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The role of law in the study of the relation genes with violence and behavior, and their consequences

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Abstract

Progress and development in behavioral genetics research and the relationship of genes to violence have reached the point where genes are carefully identified and identified to make people with these genes more predisposition to crime, aggression and violence. An important question that now arises in criminal justice that is the extent to which the results of these studies are being used to investigate the facts and to ensure rights by using these new criminal evidences. So far there have been many studies on the relationship of genetic material in humans with the onset of violence and aggression or the emergence of certain behaviors that require serious attention. In this study, the role of chromosomes and genes in the development of violence and aggression in humans was discussed and in other hand, legal and judicial issues related to these cases were discussed with a number of trials in the countries of the world that used the role of genes and chromosomes as defense evidence for mitigation or exempt the defendants from responsibility for the crime. There seems to be a great tendency among the international judiciary to go deeper into the role of genetic material in violence, crime and behavior to the extent that they tend to use accurate scientific evidence when making a judgment. This study concludes that the findings of behavioral genetics research call upon all judicial institutions and officials to pay high attention to these results and to study the possibility of using them even on a small scale as evidence in the courts for the purpose of developing the capacity of the Iraqi judiciary to guarantee the rights of the individual.

Keywords: *role of law, relation genes with violence and behavior*

Introduction

Although behavioral inheritance is still not receiving sufficient attention by most mental health professionals, lawyers, judges, and others in the criminal justice system, recent serious research indicates the close relationship between genetics and tendencies to commit crimes of various degrees, from simple violence to the most severe form of murder. Research concludes that behavioral heredity will be the next concern for the year of criminal justice and a mental health professional because it has a critical role to help eliminate the understanding and understanding of the significance of new findings in this area.

Of course, allegations that genetic factors play a causal role in the origin of criminal behavior are not new. At the end of the nineteenth century and the beginning of the twentieth century, crime theories were based on unacceptable beliefs and ideas now that criminals display a genetic defect, which is believed to be evident through their low intelligence and general features, they were responsible for the majority of criminal acts (1). During the sixties and seventies of the century a plus or chromosome (Y) twentieth found that men who carry a plus chromosome are more aggressive and violent than

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others (2,3) and recent (X) results on the relationship between genetic predisposition and the crime of violence and aggression became more clear and deep and motivated Actually for the legal and legislative literature.

The relationship of genes to violence reached when the scientist Berner provoked in 1993 to reveal the relationship between one of the genes called (Mao A) (4) with violence and researcher Caspi (5) in 2002 followed to prove this on a broader field which drew the attention of law and judicial professionals, as these results affected The criminal process and the investigation process (6). And it happened that the evidence of the genetics of violence was used, even in a limited way, in many countries such as Italy, Canada, America and others to exempt or relieve the defendants from the ruling (7, 8, 9, 10).

Violence has become a dangerous phenomenon threatening most of the countries of the world, and in Iraq violence has become one of the biggest problems facing the country to the extent that baffled researchers because of its intensity and clout, which was demonstrated through terrorism, killing and hideous crime. There are good signs by researchers to study violence from a biological point of view, especially its relationship to genetic material (3, 11) and there are scientific centers in Iraq such as the Iraqi Center for Cancer Research and Medical Genetics that have begun to study that relationship clearly and scientifically (12).

Here, the goal of this study came to raise the issue of the relationship of genes with behavior and violence, and on the one hand drew the attention of stakeholders to the law from all disciplines to keep pace with those developments to enhance the concept of forensic evidence with scientific concepts that serve to guarantee people's rights on the one hand and accelerate legal procedures on the other hand.

Human genetics

A person is born after he grew up in the womb of the mother as a result of the union of the sperm from the man with the egg in the woman resulting in the formation of the first cell (the fertilized egg) that includes the complete genetic content of the formation of the complete human. The sphere possesses half of the genetic content that was taken from the father and the egg has half the content The genetics that you received from the mother, and when the egg is combined with the sperm, the genetic content becomes complete enough to form a human. Then begins the long journey of the fertilized egg (the complete cell) to form the fetus through the successive division until the entire human being contains about 75 trillion cells. The human cell consists of three parts They are distinguished by the envelope of the cell that protects the cell and determines its shape, and the second part is the largest and is called the cytoplasm that contains many organelles concerned with the functions of the cell, while the third part is the most important and is called the nucleus which is the center of the cell's leadership as it contains the genetic elements that manage and control all functions And the cell’s actors are organized and programmed with absolute precision. And graphics. Every cell in the body except the red cells has 23 pairs of chromosomes (i.e. 46 chromosomes), as 23 chromosomes come from the father and 23 others come from the mother. The sex cells (sperm and eggs) each contain only 23 chromosomes). Chromosomes are arranged in the form of pairs, because each pair is the same in shape and length except for the last pair, which is Sex Chromosomes. It is either an identical pair of chromosomes (X) and this is in the female, or it is an asymmetric pair consisting of chromosome (X) and chromosome (Y) and this is in The remembrance. That is why the genotype of a natural man (XY, 64) is written and a natural woman (XX, 64) is written. Changes in the chromosome occur for many reasons that result from a decrease or increase in the number of chromosomes, as well as structural changes within the chromosome itself that result from the loss of part of it or the acquisition of new parts or the repetition of the same parts in it or the inversion of some parts to an inverted shape and others. If the chromosome is enlarged under the electronic Hungary, it will appear in the form of a long thread that wraps regularly on molecules of protein to form a thread of your name and then re-wrap it to each other several times to hoard in the form of a small stick, which is the chromosome. This long, thin thread is called Deoxyribonucleic acid, which is widely called DNA, and the length of DNA in a cell is about two meters. DNA is made up of a long chain arranged from chemical molecules called nitrogenous bases. There are four types of these rules: thymine, adenine, cytosine, and koan, which represent the four letters of the DNA. DNA is arranged in the nucleus in the form of a pair of tapes that spin on each other in a spiral shape, and here the reading of the number of nitrogenous bases in the DNA is in the form of a base pair because each base in one of the tapes has a base that is synonymous with the other tape.

In DNA, there are more than 3 billion nitrogen base pairs present in a constant order and sequence in each species. The reason why living things differ from each other is due to the difference in the arrangement of those rules, which does not change in a single type of organism. And any change that occurs in the type of base or its chain will lead to a change in the nature of DNA and its results may be unfortunate.

