

Chapter 5

Mental Health and Hygiene, Behaviour and Society

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 - 5.1.4. Old age

5.1. Basics of mental hygiene, mental disorders

Definitions of mental health and mental illness

- 1) Mental health is “*a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.*” The estimates show that only about 17% of US adults are considered to be in optimal mental health. The situation is even more aggravating if we keep in mind that overall health outcomes depend greatly on mental health.
- 2) Mental illness is an umbrella-term used for “*all diagnosable mental disorders*” or “*health conditions that are characterized by alterations in thinking, mood, or behaviour (or some combination thereof) associated with distress and/or impaired functioning.*” The most common mental illness is depression, which affects more than 26% of US adult population. According to forecasts, in 2020, depression will be the second leading cause of disability throughout the world, trailing only ischemic heart disease.

Key Facts of mental health:

- It is an integral part of health; there is no health without mental health.
- It is more than the absence of mental disorders.
- It is determined by socio-economic, biological and environmental factors.
- It is estimated that more than 450 million people suffer from mental disorders in the world.
- Cost-effective strategies and interventions exist to promote mental health.

Dimensions of Mental Health: Researchers suggest that there are three separate domains with which one can characterize mental health. The three indicators are the following:

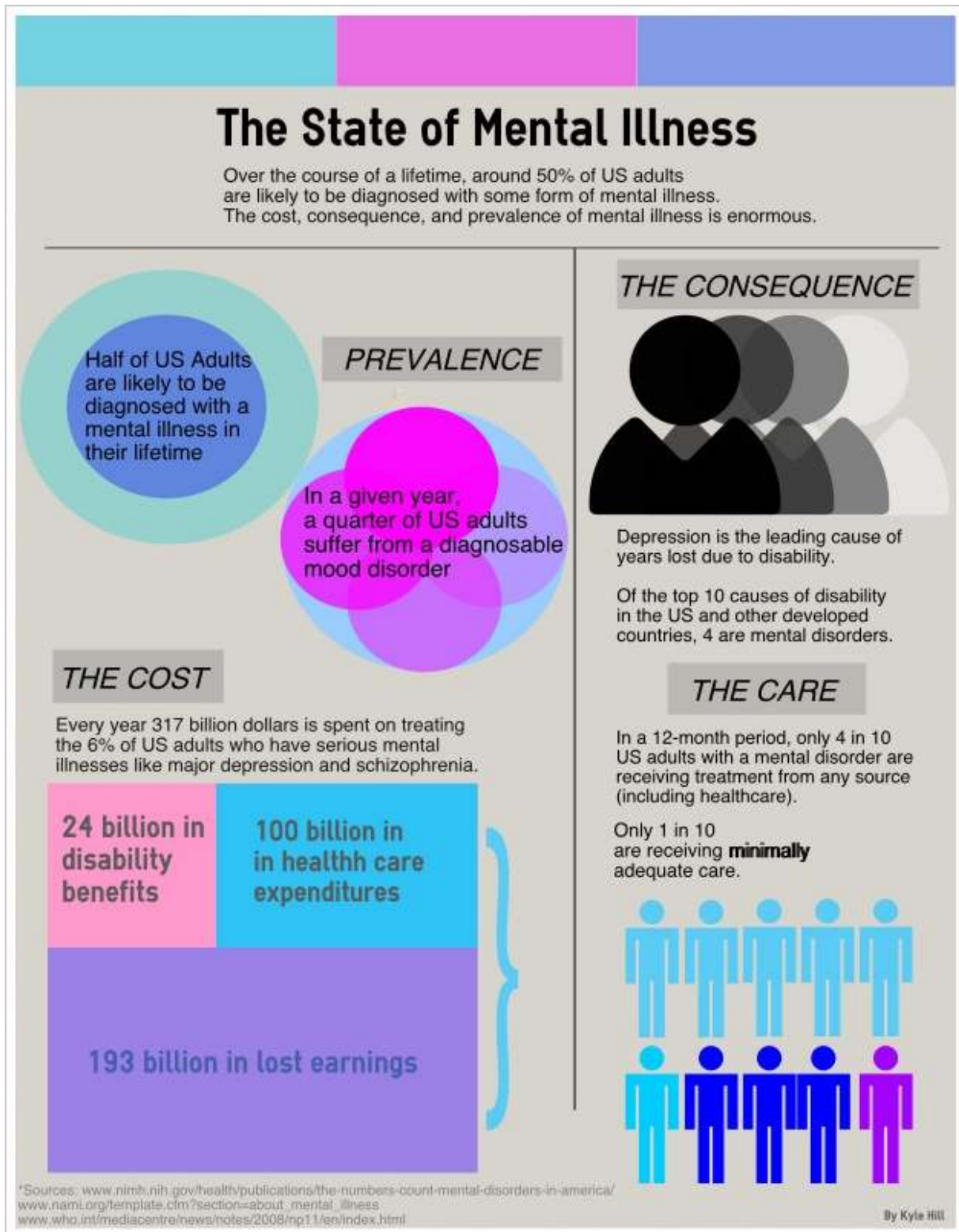
- *Emotional well-being:* perceived life satisfaction, happiness, cheerfulness, peacefulness.
- *Psychological well-being:* self-acceptance, personal growth, openness to new experiences, optimism, hopefulness, purpose in life, control of one’s environment, spirituality, self-direction, and positive relationships.
- *Social well-being:* social acceptance, beliefs in the potential of people and society as a whole, personal self-worth and usefulness to society, sense of community.

