

**Indian Institute of Technology Kanpur**

**National Programme on Technology Enhanced Learning (NPTEL)**

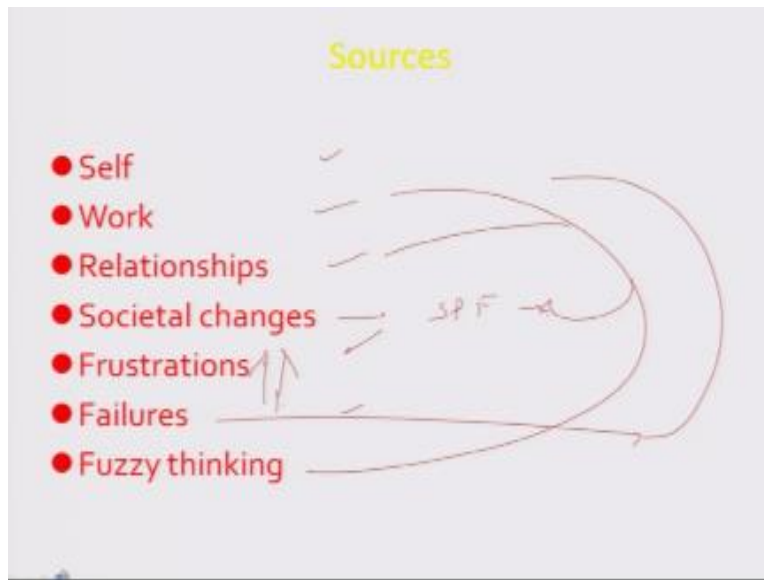
**Course Title  
Cognition, Transformation & Lives**

**Lecture-10  
Humans and Madness Continued  
by**

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So let us continue on the issue of what is normal and abnormal and we ended up at on the slide.

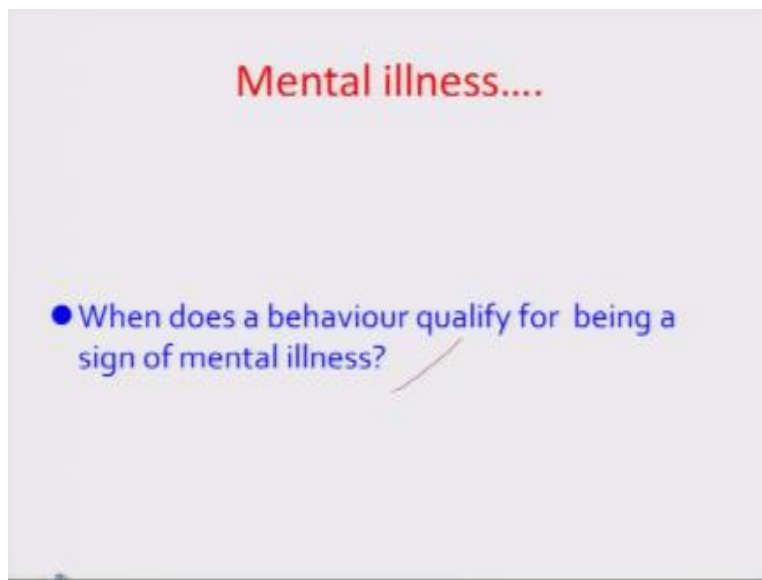
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Where all this sources of all problems but these are not the sources of problem only these are your life also, so this is how human life is, what is your life and what you are living for is the source of your happiness and source of your sadness, is a source of great achievement and source of great failures. It is a source of bringing in huge changes and source of becoming victim of forces, is a source of frustration it is a source of complacency, it is a source of sense of achievement.

But at the back ground maybe this thing and once people get into this wishes cycle so one decision which you take at certain of time maybe the right decision at that time, whether it is right or not the time proves but even while taking the decision it may not be a pure cognitive logical sequence of things, it maybe just whole platter of things which get into your head and so now everybody does it lot of people live like this with some good things, some bad things, some frustrations, some achievement, some relationship problems, some good things in the relationship and that is what is considered normal so when does the behavior become abnormal.