A gene is a small portion of DNA, and each gene has a specific number and sequence of nitrogenous bases that represent its identity and distinguish it from the other gene. The number of genes in humans is estimated at about 20,000 (13), and they can be more. All human life, activities, health, behavior, attributes and tendencies lie in the work of these genes. The color of the skin in humans has its own genes, and the color of the eyes also has its genes, height, type of hair, each having its own genes, and so on in relation to all other characteristics. For each trait there is one or more genes that determine the nature of that trait. Genes vary in length as well as in the number and sequence of nitrogenous bases they possess. For each gene, there is a fixed responsibility. For example, the gene responsible for the production of the hormone insulin, the length, number, and sequence of nitrogenous bases are fixed and one in humans, no matter how different their shape and color, and that any change in those nitrogenous bases will change the effectiveness of the gene, causing a decrease or increase in its activity or loss of its work. Basically, a gene issues commands or encryption to make a specific protein, so for every protein there is a gene that specializes in making it. Proteins are the biomolecules and the most important in the body and are the basic structure of enzymes, hormones and immunity, among others.

Which is called changes in the nitrogenous bases, the genetic mutation, which is by adding or removing a base or altering a base with another base, which causes a change in the structure of the gene resulting in a change in the activity of the gene that may lead to a deficiency that does not produce an enzyme, hormone, or any other protein, or it may lead To overproduction or complete loss of the gene's effectiveness, and all of these things lead to conditions that affect human health, behavior, and characteristics.

Violence and heredity

Many hypotheses related to violence and aggression, their causes and motives, have been put forward. These hypotheses struggle with each other to reach the convincing reasons behind violence and aggression. Most of these hypotheses concern any greater role. Does the environment have a role or genetic factors in the emergence of violence in humans (14, 15)? In recent years and the significant and rapid scientific development in molecular genetics and genetic engineering, new data have emerged from deep studies that give the genetic factor the greatest and decisive role in the behavior of violence, aggression, killing, suicide, depression, schizophrenia, madness, insecurities, recklessness, and others. Among the clear and unambiguous evidence that supports the major role of genetic factors are:

1- Studies carried out on the behavior of identical twins who live or separate with each other after they were separated for reasons that have not been mentioned since the first days after their birth and most of them lived in different countries or environments. Most of their attributes and behaviors were similar. The identical twins carry the same genetic factors because they basically consisted of one egg and one sperm, but instead of dividing the egg into a single individual, it is divided into two cells and each cell is independent from the other to be a fetus to become two identical people, and here the effect of the genetic factor on behavior will be demonstrated in the case of changing the environmental factor Surrounding the individual. As for the environmental factor has a greater role than the genetic factor, this will be indicated to one of the twins, but not to the other, in case their environment is very different. Conversely, if the genetic factor had the largest role, the effect of the environment would not be apparent, no matter how the place and nature of life changed. On this basis, studying the behaviors of identical twins provides a valuable opportunity to know the extent of the influence of the genetic factor on the behaviors. Several studies were conducted on identical twins to investigate the role of genetic factors in the emergence of violent and aggressive behaviors, fights, depression and other behaviors of others. All of these studies concluded that socially desirable for genetic factors was the large and active role in the emergence and development of these behaviors and clearly on the twins despite the different geographical factor Or place and nature of living, and that the environment was a limited role and is not compared to the genetic role.
2- Studies on adoptions of children by non-biological parents. Whereas, children adoptions are the best way to investigate the active role of the genetic factor in demonstrating violent and aggressive behavior. Forensic studies,

among others, provide a very large number of children who have been adopted and compared to their real parents (biologists). These studies have found that criminal behavior, aggression and violence are transmitted from biological parents to their children significantly, although children have grown up in different environments and families far from their original parents. The conclusion was that the genetic factor had a significant role in the emergence of criminal behavior (13, 16, 21, 22, 23).

3- Studies on migrants, although they did not focus much on the causes of genetic violence, but what appears on the international scene as manifestations of violence because of migrants (24, 25, 26, 27) is evidence that these migrants retain their genetic factors that cause violence and have expressed themselves despite The environment has changed on them. Perhaps not a day has passed yet that one of the violent and aggressive manifestations has been announced in one of the western countries that hosts refugees from other countries. If it were noticed, what was indicated in the first point above, that the transfer of one of the identical twins to another country can be considered immigrants because he will live in a new environment that differs from the environment of his brother, who remained in his place of birth, and despite the difference in the environment, aggressive behaviors appeared in both twins

The great development in recent decades in the field of cell genetics and the chromosomal and genetic role have enhanced understanding of the role of genetic factors in violence and aggression. The accumulation of evidence on the genetic basis and the significant role of genetics in violence and aggression has led to the demand that investigations and justice institutions rely on the results of genetic tests and include them in their data when dealing with contemporary crime (28). Although there is an indication that violence and aggression is an innate characteristic inherent in the individual (29) through evidence of clear aggressive behavior of the mother, whether human or animal, in her defense of her children when exposed to danger, the aggressive behavior has a basis and a genetic basis that lies in the genes of the individual. Several in-depth studies in aggression have concluded that inheritance constitutes 50% of the factors that cause aggression (30, 31). These studies have observed that environmental factors change with time, but the genetic factors remain constant and their effect is clear in the stages of puberty. He found (30) that men show an inheritance of aggression more than women. Apart from the twins, the study carried out by Carrie and her research team (32) on 2573 addicts who have different mental illnesses and to varying degrees demonstrated that the genetic predisposition to mental and psychological diseases puts the individual at risk of addiction and that the genetic content in addition to the environmental factor contributes effectively to their tendency to Addiction and mental illness, and this indicates that the genetic factor is closely related to a person's willingness to addiction.

One of the studies showed that mental illnesses are complex characteristics that are influenced by genetic factors and transmitted from parents to children in a large percentage (33).

Experiments of high scientific value were conducted on two societies, the first society (A), which is characterized by the large number of rape cases they have, and the second society (B) in which rape is rare. Male children were exchanged secretly between the two societies for the purpose of knowing the effect of the genetic factor on the characteristics. Rape in society (a) decreased after it was prevalent while it increased in society (b), which was characterized by a rarity in the state of rape. This experiment was repeated and gave the same results, which indicates that the genetic factor plays a major role in transmitting unwanted behaviors, including rape and others (34).

In public life, people generally talk about the inheritance of many diseases, especially psychological and mental ones, but without concrete scientific knowledge and without knowing the truth about the genetic basis of these diseases, depending on the concentration and inheritance of these diseases in specific families or certain closed societies. The impact of the individual on society comes from the merging of two main factors, the internal genetic factor that came with the formation of the individual, and the environmental factor in which he grew up, both of which affect the personality and behavior of the individual (35).