Determinants of mental health: it is determined by multiple social, psychological, and biological factors. The clearest evidence is associated with indicators of poverty, including low levels of education. *Personality factors* are also very important, the imbalance of protective and risk factors may lead to the development of certain mental disorders. *Biological causes* (genetics, chemical imbalance in brain) play an important role as well.

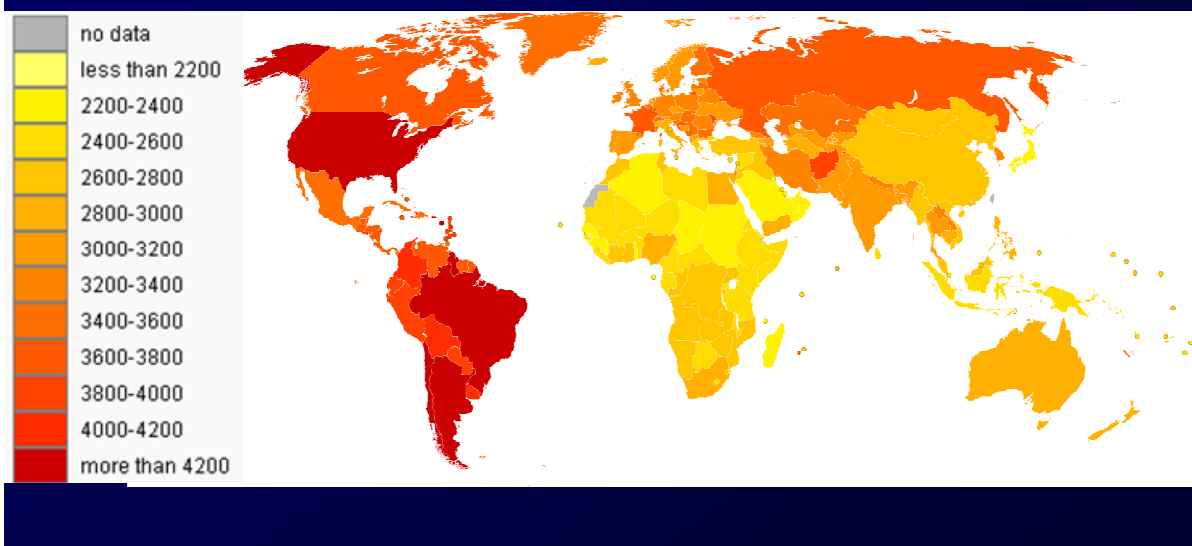
Poor mental health may be caused by the following:

- Rapid social change
- Stressful work conditions
- Gender discrimination
- Social exclusion
- Unhealthy lifestyle
- Risks of violence
- Physical ill-health
- Human rights violations

The images below summarize the epidemiology, costs, consequences, and treatment ratio of mental illness.



Age-standardised disability-adjusted life year (DALY) rates from Neuropsychiatric conditions by country (per 100,000 inhabitants)



5.1.1. Prevention of mental disorders

To maintain mental health, it is very important to create living conditions and an environment in general that propagates and supports a healthy lifestyle. Actions should try and satisfy the needs of every individual, which is not always simple due to the internal conflicts of society. It is very important to respect and protect basic civil, political, socio-economic and cultural rights. Without these rights, it is impossible to maintain mental health.

National mental health strategies shouldn't focus exclusively on mental disorders but on prevention as well. The programs should appear in the several different levels of society from education to labour, justice, transport, environment, housing, and welfare, as well as the health sector.

Like many areas of public health, mental health should engage in strategies based on the cooperation of *several sectors*.

Specific ways to promote mental health include:

- *Early childhood interventions* (e.g. home visits for pregnant women, pre-school psycho-social activities, combined nutritional and psycho-social help for disadvantaged populations);
- *Support to children* (e.g. skills building programs, child and youth development programs);
- *Socio-economic empowerment* of women (e.g. improving access to education and microcredit schemes);
- *Social support for elderly populations* (e.g. befriending initiatives, community and day centres for the aged);

- *Programs targeted at vulnerable groups*, including minorities, indigenous people, migrants and people affected by conflicts and disasters (e.g. psycho-social interventions after disasters);
- *Mental health promotional activities in schools* (e.g. programs supporting ecological changes in schools and child-friendly schools);
- *Mental health interventions at work* (e.g. stress prevention programs);
- *Housing policies* (e.g. housing improvement);
- *Violence prevention programs* (e.g. community policing initiatives); and
- *Community development programs* (e.g. 'Communities That Care' initiatives, integrated rural development).

