Psychiatry an Overview Dr. Alok Bajpai Humanities and social science Indian Institute of Technology, Kanpur

Module-04 Psychiatric Disorders and their treatment-2 Lecture-14 Childhood Disorders-Introduction

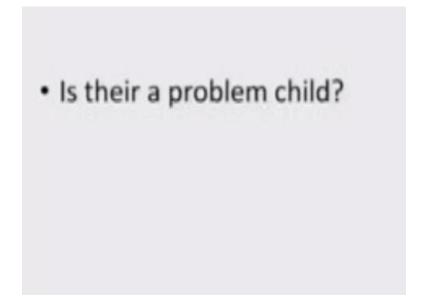
Welcome to this fourth week of for the smoke course psychiatry an overview this week we will try and understand what is called a child mental health or Child and Adolescent Psychiatry or adolescent psychiatry. Why is child psychiatry so important?

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In one way yes and in some way no, because normally what is understood that children are the future of the country and they should be happy and playing and all. On the other hand there is always a issue of children being unruly and not obeying and there is a whole list of problem which parents and teachers can mention. And they always complaining against the kids, the kids complaining, there is a lot of misery around childhood as much as there is happiness around it. So the basic question before addressing child and adolescent mental issues or psychiatry is one simple question. Is there a problem child, now for a time being let us look at the data which is available from a bit ecological studies and from clinics all across the world.

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To answer this question from a perspective of a clinician and a mental health professional the data suggests that.

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High prevalence of mental health problems -10-20%

There is high prevalence of mental health problems, almost 10 to 20% in the population.

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The median number of years from the time child first experiences psychiatric disturbance and receives treatment is nine years that means when the child actually starts having a problem and by the time, when it comes to the doctor of nine years have elapsed.

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- · Long delays , inadequate care

The long delay there is inadequate care.

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depression -17% of adolescents and young

And so if you look at the type of illnesses which kids have an adolescent 17% have depression anxiety disorder.

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- depression -17% of adolescents and young
- Anxiety Disorders -approximately 13% of children and adolescents (Shaffer et al, 1996).

Almost 13% of children and adolescents is the high number by all standards even if you compare with adults ADHD which is a very common diagnosis right from childhood ADHD to adult ADHD 3- 7%.

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Bipolar mood disorder we have talked about bipolar in adults in the last week. (Refer Slide Time: 02:55)

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- Learning disabilities -1 in 10

And learning disabilities one child in every classroom has what we call learning disability we will learn about this as we go on into rather talks.

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- Epidemiology
- Etiology
- Neurobiology and clinical research
- Treatment syndromal or symptomatic
- · Labelling or developmental perspective

So this is the epidemiology, the issues really have to decide about problems with children and adolescent is obviously we have seen the epidemiology gives year of data of how much, what percentage of population out of all the children and adolescents is inflicted by behavioral issues or mental illnesses. Etiology we will discuss about it.

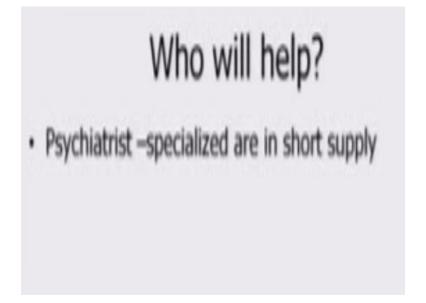
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- Epidemiology
- Etiology
- Neurobiology and clinical research
- Treatment syndromal or symptomatic
- Labelling or developmental perspective

Neurology and clinical research indicates that there are certain set of illnesses, but it also indicates that most kids who have problems may not be I will, they may just behavioral issue. So biggest question which remains to decide for any clinician of anybody who even if you are in a teaching profession or even if you are running a NGO or if you are working with kids, and whatever capacity kids who have problems we have to decide whether it is a symptom of some underlying issue or it is just a transitory behavioral issue which may be taken as a symptom and allowed to be passed off.

Or it is a syndrome with diagnosis whether we have to label the kids or we have to take a developmental perspective.

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When I am saying development perspective it simply means that as we have talked about the brain growth in the -- if you remember from the first week that the brain grows in response to the environment the neurons, the 10^10 or 11 number of neurons which are in the network they form a network in response to the environmental stimuli.

And doing development there are lot of events, lot of behavior and lot of aberrations happen which are not temporary, and if you look at your own life or anybody who is an adult that lot of things which we talk about kid that they are not obedient and they are defined or they are lacking in concentration, or not focused.

And so under the whole list of barrage of complaints against children we all have been like this at some point of the time in our life some of them aberrations may have continued with us, some of them passed off and it happens to everybody, because that is probably how the brain develops by taking an input and by responding.