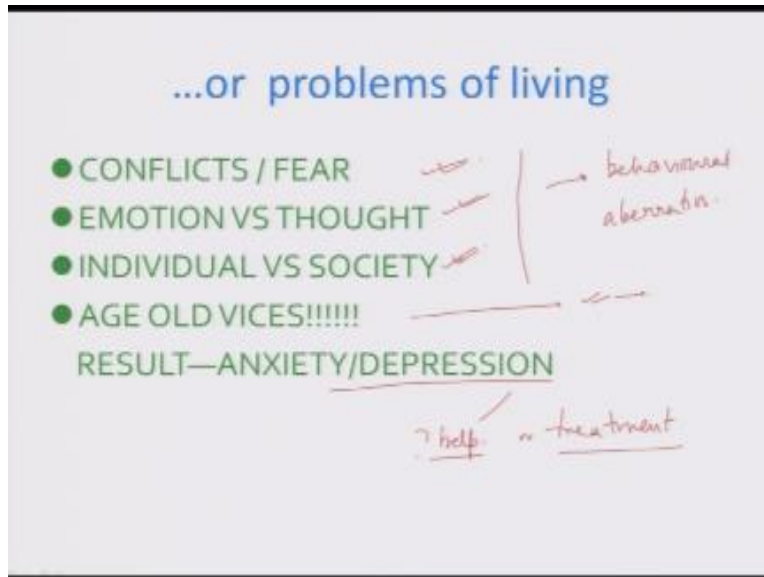
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And when does it qualify for being a sign of mental illness, this is the big thing because if you tell somebody that your mentally ill. Unless the person is feeling himself he would normally brush it of, and he would probably give you a lot example that okay fine this other person are also doing like this, other person so in this whole confusion you bring the person to the psychiatrist, psychiatrist has a whole list of symptoms by which they can, so whether something is a mental illness or it is a problem of living.

This issue is bothering not only general public but also professionals and if you look at it forget mental illness for a time.

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Conflicts and fear are universal everybody has it, emotion verses thought everybody has it, individual verses society these are sources of where a behavioral aberration can arise, age old vices will talk about vices in the next lecture, they bring in direct conflict with society so what is the result anxiety or what we commonly call depression. But is this depression and illness it may require help, help is different help or treatment this is a question not only for people but for professionals also.

Whether they are whoever comes to them, whether they are helping that person or treating that person most of the time it is the later actually, social stigma.

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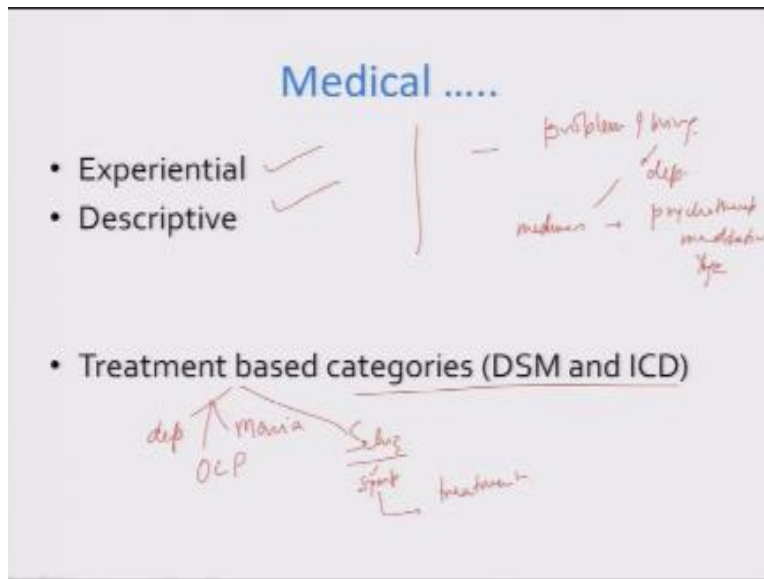
Now the social stigma of mental illness of so much that all these people were called as a deviant, disruptive, harmful, intention as I talked about determines so society handled with witch hunting initially then prison then lunatic asylum, mental hospital and now the mainstreaming what you commonly call as rehab of a mentally ill person is invoke, and why should in pay because if people have a little bit of illness and you treat them they can always get back to life.

But if people are not ill and you are trying to help them that help is not going to happen outside the system, one has to understand this difference and the, so if somebody has a illness what do you do it you treat and send them to mainstream maybe and when you treat it can be in a hospital or it can be home and you give a leave to person for two weeks and say take you rest, take your medicines be alright and get back to work simple.

