Mental Health

KSU Dept of Family & Community Medicine

435 Lecture Notes by Qusay Ajlan

Original Content | **Titles** | Additional Notes | **Important**

objectives

- Define “mental health” and state the factors that contribute to the achievement of mental health
- Debating the placement of “mental health” on the global and national health agenda
- Discuss the global and national magnitude of mental illnesses based on GBD
- List and classify the factors contributing to the occurrence of mental illnesses
- Define stigma and explain its consequences on mentally ill patients,

their families and treatment outcome

- Provide reasons for the integration of mental health in PHC
- Discuss the primary prevention of mental illnesses
- Outline the main strategies of integrating mental health into PHC with reference to the

initiatives of the Eastern province

Definition of mental health

State of well-being in which every individual realizes his or her own potential, can **cope** with the normal stresses of life, can work **productively** and fruitfully, and is able to make a contribution to her or his community"

or

- State of successful performance of mental function,
- resulting in productive activities,
- fulfilling relationships with people, and
- the ability to adapt to change and
- to cope with adversity"

Achieving positive mental health

1-Structural factors:

- satisfactory living conditions, housing, employment, transport, education.

2-Individual factors:

- Resiliency = ability to cope with demands and pressure of life (differs from person to other)

3-Community factors:

- sense of belonging, social support.

Magnitude based on point prevalence - global

- neuropsychiatric conditions had an aggregate *point prevalence* of about 10% for adults (GBD 2000)
- About 450 million people were estimated to be suffering from neuropsychiatric conditions including
  - unipolar depressive disorders,
  - bipolar affective disorder,
  - schizophrenia,
  - epilepsy,
  - alcohol and selected drug use disorders,
  - Alzheimer's and other dementias,
  - post traumatic stress disorder,
  - obsessive and compulsive disorder,
  - panic disorder,
  - and primary insomnia.

Magnitude based on life-time prevalence - global

Surveys conducted in developed as well as developing countries have shown that, during their entire lifetime, more than 25% of individuals develop one or more mental or behavioural disorders

GBD 2010 Arrow Diagram

Saudi Arabia | Top 30 | Causes | Risks
Both | Male | Female | YLD (Years Lived with Disability) | All ages

1990 Mean rank (95% UI)		2010 Mean rank (95% UI)		Median % change (95% UI)
1.4 (1-3)	1 Major depressive disorder	1 Major depressive disorder	1.6 (1-3)	78% (4 to 201)
2.1 (1-4)	2 Low back pain	2 Low back pain	1.8 (1-4)	108% (65 to 156)
2.6 (1-4)	3 Iron-deficiency anemia	3 Diabetes	2.9 (1-4)	190% (131 to 264)
4.3 (4-6)	4 Diabetes	4 Iron-deficiency anemia	4.7 (4-7)	16% (8 to 23)
6.9 (5-12)	5 Neck pain	5 Anxiety disorders	5.1 (1-11)	165% (-14 to 718)
7.1 (3-18)	6 Anxiety disorders	6 Neck pain	7.0 (4-11)	104% (54 to 177)
8.9 (5-16)	7 Drug use disorders	7 Osteoarthritis	8.2 (5-12)	157% (94 to 243)
10.0 (4-24)	8 Asthma	8 Drug use disorders	8.9 (5-15)	101% (23 to 244)
10.2 (6-16)	9 Other musculoskeletal	9 Other musculoskeletal	9.0 (6-13)	118% (46 to 229)
11.0 (5-21)	10 COPD	10 COPD	10.7 (5-19)	97% (26 to 214)
11.3 (6-17)	11 Road injury	11 Migraine	12.4 (8-18)	107% (55 to 169)
11.6 (6-17)	12 Osteoarthritis	12 Asthma	12.5 (4-25)	53% (-48 to 410)
11.9 (7-18)	13 Diarrheal diseases	13 Road injury	12.6 (8-17)	80% (42 to 135)
13.5 (8-19)	14 Falls	14 Falls	12.6 (9-17)	99% (61 to 144)
13.9 (8-22)	15 Migraine	15 Bipolar disorder	14.7 (8-22)	108% (58 to 175)
14.6 (9-20)	16 Sickle cell	16 Schizophrenia	17.2 (9-24)	136% (56 to 263)
16.8 (8-25)	17 Bipolar disorder	17 Iodine deficiency	18.5 (12-25)	88% (43 to 144)
19.6 (11-26)	18 Iodine deficiency	18 Sickle cell	18.8 (14-24)	33% (5 to 68)
21.0 (16-27)	19 Epilepsy	19 Diarrheal diseases	19.0 (13-25)	13% (-14 to 53)
21.8 (13-31)	20 Schizophrenia	20 Dysthymia	19.3 (14-28)	103% (62 to 152)
21.9 (15-31)	21 Dysthymia	21 Epilepsy	21.5 (17-28)	65% (31 to 107)
22.5 (16-30)	22 Thalassemia	22 Eczema	23.8 (16-35)	64% (25 to 115)
22.7 (15-33)	23 Conduct disorder	23 Conduct disorder	25.4 (17-36)	46% (8 to 97)
22.8 (15-33)	24 Eczema	24 Other hearing loss	25.6 (18-35)	108% (62 to 163)
27.9 (17-40)	25 Edentulism	25 Eating disorders	25.8 (13-44)	114% (-40 to 584)
29.3 (21-38)	26 Other hearing loss	26 Thalassemia	27.1 (20-35)	30% (-3 to 73)
29.8 (12-52)	27 Eating disorders	27 Ischemic heart disease	27.2 (21-36)	107% (64 to 166)
30.2 (20-41)	28 Other vision loss	28 Other vision loss	29.1 (18-42)	81% (14 to 195)
30.7 (23-41)	29 Ischemic heart disease	29 Acne vulgaris	29.8 (20-42)	81% (32 to 150)
30.9 (19-44)	30 Acne vulgaris	30 Dental caries	31.9 (19-49)	80% (22 to 161)
33.1 (20-53)	33 Dental caries	40 Edentulism	40.1 (26-58)	-1% (-50 to 101)

