/>	Sadness	<input type="checkbox"/>	<input type="checkbox"/>	Pain
<input type="checkbox"/>	<input type="checkbox"/>	Worry	<input type="checkbox"/>	<input type="checkbox"/>	Sexual
<input type="checkbox"/>	<input type="checkbox"/>	Loss of interest in usual activities	<input type="checkbox"/>	<input type="checkbox"/>	Skin dry itchy
<input type="checkbox"/>	<input type="checkbox"/>	Spiritual/religious concerns	<input type="checkbox"/>	<input type="checkbox"/>	Sleep
			<input type="checkbox"/>	<input type="checkbox"/>	Tingling in hands/feet

Other problems

مقياس الكدر لمرضى الأورام

رقم الملف File number :

اسم المريض Name :

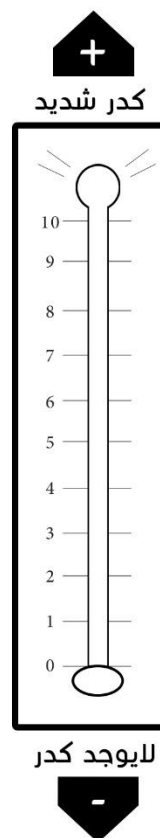
ثانياً: يُرجى الإشارة إن مثلت لك أيّاً من الأمور التالية مشكلة في الأسبوع الماضي بما فيها هذا اليوم

من فضلك ضع علامة نعم أو لا لكل اختيار:

<u>المشاكل الجسدية</u>		لا	نعم	<u>المشاكل العملية</u>		لا	نعم
المظهر	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	العناية بالطفل	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
الاستحمام / ارتداء الملابس	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	المسكن	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
التنفس	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	التأمين الطبي/ الأمور المالية	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
تغير في التبول	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	المواصلات	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
إمساك	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	العمل / الدراسة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
إسهال	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	القرارات العلاجية	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
الأكل	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>المشاكل العائلية</u>		لا	نعم
التعب	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	التعامل مع الأطفال	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
شعور التورم والانتفاخ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	شريك الحياة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
حمى	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	القدرة على الإنجاب	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
التجول والحركة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	مشاكل صحية في العائلة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
عسر الهضم	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>المشاكل العاطفية</u>		لا	نعم
الذاكرة/ التركيز	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	اكتئاب	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
تقرحات الفم	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	مخاوف	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
غثيان	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	سرعة الانفعال	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
جفاف الأنف أو احتقانه	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	الحزن	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ألم	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	الهم	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
الجنس	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	فقد المتعة في النشاطات المعتادة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
جفاف الجلد/ حكة	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>أمور روحانية / دينية</u>		<input type="checkbox"/>	<input type="checkbox"/>
إدمان المخدرات	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
تتميل في اليدين / القدمين	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

مشاكل اخرى (أذكرها)

أولاً : من فضلك ضع دائرة حول الرقم من (0 - 10) التي تعطي أفضل وصف لحجم الكدر الذي أحسست به خلال الأسبوع الماضي بما فيها هذا اليوم



Summary (Depression in medically ill)

- ❑ Historically, depression in the medically ill was often considered a natural and expected response to medical illness.
- ❑ Treatment of depression was often considered secondary to treatment of the medical illness, if the depression was even treated at all.
- ❑ Today, this perspective can no longer be accepted.
- ❑ Depression is a systemic disease.
- ❑ The effect of depression on the course of medical illness is multifaceted because there are systemic pathophysiologic implications, as well as psychological and behavioral ramifications.

Summary (Depression in medically ill)

- ❑ The accurate diagnosis and appropriate treatment of depression in the medically ill improves quality of life, enhances the patient's ability to be actively engaged in his or her treatment, decreases symptom quantity and severity, and decreases cost utilization.
- ❑ Most important, it decreases morbidity and mortality.

