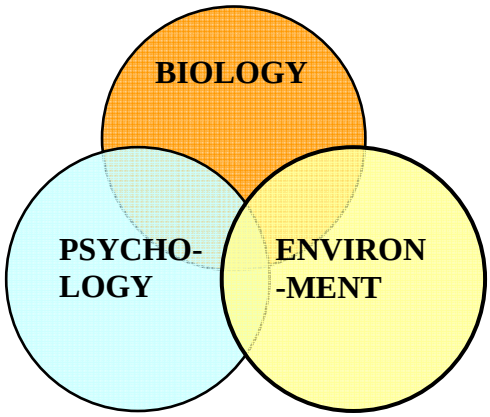
1) How do mental disorders come about?

Interaction between biological, psychological and environmental aspects of a person's life:

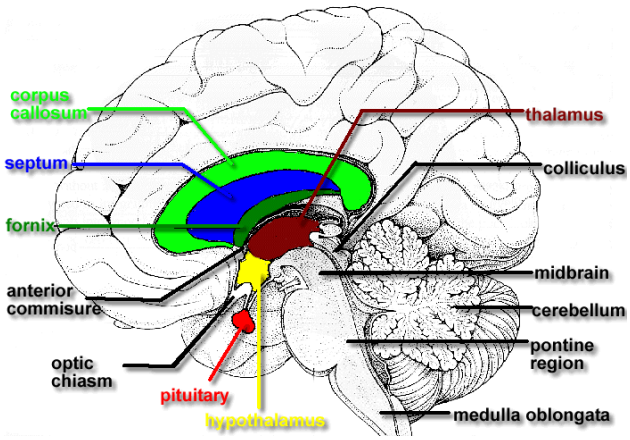
a) A person may be genetically predisposed to a particular type of mental disorder.

b) Presence of adverse psychological conditions such as poor coping skills, maladjusted behavior, temperamental, hostility, mistrust, suspiciousness etc make the person much more vulnerable.

c) An environmental stressor, such as pressure at work, financial difficulties, physical illness, family disharmony and academic problems, will precipitate a full-blown mental disorder.

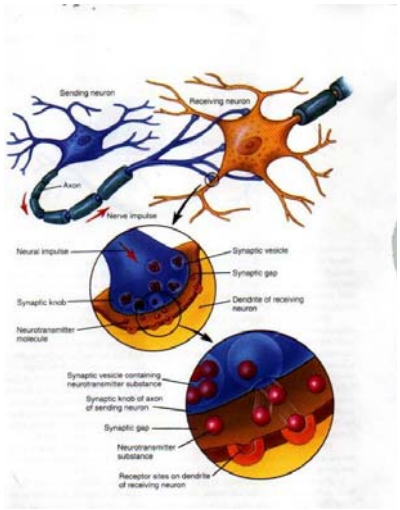


2) What are the bio-chemical changes seen in a person with mental disorder?



The limbic system and other parts of the brain are believed to be involved in development of mental disorders.

The nerve cells in the brain (also called neurons) form complex networks and signals are passed from a nerve to the next by means of neurotransmitters. They are basically 'chemical messengers' necessary for a brain to function normally.



There are many such networks or pathways, for example:

Dopamine pathways – implicated in development of Schizophrenia.

Serotonin pathways – implicated in mood disorders.

Noradrenaline pathways – also implicated in anxiety disorders.

3) What happens when there is imbalance of these neurotransmitters?

	DOPAMINE	SEROTONIN	NOREPINEPHRINE	ACETYLCHOLINE
Effect	Euphoria	Calm, Resilience, Security, Self worth	Alert, Focused, Positive emotions, Pain-relief	Arousal, Learning, Mood, Sleep.
Too little	Parkinson's disease	Sadness, Compulsive behavior	Sadness, Poor concentration	Poor memory
Too much	Psychosis	Hallucinations	Sadness, Poor concentration	Muscle spasm
Illicit drug that mimics	Cocaine	LSD	Methamphetamine (eg: Ecstasy)	Nicotine