First, I would like to tell you how grateful I am to the Study Club of New Brunswick for providing me with the opportunity to research drugs and their abuse in 1971. It has been not only intensely interesting but extremely valuable to me - a mother of three children 10, 12, and 14. The terms used in connection with drugs came across as headlines only and I had no idea of their meaning. Until this time I was a classic example of the parent today who sternly says "Drugs are very harmful" and, while correct, does not know the facts to support it accurately.

Before going into the reasons behind drug abuse it is best to examine the drugs and their effects.

Heroin is known as a hard core drug, a depressant, - to be taken as an injection into the bloodstream, (called mainling) or under the skin (skin popping) thus producing a fast escape from the troubles of the moment. It is addictive and the body can take ever increasing amounts with no limit. Our body chemistry is such that we willingly adjust to this substance and the next time we can tolerate more. The problem comes when our new chemistry balance is not fed the proper dosage at the proper interval and it screams in pain and must then withdraw to its former chemistry balance - such a frightening and painful experience that it is easier to inject more heroin. Heroin is said to beguile its subjects, with a loss of sense perception in which they seem to be nodding in sleep, oblivious to the world around them, and soon their only reason for living is to have that next fix, it has mastered the person. It depresses the thirst and hunger
causing malnutrition. Using contaminated needles causes hepatitis and blood infections. If by chance pure heroin is obtained it may kill the user moments after the injection. Most heroin has been cut with milk sugar, quinine, or other materials. In NYC one junkie (that is one addict) dies every day. The majority of these are in their teens or early twenties. As you might expect there is far more heroin addiction in the cities, - 50% of all addicts are in the cities - 50% of these are Negroes.

One book that I read was "The Merchants of Heroin" by Alvin Moscow, in 1968. It is the story of the flower of sleep, commonly known as the poppy, tracing its origin as a seed planted in Turkey, smuggled out, converted from crude morphine, shipped, and fortunately in this case, discovered by narcotics agents in this country. Turkey is the second largest producer of legal opium in the world (heroin is a derivative of opium, 10 to 20 times more powerful than opium). India produces the largest quantity but the quality is not as good. Afyon Province in Turkey is located at the foot of the Sultan Mts. on a high plateau. The farmers who have grown poppies for generations estimate to the government how much opium they produce and then they grow a little more, put it in a secret warehouse and sell it on the black market. They are a religious people and would never considering using it as a drug, because they fear its results. However in very small doses as the original milk white sap from the poppy flower it is a natural medicine curing all common ills.

In October the fields are seeded by hand. If it snows before the ground freezes the plant will be protected and will have a higher morphine content having been in the ground all winter. If their
calculation is off the plant will freeze. They then replant in the spring but will not have as potent a crop. It is because of this uncertainty that their estimate to the government can not be questioned closely. As the plant grows taller there is an unpleasant fragrance and when the moment (which is only a 24 hour period) arrives to harvest, the entire family works, all wearing masks. Hiring outside help is not customary because their is an understandable tendency to steal. Children under 15 years of age may not pick either. Only, then, have they reached a sufficient height to pick without succumbing to the overpowering heavy fumes which sink near the ground. When the poppies are cut the white sticky substance oxidizes in the air, so doors and windows are shut tight and all small children are kept inside out of harms way. After the initial cut is made, the sticky substance oozes out, forming a glob of opium which oxidizes from white to dark reddish brown. Several hours after cutting each member of the family scrapes off with a knife forming it into balls about the size of a volley ball. Fifteen days later they harvest the brown poppy seeds and shells. The seeds have no trace of opium and are sold as poppy seeds for rolls, bils for cooking, even a substitute for turpentine in oil based paints and of course to plant next year's crop. The shells are shipped to Holland and Belgium and legal morphine is extracted. No wonder the Turkish farmer has proudly planted poppies for generations.

