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Conversation with Juan Carlos Negrete

In this occasional series we record the views and personal experience of people who have especially contributed to the evolution of ideas in the journal's field of interest. Juan Carlos Negrete is Emeritus Professor of Psychiatry, McGill University; Founding Director, Addictions Unit, Montreal General Hospital; former President, Canadian Society of Addiction Medicine; and former WHO/PAHO Consultant on Alcoholism, Drug Addiction and Mental Health.

SCHOOLING AND MEDICAL SCHOOL

Addiction (A): Perhaps you could begin by telling us about yourself, where you are from, your family background. How did you become interested in medicine and especially in psychiatry, and what led you to the field of addiction studies?
Juan Carlos Negrete (JCN): I was born and raised in the northern Argentinian city of Tucumán. My grandfather Negrete had arrived in Argentina in the 1880s with a medical degree from Madrid, but it did not entitle him to set up a practice. Instead he secured employment as medical officer for the railways. My father was 18 years old when my grandfather died. As the second eldest in a family of seven siblings, he had to start earning a living and was not able to pursue university studies. My mother was a teacher for many years and reached the rank of school Principal. I attended primary school in Tucumán but then was sent to a boarding school in Córdoba, a military academy. My mother must have thought that it would be good for me, although I was not an undisciplined or problem teenager. At the time I went there, this school provided a very good secondary education in the style of the French Lycées; most of the teachers were faculty members at the University of Córdoba as well. The military discipline made me very orderly, as I have remained all my life.

A: Did you see that as a good thing, or as an imposition?
JCN: I always felt it was a good thing. After gaining my baccalaureate, I went back to Tucumán for my university studies. I decided on medicine without much previous thought. I graduated in 1961, when I was 24 years old. The entering class had 220 students, but the real selection was based on the results in the first-year examinations, and certainly in the second. The class was thus sharply reduced in size, just as was then the custom in France, Italy and Spain. In that relatively small environment it was easy for all to know each other, including the professors and the hospital staff, so that in the fourth year of the 6-year course I was already helping surgeons in their operations, well before my internship. In the fifth year we could attach ourselves to a service of our choice, and go on from there to do other rotations. I chose neurology and neurosurgery, but found that I was really more interested in the psychic function, and so I changed to psychiatry. The chief of neurosurgery, who was a good friend and a real mentor to me, asked jokingly: 'Why would you want to do that, when you could be a *real* doctor?'. I was awarded a Teaching Assistantship under the professor of psychiatry, which I kept for a while after my graduation, but it was only on a part-time basis, because I also worked as a general practitioner in a rural community for a couple of years while looking around for somewhere to go for formal training in psychiatry.

POSTGRADUATE TRAINING AT MCGILL

A: What led you to come to Canada for that training?
JCN: Montreal had hosted the World Congress of Psychiatry in 1961 and Dr Ewen Cameron, the chairman of psychiatry at McGill, was its president. I read the proceedings in Argentina and was impressed by the work presented there. At that time, advanced psychiatric training in Argentina was dominated by the psychoanalytical leadership in Buenos Aires, as it had been since the early 1950s.

A: In the 1950s that would not have been very different from the situation in, for instance, New York, would it?
JCN: Very possibly not. So that if you wanted the best available training in psychiatry you had to become a psychoanalyst, which was not my choice. I was interested in what was going on in different areas that I would not be exposed to in psychoanalytical training. Dr Heinz

Lehmann, at McGill University, had recently conducted the first clinical trials with chlorpromazine in the treatment of psychotics. He had learned of this drug from the work of Professors Delay and Laborit in France.

A: The surgeons were the first to use it, weren't they, for pre-anaesthetic sedation?
JCN: Exactly. Delay was a psychiatrist, and it occurred to him that it might be useful in calming agitated psychotics. Lehmann brought it to Montreal, to the Verdun Protestant Hospital (now known as the Douglas University Institute of Psychiatry), and carried out the first properly designed placebo-controlled study of it as an antipsychotic drug. At McGill there were many other innovative approaches as well: it had family psychiatry, cross-cultural psychiatry, truly a novelty at that time, it had the first day-hospital program outside Russia, at the Allan Memorial Institute, and the first full psychiatric service within a university teaching hospital in Canada, the Montreal General Hospital; and, of course, there was Dr Wilder Penfield and the Montreal Neurological Institute, Professor Hebb in psychology, Professor Sourkes in the neurobiology research laboratories at the Allan Memorial Institute, and so many other major figures I had heard about. I had no doubt in my mind that I wanted to go there.