GBD 2010 Arrow Diagram

Saudi Arabia | Top 30 | Causes | Risks

Both | Male | Female | DALY (Disability-Adjusted Life Ye... | All ages

1990 Mean rank (95% UI)		2010 Mean rank (95% UI)		Median % change (95% UI)
1.0 (1-1)	1 Preterm birth complications	1 Road injury	1.1 (1-2)	49% (17 to 81)
2.2 (2-3)	2 Road injury	2 Ischemic heart disease	3.0 (2-5)	63% (42 to 91)
3.0 (2-5)	3 Congenital anomalies	3 Major depressive disorder	3.8 (1-7)	78% (4 to 201)
4.2 (3-6)	4 Ischemic heart disease	4 Diabetes	4.3 (2-6)	190% (139 to 250)
5.4 (3-10)	5 Major depressive disorder	5 Low back pain	4.4 (2-7)	108% (65 to 156)
7.2 (5-12)	6 Low back pain	6 Preterm birth complications	4.9 (2-7)	-46% (-59 to -15)
7.9 (5-12)	7 Lower respiratory infections	7 Stroke	7.6 (6-9)	54% (32 to 81)
8.6 (5-13)	8 Iron-deficiency anemia	8 Congenital anomalies	8.7 (7-11)	-40% (-58 to -7)
8.9 (6-12)	9 Stroke	9 Iron-deficiency anemia	9.6 (7-13)	15% (8 to 22)
9.7 (5-13)	10 Diarrheal diseases	10 Anxiety disorders	10.2 (2-21)	165% (-14 to 718)
10.5 (6-14)	11 Neonatal encephalopathy	11 Drug use disorders	12.1 (7-19)	122% (32 to 277)
11.2 (7-14)	12 Diabetes	12 Neck pain	13.6 (9-19)	104% (54 to 177)
13.9 (7-24)	13 Neonatal sepsis	13 Lower respiratory infections	13.6 (10-18)	-28% (-45 to -4)
16.6 (14-22)	14 Falls	14 Other musculoskeletal	15.5 (11-21)	126% (57 to 229)
17.1 (13-23)	15 Drowning	15 COPD	15.5 (10-23)	69% (21 to 145)
17.7 (13-25)	16 COPD	16 Osteoarthritis	15.8 (11-22)	157% (94 to 243)
18.3 (8-35)	17 Anxiety disorders	17 Falls	16.1 (11-21)	55% (20 to 99)
18.5 (8-28)	18 Drug use disorders	18 Chronic kidney disease	16.9 (13-21)	203% (131 to 288)
18.5 (10-33)	19 Asthma	19 Asthma	18.8 (8-34)	42% (-44 to 302)
18.9 (14-26)	20 Neck pain	20 Neonatal encephalopathy	20.7 (14-27)	-40% (-64 to 1)
19.9 (15-25)	21 Fire	21 Migraine	21.8 (15-32)	107% (55 to 169)
22.5 (16-32)	22 Tuberculosis	22 Diarrheal diseases	22.6 (18-29)	-49% (-68 to -24)
22.9 (17-29)	23 Other musculoskeletal	23 Other cardio & circulatory	25.0 (20-31)	57% (23 to 109)
24.2 (18-30)	24 Sickle cell	24 Bipolar disorder	25.4 (17-36)	108% (58 to 175)
26.1 (18-35)	25 Osteoarthritis	25 Neonatal sepsis	25.8 (14-39)	-30% (-66 to 17)
26.1 (17-34)	26 Meningitis	26 Fire	26.6 (21-33)	7% (-17 to 48)
26.4 (20-33)	27 Other cardio & circulatory	27 Epilepsy	27.0 (21-33)	55% (25 to 89)
27.9 (22-35)	28 Epilepsy	28 Schizophrenia	28.0 (18-38)	138% (58 to 275)
28.8 (21-40)	29 Migraine	29 Drowning	28.5 (22-35)	-15% (-40 to 23)
30.2 (20-40)	30 Protein-energy malnutrition	30 Sickle cell	29.6 (22-36)	18% (-6 to 49)
31.3 (25-37)	31 Chronic kidney disease	34 Tuberculosis	34.1 (29-40)	-9% (-35 to 23)
33.2 (23-46)	32 Bipolar disorder	42 Meningitis	44.0 (38-52)	-33% (-55 to -3)
39.5 (28-52)	38 Schizophrenia	54 Protein-energy malnutrition	54.5 (41-66)	-40% (-62 to -2)

Mental disorders contributing to YLD & DALYS – KSA, 2010

YLD (years lived with disability) (n=8 out of top30)

1. Major depressive disorders (78%)
5. Anxiety disorders (165%)
8. Drug use disorders (101%)
11. Migraine (107%)
15. Bipolar disorders (108%)
16. Schizophrenia (136%)
20. Dysthmyia (chronic state of depressive symptoms) (103%)
21. Epilepsy (65%)
23. Conduct disorders (46%)
25. Eating disorders (114%)

DALYs (disability adjusted life years, which means the number years lost due to disability,or illness) (n=5 out of top 30)

3. Major depressive disorders (78%)
10. Anxiety disorders (165%)
11. Drug use disorders (122%)
21. Migraine (107%)
24. Bipolar disorders (108%)
27. Epilepsy (55%)
28. Schizophrenia (138%)