Four important messages ABOUT MEDS in ESRD

- Most **psychotropic** medications are **fat soluble**, easily pass the blood-brain barrier, are not dialyzable, are **metabolized** primarily by the **liver**, and are excreted mainly in bile.
- The majority of these drugs can be **safely used** with the ESRD populations.
- Dosing often involves trial and error. The majority of patients with ESRD both tolerate and require **ordinary doses** of most psychotropic medications.
- Toxicity is usually obvious, and we would **caution** more **against undermedicating** patients than against overmedication.
- Cohen LM. Update on psychotropic medication use in renal disease. Psychosomatics. 2004

Summary of psychopharmacology for patients with liver disease

- To guide pharmacotherapy in liver disease, use Childs-Pugh scores with closer monitoring to help to increase safety and tolerability.
- When choosing psychotropic agents for patients with liver disease, consider the following:
 - ▣ **Drug interactions**
 - e.g : NSAIDs + SSRI for GI bleed
 - ▣ **Medical Disease**
 - E.g : Severity of liver disease, protein binding
 - ▣ Age : e.g. : Decreased risk hepatotoxicity in adults
 - ▣ **Drug profile**
 - E.g.: Hepatotoxicity, hyperammonemia
 - ▣ **Hepatic modifications**
 - E.g: Bupropion vs. citalopram



Perinatal psychiatry

CONSEQUENCES OF DEPRESSION IN PREGNANCY

Mother	Baby
<ul style="list-style-type: none"><input type="checkbox"/> Suicide<input type="checkbox"/> Unhealthy practices e.g. smoking<input type="checkbox"/> Poor nutrition<input type="checkbox"/> Less compliant with prenatal care<input type="checkbox"/> Increased pain ,nausea, stomach pain, SOB, GI symptoms..etc	<ul style="list-style-type: none"><input type="checkbox"/> low birth weight, smaller head circumferences, premature delivery, etc<input type="checkbox"/> poor mother-infant attachment, delayed cognitive and linguistic skills, impaired emotional development, and behavioral issues<input type="checkbox"/> emotional instability and conduct disorders, attempt suicide, and require mental health services

Depression in pregnant Women

- ❑ 10% to 16% of pregnant women fulfill the diagnostic criteria for MDD, and even more women experience subsyndromal depressive symptoms
- ❑ Many of depressive symptoms overlap with the physical and mental changes experienced during pregnancy

Treatment of Depression in pregnant Women

- ❑ Antidepressants reduce risk for preterm birth and cesarean delivery compared with Depressed women untreated BUT has more neonatal complications, including low Apgar score (? Withdrawal syndrome) (Heli Malm, AJP, 2015).
- ❑ Sertraline, Escitalopram and Citalopram are the Safest SSRIs in Pregnancy (Reefhuis J et al, BMJ 2015)
- ❑ *SSRIs* : exposure show NO consistent information to support specific morphological teratogenic risks.
- ❑ NO association between TCA use in pregnancy and structural malformations.
- ❑ Presumed associations between antidepressants and malformations may be complicated by poly-drug interactions

- ❑ Bupropion, venlafaxine, duloxetine, nefazodone, and mirtazepine: NO statistically significant difference or higher than expected rate of congenital anomalies
- ❑ ECT has long been regarded as a safe and effective treatment for severe depression, life threatening depression, or failure to response to antidepressant drugs.
- ❑ Psychotherapy: is considered to be an *evidence-based treatment* of mood disorders.
- ❑ Mild depression: *interpersonal psychotherapy (IPT)* or *cognitive behavioral therapy (CBT)*, both having solid evidence-based outcomes data for the treatment of depression.
- ❑ Couples counseling

❑ The American Psychiatric Association and the American College of Obstetricians and Gynecologists, 2009 Report

Treatment of mania & psychosis during pregnancy

- Typical antipsychotics esp. high potent considered as relatively safe compared to other medications.
- Atypical antipsychotics: no major malformations were found. However, limited data so far, Metabolic syndrome is more with olanzapine and clozapine.
- Lithium is considered first line mood stabilizer during pregnancy despite rare cardiac anomaly.
- Lamotrigine is the safest anticonvulsants mood stabilizers.
- Avoid valproate & carbamazepine in child bearing women and pregnancy

Why to avoid Valproate in child bearing women and pregnancy?

