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NANCY CAMPBELL

SUBJECT: ADDICTION RESEARCH

INTERVIEWER: NANCY CAMPBELL

INTERVIEWEE: HERMAN JOSEPH

SOURCE FILE: 01 - HERMAN JOSEPH 1.MP3

LENGTH: 128 MINUTES

NANCY CAMPBELL: Please start with your pathway into the field. Can you tell me if you had any experience with addicted persons or the subject area in your early life?

HERMAN JOSEPH: No. I did not have experience with addicts as such. I was brought up in a very sheltered lower middle-class or working-class background in New Jersey. I can

safely say that I did not even know about marijuana as a child or teenager. All of this changed when I became a probation officer. I had considered teaching, but then I went into a high school on a job-related matter as a probation officer. After completing interviews in the school pertaining to one of the students, I realized that I would not be happy working with this particular age group (teenagers and younger), or with the kind of bureaucracy that you encounter in the school system. I don't think I would have passed the physical exams because I was born with a malformed right eye. As a result I am legally blind in that eye. Also I was born with an Erb's palsy on my right arm, which I cannot lift, and also some skeletal impairments that affect my balance. In fact I think I am right handed, but there is atrophied musculature, resulting in limited use and deformity on the arm and shoulder. When I went to kindergarten, my impulse was to write with the left hand because I had very little control over my right arm. The kindergarten teacher took the pencil out of my hand and put it into my right hand and insisted that I write with my right hand. I think that the strategy was that I learn to use my right arm. However, to this day, writing for me is difficult and my handwriting is sometimes hard to read especially in extended passages. I had a lot of problems

taking notes in college, writing exams and term papers.

But let me say this. The only thing that my physical difficulties did was make it so I persevered to achieve something in my life. My life was such that I had to go into a job that I could do physically. I always had ambitions beyond that, which were a disaster. One of them was that I had the illusion that I wanted to be a concert pianist. I love music, so my parents gave me piano lessons as a child to strengthen my arm, which kept falling off the keyboard. My mother would sit with me. I remember once that she interrupted a Monopoly game I was playing with friends and announced that I had to practice and threw everybody out. The piano was not only discipline but also exercise so that my arm would gain coordination and strength. My parents couldn't afford a piano, but they sacrificed and bought a second hand upright from the super. I became somewhat proficient, but I sometimes I could not play a piece through because my arm would tighten up, and I would lose control, it would spasm. If you're going to be a musician with any kind of dexterity on an instrument, you really have to use your whole body. My father was a good athlete and brought me to a gym but there were no trained physical therapists at the gym so that did not work out too well.

What this did, I felt, was to give me some kind of empathy for people with problems, disabled people, or people with impairments. I don't consider myself disabled, but I realize that I do have some physical impairments. People with disabilities and impairments are faced with a stigma, and certainly I was faced with stigma as a child.

NC: How early in life would you say that you started thinking in that way?

HJ: Very early. When I was about three or four, my parents registered me in a summer play group for toddlers at a local YMHA. I was the only child with a major impairment and disfigurement that was noticeable. I remember to this day my reaction of fear and terror when the counselors began to ask the children to remove their shirts since it was a hot day and we were on the roof of Y. I realized that my disfigurement would be exposed to the whole group. I stood there terrified in the middle of a circle of children. When the counselors pleaded with me to take off my shirt I resisted with my arms folded in front of me and my head bowed resisting their efforts. For me as a toddler it was a horrific incident. I did not take off my shirt nor did I

allow the counselors to touch me. However, this incident immediately set me off from the rest of the children and, in a sense, isolated, alienated and stigmatized me in a very fundamental way. Subsequently, I never mentioned the issue of stigma, disfigurement, impairment, or disability to anybody, but it was always on my mind. I never spoke about it outwardly, but it was always there. It directed my life.

Stigma affects every aspect of your life. It is like the invisible worm in Blake's poem, "The Sick Rose." I didn't use drugs, but my physical conditions certainly contributed to my awareness of stigma within the methadone population, and how this reshapes your perceptions and your life. My awareness of stigma and how it affects methadone patients was also the subject of my dissertation, "Methadone Medical Maintenance: The Further Concealment of a Stigmatized Condition."

NC: When were you first introduced to the subject of drug addiction?

HJ: I was introduced to the subject of drugs—and heroin addiction in particular—when I became a probation officer in the criminal or misdemeanor courts of New York City in the

1960s. I thought that would be a good job for me as I was interested in social issues of the city. I was in the lower courts and the crimes I dealt with were non-violent misdemeanors. I would be able to get an advanced degree, which I did in sociology, social research. I went to school at night. About six months after I became a probation officer, there was an examination for supervisor, and I passed the exam. However, the authorities wouldn't let me supervise other probation officers since I'd only been there for six months. The department started a small narcotics unit, and I was placed in this special unit.

NC: What were the main problems you dealt with on the job as a probation officer?

HJ: Heroin addiction was the major issue. What we had on the caseloads were problems with heroin addiction, some pill use, and excessive alcoholism. Intractable intravenous heroin use was by far the major issue. In New York City prior to the introduction of methadone treatment, death by narcotism or overdose was the number one cause of death for young adults within the age group of 15 to 35 years.

So I had to learn about theories of addiction. The probation

department sent me to Beth Israel Medical Center for two to three months to learn about addiction. Beth Israel, in their Morris J. Bernstein Institute at 18th street and 2nd Ave, provided withdrawal services to heroin addicts. I was trained by two really wonderful people, a psychiatrist, Dr. Harold Trigg, head of the Beth Israel drug detoxification service, and a social worker named Leon Brill. They were talking about character and psychological disorders as the cause of a sustained addiction. This is how addiction was then classified--as a character disorder and addictive personality. Now I was sitting in the class with about five others, thinking they were describing me. I'm a slob—disorganized with papers. I procrastinate. I have a lot of problems with organization. I felt somewhat alienated and anxious because of my physical problems. However, I never took drugs. I felt that what they were talking about applied to a lot of people who were not addicts, so something in their argument was missing. They were not discussing the metabolic theory of addiction and the unique narcotic craving that is a major cause of relapse and the physiological basis of an extended addiction.

I was assigned in this unit to the South Bronx and East Harlem. What I saw was a generation of young Blacks and

Puerto Ricans who were addicted. They were first or second generation in New York City. I was first generation in New Jersey, brought up in working class or poor neighborhoods some like the Lower East Side. What I saw on my job to a degree were Hispanic and Black counterparts of my Jewish, Irish, and Italian friends when I was a growing up. But there were no drugs in the neighborhood that I was aware of when I was growing up, and here there were drugs. So I felt something was amiss in the presentation of the theory of addiction that was promulgated at the time by the medical, psychiatric, and social work professions and as presented by Trigg and Brill. The availability of drugs was a factor that leads to addiction among vulnerable teenagers.

Then the therapeutic community movement started under Mayor Lindsay. Since I was a narcotics probation officer, I was sent to a meeting of the Department of Health to hear Dr. Efrain Ramirez, the first NYC narcotics commissioner who set up Phoenix House. When he was talking about cures from treatment in therapeutic communities, I raised my hand in the meeting and said that they relapse. I kept statistics on what happened to my probationers after they left the therapeutic community. This did not sit well with either Ramirez or the social workers who were at the meeting. I

believe that the city authorities were concerned about my statement and attitudes and reported this back to the Probation Department but nothing happened to me and I was allowed to keep my assignment. The probation commissioner at that time was a Mr. Wallace and the assistant commissioner was a Mr. McDivit. For some reason, both respected me and allowed me considerable freedom to develop programs in the probation department.

I was a probation officer at the time when Synanon first established an administrative facility at 37 Riverside Drive. They invited me to an orientation. At first I thought it was great because at least they were recognizing that a different approach was needed besides talk therapy. They were taking hopelessly addicted people out of the community and sending them to their program in California. I cooperated since it made sense to me at the time to remove the addicts from the source of heroin and reeducate them through behavior modification and other methods. This was before I became aware of Dole and Nyswander's research at The Rockefeller University. I went to Connecticut where Synanon established a small therapeutic community, and I saw they had different types of groups. Groups were like the chicken soup of psychiatry and self help. Anything ails you,

you go into a group. I was taken aback by encounter sessions and the type of aggressive groups that they advocated, but I thought that maybe this was an approach that was needed. I was also impressed by the organized, clean-cut image that the residents of Synanon presented. These beliefs were short lived once I found out the process also involved humiliating tactics employed to bring about behavioral change and conformity in thinking.

Nevertheless, I organized some of my probationers in New York to go to Synanon in California since it sounded better program than anything that existed in NY. It cost a thousand dollars for somebody to get into Synanon. One or two of my probationers from middle-class backgrounds were able to afford the induction fee. Lo and behold, after I sent them to Synanon, a month or so later I saw one in the detoxification unit at Beth Israel. He left Synanon and relapsed, as did others. So I began to become very, very suspicious about their propaganda, lack of research, and the effectiveness of the whole TC movement.

It sounded great. It feeds into all of your good values. We’re going to teach addicts self control, how to be neat, clean, prompt, rigorously honest, and they’re going to cure

their addictions. Also the addicts that went through the program would be models for others and would help administer the programs. You can't fault that. In reality, the programs didn't work for the vast majority who entered. Maybe some people responded, but they appeared to me rigid in their ideas, perception of the world, and human nature. The government spent millions of dollars on this, but TCs were only able to treat a small number of addicts because of space limitations and expense. From a public health view TCs were not cost effective because of the high dropout and relapse rates. The discharge data that I collected from my probationers who entered the programs were overwhelmingly negative since most relapsed. However, there were a few exceptions of persons who benefited.

NC: How much of a caseload would an individual probation officer have carried at the time?

HJ: They would have around 50 at the time, but I was in the special narcotics unit and we had around 35. I was the probation officer for all the probationers who came into this special unit in the South Bronx and in East Harlem. I was an active probation officer. I did a lot of field work. I went into the neighborhoods and visited the probationer's

homes. I would take small bottles with me to administer urine tests in the homes and then drop the bottles off at a local drug store. The Department of Health would pick up the urine specimens, test them, and send me back the results. This was really intensive supervision. I would go to 117th Street and Fifth Avenue and find the probationers who relapsed and take them by taxi down to the Bernstein Institute of Beth Israel to withdraw. The location at 117th street and Fifth Avenue in the late '60s and '70s was notorious. It was a tenement neighborhood with crowds of addicts milling about in the streets. I did not feel threatened since my probationers knew that I would take them to the hospital. I would also make arrangements to send them to the US Public Health Hospital in Lexington, Kentucky. I would send them wherever they could get help. We also had a social worker stationed at an agency called the Washington Heights Rehabilitation Center located on the upper West Side of Manhattan. They rarely reported as directed and our results were a disaster at the end of two years. They relapsed at the same rate of people coming out of Riverside Hospital or the Lexington Public Health Service Hospital. Both institutions had over 90-95% relapse rates, depending on the studies.

NC: Were you required to keep track of what happened to people, or did you just start doing that on your own?

HJ: I had to follow them since they were under my supervision and the Probation Department had entered into a contract with the Washington Heights Rehabilitation Center. The social work part was under the direction of Leon Brill, who also trained me. The social work staff consisted of white and one Black female social worker and nurses and the clientele consisted of young Latino and Blacks males from the ghettos. The nurses functioned as counselors. I was a white male so the ethnic and gender mix was wrong for the population, but I did try to understand the problems which I saw in the ghettos.

However, I was also curious about the disease of addiction. I wanted to know what happens to addicted persons over time, and I wanted them to succeed. I really didn't understand what was happening in front of me because of the way I was trained in the character disorder psychological theory of addiction. But I also incorporated the influence of poverty, social class, and high unemployment, leading minority youths to experiment with drugs in the ghettos. In the late 1960s and early 1970s there were few job opportunities for young

minorities. Manufacturing jobs on which previous generations of immigrants depended were leaving the city to be replaced by office jobs connected to the newly emerging information-based economy that demanded education and skills.

There was the anti-poverty movement, and so I enrolled the probationers in an anti-poverty job training program where they would learn building maintenance. They would learn a little spelling, arithmetic, and most important work with mechanical tools. The anti-poverty agency was supposed to place them in jobs, which they rarely did, at least for the outcomes I saw on probation. They got money for training, but they were unable to place many of their graduates in jobs. I had one probationer for two or three years named Julio Martinez, and he eventually became the commissioner of the New York State Narcotic Addiction Control Commission which was the predecessor of the current OASAS [New York State Office of Alcoholism and Substance Abuse Services].

NC: You were the probation officer of Julio Martinez? Can you tell me more about what happened to him?

HJ: Julio was placed on probation for a minor offense—shoplifting a coat in Klein's bargain basement, a department

store which catered to the working class and poor. It was a bargain store and they had super bargains in the basement. So he walked out of the basement with a coat. He didn't get past the guard, and was arrested. At that time Julio was about 18 or 19 and was using heroin-snorting, skin popping, and some intravenous use. Julio was very smart. What I'm describing was not very smart but in a way comical. He thought he could get away with a small shoplifting incident in Klein's bargain basement. Obviously his shoplifting skills were limited or nonexistent. Julio told me that when he was a child he had TB and it affected one of his legs, so he had a limp. I thought that he might have had polio. He was placed on probation for two or three years, and I got to know his mother and aunt. They came down to the probation office and sometimes I visited the family in their south Bronx apartment. I told the family that Julio was bright and that I could work with him and that, hopefully, he would stop using narcotics.

I instructed Julio to let me know when he started using heroin again, and I would put him in the Morris J. Bernstein Institute of Beth Israel hospital for detoxification instead of sending him to jail. Since I had a relatively small caseload I did this type of supervision with all of my

probationers. The Bernstein Institute is where Beth Israel had its detoxification units. It is also where the first methadone patients where stabilized by Dr. Nyswander once the methadone pilot project left The Rockefeller University. It is considered a landmark building that was constructed in the late 19th century as a lying-in hospital for poor indigent pregnant women. The great marble lobby and staircase are still preserved and it is now a luxury rental building. Prior to being known as the Morris J. Bernstein Institute, it was known as the Manhattan General Hospital.