But what happens when you are helping a person, when you are helping do you take of the person from the mainstream and then send for rehab this is a question which is still unresolved because if sometimes you can do it, but suppose if there is a stress at work and the person gets off but again he has to go back to work only, so the solution which he has found in isolation is it

going to work back into the same situation where this stress is arising, that is something which is as I said.

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So what is happening the categories are either experiential or descriptive and categories in what you call a diagnostic and statistical manual and international classification it is our treatment based category, you have labels like depression you have mania, you have OCD, you have schizophrenia and so on so forth, so there is a certain set of symptoms and there is a matching treatment this is where medically it is being worked.

But again if there are no clear cut symptoms and you think it is a problem of living in the background which is leading to depression, so you give medicines plus psychotherapy or people do meditation, yoga and lot many things which are refresh things to the basic issue, but basic issue which I was discussing remains. If the person has a illness you treat him he gets back but the person who requires help in problem of living should he actually get away from the situation briefly think over of a solution but ultimately he has to get back to that situation.

So this is important because when we will talk of transformation I will tell you why it is so important. So does it mean that there is no psychiatry illnesses and everything is a problem of

illness no, the epidemiology which has under gone into the study of psychiatry illnesses tells that.

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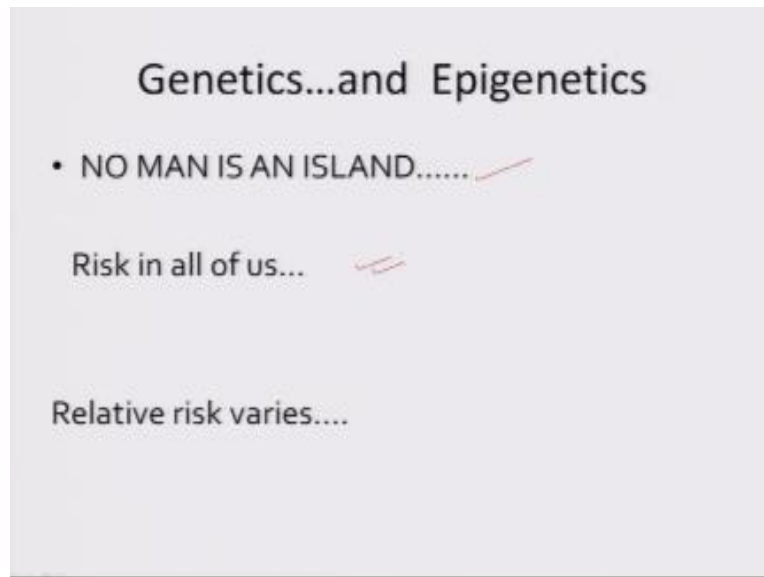
**Saviour ..**

- Epidemiology--- cross cultural ✓
- 1/3<sup>rd</sup> population at anytime →
- WORLD WIDE PREVALENCE....



One third of the population at any time is actually ill. Whether they have a problem of living and that has caused the illness or a primarily an illness is a different issue all together, so there is a world wide prevalence in the whole thing.

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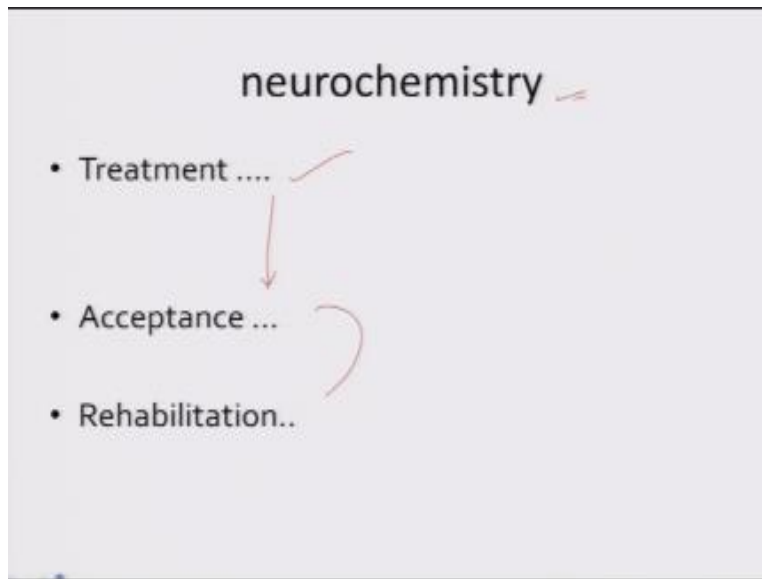


Genetics we were talking about so no man is an island we are all connected by genes the common pool of genes we share more than 95% to the genes, so risk of illness all of us carry, so if somebody experiences some disturbance in his behavior one should know that there is a risk possibility of an illness. Relative risk varies if somebody in the family has seen it is like everybody carries genes in the same way, some of the genes are just covered.

