

Genetic Factor of Mental Illness

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Abstract

This article provide a comprehensive and readable primer on the complex interplay of genetic and environmental factor in mental disorder. This article contain finest information and basic knowledge of mental problems and causes. This article is a concise and original summary of method and guidelines in the field of genetic factor of mental problems. It include all types and causes related to mental illness. With its admirable blend, this book will helpful to professionals in various manners.

Keywords: *Mental Illness; Mental Disorder; Depression; Anxiety*

Introduction

Most mental disorder are caused by a combination of different environmental factor and multiple genetic. Basically mental disorder is self created disease by human beings from high Stress, Depression and anxiety etc. This is called multifactorial inheritance [1].

Incidence and diagnosing mental problems

According to the national Institute of mental health, about 25% of US adults and about 13% of US children are diagnosed with mental disorder and anxiety each year. Example of mental disorder include:

- Depression- Affect 10% of the population
- Autism Spectrum Disorder (ASD)- Affect 10% of the population
- Schizophrenia- Affect 1% of the population
- Bipolar Disorder- Affect 2 - 3% population.

There is no perfect diagnosis and test available now who confirm a diagnosis of mental disorder. Because environmental play important role in the development of mental disorder.

To determine a check and diagnosis for related complication and problems, you may have [1]

A physical exam

Your doctor will try to rule out physical problems that cause your symptoms. A general practitioner or other medical experience scientist is often involved when diagnosis a mental health disorder.

The Merck Manual of diagnosis and therapy recommend that examination in order to check the medical problems that might be causing or resulting from a physiological disorder. Some disorder, such as depression and anxiety are the example of physical causes. In many cases, thyroid problems and other physical diseases can sometimes be missed a mental health disorder so this physical exam is essential.

Lab test is also conducted. If doctor does not find the physical causes for the symptoms then patient will be referred to a mental health professional to be evaluated for physiological illness.

A physiological evaluation

In this examination, doctor talk to you about your feelings, emotion, thought etc. Psychiatrists and physiologists can identify the health disorder. Psychiatrists is a specialize medical doctor who specializes in mental health. Specialized education and practical experience are needed to be licensed in both field. most psychologist and psychiatrists use the diagnostic and statistical manual of mental disorder. The doctor will be decided which criteria perfect the client condition best.

The disorder in the DSM-5 are broken down into several types. Mayo clinic list the following types of mental illness:

- Psychotic disorder
- Bipolar and related illness
- Anxiety disorder
- Depressive disorder
- Obsessive-compulsives
- Feeding and eating disorder
- Elimination disorder
- Sexual dysfunction
- Gender dysphoria
- Neurocognitive disorders
- Paraphilic disorders.

This is not common to be diagnosed with more than one health illness. Some of the diagnosed are dependent to each other so the treatment process should be evaluate the client for illness.

Lab test

In this test your doctor will check of your level of drugs and alcohol and thyroid function [2]

Types of mental disorder or illness

There are 300 mental disorder patient listed in the DSM-5. This is survey used by health professional to help identify mental illness.

Some of the group of mental disorder are:

- Bipolar disorder
- Persistent depressive disorder Generalized anxiety disorder
- Major depressive disorder
- Obsessive-compulsive disorder
- Post traumatic stress disorder (PTSD)
- Schizophrenia
- Social Anxiety disorder [3].

Bipolar disorder

Most of the people are sensitive in emotional cases. They can't control his/her emotion. But if you have brain condition called bipolar disorder, your feeling can reach abnormally high or low levels.

Sometimes you feel energetic. Other times you may find yourself sinking into deep stress and anxiety.

There are four basic types of bipolar disorder or illness.

- Bipolar 1 disorder
- Bipolar 2 disorder
- Other specified and unspecified bipolar and related disorder
- Cyclothymic disorder.

Bipolar 1 and 2 are more common than other type of bipolar illness.

Bipolar 1 vs bipolar 2

Mostly bipolar disorder are characterized by cases of disturb or extreme mood. The low are known as depressive case and if the high then its called manic case.

The main difference between bipolar 1 and 2 cases based on the cases and causes of each type of illness. A person with bipolar 1 will experience full massive cases and those who have bipolar 2 will experience only hypomanic cases. A person with bipolar 1 may or may not experience a depressive cases while a person with bipolar 2 will face a major depressive cases.

What is bipolar 1 disorder?

Those person who have bipolar 1 disorder may or may not have a major depressive case. The symptoms of manic cases are severe that you require hospital care.

Manic cases are usually characterized by the following:

- Trouble concentrating
- Risky behaviour
- Poor sleep
- Restlessness
- Extreme happiness.

The symptoms of manic cases are too obvious and doubt full that something's wrong.

What is bipolar- 2 disorder

Bipolar disorder 2 involve depressive case lasting at least weeks cases. Those people who have bipolar 2 diseases typically don't experience manic cases and enough to require hospitalization. In many times, bipolar 2 is sometimes misdiagnosed as depression.

