## **Smoking Cigarettes Are Mental Illusions**

Hello everyone, it's been a long time I have not posted anything on my blogspot. Well today's topic is quite relevant for the present day scenario of our society which are gradually going into the tight grasp of addiction, the addiction that is obviously not healthy. So I will not talk about the addiction and its effects on our body because it is a vast topic which I will address later on in another blogpost. One of the indispensable and most prevalent addiction is Smoking cigarettes. It is quite seen in almost all the age groups above 15 yrs old. When a child attains his adolescence he is quite prone to some deadly addictions to drugs like Nicotine, Caffeine or in some cases it advances to even heroine, mandrax, LSD, Cocaine etc or Alcohol.

But why adolescence stage is always victimised?

To answer this, we can correlate a famous proverb, "Little knowledge is very dangerous than that of having no knowledge". Relevantly, it's the phase of life similar to the dawn of the day. It's the intermediate between the known and the unknown. In adolescence a child grows up to be a teenager and he starts experiencing new things, new lives apart from the grasp of their respective guardians. Also they start learning new tactics of the society and they start meeting new friends. The college life, the hostel life and the new friend society heavily influences them to taste new things, experience the best and the worst feelings. Their minds at that time are quite immature and ridiculously they think themselves as the most mature being on the earth. They could not grasp a single thing then because it's the mind that controls their physical activities and the social activities as well and their minds are most undulating at that particular stage. Sometimes addiction are quite influenced by genetic practices but its not obvious but it just make one prone to become addicted. The teenagers most commonly get into the grasp as they want to feel better, do better and get the influences from friends and environment. They trust their friends more than that of parents and logics. But the turning point is not to get into these stuffs but getting into the addiction. Its very hard when one gets addicted. Tasting something is not a bad thing but to get addicted into it can make this habit a parasitic life-partner.

Here we are talking about Cigarettes. My topic headline seems quite ridiculous as I am claiming it as a mental illusion. But really it holds a logic in it. Illusions are playing with our minds. If our brain pre assumes something, that pre

assumption becomes an illusional reality which our brain and mind configures as the utmost truth. Cigarettes also play that game with our brain specially the immature ones. When a teenager starts his smoking habit, the first day was always the worst one but that worst feeling starts converting to the best ones day by day. Starting with 1 puff, 2 puffs etc, one starts engulfing a whole pack of 10 cigarettes a day and also advances to 2 or 3 packs a day. At first smoking was their curiosity, after that it turns into habit and later on it becomes the necessity and it's the deadline of smoking. Because upto a limit we smoke cigarettes after that cigarettes starts smoking us.

Lets get some science between our topic. The most heard excuse of a chain smoker is that it helps in relaxing one's mind, motivates us and our mood to do something energetic, feels refreshed and active, helps with drowsiness and sleepiness etc. So is it true that only cigarettes helps with that or there are also some other healthier options that can really help dealing with that? Yeah it true that there are lot more stuffs one can take for the lame excuses a smoker often made to puff a cigarette. So lets get started.

Cigarettes contains Nicotine which is present 0.6% - 3% of the total dry weight of the tobacco and nicotine is a stimulant and potent parasympathomimetic alkaloid that is naturally produced in the Solanaceae family of plants. Nicotine has a role function as a receptor agonist (it binds to the receptor enhancing it to bind to a molecule) at most nicotinic acetylcholine receptors (nAChRs), except at two nicotinic receptor subunits (nAChRα9 and nAChRα10) where it acts as a receptor antagonist (it binds to the receptor inhibiting its binding capacity to a molecule). Nicotine is present from 1.5mg – 3mg on an average in every cigarette approximately on an average scale. Nicotine is a highly addictive drug that causes intense addiction and therefore there are certain withdrawal symptoms when a chain smoker quit smoking. Nicotine in a certain dose is then administered to that particular patient by various ways like nicotine gums, dermal patches and lozenges in order to keep this withdrawal symptoms away.

Its not only the nicotine that makes a cigarette harmful but there are also some other chemicals and substances that makes the cigarettes seriously deadly.

A cigarette contains about 7000 chemicals when it is burnt and out of these about 60 or more are known to be carcinogenic or cancer causing. Some chemicals are mentioned below-

Tar – One that is used to prepare the tarmac roads. It's a sticky substance that gets collected in the lungs and can cause cancer.

Carbon monoxide- One that is emitted by most car exhausts.

Cadmium- found in batteries.

Arsenic- found in rat poison.

Ammonia- found in toilet cleaner

Radon- a radioactive gas

Acetone- found in nail polish remover

Polonium 210- A radioactive gas

Methanol- Rocket fuel

Hydrogen cyanide- poison

Butane- lighter fuel

Hexamine- found in lighter

Methane – found in sewer gas.

So these are the chemicals that causes cancers. Besides this there are again a lot more chemicals which indulge in cancer.

Nicotine makes the cigarettes addictive and these chemicals are there to ruin our body. Nicotine is often said as a stress reliever, so let's get into the depth of that topic.