A: Were there any other considerations that influenced your wish to go there?
JCN: There were some other considerations one could call 'ideological'. I was a young Argentinian university graduate, and if you were that at the time, you could not be anything but a leftist thinker—so I would not even consider going to the United States, and the opportunities in Europe were rather limited for an Argentinian applicant.

'I was a young Argentinian university graduate, . . . so I would not even consider going to the United States . . .'

A: Was it the old apprenticeship system in which you had to learn a speciality by working alongside an older physician who had limited his practice to that area?
JCN: Yes, in Europe it was a rather paternalistic system at that time. My interest in Montreal was also stirred by a conversation with Dr Henri F. Ellenberger, the Swiss psychiatrist who wrote a tremendous treatise on the history of the unconscious. He was then at McGill and visited Tucumán in 1961 with his wife, who was an entomologist. She wished to see something that I did not even know existed: apparently the University of Tucumán had one of the largest collections of butterflies in the world! I was asked by my professor to accompany them on their visit to the collection, and I took advantage of the opportunity to ask him about McGill. My application was accepted and I went there, thinking of only the 4 years of training, with no intention of staying in Canada afterwards; but as happens to so many foreign trainees, my plans changed along the way. At the end of my training I was conducting research that I wanted to continue, and had already decided on a career as an academic psychiatrist. McGill offered me a faculty position as soon as I finished my formal training, in 1967, so I have now been at McGill, as a trainee and a faculty member, for nearly 50 years.

A: Yet during that time you have also been involved with studies in various parts of the world. What led you to branch out from McGill into your work with the World Health Organization (WHO), Pan-American Health Organization (PAHO) and other international agencies?
JCN: I had become interested in cultural psychiatry. As a foreigner in Canada I was 'trans-culturated' myself, perhaps more sensitized than others to the cultural differences in attitudes and behavior. In my senior residency year at McGill I thought of carrying out research on the social aspects of psychiatry and I met Dr Henry B. M. Murphy, whom I knew from his paper on the psychiatric aspects of marijuana use in Jamaica. He was working within the Division of Transcultural Psychiatry. Dr Eric Wittkower was the senior faculty member in charge of this program. Dr Wittkower was a German–Jewish psychiatrist who had gone first to England, and was then invited to come to McGill by Professor Cameron. He was a psychoanalyst, but he founded and for many years edited the *Transcultural Psychiatry Research Review*, the first scientific journal in the field. He and Murphy had carried out a survey of psychiatrists in different countries, asking them to describe the symptoms of patients in whom they would make a diagnosis of depression. There were remarkable cross-cultural differences. In Africa, for instance, the diagnosis rested mainly on physical complaints, on somatization, and it was primarily an agitated state. In Germany and northern Europe, on the other hand, the diagnosis was based mainly on feelings of guilt, remorse, self-recrimination or even delusions of self-accusation, within a context of psychomotor retardation.

COQUEO AND COGNITIVE DEFICITS

A: Where did you fit into that approach?
JCN: I went to see Dr Murphy to propose a study on *coqueo*, the traditional South American practice of chewing a wad of coca leaves together with some alkaline material to facilitate absorption of the coca alkaloids. I had known about this practice because in northern Argentina, for the sugar-cane harvest, many migrant workers come from Bolivia bringing their supply of coca leaves with them.

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A: Was this to increase their endurance at work?
JCN: Well, they *said* so. Traditionally, manual workers were regarded as entitled to chew coca. Most women did not do it. It was socially acceptable among men going into the sugar-cane fields, or the potato fields, or down into the mines—no highland worker would go down into the mines without his pouch of coca leaves!