Julio relapsed five or six times over the next two or three years. Instead of sending him to jail, I took him to the Bernstein Institute. I made special arrangements with Dr. Trigg, the director of the detoxification service, to allow me to visit the detox unit and speak with my probationers. Upon admission I would accompany them to the hospital, and I would sign them all in. I would tell them the reason I was signing them in was that I knew that if I left the waiting room, five minutes later they would walk out. I also told them I was staying there until I saw them walk upstairs into the hospital. They were usually sick the first few days. I also told them that I had permission to come and see them on the ward within 72 hours.

NC: At that time, what did detox consist of on that unit?

HJ: Detox with oral methadone and chloral hydrate for sleeping over a 21-day period. After three days I would go and tell them they would have to stay there 21 days. Julio was a very good probationer. He stayed for 21 days every time he was signed in-five or six times. You can check his records there, and you'll see that I signed him in. I did the same for the other probationers.

At one point during his probation experience, Julio's mother and aunt came down to the probation office to talk with me. They told me that Julio was driving the family crazy. I told them I was trying to help him, so I wasn't going to put him into jail at that point. I went to the welfare office with him. When necessary I went with all the probationers either to a welfare office or to a mission for food and temporary lodging located across the street from the office at 80 Lafayette Street. I had to go with all of them or else they would never get to their destinations. Since I had 30 cases, that's all I was doing. I was case managing their lives between all the places, the welfare department, the hospital for detox, Lexington. That's what my job was. I tried to

keep them out of jail. I tried to help them medically. But it still didn't dawn on me what was going on, except that I knew there was a piece of the addiction puzzle that was missing. No matter what I did, they still relapsed. No matter what the social worker did, they still relapsed.

The turning point in my relationship with Julio was when I placed him a furnished room through the welfare department. The stereotype was that the place should be a mess since addicts have a character disorder and are indifferent to their surroundings—sloppy and dirty. When I went to see him, the place was spotlessly clean and neat, and Julio was reading *The Rise and Fall of the Third Reich*, which I had read and knew was a difficult book. So I said to myself, this kid has organizational abilities and brains. I told him there was an anti-poverty program near my office. "I'll give you the carfare. They teach you how to fix things. Maybe they'll get you a maintenance job. They'll teach you a little reading and writing. How does that sound?" He agreed to work with me and I was able to get carfare from spare money allotted to us in the probation office. However, the probation supervisor of the unit I was in disagreed with me and wanted Julio brought before the court. I persuaded him to give Julio another chance.

Julio was on a weekly reporting schedule. We had urine testing in the office. I would give the probationers a bottle, send them to the men's room, and they would come back and give it to me. If indicated I would do an observed urine. Julio was very honest. He would tell me when not to send the urine specimen to the lab since he used drugs. So then I would take him to the hospital. He told me when the urines were free of illicit drugs and when they were not. Then one day he brought me a notebook from the school, and I couldn't believe it. He had neatly taken notes and made diagrams of all the tools. Everything was diagrammed and labeled in different colors. I was so proud that I took Julio and the book around the probation office and introduced him to the other officers and staff. I was not only proud of him but really surprised about his diligence. Nobody had an addicted probationer like Julio. Since he had a limp, I did give him extra attention. But then I had to put him back in the hospital because he began to use heroin as soon as he finished the course. Under my supervision I never let him develop an uncontrolled addiction. He was placed in the hospital at the first sign of heroin use.

He was in the hospital on the ward with a number of other

patients who had all been there many times. They decided they needed something else for treatment, a therapeutic community, so they formed Phoenix House with Commissioner Ramirez of the NYC Addiction Services Agency. They also had the support of Dr. Harold Trigg. I had encouraged him to organize the therapeutic community on the ward. While hospitalized, Julio finished his probation period with me. I discharged him, telling him that I had done everything I could for him while he was on probation, and that he would have to make it on his own.

Eventually Julio showed his administrative ability and organized Project Return. Then he organized a large demonstration for increased funding for drug treatment across the Brooklyn Bridge in New York City with hundreds of residents from different therapeutic communities. This impressed the then Governor Carey, who eventually appointed Julio Commissioner of NACC. He was my boss for a while. What killed him was cancer, possibly end-stage liver disease or pancreatic cancer—I don’t know the exact details--possibly from hepatitis and drinking. Alcoholism and smoking were problems with many staff and residents in the therapeutic communities at the time. I located a public health study by Lawrence Kolb in the 1920s, in which he

surveyed heroin addicts across the country and found that between 30 and 40 percent of them also had alcohol histories. Dr. Nyswander had saved a monograph of studies of addicts admitted to the US Public Health Hospital in Lexington, Kentucky, from the Bureau of Applied Studies at Columbia University. On admission to Lexington in the late 1930s and I believe 1940s, between 30 and 40 percent of the admissions had alcohol problems, either during periods of abstinence or while they were addicted. These were the same trends that Kolb had identified a generation earlier.

The myth that you're a heroin addict without alcoholism was not true by the things that I observed, by the things that I read, and by my own study. When I wrote with my friend and colleague at OASAS, Dr. Phil Appel, "Alcoholism and Methadone Treatment: Consequences for the Patient in the Program," I indicated that, in the post-treatment period, sometimes I had to stop the searches in the drug field and go to the alcohol field. I did not consider a person cured of addiction if I found they were seriously ill with alcoholism. Alcoholism was a major cause of death in methadone treatment in the early 1970s, so I did not consider people cured if they just went from one form of addiction to alcoholism.

NC: What else can you tell me about your work in probation?

HJ: I went through the experience of "drug free" with my caseload. There were four probation officers in the unit. Over time we had 120 to 150 probationers from all over the city. We were all getting the same result, constant relapse. Then I heard about methadone at a community meeting in Brooklyn in '65, '66.

NC: What did you first hear about methadone?

HJ: The speaker stated that physicians at The Rockefeller University were experimenting with a medication that was supposed to curb heroin addiction. At first I was very leery of it. What happened is that Dr. Nyswander called me at the probation office and sent some older patients who were on methadone. They must have been in their late thirties or forties. The first patients they stabilized on methadone were older, hardcore addicts. The criteria were at least 21 years of age with four or more years of addiction and at least two attempts at treatment such as detoxification. So I met two methadone patients who were older than my probation group. You could see that they lived a very hard life. One

of them was smoking very heavily. While I was impressed, I was not that impressed. I saw people who were functional, but because of their backgrounds appeared to be somewhat "burned out" by their life experiences. However, maybe my standard was too high: the fact of the matter was they weren't using drugs illegally, they weren't in jail, they were on methadone, they were working for the program, and they were down at the probation office, telling their stories. I suppose that they were suspicious of me since their past experiences with the criminal justice system were negative.

Then I spoke to Dr. Nyswander on the phone and she invited me up to her office at The Rockefeller University. I didn't know what she or Dr. Dole looked like. I didn't even know where The Rockefeller University was. I thought it was at Rockefeller Center. After working for about two years in the unit, I was getting very concerned and angry with what was happening in the city with drug treatment and therapeutic communities. It was a financial and public health crisis. A lot people on probation were being sentenced by judges as a condition of probation to therapeutic communities. At one point a young Puerto Rican teenager about 16 or 17 came into my office, charged as a Youthful Offender or with a

misdemeanor. He was sent by a judge as a condition of probation to a therapeutic community. He was crying. This Puerto Rican teen was breaking down in tears. He was in a therapeutic community where they shaved his head and humiliated him. I thought it was horrific. I was so angry I called Mayor Lindsay's office and asked the secretary whether the mayor was aware of what was happening–that peoples' heads were shaved and they were forced to wear humiliating signs. What were these tactics supposed to accomplish? I did not receive a response from the Mayor.

Ramirez wanted agency staff to participate in 24-hour encounters where they would have the experience of being confronted about their problems. Some of the probation officers I supervised attended the encounter sessions and came back either brainwashed or traumatized and needed psychiatric help to overcome the encounter. I remember one young woman who had an A average in college and who was in graduate school who needed professional help to overcome the trauma of the encounter. Others came back hoarse. Some were enthusiastic. However, I was appalled. When I was asked why I did not cooperate with this program, I informed my superiors that the programs had low retention rates and high rates of relapse. I said that persons in the city that

permit and fund such outrageously expensive programs with no evaluations and little to show for it have "shit in their heads and brains in their asses." McDivit and Wallace were taken aback by my explicit response, but I think that they agreed with me since I was not disciplined for use of such language to describe the decision makers who supported the faltering city and state heroin addiction effort.

NC: Why do you think the TCs were so successful in getting established at that time?

HJ: Mayor Lindsey brought Dr. Efrain Ramirez from Puerto Rico to be the first commissioner for narcotics treatment in the city. Dr. Ramirez was supposed to have developed effective programs in PR using the 12-step therapeutic community approach, but there was no data to substantiate his claims. Ramirez harbored anti-methadone biases and so just encouraged the development of one type of program in the city. Lindsey and other politicians appeared impressed with the goals of the TCs and aggressively supported the modality. The well-meaning and influential Monsignor O'Brien of the Catholic Church developed a famous therapeutic community called Daytop, which was presided over by a brilliant ex-addict, Dave Deitch. The community took in

young persons who were experimenting with drugs and others who were addicts. They developed ties to probation and the criminal justice system. They offered educational programs and tried to prepare residents for their lives when they left. However, I never saw their statistics for treating hardcore heroin addicts. Daytop tried to offer quality treatment and appeared to be more open to methadone than the other therapeutic communities. Monsignor O'Brien was a positive force in the city for diverse drug treatment and at that time the TC was the major treatment for addiction.

A therapeutic community fits right into one's thinking about denial and honesty. They had 24-hour encounter groups to make the addicts face themselves by breaking down their defenses. In our probation office, we had nuns who were social workers. They were a real asset to the probation office with counseling and referrals on a variety of issues. Furthermore, methadone in the late 1960s and early 1970s was considered an experimental controversial research medication.

At that time it was known that Riverside Hospital in NYC and the US Hospital in Lexington, Kentucky, had failed. New York State set up civil commitment for the treatment of

addiction. This program proved to be excessively expensive and addicts who were committed absconded from the program and relapsed at high rates. The next step was to develop community programs, and the TC is an attractive alternative since the TC tries to inculcate certain values that are acceptable to the community and politicians.

Furthermore, the founding directors of the TCs were people of some political clout and social standing. Odyssey House was run by Dr. Judianne Densen-Gerber, who was a wealthy, influential physician whose husband was the medical examiner, Dr. Mike Baden. She was heir to the Gerber food fortune. She was a psychiatrist at that time, connected to Metropolitan/Flower Fifth Avenue Hospital, so she formed a ward in Metropolitan Hospital which turned out to be Odyssey house. Unfortunately, Densen-Gerber and Baden were very hostile to the concept of methadone treatment. Baden started classifying all deaths of patients as “methadone related” irrespective of the cause of death. Phoenix House was formed on a ward at the Morris J. Bernstein Institute of Beth Israel by the patients, and Dr. Trigg supported their endeavors as did Commissioner Ramirez. Later a third generation physician with social and political connections Dr. Mitchell Rosenthal became the medical director of

Phoenix House. In the therapeutic community the residents all looked good. They were detoxed, they were full of ambition, and they wanted to take control of their lives. For the few who succeeded, the therapeutic community saved their lives. It was very appealing. They learned how to organize their lives and kept the TC immaculate. If you went to a therapeutic community, you could virtually eat off the floor. However, therapeutic communities did not address the physiological narcotic craving. At the time they considered methadone treatment to be just substituting one addiction or drug for another.

For all their good intentions, therapeutic communities were unable to meet the public health needs of New York City. Heroin addiction continued to spread, death rates and heroin related crime increased. Under pressure from the medical and legal professions, Lindsey saw that another approach was needed and that methadone had to be implemented. The leaders in this fight for methadone in NYC were Dr. Ray Trussell and Dr. Arthur Logan, a leading Black physician who was also Duke Ellington’s physician. Ellington approached Logan about methadone treatment since several of the musicians in his band were addicted to heroin and had entered the methadone program and made successful adjustments. Logan met with them

and was impressed. Another leader in the Black community, James Haughton, who organized minority workers to obtain union jobs, was also impressed with methadone when he saw the successful results of some of the members of his organization. Logan and Haughton knew each other. I knew Haughton from my involvement in the school desegregation movement. Haughton knew Annie Stein and Max Wolf who were involved with school integration and the creation of educational parks so he had my phone number and called me at work one afternoon in August. That must have been in the late 1960s or early 1970s. He told me to come to Dr. Logan's house about a meeting concerning methadone.

Meanwhile I was told by a friend of mine who worked in Percy Sutton's office to give the monograph which I wrote for a Methodist social training group called "Heroin Addiction and Methadone Maintenance" to Mr. Irving Blumberg. Mr. Blumberg was employed as a consultant to the Lasker Medical Foundation and lived in the apartment house in which I resided on the 17th floor. I lived on the tenth floor but I never previously met him. I left the monograph under his door with my phone number. Within a few hours Mr. Blumberg called me and asked me to come to his apartment. He worked for a mental health organization connected with the Lasker

Foundation. Blumberg was a remarkable man. Everybody respected his intellect and honesty. He was a great organizer and was one of the original organizers of the first teacher's union in NYC. He knew Trussell and Logan. Within a few weeks he organized a group of socially active people, politicians and elected officials, medical and scientific leaders in the city including Dr. Mathilde Krim. I was a central part of the organizing and my article educated the group.