But because of certain circumstances what we call epigenetics it could be trauma it would be toxin, mothers illness where in home your own illness while you are in a child any emotional trauma catastrophe anything can uncover that gene and trigger a illness, but once somebody has had an illness in the family in the first degree relative or second degree or so the risk of having that illness between 16 to 45 years increases.

Otherwise we all carry a small risk of say 1% risk of having schizophrenia between 16 to 45, that is age group when maximum illnesses come up because the brain changes which happen somehow the trigger it.

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Neurochemistry the neurotransmitters like one of which we talked about dopamine we have hit on correcting those neuro-chemicals, neurotransmitters in the brain with very, very specific working medication and that has let to treatment and obviously treatment in isolation doe not work if the person is getting treated and there are no people to help him around to re-adjust to accept what is happening obviously it will lead to more complication as I said acceptance and rehab.



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### Medicine vs Psychiatry

- Symptoms--- cause --- treatment
- Cause driven classification
- Symptoms --- treatment --- ? Cause
- Description and treatment driven classification

I do not think this is very important for you.

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New risks..

- DSMV →
- Medicalization of social suffering
- Escape or illness...
- Disability vs. impairment

*b d  
was saw*

*psychosomatic*



The slide contains a list of four bullet points under the heading 'New risks..'. The first bullet point is 'DSMV' with a red arrow pointing to the right. The second is 'Medicalization of social suffering' with a red underline and a red arrow pointing from the first bullet point to it. The third is 'Escape or illness...' with a red underline and a red arrow pointing from the second bullet point to it. The fourth is 'Disability vs. impairment' with a red underline and a red arrow pointing from the third bullet point to it. To the right of the list is a small illustration of a person in a blue shirt and grey pants holding a globe of the Earth. Handwritten red notes are present: 'b d was saw' at the top right, and 'psychosomatic' with an arrow pointing to the third bullet point.

But when we are talking of something like understanding how people and why people do what they do, and also we are talking about the basic structure of the neuroscience which we have understood in last few years which we discussed in the previous lectures and you should whatever you want me to repeat or whatever you want me to re-emphasis we leave some space in this course say for about one or two hours, so if you can, if you want something specific you can always ask me and I can talk about it in that spare time.

We should look at the whole culture of psychiatry and the whole culture of mental health in the whole culture of the way things are emerging, as you know the use of psychiatry drugs has increased the lot of people who wants sleep pills and antianxiety drugs in fact they are I think they are most prescribed drugs if you look at it. What are the new risk, what is happening and what is the thought process which is emerging DSMV is a new classificatory system which has come up in US and there is a lot more categories, but categories are still based as we looked into the previous slide if you remember.

They are based on description, they are not based on cause so if you have more categories and obviously if you say it is an illness and his behavior is an illness a child getting explosive anger if a mother brings a child say 10 or 12 year old child and she presents it to the doctor that he gets angry, he has academic problems and he gets angry, sometimes breaks things here and there once in a while it will have a diagnosis.

Now anger, will have a diagnosis so once you have a diagnosis the owners of the medical system or a psychiatry system is again on treating, so because you do not the cause of it so if you analyze the cause it maybe a academic problem, it may be a relationship problem at home so with children we can go back look into the problem, sort those problem out whether it is dislikes or some physical illness and all.

But imagine if we look at some situation in adult where he is not able to trace the cause and he still gets anger there may be a cause he not be aware of it or he not may be sharing it, so you have a treated, so you have to treated so you have make drugs. So there will be more and more medicines which will be require, that this leads to what some people call it there is medicalization of social suffering.

In this world which is crowded the population is humongous the resources are less the ambitions are very high, people want everything and create pressure on their head. In this world where there is a rush and especially in the last 50 to 60 years countries are facing this rush for life all over, so there is a social misery which is arising in everybody, is this social suffering which will lead to as I said depression or anxiety again is the medical science is trying to treat it lot of other people are also trying to treat like we talked about the self help, books and the gurus and the new age religious gurus in who have their own cults and millions of dollars with them.