A: So the justification offered really was to increase work endurance?
JCN: Yes, that was certainly one of them, and the adrenergic action of the drug justified that interpretation. Men also chewed when they went hunting to stay awake and go for a longer time without food. In pre-Hispanic times the Inca couriers were given coca leaves to chew to enable them to run long distances at high altitudes. I told Dr Murphy that I was interested in knowing the implications of this practice for cognitive function, for many people felt that the mental functions of chronic coca chewers are not very sharp, that the women have to look after their business affairs because the men are not very alert. They seem bright enough as children, but after 20 or 30 years of coca chewing, when they are in their 40s, they appear dull. I thought that there was justification for studying cognitive performance in relation to the chronicity and total amount of coca use. He asked how I proposed to do this, and I said it could not be conducted in Peru or Bolivia because there was little support there for research that could put into question such an entrenched traditional practice. So I went to the north of Argentina, to the site of a large sugar company, and gained authorization to interview migrant workers from Bolivia. I wanted to gather a sample of non-chewers as controls, but could not find a well-matched group. The non-chewers were more likely to be *mestizos*, not purely native, and they tended to have more education than the chewers, most of whom were illiterate, so I compared people who chewed less often with people who chewed every day. We had to analyze the data in relation to frequency of chewing, rather than to the amount chewed per occasion. Also, we had to limit the age of participants to 40 years, because we were looking at cognitive functions that could be affected by age [1,2].

A: That might have been affected by nutrition, or a variety of other environmental factors?
JCN: That is true, but I managed to control for all those factors by gathering samples that were quite homogeneous. I needed to put together a battery of cognitive tests suitable for people who could not use pencil and paper, and who could not read. I managed to do this with the help of Dr Brenda Milner, the pre-eminent neuropsychologist, who had come only recently to the Montreal Neurological Institute. I conducted the fieldwork in 1966, when I was still a resident, during a 3-month leave I was allowed for carrying out this project. I returned to Montreal to analyze the data, write up the paper and take my specialization examinations, and then McGill offered me a faculty appointment, so I did not go back to Argentina as I had originally intended.

A: Was that project connected in any way with PAHO or WHO?
JCN: Yes, it was financed by a grant from WHO that Dr Murphy obtained on my behalf, and the paper reporting the findings was published in the *Bulletin on Narcotics*.

CROSS-CULTURAL ASPECTS OF DRINKING

A: Did it lead to further studies in cooperation with other international agencies?
JCN: Yes, indeed. I participated in a PAHO multinational study of the epidemiology of alcoholism, financed by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), and run from Washington under the guidance of Dr René Gonzalez, who was then the WHO/PAHO mental health consultant for the region. He invited me to take part, together with other collaborators from the various countries involved.

A: Was the cross-cultural aspect of special interest to you?
JCN: Yes, I was interested from the beginning in the cultural expression of alcoholism, having read Jellinek's book, *The Disease Concept of Alcoholism* [3], in which he describes four distinct patterns that he thought were not distributed equally across cultures. Indeed, I had observed differences in the behavior under alcohol of the two groups with which I was familiar, middle-class people in Argentina and middle-class people in Montreal. I thought that drunkenness under certain circumstances, such as during celebrations, was much more permissible among men in Montreal than it was in Argentina, which shared the Mediterranean tradition that it was all right to drink but not to appear drunk. Of course, that was in my youth, and attitudes may have changed since then.

'I was interested from the beginning in the cultural expression of alcoholism, having read Jellinek's book, *The Disease Concept of Alcoholism* . . .'