Genetic factors that contribute to violence, aggression, tension, and others can be classified into two categories, which are chromosome factors that depend on the increase or loss of a chromosome or part of it, and genetic factors that include molecular changes that occur in a specific gene, which leads to stopping or less production or loss, or an

increase in Produce it. In this part of the study, the focus will be on chromosomal factors and genetic factors will be covered in the second part of it.

Chromosomal factors

Naturally, the genetic makeup of men is (XY, 64) and for women (XX, 64), as indicated earlier, but if something happens, and if an error or chromosomal mutation occurs that results in adding another chromosome to the genetic makeup, the newborn will be a genetically pregnant carrier with its advantages and consequences, and among those examples are related Mental and psychological diseases and violence are:

1- **Klinfelter Syndrome:** Klinfelter Syndrome is characterized by the fact that a person is born with a chromosome composition (XXY, 47) where there is an additional chromosome. This syndrome can be observed at a rate of 1/581 to 1/917 among individuals (36) and the frequency of its occurrence in a number of developed countries is about 152 per 100,000 people (37). People with Klinefelter syndrome tend to exhibit some isolated psychological manifestations, autism, behavioral and cognitive dysfunctions, and are exposed to emotional and psychosocial problems such as social withdrawal, social anxiety, shyness, impulsivity, improper social behavior and depression, and they also tend to isolationism and scarcity of friendships and they show vigor and initiative spirit are very weak and their relationship to them is weak Others (38, 39, 40). It turns out that a large percentage of these people are difficult to learn the language and do not progress at their academic level (41, 42). Most of them appear sensitive, anxious, and emotional, and they have anxiety-depressive disorders and tend to take drugs and drugs and show neurological disorders of schizophrenia (43, 44). (Shizophrenia) There is a number of research that has proven these people condemned with violence and many crimes such as sexual violence, theft, robbery, physical violence and burning Mayors and others (45, 46, 47). In Iraq, a study conducted on prisoners in general (46) revealed that (3%) of the 217 inmates carry Klinefelter syndrome and are imprisoned for premeditated murders, property burns, or rape.
2- **Jacobs Syndrome: the** chromosome composition of people with this syndrome (XYY, 47) with the presence of an additional Y chromosome, and this syndrome is often called XYY. The rate of their presence in the community is 1/1000 male births (48) and this rate is inaccurate because those who have this phenomenon do not have health problems and do not have a case of infertility, so no comprehensive tests were conducted to find out the percentage of their presence. Their IQ is lower than normal people, their educational level is low and most of them have difficulty learning since childhood (49, 50). The beginning of the link between the members of this syndrome, violence and aggression since 1965 (51) when they were admitted to the Central Security Hospital in Scotland. At the same hospital, two years later, and as a confirmation of this, other researchers (52) found that the beginnings of crime for Jacobs syndrome individuals are more early than normal, and that these individuals tend to crime against public property a lot. Studies continued to link those with this syndrome with many mental and mental illnesses, violence, and anti-social behavior (52, 53, 54). Because of their behavior, it was suggested that these individuals be placed under special care, great attention and constant psychological evaluation to avoid the risks of their criminality (42). In a recent study (55), it was observed that the criminal conviction rate for Jacobs Syndrome individuals increased compared to normal subjects.
    1- **Telomeres:** are frequent sequences of nitrogenous bases in DNA that have nothing to do with protein production and are found on the ends of the chromosomes to form covers that protect the chromosomes from damage. Telomeres shorten with age and it is found that age is measured by the short length of these telomeres (56). It was found that telomeres are shorter in people who complain of stress, depression, anxiety, major depression and schizophrenia, and individuals with previous psychological trauma compared to their normal peers (57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68). It states that wherever you live, the violent and abusive neighbors or the unfavorable environment surrounding it is related to shortening telomeres and the consequent manifestations of anxiety and violence (72). It appeared that children with autism spectrum disorders have a shortening of telomeres, and they are on the verge of a risk of developing mental and mental illnesses, with an accelerated process of shortening telomeres (73).

Genetic factors

Genes are responsible for inheritance and are responsible for ordering proteins, hormones, and enzymes, among others. It is therefore responsible for the appearance of the traits and advantages of the organism. If there is an imbalance in the insulin hormone gene, it is expected that insulin will not be produced, resulting in diabetes. If a change occurs in one of the nitrogenous bases in the hemoglobin gene, this produces a different hemoglobin production that causes sickle cell anemia. When genes stop producing melanin in the hair, the hair will turn white. From ancient times until now, farmers have been trying to elect beneficial, fruitful and powerful plants, as well as selecting productive and disease-resistant animals by controlling the mating and pollination method. This means that the farmer was looking for elected and desirable traits and behaviors that he wanted to invest in his field. From these examples it can be concluded that the characteristics and behaviors are clearly determined by genes.

Violence and aggression are also behaviors that may be normal if they are used at the designated time and place but become harmful and dangerous if they are used in a time other than their place and place and excessively. And since they are behaviors, then there are genes that control them.

In the last three decades, there has been a major development in the field of genetic engineering and genetics, which has resulted in a great understanding of the functions of genes and the follow-up of their role in the human body. Among the outcomes of these developments is the emergence of an understanding of the relationship of genes with violence, aggression, killing, terrorism and others. Among the most prominent genes that have been studied extensively in relation to violence and aggression is the MAO A gene, which is often called the warrior gene. Whereas, this gene is the first gene for its relationship to violence, aggression and socially rejected behavior to be revealed in 1993 among a large German family that was famous for violence, aggression, murder and rape by researcher Brunner (4). For the purpose of broad knowledge of the relationship of genes with violence, aggression, murder, suicide, recklessness, and others, reference can be made to Source (3), which gave extensive scientific coverage to violent genes. For ease of follow-up, a table was drawn up showing the number of genes mentioned in the research and their role in violence, aggression, and other mental and mental illnesses (Table 1). The table shows that some of the genes have no relationship to violence but are related to many mental illnesses that all ultimately lead to Violence and aggression.