- Neural tube defects secondary to interference with folate metabolism with first trimester exposure
 - Risk = 7-16%
- Craniofacial defects: mid-face hypoplasia, short nose with anteverted nostrils, and long upper lip
- Hypoglycemia, hepatic dysfunction, fingernail hypoplasia, cardiac defects, cleft palate, hypospadias, polydactyly
- Neonatal toxicity possible
- Significantly lower mean IQ and verbal IQ

POSTPARTUM DEPRESSION

- 10% to 20% of women who give birth
- *Undetected and commonly underdiagnosed*
- Continuum of Affective Symptoms
“baby blues” postpartum
psychosis

TREATMENT OF POSTPARTUM DEPRESSION

- ❑ SSRIs are medications prescribed most commonly but other agents should be considered
- ❑ ?More positive response to SSRIs and Venlafaxine, than to TCAs
- ❑ Pharmacotherapy should continue for at least 6 months to prevent a relapse of symptoms
- ❑ Breastfeeding: All antidepressants are secreted to some degree into the breast milk!
- ❑ *Recommend sertraline or Paroxetine* : Infant serum levels are low to undetectable.

- ❑ Fluoxetine : higher rate of secretion into breast milk, long half-lives of metabolites, they can accumulate in an infant's blood, reaching detectable levels
- * NOT considered the first-line SSRI for breastfeeding women
- ❑ Mirtazapine: no negative effects on infants with maternal use*
- ❑ Research on long-term effects of SSRI and TCA exposure through breast milk on children shows NO alteration in IQ, language development, or behavior**

- ❑ IPT and CBT are effective.

*Kristensen JH. et al. Br J Clin Pharmacol 2007;63:322

**Hale TW. Neo Reviews 2004;5:E451

Postpartum Psychosis

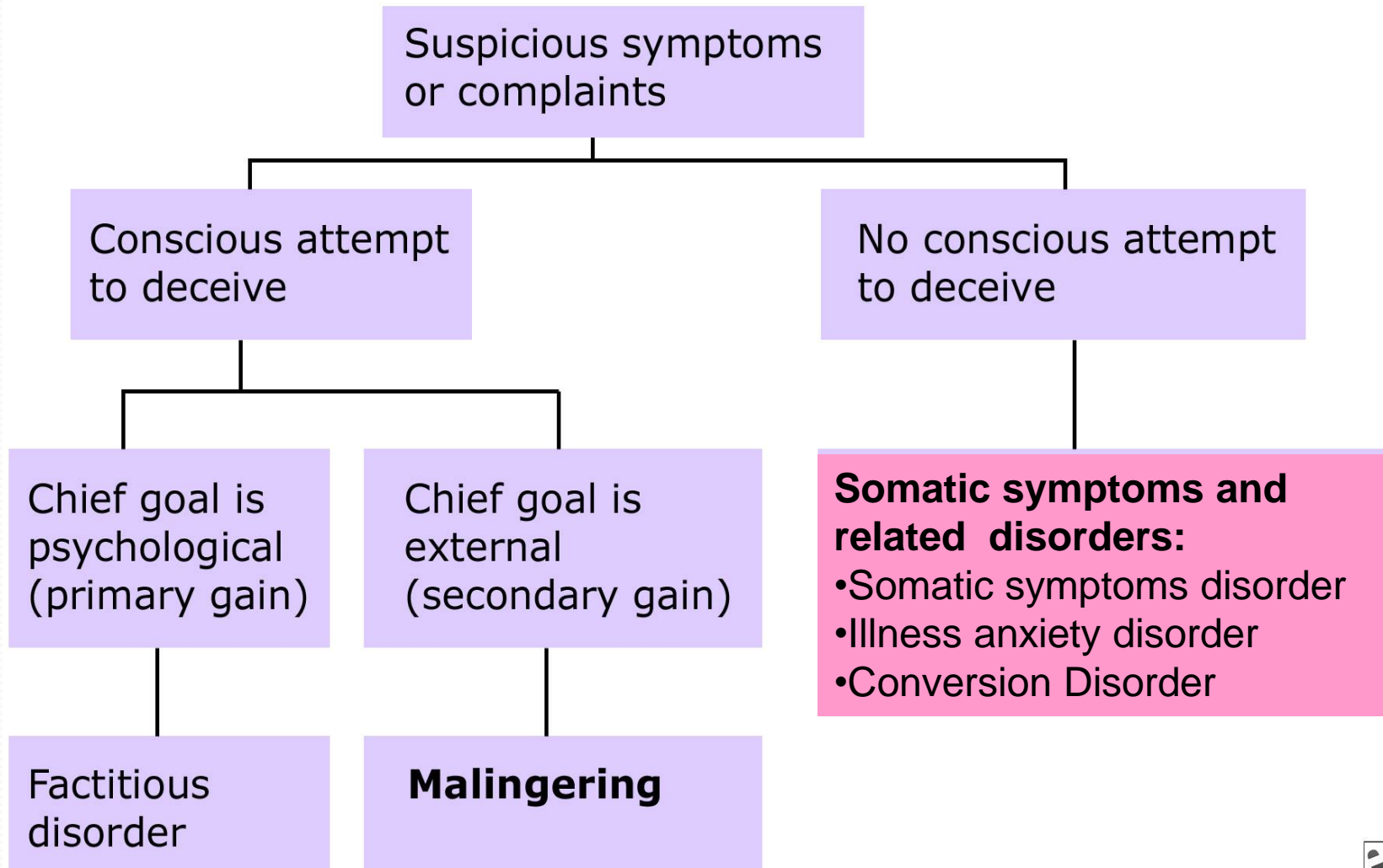
- Rare: 1 in 500-1000 deliveries.
- Typically presents within 2 weeks of delivery.
- Often is a manifestation of bipolar disorder.
- Signs/symptoms: Severe insomnia, Rapid mood swings, Anxiety, Psychomotor restlessness, Delusions (childbirth themes) ,hallucinations, cognitive disturbance, neglecting the infant.
- Assess for suicidal, homicidal/ infanticidal ideations.
- Treatment: mostly similar to Tx of bipolar disorder, consider ECT.