They are also trying to help I think, but what doctors do he tries to treat a social suffering on the surface which is a dispersion and anxiety or other issues coming from some other deeper cause as an illness, so movement you label that you have medicalized the social suffering and then you are trying to treat it, what we do not know whether this whole idea of depression or anxiety or there are some depression which are pure illnesses.

Like which have genetics and they are endogenous depression people are going alright and suddenly they will have an episode of depression or a episode of excitement and mood delusion call mania. But if you look at the whole lot of people who have diagnosis of depression this percentage is very small there are only 2 or 3% people have some things like this, rest of the people who have problems of living and they are not able to cop up.

Whether their mind is using remember this word for the later lectures, whether their mind is created a different cognitive frame work or a concept escape the stress or it is a illness, I mean this some people who would say you call as psychosomatic, you have a problem you have a head ache, head ache is arising from your relationship, you have a continuous head ache but go deviate you find you have a continuous relationship problem.

So brain has to divert itself son it creates an illness or actually it is an escape mechanism, you all remember when you did not want to go to school in the childhood all of us used to do it. The first thing was fever, body pain, some problem in the tummy all excuses we still make it all of us. the first thing you do not want to go with your spouse you know nothing is going to work if you have to go you have to go, the only escape route is that I am not feeling well.

Now once you are not feeling well nobody can do anything, so but this is a harmless pranks so but if it becomes a sustained view of dealing with problems then it becomes it can this escape can turn into illness, because society gives a huge weightage on being well so society does not want that you should keep ill for very long, so society will say okay, you are not well rest come back to work, come back to your relationship, come back to things.

But if goes on sustained then there is a problem, disability verses impairment, impairment is a loss of physiological function, disability is in the mind somebody does not have a hand may be a impairment, but if he does not do anything with rest of his body and mind that is disability, what you call dyslexia is an impairment some kids are not able to make the visual pattern the brain network is not able to make a pattern of what they see.

So once they cannot read the brain forms some muscled up images of the words and when they try to reproduce obviously they put in tried mirror imaging and lot of this mirror imaging like writing b and d, was and saw like this is developmental, but even after do you reach class 1 and 2 you continue this so that is a problem mirror imaging reverse self, substitutions they do all this things, and then they are not able to perform well.

So they just have a impairment but because nobody catches them, nobody is tried to correct then they reach class 4 and 5<sup>th</sup> and absolutely miserable condition they have to pushed, promoted parents will go and listen from teachers, teachers would have given up and in this country where parents make their kids lift for report cards largely it leads to the whole bunch of misery and sadness in the family very, very troublesome.

The children respond in different way so look at it, you look at the escape mechanisms the brain wants to escape stress a brain which is normal does not have a genetic predisposition of illness wants to escape stress fight or flight remember this word so either the mind has to fight and come over it that is were help comes in that you don't run away from a situation.

You just face it and move on but if you want to escape mind has to create something it has to create remember what we were talked it has to create a viable story so the brain of this kids reacts in two ways either they externalize it their stress or they internalize it not only kids all of us do it.

Because these are the only mechanisms available to it so if you have too stress and if you did something wrong and you were asked why did you do it even if you would not thought it your brain will be immediately conquer the story but the story is liaised with the emotion obviously the need is to escape but story is to give a sensible meaning of the whole thing kids who internalize they can have lack of confidence, depression.

These kids may have conduct problems anger get into anti social acts be very explosive so it depends on what temperament child is having and now the question is what was an impairment

because of external circumstances because of the way it has not been handled the way it has not been corrected has turn into a disability.

And this is the issue with lot of situations which we face in psychiatry, whether psychiatrist are free to choose whether they do not want to get into all these heavy stuff and you take just read whatever the person is coming with don't bother about the that is the choice and that is the perfectly legal choice it is a legal choice because nobody is asking them to that you have to really go into depth and find out the personal the cognitive into social political causes of illnesses.