Through a wide review of those genes that are related to violence and aggression, directly or indirectly, it becomes clear that the genetic factor plays a major role in determining people's behavior. Although the environmental factor influences the activation of a number of these genes, the presence of specific families that are unique in violence and aggression lives within one environment with another peaceful society indicating that the genetic factor was the master of the situation. This is supported by studies of identical twins, adoptions and migrants

It was mentioned previously. It can be concluded from studying the relationship of genes with violence to the presence of four classes of genes:

1- The presence of congenital genes that cause violence without any effect because they came with the individual fetus and bear change or mutations transmitted from the parents or that they were activated during the formation of the fetus for unknown reasons at the present time. Individuals carrying those genes are born with violence and aggression, just like any behavior.
2- The genes that activate when the environment factor enters into violent genes, and here these genes work like mines, which explode when pressed. These represent the majority of the genes associated with violence and aggression.
3- Genes that are activated by taking medicines that are used to treat depression. These drugs play an important role in provoking the genes of violence that make a person violent and sometimes fatal. This is another factor that adds weight to the importance of genes in violence.
4- Genes that have nothing to do with violence, but rather they affect the genes of violence and make them effective, which caused the violence, even though the first genes were originally peaceful.

Mostly, most of the violent genes were only known to be effective after specific environmental conditions exist. All of this requires standing seriously against that challenge that threatens human genetics, and seeking to explore more

mechanisms behind the role of genes with violence and aggression, on the one hand, and the development of practical scientific mechanisms.

Courts and genetics

The first case that raised the question of the possible role of genetic factors in murder was the trial of Richard Lubbe and Nathan Leopold in 1924. Loeb and Leopold were two young families from good families who died for no apparent reason. Mr. Clarence Darrow, the famous defense attorney at the time, wrote: 'Does Loeb deserve blame for the infinite powers that gathered to create him, and the endless powers that created him existed before he was born with ages, and because of this infinite combination of powers born without the ability to feel emotion? If this is correct, then there must be a new definition of justice. (86) Although the lawyer did not make any direct claim regarding his clients 'genetic inheritance, it implied that the loss of their emotions must be understood as a formative or inherited condition that the defendant could not choose or influence, and that the accused were originally determined and created To kill. Defense endeavors have succeeded in commuting the sentence from death sentence to life imprisonment with 99 years. This decision clearly raises the legal possibility of using inherited or formative factors in future cases to avoid or reduce liability and reduce punishment.

The first case raised clarifies the claim to use genetic factors as a tool to alleviate judgment was in the year 1968, which has to do with those who carry an extra copy of the Y chromosome, i.e. those with Jacobs Syndrome syndrome. In 1985, Glenda Sue Caldwell killed her son and purified himself madly. She was sentenced to life imprisonment. While in prison, she developed symptoms of Huntington's disease (a genetic condition that causes brain damage; it is known that people with it suffer from accidental and unexpected violence). Because of this, Caldwell was released after a retrial. It appears that the influencing factor in the retrial was the perception that it was her genetic condition that increased the risk of committing the crime, moreover, this genetic condition was more specific and more important than other factors believed to contribute to the crime such as biological or social factors and history factors of abuse (87). This issue raises an important question about whether there is anything special or imperative unique in the nature of genetic defenses compared to those that depend on other possible mitigating factors such as brain damage or mental disorder. For example, most judicial authorities provide psychological defenses based on a wide range of mental disorders, and may also refer to genetic defects (87). Since then, there have been a number of cases in which a genetic defect is sought as a direct basis for defense, the most common when the accused faces the death penalty. The most defensive cases attempting to use a genetic argument depend on heterogeneity of Mao A (88).

In 1991 Stephen Mobley, a 25-year-old resident of Georgia, was charged with murder, as he entered a pizzeria in Oakwood, Georgia, by shooting the head of the restaurant from behind when he shouted loudly. He had a tattoo on his back and there was no regrets for what he did. The murderer Stephen had an average IQ and his family where men were violent and socially unacceptable, yet his father was a successful businessman. Because of his family history, the defense team sought advice from researchers involved in the study of the Dutch family, citing Dutch research (92). That revealed that violent behavior was associated with a genetically determined neurochemical deficit by Jin Mao A as an attempt to commute the death penalty to life imprisonment. She rejected this attempt on the basis that the genetic research referred to did not meet the required criteria as scientific evidence may be approved, so Stephen was executed on 1 March 2005 with lethal injection.

As evidence and a mitigating factor, MAOA was the first attempt to use levels of a convicted murderer in the United States in 1994, which came a year after the publication of research that revealed the loss of Jin Mao's job in five legs of a Dutch family.

Those who showed a decrease in the IQ and an increase in behavior abnormal violence (4) and even their children retained that behavior, which included bullish and impulsive violence, burning and rape. This research has aroused the enthusiasm of researchers and specialists in the relationship between genetic and aggressive factors and opened a wide door to enter in this direction significantly. The researchers conducted their study on a Dutch family in which most men complained of somewhat mental retardation and abnormal behavior, including impulsive violence control disorder. All of these people have the advantage of demolishing the presence of an MAO enzyme responsible for

breaking down neurotransmitters between neurons that carry neuronal stimulation. It was found that these people carry a genetic mutation in the gene responsible for producing this enzyme, which has the same name as the enzyme.

After that, a broader and more comprehensive study appeared to include 1037 children in New Zealand who have been studied and followed nine times since they were three years old and until the age of 26 years (5). The study found that men convicted of violence and crime who had received ill-treatment in their childhood had high or few percentages of Mao's products. It turns out that increasing or decreasing production leads to the emergence of violent and aggressive disorders. It did not take long for the legal professionals to notice the data presented by these studies, as these results affected the criminal process to become the subject of intense speculation (6, 93).

An Italian court reduced the verdict on a criminal because he possesses genes related to violent behavior. For the first time, behavioral genetics affects the judiciary in European courts, and researchers hope that this decision was based on scientific grounds and nothing else. In the year 2007, the Algerian citizen Abdulmalik Biwat, who has lived in Italy since 1993, was sentenced for killing the Colombian citizen, Walter Philip, who lives in Italy, was stabbed with the knife, and Abdulmalik was impotent, claiming that he was for a religious reason. The defense attorney asked to commute the sentence because the accused was mentally ill and he was suffering as a result of the crime committed (94). After taking the opinion of three psychiatrists, Judge Paulo Alessio convinced and reduced his sentence to nine years and three months. At the appeals hearing in May 2009, the Trieste appellate judge in Italy asked doctors and forensic researchers for new independent psychological evidence to decide whether the sentence should be commuted after. The Italian researchers Pietro Petrini, a molecular neuroscientist from the University of Pisa and Josep Sartori, a cognitive neuroscientist from the Italian University of Padova, conducted a series of examinations and tests and found abnormal images of the survey

Cerebral in five genes associated with violent behavior, the most important of which is Jin Mao A. (7) In 2002, researcher Kasby, a geneticist at the Psychological Institute at the Royal College of London and his group, revealed that there is a close relationship between low

Jin Mao's expression, aggressiveness, and murders of young men who grew up in a bad environment (5). The appeals judge concluded that the convict's genes make him prone to violence if provoked and said, “There is growing evidence that some genes with a certain degrading environment may predispose people to Certain behavior. ”On the basis of the genetic testing, Judge Raynotti in September 2009 reduced another year of judgment on the pretext that the defendant’s genes“ would make him particularly aggressive in stressful situations and said he had found convincing evidence about Mao Jin in particular.