A: Would it not have been true, even at that time, that within Argentina itself there were big class differences in acceptability of drunkenness?
JCN: Oh yes, very much so. Drunkenness in men was an expected behavior among the lower social classes. What I was describing applied to the middle-class society that I knew more directly. I began research in Montreal when I was training at the Veterans' Hospital, which at the time was treating mainly ex-soldiers from the Second World War. There were many alcoholics among them; in fact, it was the hospital with the largest number of alcoholic patients within the McGill psychiatric network. That is why I applied to train there. In Montreal's bicultural milieu I was able to gather data on large groups of patients with English Protestant and French Catholic backgrounds for the purpose of cultural comparison. I made sure that the alcoholism parameters of the two groups were equal in terms of chronicity and symptom severity. Most of those patients had been in their 20s during the war so that, in 1964, when the data were collected, they were in their mid- to late 40s. I found some clear intergroup differences in the social consequences of alcohol abuse: among the English Protestants there was a higher likelihood of divorce, and of course divorce was less acceptable to Catholics at that time. Nowadays, religious pressure would not really be a factor. The Anglo-Protestants were also more likely to have been picked up by the police for public drunkenness offenses; they had become unemployed at an earlier age and, more often than the French Catholics, had been given a diagnosis of personality disorder [4]. That was the kind of thing I was interested in comparing in alcoholics, and addicts in general, across different cultures: the aspects that gave cause for social concern.

A: Did that experience alter in any major way your concept of addiction? Did the importance of the cultural factors alter, in your view, the importance of the purely pharmacological role of the drugs?
JCN: No, it did not. Because of my medical background I had always seen the biochemical component as being important. You would probably remember Dwight Heath, the anthropologist from Brown University. He studied the Camba Indians in Bolivia, and he said that among them there was no alcoholism 'problem' because everybody drank in the same way, so that nobody was identified as 'alcoholic'. I thought that he was right, in the sense that there was no stigma, no perception of social deviance related to drinking, and although I endorsed his views on social mores and the notion of deviance I thought he should have paid attention to the question of the effects of such a toxic drinking pattern on the brain. There were no alcoholic beverages in the Chaco jungle; the Cambas were buying barrels of pure ethanol and mixing it with water to drink in their frequent parties, when all participants would become thoroughly intoxicated.

A: Did this have any relation to the pattern of use of hallucinogenic plant materials that has been described among Indians in the Amazon jungle?
*JCN: Y*ou are referring to *ayahuasca*, a hallucinogen used under the guidance of shamans for healing and ritual purposes, but the use of alcohol by the Camba was purely for the purpose of social celebrations, in which everybody got drunk, including women and children.

A: Did that population in fact show physical consequences of their heavy drinking?
JCN: Well, they had a very high rate of early death; the life expectancy among the Cambas at the time was in the late 30s.

THE BIOLOGICAL EFFECTS OF SUBSTANCE USE

A: Could that have been due in part to infections, accidents, malnutrition, and so on?
JCN: Everything, but alcohol was certainly responsible as well. At first I was focused almost exclusively on the social and cultural differences in the patterns of alcoholism and other addictions in different populations, but later I became increasingly interested in the pharmacological and neurobiological processes in the brain of the individual user. In some ways I regret this narrowing of my view of addiction, but I think the social and cultural concepts have to be enriched by an awareness of the neuropathological consequences of drug-using behavior. These substances, after all, have important physiological effects.

'At first I was focused . . . on the social and cultural differences . . . in different populations, but later I became increasingly interested in the pharmacological and neurobiological processes . . .'

A: You are talking here about physiological and pathological consequences of drug use. How does that relate to the present-day emphasis on neurobiological causes or mechanisms of addiction?
JNC: It appears, perhaps, an oversimplification to think that a person can play fairly safely with alcohol or another drug until the moment when a switch goes off in the brain and he or she begins using the substance in a compulsive, out-of-hand way; but there *is* a process going on that results in the loss of the ability to use the substance in a fully voluntary way. To me it is a pity that scientists who look at addiction only from a behavioral or

social point of view do not recognize this, that a person drinking in excess at age 25, if he continues to do that, at age 35 or 45 is no longer the same person, and does not have the same brain, so you can no longer apply the same concepts to understand his behavior. Ignoring the role of brain pathology seems to me a shortcoming in the otherwise meritorious work of many scientists in the non-medical, non-biological areas of our field of interest.

HARM MINIMIZATION

A: Has your clinical experience, and the evolution of your thinking on how the social and cultural factors interact with the pharmacological and neurobiological factors, led to any change in your views on appropriate methods of treatment or prevention?