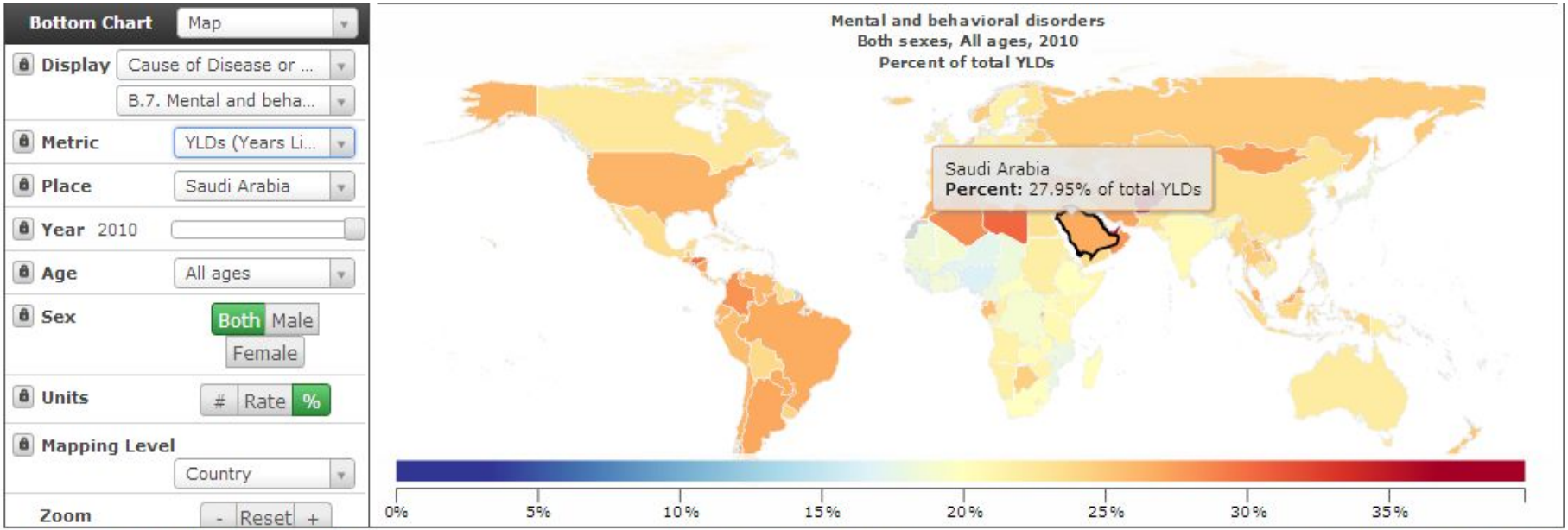
Percentage increase between 1990 and 2010 and rank out of the top 30 conditions

Contribution of mental illness to YLDs – KSA, 2010

Mental and behavioral disorders:

Schizophrenia,Depression ,Anxiety ,Drug/alcohol ,Eating disorders,Pervasive developmental disorders ,Childhood behavior disorders

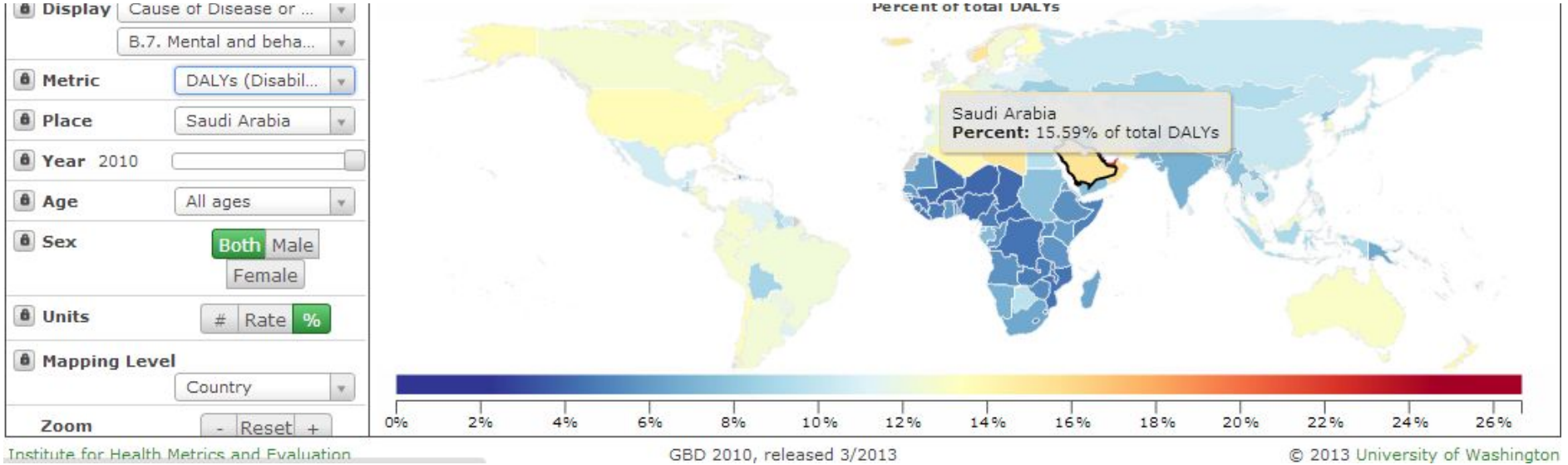
- Rate: 3,061.19 per 100,00



Contribution of mental illness to DALYs – KSA, 2010

Mental and behavioral disorders:

Schizophrenia, Depression Anxiety Drug/alcohol Eating disordersPervasive developmental disorders Childhood behavior disorders



Rate: 3,204.65 per 100,00

Consequences of mental illnesses

- Likely to increase in the future (ageing, low mortality, technologies)
- Disabling
- Stigmatizing will be discussed
- Family effects (changes to adapt)
- Costly(medications + the prossecs of training and rising doctors)
- Economic loss and drift to poverty
- Burden on healthcare system

Stigma

Stigma is defined as "a cluster of negative attitudes and beliefs that make the general public to fear, reject, avoid, and discriminate against people with mental illness."