In September 2009, the Italian Court of Appeals sparked controversy when it reduced the death penalty for the defendant (Bewat) for murder based on evidence of a genetic predisposition to violence after a positive test for Mao A. The perpetrator, a man with schizophrenia, admitted to stabbing and killing a man. Although the defense He succeeded in saying that the defendant's mental illness reduces the sentence, they also say that his genetic predisposition to violence led to the commission of the crime.

In 2011, a similar issue sparked similar controversy and the press drew attention in the United States. Bradley and Al-Deroub were convicted of kidnapping, attempting to kill his wife by hitting her head with a shovel, and killing her friend Leslie Bradshaw by shooting her eight times and then cutting her head with a scythe. The defense lawyer challenged his conviction of the murder on the pretext that he was carrying Jin Mao A. The Court of Appeal found that the genetic evidence could be a mitigating factor, and the history of his mistreatment during his grueling might ease the conviction from first degree to second murder. This decision led to major headings, including the poor murderer's compassion, and his genes made him do so (95). But one of the jurors was a woman who commented: The diagnosis is a diagnosis, and she said, "A bad gene is a bad gene." (96) Both nature and education were considered to have influence on responsibility, but the medical diagnostic component seemed to have had a special weight.

Discussion:

Humans vary among themselves in many characteristics such as height, weight, personality style, and behavioral tendencies. Not everyone is nice and friendly, and not everyone is as tall as a professional basketball player. Genetic factors have to do with the origins of these variations. Genetic variations play a role in creating marked differences between people. Variation and heterogeneity in genes is important in understanding why some people have distinct skills that are not easy for others to emulate and why some people constantly break the law. Genetic variations and variations are what make some people more hasty, reckless and impulsive than others, and some people are healthier than others, and genetics also make some people more vulnerable to breaking the law than others.

When referring to the genetic ivory to treat hereditary and cancerous diseases, it becomes clear that repairing the damaged gene restores the cell to its normal state after it was like crazy and does whatever it takes to the extent that the murder is committed against its owner. The damaged gene led to serious diseases, most of which are fatal, have been dealt with and replaced, and accepted scientifically and legally, so why does it not accept the act of any other gene such as the genes of violence. Does a person with Down's syndrome called wrong (Mongolian) have a normal behavior. Why? Because he has a gene defect that only has one extra copy of chromosome number 21, and this chromosome carries a lot of genes, and here when the dose of gene expression increased Disruption of the body structure and the patient has become a patient with this syndrome carrying certain characteristics and behaviors as a result of the actions of genes and the environment did not play any role in its behavior, but it is all due to the genes. And aggressors to the point of killing or suicide, because these treatments evoke the genes of violence they have (100, 101). One of the genetic tests applied by medicine is the examination of the presence of Sickle cell anemia and Huntington's disease through early detection of the gene The defective can tell the patient to take measures for these cases, so the underlying genes allow for compulsory actions and do not interfere with their affairs unless they are repaired. The 1940s and 1940s are an example of the worst genetic research offers in choosing a distinct race with specific characteristics. Intelligence testing during the twentieth century sparked controversy at the beginning of its appearance. Based on eugenics, Alfred Bennett and Theodore Piaget put in France the first intelligence test to separate those who have intelligence enough to succeed in school from those who do not have (102) and certainly that test is based on the genetic basis of intelligence and has become a global standard and standard.

There are a number of researchers who see crime as a type of natural human function disorder and thus tend to prefer arguments that strongly support the genetic influence on the commission of the crime (103, 104) It can be said that the debate about the role of genetics in crime has been driven by legal attempts to use genetics As a basis for defense and by increased genetic studies of behavior (105).

Human behavioral genetics research has already been incorporated into the criminal justice system in the United States, and its use will become more widespread. In several cases, the defendants have presented a certificate of hereditary predisposition to commit the crime in an attempt to deny the assumption that they voluntarily committed the crime. The majority of the defendants did this for the purpose of making such allegations in the context of drug or alcohol addiction (106). In these cases, the defendant claims that he acted without his will as a result of his addiction to drugs or alcohol for which he was genetically predisposed. In the 2004 case, for example, the researchers say, in the 2004 Hermann Henry (von Dühlen) case, the South Carolina Supreme Court found that the defendant's mental illness was convincing, as the severe depression caused by a genetic predisposition made killing a consequence of the disease, without will, rather Of a voluntary criminal act by the defendant. Von Dühlen was convicted and sentenced to death for armed robbery and killed a dry cleaning employee who was shot in the back of the head. A request was made to commute the sentence as a result of a report by the psychiatrist indicating that he had done it as a result of a defect in his mentality. The Court of Appeal said that the doctor's report to myself provides a reasonable way to review the ruling.

In May 2004 the College of Forensic Psychiatry at Vanderbilt (a component of the Department of Psychiatry at the University of Vanderbilt in Psychiatry in Nashville, Tennessee) began including genetic testing as part of their comprehensive forensic psychological assessment

Before the trial for those accused of homicides (106). The last two added that expert testimonies on serotonin levels (controlled by a specific gene) had been provided to defendants to relieve them in several criminal cases in the United

States of the existence of a link between the defendant's low levels of serotonin and emotional control or explosion and reckless disorder. These cases are that they are incapable of forming the required intention for the alleged crime, and that they are incomprehensible about the size of the blame that falls on them at the judgment.

Sentencing. Here it can be said that the results of research on the two genes above will play an important role in criminal cases in the future.