Out of this effort a lobbying organization was formed called the Committee for Expanded Methadone Treatment. Logan and Haughton were the chair and co-chair respectively of the committee. I wrote a letter for the group to the *New York Times*, which several prominent physicians signed, advocating that the city adopt methadone treatment. Within a week of the letter's appearance in the Times, Lindsey requested that the members of the group meet with him. I recall those who met with the Mayor-Alice Fordyce, the sister of Mary Lasker, Dr. Joyce Lowinson, Dr. Beatrice Berle, Irving Blumberg, Dr. Arthur Logan, Timothy Cooney, the husband of the producer of Sesame Street, myself and another man who was a temporary executive head of the committee. There were some heated discussions between Logan and Lindsey. Lindsey was preparing

to implement the Addiction Research and Treatment Corporation in NYC, a methadone program for the Bedford Stuyvesant area in Brooklyn, but we advised that this was a local endeavor and that a city-wide approach was also needed. Logan called Governor Rockefeller and a group of us—again Drs. Joyce Lowinson and Beatrice Berle, Irving Blumberg, and, I believe, Alice Fordyce—met with the actuary of the state and some senate leaders with the budget and appropriations committee. We presented our case about methadone.

Meanwhile the Lasker foundation had me reduce my article to a question and answer format like the ABCs of methadone treatment. It was published by the foundation and distributed. Within a few months the city received a $15 million grant for the expansion of methadone into city-wide clinics under the direction of Dr. Robert Newman of the Health Services Administration, who was my neighbor and an employee of the Health Department.

NC: How did you get to know Bob Newman?

HJ: He had moved onto the floor that I resided on–down and diagonally across the hall. There were some rumors on the

floor that he was a physician. One day I was at Rockefeller University with Nyswander and she told me that the program really needed a public health doctor to bring the work out of the clinical research phase. I went home that evening and Newman was standing by the elevator. I introduced myself and indicated that I understood he was a physician. Meanwhile the elevator door opened, and he told me that he was a public health physician with the health department. I could not believe this. I told him that I wanted to discuss addiction treatment with him and the methadone research at The Rockefeller University. He indicated that he had never heard of methadone, but had an appointment with Judianne Densen Gerber at Odyssey House the next day to learn about addiction treatment. I told him that I had something much bigger in mind. He invited me into his apartment, and for the next two hours I explained how methadone works and about the research that Dole and Nyswander were engaged in. I told him that I would call Nywander the next day and tell her to expect your call. He did and the rest is public health history. He's done wonders. In the 1970s he opened up all of the citywide clinics in NYC and created a meaningful public health intervention with methadone not only here but also in Hong Kong. On a personal level, when I was sick and hospitalized on three occasions during the past decade with

serious illnesses, he made sure I had the right doctors and services.

NC: What do you remember about the move towards civil commitment?

HJ: The state of New York adopted civil commitment, and began to develop the program using mental hygiene facilities. New York state modeled its civil commitment program on the California program, which at that time was thought to be an answer. However, research reports at the time suggested that the California program was more of a failure than a success with high rates of absconders and persons who relapsed after being discharged. Truthfully, there were no answers to the post World War II heroin addiction epidemic in New York State. Addiction related crime and deaths were major public safety and public health problems with not only high death rates but the spread of hepatitis both B and C (although C was called nonA-nonB and its potential for severe illness and death were not yet known to the medical authorities). HIV was also in the population by the 1970s but did not become manifest until the 1980s.

Governor Rockefeller had to respond to the epidemic of heroin addiction and addiction related crime. Therefore he set up civil commitment, and the state addiction agency known as NACC (the Narcotic Addiction Control Commission) was established. People were either civilly committed, or they were sentenced. Civil commitment was really quasi-legal, because a family could have an addicted member civilly committed to one of these facilities without a crime having been committed. They transformed mental hygiene facilities in the state into commitment facilities. They also transformed a wonderful YMCA building in Brooklyn into a facility. The government created large therapeutic communities with 12-step programs in these facilities, to which addicts were sentenced for a year or whatever.

Once authorities realized that people were absconding and relapsing, they adopted methadone for outpatient facilities, but they didn’t do it too well. Civil commitment turned out to be very expensive. The addicts called the facilities “candy-coated jails.” And that is a very apt description. Even Lexington itself was a hospital-like jail. Civil commitment facilities were modeled after the idea of Lexington, with rehab and educational activities, all the things that were supposed to work but did not. They missed

out on the missing link, narcotic hunger. They did not understand that addiction had a very strong metabolic component. The authorities thought that most addicted people could resolve narcotic hunger through willpower and strength of character. That's just not true. Even Julio, who went on to become head of OASAS–a successor to NACC-had a drinking problem. Alcoholism and diseases related to cigarette smoking were the major causes of deaths in the drug programs.

I was in probation for 15 years. I used every type of program to find something effective for the individual probationer. If probationers wanted to enter a therapeutic community, I felt that they might respond if they were motivated even though I was aware of the high drop out and relapse rates. I adopted the same attitude with civil commitment. At one point I developed procedures for probationers to enter civil commitment facilities fro treatment including methadone maintenance since there were few viable options available as alternatives to incarceration. I developed the protocols for admission with Jim Carey, a former Jesuit who worked with the state authority. The state civil commitment programs developed some outpatient methadone programs under a Dr. Joseph (no

relation), although they were of questionable quality.

It did not take long to see that this approach would bankrupt the funds allocated for drug treatment. Through political pressure, especially from physicians, including Drs. Arthur Logan and Ray Trussell, a policy change was brought about. I had written an article in the late 1960s which was published as a monograph by a social action education committee of the Methodist Church. My friend Ray Hendricks, who died from a smoking-related cancer, was in charge of social literature for educating young ministers and the committee wanted literature about methadone treatment. This monograph was one of the most requested publications of the committee. It was the only piece of popular literature I've written, and it was called "Heroin Addiction and Methadone Maintenance."

Before that I didn't know I was able to write. I sent it to Dr. Dole, and he was very impressed. I had my own way of presenting Dole and Nyswander's metabolic theory of addiction using three rings. I developed an illustration of 1) a closed ring, which represented the normal metabolism that you're born with, and then 2) an open ring, which represented a break in the metabolism after a period of

heroin misuse. The break in the ring represented the existence of narcotic craving which is symptomatic of a change in metabolism. The third ring shows that Methadone essentially fills the break. It is a corrective but not a cure. Then I placed a circle, which represented the blockade effect, around the third ring. If you take methadone away from ring 3, most people return to the second ring, where you have the break and relapse because of craving. Only a few go back to the first ring, which is the normal state. So that diagram was used to teach methadone patients about the disease of addiction and methadone treatment. For most patients treatment could be indefinite or lifelong, although there are some who are able to withdraw from methadone and live normal lives. I believe that for those who can withdraw successfully there has to be a stable social situation, and also physiological or genetic factors that enable the patient to live without medication. The duration of treatment appears to differ—I have met people who were able to withdraw successfully after two or three years and live medication-free lives. Others have to be in treatment for 15-18 years before withdrawing. But for most who are doing well on methadone and withdraw, unfortunately, the narcotic craving returns, and there may be relapses requiring reentry into treatment. Future research will help clinicians

determine who is able to withdraw successfully and who will need methadone or buprenorphine for the duration of their lives. Anecdotally, I have met people who successfully withdrew from methadone and lived without medication for as long as 20 or more years, who then relapsed and reentered treatment.

NC: Did you think about it that way even before you had much contact with Dole and Nyswander?

HJ: Yes. I thought about it when I was reading the literature, particularly Dole's articles, and analyzing the experiences of probationers and other patients whom I met. I sent the article with the ring diagram to Drs. Dole and Nyswander at The Rockefeller University. They read the monograph. When I first met Dole, he complimented me on the concept and the monograph. The patients liked it because they saw immediately what methadone treatment was about. At that time methadone was perceived as just a heroin substitute and not a bona fide medication. This monograph and the diagram helped them change their concept and attitudes towards the program.

I recall two other things about the monograph "Heroin

Addiction and Methadone Maintenance.” To this day the ring diagrams are used in training session for patients, counselors, social workers, and administrators. In 1968 ten copies of the monograph were sent to Dr. Ursula M. Von Eckardt, Professor of Social Science and Psychology of the University of Puerto Rico Copies, and were then forwarded to influential public health leaders in Puerto Rico, including Dr. Ramon Fernandez Marina, Clinical Director of the Puerto Rican Institute of Psychiatry and Dr. Guillermo Arbona, a former secretary of health. They subsequently established communications with Dole and Nyswander. The monograph played a central educational role in the initial planning of methadone treatment in Puerto Rico. However, over the decades the methadone program in Puerto Rico did not receive the type of support that was necessary to maintain a quality program and subsequently deteriorated.

By the late 1960s and early 1970s I had become disappointed with the outcomes of the therapeutic communities. I was through with Synanon. Because I had friends in therapeutic communities, I knew some were drinking excessively, and smoking heavily. If you ever went to groups that were run in the ‘60s, smoking was a major problem but it was permitted.

Now I understand that smoking is not permitted.

Methadone patients, of course, use the same drugs, but the program keeps track of illicit drugs including cocaine and crack, alcohol use, and in some programs, smoking, because of the health problems and subsequent deaths. Methadone programs have always been transparent, open, and honest because of the monitoring and continuous evaluations from all over the world. In the office-based medical maintenance program conducted by Dr. Salsitz, smoking cessation procedures, including medications, were implemented. This is described in the *Mount Sinai Journal of Medicine* article that Dr. Salsitz and I wrote with others describing the methadone medical maintenance program.

While working in the probation drug unit, I went through the drug-free experience with my probationers. I had one huge success. Almost everybody was relapsing at the same rate from Riverside Hospital or from Lexington Hospital, over 90 percent. And they were relapsing several times. And I'll tell you, if Julio didn't have me, he would have been in jail. The senior probation officer called me in about him because my cases were reviewed. They asked what I was doing with Julio since he had been in detoxification at Beth

Israel five or six times. He was of the opinion that I was wasting my time. I indicated that I was sending him to school.

However, Julio did relapse after he completed the vocational program. My last dealing with Julio as a probationer before I discharged him was on the detox ward at Beth Israel. His probationary period had expired. By then I'd had him for over two years, and I said, "Julio, there's nothing more I can do for you. That's it. We're finished. It's now up to you." He said he was forming a program with patients on the ward. The next thing you know they had formed Phoenix House on the ward. While I realized that therapeutic communities were not producing the outcomes they advertized, I thought the formation of Phoenix House on the ward of the Morris J. Bernstein Institute of Beth Israel was a remarkable accomplishment by patients. Some of the patients on that ward have really done very well. One organized Staying Out, a therapeutic community for drug offenders established in jails nationwide.

Eventually, I became upset about treatment money being used for therapeutic communities that had a low success rate, high dropout rates, and were very expensive. They provide

high-paying jobs for people without showing results with hardcore drugs. If somebody goes there with marijuana and some pill use, probably they'll do a good job. However, hardcore heroin and cocaine addiction present many complicated physiological issues that are not addressed in the drug free programs. There is no medical treatment for cocaine addiction, so the therapeutic community is probably a viable alternative. However, there is opioid agonist therapy for heroin addicts and that should be exploited.

Finally I decided in 1968 or '69 that what we needed in probation was our own methadone program. Dr. Frances Rowe Gearing of the Columbia University School of Public Health had written a number of favorable evaluation reports on methadone, and I had observed some of the probationers receiving methadone who came into the office. At that time the waiting lists were very long and applicants had to wait 11 months to be admitted. Why would you place a heroin addict without access to methadone treatment on probation when within a week or a month you would have to get a bench warrant because the addicted probationer absconded? So I discussed the idea of establishing our own methadone clinics in probation offices with Wallace and McDivit. This was the first implementation of methadone maintenance treatment

within the criminal justice system. Dr. Dole had previously established methadone detoxification procedures in New York City jails when Benjamin Malcolm was commissioner.

I was very motivated, and I set up five clinics with no money. I decided to go to the hospitals and barter for services to create a program–I'll give you space, I'll give you a secretary, and I'll make probation officers counselors. You give me a nurse, a doctor, and the medication. The first two probation clinics in Manhattan in the late 1960s were located at Beth Israel Medical Center and in the Manhattan probation office. A court psychiatric clinic serviced the criminal courts and probation. Dr. Naomi Goldstein was the head psychiatrist. When addicts were placed on probation, they would automatically be referred for a psychiatric consultation. We'd get the same diagnosis over and over, drug addiction. So I called Naomi and said, instead of writing me the same diagnosis over and over, how would you like to be the physician of the probation clinic at Beth Israel Medical Center? She and another psychiatrist agreed to train at Beth Israel. At the time Beth Israel was building nine methadone clinics on 2nd Avenue and 25th Street in New York City, and they gave me one that I staffed with probation officers as counselors and a clerk from the

probation department as a secretary. The two court psychiatrists were the clinic physicians. The hospital gave us the clinic space, the medication, nurses, appropriate appliances, and furniture for the clinic. When Beth Israel built these nine clinics, they hired an interior designer. The clinics and hallways in the building were very pleasant, modern in design with bright cheerful colors. Over the years, neglect of the clinics was noticeable and the interiors eventually degenerated into depressing environments.

NC: What kind of training did the staff get?

HJ: At the time I knew more about methadone than the doctors, so I provided the probation officers with training. I only took the brightest probation officers to work in the clinic. The Beth Israel clinic eventually filled up with close to 150 patients, so I went to the New York City Health Department Health Services Agency (HSA) Methadone Program, which was directed by Dr. Robert Newman, and indicated that I needed an extra clinic in Manhattan. I asked him to open it in the Manhattan Probation Office. I emptied out two rooms and the HSA put in an examining room and we put in a waiting area and a dispensing area. We needed a place to

store the methadone. The head probation officer had a huge safe in his office and he agreed to allow us to store the medication in it. This was before all the regulations came out. The methadone clinic was successful. Anybody who came in with a heroin habit either went down the hall for methadone, or to the Beth Israel clinic. Both clinics filled up pretty quickly. We used the men's room and the women's room for collecting urines.

