# EMOTIONS

Abdul - Monaf Al-Jadiry,

MD; FRCPsych

Professor of Psychiatry

#### **Emotions**

- Is a complex psychophysical process that arises spontaneously, rather than through conscious effort.
- Evokes psychological response (negative or positive) and physical expressions.
- Often involuntary.
- Related to feelings, perceptions or beliefs, in reality or in imagination.

# Theories of Emotion

Somatic theories

Cognitive theories

The evolutionary perspective

#### Somatic theories

• William James (late 19th century)
believed that emotional experience is largely
due to the experience of bodily changes:
visceral, postural, or facially expressive.

James-Lange theory

a changed situation leads to a changed bodily state, which in turn gives rise to an emotion.

# Somatic theories

Walter Cannon & Bard

**Emotion** is produced when an appropriate stimulus is perceived by the thalamus, which in turn activates part of the cerebral cortex concerned with emotional experience and causes the physiological changes in the periphery.

# Cognitive theories

- The Singer- Schachter theory (two factor theory):
- Emotional experiences were the result of :
- > Physiological arousal which is undifferentiated
- > Cognitions which are different in different emotions
- Experimentally shown that injections of adrenaline produced both happy and anger emotions.
- Example:
- > Spot a bear in a forest-- Adrenalin is released, hearts starts beating faster
- The sight of a bear is interpreted as being dangerous for the health
- > The emotion fear arises.

# The evolutionary perspective

- In the 1870s, Charles Darwin proposed that emotions evolved because they had adaptive value.
- E.g., fear evolved because it helped people to act in ways that enhanced their chances of survival.
- Darwin believed that facial expressions of emotion are innate.
- Darwin pointed out that facial expressions allow people to quickly judge someone's hostility or friendliness and to communicate intentions to others.

# The evolutionary perspective

- Evolutionary theorists believe that all human cultures share several primary emotions, including happiness, contempt, surprise, disgust, anger, fear, and sadness.
- They believe that all other emotions result from blends and different intensities of these primary emotions.
- <u>E.g.,</u> terror is a more intense form of the primary emotion of fear.

#### Brain areas related to emotion

- Emotions are thought to be related to activity in brain areas that direct our attention, motivate our behavior, and determine the significance of what is going on around us.
- Broca (1878), Papez (1937), and MacLean (1952) suggested that emotion is related to a group of structures in the center of the brain called the limbic system, which includes the hypothalamus, cingulate cortex, hippocampi, and other structures.

# Primary and secondary emotion

#### **Primary emotions**

- innate emotions, such as fear
- depend on limbic system circuitry," with the amygdala and anterior cingulate gyrus being "key players".

# **Primary emotions**

Robert Plutchik described eight primary emotions:

Anger fear sadness joy disgust surprise curiosity acceptance

Similar to the way primary colors combine, primary emotions are believed to blend together to form the full spectrum of human emotional experience.

# Secondary emotion

- Feelings attached to objects (e.g., to dental drills), events, and situations through learning.
- They require additional input, based largely on memory, from the prefrontal and somatosensory cortices.
- The stimulus is analyzed in the thought process.
- Thoughts and emotions are interwoven; every thought, almost always, carries with it some emotional response

# **Dimensions of Emotion**

- Emotion has multiple dimensions:
- > Behavioral expression
- Physiological arousal
- > Subjective feeling (conscious experience)

Cognitive

## Physical responses in different Emotions

#### • Fear

is felt as a heightened heartbeat, increased "flinch" response, and increased muscle tension

#### • Anger

is based on sensation, seems indistinguishable from fear.

#### Happiness

is often felt as an expansive or swelling feeling in the chest and the sensation of lightness or buoyancy, as if standing underwater.

#### Physical responses in different Emotions

#### • <u>Sadness</u>

is often experienced as a feeling of tightness in the throat and eyes, and relaxation in the arms and legs.

# • Shame can be felt as best in the upper chest and fe

can be felt as heat in the upper chest and face.

#### • Desire

can be accompanied by a dry throat, heavy breathing, and increased heart rate.

# Positive and negative perception

Emotions are experienced as either:

**Positive X Negative.** 

> Pleasant X Unpleasant.

Emotions do not seem to be neutral.

# **Emotions & Psychotherapy**

- Psychotherapy propose that distressing emotions are relieved by emotional "discharge". Hence crying, laughing, sweating, shaking, and trembling.
- These actions commonly associated emotions, are thought to not be the original sensation, but instead nearly automatic responses that dispel the discomfort of disturbing feelings.

#### **Conflict**

- A clash of interests, values, actions or directions
- A mental struggle arising from opposing demands or impulses.
- Psychologically, a conflict exists when the reduction of one motivating stimulus involves an increase in another, so that a new adjustment is demanded.

#### **Conflict**

- There are four main types of conflict:
- 1. Man Vs. Man problem with another character
- 2. Man vs. Society problem with the laws or beliefs of a group
- 3. Man vs. Nature problem with force of nature
- 4. Man vs. Himself problem with deciding what to do or think

## **Common Conflict situations**

>Approach-Approach

>Approach-Avoidance

>Avoidance- Avoidance

# THARYOU