Hence the urgent and necessary need to deal with the role of genetic factors in the criminal justice system, as well as the role of the environment in it. And the report of the Nofield Council for Bioethics, which stated that reliable information about the genetic factor that affects behavior and the attribution, is the result of scientific experiments that must be taken when trying criminals with the same scale in which environmental, social and psychological evidence is taken, and that it is taken as a factor to reduce judgment like other factors (107) English law allows for mitigation of judgment in cases of mental disorders (108). Extensive research on heredity serves in that it will lead to early detection of crime preparedness through the detection of genes, which will lead to prevention and reduction in society.

(109) It is stated that the genetic evidence now serves to reduce responsibility somewhat for criminals carrying a genetic defect that calls them to commit the crime. The researcher concludes that the current concepts of criminal justice should be abandoned because they are based on a morally wrong basis. To understand how genetics research affects criminal law requires an understanding of the underlying psychology of law and the concept of responsibility. Law is a system of rules and standards that aims to direct human action by providing factors with reasons for working in one way or another (110). Therefore, criminal law, and in fact all laws, presuppose the popular popular psychological viewpoint, which causally interprets behavior partly through mental outcomes such as desires, beliefs, intentions, intent, will, and planning (111). Popular psychology is still considered the basis of mental state in the interpretation of all human behaviors, although the biological and social sciences gave other explanations.

The legal concept of responsibility stems from the nature of the law itself and the type of creature it deals with. My headquarters or agents of responsibility are those who can be sufficiently guided by the law, which roughly means that only conscious and intended creatures

Rationality and advanced language abilities can be responsible. This explains why young children and some people with mental retardation are irresponsible (112).

Genetics is related to the causal mechanism. Genes do not have mental states and do not commit crimes as people do. In order to make a meaningful internal contribution to criminal responsibility, the genetic data must be translated into the criteria for psychological responsibility of the law (113). It must be precisely indicated how the genetic data are relevant to whether the defendant acted premeditatedly or if mental states were relevant. (113) suggests that genetic research may contribute internally to criminal law in ways that have nothing to do with responsibility. He adds that knowledge about the genetic variables that prepare people for crime can enhance the accuracy of dangerous predictions that affect sentencing and parole, and may be strengthened to reduce the risk of crime. Genetic research may also provide a radical external critique of criminal responsibility if it convincingly proves that no one with a genetic predisposition to crime deserves to be punished.

108 Guiding laws for sentencing around the world allow judges to reduce the sentence for criminals with low mental ability (108). As a result, these criminals may be subject to mandatory quarantine or treatment at one of the relevant psychiatric institutions. According to the opinion of the researcher, many judges are still reluctant to classify the genetic predisposition of violence as a mental handicap, but they may also push for this broad principle of justice to serve as a punishment for crime commensurate with the person's blame.

Behavioral inheritance is used at indicative scales in the courts, but so far it has not effectively influenced the basic elements of criminal and legal justice systems. The use of behavioral inheritance in these areas will expose society to additional ethical issues such as the responsibility of crime and biological determinants and the identification of risk, and here the need arises to reformulate the law according to scientific developments. All of these things have the

ability to not only change the course of criminal justice, but also the basic ways in which it is defined, prevented, dealt with and predicted in the criminal punishment.

In the crime trial process, there are two broad areas in which the evidence of behavioral inheritance can be used, the first when determining responsibility for the crime and the second when the judgment process (114). And when determining responsibility, there are two main elements in the crime that must be approved, namely the guilty behavior and the guilty mind. This means there must be evidence behind the logical suspicion in which the defendant conducted the guilty conduct with the determination to do guilt in order to establish responsibility for the crime. Genetic evidence can be used at this stage of the trial to deny guilty behavior, to demand that the defendant is not guilty or that he has poor insistence to carry out the guilt by claiming that the defendant's intention is unintended so that he is not guilty such as proving insanity or losing the ability to control the behavior. Here it appears that the evidence of behavioral inheritance serves not in denying responsibility but to mitigate it. For example, it is the claim that genetic predisposition is the factor that leads to aggressive and repressive behavior. The aim is to use behavioral evidence of genetics to reduce the liability of criminality and thus reduce the amount and type of punishment imposed on the defendant (114).

Anglo-American law has enacted laws or articles that relieve defendants from liability when their ability to choose their behaviors is significantly impaired. The defense of madness and spontaneity or spontaneity are two well-known examples. If mental disorders cancel understanding or eliminate error estimation or cancel the ability to control behavior such as those that eliminate responsibility for crime, then why do genetic factors, for example, low Mawa Jin activity that has similar consequences, have the same effect? . In fact, researcher Johnson from Thorkwood Marshall Law School advocated the use of genetic factors in the judiciary that operate in the same manner as mental disorders (115) and this was not the first time that courts had to address these claims.

In the 1970s, many of the defendants attempted to provide evidence of their condition being afflicted with Jacobs or Klinefelter syndrome in an attempt to reduce responsibility for them. At the time, the courts uniformly rejected defense attempts, although the reasons for their decisions varied and were not based on a realistic matter other than that the courts had little knowledge of the genetic material and its role in determining behavior.

Their judgments were based instead on the conclusions that merely showing legal madness would exempt the defendant from his crime, and that Jacob and Kleinfel syndrome precipitated their opinion at the time that they did not constitute a mental illness or a defect, that the evidence demonstrating a causal relationship between those syndromes and violence was not sufficiently certain. Even if these syndromes made the defendant Alia highly inclined to violence, it was not then possible to demonstrate that any particular behavior was categorically linked to genetic change (116). This confirms the doubts expressed by the judicial authorities at all times towards each new scientific product, forgetting that many scientific achievements have become strong evidence in issuing decisions adopted by the courts such as blood groups, DNA, tissue matching, degree of intelligence, etc. Significant obstacles must be overcome to persuade any court that a person who has forbidden should not be punished. The nature of the genetic evidence itself would make it difficult to meet the traditional standards of innocence because it required the scientific convictions of the legislator. So, what is the future of defenses that depend on the products of genes in criminals who were subjected to ill-treatment during their childhood and which activate the work of the genes of violence? Many imagine most of the relevant genetic data will show an increased willingness among people associated with a specific set of genetic and experimental factors to engage in violence and criminal behavior but will not be able to establish a final causal link between the genetic defect and the defendant's act. Genetic data may be insufficient to meet the criteria for defense of madness and mental illness, and may not be sufficient even to satisfy a more tolerant approach, such as the proposed defense of genetic factors. Genetic data may not meet the criteria for admissibility of evidence, because the federal rules of evidence in America exclude certificates that are intended only to demonstrate that the defendant has a tendency to act in a particular way. But if the function of genes, especially those related to violence, is deepened, he will see that the link is strong and needs more depth for justice, treatment and protection purposes. Indeed, the convicted murderer Mobley in Georgia (117) attempted to take advantage of the potential impact of genetic data to reduce judgment after the Dutch study first documented a link between Mawa's absence and violence. Although Georgia courts refused to allow the prisoner to test the effectiveness of Jin Mao at state expense, to lay the