After the first two clinics opened, I went to the Bronx, where the probation branch was in the basement of a multiservice building. On the top floor of the building was a methadone clinic associated with Albert Einstein College of Medicine. I prevailed on them to open up a branch in the probation office. They sent down a nurse, and the probation officers acted as counselors. The probation office provided space. In the Queens Probation Office, I organized an on-site methadone clinic with the HSA. The most famous one was in the municipal building in Brooklyn, where we had a probation office on the third floor. I organized with HSA a clinic with the Criminal Court and the Supreme Court. We had a joint clinic. These clinics ran for three years, until the city was able to set up enough programs that people could get methadone treatment in their neighborhoods within a few

days. In summation there were five probation methadone clinics in New York City: three were organized in probation offices with the cooperation of HSA one was organized in a probation office with the Albert Einstein College of Medicine and Beth Israel methadone program gave us a clinic in their complex on 25th street.

NC: Were you still working as a probation officer when you were organizing these?

HJ: Yes, they just let me do this. Mr. Wallace let me do special projects. After I set up the five clinics, he called me in and stated he had a major problem with storage of old records. He took me down to the basement in Brooklyn Municipal building, where old probation records were filed in storage that was costing a lot of money. He indicated that when he picked up these records, he could not find important information since there was no standardized way of keeping records. So he asked me to do something about the chaotic record system.

So I said, all right, people are on probation for a year with a misdemeanor. I took a folded piece of paper like the Daily News, and said, my yearly reporting record is going to

be no more than this one folded sheet of paper. On the first page I had identifying information and a grid for one year with all the variables on top that you're interested in, employment or unemployment, re-arrests, dates. All you had to do was check off yes, no, employed, no, rearrest, next, so. On the next pages were allocated spaces describing arrests and agencies involved and a section for comments and a summary. He really liked it that you could pick up this record at the end of a year, you didn't have to read a lot, and you could see what happened to a person over a year. Each folded sheet was for a year. Since the maximum length of time a person was on probation was three years, three folded sheets comprised a record. Essentially, what I did was graph and explain a probationer' adjustment over time. It was piloted and found to be acceptable with some needed adjustments. After Mr. Wallace left, there was a consolidation, and the old guard called me into the front office. There were thirty people sitting there, and they said, what do you want to do, deprofessionalize probation? I answered that you can't find anything in these records unless you read them for over an hour. Everybody has a different style of recording information. Some probation officers give you minimal information, and others write a Dostoyevsky novel. With this form, it doesn't matter since

all information was standardized and in a particular place.

I used the form in my Manhattan methadone clinic because I wanted to see what would happen. At the end of the year I had all the cases entered onto the form. This was before computers. I was asked to speak at a meeting on treatment of addiction, and I decoded the book with an adding machine in two days. I had basic demographic data, man months of employment, man months of unemployment, rates of arrest, referrals to social agencies, etcetera. Everything I needed to know about the probationers. I went to testify, and all these large agencies were coming to the hearing without data. When I testified I had man months of this and man months of that. Those who presided at the meeting were amazed at the precision of the data. However, the probation administration did not adopt my record keeping system since they felt that it would deprofessionalize the department. They dismantled it before I left to go to Rockefeller University.

A few years later, I was working at the World Trade Center for the state, and auditors were randomly auditing old probation records. They came over to me in the lunch room, and said, “Herman, whatever happened to that form? We’re

spending hours on each case and not getting the information we need. We pick up one of your cases, we're able to audit it in five to ten minutes." I related the story about the reaction of the new administration to the form.

Getting back to my years in probation under Wallace and McDivit, once I had organized the methadone clinics, my next problem was getting jobs for the probationers. The job market was changing in the early '70s. Unless you had literacy skills, you couldn't get a job in New York. I was unaware of this. It was the beginning of the information age and the introduction of the computer. To establish an employment program I went to NYU and the employment office, and they told me about the shifts in employment and that the old manufacturing jobs were leaving the city. I was informed that in order to obtain a job in the new emerging economy an applicant had to have literacy on a 7^{th} or 8^{th} grade level. I went back to my office, and there were some probationers in the waiting room with the Daily News. I assumed they were able to read the sports section. I picked 20 of them coming in. It was a convenience sample. I was friendly with them and asked them to read the sports page. They could not get through a paragraph. Then I saw that although they were carrying a newspaper they couldn't really read. Then I gave

them a little arithmetic test, add a half and a third. Only two of them could do it with my assistance. So I realized that they couldn't do public school arithmetic. The probationers were mostly Latino and African Americans who could not read and therefore were unable to obtain a decent job in the emerging economy. The highest unemployment rate in the probation methadone program was in the Bronx clinic. With the help of Federation Employment and Guidance Service I set up an employment service with the intake in the Bronx Probation Office. That office not only had an onsite methadone program, but a first rate employment service. The probationers were evaluated, trained, and then sent on a job, and while they were on the job they also were counseled and evaluated. This was the first entrance of Federation Employment and Guidance service into criminal justice. It was the first program of its kind in the probation system. Before I left probation I set up the methadone programs, an employment service, tried to revamp record keeping, and developed a liaison with the NACC program.

NC: Why did you decide to leave the probation department?

HJ: My decision to leave the probation department was based on a number of factors. The administration of the probation

department had changed into appointees who were politically connected and of course did not have the vision of Wallace and McDivet. At that time I was really interested in the metabolic theory of addiction since it appeared to be a logical explanation of what I was observing in compulsive opioid addiction—namely the craving, chronic relapses and the behavior linked to relief of craving among probationers. My advocacy of addiction as a metabolic disease with behavioral, personal and social factors was not too well accepted at that time. I was sort of an alienated person, even though I had written two published articles while a probation officer for the journal of *Federal Probation.* One was an overview of methadone treatment with an emphasis on methadone patients who were on probation and parole. The other was a summary of the five probation methadone clinics I established by pooling together facilities, services of various hospitals, the Health Services Administration (HSA), probation, and a community agency such as the Federation Employment and Guidance Service to implement a special employment service for probationers who were in the Bronx Probation methadone program.

All of this was a first for probation and the criminal justice system, yet I was not considered for promotions. So

I was at a dead end in my job. Wallace and McDivit left and my perception of the new political appointees was rather negative. Wallace left an unusually fine recommendation in my folder before he left. However, I saw little or no possibility for the understanding my views and advancement within the new political administration. They appointed two politically connected persons within one year as commissioner.

NC: What was the fate of your methadone clinics in the probation system once you left?

HJ: Eventually the methadone clinics in probation were closed down because clinics were established throughout the city. Dr. Robert Newman became head of HAS. Within three years 34,000 patients were stabilized on methadone in small clinics throughout NYC. There was no sense in probationers coming every day to the probation office when there were clinics located near their homes or employment office. Also, I made arrangements with NACC/DACC to accept probationers into their services which included methadone treatment. This was accomplished with John Carway of the state agency. The clinics had served their purpose. About nine hundred to one thousand addicted probationers were serviced in these

clinics and transferred to clinics near their homes when their probation sentences were completed.

After the clinics closed in the early 1970s, Dr. Dole asked me to join him at The Rockefeller University because he wanted me to do a detailed follow-up study. I had never in my life done a research study and so I was a little daunted but I just wanted to leave probation.

What attracted me most is that I would be working with an entirely different intellectual and imaginative class of people-Nyswander, Dole and I knew Kreek at Rockefeller and Gearing from Columbia, who was so supportive and generous. So even though I was not paid much I took a leave of absence from probation and went to work for Dr. Dole. When I left probation my self esteem was at a low ebb. Dole elevated people and that was the difference. I told Dole that I had serious limitations, but he insisted that I join his department. I had to learn programming during the summer before I joined his lab. After three or four weeks I showed him a program I had worked on that retrieved data from the methadone admission forms. I went to Rockefeller University in the evening to study programming on my own in a room with a computer in the basement after finishing my probation

duties during the day, since I was leaving probation on a certain date in September so as not to jeopardize my city benefits.

NC: How did you do the follow-up study?

HJ: Frances Rowe Gearing was doing the evaluation. I knew about Dr. Gearing prior to my joining Dole. She had a very small staff who had to go out interview patients and retrieve data from clinic records. They were really very good, but she was criticized. I wouldn't criticize her. I thought she did an excellent job. Her work still holds up. I was hired to investigate outcomes of patients who came in the first two years versus people who came in later. I did everybody who came in the first two years, six hundred people, and I took a random sample of people who came in later. The reason why was that the program changed in terms of population, stabilization procedures, a different employment market, and the economic situation in New York. Patients were originally stabilized on a ward at Manhattan General Hospital, which was a branch of Beth Israel. After a year or two they were stabilized in outpatient clinics. There was an economic crisis in the 1970s, manufacturing jobs were moving out of New York, and an information,

computer based economy was transforming the workplace. Even the retention rates in the later group were less than the retention rates in the first group that I saw.

NC: What do you think accounted for that difference?

HJ: Different time, different job market, different economic conditions. Furthermore, the admission criteria had changed. I was able to identify people coming in with alcoholism. Although they came in with alcoholism before, poly drug abuse and mental illness were originally screened out.

NC: What were the original selection criteria for Dole and Nyswander's program?

HJ: Initially, Dole needed as pure as possible an opioid addicted population. He initially ruled out mentally ill patients who might not be able to comply with the regulations of the program. Those with excessive alcoholism and polydrug abuse were initially excluded, since methadone treatment and the medication itself were not meant to treat these conditions. The effectiveness of methadone had to be established within a heroin-addicted population that was

entering methadone treatment. If problematic side effects or problematic behaviors arose, they could be attributed to the methadone or not, without the complications of other conditions and medications.

He wanted to test out the effectiveness of methadone initially with patients who had heroin addiction problems and to use methadone as a medication to treat heroin addiction. However, some patients with alcoholism and poly drug use were admitted at the beginning, since they denied having these problems and records may not have been available to validate their conditions. They were not discharged when discovered, but were treated as best they could within the clinic system. Notwithstanding the few patients who were admitted because their co-morbid conditions were not known, the first patients in the program as a group created a strong knowledge base. When poly drug or mental health problems were identified in later admitted groups, the problems were not because of methadone and heroin, but because of other co-morbid conditions which patients presented.

Originally women weren’t accepted because of pregnancy. This admission criterion was changed when the program was

transferred to Beth Israel Medical Center, which had medical facilities to treat methadone maintained pregnant women. Procedures were developed for delivery and treatment, including follow-up on the mothers and neonates.

As time progressed, younger people and more disturbed people entered the program, including those with serious polydrug and alcohol problems. Age criteria and duration of addiction were changed to a lower level of 18 with a least one year of addiction. The upper limit of 45 was discarded. The upper limit was imposed since there was a theory that addicts matured out of addiction after the age 40 or 45. Maybe a certain percentage did, but many died during the course of their addictions and others were serving long prison sentences.

NC: What were the major causes of death according to the followup study?

HJ: There was a group in my follow-up study that was discharged from treatment because of severe alcoholism. These patients had become heavily alcoholic during the post treatment period and were subsequently treated in alcohol facilities. They were no longer addicted to heroin and most

died from complications of alcoholism within ten years of their discharge. Most of the patients with alcohol problems in treatment had drinking problems before they entered methadone treatment. Of the patients who died from alcoholism, I was able to identify 70 percent who had a history of alcohol problems in various medical records prior to their entering methadone treatment. Alcoholism was the major cause of death in methadone treatment during the first decade of treatment and the second major cause of death during the post treatment period. Heroin was the major cause of death during the post treatment period. The highest rate of heroin overdose deaths occurred during the first two months after termination from methadone treatment.

A number of elderly addicts did enter treatment in the 1970s after the upper age limit was lifted. Six or seven of them were born prior to 1900. The discovery of this group of patients over 60 and 70 led to the book *Addicts who Survived* [discussed below]. I subdivided the people in my study by cycles of treatment. I had so much data, and Dole told me that I had to think of some way to make sense of it all. When I was thinking of what I should do, he also told me that NIDA was coming for a review of the research project.

NC: When would that have been?

HJ: That was sometime in 1973. So I organized my data by cycles of treatment. Every patient was put into a unique cell. The cycle one cell is one episode of treatment and one discharge period. Some people remained in the first treatment period and never left, and some people entered into the first discharge period and stayed there and never left. Then you had the second cycle, two admissions (1a and 2a) and two discharges (1d and 2d); three admissions and three discharges; four admissions and four discharges. Also there were accumulative cells where everybody who went through a certain period of treatment were clustered. Then there were final status cells, which reflected where the persons were at the end of the study. You were able to look at the data individually, in cells, and across cells. You also measured the duration of time in each cell and also the probability of going from one cell to another.

It was an interesting way of looking at things. You could see some patients progressing slowly and others more rapidly with many admissions and discharges. The later patients were socially the most disorganized, poverty stricken, and homeless. They were in and out of treatment and the jail

system. You could not blame methadone for this since there were simply no social services at the time to meet the needs of people whose lives were so chaotic.

NC: Had you had any training in how to organize data this way?

HJ: No, I learned this by myself thinking about human behavior. It was a form of Markov processes or chains. I just thought it would be a more accurate way of describing behavior. One day I was walking home from work and saw a poster advertisement for a space age movie with a revolving space station. I looked at it and it occurred to me that the basic behavior of all the patients was the revolving door of treatment. They went in and out of treatment. I went home and devised my strategy around the cycle of treatment concept. I brought the idea to Dole the next day and placed it on the blackboard. He agreed with only one correction in language from phases of treatment to cycles of treatment. By placing people into different cells and cycles of treatment, I located those who had three or more entries into treatment, those who had many social and medical problems. We have patients in the late 1990s and 2000 who have 30, 40, or at one time 50 admissions. They’re just

running around in circles. The follow-up study also showed that people who have one or two admissions are relatively stable, but when you get into four, five, six, seven, eight, nine, ten admissions, you have people running into treatment, the streets, and the jails. These are the same people that you see at Rikers Jail who have over five or ten or more arrests and are homeless.