When sold legally a government agent bounces these opium balls in his hand to determine its weight—no scales. Usually they weigh 2 kilos or 4½ lb and are worth $10 a kilo—illegally the farmer gets $20 a kilo. As late as the 1950's it was easy to transport illegal opium. By 1959 the penalty was 10 years in jail and then in
1960 an American agent from the U.S. Narcotics Bureau introduced our tactics and Turkey soon had 25 agents. Their task is formidable.

The smuggled opium makes its way by ancient truck and horseback to the Syrian border. There it is converted to crude morphine, in this instance at a rough secluded camp in the hills. Fifty gallon drums of water are kept at just the right heat, straight lime is added changing chemically into calcium hydroxide which in turn reacts on the brownish opium dissolving it and separating the morphine and a bit of codeine from it. The botanical segment of the opium settles to the bottom. An hour later when the water becomes clear again the liquid is poured off, through woven cloth. It is then reheated. Ammonium chloride is added sparingly causing the morphine and codeine to crystallize as a cloud of grayish-white mass in the water. Once again filtered, the morphine base remains on the cloth. This dries in the sun to look like highly refined brown sugar and is on its way again in wax bags to a laboratory in Marseilles to be purified again. Syrians are not addicts so there are no agents and it can be smuggled through rather easily. Travelling by ship with its limitless hiding places is considered the best means and so this particular shipment went into a potato sack to Marseilles from Lebanon. To get to the ship a greedy Inspector on the police force transported it in his official car.

Thirty years ago camel caravans were used. The camel would swallow a metal container of narcotics. This was soon detected by x-ray so they switched to rubber bags but some burst and a drunken camel would stagger up to the customs officer - an unwitting informer.

In Marseilles the chemist purified the morphine base again, by adding acetone and letting it stand for several hours. To make it into
Heroin is relatively simple but takes expertise and many laboratories in Turkey, Lebanon, Mexico and Italy have blown themselves out of business permanently. The process must be carefully watched in a well ventilated room for the fumes are both noxious and highly flammable. In several tedious refining processes but the French pride themselves on the high percent of purity they obtain. The results are a snowy white powder, much like talcum powder, that is twenty times more potent than the morphine given medically to relieve the worst bodily pain. The chemist works only three or four days to be able to detoxicate himself the remainder of the week. He charged $700 a kilo—remember the farmer got $20 a kilo. The seller in America planned on getting $10,000 per kilo.

He smuggled the heroin in a sports car he had shipped to this country, setting up his cover and contacts very carefully. Unfortunately for him the U. S. Bureau of Narcotics was also setting up their cover and contacts and they successfully arrested each member of the long chain of men involved in this one transaction. I have no doubt that this same process, differing in details only, is still going on. The Narcotics Bureau has 300 agents who deal with the problem daily and who feel the only weapon is passing and enforcing laws to keep drugs away from those desiring them and at the same time providing addicts with facilities to ameliorate their problem. Heroin is the addict's choice drug but when this becomes more difficult to obtain he will turn to LSD, the amphetamines, and marijuana.

Fortunately for this gathered group I did not read any other books which trace step by step the progression of other drugs from seed to consumer!
However next let's look at LSD which does not produce the nodding depressant effects of heroin but instead is a hallucinogen creating so-called mind expanding sensations. It is a colorless, tasteless liquid usually taken on bread or sugar cube or can be in capsule form. Lysergic acid comes from ergot, the fungus that spoils rye grain. It was recognized as highly toxic as early as 994 A.D. when it killed 40,000 people in France from infected flour. Not until 1938 did a Swiss chemist convert it to lysergic acid diethylamide (hence the name LSD or acid). His partner Albert Hoffman accidentally discovered its mind altering properties in 1943. An amount of LSD equivalent to two aspirin tablets will provide 6500 100 microgram doses. The effects of a small dose can last for 8-12 hours causing enlarged pupils, a flushed face, chilliness, rise in temperature and heart beat, and slight rise in blood pressure. The psychological effects are far more intense. It causes changes in sensations — vision, depth perception, thinking may become pictorial, sense of time and self are altered, emotion may run from bliss to horror in a single experience, music may be seen, color heard, one loses the ability to evaluate. How it acts on the brain has still to be discovered, but it does effect the brain cells and animal experiments so far suggest that the brain's normal filtering and screening out process becomes blocked causing it to be flooded with sights and sounds. Chronic LSD users become unable to think clearly and to concentrate on a goal. There is some evidence that there is damage to the chromosomes causing birth defects.