And in the response they are no robot like responses of human beings each human being has its -- even with the same type of environment, and you can see it with as if you remember when we were talking about genetics in monozygotic twins, even with the same environment and the same set of genes there is never a 100% concordance of any behavior forget the illness.

Not two individuals even if they are monozygotic twins do everything in the same way they may be high concordance for some things, they may be high concordance for low concordance for the other thing. So the same environment the same stimuli, the same set of information which goes from the environment and they are nurture to the kid is processed differently.

And a different set of behavior may be brought out to give an example, even if you take something as disruptive as anger and if you can see it around you, because obviously no psychiatry or mental health or neurosciences does not work in isolation, it has to be rooted in the world.

The simplest thing is anger know two people show their anger in the same way. So now situation may be the same, but the output is different and that is the developmental perspective. So is that we -- developmental perspective is that we labeling a behavior for

labeling is something which is easy to do you can read certain criteria, put a label that the child is this or that.

But that cannot be done in a hurry, because once you label normally these labels stick to the person and if you remember that 5 access with which I talked about and when talking about DSM the access 2 is about developmental disorders. So once you say that there is a developmental disorder or a level that has a illness it normally sticks, so one should be very careful.

Who are the people who help kids to psychiatrist they are specialized inside the psychiatry, but they are in a short supply. So our clinical psychologist special educators which you find in most of the metros in India atleast now.

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Who will help?

- Psychiatrist –specialized are in short supply
- Clinical Psychologist
- Special educators

People who work with kids with dyslexia and dysgraphia occupational therapist, speech therapist, and not the least parents.

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Who will help?

- Psychiatrist –specialized are in short supply
- Clinical Psychologist
- Special educators
- Occupational therapists
- Speech therapist
- Parents

One can ignore the attendant and caretakers when talking about the adult psychiatry illnesses, but not in the case of parents.

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Who will help? Psychiatrist –specialized are in short supply Clinical Psychologist Special educators Occupational therapists Speech therapist Parents School teachers

School teachers, a school is the place where most of the problems are noticed, a school is the place from where most of the kids are being referred to us. (Refer Slide Time: 08:35)

Development

- Psychoanalytic -- Freud
- Psychosocial --- Erikson
- Cognitive --- Piaget
- Behavioural-- Skinner

So what is development if you take a few of these theories which we mentioned while talking about psychology, psychoanalytic, psychosocial, cognitive, behavioral they all have mentioned different stages of development, which some of them may are valid, some of them were valid at the time they were proposed.

They have been counter poised, but the fact of the matter is that all human mind undergo in a normal circumstances, a similar process of development.

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Issues

- Normal vs. abnormal
- "issue" vs. problem?
- state vs trait

What are the issues in development you look at whether it is a normal development, these are be abnormal, is there a issue which is presenting when we are talking about kids, or is there a problem not performing in a school in one exam maybe a issue. And the child may not have been well or they might have been emotional problem.

So one a dip in this course in one exam is a issue, but a child who is consistently not performing over one or two three classes may be a problem.

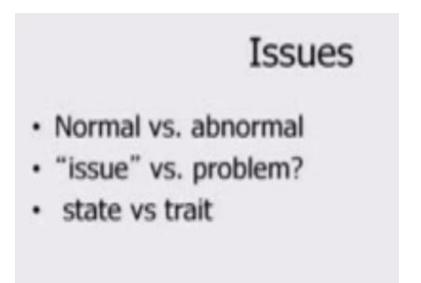
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Issues

- Normal vs. abnormal
- "issue" vs. problem?
- state vs trait

It says state versus trait, a state is temporary; a trait is more or less permanent. So a child who is having a fever and is irritable or otherwise not irritable is a state compared with a child who is always irritable for a very, very prolonged period.

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And as I said it is a developmental step or aberration like a lot of teenagers they start rebelling against their parents and they started getting angry or what things they do not like being told over everything and they don't like being directed on every small issue, it is a development step.

But if for a dollar sign this disciplining or set of instructions from the parents become such an issue that the child does not need for many days or gets angry or push things at fire, breaks things then it may be a aberration.

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NATURE vs NURTURE

Genetics and Epigenetics

Again the debate of nature versus nurture genetics and epigenetics we have mentioned about this in previous lectures so just to reiterate. This whole debate of whether the person is born with a personality or the person is a blank slate over something can be written, has been ranging from ages.

But now it is getting more or less settle that it is both, a person is born with a certain genetic template and temperament, temperament is basically if you look at certain behavioral paradigms like attention, span like reaction to stress, like predominant mood state, activity level.