The WHO MIND Project emphasizes 5 areas of action to ensure concrete changes in everyday life. These are the following:

- 1) Action in and support to countries to improve mental health, such as the WHO Pacific Island Mental Health network (PIMHnet)
- 2) Mental health policy, planning and service development
- 3) Mental health human rights and legislation
- 4) Mental health as a core part of human development
- 5) The Quality Rights Project which works to unite and empower people to improve the quality of care and promote human rights in mental health facilities and social care homes.

5.1.2. Stress



Stress and its implications on health have been in the spotlight for quite a while. The cover story “The Epidemic of the Eighties” appeared on newsstands in 1983. Surveys prove that people today experience more stress than a decade ago. In 1983 only 55% of the people asked reported high levels of stress at a weekly basis. By 1996, this figure rose to 75%, and continued to escalate over the next decade.

The term “stress” was first used by *János Selye* back in 1936, who defined it as “the non-specific response of the body to any demand for change”. The problem with stress is that it implies something negative. Traditionally stress is used when someone is speaking about *distress*, which is potentially harmful unlike *eustress* that is necessary in order to live a healthy and fulfilling life.

Distress or negative stress has the following characteristics:

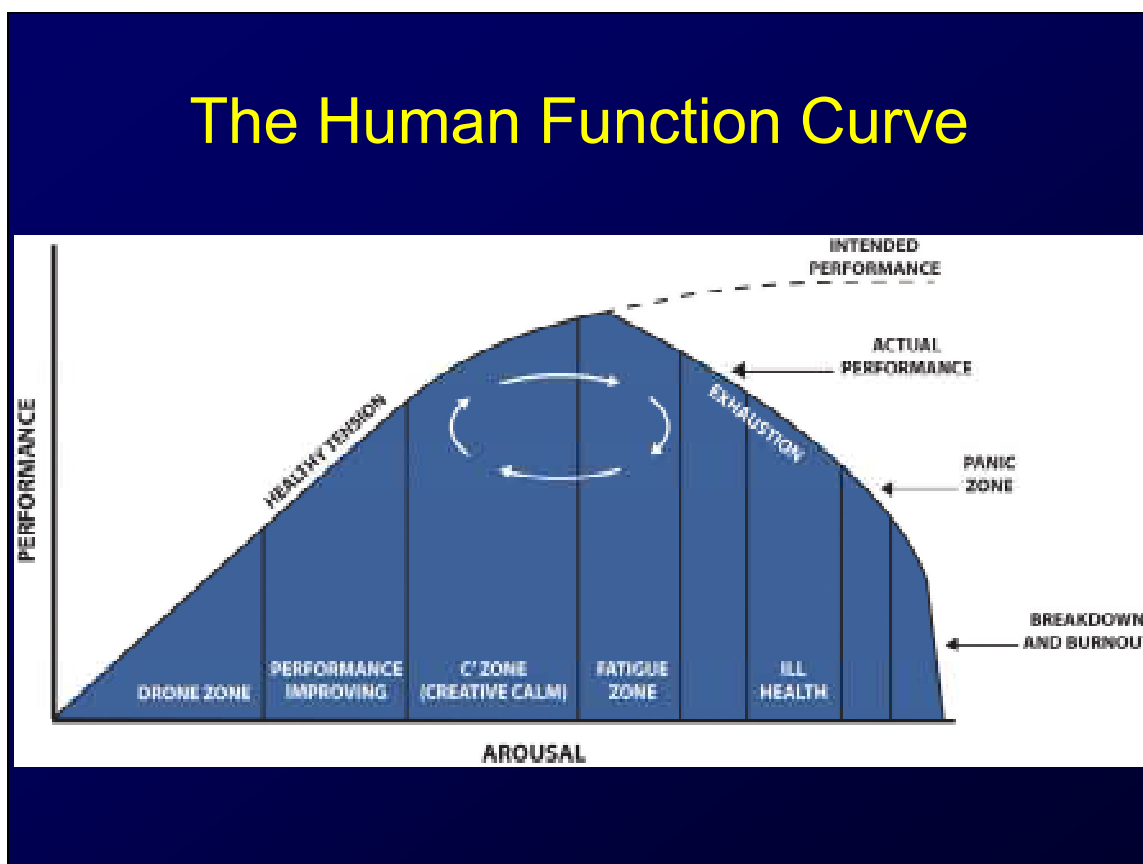
- Causes anxiety or concern
- Can be short- or long-term
- Is perceived as outside of our coping abilities
- Feels unpleasant
- Decreases performance
- Can lead to mental and physical problems

Eustress or positive stress has the following characteristics:

- Motivates, focuses energy
- Is short-term
- Is perceived as within our coping abilities
- Feels exciting
- Improves performance

The Human Function Curve

As seen in the graph below, a certain level of stress/arousal is needed for optimum efficiency, but the borderline is thin. It is not always easy to adjust the desired level, because it varies greatly depending on individual and environmental characteristics and their effects on one another.



Causative factors of stress: the most important ones are the following:

- Money (76% of subjects asked)
- Work (70%)
- The economy (65%)
- Family responsibilities (58%)
- Relationship (55%)
- Personal health concerns (52%)
- Housing costs (52%)
- Job stability (49%)
- Health problems affecting family (47%)
- Personal safety (30%)

Reactions of key body systems on stress

The Effects of Stress

Here are ways in which some key body systems react.