The other hallucinogens are mescaline from the peyote cactus, peyote, psilocybin from the Mexican mushroom, morning glory seeds, and DMT, STP, MDA.
Because of the property THC (tetrahydrocannabinol) found in marijuana it too can be classified as an hallucinogen. The Indian hemp plant produces marijuana. Hashish is collected from the tops of the plant and is five times stronger than marijuana. Although it is called hashish in the Middle East and North Africa, the same potent substance is called charas in India. The dried leaves and flowering shoots produce bhang and less potent still ganja. Therefore in degree of potency charas and hashish are the most, next are ganja and bhang, and marijuana is the least. The Indian, Mexican, and Lebanese varieties are far superior to the plant that grows wild in the U.S. The plants are dried and crushed or broken into small fragments and then rolled into thin cigarettes known as "joints". It may be smoked in pipes or occasionally sprinkled on food. The smoke smells like burning rope and often incense is burned to disguise the odor. The physical effects are reddening of the whites of the eyes, increased heart beat, coughing due to the irritating effect of the smoke in the lungs, dryness of the mouth and increased hunger and sleepiness. Despite the fact that marijuana has been used for thousands of years little research has been done on its effects. Now that THC has been identified more laboratory findings will be available. The psychological effects are variable depending on mood and susceptibility of the user. They include distortions of hearing, vision, sense of time - perhaps a dreamlike mood. Unfounded suspicion may occur, followed by anxiety, but more often a euphoric high. The individual tends to draw within himself happy with his thoughts. In countries where tradition allows it, excessive amounts of marijuana have induced loss of motivation, apathy, memory difficulties and loss of mental acuity. It has been noted in this country that
judgement is impaired and performing complex tasks becomes difficult. The youthful user whose brain and emotions are still developing is most susceptible.

A narcotic is any drug that produces lethargy or drowsiness, numbs the senses and in large doses relieves pain or produces coma. The Federal Government classifies marijuana as a narcotic. It does numb the senses although not to the extent that the narcotics like opium, codeine, cocaine, heroin, or morphine do. Marijuana is also classified as an hallucinogen like LSD because taken in the most potent form of hashish it does expand the mind.

There is another grouping of drugs called amphetamines which act as stimulants to the central nervous system. The senses become hyperalert, keeping the body in a state of stress or tension ready for a fight. Truck drivers use them to stay alert on long hauls, athletes use them to stay hyperalert during a specific game. Strangely enough hyperactive children who cannot concentrate in school are given amphetamines to quiet them. Under doctors care this has been very successful and enables the child to attend special classes in school. There are approximately 10% in the U.S. who are hyperactive. I met Mrs. Sikes who teaches 12 of them in Titusville on the 2nd and 3rd grade level. Amphetamines are also used medically to control appetite but most doctors agree that more harm is done to the obese person by relying on these pills instead of curing the underlying problem. Another prescribed use is for narcolepsy which is overwhelming episodes of sleep during normal waking hours.

The physical effects on a heavy user are severe. Tolerance increases rapidly and a person can become dependent in a few weeks time. The pill can be swallowed or it can be injected, thus causing the susceptibility to infection from dirty needles. The feeling of
exhilaration is very pleasant but the following fatigue and depression are so severe more amphetamines are taken to keep the high. There is evidence of liver and brain damage causing a heavy user to become irritable and unreliable, suspicious and suicidal. Hence the term "speed kills". After WW II in Japan it was estimated that between 500,000 and one million persons were regular drug users. About 5% of the adults in some cities were dependent. I believe the high use was to stimulate production in factories as well as to ward off the natural depression at their reduced state. However the epidemic was controlled through elimination of source of supply and increased regulations. Great Britain and Sweden have an amphetamine problem at this time.