So there are certain eight or nine parameters on which you have to assess the temperament, people are born with temperament this temperament remains like a genetic blueprint over which the nurture modulates and that is how we become adult. We all it is a - it is a scientific thing, but if you look deeply into yourself you will really find what is happening.

So it is a genetics and epigenetics, so genes have this template which can be modified by the environment right from the biochemical environment in the womb to the external upbringing things in the initial few years, when the brain tissues the brain that neurons are really forming that network.

To go once this, because of the trauma or toxins and lack of a secure healthy environment this network itself can be altered in aberrant form. So normally it may sound a fraud was right that all your adulthood behavior has really been programmed in the sense of synapses and the network, because if that these anxieties which get into the mind and the brain gets into the firing an aberrant pattern these anxieties always remain.

If you just look around yourself and see people, there are lot of people who will tell you okay I get fearful to this or I cannot take criticism, these are all things which everybody suffers everybody is afraid of heights, everybody is afraid of something or the other. But most people who have a secure environment they grow out for some people where it is not so.

Their brain lungs to respond in a different way in the form of anxiety or panic attack for the same situation somebody maybe very cool, somebody may not be. So if -- now illnesses can happen in their adulthood, but if you look at the behavioral patterns they are more or less people learn as they grow till around 16, 17, 18 years of age.

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- Developmental trajectory
- Critical periods

So this developmental trajectory, so this is how it actually the child develops as I said your brain is growing you come into the world there is environment around you which keeps you, makes you more too trusting, comfortable, harmonious that is sustained trust and security is very important for the brain.

And it is amply proven now, and then the developmental trajectory we have talked about the brain that how it over grows and it triunes how it reflection to the behavior that their critical periods while developing from say, zero month to say about 18 years so slightly beyond that also.

Where they are critical period when the environment challenges you one of such period is adolescent when their hormonal changes happening in the body. And so on so forth where one response to that and in the process lungs and scales, lungs were ways to handle and his own temperament is modulated.

But if you just look across the people and the number of people whom you know the growth is always differential within the individual and between individuals, no two individuals as I was saying grow alike in the same situation, that means the brain itself, because of genetics or because of individual differences is responding in a different way

and forming different network and hence a different output of the behavior of within the individual also.

There is a hell of difference in between your scales, your way, somebody may be good in talking, somebody may be good in expressing the mind in a different way, somebody may not be so comfortable expressing. If you observe your own mind which is obviously the best laboratory to observe if you just peep into your head and just look at the way your mind response to different situations.

You will find that it is probably what the way you were ten years back you are not now, maybe when you were growing you were doing things differently, even at that time you were not adapt at all the skills, and everything was not growing together. So this differential growth it really keeps the whole flavor of life alive.

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Developmental trajectory
Critical periods
Differential growth

But we have to keep this in mind when we are talking about kids and their problem.

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- A pattern of behavioral, cognitive, emotional, and/or physical symptoms shown by an individual
- · Characteristics must include:
 - Distress
 - Disability
 - Risk of further suffering or harm

So what is a problem, there is a pattern of behavior, cognition which is thinking judgment, attention, emotional, or physical symptoms shown by a individual. The characteristic must include distress, disability, risk of further suffering. So in kids you have to look at the pattern of behavior a single behavior may be very severe to disrupt things.

But it may not be very significant, but when you talk about a pattern of behavior, so there should be significant distress by it, or there should be a disability which is arising out of behavior or risk of further suffering or harm.

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Risk Factors

 Poverty, inconsistent care giving, parental mental illness, death of a parent, homelessness, family break up, early pregnancy, neonatal complications, etc.

So what are the risk factors where the kids have let as talk about the environment, poverty inconsistent care giving, parental mental illness, death of a parent, homelessness, family break up, early pregnancy, neonatal complications, etc. These if we look at these factors these are stressful for anybody.

But if you are a stable healthy individual you can suffer all this and you still move on, but for kids who are growing these things they oppose a significant risk.

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Resilience Factors

 A variable that increases one's ability to avoid negative outcomes despite a risk for psychopathology Oppose the resilience to risk as I said, this is a variable that increases one's ability to avoid negative outcomes despite a risk for psychopathology. That means if your brain is programmed such that within your own mind, within your own brain processes the brain is able to absorb these external stresses in a way that it does not lead to negative outcomes in your behavior or thinking process.

That is resilience, so brain has both it has a resilience factors it has inner capability to absorb the shocks and is still grow on the – see the surprises that.