groundwork for challenging the death sentence, she could expect more such requests following the release of data like this. What is instead of growing at the end of the last century is that should genetic preparations reduce punishment as a result of criminal behavior? The answer to this question depends in part on whether one believes that factors that reduce an individual's ability to exercise self-control but not eliminate them should reduce the moral responsibility of one's behavior. These are good signs for starting criminal justice by adopting the scientific foundations that depend on the results of genetics effectiveness in the judiciary. Ultimately, utilitarian considerations are likely to determine how courts deal with this issue. And unlike most mental illnesses, criminal genetics cannot currently be addressed and, as such, there are no clear ways to reduce the risks presented by these defendants.

This leaves defense attorneys a somewhat unconvincing argument, because their agents are more likely to offend people as a result of their genetic status, and they should be judged more severely to protect people according to the opinion of traditional judges. This does not necessitate staying on only those decisions and mitigating the ruling. Rather, it calls for the state to establish institutions that deal with them by special methods that keep them away from emotions first, as well as to exhaust their energies with things that benefit the community to ensure they avoid crime. In genes of violence for the purpose of preparing for these newborn cases or for leaving an abortion option to get rid of these births from the roots. In the face of the activities of the genetics of violence, it will now be necessary to think about how we believe that our criminal justice system should respond to the inevitable scientific developments that will reveal large aspects that are supposed to serve human justice.

Criminal defense attorneys try to provide certificates related to behavioral genetics in several circumstances. Therefore, the researchers uncovered (106) several points to support the role of behavioral genetics in issuing a judgment, namely:

• As mitigating evidence during sentencing sessions.

Reinforcement of the argument that the defendant may be unable to personally constitute the mental state required for a particular crime, particularly with regard to the insistence of a first degree murder.

• In the juvenile justice system, it is established that the juvenile's behavior has been determined in part by factors beyond his control (such as his genes and his miserable childhood history) and can be addressed, to support the retention of the case in the juvenile court instead of and transition to the criminal court.

A criminal defendant is likely to seek tests of these genetic forms to support the claim of legal madness. (9) stated that behavioral genetics may be the required next goal for the world of criminal justice, and mental and genetic health researchers are likely to play a critical role in helping courts understand the new history of scientific evidence. The recent use of this evidence in the criminal courtroom indicates that his expectation has begun to materialize.

It appears that research on Mao's role in violence and aggression will lead to a greater understanding in modifying the effectiveness of this gene, as well as to know the causes of behaviors harmful to society and the development of knowledge in dealing with risks and other interactions in treatment and forensic medicine (118). All of this called for a number of scholars (7, 97, 119) to request the judiciary departments to take into account the campaign of Mao A gene variants and to reduce their judgments because of the internal pressure these suffer from comes from the products of that gene.

Once the evidence about the person with the genetic defect is accepted, the justice system faces a balance of its duties between safeguarding the safety of people on the one hand and compassion for people who have committed crimes because they are compelled to be carrying genes calling for crime in compliance with the Eighth Amendment to the United States Constitution (115) through several options:

1. Once found guilty, the accused can be released back to society.
2. The defendant can be convicted and for being a genetically handicapped person who is placed in a penal institution.
3. The defendant may be required to review a gene therapy center.

4. The defendant can be isolated in some type of genetic defect complex.
5. Offers genetic therapy or genetic engineering.
6. Reducing the sentence.

As indicated (115, 120), the perpetrator is exempted from his behavior that constitutes a crime if he is the result of one of these cases:

1) Mental illness or defect.
2) If the subject:
    a. He is not aware of the material nature or the consequences of that behavior.
    b. He does not know that his behavior is wrong or a crime.
    c. Is not sufficiently able to control his behavior, but be responsible for that.

And criminal defense against genetic determinism or a genetic cause can be applied to the same previous mechanisms for similarities.

The perpetrator is exempted from his behavior that constitutes a crime if he is the result of the following:

1) Genetic predisposition.
2) The actor who:
    a. He is not aware of the physical nature or the result of his behavior.
    b. He does not know that his behavior is wrong or criminal.
    c. Is not sufficiently able to control his behavior, but be responsible for that.

As scientists and researchers make a great effort with the growing genetic studies and conclusions, the law has also begun to grapple with new scientific outputs. To accept the defense's excuse, the defendant must be able to demonstrate that the genes or a group of genes produced a sufficiently severe condition that the actor could not act within the normal life zone established by society. The defendant must demonstrate that the genetic predisposition causes a state of perception that the subject cannot realize the seriousness of the effect of his behavior. The plaintiff must also prove that hereditary predisposition causes an inability to perceive the actual nature of his work. If these justifications are absorbed with conviction, the perpetrator will be excused from full responsibility, as is the case in which the genetic predisposition that causes mental retardation is sufficient to defend the defendant and raise the responsibility for it.

The defendant may be unaware of the nature of the ethical matters, the penalties and the laws resulting from the act he performed, which also calls for the judiciary to release him from liability. In general, the perpetrator must be completely unaware of any fundamental risk that the behavior is wrong or criminal. If the lack of awareness is due to a defect in the genetic makeup, the defendant's behavior will be excused. The other element of defense is more directly related to the theory of genetic determinism because it relieves the subject of responsibility based on his erroneous genetic makeup, as he cannot act other than what he envisions is true. This is the theory that people can choose to act or not to act in certain ways (121). A defendant who relies on genetic determinism is able to demonstrate an inability to control his behavior. Here, a distinction must be made between the inability to control an act. As with irresistible motivational criteria, the perpetrator does not need to suffer from the urge to be very strong in the act, as he may have a natural desire, but he may lack the ability to control that desire. Once the defendant faces the burden of proving that he suffers from a defective genetic makeup and that this combination leads to a genetic disease or a defect that made him unable to exercise free and independent will to curb the crime, the question becomes, how can the criminal justice system respond to that? According to what the researcher stated (122), the excuses are based on the causal theory. Specifically, if it is due to a factor outside its control, it is exempted; As for the actions that are not caused by external factors, he will not be excused (116). If a person cannot be held responsible for his work because of genetic determinism, the absence of free will will result in the result of not being convicted and here is not punished (123).