Whereas amphetamines act as a stimulant, barbiturates act as a depressant and there are some people who use both, one to counteract the other as they go through their daily life. Barbiturates are used medically to induce sleep, relax tensions, for high blood pressure, and peptic ulcers. Our son Bill was susceptible to high fevers with a cold as a baby and phenobarbital was prescribed as an anticonvulsant. The danger is that although it was prescribed we now have a bottle of it in the house available to anyone who might go through the medicine closet.

These are the major drugs on the legal and illegal market today. However a devoted addict or experimenter in drugs can use glue, gasoline, wood alcohol, paint thinner, paragoric, aerosol cans, aspirin, nutmeg, mace, belladonna, and Jimson weed, and probably hundreds of other unsuspected substances. Alcohol, although a national disaster, does not seem to interest the youthful drug user and therefore I have left out any discussion of it. Since I wrote this I have read that alcohol
is more of a problem on the college campus than marijuana.

Goofballs, yellow jackets, rainbows, red devils, blue angels, sleepers, downers, bennies, dexies, meth, hearts, uppers, pep pills, jolly beans, speed, crystal, smack, scag, horse, H, dynamite(good), lemonade(weak), pot, grass, joint, weed, M, smoke, snow, hay, mary jane, gage, hash, acid. Each of these is a drug and even though they represent a sick habit I find the names imaginative and at times amusing. What makes drug abuse so popular today? Has the Federal Government failed or is it the towns in which we live or is it the family, the parents who must take the burden of guilt? I am not prepared to put the whole blame on any one of these institutions.

In Robert De Ropp's book "Drugs and the Mind" written in 1957, he begins by stating that man's quest since time began has been "Happiness and Serenity." The true theologians and philosophers feel it is a life long search of intense study and dedication with perhaps a reward at the end. However Man has consistently sought to find the quickest short cut possible. De Ropp cites the writings of Beaudelaire in the mid nineteenth century. He was a member of the Club des Hachischins and described one of his hashish experiences in these terms. "Now my imaginary man, the spirit of my choice, has reached that peculiar state of joy and serenity in which he finds himself compelled to admire himself. All contradictions disappear, all philosophical problems become clear or at least appear to be, All is food for pleasure. A voice speaks inside him and says to him, "you now have the right to consider yourself superior to all men; no one knows or could understand all that you think and all that you feel; they would even be incapable of appreciating the good will with which they inspired you. You are a King unrecognized by the crowd and who lives alone in his beliefs;
but who cares? Do you not possess a sovereign contempt that strengthens the soul?

An American, Fitz Hugh Ludlow, was experimenting with hashish at the same time and in 1860 he wrote "The Hashish Eater". As he continued to take the drug his trips downward became more numerous than his highs and this is one account. "But - oh horror immeasurable! I beheld the walls of the room slowly gliding together, the ceiling coming down, the floor ascending, as of old the lonely captive saw them, whose cell was doomed to be his coffin. Nearer and nearer am I borne towards the corpse. I shrank back from the edge of the bed. I cowered in most abject fear. I tried to cry out but speech was paralyzed. The walls came closer and closer together. The stony eyes stared up into my own, and again the maddening peal of fiendish laughter rang close beside my ear. Now I was touched on all sides by the walls of the terrible press; there came a heavy crash, and I felt all sense blotted out in darkness."

In 1821 De Quincey had written his famous "Confessions of an English Opium Eater" and this excerpt is from his first experience with the drug. He had had a severe headache for three weeks and a friend suggested opium. "What a resurrection from its lowest depths of the inner spirit! What an apocalypse of the world within me! That my pains had vanished was now a trifle in my eyes; this negative effect was swallowed up in the immensity of those positive effects which opened before me, in the abyss of divine enjoyment thus suddenly revealed. Here was a panacea - for all human woes; here was the secret of happiness, about which philosophers had disputed for so many ages, at once discovered; happiness might now be bought for a penny, and carried in the waistcoat pocket; portable ecstasies might be corked up in a pint bottle, and peace of mind could be sent down by the mail."
These are, in two instances, rapturous accounts of escapes from reality, and mind altering experiences that thrilled the authors. There are other records even as far back as a Chinese writing in 2700 B.C. But these are isolated accounts and not until the past 10 years has drug abuse become such a problem in this country. Why? In a book entitled "The Drug Beat" the author blamed the soldiers returning from WW II who brought back drug habits with them. I haven't found anything to support this and there were so many other inaccuracies in the book I put it aside. Not recommended reading.