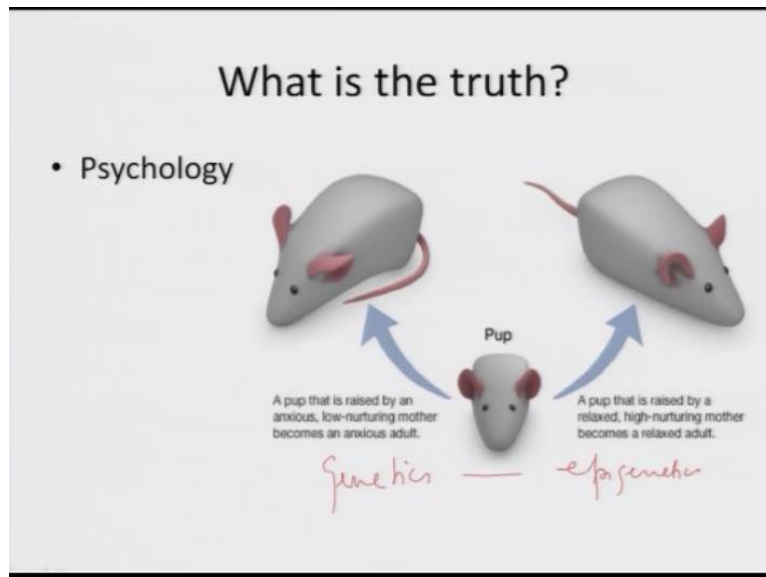
Because, they are treat depression and just treat depression and move on but if you go into the process this is the process of internalization on externalization of your temperament interacting with your temperament and your cognitive framework acting with interacting with the external stress and how your brain creates the story which is acceptable to you first.

So a kid doesn't who has internalize this stress who has been labeled as you are studying bad this that, that kid would normally what he would do is he would tell you that ok fine I don't study because nobody becomes happy with me teachers are not happy and I am trying to work but my parents is not so and so forth.

So this is how it works now you can see whatever is talking in initial lecture nothing is independent no man is an island your temperament your genetics your cognitive framework your experiences your emotional style of handling your everything has gone into you right from may be two or three years of life and even before that your temperament can would have made you other happy or sad.

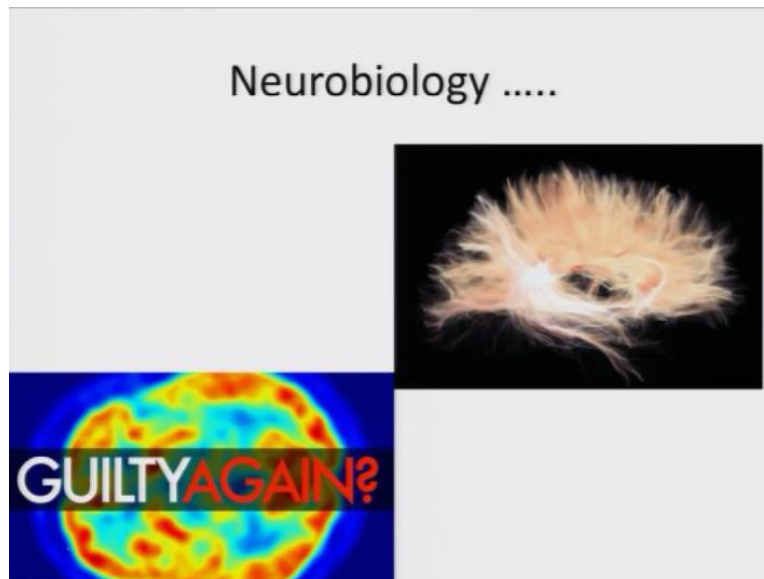
Their kids who are happy kids the kids are sad and they evoke reactions from the environment so right from there it's juts it is on and on and continuous dynamics of the world and self and it's just going on till you one is alive so within that sometimes it becomes stressfulness stress goes beyond that normal stress is required and to different ball game altogether.

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And then your mind internalizes and then creates a new behavior so what is the truth so the truth is as I said genetics and epigenetic so genetics at one point of time people were thinking is all about genetics but now we know the nature and nurture both work to make human beings sustained.