1 NERVOUS SYSTEM

When stressed — physically or psychologically — the body suddenly shifts its energy resources to fighting off the perceived threat. In what is known as the “fight or flight” response, the sympathetic nervous system signals the adrenal glands to release adrenaline and cortisol. These hormones make the heart beat faster, raise blood pressure, change the digestive process and boost glucose levels in the bloodstream. Once the crisis passes, body systems usually return to normal.

2 MUSCULOSKELETAL SYSTEM

Under stress, muscles tense up. The contraction of muscles for extended periods can trigger tension headaches, migraines and various musculoskeletal conditions.

3 RESPIRATORY SYSTEM

Stress can make you breathe harder and cause rapid breathing — or hyperventilation — which can bring on panic attacks in some people.

4 CARDIOVASCULAR SYSTEM

Acute stress — stress that is momentary, such as being stuck in traffic — causes an increase in heart rate and stronger contractions of the heart muscle. Blood vessels that direct blood to the large muscles and to the heart dilate, increasing the amount of blood pumped to these parts of the body. Repeated episodes of acute stress can cause inflammation in the coronary arteries, thought to lead to heart attack.

5 ENDOCRINE SYSTEM

Adrenal glands

When the body is stressed, the brain sends signals from the hypothalamus, causing the adrenal cortex to produce cortisol and the adrenal medulla to produce epinephrine — sometimes called the “stress hormones.”

Liver

When cortisol and epinephrine are released, the liver produces more glucose, a blood sugar that would give you the energy for “fight or flight” in an emergency.

6 GASTROINTESTINAL SYSTEM

Esophagus

Stress may prompt you to eat much more or much less than you usually do. If you eat more or different foods or increase your use of tobacco or alcohol, you may experience heartburn, or acid reflux.

Stomach

Your stomach can react with “butterflies” or even nausea or pain. You may vomit if the stress is severe enough.

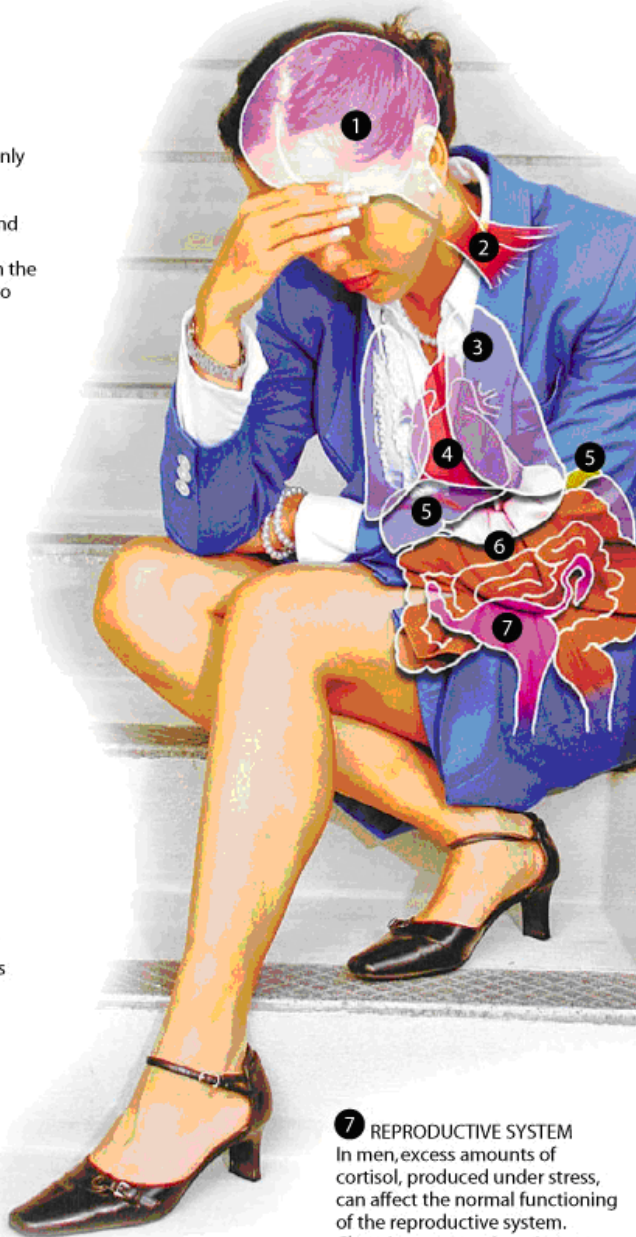
Bowels

Stress can affect digestion and which nutrients your intestines absorb. It can also affect how quickly food moves through your body. You may find that you have either diarrhea or constipation.

7 REPRODUCTIVE SYSTEM

In men, excess amounts of cortisol, produced under stress, can affect the normal functioning of the reproductive system. Chronic stress can impair testosterone and sperm production and cause impotence.

In women, stress can cause absent or irregular menstrual cycles or more-painful periods. It can also reduce sexual desire.