Stigma is a gap between actual identity (who they are) and virtual identify (what people think they are)

Impact of stigma

- Limits access to quality healthcare
- leads to concealment or denial of symptoms
- Prevents adherence to treatment
- Inaccurately affects patients' beliefs about what is wrong with their health
- lowers patient’s self-esteem and negatively affects self-perception and self-care
- It negatively affects the attitudes of health care providers
- Increases isolation of patients and their families
- Contributes to the economic conditions that influence poor outcomes
- Limits the community's response to illness
- Limits the formation of nonprofit groups for support

Stigma reduction

An important aspect of mental health promotion involves activities related to dispelling myths (education) and stereotypes associated with vulnerable groups, providing knowledge of normal parameters, increasing sensitivity to psychosocial factors affecting health and illness, and enhancing the ability to give sensitive, supportive, and humanistic health care.

Stigma will lead to negative discrimination

Factors contributing to mental illnesses

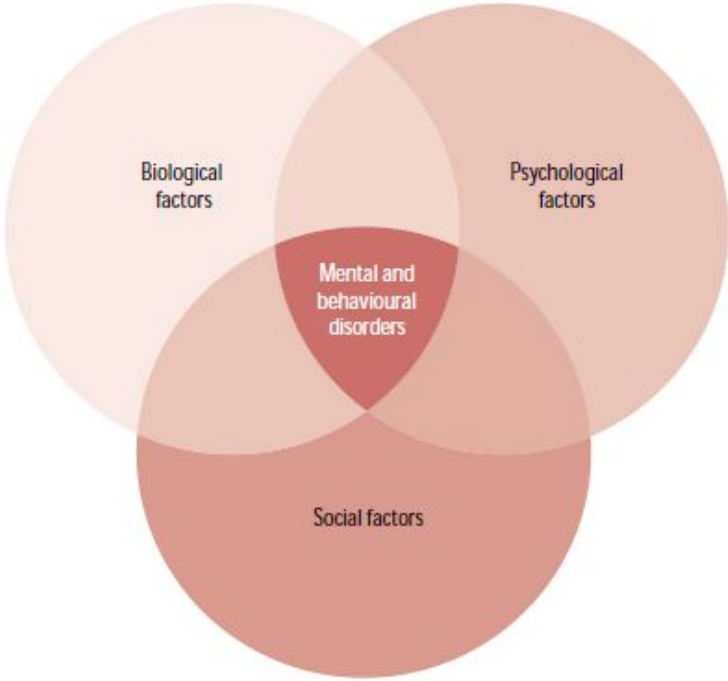
Also called Biopsychosocial factors

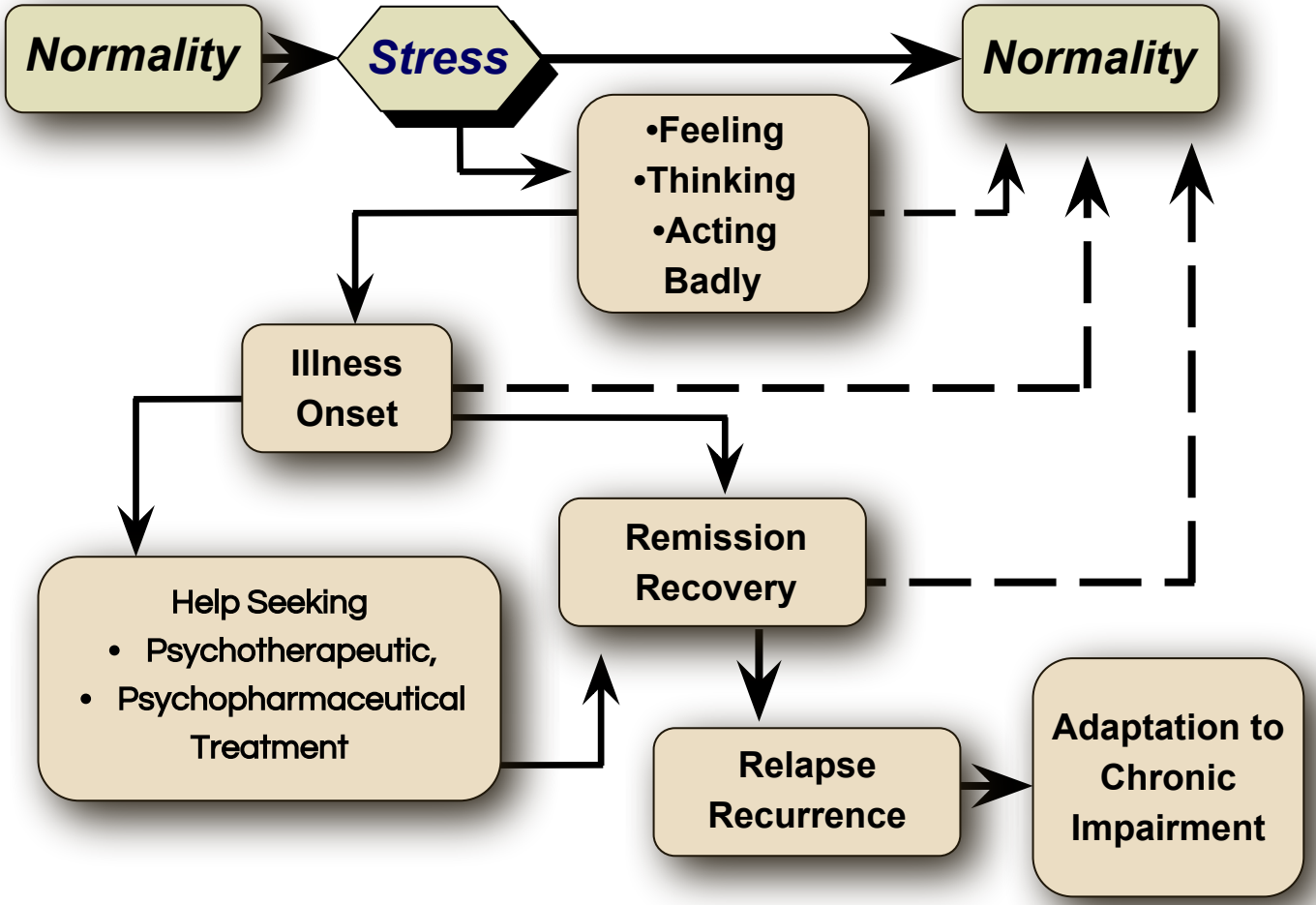
Biological factors:
Age, Sex, Major physical diseases