JCN: If I think that an addicted person has changed so that he or she no longer responds to alcohol as he or she did when not yet dependent on it, if I believe that he or she has developed a substance use behavior driven by cues, pathological reactions in the brain that make him or her behave in such particular ways, then of course I have to think in terms of what can be done to interfere with that process, to help the addicted person to not react in that way. I have come to believe there is only one way of doing it, and that is to help the person to abandon completely the use of the substance, and become desensitized to the cues. I know that in many cases this is not realistic, because we do not have methods that can guarantee that outcome. However, certain scientists have started to think that the process of addiction does not really matter, that all that matters is to avoid some harmful consequences that can be prevented. Certainly that is important, but in my view the scientific work aimed at tackling the problem of addiction itself should not be relinquished.

A: Are you saying, in other words, that the present debate about harm reduction versus abstinence as treatment goals is really a matter of deciding what is feasible in a given case, but not necessarily what is the ideal goal?

JCN: If you do not care about the development of a neurobiological condition that rules the behavior of that person, then you are abandoning the most important aspect of the intervention that will help that person. I think it is certainly meritorious for a therapist to say 'let's offer a way of helping this person not ruin himself or herself completely, and if possible, not to have consequences for others'; but to make that the mainstay of an approach to addiction is to me quite unambitious and sadly disappointing.

A: In other words, if in a given case it proves quite impossible for the person to stop using the drug harmfully, there is a place for trying to keep the harm to as low a level as possible, but that should not be seen as an ideal approach.

JCN: Of course. Harm reduction has to do with certain practices, with certain costs of bad use, that should be a legitimate target of any helping approach; but the most effective form of harm reduction is cessation of use. If we do not continue to pursue that goal, we are short-changing the people who need to be helped.

A: As you look at the present range of opinions, theories, approaches in this field, each of which contains some element of truth, what do you think are going to be the important future developments that may come from connecting together the present approaches?

JCN: I do not want to sound overly optimistic about it, but I think that eventually there will be a rapprochement between those who concentrate on a community-based approach trying to attract the most severely affected people into some kind of care—which is certainly a most humane concept—and those who are trying to find ways in which the harmful behaviors can be actually arrested. I believe that all addiction workers would agree on the merits of the latter goal. It so happens, because of institutional and organizational reasons, that if a program adopts a particular approach for which it is funded there is little incentive to change that approach. For example, if you are funded to set up a program to induce drug users to come and inject themselves under supervision and clean conditions in a clinic, rather than on the street, you will probably concentrate your efforts on finding more and more individuals who will come to the clinic to do that. Efforts to encourage them to stop intravenous drug use may take second place to maintaining the approach that you developed to attract them, so there is a risk of inappropriate recruitment simply because numbers are needed to ensure funding. That also applies to methadone maintenance clinics, where many people are included who do not really fulfill the criteria for permanent opioid maintenance.

A: Do you fear that preoccupation with getting sufficient numbers to answer the questions originally posed may interfere with giving more complete treatment to some who may be good candidates for it?

JCN: Yes, I fear that those institutional interests may prevent the proper exclusion of participants who should be recruited instead for another stage in the treatment process.

PHARMACOTHERAPY

A: What do you see as the place of pharmacotherapy in the treatment of alcoholism, cocaine addiction, etc.? Where does it fit into the whole treatment picture, in your view?

JCN: Certainly we would be very fortunate to have pharmacotherapies that, at a certain stage in the process, could facilitate the attainment of the final goal. Unfortunately, we do not have highly successful pharmacotherapy for addictions. That also goes for methadone, which is an effective treatment for many people. However, only about 40% of people who start a methadone substitution program continue on it 12 months later, and among that 40% as many as half continue to inject opiates, one way or another. So it is good for a minority, but for that minority it *is* good, and we continue to use it. We have the same situation in alcoholism. The advantage of giving naltrexone or acamprosate or baclofen or disulfiram is relatively small. It is about 27%; that is, for every person who stops drinking without it, there will be 1.27 people who stop with the addition of pharmacotherapy. Helpful, but not very impressive.

'Unfortunately, we do not have highly successful pharmacotherapy for addictions.'