I also identified alcoholism from the follow-up study. From the Bureau of Vital Statistics and the medical examiner's office, I found that alcohol related conditions such as cirrhosis were the primary causes of death in treatment and the second major cause of death after leaving treatment. Then I found out that people who did well had longer durations of treatment (four to eight or more years) and shorter durations of heroin addiction (less than four or five years). In other words, duration of exposure to heroin itself was one predictor of whether or not patients were able to live an abstinent life without methadone. A shorter history of heroin use, less than three or four years, and a longer history of methadone treatment were characteristics of most people who were able to abstain. Of course, there were others who had longer histories of heroin use who were

able to abstain. But the bulk of those who abstained after leaving treatment had shorter addiction histories.

Duration of treatment, duration of addiction, and a favorable discharge determined abstention after treatment. That was a major finding of the follow-up study. However, there were many patients who had made exemplary adjustments on methadone and could not abstain. Nor did they want to be withdrawn. Many of these patients entered methadone medical maintenance where they see a physician once a month and receive their medication with little or no clinical social services.

The follow-up study showed that about 80% of the patients who left treatment relapsed. Another 10% exhibited serious alcohol problems and could not be considered cured of an addiction. Only about 10% of those who left were alive and well at the time of follow-up. This does not auger well for patients who leave treatment. There is a physiological component that has yet to be unraveled. Alcoholics in the post treatment period were able to abstain from heroin, but the whole group became seriously alcoholic and died. I had to search for them in programs that treat alcoholism instead of programs that treat addiction.

NC: When you did the follow-up study, were you finding people through treatment programs?

HJ: Yes, and I had access to methadone program records the welfare register since residents of therapeutic communities received benefits and were known to the city social service agency, and records within the corrections departments of the city, the state and the federal government. I also either visited or wrote to their families. I had information on about 85 percent. Most of the deaths were recorded in the Bureau of Vital Statistics and I went to the ME office to examine autopsy records. At least four patients died outside of the city and some deaths were probably John/Jane Doe deaths in the Bureau of Vital Statistics.

NC: When NIDA showed up to review what you were doing, what did they look at?

HJ: They sent two people to review the samples and my approach to the analysis. They approved everything. I had hired methadone patients to do the fieldwork and supervised them closely. I went to the field with them when they were first hired and sat in on their interviews to make sure they

knew what they were doing. I trained them personally. I had an assistant by the name of Jack Curia who was extremely capable. Unfortunately, he was a compulsive cigarette smoker and died as a result after the study was completed. He was a great driver. The people from NIDA didn't know that they were methadone patients. So I said to Jack, "Why don't you drive the NIDA people to the airport? You're a very skilled driver." And I told him to engage them in conversation, and then in the middle of the conversation, tell them he was on methadone because, even though they've been involved in evaluation for years and years, they probably haven't interacted on a personal level with many methadone patients. Jack told me that's just what he did. In the middle of the ride, he told them he was a methadone patient. There was almost total silence for the rest of the ride, he told me.

I also used reverse phone books to locate people. We would call and ask if the people knew so and so at this address, and tell them this was a public health survey of persons who used hospitals and clinics in New York over the past five years. People who answered usually volunteered information. We made the reason for the inquiry as general as possible to protect confidentiality. Stigmatized illnesses such as addiction or mental illness were not mentioned. One person

who answered happened to be the president of a local hospital, and he indicated that follow-up studies were important since he himself wondered about the outcomes of people who use the services of his hospital. In another case I retrieved a wedding invitation in the medical records that was addressed to the patient's counselor. The patient had married in a rural area out of the state. I called the pastor, who then contacted the family. Within two weeks the patient showed up in our office in a drug-induced stupor. He had relapsed to heroin and we had to call an ambulance to take him to an emergency room.

Also an integral part of the follow-up study was the creation of a follow-up log on every patient. Every effort to locate the patient was listed on this form by date. It was time consuming but the most accurate method to track subjects which could be chaotic if there is no structure. The follow-up study could have been better if I had more time. I did get important data on causes of death, death rates both during and after treatment, discharges and adjustments in treatment and post treatment periods. I do think that there is more sophistication in the field today about doing follow-up studies.

NC: When would you say there began to be increasing sophistication in this field?

HJ: In NYC with NDRI, with the training of statisticians, with the emergence of computer literate people, and the advances in ethnography and analysis. These factors all had a bearing on changing the level of sophistication in the field.

NC: What did Frances Gearing's evaluation look like in terms of the relative level of sophistication?

HJ: Her final paper, a six-year summary of methadone treatment, was masterful. At the end she recognized that people were coming in with life-threatening illnesses even in the pre-AIDS era. Hepatitis C was coming in at this point but we didn't know what it was. She saw the seriousness of the unknown conditions. She randomized and she was able to get death rates. I thought she did a terrific job. She also did evaluations every six months on different topics and populations within the program, especially when admission criteria changed. She submitted her work and recommendations to an evaluation committee which oversaw her work. This committee was chaired by Dr. Henry Brill, who was very

conservative in his opinions about methadone treatment and careful about the recommendations of the committee. The evaluation committee also directed some of the topics that should be evaluated by Gearing. No other treatment for chemical dependency was subject to such oversight, scrutiny and evaluation.

NC: Are you saying that people in the beginning were not coming in with the level of disease you saw later?

HJ: Correct. They were infected with Hepatitis C, only we didn't know it. It was known as Hepatitis, non-A, non-B. And AIDS started coming in the '70s around New York, when people were coming in with pneumonias. Gearing noticed they were coming in with life-threatening illnesses, which was a new development not seen at the beginning of methadone treatment. She noticed this on the new admissions. One of her final summary paragraphs stated that because of the illnesses, methadone treatment has to be associated with hospitals and healthcare. I thought her work was superb, and it has not been supplanted by anybody. She cut the first knife through the cake, so to speak, and the trends that she found there have only grown.

While in probation, I had begun to see the centrality of Dole's metabolic theory of addiction. Dole was part of the Health Research Council. He was assigned to the addiction committee by Dr. Lewis Thomas, a very famous scientist. Dole had studied human metabolism and obesity, and started the obesity program at The Rockefeller University. He came up with the idea of cellular change with obese people. He wrote an article, "Body Fat," published in the 1959 in *Scientific American*, about this. In the '40s he wrote a seminal article concerning electrophoresis, the way ions are organized and transmitted in the human body. This complicated article employed his knowledge of mathematics and physics. Very few scientists could have written it because they didn't have the breadth of scientific training that he had. He was a superb mathematician with a deep knowledge of physics and chemistry. He combined all of these fields into his understanding of the way ions are organized and transmitted within the body.

In cases of extreme obesity, he was able to reduce people, but they would gain the weight back because there was a metabolic appetite also cellular impairment in these individuals. Dr. Nyswander felt that he should have gotten a Nobel Prize for his work in metabolism prior to the work

that he did in addiction. He did get the Stouffer Award for discovery of free fatty acids in plasma, which influenced the treatment of diabetes and hypertension. He was responsible for the Rockefeller Diet, which was the beginning of liquid diets. He saw something similar when he began to study addiction. He hypothesized that the narcotic craving of a heroin addict is symptomatic of a metabolic alteration in the central nervous system or brain. He also predicted the existence of opioid receptors, their location in the brain, their density, and how to locate them once the technology was developed and wrote a seminal paper in the *Annual Review of Biochemistry* called "The Biochemistry of Addiction" in 1970. He received the Lasker Clinical Medical Award in 1988 for his work in developing methadone treatment and for defining the metabolic basis of addition.

NC: How did he come upon receptor theory?

HJ: He hypothesized the existence of opioid receptors on the basis of his biological observations and experiments. He was a superb statistician. He is possibly one of the most brilliant all-around scientists in the country. His undergraduate work was in mathematics. His research abilities were recognized when he was in medical school, and

he went directly from Harvard to Rockefeller. He saw the similarity between drug addiction and obesity, the food intake, change in metabolism of the very obese person, the inability to permanently lose weight. I'm talking about compulsive, really obese people. He felt there was some metabolic cellular change in these people, who would practically have to be starved and they wouldn't keep the weight off – they'd gain back the weight.

NC: Did he liken it to relapse in drug addiction?

HJ: Correct. That was it. It wasn't like relapse, it was relapse. He saw this analogy as directly related to heroin addiction. His earlier work on metabolism influenced his physical understanding of addiction. Dole realized that there were other things involved. He read everything. He lived upstate in Westchester, so he would come down to New York, and he would get off at 125th Street in Harlem, East Harlem, and walk down to Rockefeller University, observing the effects of addiction on the neighborhood. He had a full understanding of the relationship between the metabolic and the social and the personal. Before he even started the addiction research at Rockefeller, he had planned out the strategy for the research. Then he read Dr. Nyswander's

book, *The Addict as Patient*.

NC: By the time you got to Rockefeller, Dole and Nyswander had worked together for about five years. Do you think that they knew about previous, less systematic use of methadone as a maintenance agent by Dr. Harold Meiselas or others?

HJ: I think his work was completely independent. I interviewed Meiselas a few years ago about his work. He barely recalled the work and did not know where the records were. He did not set up rigorous research, did not ask questions about what was happening scientifically, did not hypothesize, and did not really learn how to use methadone properly. He did not have the concept of narcotic hunger, the blockade effect, or know how to organize studies and evaluation. Dole insisted on evaluation. Other physicians had stumbled on methadone, and one physician in Vancouver began some type of maintenance but never conceptualized the ideas about addiction being a metabolic disease and that methadone was a corrective medication. Dole organized his work based on his knowledge of metabolism and his previous work on obesity. Other physicians who prescribed methadone were not capable of hypothesizing or creating the type of studies that would lead to a knowledge base with directions

for further clinical and basic research. For the book, *Addicts Who Survived,* I interviewed a patient who was maintained on 80 milligrams of methadone by a family physician in Brooklyn prior to his entering the program. This family physician did not perform research, hypothesize about the disease addiction, or publish his work with this one patient. The physician had an insight but for one reason or another was unable to develop it.

Dole was the only genius to come into this field to explain what the disease of addiction is, the metabolic alterations which are now being unraveled, and the role of methadone. Nobody else had his overall scientific ability. You began to realize this when you work with Dole. He learns everything. He came into the computer age as an older researcher and mastered the technology. When I went to Rockefeller, I didn’t know anything about computers. He insisted I learn programming the month before I came to work, so I went to the university at night and learned programming. Within a month I produced my fist program. He did not let me use packages so I had to learn basic programming skills. When you worked in his laboratory and you wanted to know something about a rat, there were manuals, you learn by studying. He is also recognized at Rockefeller as one of the

most all around scientists at the university. He is a superb mathematician, statistician, and designer of research. Dole was on the physics committee at Rockefeller. At his retirement, Einstein's biographer, Abraham Pais, extolled Dole's mathematical and scientific abilities. Once I went out with Dr. Edelman, a Nobel Prize winner, and Dr. Dole. Edelman had such respect for Dole because he had solved some eigenvector equations having to do with metabolism. Dole has not been given his full due. His work was so rigorous and so phenomenal in taking together many different fields of science. He was able to integrate, discard, and hone through to the basic problems.

NC: Was he able to talk to people, to connect with these folks he was seeing?

HJ: With the patients? Yes, he understood their problems, and was able to communicate with them about their social situation, their medical problems and their aspirations. I remember he was deeply concerned about the issues facing patients and organized at Rockefeller the first patient advocacy group, which then developed into the National Alliance of Methadone Advocates [NAMA] under the brilliant and dedicated leadership of Joycelyn Woods, herself a

methadone patient with a master's degree in neurobiology or psychobiology. Joycelyn worked in another laboratory at Rockefeller University–Neil Miller–and was senior author of one of the early papers on receptors. Her master's thesis was on receptors. In his late years after retirement, Dole's energies were devoted to patients worldwide and he communicated with them through email. He was acutely aware of the stigma that surrounded methadone, the effects this had on the lives of patients. And in some way he wanted to help them resolve it. He contributed money to the patient organization over the years since the patients had absolutely no support.

NC: What do you think allowed him to empathize with the patients?

HJ: He didn't have to shed any biases. He came to this field with a fresh mind. He'd read the literature, and he was stunned that there was no real systematic research on the treatment of chronic addiction. The ARC research at Lexington by Martin and Jasinski was excellent in that they identified for the first time the primary and secondary abstinence syndromes. This was very important, but they did not make the connection that addiction was a chronic

metabolic condition. They however suggest that the existence of the secondary abstinence syndrome may be related to relapse and changes in metabolism. They proposed that deconditioning therapy could change this problem. Deconditioning most certainly is an important part of the issue, but they did not conceptualize craving, its very centrality to addiction and its metabolic basis. For most patients deconditioning is simply not enough. The use of antagonists to treat addiction stems from the deconditioning theories. This approach is theoretically attractive but not clinically successful. Most patients do not accept antagonist therapy because they feel physically uncomfortable. Naltrexone maintenance plays a role in the treatment of alcoholism but these are two different addictions. For opioid therapy one needs a long-acting agonist such as methadone, or more recently buprenorphine, and in Europe slow-release oral morphine. Dole brought the understanding of the neurological basis of addiction and the approach to treatment to a different level.

NC: What about Abraham Wikler's work on conditioning?