When there are no manic cases to suggest bipolar illness.

Persistent depressive disorder

This is a type of chronic depression. Its relatively new diagnosis that combine the two previous diagnosis dysthymia and chronic depressive illness. These feeling and cases can affect your mood and behaviour as well as physical function, including appetite etc. As a result, people with the disorder often lose hobbies in doing activities.

These symptoms are seen in all forms of mental problems. In PDD, however the symptoms are less severe lasting. They can stuck in your life for years and may interfere with school work and personal relationship.

PDD can also make it more challenging for face the chronic nature of these symptoms. Symptoms of persistent depressive disorder:

- Sleep problems
- Low energy
- A challenge in appetite
- Difficulty concentrating
- Decreased productivity
- A lack of interest in daily activities
- A negative attitude
- Poor self confidence
- Avoid social activities
- Poor self esteem [4].

Major depressive disorder

In today' generation, mostly people lost the ability to think about the current problems in their life challenge. Sadness is the natural part of human life. People may feel happy or sad when they are going through life challenge and a one loved one passes away such as love relationship. However, people should be understand that these problems and feelings are normally short lived. When someone experience or face extend persistent and problems then they have major depressive disorder (MDD). MDD is also called clinical depression. This is a significant medical condition that can affect your life. They can affect on your mood, feelings, physical body and your daily routine activities. MDD is the most common mental disorder in the united states. In 2015, nearly 7 percent of Americans had an cases of MDD.

Symptoms – Your doctor or specialist can make your MDD diagnosis based on your sign and symptoms, feelings and behaviour pattern, etc. They will ask some question or give you some guidance so they can good for you.

- You experience of restlessness
- You have trouble falling asleep or want to sleep more then usual.
- You are less interested in daily activities
- Your physical behaviour are totally different
- You have difficulty concentrating, thinking, or making right decision.
- You think about harming yourself and suicide

Causes - There are several reason who can increase the risk of MDD. A combination of genes and anxiety can affect of your brain and neuromuscular function.

Hormone change is also the reason of development of MDD.

MDD is also rise by:

- Certain medical condition, such as cancer
- Drugs and high amount of alcohol
- Particular type of medication [5].

Obsessive compulsive disorder

Obsessive compulsive disorder is an anxiety or stress disorder where people think negative and unwanted thought that make them feel driven to do something repetitively. The repetitive behaviour such a hand washing, cleaning or checking on things can interfere with people activities and interaction in society. For people with OCD, thought are persistent and useless activities and behaviour are rigid. Many person with OCD know their obsession are not true and some people think they could be true. Even if they know their obsession not true, have hard time keeping their focus off the obsession.

Although people with OCD may know that their idea or thought are meaningless and don't make sense.

Causes – The exact causes of OCD is unknown, but researchers and scientist believe certain region of brain is not work normally to serotonin. Genetic are thought to involve or contribute to OCD as well.

If your parents have siblings with OCD there about 30% chances that another immediate family member will have it.

Types – There are several type of obsession but the most well known are:

- Obsession related to symmetry involve compulsion of ordering
- Obsession that involves fear of germs with compulsion of cleaning

According to Dr. Jill Stoddard, author of “Be mighty”:

- Meaningless and unwanted sexual thought
- Fear of harming one self or someone else
- Fear of acting impulsive. This involve importance like counting, praying and repeated any work.

Symptoms - OCD obsession are repeated and unwanted thought, urges image that are interfere and cause distress or anxiety. You may try to ignored them or get rid of them by performing intense behaviour. These obsession are typically cruel when you trying to think of or do something.

Obsession often have sign to them:

- Fear of contamination
- Doubting difficulty tolerating uncertainty
- Unwanted thought
- Needing things orderly
- Aggressive or horrific thought about losing control and harming yourself [6].

Post traumatic disorder (PTSD)

Post traumatic stress disorder is a illness that rise in some people who have experience the dangerous event. Mostly people face so many dangerous event in their life. Its natural in every person life during and after a traumatic situation. Fear trigger help in different ways to prevent from danger.

Post traumatic stress disorder is a mental health condition that stimulate by a terrifying and dangerous event. Symptoms may include scary nightmare, and severe anxiety, as well as negative thought about the event. Most people who go through traumatic moment may have short difficulty event adjusting. If the symptoms get worse, last for months or even years.

Symptoms - PTSD symptoms may start within one months of traumatic moment but in some cases symptoms are not appear until year after the event. These symptom cause severe problems in relationship, social activities. They can also affect of your daily

activities. PTSD symptoms are generally group into four different types: Avoidance negative changes in thinking

- Change in physical and emotional reaction.
- Symptoms can vary over time to time
- These symptom can transfer from person to person.

Intrusive memories

- Symptoms of intrusive memories may include:
- Recurrent, painful distress memories of the traumatic event
- Many emotional stress or physical reaction to something memorizes you of the aggressive event
- Upsetting dream about the traumatic event.