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Resilience Factors

 A variable that increases one's ability to avoid negative outcomes despite a risk for psychopathology

Of lot of people have lot of negative factors when they are being brought up. But in spite of that most kids do not turn out to be normal. So the same amount of which does not destroy everybody but there are – these are small percentage which as we said 10-20% of all kids have mental lists of some sort not all of them are related to stress, but some of them especially the behavioral issues.

Even if there is a illness the external environment can complicate it, like imagine a kid who has a predisposition to having anger outburst such kid is -- are born and brought up in a family where the father drinks and comes and beats up the mother. This has a huge negative impact and let me actually make him more angry which he can express in the school or out on the road or.

And then he will be labeled as a sick person without unless somebody goes and really looks back into the cause of it.

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Resilience Factors A variable that increases one's ability to avoid negative outcomes despite a risk for psychopathology A much more difficult factor to categorize and may change over time depending upon the child and the environment; individual, family, and social factors will all have an impact

So a much more difficult factor to categorize and it may change over time depending on the child an environment. So we cannot really rule out environment while we are talking about children individual family, and social factors will all have an impact.

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So, how do we know when there is a problem?

or

How do we know when a problem demands treatment?

So, how do we know when there is a problem or how do we know when a problem demands treatment. This is a trick of good child psychiatry or child mental health. And so child psychiatry is does not remain in the purview of psychiatrist itself as adult psychiatry can.

Because there are lot of agencies involved parents, are involved school is involved, psychologies are involved, occupational therapist and a lot of hosts, and lot of adults and everybody in the family who especially in a country like India were a child is always in the eye of some uncle aunty and big brothers and all.

So before we really go to the talking about illnesses in the subsequent lecture I will like to take you to a different dimension all together.

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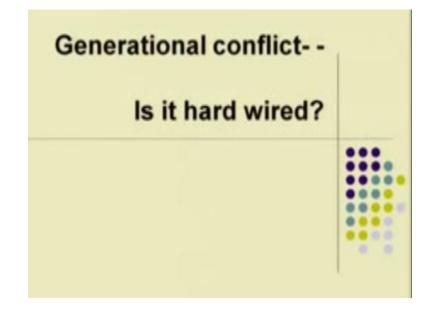
So, how do we know when there is a problem?

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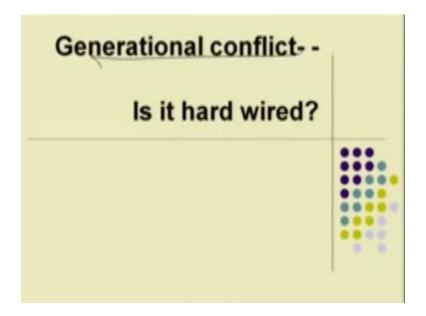
This is what I was talking about children when you really look at them and when you look at the children and say whether they have a problem or we are really talking about whether they have a illness before we really come to that I would like to touch briefly upon.

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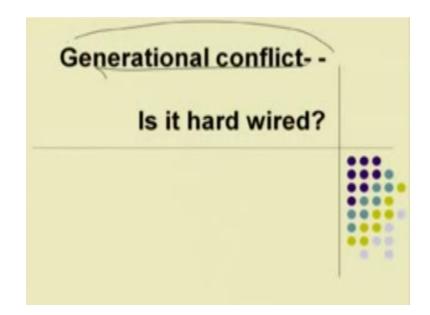
What is a very common term called generational conflict, but this I will tell you as an example of what I was talking whether there is a problem, whether there is a issue, or there is a illness, or all this conflicts really come to a peek at the time of teenagers when you are talking about adolescents. And there is this word which I have put it here called generational conflict.

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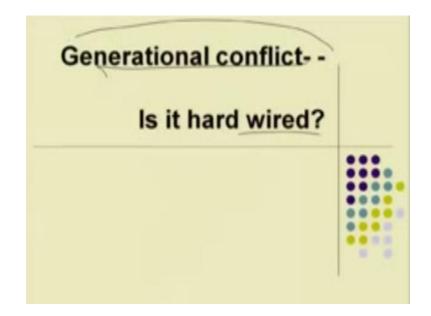
We just look at this thing, this is a very common all generations have heard it.

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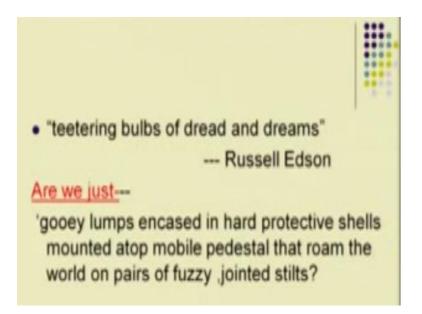


It is something which has remained always every generation will say that the kids are spoiled, they do not listen, the kids will say, their parents do not understand. Now we are making some sense of it, and what is the real terrible is, this starts around 10-12 years continuous to late teens and in some cases. So the big question is whether it is hard wired.