HJ: Wikler's work on conditioning doesn't work completely. If you're on Naltrexone, and you get a craving, you're not

going to be able to resolve it. For some patients this would be torture. However, naltrexone implants have been developed and they would have to be studied. If a patient is on naltrexone maintenance and is in a painful accident or needs immediate surgery, there is also the problem of adequate pain management, since naltrexone and the antagonists block the analgesic effects of narcotics. Some advocates of naltrexone indicate that fentanyl patches can work, but I cannot comment on that. Before Dole entered the field and said that craving was a metabolic problem or a metabolic alteration which was central to addiction, all these other people were looking at data and trying to fit it into their old theories instead of organizing a new theory. Wikler's theory was that relapse was a matter of conditioning—which is just part of the story. Even if they identified a secondary abstinence syndrome, they tried to combine it with conditioning. Antagonist medications fit into deconditioning theories, but they do not work for the majority of patients. Agonist medications correct but do not cure addiction. The role of long-acting agonist medications–what they do–should be investigated since this may be a road to identifying more precisely the impairments of addiction. Perhaps a medication can be found to cure the disease of addiction, but this requires more time and research.

NC: Can you explain the difference between primary and secondary abstinence syndromes?

HJ: Primary abstinence syndrome is immediate symptoms of pain, nausea, vomiting, goose flesh, chills, and depression that an addict reports when the narcotic drug is withdrawn without medication or tapering. To avoid these painful, flu-like symptoms, a medication such as methadone or buprenorphine is administered. After the immediate withdrawal, the secondary abstinence syndrome appears. It is characterized by craving, restlessness, insomnia, and certain physiological measurements such as eye measurements, which indicate that they are metabolically altered. At Lexington, researchers did two studies on the secondary abstinence syndrome, one in animals, and the other in man. The one in man went on for six months and showed no change in measurements. We don't know how long the secondary abstinence syndrome remains, but craving appears to be part of it. Or perhaps craving is symptomatic of impairments reflected in the changes measured during secondary abstinence. For some people, genetically, it may not last long. For others it may be indefinite. For others it may fluctuate related to stress. For the people who were in the

six-month study, the measurements of the secondary abstinence syndrome did not abate. Those are very important papers. They are quoted and one is cited in my first article with Dr. Dole, "Methadone Patients on Probation and Parole," published in *Federal Probation*. They also did a study of methadone at Lexington.

NC: Yes, they did several papers on methadone in the late '40s when they first evaluated it.

HJ: Methadone was brought to the US as a spoil of war. It was known by the name of city in Germany, Hoechst, and it was assigned the number 10820. It had several names, including amidon, and I believe it was synthesized in the late 1930s and patented in Germany in 1941. In the article where that number appeared, the scientists, Isbel and Vogel, at Lexington saw that once patients were maintained for a few days on methadone, they acted normal, they were playing cards, and lounging on the ward. But the researchers at Lexington did not realize the ramifications of this behavior change.

NC: Indeed, they thought methadone was a dangerously addictive drug that should be kept away from the public. I

didn't realize how extensive your experience as a probation officer had been, that you would have heard tales about Lexington from people who were there later. Marie Nyswander was at Lexington much earlier (1945). How much of your knowledge of Lexington came in part through her?

HJ: She was not too happy at Lexington. She felt that the patients were not being treated as patients. You have to realize that Lexington was a jail-like setting, and she did not like that atmosphere. Kolb set it up as a jail-like hospital because he didn't completely understand addiction either. Nyswander's experience with Lexington is reflected in the book, *The Addict as Patient*. When she wrote the book, she saw that abstinence therapy was not working. However, there was no effective medication when she wrote the book. After her stint at Lexington, she was a psychiatrist at the Musicians Clinic in New York with Charles Winick the sociologist and Percy Sutton, the former Manhattan Borough President, who was the lawyer for the clinic. The Musicians Clinic attempted to treat jazz musicians. Some of these musicians entered the methadone program. She also helped form the initial Narcotic Anonymous program.

NC: Can you give me a condensed version of what she did in

those years after Lexington, before she went to Rockefeller?

HJ: She was in private practice as a psychiatrist. She tried to treat heroin addicts. At that time many jazz musicians were involved with heroin, and some of them entered methadone when it became a program. She worked with Dr. Beatrice Berle in a storefront in East Harlem, which I believe was connected with the East Harlem Protestant Parish where she worked with local addicts. She recruited some for studies at Rockefeller. She was connected to Flower Fifth Avenue, a medical school, and Metropolitan Hospital. She was continuously working in addiction and also trained physicians in psychiatry. That was her post-Lexington experience. Nyswander with Charles Winick also organized Narcotics Anonymous She also wrote the book.

NC: How did she meet Dole and begin at Rockefeller?

HJ: He came across her book and invited her to Rockefeller. It was the only book where somebody was looking for an answer beyond the criminal justice system. The title-*The Drug Addict as Patient*—is in itself a revolutionary concept. She did not have the answer when she wrote the book, but she had personal experience treating heroin addicts and a

thorough grasp of the contemporary scientific literature.

NC: Interestingly, her book was still pretty psychiatric.

HJ: Correct. You have to remember, she's a trained psychiatrist. When working at Rockefeller with Dole, she realized psychiatric approaches don't work, she began to hypothesize with Dole the metabolic theory of addition, and then she goes against the book. That was very conscious once she met Dole, and he began to discuss his theories with her. She was very important to the research because there were behavioral problems involved with addiction. These differ from person to person although there may be commonalities whether they preceded addiction, or followed it. What methadone did was in effect to remove the prominence of the personality theory. Once the craving is relieved the true personality of the patient emerges. The patient may be mentally ill or may not. The patient may have a character disorder or may not. The patient may be well within the normal range of personalities in a given community or may not. The patient may have a straight or gay sexual orientation. The patient may have a high moral sense which was subsumed when addicted to heroin. If methadone is correctly implemented, the patient can take advantage of his

or her talents and develop like other members of society. Nyswander and Dole realized this. That also was a revolutionary idea. Nyswander knew what patients went through, the stigma and degradation, and also realized that methadone could help restore them. So Dole hired her, and she began to teach Dole even before she was at Rockefeller. They complemented each other, she with her personal and social insights, and he with his understanding of human metabolism.

Dole hired Mary Jeanne Kreek in 1963. She came to Rockefeller in 1964, but you must realize that Nyswander's influence on the project began with his reading of her book, which occurred before the project began. Joyce Lowinson was a medical resident at Metropolitan Hospital where Nyswander was on the faculty. Nyswander was on vacation and when she came back she learned that Lowinson was interested in treating addicts and hired her for the project when it was transferred to Beth Israel in the fall of 1964.

NC: What was their division of labor like? How did they organize the lab? What was it like to work there?

HJ: Dole was in charge of the initial experiments and was

aware of everybody's work, capacities, and role. He synthesized the work. Another person who was in the lab was Enoch Gordis, who had been working there for years. He was transferred from the metabolism work to Dole's work on addiction. Another researcher who worked with Dr. Dole in the laboratory is Ann Ho, formerly Ann Henderson. She worked from 1964 on and is now working with Dr. Kreek.

NC: What were the roles of Joyce Lowinson and Mary Jeanne Kreek?

HJ: Joyce Lowinson was a psychiatric resident at Metropolitan Hospital in the mid 1960s who became interested in addiction when Nyswander was on vacation in Greece—she was working on a master's degree in Greek at Columbia. When Nyswander returned she was informed that a resident, Dr. Lowinson, was interested in the addicts on the ward at Metropolitan Hospital. Nyswander subsequently recruited her to work as a physician when the pilot at Rockefeller was transferred to the Morris J. Bernstein Institute of Beth Israel. This was a few months after the project began since the pilot at Rockefeller was transferred in the fall of 1964 to Beth Israel after the first six patients were stabilized. Dr. Ray Trussell was instrumental in this transfer and the

continuation of Dole and Nyswander's work.

Mary Jeanne Kreek came in February of 1964, I believe, as a first-year medical resident at New York Cornell Hospital-Cornell Medical Center. She stayed for six months and did work with Dole and Nywander that resulted in the paper "Narcotic Blockade." Then she left and went back to finish her residency. She came back a year or two later, after the program was implemented at the Morris J. Bernstein Institute and independently began her ground breaking research which is continuing to this day. She has also trained a whole generation of young scientists, including women and minorities. I don't think that Lowinson and Kreek met during the first year since they started at different times. Meanwhile, Dole was continuously thinking and developing his theories, explaining his theories and predicting the receptors. Dole tried to find the receptors, but he couldn't because the technology wasn't there yet. In a seminal paper the Biochemistry of Addiction he predicts the existence of opiate receptors their location in the brain, their density, and how to find them once the technology becomes available. Sol Snyder has a laboratory at Johns Hopkins, reads the paper and gives it to Candace Pert, who was a Ph.D. postdoc. She follows Dole's arguments, and she discovers the opiate

receptors as Dole predicted.

NC: At what point did you become part of the Dole and Nyswander team?

HJ: I did organizing for methadone treatment with Irving Blumberg in the late 1960s and knew Dole and Nyswander. They accepted me informally as part of the team although I had no formal affiliation with Rockefeller. I wrote a paper in 1970 with Dr. Dole, when I was still in probation. I was calling Nyswander almost every day while I was setting up methadone clinics. At first I didn't tell them what I was doing. I was in the Nyswander's office one day, and I just mentioned that I set up a methadone clinic in probation, and she nearly dropped dead from astonishment. Anyway, in early 1970 I was in my office at Probation, I got a phone call from Dr. Dole that *Federal Probation*, a journal published in the Supreme Court Building by the Department of Justice, wanted an article on methadone. He told me that I would be the first author and that he would be the second author. I had never written a professional article in my life although I wrote the monograph Heroin Addiction and Methadone Maintenance and a pamphlet for the Lasker foundation. This was the age of typewriters, Xerox and carbon paper. I was stunned. I wanted

to write an article that integrated everything, that explained the situation in New York, how this happened in the lab, what the idea was, and the metabolic theory. I wrote that heroin addiction was a metabolic alteration. This was his theory, but he said, if this goes to a medical journal, it'll be thrown out. So I said, well, it's going to *Federal Probation* and we have some evidence in the existence of the secondary or protracted withdrawal syndrome.

NC: Did you want to push the claim further than he wanted to push it?

HJ: Correct. He and Nyswander wrote a paper on heroin addiction calling it a metabolic disease, but it was an alternative conceptualization. He was not too happy about it because he's a scientist, but I was taking the lead in this article. I was so naïve, I didn't realize anything about publishing. I just wrote. There is a little sentence in that article that I'm very proud of because it turned out to be true–"craving is symptomatic of metabolic alteration." If it had turned out to be false, I would have been very embarrassed. Now it may not be a metabolic alteration as such but it is probably a physiological response of reactions in the brain to the misuse of narcotics. The

important concept is that specific narcotic craving is a physiological phenomenon which still must be unraveled.

NC: When you were writing that article, what was it like interacting with Dole?

HJ: I learned how he thinks and works. My draft was typed out triple-spaced. Nyswander calls me and said, I understand you're writing an article with Dr. Dole. You know, Dr. Dole is a master of the King's English. This is another thing about him. With all his scientific ability, he was a masterful writer. Better than practically anybody I've come across—and I'm not saying this as an exaggeration. It's true. I come in, and he sits me down in the lab with the draft. At that time I was a supervisor of probation officers. I got very nervous when we started the editing. He told me to get a cup of coffee and sit down, and said, "I'm treating you like a professional, and we're going to go through this." I told him Dr. Nyswander told me that you don't let anything out of your lab, and that you make people rewrite things five times. I said, I'm not doing that. I had the draft written out and typed out triple-spaced. I said, We can both edit it and I'll do the final copy from the editing. We agreed upon that and finished the article in one

month. That article appeared in June 1970 of *Federal Probation* and was used to educate the Department of Justice about methadone.

NC: Was there any response to that article? What happened once that article was out?

HJ: Two things happened. It was read extensively and I think broke the ice about methadone treatment at least in certain quarters. It was also used an educational piece. However, when we were writing the article either somebody's phone was tapped or somebody unknown to Dole or myself gave the feds some information. The Federal Bureau of Narcotics went to *Federal Probation*. The editor of *Federal Probation* called me, and told me that he had a visit from the Bureau of Narcotics. The Bureau of Narcotics knew that this article was being written, knew that Dole and I were writing it before we had a title, and told *Federal Probation* not to print it. They did not want this article published in *Federal Probation*. The editor told me he threw them out of the office, and that article will be published. Dole and I didn't have any further contact with the journal. Somebody found out that the article was being written and notified the Narcotics bureau. Almost at about same time, or a few

years later, I don't exactly recall, under the Freedom of Information Act, Nyswander asked that anything about her be sent to the office. You were able to get records from the Federal Bureau of Narcotics, and it turned out they were tracking her. Her record was as thick as a phone book. Everything important, such as the source of information, was blacked out. I saw this report in the lab because it came in one day when I was at the lab. The feds knew every place that she went. They even knew when she was going on vacation. They found nothing of interest in her life.

NC: Why do you suppose they were so interested in her?

HJ: I think it was because she was treating heroin addicts and writing about it. The Bureau of Narcotics was concerned that the metabolic theory of addiction may destigmatize addiction and lead to widespread use. The Bureau recognized the importance of stigma. Dole and Nyswander were not advocating for the use of heroin or long-acting narcotics such as morphine. They were for medical treatment using long-acting agonists such as methadone. But methadone somehow was a threat to the feds. They wrote a letter to the *Yale Review* to that effect. This all happened when I was at probation, before I worked at Rockefeller.

A few years later I published an article, "A Probation Department Treats Heroin Addicts," which was about the probation methadone clinics. We had emptied out a small-sized jail of between 900 and 1,000 patients in these five methadone clinics. That was enough to fill a medium-sized or small-sized jail.

NC: When you got on board at Rockefeller, were you still working for the state or city?