Do you remember as a child having a headache or cramps and having your Mother say "It will pass, dear - just lie down or get busy and do something to take your mind off it!"? They were natural minor unpleasantnesses that were to be endured and forgotten. Then when the ache did go away there was an unconscious pleasant sensation of relief and you had again conquered the problem. Success. Aspirin was not considered necessary for me as a child. Today I use the theory or excuse that one must be clearheaded to carry on the days activities and so my children are allowed to take an aspirin. Have we systematically, under the guise of kindheartedness, allowed our children to be too soft with no feeling of pride in having successfully endured even a simple headache?

On the other hand, how much can one endure? When speaking of drug abuse there are three areas. One group is the adolescent and college age student from quote "comfortable homes", one is the mature social user or mature hypochondriac also probably from comfortable homes, and the third group is the desperate ghetto youth who can no longer endure.
The city ghettos produce a youngster who has played in the street from toddler stage, who has seen such poverty and lack of understanding on the part of his adult world that when a friend says try this he is only too willing to escape. There is a book called "Throwaway Children" by Lisa Richette. She was Ass't District Attorney in Phila. and these are her unbelievable cases. Not all of these children turned to drugs - in fact not many - one nine year old boy made bombs, one boy killed his parents, one 12 year old girl turned to prostitution, but all took a course that led away from the horrors of their own home. As children they had no guidance to teach them how to cope with each problem as it came and so they made their own desperate decisions. Those who turn to drugs must then find a source of income to support their habit which usually leads to a life of crime. They have complicated their original problem and have very little future hope.

I have not done any research on the mature user of marijuana who uses it in place of alcohol at parties. I understand the fad is popular but few statistics are known because, although it is illegal, adults are far more careful than youngsters and are not frequently caught. Those who use amphetamines and barbiturates have not been written up statistically either.

The dramatic concern of today is the adolescent and college age students from that nebulous middle class who in the past were relied upon to be the leaders of the future. They seem to have let us down by turning to pure pleasure.

Pleasure is difficult to measure - in fact the scientists are not sure where or how it is recorded in the brain. An experiment was done on rats in which electrodes were planted in what is thought to be the pleasure cells of the brain. Even hungry rats chose to press the bar
that stimulated the electrodes - some up to 2000 times in one hour for 24 consecutive hours. Drugs seem to stimulate these cells. If this is correct it is not surprising that young people today are using them even to the detriment of their physical bodies. Therefore it would seem necessary to educate the young child (third or fourth grade) to the real dangers of each drug. Children do not usually learn after one lesson. In any subject it has to be repeated and presented in several ways. My own children say they're tired of hearing about drugs but then they occasionally ask questions which show they do not begin to have a thorough knowledge of the effects and results.

A bill granting local districts the right to establish drug abuse and demonstration programs in public schools in New Jersey was passed in February of this year. Dr. Helen Nowlis of the U. of Rochester spoke at Rutgers in March. She has written an excellent book called "Drugs on the College Campus". She feels the adolescent gains status by being daring, and perhaps giving them so many particulars on the effects of the most dangerous drugs only stimulates them to try it.

Mr. Webb of Rutgers Graduate School said he felt many teachers are at war with the students and for them to teach the effect of drugs only polarizes the school further. These are two dangers but certainly education starting in the lower grades would give them background knowledge before they reach the critical age. Dr. Nowlis said "to teach respect for the human... It is not a car to which one adds additives.

On the college level, I read in the Home News in March that Rutgers students in the College of Pharmacy are teaching highschool students and teachers the dangers of drug abuse. They hope to develop a program for business and industry too. This is very encouraging but in the following days paper a Livingston College student involved
in anti-drug activities was kidnapped by three known dope pushers. On reading further articles there were more ramifications to this but society has a long way to go.