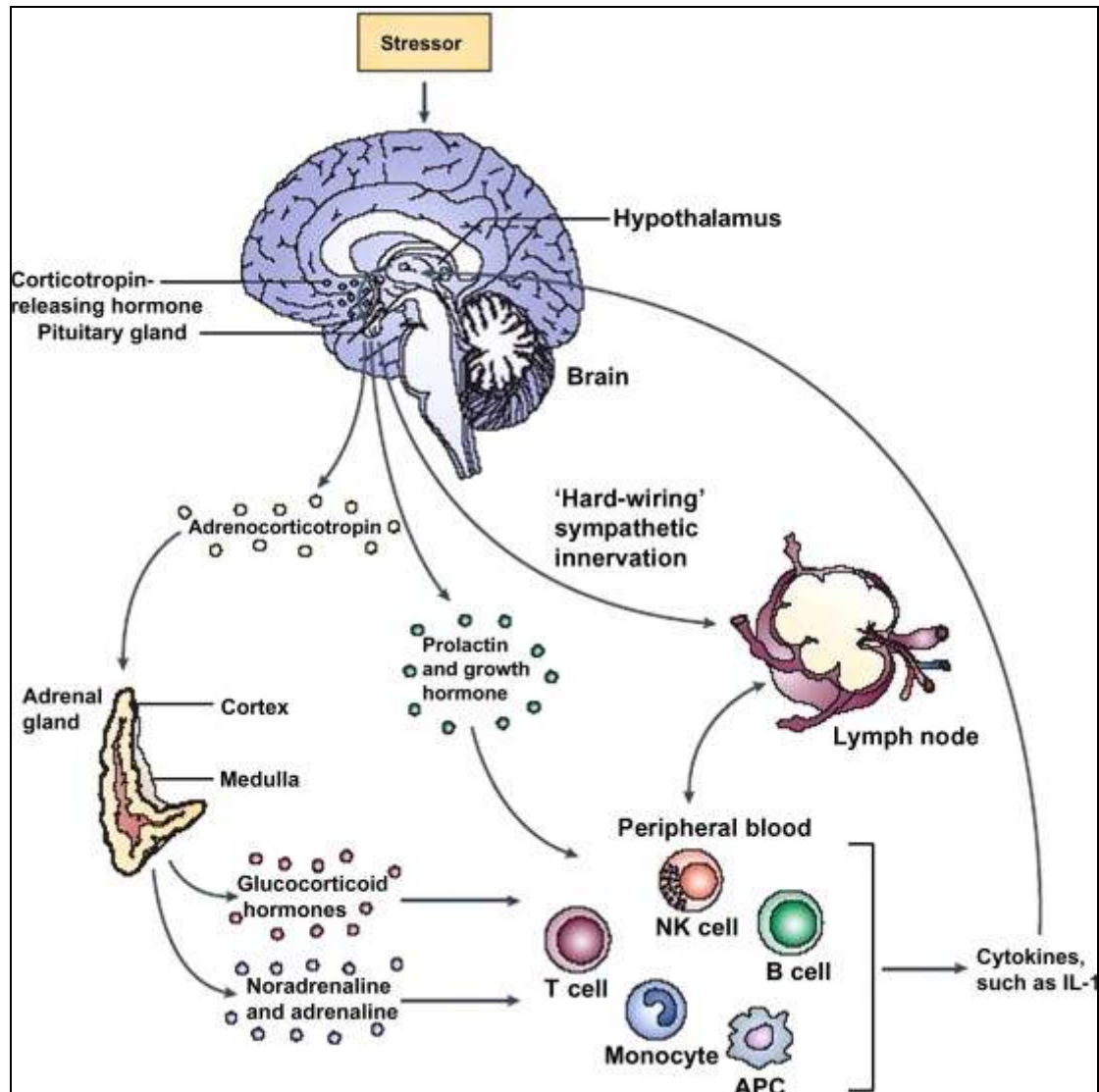


See more at: <http://www.stress.org/what-is-stress/#sthash.ZoNkLvC5.dpuf>

Stress hormones and their effect

The most significant stress hormones and their effect can be seen below:

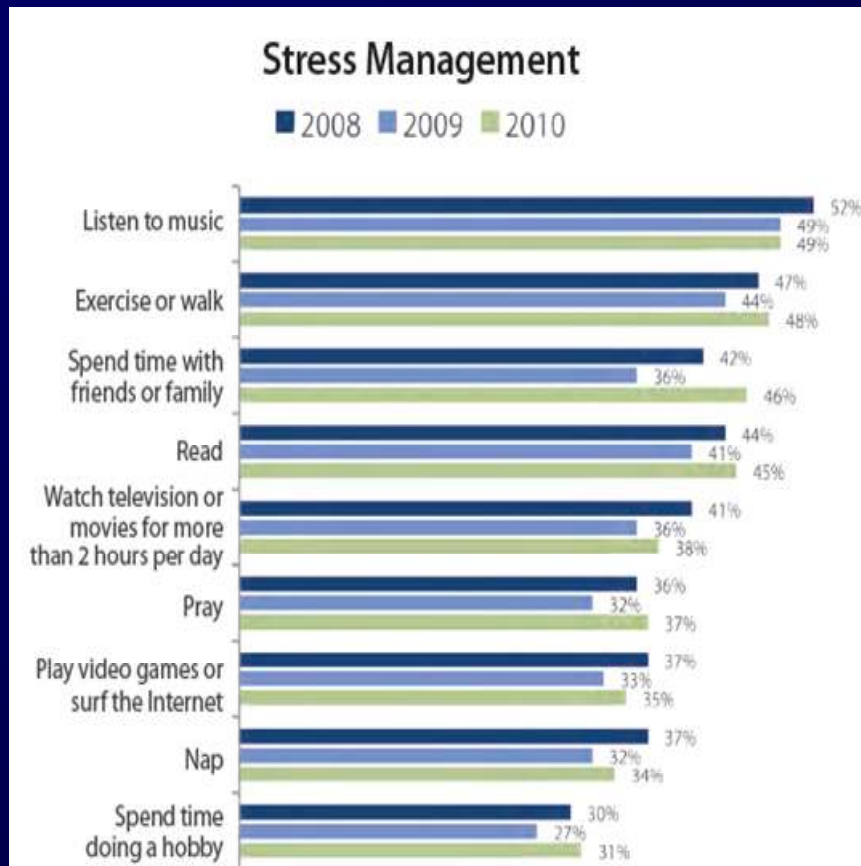
- Cortisol
- Epinephrine
- Norepinephrine



Stress Management has physiological and immune benefits. Positive outcomes are observed using a combination of non-drug interventions:

- treatment of anger or hostility,
- autogenic training
- talking therapy (around relationship or existential issues)
- biofeedback
- cognitive therapy for anxiety or clinical depression

The most popular ways to manage stress



For more information visit the following website.

<http://www.apa.org/news/press/releases/stress/national-report.pdf>

Coping

In psychology, coping is expending conscious effort to solve personal and interpersonal problems, and seeking to master, minimize or tolerate stress or conflict. Coping responses are partly controlled by personality, but also partly by the social context, particularly the nature of the stressful environment

- *Adaptive* or constructive coping strategies reduce stress levels.
- *Maladaptive* strategies increase stress levels.

Adaptive or constructive coping may be:

- Anticipating i.e. one foresees the future difficulties and prepares for them in advance.
- Social coping, such as seeking social support from others, and
- Meaning-focused coping, i.e. the person concentrates on searching for meaning in a stressful experience.

Maladaptive coping or non-coping: while adaptive coping methods improve functioning, a maladaptive coping technique will just reduce symptoms while maintaining and strengthening the disorder. Maladaptive techniques are more effective in the short term rather than long term coping process. Examples of maladaptive behaviour strategies include

- Dissociation,
- Sensitization,
- Safety behaviours,
- Anxious avoidance, and
- Escape (including self-medication, substance abuse).

These coping strategies interfere with the person's ability to unlearn, or break apart, the paired association between the situation and the associated anxiety symptoms. These are maladaptive strategies as they serve to maintain the disorder.

5.1.3. Suicide

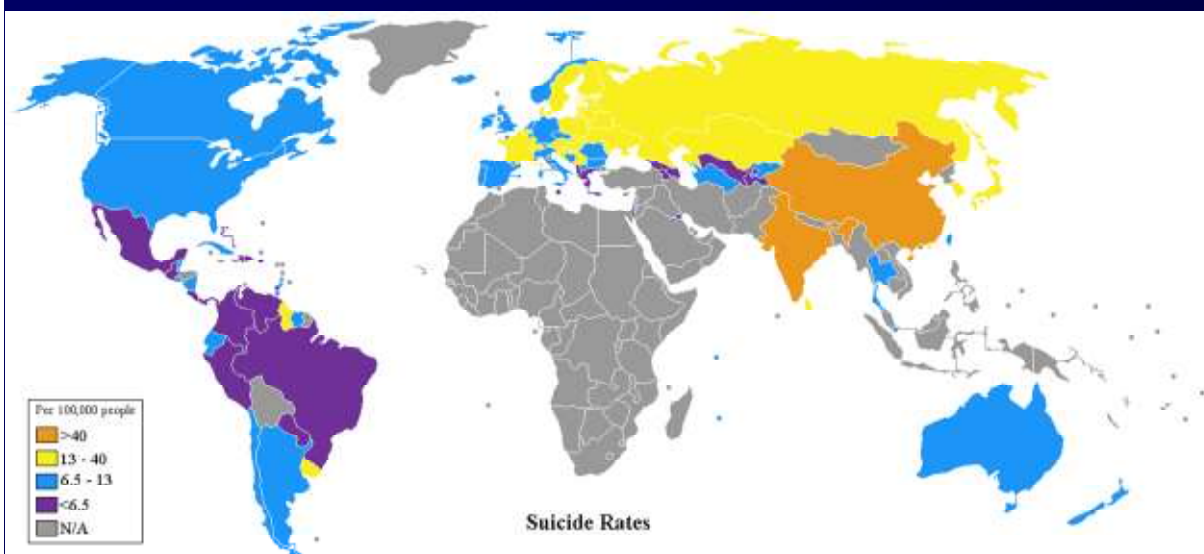
The effects of suicide have a rippling effect on individuals, families, communities and society, but even on the economy. In the US, suicide is the:

- 3rd leading cause of death among 15-24 year olds
- 2nd leading cause of death among 25-34 year olds

A study shows that in 2009 almost 1 in 7 high school students (grades 9-12) considered suicide in the previous year.