HJ: Although I worked with Dole for years, I officially came on board at The Rockefeller University in 1974. At first I was granted a leave of absence. Mr. Wallace, who was head of probation, and Mr. McDivit, the assistant director, were very proud of my contribution. They left after an election and a new administration came in to consolidate the probation department

NC: What do you think allowed you to innovate in that way? I assume that most probation officers weren't necessarily innovating in terms of data and record-keeping, writing articles, or organizing methadone clinics. What do you think enabled you to be in that kind of role?

HJ: I really don't know. I tried to be innovative and not do a routine job. I really wanted to make changes in the world around me. Sounds naïve now but then I understood things from the perspective of my civil rights work. I was part of Equal, a school integration movement in NYC. Equal was headed by Ellen Laurie, a woman of immense energy, skill and intelligence. We worked with Reverend Milton Galamison and the Harlem Parents committee. I helped to organize a number of demonstrations and did some writing. I worked in a lot of communities, and I knew what the concerns were in these communities. Also for a time I had worked in social services in the East Harlem area and visited people' homes and those who lived in furnished rooms with shared kitchens and toilet facilities. I did the same when I was a probation officer. I tried hard to lose my lower middle-class bias and fears, and to understand on a personal basis racism in white society. It was a continuous internal search. Outside of work I also found apartments for minorities in decent apartment houses from which they were illegally excluded. This was emotionally taxing since the people depended on me to obtain an apartment which ended up in a hearing in the NYC Human rights office.

I was also in the anti Vietnam movement, which was important because most of my patients or subjects that I was working with were minorities. I was brought up in a lower working class section of Paterson, New Jersey, and went to school in a poor but integrated neighborhood. I saw the minority counterparts in my own friends.

In the civil rights movement, I worked with Dr. Max Wolf, a remarkable man who was a refugee from Nazi Germany, where he had been a judge. He had a degree in jurisprudence and philosophy, which is a very prestigious degree in Europe. I also had the privilege of working with Annie Stein, who was a labor statistician. I remember in East Brooklyn Thelma Hamilton, who was ceaseless in her efforts to improve education in East Brooklyn, also Thelma Johnson, Dorothy Jones, Rae Hendrix, and the Harlem Parent's Committee and, of course, James Haughton who was a labor organizer. I didn't realize I was working in such a radical area. I went to one house, and up from the basement comes H Rap Brown. I was really in circles that changed my whole way of looking at the world. I didn't perceive of addiction so much as a personal, individual problem, as in psychiatry. I saw addiction as a social issue and also considered the availability of drugs in a particular neighborhood, whether

it be a low income, middle or high income area. I was very much aware of racism. I read Franz Fanon. I really learned a lot from my work helping to organize and coming into contact with the people who were demonstrating for rights on the streets. Dole and Nyswander were also understanding of the society in which we lived and the role of stigma and prejudice in the lives of the patients.

Working on school desegregation with Annie Stein and Dr. Max Wolf gave me another orientation to job possibilities which coincided with my interest in Dole and Nyswander's work. That was a social orientation towards people and class and the way things are analyzed. I applied it to my work in the office. I kept records.

I had a some problems with the nurses who were in my probation clinics, especially at the hospital. They sent in middle-class young women to be nurses. They came from working-class backgrounds, but some were inexperienced and frightened, and consequently tended to very strict and rigid. The clinic closed at 2:00 o'clock and a woman walks in a minute after 2:00 with her little girl, and the nurse refused to give her the medication. There was a lot of tension there. I had problems with the nursing

administration. I found most of the nurses but not all that they sent to the clinics, be they white, black, or Asian, were somewhat controlling. The nurses controlled the clinics. At one point they reported to probation that I obstructed their work in the Beth Israel clinic. I was removed from the clinic for a few weeks and then returned. The nurses in my other clinics, which were staffed by the Addiction Service Agency and Einstein College of Medicine, appeared to be more flexible. They were older and more experienced.

NC: Was this class conflict going on even before all the regulation of methadone clinics?

HJ: It was a class conflict, and it was a profession conflict. I'm a nurse, you're the administrator, you don't tell me my job, and you don't tell me how to act, and I'm going to do this or that. If a physician was passive or not sure they told the doctors what to do, too. I think that a great part of the problem is that physicians are not educated about addiction or methadone treatment in medical schools. They come to the clinics virtually without formal training and are dependent on nurses. Now physicians who want to prescribe suboxone must take a course either online

or at a sponsored meeting before they can prescribe. When I worked for the state, the head of patient advocacy, an attorney by the name of Mike Yurio told me to organize a full day education course for physicians in the methadone programs since many were unsure of how to prescribe and regulatory issues. I organized a full day meeting at Mount Sinai with Sy Demsky, the administrator, drawing on the experience of our best physicians in the system. The physicians came and were grateful since they never received integrated planned training that focused on addiction, methadone treatment including stabilization and adequate doses, the problems patients presented, and the medical psycho-social and regulatory aspects of the program. One physician told me at the course that she was given 15 minutes training before being assigned to a clinic. So it was natural for the nurses to step in and fill the vacuum.

NC: When you went to Rockefeller, did you notice different interactions between staff and patients?

HJ: There were no patients at Rockefeller. There were only six patients at the beginning at Rockefeller University Hospital, and they were handpicked by Nyswander. Then the program was expanded to Morris J. Bernstein Program at Beth

Israel Medical Center by Ray Trussell, who was also a commissioner of hospitals, or assistant commissioner of hospitals, at that time.

NC: What were attitudes like during the expansion period?

HJ: Attitudes towards heroin addicts and methadone patients were variable. Some staff treated them well and with understanding, and others really lorded power over them. The point is it depends–it was a personality thing. The clinic staff could be flexible or very controlling. I had well trained people in my clinics, people with master's degrees. They were probation officers. Interestingly, I mostly had women probation officers in the probation methadone clinics in Manhattan and Queens. In Brooklyn they were not segregated and were dispersed throughout the probation case loads. I had excellent methadone patients from the Health Services Agency to assist in the running of the clinics. They acted as liaisons between the staff and the patients if problems arose.

In one clinic I had a former methadone patient by the name of Frank Tardalo, who was impressive. He was on methadone for a few years and then withdrew and was able to live

without craving. He went to college at night, obtained an MSW degree, was married, and had children. Frank thought up the idea of KEEP when he was working in the detox unit at the Riker's island jail. With all the professionals, it took an ex-methadone patient to come up with the idea of the KEEP program. Instead of detoxifying heroin addicts in jail, an alternative methadone maintenance program could be set up for prisoners who wanted this program. They could be referred to a community methadone program upon their release. Frank presented this idea to Charles Laporte, who was a Director at OASAS, was a former heroin addict and an executive at Promesa a methadone treatment program in the Bronx. Laporte then made arrangements with Rikers Island to implement KEEP with a small team from the agency: John Perez to supervise, Frank Tardalo, and Larry Watts, another ex-methadone patient, to implement the program. Larry is now the administrator of the Bronx Lebanon Substance Abuse Service.

NC: What was your role on the KEEP team?

HJ: I was assigned to the team to keep records and do an initial evaluation of the project. I wrote an internal report and published the first paper about KEEP in

Corrections Today, a professional publication for jail wardens. Steve Magura, Andy Rosenblum , Lewis, and myself published articles about KEEP in academic journals but it has not really forwarded the program in the United States. Europe and worldwide is a different story since you have methadone now in jails across the world, including Iran. At that time we couldn't get KEEP into any other jails, so it's only in two or three jails in New York State. You have sheriffs and jail administrators who are against the use of methadone. You have doctors who don't like it, although they use medications like clonidine that may not relieve the pain of withdrawal.

In 1997 NIH sponsored a consensus conference on "Effective Treatment of Opiate Addiction," chaired by Dr. Lewis Judd. The program was planned to invite a network of experts from across the country to present information about the effectiveness of methadone and the science of addiction. However, to the dismay of OASAS, no one from New York was invited to make a presentation despite having the largest methadone population in the country. OASAS sent me down and I was allowed to make a five minute presentations with the non invited participants after all the invited presenters gave their papers. Among the invited presenters there was

not even a mention about the plight of addicted prisoners within the jails and criminal justice system. I related the story of KEEP and the implementation of detoxification and methadone maintenance in the Rikers Island Jail. I spoke to how desperately these programs were needed across the country in the criminal justice system. After the conference Dr. Judd saw me outside the building and indicated that he found my comments most interesting. When the results of the conference were published the first recommendation was defining opiate dependency as a brain-related medical disease and the second was that methadone maintenance with relevant medical services had the highest probability of being the most effective of all available treatments. Dr. Judd and his committee stated as the third major finding and recommendation that opiate-dependent persons under legal supervision should have access to methadone treatment.

I hope with buprenorphine, which is less stigmatized, that it can be introduced as an effective medication in the criminal justice system. That remains to be seen. In a large jail such as Rikers with high security, administration of buprenorphine or suboxone is time-consuming. Prisoners have to be monitored while the medication is being absorbed sublingually, which takes up to six or more minutes a

prisoner. This may not be cost effective. The Rikers Island Jail administration estimated they could medicate ten methadone patients for every buprenorphine patient. You also have watch for possible diversion of suboxone pills. In smaller jails or in rural areas where there is no methadone, suboxone should be considered. Things are picking up now since the American Association for the Treatment of Opiate Dependence is encouraging a nationwide educational effort to get jails to adopt methadone and KEEP. Eventually there's going to be a research project which I hope to involved with. I've been involved with the first two major innovations in criminal justice. I don't know whether I'll be involved with a nationwide agenda. However, in the last three years there has been a small increase in the use of methadone in the jail systems.

NC: When your leave of absence ended, what did you do?

HJ: I immediately had a job with the state. There was a change in the city laws. I got a phone call four months after I started at Rockefeller that I had to come back for my job or else I would be laid off. Wallace and McDivit had left and the agency was run by the most unimaginative political hacks-the same ones who had questioned my overhaul

of record keeping. I said I couldn't come back because Dole had hired me for a major follow-up study that I was in the middle of. So I quit the city, wrote a grant that was approved, and worked full time on the follow-up study. I worked 24/7. I was there until 1977. Then I was hired by Doug Lipton as part of his research team at the New York state Department of Substance Abuse Services (DSAS), which later became OASAS. Doug Lipton hired a lot of really good researchers—Don Des Jarlais, Bruce Johnson, James Schmeidler, Sam Friedman, Mike Miranda, Steve Magura, Andrew Rosenblum, Phil Appel, Blanche Frank, Sherry Deren, Liz Kastner, Rosanne Morel, Gregory Rainone, Ray Toledo, Rob Smith, myself, and a host of others. He hired really first-rate people many of whom became the nucleus of NDRI under Doug's leadership. There was a split in the '80s from OASAS, and Doug moved everybody who wanted to join the new group and work on research grants over to NDRI. I did not want to go. Sherry, Don, Bruce Johnson, Sam Friedman Steve Magura and Andy Rosenblum left. They felt that they would be able to do more research, obtain grants without restrictions of a state agency or the state agency taking indirect costs. They were all successful and gained world wide reputations. Dole and I still wrote papers on the follow-up study for the *New York State Journal of Medicine*, and for the New York

Academy of Sciences. That was really one of the most quoted papers I helped write. I also wrote "Alcoholism and Methadone Treatment: Consequences for the Patient and the Program at New York State" with Phil Appel. Then I wrote a few others on predicting post-treatment outcomes, where we used fairly sophisticated statistical methods, and on these I worked with Don Des Jarlais and Jim Schmeidler.

NC: You also worked with Don Des Jarlais, as well as historian David Courtwright, on the book, *Addicts Who Survived.* How did that project come into being?

HJ: The book, *Addicts Who Survived,* came into being because Dole's database at Rockefeller University was transferred to Creative Sociomedics. After fifteen years it was decided that the database should go to another agency and the unit, which was part of Dole's laboratory and known as the Community Treatment Foundation, was closed. The database was awarded on a bid to Creative Sociomedics, which had to get permission, signed releases from all active patients. Creative Sociomedics has the basic data for practically all methadone patients in New York State. The database was set up basically to avoid duplicate registrations. When I did my follow-up study, I only found three duplicates. They weren't

getting medication from different clinics-they just used different names at different times.

When the database moved in 1979, the state wanted to keep some trend data. The only patients included in the transfer were the active patients. One of the workers, Mike Miranda, who worked with the computer system at OASAS while studying linguistics, ran a frequency table without names or personal identifiable data of the number of patients in treatment by year of birth. He went around the office showing this distribution but people ignored it. When I looked at it, a light went on. There were about a half a dozen people born before the 20th century. They were born in the 1890s.

When I looked at this frequency distribution, I saw that heroin addicts survived well beyond the age of forty. This fit into my concept that they were not abstinent but on methadone maintenance and therefore this was possibly indicative of a metabolic theory of addiction. When Dole did his original methadone research there was a maturing out theory of addiction which inferred that addicts matured out of addiction after the age of 40 or 45. This frequency distribution in a sense refuted the maturing out hypothesis. So I wanted to know who these people were and how they

survived over the different eras of the 20th century. Those were my two basic questions.

I really felt this study was worth doing, so I told Don Des Jarlais that I had people on methadone who were advanced in age and had survived as heroin addicts past the age of 40. Don stated that we would need an historian to do the study, but the state did not employ one at the agency. My idea was to look at addiction through the different phases of the century, at how people survived through the age of enforced abstinence, when things were very highly criminalized. By the late 1960s and early 1970s we had methadone, and things were different.