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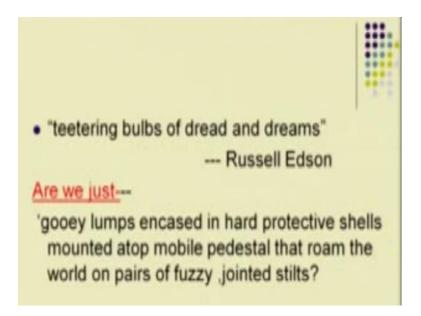


Hard weird means whether your brain actually is like this. So when somebody said that adolescents is nothing but a teetering bulbs of dread and dreams, there is a lot of anxiety and -- is you go back to your adolescent and if you are a adolescent you can still think being there.

That all the time your mind is in a perpetual anxiety of what is happening, who are you, now these are the question which human beings always ask. But as they grow old when their chances become less of changing life and when the life is more or less settled they asked it less.

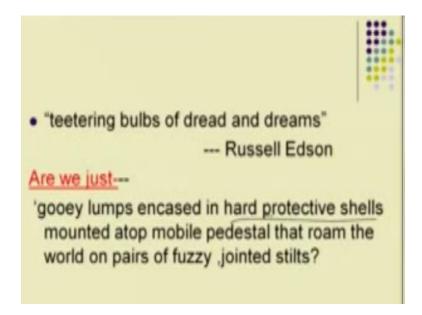
Now some people can rewind teenagers and anxious adults all their life, but in adolescent keep asking this, there is a sudden dread. But it is the same time to counter this dread our dreams as they were saying there is a risk, there is a dread, and there is a resilience also, this resilience also,

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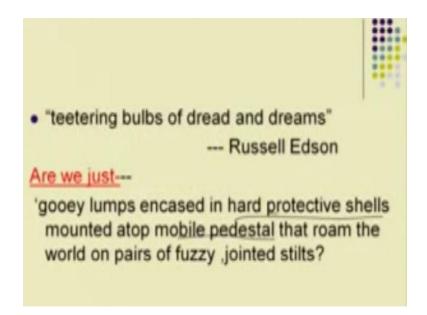
Is giving you dreaming. So what are we, are we just gooey lumps encased in hard protective shells which is brain, this is brain.

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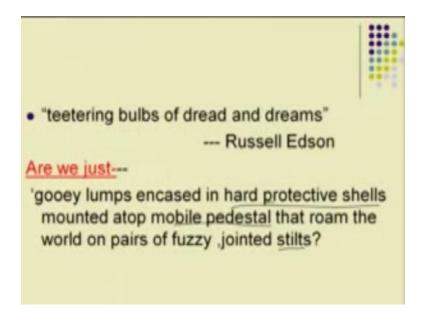
Is mounted atop mobile pedestal which are your legs .

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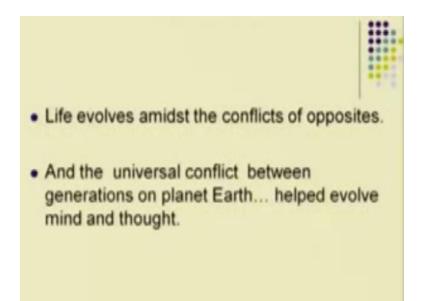
That roam the world on pairs of fuzzy, jointed stills, these are your joints.

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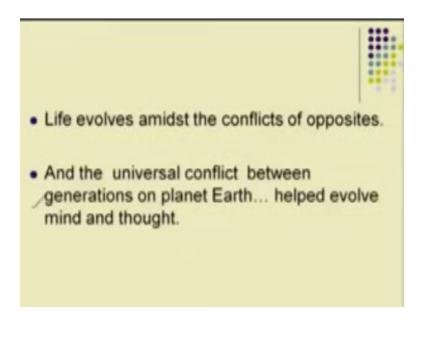
So I will adjust this, this gooey lump body which is in case an sub shell and are we something more.

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But one thing we assure that life evolves emits the conflicts of opposites. Imagine the number of conflict, the good, bad, day, night, right, wrong, white, black, everything there is nothing which is existing single in the world. And the universal conflict of generations.

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But I guess that this conflict while you are growing and this conflict which actually pushes you and puts you in a sort of a real tension this has actually -- this actually helps you evolve the mind and the thought. What I will do is after this, I will talk briefly about adolescents in the next lecture, and then we will go on to talk about some lessons and some behavioral issues. So rest about that adolescents in the next lecture. Thank you.