After the formal drug education what can the Federal Government, town, and parent do? I believe the federal and state governments are working towards stiffening and making more effective penalties for drug pushers and illegal laboratories. I hope they will not legalize marijuana. It appeals to the young whose minds are impressionable and not yet emotionally stable to cope with all the reactions. One of the dangers of marijuana is that it is the mood in which it is taken that directs its influences.

Dr. Walter Lehmann of Norwalk, Conn. wrote an article in the April Readers Digest on his work as director of a rehabilitation foundation in Norwalk. Over a five year period he has treated 2,000 youngsters. His findings - marijuana can cause muscular incoordination, can distort perception of time and space, impair the memory as well as the ability to make judgements and decisions. Take enough of it and it will produce hallucinations. Other experts found changes in personality functioning, acute panic, and high doses injected into pregnant rabbits etc. have caused dead or malformed fetuses. Not proven in humans but what a terrible chance to take to condone marijuana by legalizing it before all the evidence is in.

Those who come to Dr. Lehmann for help often have noticed frightening changes in themselves. They are withdrawing more and more from reality and its problems. The problems pile up and he can't concentrate so he becomes apathetic and stops trying. Stops growing up! Dr. Lehmann says of nearly 1 thousand youngsters hooked on hard drugs all but one started with marijuana. Did you see Teen-age Mail in the
Home News March 11? The saddest part of this is her parents will no longer help her. Another case of a "throwaway child".

To digress from Dr. Lehmann further - I have often wondered about the articles on the fine community minded family whose children are Boy scouts, A students in school, leaders of their class, and suddenly one of the children is hooked on drugs and unreachable. My own feeling is that for a boy growing up to have to compete with this glorified image of a father who is praised on every side, who is involved with every local committee of good works, and whose friends and influence are endless, is impossible. He may be an A student and a leader but because of age difference when he meets someone he is "Joe's Son". This can be applied to an older brother too. He gets the line "Aren't you lucky to have such a wonderful Father?" None of us can stomach constant reference to someone else's attributes let alone your own Father. You can never beat him! The same holds true for a girl in competition with her Mother. And if her Mother bakes delicious cakes, is young looking and attractive even to her daughter's dates it just isn't fair. You may say this is life but a child needs to develop his own talents in his own way with parents who are at home to back him up as security. Then who is supposed to run the civic projects and be executives of large businesses? There are some men and women who are naturals for it. Can they find time to guide their adolescent children as well? In "Students and Drugs" by Blum and Assos. Mr. Blum says nature abhors a vacuum and if these youngsters don't find enough firm guidance at home they turn to something else - their peers and today it is drugs. Tomorrow it may be something different.

To go back to Dr. Lehmann's article on marijuana he answers the question, is marijuana more harmful than alcohol. No, but most users
of alcohol are well-adjusted adults who use it in a disciplined way to relax, whereas marijuana is used for the purpose of becoming intoxicated and to withdraw socially. Some may argue against that. Dr. Lehmann is distressed that it causes apathy at a time when the adolescent should be most eager to be planning his life. It is frightening for them to see all the problems of the world flashed across the TV screen every day to be solved by them in a few years time.

We, as parents, have perhaps failed to teach the continuity of the past, the excitement of the possibilities of the world today. We are so busy earning a living and getting the food on the table that we don’t stop to reassure them that life is breathtaking without drugs. A small child with time to dream can watch an ant for an hour, completely absorbed and at one with nature. My Mother at 71 is leading a quieter life than she did 25 years ago and she is constantly amazed at the beauty around her in every shape of tree and color of nature. Neither she nor the small child need mind expanding drugs. Can we as, necessarily busy parents help our adolescents to enjoy these same pleasures and make them secure in the wonder of life itself so that they can day by day grow in their own minds, able to cope with each successive problem, find a solution, and reap the rewards of inner satisfaction from their results?

Marijuana scare in the 30’s
More efficient narcotics squads

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