It seems that the judges and legislators have become accustomed to the traditional and descriptive evidence and do not have sufficient experience with the function of genes and the tasks they perform that make them believe that the whole body and its behavior are under the command of the gene and its products that determine what you want. As for the environment, it works as a provoking or provoking factor that makes genes work more or less or not in time, which is a catalyst and complement to the genes. Thus, the violence that is based on the availability of the active and starting material, which is genetics, and what the environment adds will only accelerate or move its effectiveness. Here, a group of judges can easily embrace the issue of genes and volunteer to study it academically and practically, and then their role will be crucial and convincing to justice. What is afraid of justice is that the release of those who have the violence gene will expose the security community to the danger of the presence of these free people who forget that the state must take safe and sound measures to take advantage of these cases in certain places that exhaust their energies or enter them in specialized institutes dealing with them in studied ways that reduce their state of violence .

It is true that judges accept the idea that the hereditary content is responsible for the crime. It will not be easy because the judiciary since ancient times relied on a specific pattern and on procedures, steps and routines that are not easy to abandon, except that the development of scientific methods in crime must be welcomed by them as they have accepted many of them previously. . The scholar Franklin said that evil is embedded in human chromosome scrolls and transmitted from parents to offspring (124). Churchill said it is probably better to be irresponsible and you are righteous, than to be responsible and abusive (125). The study of genetics and the resulting theories has been the subject of scientific debate. Genetic concepts are now incorporated into legal belief. This emerging synthesis of scientific genetic principles with legal theory presents many challenges to basic legal principles.

The current criminal justice system is based on the idea of free will. Free will clearly justifies the concepts of retribution and punishment as reinforcing the basic theory that people should be responsible for their actions. In the field of criminal justice, the legislative bodies define what criminal acts are and establish the penalty for violating these laws. Punishment is generally abolished when the person who commits the act is unable to establish the free will required to choose the legally permissible act and not the impermissible act. The idea of criminalizing the act is based on whether it will be canceled later from relying on society's concept of the power of human will, or free will, versus the force of external or determinist causality.

The law in our societies is determined by social and legal institutions and not by the life and biological science in which we live, while our genes that control all the details of our formation, growth, and behavior are determined by God Almighty that we cannot interfere with their functions. Despite the terrible developments in the field of molecular genetics and genetics in particular, legal institutions have done little to interact with them to adapt them to serve the judiciary, although lawyers have repeatedly tried to use genetic evidence to defend defendants. The coming and accelerating developments that will take place in the fields of genetic engineering and genetics to ensure that all judicial institutions are convinced of the new results to become effective tools in the hands of justice to serve humanity.

Conclusion:

In the future, genetic testing is expected to play a pivotal role in criminal trials, and research will flourish to identify more interactions and interactions between genes and life experiences, which enhance specific behavioral outcomes. With scientific progress and more data, conclusions regarding biological contribution to behavior will become more accurate, and the degree of scientific probability will become more powerful. New scientific discoveries may provide a clearer understanding of behavioral differences between individuals, and have a greater potential impact on criminal procedures. Research concludes that behavioral heredity will be the next concern for the year of criminal justice and a mental health professional because it has a critical role to help eliminate the understanding and understanding of the significance of new findings in this area.

In Iraq, despite the lack of sufficient research on the relationship of genes to violence, there are researches related to the relationship of chromosomes to violence, and there are also studies related to the third sex, although it has nothing

to do with violence now. New legislation and keeping pace with scientific developments and putting them into practice to facilitate the work of forensic evidence as well as to guarantee the rights of the individual. A person of the third sex, for example, after he lived 25 years on the basis that he is a female apparently, and then it becomes evident through genetic tests that he is a female and turns into a female, what are his rights and how will his social, functional and psychological life be organized.

In these cases, the judiciary will have a major and guiding role in solving most dilemmas, and this requires the issuance of new legislation based on scientific foundations. And the large number of violence in Iraq requires the concerned scientific authorities to begin seriously to study the relationship of genes to violence, as is being done in developed countries to develop a scientific database that determines the role of genes with violence. Despite this, what is happening in the world about genetics and violence is not far from what is happening in Iraq. Judges and laws must all follow developments and prepare to reconsider some criminal legislation and deal with the role of genetics. The law also deals with some special criminal cases of insane people who have mental retardation. The judiciary will be more effective if some of the laws and those involved in forensic evidence can judge judges in academic and scientific studies in the field of behavioral genetics and the role of genes for the purpose of creating specialists who are able to link genes and the judiciary with ease, understanding and full knowledge. The other thing is for the various state agencies to follow these results and benefit from their data for the purpose of activating new laws that have three on the subject and also the creation of centers or institutions concerned with following up individuals who have genetics of violence to prevent from tainting them first and to take advantage of their capabilities in other areas that exhaust their energies.

Table (1): Violence genes and their relation to the disturbances resulting from the defect

The name of the gene		AKAP5	ALDH2	ANK3	ANKK1	AR	BDNF	CACNA1C	CADHI3	COMET	CRHR1	CYPs	DAT	DRD2	FKNPS	GABRA	HIR2B	ITIH3	MAO-A	MTHFR	NCAMI	NOS	SLC6A4	SNAP25	TBXI9	TPH1	TTC12
Resulting disturbances	**vi The olence**	*				*	*			*		*	*	*	*	*	*		*		*	*			*	*	
	the kill					*						*					*		*								
	Suici de		*	*	*		*			*	*				*		*	*				*			*	*	
	Dep ressi	*		*	*	*	*	*	*	*	*		*		*			*		*				*	*	*	
	Bipolar depression	*	*	*	*		*	*	*	*				*				*		*	*		*	*		*	
	Schizo phreni	*		*	*	*	*	*	*	*	*		*				*	*		*	*	*	*	*		*	
	Impulsi vitv and			*	*	*	*							*		*	*					*				*	
	Obsess ive-				*		*			*				*			*						*				

Alcohol addiction		*		*		*		*		*		*	*		*	*		*	*	*		*			*	
Drug Addict						*			*					*													*
Violence or depression									*	*		*	*	*		*		*				*					
Attention deficit				*				*			*						*			*	*		*			*	*
Autism							*	*	*										*			*					
Rape					*	*																					
Other diabete	*	*	*			*		*				*	*						*							*	

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