A: How long do you think the benefit lasts? Such studies have generally been of relatively short duration, have they not?
JCN: Most of them, and that is a major issue because addiction is a recurring problem. However, in the short term, if we help a person to drink less with naltrexone, or stop completely for a time, as has been claimed for acamprosate, we do have a little leverage, and for that reason it should be offered. As a physician and psychiatrist in our treatment centre, where most of the work is conducted by non-medical personnel, I am responsible for deciding who receives pharmacotherapy and I do use it, but I do not think of it as the key component of our intervention.

A: Was that not the real conclusion of the large multicentre studies such as the MATCH (Matching Alcoholism Treatments to Client Heterogeneity) study?
JCN: Yes, that there should be a combination of pharmacotherapy as an initial aid, and behavioral change by psychological and other means. Among the patients who maintained sobriety the longest, however, the highest proportion were those who were induced to join Alcoholics Anonymous (AA) and continued with it. At the 3-year follow-up, the best rate of maintained abstinence was in the people who had the highest degree of involvement with AA.

A: Is there not a problem, however, with interpreting that finding? Could it not be a self-selection of those who were already the most strongly motivated to stop drinking?
JCN: Quite possibly. In many alcoholism treatment programs exposure to AA is almost obligatory, but the majority of patients who are so exposed to AA do not continue with it after discharge. Those who do have somehow experienced an ethical and moral conversion, they want self-improvement, to become more honest, more responsible and, if they are so inclined, believe that they will be helped by a higher power; so these may indeed be self-selected. Many become attached to the program because of the peer influence of other people who become their role models, who inspire them. Of course, the fact that you can resort to such a support at any time, anywhere, is an advantage that no professional service can offer.

A: What public health significance do you attach to the now well-demonstrated fact that an increase in price or taxation can decrease consumption, even among people who are addicted?
JCN: The data certainly indicate that, but I suppose that among those who have experienced neurobiological alterations associated with addiction, the effect of price will be a secondary influence. You see that with heroin, for example. If temporary scarcity drives up the price the addicts will still try every possible means to get their dose, because nothing else in their life matters as much. It happens sometimes with alcoholics as well: if circumstances force them to it, they will drink non-beverage alcohol instead.

TRAINING

A: You have also been involved extensively in education and training in the field of addiction treatment, have you not?
JCN: Very much so. For some time I was the only faculty member in the Department of Psychiatry at McGill who was working full time in addictions. It was my responsibility to organize the specific clinical service and the education and training programs for medical students and residents.

A: Did you have any residents who wanted to go into the addiction field as a major part of their career?
JCN: I always had some residents and fellows who chose to work under my guidance. The regular, now compulsory, psychiatric rotation in addictions came later. I am still active in their training, and continue lecturing at continuing medical education (CME) events. I like teaching: it is a tremendous incentive to learn, to keep well informed and be eclectic. Medical education has been important in my international work as well; most of my PAHO assignments in Latin America were to participate in educational events, and I still do that. I recently received a grant from the McGill Institute of Health and Social Policy, which had called for submissions from members of the faculty to go to Latin America to 'train the trainers'. I put together a proposal for a program to train and encourage mental health professionals to

develop integrated dual-diagnosis services within the psychiatric facilities in northern Argentina, where I knew whom to contact as valid local partners. Medical education has indeed been a major part of my work throughout my now long career.

'Medical education has indeed been a major part of my work throughout my now long career.'

A: With such a long and varied experience, both in clinical practice and in medical and specialist training, have you formulated any advice that you would give to a young professional who is considering a career in the addiction field?
JCN: Prospective addiction professionals should be willing to acquire a broad knowledge basis, one that reaches across scientific disciplines, for addiction represents the archetypical bio-psycho-social problem. Addiction specialists need to understand the complexity of factors that underlie a behavior which the less informed naively perceive simply as socially learned self-indulgence. If they are clinicians, they must learn to accept and tolerate dealing with a condition that often proves to be chronic or recurrent. However, lest such comments discourage them, I am in a good position to attest to the fact that addiction work yields much professional satisfaction and can be as rewarding as the most prestigious health areas.