Avoidance

- Symptoms of avoidance involve:
- Try to ignore about the nightmare dreams and traumatic event
- Avoid place and activities that remind you

Changes in physical and human feelings:

- Easily frightened
- Try to take risk and danger as well as hurt by self
- Self destructive behaviour and expression
- Difficult concentrating difficult sleeping
- Unnecessary shame or shy.

Causes - The reason of PTSD is not develop yet that's why doctor can't tell you why some people get PTSD. PTSD is normally caused by the complex reason of:

- Stressful and persistent experience, including the amount and severity of trauma
- Genetically mental risks such as family mental health risks such as a family history of stress and depression
- Response of your brain by releasing the hormones and enzymes
- Genetically mental health risk [7].

Schizophrenia

Schizophrenia is a serious mental disorder in which people disturb the reality. Schizophrenia is a combination of delusion, high level of stress, hallucination and behaviour that impair daily life.

People with schizophrenia require lifelong care and treatment. Early treatment may help get symptoms under control before serious complications develop.

Symptoms - People with schizophrenia face a lot of physical challenges like negative thinking, behaviour and emotion. Signs and symptoms may vary and may involve reflecting an impaired ability to function, hallucinations etc. Symptoms may include:

- **Delusion:** These are untrue beliefs that are not based in reality.
- **Hallucination:** In this case, people see or hear things that don't exist in real life. Hallucinations can be in any of the senses but hearing voices is the most common hallucination.
- **Negative symptoms:** This describes a reduction or lack of ability to function properly.

Symptoms in teenagers

That is similar to those in adults, but the condition may be more difficult to recognize:

- Withdrawal from friends and family
- A drop in performance at college or school
- Lack of self-confidence
- Lack of motivation [8].

Social anxiety disorder

Social anxiety disorder is a common type of anxiety disorder. A person with anxiety disorder feels symptoms of stress in some certain situations such as meeting a new person, being afraid of new contact, job interviews etc. Most people have many persistent and depressive feelings that they feel are beyond their control. As a result, it gets in the way of attending work. Some people with the illness do not have stress in social situations such as giving a speech, playing a song etc.

Sign and symptoms

- Blush, rapid heartbeat, feel something might be wrong
- Feel nausea or sick to their stomach
- Show a rigid body posture, difficulty with eye contact
- Be self-conscious in front of other people and feel hesitant
- Be afraid that other people will judge them
- Stay away from crowds
- Lack of self-confidence.

Causes

Social anxiety disorder sometimes follows genetic rules, they might be seen in person to person in families. Scientists have found that several parts of the brain have various fears and anxieties.

- Bullying
- Family conduct
- Sexual abuse.

In most of the mental disorders, social anxiety disorder always arises first from complex environmental conditions and biological conditions. Most causes include:

- **Inherited traits:** Anxiety disorder always runs through families. However, this is not fully clear how much of this may be due to behaviour and how much of this may be due to genetics.
- **Environment:** Behaviour and external environment also affect human behaviour. Social anxiety disorder may be learned behaviour. Most people may develop the condition after an unpleasant or embarrassing social situation [9].

Effect of psychological disorder on humans

Those people who live with psychological illness or problems are at greatest risk for poor quality of life, lowered productivity, educational difficulties, social problems, additional health problems. Youth education is a common problem for mental depression by taking some bank loan, career stress, job problems from his/her parents.

Psychological disorders can also contribute to other health problems and depression. For instance, patients with depression and anxiety are three times less likely to adhere to medical help than are non-depressed patients. Mentally ill people always encounter less quality care. The burden of caring for a mentally ill person often falls on the patient's immediate family. The burden of family financial problems and caring for a mentally ill person often falls on the patient's immediate family. Caregivers are not always individuals with psychological illness for care. Caregivers are also reported to experience social isolation due to their family member's mental illness. Particularly in rural areas lacking community resources for the mentally ill.

Social impact of mental illness varies among different cultures and nations. Mental disorders have significant costs to society.

In addition, psychological disorder can disturb other public health issues, increasing the burden on impeding international public health work and effort. Mental disorder are also associated with increase risks of non adherence to medical regimens [10].

Conclusion

This article summarize the main and important finding of the report, including new evidence and research which question some of the myths around mental illness and work. People with severe mental illness too far away from the labour market. The majority of the people with mental disorder struggling in their jobs. Neither are they receiving any treatment nor any kind of support in the workplace.

This implies a need for policy or rules to shift away from severe to common mental illness; away from a focus on inactive people to more focus on those employed.

Suggestion

- Special clinics for group of patient with same diagnosis and their families
- Think positive and encourage him (mental disorder patient) about the good thought
- Partnership with families for moral support
- Meditation is the best technique to overcome of mental illness problems
- Create policies and guide the new technology and data for early analysis and prevention of mental ill health.

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