Social factors:
Poverty, Social deprivation, Broken homes, Faulty parenting
Conflicts and disasters

Psycological factors:
-Coping skills
-Low self-concept and self-esteem (financial factors)

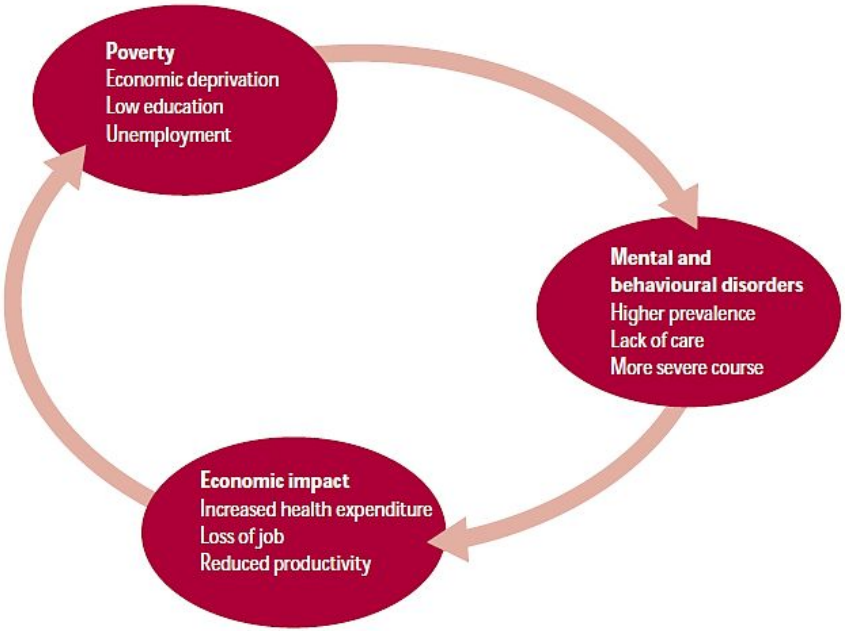
Most of mental illnesses have their roots during the childhood period
Interaction between biological, psychological and social factors in the development of mental disorders





Career model of mental illness

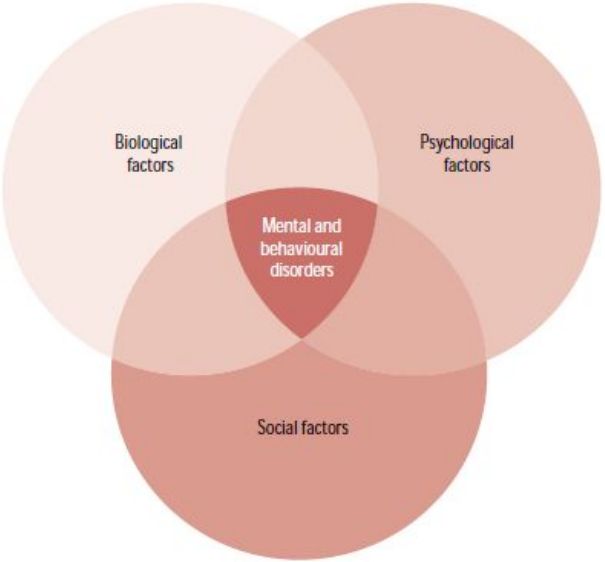
The link between poverty and mental illnesses



The vicious circle of mental disorders and poverty

Primary prevention: Exerting control over contributing factors

Age
Sex
Major physical diseases



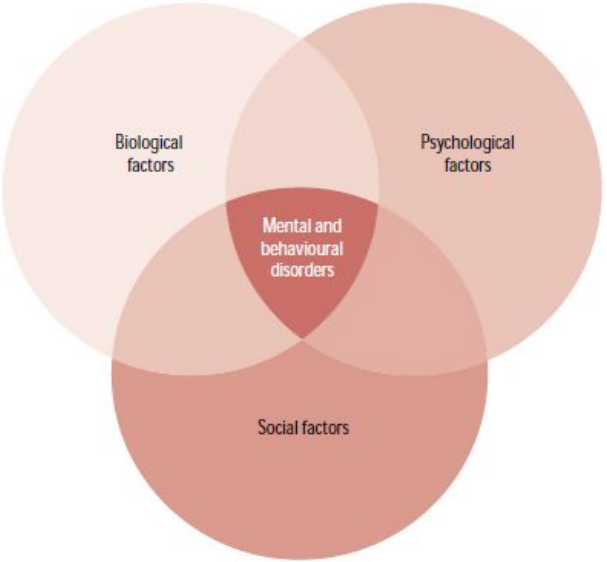
Coping skills
Low self-concept and self-esteem

Poverty
Social deprivation
Broken homes
Faulty parenting
Conflicts and disasters
Major life events

Question of practicality:
How many of the factors can be effectively addressed?
What conditions could be prevented at primary level?
How many conditions could be prevented at primary level?