THE CHANGING FACES OF ADDICTION

A: Have you found a greater receptivity of medical faculties towards dual-diagnosis activities in recent years?
JCN: Very much so; particularly in relation to the widespread use of drugs, especially among the young, which is an issue that worries many people now. When I left Argentina, nearly half a century ago, there was practically nothing apart from alcohol that gave rise to addiction problems. We knew of a few rare individuals who used psychostimulants, appetite-reducing pills, some barbiturates, ephedrine-based nasal sprays, things of that kind, but now the drug scene in Argentina is the same as everywhere else.

A: Is that happening elsewhere, from what you can see? Are the patterns of drug use becoming much more similar all over the world, even in non-industrialized countries?
JCN: Definitely. The cultural differences have blurred almost completely over the past 30 years. Youngsters in Latin America now do the same things as youngsters in Canada or the United States. They take some alcohol prior to going out and then continue using alcohol along with ecstasy, cocaine and other drugs throughout the night.

A: Is that changing the face of addiction? Do you see fewer cases of dependence on a specific drug and more cases of excessive and indiscriminate use of a whole mixture of things?
JCN: Yes, the model that we learned with older alcoholics does not apply well to young drug users now; theirs is a pattern of rather chaotic abuse, the pursuit of intoxication with several drugs at the same time, any kind that happens to available at the time. As a result, many people working in the addiction field, in Latin America at least, think of such drug abuse primarily as a behavioral problem, and they tend to put these 'badly behaved' youngsters in detention facilities with rather strict disciplinary controls.

A: Does the distinction between 'soft' and 'hard' drugs have any meaning now?
JCN: Here, in North America, practically every time that reference is made to 'soft' drugs they are talking about marijuana. There may be a few others that are regarded as not 'hard', such as benzodiazepines or some prescription opiates; all the rest are viewed as pretty much comparable with respect to problems. Lysergic acid diethylamide (LSD) may be a special case; we rarely see people who are 'hooked' on LSD, because the effects disappear if it is used too frequently. Those few individuals who use LSD or other psychodysleptics regularly over a long period of time are usually mentally unwell, classic cases of comorbidity, but they are not primarily addictions as we see with cocaine or opiates or alcohol.

A: What has been your experience with marijuana in relation to what you see as true addiction?
JCN: At our addictions unit in Montreal, at any given time we have between 420 and 450 people in treatment. Up to 10% of those have come for treatment primarily because of marijuana, and they are as dependent on it as anyone addicted to alcohol or tobacco. They are not using hashish or hash oil, as was the case in the past; they are simply smokers of marijuana, which is now a very potent drug, not like the preparations with 1 or 2% tetrahydrocannabinol (THC) that we used to see many years ago.

THE PRESENT STATE OF ADDICTION RESEARCH

A: What are some of the concerns that you have about current research in addictions?
JCN: I regret the separation that has become so marked between medical–biological research and the psychological–behavioral approaches that play such a large part in therapy, including the therapeutic communities. There seems to be a dissociation in views and interests between the two groups, and even some enmity. The

social behavioral group particularly seems to feel that the work of the neurobiological group is of no relevance.

A: Does that not go both ways? One has the impression that the granting agencies have become so enamoured of the neurobiological approach that there is not a great deal of support for behavioral studies.
JCN: I have been on the review board of a major granting agency, and my experience has been that submissions for behavioral studies have a harder time gaining approval for funding than do biological studies. One problem is that proper control is harder to design in behavioral studies; the processes cannot be measured with the same degree of precision as in biological laboratory studies, and that is a major issue for granting agencies. They look at psychotherapy work as less scientific—yet psychosocial approaches play the lead role in therapeutic interventions.

WHAT IS 'CURE'?

A: Is there a stage, in your view, at which an addicted person can really be called 'cured'?
JCN: I have seen many people over the years who have been able to leave their addiction behind, completely. The first requirement is that you become convinced that you have a problem that really *must* be tackled. It takes a great deal of work to get to that stage. The next requirement is to realize that the solution involves a major change in your life-style, that you can *not* continue doing what you have been doing; and there is a third stage in successful therapy that I have seen time and again, when the patient no longer *wants* to do what he or she has been doing.