Nicotine is a stimulant basically but studies shows that it too have a depressant effect when taken in very low doses. But a smoker never takes nicotine in low doses so it always have a stimulating effect. It acts as a mood swinging chemical which often seems to alter moods. It do not practically relieves stress instead it increases the stress level but it is a momentary perk of happiness soon after smoking a cigarette that often deceives us to choose the wrong way of smoking. Nicotine stimulates in releasing a good feeling chemical called as dopamine in the brain which ultimately helps in relieving stress and provides good mood, happiness and relaxation. But it is quite momentary. The adverse effects of nicotine is that nicotine when is introduced inside our body plays a

role in constricting the blood vessels and restricting the blood flow and thus the blood becomes devoid of oxygen. The oxygen scarcity in the blood demands for more oxygen for which a large amount of hardwork is done by the heart by forceful pumping. Repeated exposure thus increases the risk of heart failure or any cardio-vascular diseases.

What are the healthier and effective ways of relieving stress if one do not smoke?

Yes, it's a quite significant question. There are many physical ways by which one can release stress like meditation, yoga or daily exercise as it enhances the cardiovascular activities and increases the blood flow to the heart and provides free pure oxygen from the environment and thereby it reduces the cardiovascular diseases enhancing overall good health.

Moreover if one is so much possessed with his work and tired cumbersome day he can switch to Caffeine, a much healthier drug than that of Nicotine which have proven to be really a stress reliever. Caffeine taken from certain stuffs or drinks are proved to be a healthier habit but upto a certain limit, crossing the deadline may cause harm to anyone ofcourse is not recommended. Earlier it was thought that caffeine is harmful to the heart but recent studies assures us that if it is not overdosed, then there is no connection between caffeine, cancer and cardiovascular diseases. We can get caffeine mainly from Coffee, chocolate or cocoa powder, tea and some certain caffeinated beverages.

An average cup of coffee (100 ml) contains caffeine that ranges from about 90-96 mg. So as it is a much healthier choice than that of the nicotine and it also works as a stress reliever so let's get into the depth of the mechanism how does caffeine work in our body.

Caffeine is a type of a psychoactive stimulant which means it stimulates our brain to be psychologically active. Caffeine functions by traversing the blood brain barrier and it specifically binds to the adenosine receptors, now the matter of fact that these adenosine receptors are some neuro transmitters which functions by inducing sleep in the brain. When a chemical called as adenosine binds to the receptor then the brain gets drowsy and the intension raises to sleep. As the person takes a nap or takes a sound sleep then the adenosine gets removed from the receptors making the binding sites free and thus the brain regains its freshness. So the caffeine has a tremendously similar structure to adenosine which then binds to the adenosine receptors and also decreases the

number of adenosine receptors in the brain. As the caffeine gets binded to the receptor there are no space left for the adenosine to bind which prevents the brain to get a drowsy feeling and the brain remains active. But a cup of coffee has a self expiring time. So generally after that time more adenosine receptors start popping in the brain which demands for adenosine molecules. So it's the high time to get asleep or to recharge with another cup of refreshing coffee which will initially repeat the process. And therefore a person who is literally a coffee addict develops intense drowsiness as compared to the normal being if they have to survive a day without coffee because of the increased number of adenosine receptors.

Here I made a small schemation animation video of the simplified mechanism which I am providing below. Click on the play button and raise the volume. Enjoy!

Caffeine also increases metabolism of energy throughout the brain and at the same time decreases the cerebral blood flow, which ultimately induces a relative brain hypoperfusion. Caffeine activates nor-adrenaline neurons which results in the release of dopamine locally. Certain studies have shown that there are 2 types of adenosine receptors (A1 and A2A). A1 are thought to be wake promoting and sleep inhibiting and A2A are thought to be sleep promoting and wake inhibiting. Caffeine also triggers the release of Adrenaline which is also known as the fight and flight hormone of our body or also known as the emergency hormone. Certain studies have also proved the use of caffeine in case of headaches and migraines which lowers the symptoms and severity in the body.

Now overdosing caffeine can really compel one to lose their lives but it is too far again. Because about 150 - 200mg/kg of body weight is harmful to a person. So, an average 80 kg person has its deadline at 12000mg caffeine at a time if we consider the amount of caffeine as 150mg/kg. And an average moderate to strong cup of coffee literally contains about 100-120 mg of caffeine therefore a particular individual have to drink atleast 120 or 100 cups of coffee respectively which is practically not possible. He will be hallucinated much before crossing the deadline. So it can be said as a healthier and effective option than that of smoking a deadly cigarette.

Cigarette smokers who get heavily addicted are more likely to give those lame excuses which literally makes no sense. Because above all there is a logic which bears no logic.

I want to request each and every cigarette smoker to please quit smoking and to choose a healthier way of living. Nothing is impossible and nothing is more precious than your own life. Quitting smoking is never late. You have the full right to live your life that's true but you have no right to destroy a human resource because it's the resource of the world.

So do not let your cigarette to puff you and smoke in vain.

Thank you very much.