Primary prevention: Exerting control over contributing factors

Age
Sex
Major physical diseases



Coping skills
Low self-concept and self-esteem

RESILIENCE

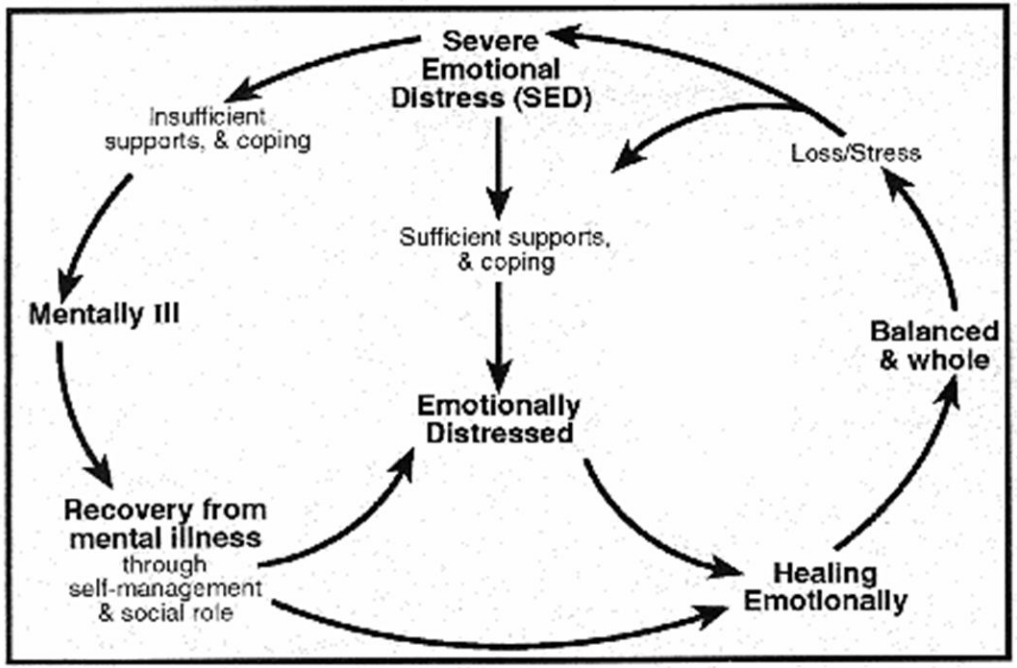
Poverty
Social deprivation
Broken homes
Faulty parenting
Conflicts and disasters
Major life events

- Little or no evidence about the primary prevention of depression, schizophrenia, cognitive impairment of idiopathic origin
- Possibility of primary prevention of a proportion of cases related to childhood behavior disorders and substance abuse

Secondary prevention

- Early detection
- Appropriate management
- Follow up
- Support component

PROMOTE
RECOVERY
PREVENT RELAPSE



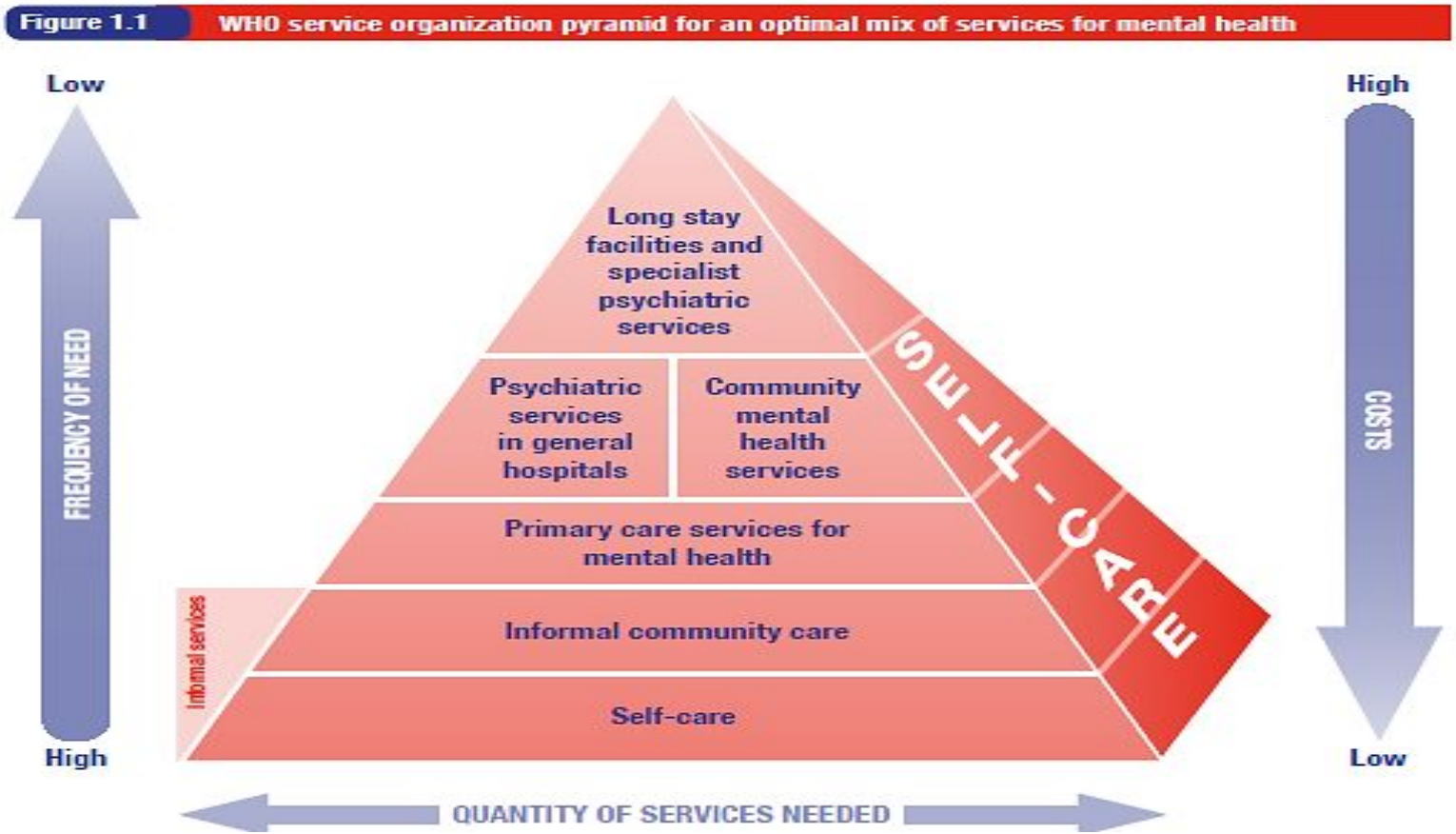
Empowerment Model of Recovery from Mental Illness