Somatic Symptoms And Related Disorders

Medically unexplained symptoms

Flow Chart for Suspicious Symptoms



DSM-5 criteria of Somatic Symptom Disorder

- A. One or more somatic symptoms that are distressing or result in significant disruption of daily life.
- B. Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:
 1. Disproportionate and persistent thoughts about the seriousness of one's symptoms.
 2. Persistently high level of anxiety about health or symptoms.
 3. Excessive time and energy devoted to these symptoms or health concerns.
- C. Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent (typically more than 6 months).

DSM-5 criteria of Illness Anxiety Disorder

- A. Preoccupation with having or acquiring a serious illness.
- B. Somatic symptoms are not present or, if present, are only mild in intensity. If another medical condition is present or there is a high risk for developing a medical condition (e.g., strong family history is present), the preoccupation is clearly excessive or disproportionate.
- C. There is a high level of anxiety about health, and the individual is easily alarmed about personal health status.
- D. The individual performs excessive health-related behaviors (e.g., repeatedly checks his or her body for signs of illness) or exhibits maladaptive avoidance (e.g., avoids doctor appointments and hospitals).
- E. Illness preoccupation has been present for at least 6 months, but the specific illness that is feared may change over that period of time.
- F. The illness-related preoccupation is not better explained by another mental disorder, such as somatic symptom disorder, panic disorder, generalized anxiety disorder, body dysmorphic disorder, obsessive-compulsive disorder, or delusional disorder, somatic type.

DSM-5 criteria of **Conversion Disorder** (**Functional Neurological Symptom Disorder**)

- A. One or more symptoms of altered voluntary motor or sensory function.
- B. Clinical findings provide evidence of incompatibility between the symptom and recognized neurological or medical conditions.
- C. The symptom or deficit is not better explained by another medical or mental disorder.
- D. The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation.