A: Does that occur spontaneously?
JCN: In some people it can happen spontaneously, at a moment when they take stock of their life and situation, and decide that they do not want to have the problem any more. A further stage in the recovery comes with the realization that all the justifications used for drug use are not sufficiently valid, that it is possible to handle their work, stress and other life problems in a different way. There are cures, in that sense. Of course, recurrences are one of the defining features of addiction. A person who appears 'cured' may go right back to where he or she was. The addict's brain appears to have been altered so that renewed use of the drug causes in that person a different effect, one that is more harmful than in a novice user. We must keep that in mind when we talk of cures.

A: What should a therapeutic program include, then, to help protect against a stress-induced relapse in someone who has apparently recovered normally controlled behavior?
JCN: As you know, most therapeutic programs include stress management approaches as a form of relapse prevention. Learning to anticipate and forestall the effects of stress is very important in rehabilitation. I think that North American treatment programs tend to offer too brief an exposure, often only 3 or 4 weeks, to the training needed to prevent relapse. I do not believe in that approach, and in our own service we have always kept patients under treatment for 1 year, no matter how well they were. Some patients leave earlier than that, with our consent and approval; some quit treatment before completion; and a few stay a little longer. The 1-year term is arbitrary, of course, and as we do not have data on those who discontinue contact with us, I could not tell you how they compare with the program completers.

'. . . in our own service we have always kept patients under treatment for 1 year, no matter how well they were.'

A: What do you make, then, of the various studies that have been reported on brief or minimal interventions?
JCN: You can often achieve an important change with a brief intervention, but in my mind the real purpose of the prolonged intervention is to deal with the problem of relapse, and facilitate the important changes in behavior and emotional adjustment that occur only over sufficient time. An interesting feature of Griffith Edwards' pioneering study of brief intervention [5] is that all his alcoholics had a spouse or a companion with whom they had a stable relationship, an obvious selection factor. In order to keep informed of how the patients were doing, the spouse/companion had continuing contact with a research social worker once a month, so that the intervention was not really limited to the one counseling session. The brief intervention developed by Martha Sanchez-Craig [6] to encourage alcohol abusers to drink sensibly also works well for some people, and we have adopted it as an educational and motivational tool for certain patients who are not prepared to pursue the goal of abstinence. Those who fail to modify their pattern of abuse through this method, of course, become candidates for other options.

A: What are the criteria that identify suitable patients for that treatment approach?
JCN: Mainly previous experience, but also the severity of the problem. If past experience with that patient shows that treatment effects do not last, then we would not use that approach again; but if the previous responses have been long-lasting, then we do. In any case, there is always a primary therapist who keeps in touch with the person, to see how he or she is doing. The contact is thus maintained over time, even though the intensive intervention

is short. For us it is important to reassure the patient that there is immediate help available if the need arises.

A: A final question of a very different nature. With such weighty issues occupying your thoughts day after day, you must have ways of relaxing and enjoying some leisure. I know you have been a keen horseman; do you still enjoy riding? What do you read, what music do you listen to? What shows do you enjoy?

JCN: My father used to run a large cattle ranch (*estancia*) in Argentina, where I enjoyed horse riding from a very young age. After acquiring a farm here in Quebec, I imported horses of the same Peruvian Paso breed we had over there. Alas, the last one died a few years ago and now I ride only occasionally, and on other people's horses. Despite my 'tropical' origins, I very much enjoy winter activities in Canada; snow-shoeing in the farm's woodlands is one of my favorites. As a teenager, I was unsuccessful in my bid to join the school choir but, undeterred by my poor singing, I have remained a music lover all my life. I like folk music from all parts of the world, but as I grow older I find myself preferring the classics; their timelessness is reassuring. My recreational reading includes fiction, but I am more attracted to good travel or historical writing and I am biased in favor of books written in the languages that I know, for I prefer the original author's version rather than a translation.

A: We have covered a great deal of very interesting ground. Thank you very much indeed for this stimulating and challenging discussion.

Note

The opinions expressed in this interview reflect the views of the interviewee and are not meant to represent the opinions or official positions of any institution or organization the interviewee serves or has served.

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