by Daniel B. Fisher, M.D., Ph.D. and Laurie Ahern

Principle of treatment

- Early identification of the disorder to ensure good prognosis
- Provide care at PHC supported by referral center
- Limit institutionalization and shorten its duration
- Collaboration with other sectors for support and integration:
  - **Education**: measures to complete at least primary education in friendly schools
  - **Employment**: gainful employment in a work environment free from discrimination
  - **Housing**: subsidiary cost, prevent discrimination in location of housing or geographic segregation
  - **Social development**/affairs: welfare coverage
  - **Criminal code:** no incarceration of mentally ill and providing mental services to prisoners

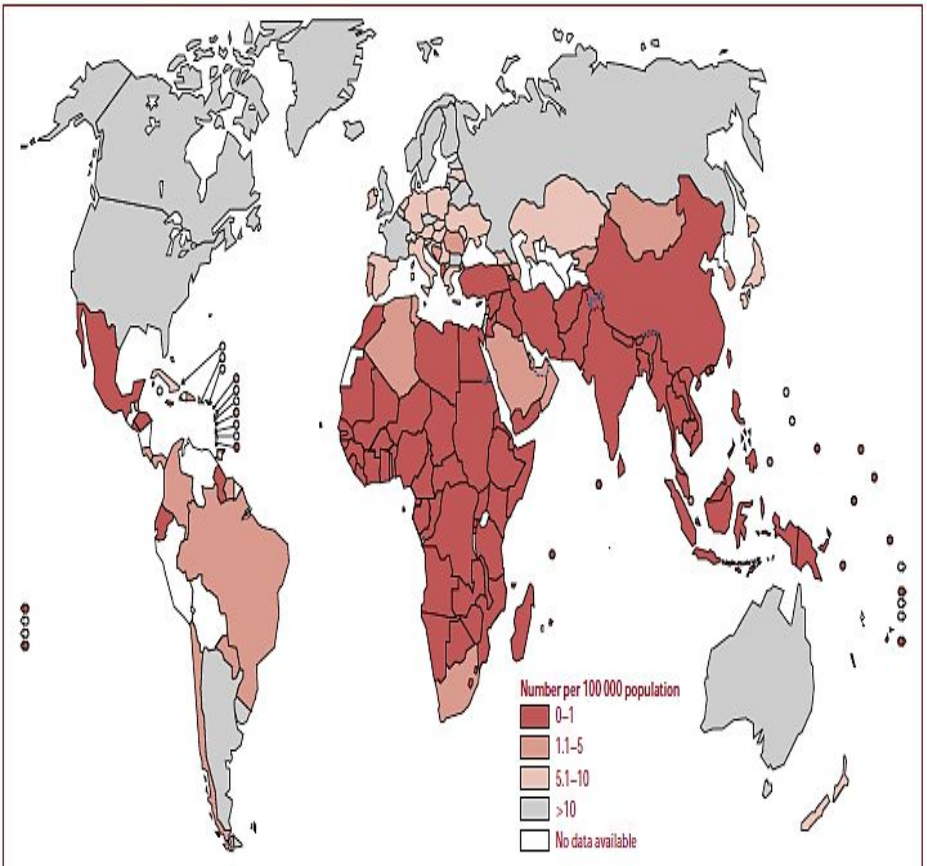
Services for mental health



Integration of mental health into primary health care: Justification

- Affordable and cost effective for patients and governments
- Inter-relationship between physical and mental disorders (somatization)
- **High burden of mental disorders** (disproportionate to specialized care)
- Increase access to care for mental disorders
- Narrow treatment gap for mental disorders (gap 32% - 78%)
- Reduces stigma and discrimination
- Associated with desirable outcome as other levels of care