Global estimates show that around 900 000 people die by committing suicide each year.

Map of Suicide Rates



Suicidal Behaviour includes:

- Suicidal ideation (thinking about ending one's life)
- Suicide attempt (non-fatal suicidal behaviour)
- Suicide (ending one's life)

Gender differences: According to statistics, females engage in nonfatal suicidal behaviour more frequently than men. This is only partially due to the different methods used.

- *Women* frequently commit suicide as an act of “*crying out for help.*” Females show a higher rate of suicide attempt, but lower rate of fatal suicides. Women usually try drug overdosing, which of course may be fatal as well, but there is a greater probability of survival.
- *Men* overall show a lower rate of suicide attempt, but higher rate of fatal suicides. They prefer to use methods that are more fatal. These include hanging, carbon-monoxide poisoning, and gun violence.

In Europe, where the gender discrepancy is the greatest, studies show that the most frequent method of suicide among both genders is hanging, but it must be noted that the use of hanging is much higher in males (54.3%) than in females (35.6%). The same study proved that the second most common methods were fire arms for men and poisoning for women.

Primary Prevention

The majority of suicides can be prevented. The measures must be taken not only at the community level but nationally as well. To decrease risk, the following possibilities are at hand:

- Reducing access to the means of suicide (e.g. pesticides, medication, guns);
- Treating people with mental disorders (particularly those with depression, alcoholism, and schizophrenia);
- Following-up people who made suicide attempts;
- Responsible media reporting;
- Training primary health care workers.

In general, public health emphasizes on *preventing* violence towards other and towards oneself. This means that to prevent suicide, we must decrease the causes leading to it and strengthen the factors the hold people back.

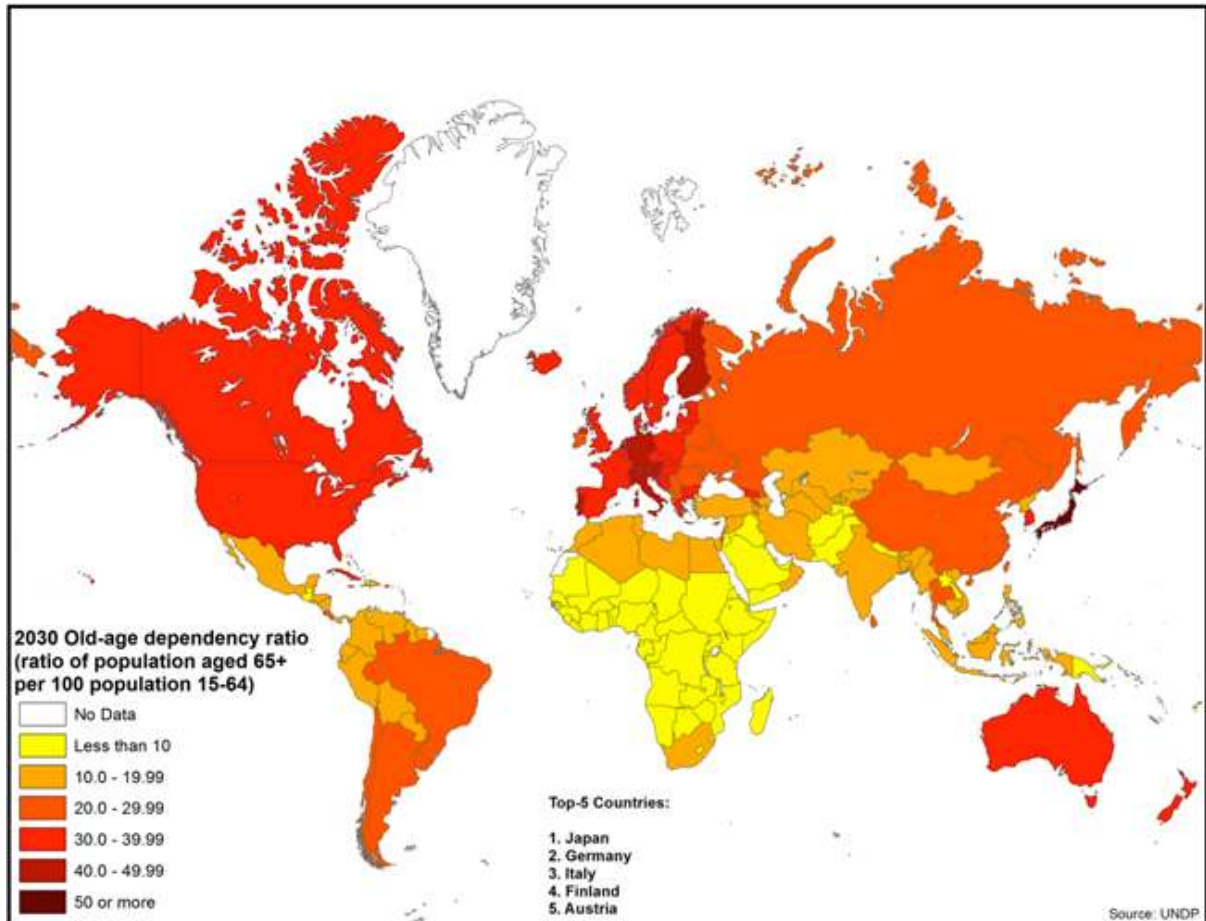
A very effective possibility may be to train service provider who interact with the youth at some point or the other (e.g., teachers, social workers, juvenile justice staff). Their job is to identify anyone at risk and refer them to other professionals for help. This is different from the traditional approach where victims were identified and referred usually only after the act of suicide had been committed.