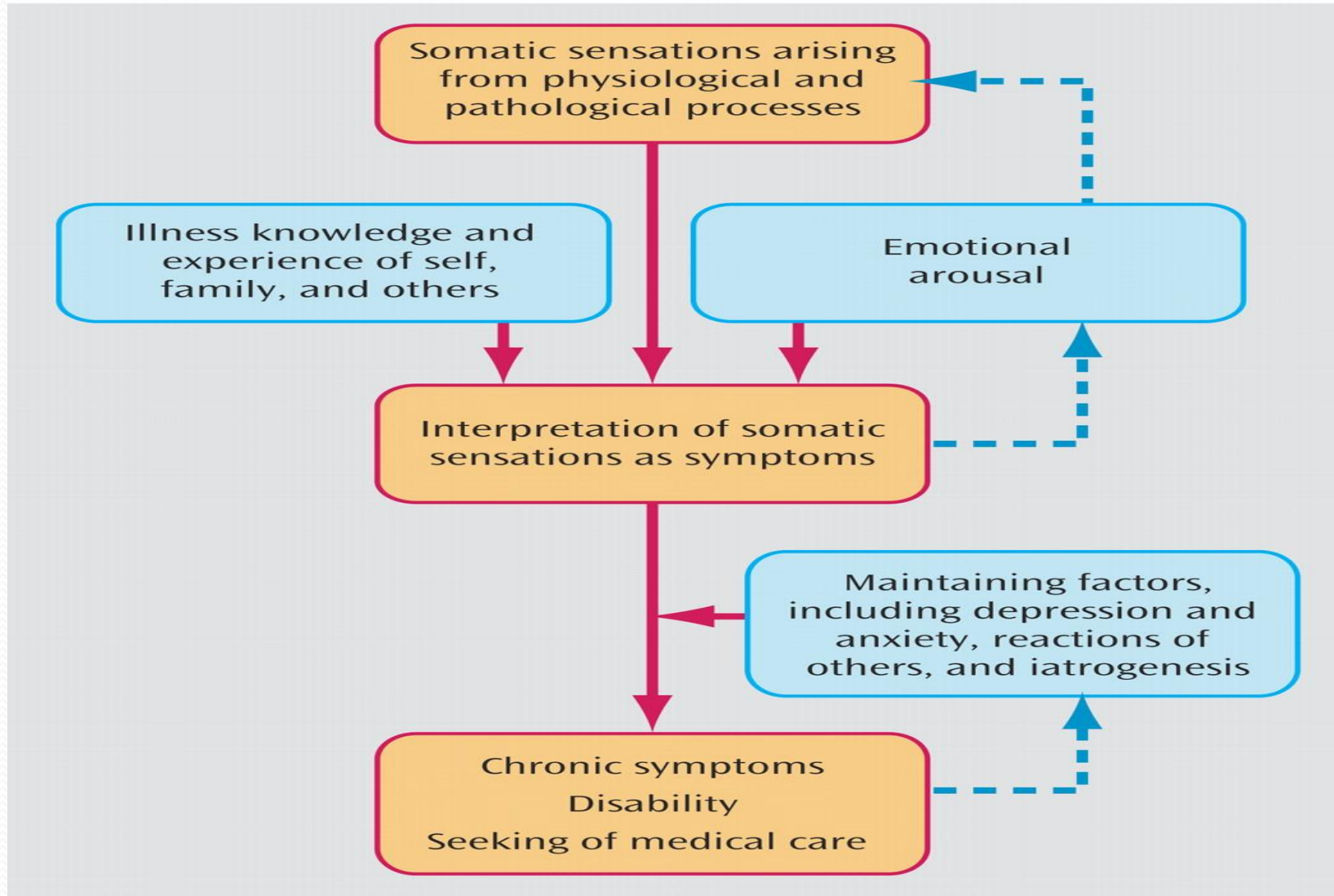
Specify symptom type:

- *With weakness or paralysis
- *With abnormal movement (e.g., tremor, dystonic movement, myoclonus, gait disorder)
- *With swallowing symptoms
- *With speech symptom (e.g., dysphonia, slurred speech)
- *With attacks or seizures
- *With anesthesia or sensory loss
- *With special sensory symptom (e.g., visual, olfactory, or hearing disturbance)
- *With mixed symptoms

DSM-5 criteria of Psychological Factors Affecting Other Medical Conditions

- A. A medical symptom or condition (other than a mental disorder) is present.
- B. Psychological or behavioral factors adversely affect the medical condition in one of the following ways:
 1. The factors have influenced the course of the medical condition as shown by a close temporal association between the psychological factors and the development or exacerbation of, or delayed recovery from, the medical condition.
 2. The factors interfere with the treatment of the medical condition (e.g., poor adherence).
 3. The factors constitute additional well-established health risks for the individual.
 4. The factors influence the underlying pathophysiology, precipitating or exacerbating symptoms or necessitating medical attention.
- C. The psychological and behavioral factors in Criterion B are not better explained by another mental disorder (e.g., panic disorder, major depressive disorder, posttraumatic stress disorder).