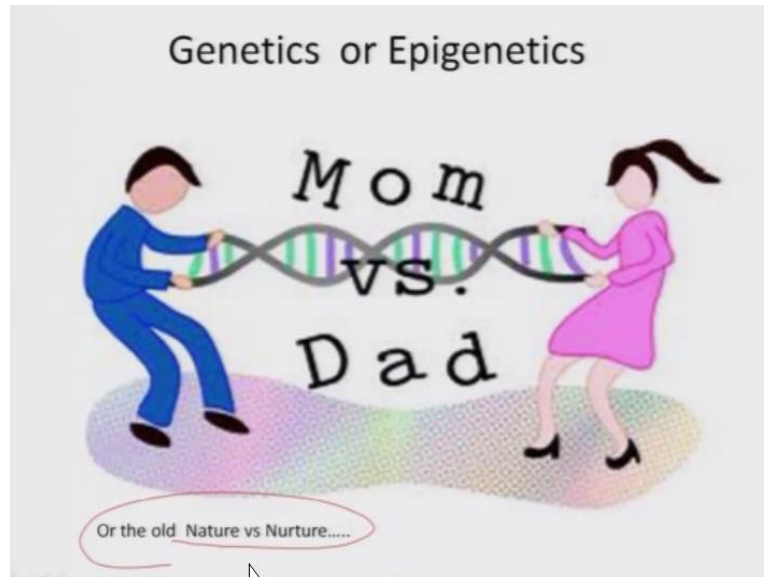
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Neurobiology this is the imaging which tells you, that is the feeling of guilt or any, any feeling has certain brain areas which we use with the blood oxygen level dependent imaging or use the positron emission tomography you give a task and people act to it, work on it then see which areas but I mean that is not purview of this talk.



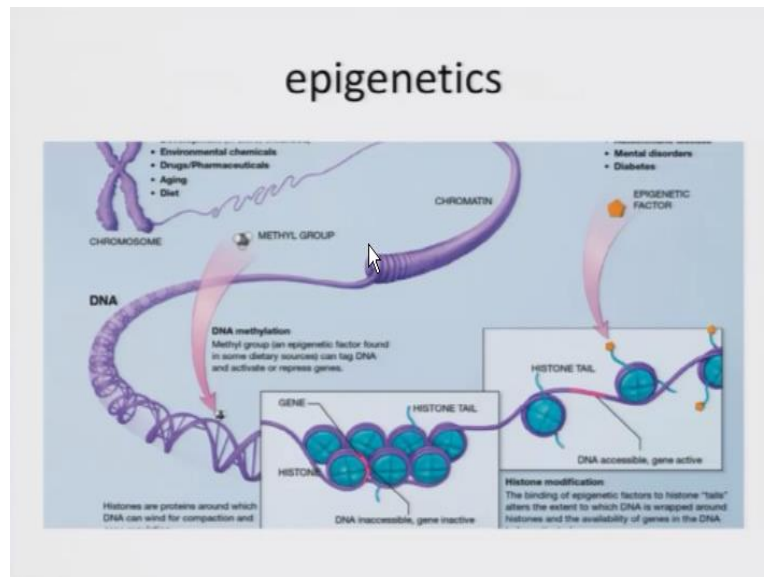
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So it is a whole nature verses. nature that is not more or less settling down that genes brings in a temperament and the gene brings the blueprint of what you are going to be but they can always get modulated within womb and outside with chemically even with the emotional trauma sudden emotional trauma is very well known to alter the memories.

And all this goes into the brain as we have talked brain builds upon layer after layer of hierarchical networks of this experiences and these experiences are continuously used to assimilate knowledge and make you act it all seems to be a big illusory drama.

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But whatever illusion it is, it is there epigenetic the common some of you who may be interest in biology is methylation (an epigenetic factor found in some dietary sources) can tag DNA and activate or repress genes. So genes which are quietly silent by methylation they would suddenly open up.

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So it is like this, this ill patient and well expert we are talking about a diagnostic category or telling that you are human being where is the problem please go this chap seems to be doing fine but that does not fit in with the diagnostic manual this was supposed to be lifelong condition. Actually I am starting to feel a lot better improvement but that wasn't supposed to have because it was a life condition I was not supposed to but them by diagnosis you start feeling.

For this type of mythological story so the important thing is where I would like to end this is a diagnostic category and behavioral symptom or the societal norms or the prescribed way of behaving is the only thing where does I ended one of the previous talks if you look at where is me? Where is my will where do I belong to is an individual important?

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Where is my story whether after I live in my story so will stop it this and just try to summing up that this narrative is my story which everything which has gone to my mind has built up a concept of self and this self takes stress and stimulus and then I have to keep rebuilding it so is it all about my story or is it about the society and where do I need to change.

So what I will do is I will end this and after this we will I will give you an example of one of the very common situations and then henceforth in further lectures we will talk about where does it all lead to what is the need for change and transformation. Thank you

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