5.1.4. Old age

Definition of an older or elderly person, demography

In most developed world countries the definition of 'elderly' or older person is anyone over the age of 65. This is an arbitrary threshold, and may differ around the world, for instance, in Africa, where it may be as low as 55. In defining old age, professionals must consider life expectancy, the age constitution of a given region, or even the age at which one may begin to receive pensions.

In the industrialized countries, life expectancy increased throughout the years. Parallel to this tendency, the number of live births decreased, resulting in a higher fraction of elderly people. In the United States, the proportion of people aged 65 or older grew from 4% in 1900 to about 12% in 2000. Population experts estimate that more than 50 million Americans—about 17% of the population—will be 65 or older in 2020. The map below shows the 2030 estimate:



The most important age-related conditions

- 1) ***Obesity and Metabolic Syndrome:*** About three-fourths of adults aged 60 and older are overweight or obese.
- 2) ***Arthritis:*** Arthritis affects nearly half the elderly population and is a leading cause of disability.
- 3) ***Osteoporosis and Falls:*** Osteoporosis and low bone mass affect almost 44 million adults age 50 and older, most of them women. In a given year, more than one-third of adults age 65 and older experience a fall. 20%–30% of those who fall suffer injuries that decrease mobility and independence. *Falls are the leading cause of death from injury in this age group*
- 4) ***Cardiovascular Disease:*** Cardiovascular disease affects more than one-third of men and women in the 45- to 54-year age group, and the incidence increases with age.
- 5) ***Vision and Hearing Loss:*** Age-related eye diseases – macular degeneration, cataract, diabetic retinopathy, and glaucoma – affect 119 million people aged 40 and older. The

incidence of hearing loss increases with age. 43% of the people experiencing hearing loss are 65 or older.

- 6) **Teeth:** 25% of people over age 60 wear dentures today.
- 7) **Depression:** Important biological symptoms of depression in old age are change in sleep patterns (especially reduced sleep and early morning wakening); decline in appetite and weight loss; regular variation of mood over day (especially worse in early morning); constipation; physical and mental slowing not accountable by other disorders; and suicidal thoughts. The prevalence of depression among people aged over 65 is 15% in the general community, 25% in general practice patients, and $\geq 30\%$ in residential homes.

Assistance and Care

In a not too recent paper (Mental Hygiene, 24, 734; 1940) Dr. Nolan D. C. Lewis, director of the New York State Psychiatric Institute and Hospital, New York City, makes the following recommendations (The source may seem outdated, but it still remains valid to this day):

- “The elderly individual should be used economically by arrangement of changes of work and frequent rest periods. The individual should be relieved so far as possible from worry, mental strain, anxiety and feelings of financial insecurity. With the gradually devitalizing processes in mind, special care should be taken to avoid physical discomforts, vitiated air, infections and over-eating. The senile patient should also be protected from injuries, as they may produce or increase a tendency to hypochondria. It is important to avoid any heavy burden on the sense organs through which exhaustion of the central nervous system may occur. Tolerance and understanding should be used with the aged person who shows a marked egoism together with uneasiness, restlessness and a tendency to harp on his difficulties.”

Around 25% of individuals 85 and older say that they need help with their activities of daily living. There are many options for long term care to those who require it. There is *home based care* where a family member, volunteer, or trained professional will aid the person in need and help with daily activities. Another option is *community services* which can provide the person with transportation, meal plans, or activities in senior centres. A third option is *assisted living* where 24 hour round the clock supervision is given with aid in eating, bathing, dressing, etc. A final option is a *nursing home* which provides professional nursing care

Topics suggested for students' oral presentations:

- 1) Characterize your country's mental health status. What are the most frequent mental illnesses? Compare the results with Canada, Brazil, China, and both an African and European country of your choice.
- 2) What are the main stressors in your country? What measures are taken by the government against them? What are the most important primary and secondary preventive means that help people cope with stress?
- 3) Describe the suicide situation in your country. Consider the following: incidence, methods used, gender differences, suicide attempt/fatal suicide ratio, changes through the years.