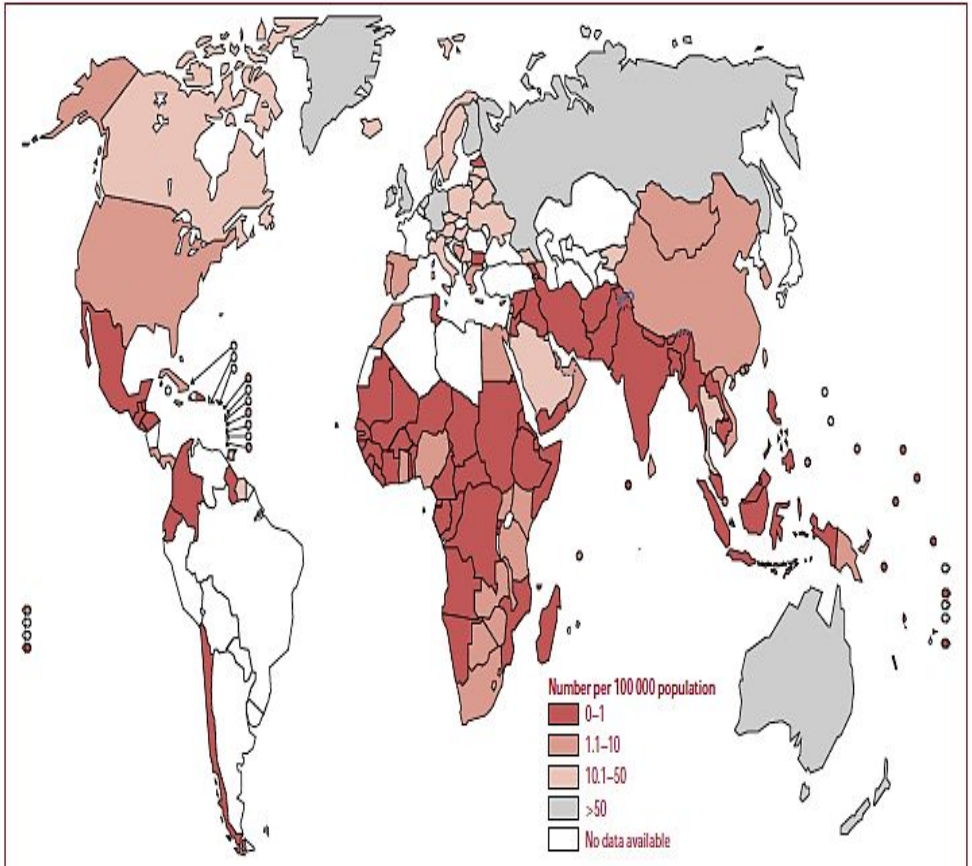
Figure 4.4 Number of psychiatrists per 100 000 population, 2000[a]



[a] Based on information from 177 Member States.

Source: *Mental health resources in the world. Initial results of Project Atlas* (2001). Geneva, World Health Organization.

Figure 4.5 Number of psychiatric nurses per 100 000 population, 2000[a]



[a] Based on information from 157 Member States.

Source: *Mental health resources in the world. Initial results of Project Atlas* (2001). Geneva, World Health Organization.

Integration of mental health into primary health care: Main strategies

- Developing policy to incorporate mental health care into PHC
- Advocacy to improve attitudes and behavior regarding mental health care
- **Training of PHC workers in screening for mental disorders**
- Availing specialists and facilities readily available to support PHC physicians
- Access of PHC physicians to essential psychotropic medications
- Presence of a mental health-service coordinator in PHC clinics
- Collaboration with other government non-health sectors, nongovernmental organizations, village and community health workers, and volunteers
- Adequate **funding** for necessary staff and mental health specialists

Mental disorders seen in general clinics in KSA

- Al-Khobar, 22% of health clinic patients had mental disorders such as depression and anxiety, however only 8% were diagnosed.
- In Riyadh, 30% to 40% of those seen in primary care clinics had mental disorders and again, most were not diagnosed.
- In central Saudi Arabia, 18% of adults were found to have minor mental morbidities

Low detection rate

Integration of mental health into PHC: experience of Eastern Province (2003 – 2006)

Training of PHC physicians at two levels of skills

- First level (one month – 17 PHC physician): basic training in mental health issues, diagnosis of common mental disorders, appropriate use of psychotropic medications, and provision of brief psychotherapeutic interventions.
- Second level (2 PHC physicians): training is more intensive and advanced, enabling graduates to manage more complicated mental health problems.

Integration of mental health into PHC: experience of Eastern Province (2003 – 2006)

- PHC (17-physicians):
  - Provide mental health services,
  - Engage families in consultation
  - Provide families with information for patient support
  - Referral of complex cases

- Community Mental Health Centres
  - Two at province level
  - Referral source for complex cases
  - Diagnosis and treatment
  - Supervise PHC practitioners in the area

KSA allocates 4% of healthcare budget to mental illnesses; 78% is directed to mental hospitals

Tertiary prevention

- **Long term treatment**
- Social and welfare support
- Care for in a community setting, day care centers
- Immediate care for crisis and relapse
- Long term stay in specialized hospital is the last option

Summary

1. Mental health is not being free of mental disorders
2. Mental illnesses are of considerable magnitude, likely to increase in the future and result in serious consequences to individuals and family
3. Mental illnesses in KSA contribute to 27.9% of YLD and 15.5% of DALYs
4. Mental illnesses adversely affect the life of people affected, their families and place a significant burden on the country's economy and healthcare system
5. Stigma is associated with mental illnesses resulting in refusal of seeking care and delay recovery
6. Stigma associated with mental illnesses limits access to quality care, increases isolation of patients and families, delay recovery
7. Mental illnesses result from the interaction of several factors and have its roots during the childhood period
8. KSA allocate 4% of healthcare budget to mental illnesses; 78% is directed to mental hospitals
9. Mental illnesses that form the main burden are not preventable at the primary level based on evidence
10. Most of childhood behavioral disorders are preventable at the primary level by good parenting, interactive schools and supporting social network
11. Mental health services are provided at PHC, community hospitals, general hospitals and mental hospitals
12. Detection, treatment and follow up of mental illness is cost effective in view of their presence in PHC, shortage and cost of specialized care