Etiology of Somatic Symptoms And Related Disorders



Diagnosis	Prevalence	Gender	Age of onset	course
Hypochondriasis (somatic symptom disorder+ illness anxiety d)	1-5% (community) 2-7% (primary care outpatients)	M=F	early adulthood	chronic, waxes and wanes
Conversion disorder	0.01-0.5% Esp. rural areas, lower SES, developing areas, and lower educational levels	F>M 2- 10	Late childhood – early adulthood	acute or sudden remit in about 2 w *recur in 25%
Pain disorder (subtype of somatic symptom d)	Unknown 10-15% of U.S. adults experience chronic, disabling pain/year	M=F	Any age	Can be acute or chronic
Factitious Disorder	unknown, 1% of hospital cases in which mental health professionals are consulted	F >M	early adulthood	Episodic

Management of Somatic Symptoms And Related Disorders

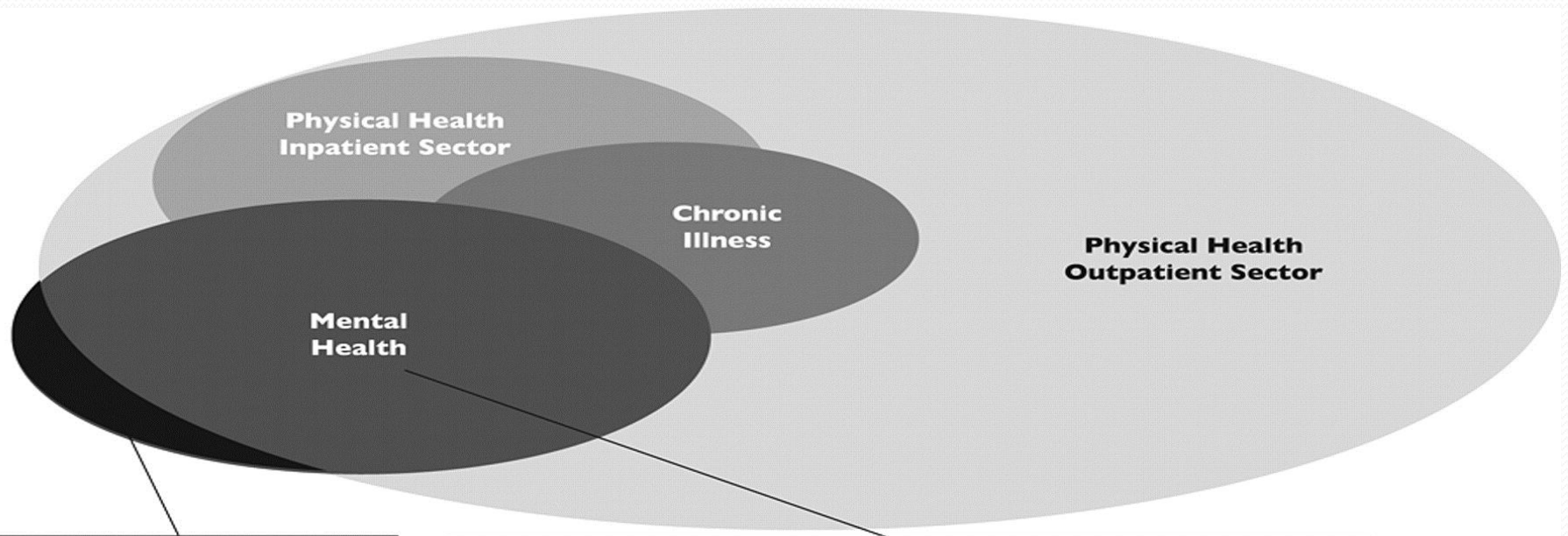
Do

- Allow patient role
- Concentrate on functions
- Frequent, short visits
- Single doctor
- Group therapy
- May individual Tx
- Drug treatment for psych co-morbidity.
- SSRIs, high doses for Hypochondraisis and BDD

AVOID

- Concentrating on Symptoms.
- Say (It's just in your mind, take it easy..)
- Tests or Rx without Dx
- Unnecessary Referrals / consults.

Future of Psychiatry



Mental Health Sector

- ~10% of mental health patients
- ~98% of mental health budget
- Mental health budget is only 2% to 4% of total health budget, excluding pharmacy
- Evidence-based treatment ~50%

Mental Health Treatment in the Physical Health Sector

- ~90% of mental health patients
- ~2% of mental health budget
- ~0% actually receive any mental health treatment
- 20% to 40% of total health budget is used for *physical health* services in mental health patients (80% of health services used by mental health patients)
- Evidence-based treatment ~10% (in only 30% treated)

شعرت بالكثير من الخجل من نفسي لما عرفت سيرة هذا الطبيب!!!



- <https://www.youtube.com/watch?v=PQPI4quZZAA>

د. عبدالرحمن السميّط



Thank you