I was a very social person in the office, so I went to Bruce Johnson and told him about my idea and the computerized list. Bruce is an extremely eclectic sociologist with numerous projects, books and publications. He didn't say anything to me. I didn't even know if he was listening. A week later, he said, "Herman, on Saturday the New York Historical Society is having a meeting on Victorian addiction." He asked if I wanted to go with him. I said no, I'm not going, I wanted to go running in the Central Park. On Monday morning Bruce comes in the office and says to me,

"I went to the meeting, and I met a young historian, David Courtwright. He came over to me and said, "You're from New York, do you have any old addicts here?" Bruce gave me David's business card. At 9:15 a.m., I called David and we made friends immediately. I spoke to Don and told him about David, then I wrote up a three-page memo to Doug Lipton, the head of the unit, explaining what I wanted to do and that we needed money for tapes. David, Don and I were in business doing what was essentially an oral history study. Lipton had some cash available for $15 or $20 an interview. He passed the idea on to the administration. Their perception was that Herman Joseph should get the potato award for being such a waste of time and state money. Even when the book first came out, nobody in administration even looked at it.

But I was persistent. Don Des Jarlais was my one my friends in the office, and my boss. He became interested in the project. Doug was his boss, and both supported this project. Even though the top administrators in the agency thought it was not essential, Don worked in a supervisory capacity with David and myself, and contributed his understanding of AIDS and addiction to the book as well as participating is some interviews.

NC: How did you divide up the work?

HJ: I got all the names of the people and the clinics they were in. We set up a questionnaire. David taught me how to be an oral historian because I didn't know anything. I watched, I listened to him do interviews, and I also took a course in qualitative research. I'm now a fairly good oral historian. You listen to my interviews and the person comes out. I learned to elicit rich material in a nonjudgmental manner. Sometimes I had to play "dumb," so to speak, to have the interviewees describe things to me in detail so that I understood everything that transpired in their narratives. If one subject said, "You know how it is," I would indicate that I did not know so the subject would explain in detail the narrative from his or her perspective and recollections.

David did the first few interviews and he also did major ones, like Nyswander and Dole. Somebody more objective had to do those interviews. As we progressed I was doing more of the interviews and David's secretary did the transcribing. Eventually I did many of the interviews by myself and also the verification in New York since David was busy as chair of the Department of History at the University of

Connecticut. He came to New York when special interviews were scheduled, such as William S. Burroughs, and at the beginning was in New York City several times a week. He stayed at my apartment and in the mornings we went running in Central Park. However, as I gained skills he was able to travel less to the city. It was a lot of interesting work and I was not bound by hours.

NC: How did the state agency respond to the book?

HJ: Doug Lipton liked it. However, when the book came out, and I brought it in, the unit I was working in didn't even take me out for coffee. I was upset. I was almost sorry I ever worked on it. I had this let down experience in the office after working so hard with David, who was wonderful, and Don, and, of course, my friend Claude Brown. However, in contrast the office reception David, Don, Claude Brown and I celebrated in a small restaurant in China Town. I became very interested in history in general as a result of this project and I learned more about addiction from listening to the interviewees. Their stories were fascinating.

NC: What else had you been working on in the 1980s?

HJ: Homelessness was increasing in NYC in the 1980s. I had never seen so much homelessness and destitution as I saw in the ‘80s. That opened up another interest for research at the state. I went around to all the shelters to see what was going on. During the AIDS epidemic, I believe it was in 1988, there was an important meeting in Washington where they invited people from all over the country and sequestered us for two days. The proceedings were published in 1988 as a NIDA monograph called “Community Response to the AIDS Epidemic.” We had a homeless division at OASAS, and Hilda [Roman Nay], who was head of that division, went down with me to Washington. We wrote the article, “The Homeless Intravenous Drug Abuser and the AIDS Epidemic,” and had a joint presentation. That was the first article really addressing homelessness and AIDS and showing the high risk behaviors in contrast to the domiciled population. The month that we wrote it, in New York City, the number of AIDS cases related to male drug addiction superseded the number of AIDS cases related to men having sex with men. For a while it was very widely quoted because it was the first to address the issue. Now there are hundreds of such articles. However, as a result of the article, I was approached by Dr. Phil Brickner to participate in a nationwide article about homelessness and AIDS in the book *Under the Safety Net: The*

Health and Social Welfare of the Homeless in the United States.

While I was at OASAS, the crack epidemic hit like a thunderbolt and nobody knew what to do. I organized a research working group called the Cocaine/Crack Research Working Group, which later became the Chemical Dependency Research Working Group. The idea was to bring together social sciences and basic sciences—lab sciences, basic bench scientists—to take a look at what can be done medically in terms of cocaine/crack. Until then nobody was talking to one another. Nobody knew one other except as references and footnotes in articles. I felt that scientific communication was almost as if not as important as the individual work in pharmacology, neurobiology and sociology. So I got the best people and set up meetings in different venues, at Rockefeller, Beth Israel, CUNY, Mount Sinai, Cornell, Harlem Hospital. At one of the meetings, Dr. Mathilde Krim showed up. I knew her from the civil rights era, and as a supporter of the work that Dole and Nyswander were doing with methadone. She is head of AmFar, the American Foundation for AIDS Research.

Mathilda Krim is a Ph.D. who was head of the interferon

cancer research lab at Sloan Kettering before she organized Amfar. She was on the board of the Aaron Diamond Foundation in New York. She came to several of my meetings, and thought it was a scientific discussion group worthy of a grant from the Aaron Diamond Foundation. She sent Dr. Alfred Gellhorn, an elderly distinguished physician who was the father of medical education in NYC. He was dean of the University of Pennsylvania Medical School and founding director of the Sophie Davis School of Biomedical Education for minority students at CUNY in Harlem and the high school Gateway science program for minority students in NYC. He came to the meetings and said they were by far the best research discussions about addiction, addicted disease, and sociology together. Nora Volkow, who is head of NIDA now, was invited as a speaker, as was Mary Jeanne Kreek, and Eliot Gardner. And these were only from neuroscience. Dr. Foltin from Marion Fischman's laboratory at Columbia also presented as well as speakers from every aspect of research, treatment and the role of needle exchange in preventing HIV.

I did all this when I was at OASAS. They let me do it. They didn't know what the hell to do with me, so I organized all these things. A major issue was the neonates exposed to cocaine in utero. I organized a consortium of the major

medical schools in the city to see if we could get a research grant. We didn't. I was very upset because we spent over two years putting together a multi-project grant to look at every aspect of cocaine-exposed children in utero. Different researchers wrote up individual grants concerning various aspects of the development of neonates exposed to cocaine. But NIDA decided not to fund it in one place, but to spread grants throughout the country. I don't think they wanted to give the grant to New York since it would have been a very local thing. What eventually happened is that a grant went here, and a grant went there. They were spread all over, which was unfortunate because we still don't have the coordinated information we could have gotten.

The cocaine research was only one project in the research working group. We examined every type of medication that was put forth to treat cocaine crack addiction. We presented every type of street ethnography and psychosocial research. Every type of intervention, including social intervention and needle exchange, was presented. The main thing was to stimulate research, and we did. Eliot Gardner got a grant for basic research at Albert Einstein College of Medicine. I think Mary Jeanne Kreek may have received some research grants or information and contacts since she attended these

meetings religiously, and allowed researchers in her laboratory to present papers. She sponsored one session, held in a small lecture hall at Rockefeller University, about the coordinated harm reduction, needle exchange, and the methadone program in Lundt, Sweden, administered by the major medical center there. The exchange actually served as an intake for methadone treatment and for tracing sexual partners of HIV positive exchangers. These were some of the Aaron Diamond Lectures that I put together. I received three grants for two years each a total of six years and then the Aaron Diamond Foundation disbanded in 1996. There were about 30 or so Aaron Diamond Lectures, culminating in the first International Conference on Pain and Chemical Dependency.

One of the major studies that came out was the series of papers on homelessness in New York, the prevalence of infectious disease in substance abuse among people who use homeless shelters, medical vans, and soup kitchens. This research was done basically under NDRI grants created as a result of the Aaron Diamond Lectures with Steve Magura and Andy Rosenblum of NDRI, Project Renewal, and the Health Department in NYC. We found our subjects in soup kitchens, shelters and the street medical van operated by Project Renewal.

NC: What is Project Renewal?

HJ: Project Renewal works with the NYC shelter system, and has been very supportive of homeless methadone patients since it is estimated that at any given point in time there are about 1,500 methadone patients in the shelters. Project Renewal has established a methadone residence for about 100 male methadone patients and has integrated them into their vocational training and housing programs. Recently they implemented a housing first program similar to Pathways to Housing. Not until 2003 did Pathways to Housing design a housing-first program targeted to homeless methadone patients with mental illness in the criminal justice system. Phil Appel, Karl Loutsis and I were the ones at OASAS who maintained contact with Pathways over the years. Eighty percent of the 32 patients who were given apartments were still housed at the end of five years.

NC: At what point did you become concerned with the under-treatment of pain?

HJ: When I finished with the studies on homelessness, I happened to read an article in the February 1990 issue of

Scientific American called "The Tragedy of Needless Pain" by Dr. Ronald Melzack of McGill University. It appeared in their edition of the 10 most important articles of the 1990s. When I read it, it really struck me that the treatment of pain very much overlapped with the treatment of addictive disease. They're opposite sides of the same coin. We're talking essentially the about same class of drugs, the same neural pathways. I noted that people were not treated well with pain, especially methadone patients. The doctors didn't understand that. When my mother was in the nursing home, I had problems getting enough morphine for her and I noticed that people were being undertreated. One reason for this was the fear of addiction. So I contacted Melzack and he referred me to Russ Portenoy, who is head of Palliative Care at Sloan-Kettering. I contacted him and inquired about setting up a conference on pain and chemical dependency. It took two years to organize. We had our first international conference on pain and chemical dependency in 1996.

A nurse in Russ Portenoy's department worked with me to establish a small program committee that included Joycelyn Woods, a methadone patient who underwent surgery and had some problems receiving adequate pain medication. Joyce Lowinson and Dr. William Breitbart of Sloan Kettering were

on the original organizing committee and with Russ were co-medical directors of the first conference. We formed an International Association for Pain and Chemical Dependency, which is the sponsoring organization of the conference and that is chaired by Dr. Ian Buttfield of Australia. As a result of the pain conferences, a group of us-Andrew Rosenblum, Russell Portenoy, Dr. Steve Kipnis, the medical director at OASAS, and myself completed research on prevalence of chronic pain in chemical dependency populations. The paper was published in JAMA in May 2003 after I retired. It was the possibly first article of its type and emanated directly from the issues presented at the pain conferences.

NC: It sounds to me like you were able to pursue your own research interests while you were at the state. You would often get an idea about something we should be thinking about and you were able to somehow marshal the resources to go into that area. Do you feel like being a state worker limited your career as a researcher, or facilitated it?

HJ: Working for the state facilitated my career, but it was not easy. Few administrators or personnel from Albany came to the Aaron Diamond lectures and practically none came to

the first pain conference. The New York Office of OASAS was well represented. I was allowed to pursue my scientific interests but I was really not integrated into the core of the agency. They recognized to a degree what I did. For example, when the my first report on the Aaron Diamond lectures came out, unbeknownst to me, the director of the agency sent copies to most of the elected officials in New York state and even Washington, so he must have seen some significance in what I was doing. But I never personally heard from him. He sent the report around with a covering memo that some of his staff were organizing the series-no mention of my name or the Aaron Diamond grant.

However, Dr. Barry Stimmel, editor of the *Journal of Addictive Diseases*, asked me to put together a special issue on the Aaron Diamond Cocaine Lectures. I got together a series of papers and was co-editor of the Journal entitled the "Neurobiology of Cocaine Addiction: From Bench to Bedside." The practice was that the issues became books. I also designed the cover with the help of friends and the publishing company because I did not like the austere covers and felt that this issue and book should deviate from the others. There are some very interesting articles in the book, including an epidemiological article about cocaine

trends in NYC from 1986 to 1984 by Blanche Frank and John Galea of OASAS; an article about cocaine and brain imaging by Nora Volkow and her staff; and an intriguing article about cocaine and the endogenous opioid system by Mary Jeanne Kreek.

I was also part of the street ethnography unit, the OASAS street studies unit. Two workers from that unit died in 1996/7 within eight months of each other from Hepatitis C, one from cirrhosis of the liver and the other from cancer of the liver. I did not know what Hepatitis C was at that time. Nobody really knew. We were working in close contact, and I got very concerned since I did not understand transmission. Once I understood transmission, I realized that the non-infected staff were out of danger, but anybody who injected a needle could be infected and not know it. It took me two years to muster the resources to present at Mount Sinai Medical Center on “Hepatitis C and the Chemically Dependent Patient.” The conference was organized with the help of Sy Demsky, the director of the narcotics rehabilitation center and the methadone program at Mt. Sinai; Michael Chaplain, who was assigned to work at OASAS by the AIDS Institute; and Frank McCorry, an administrator at OASAS. I was able to get the most renowned physicians and researchers in New York

City including the epidemiologist of the NYC Dept of Health in NYC to present at the time. Over 800 people showed up. The head of CSAT, Dr. Westley Clark, came from Washington. It was the first conference of its type in the country. At the time, the issue was really not on anyone's radar screen. What satisfied me most about this conference was that many people who attended were at one time in their lives at risk, and some of them found out subsequently that they had been infected without ever knowing it, and they're under treatment now. Their lives were saved.

Breaking the ice for Hepatitis C was for me very important. Then I was able to transfer this interest to the homeless population and write papers about Hepatitis C, homelessness, and prevalence. I was not that interested in pursuing the clinical issues. As I anticipated many researchers and administrators entered into this important area and implemented programs and research. Most of the social research studies that I did had to do with the individual, but I was also curious about whether the introduction of methadone as a public health measure had reduced hepatitis connected with drug injection, mortality, and criminal behavior connected with drugs. I don't know what made me do this. I was with Dr. Dole in the '70s, and I said, we're

always looking at the individual population but how does this affect the overall city? I went to the Police Department and the Health Department and obtained statistics showing that after Dr. Robert Newman opened sufficient clinics to increase the methadone population to 34,000, drug-related mortality decreased, drug-related arrests decreased, and hepatitis also decreased. This was before the crack cocaine epidemic, though. I imagine with the crack cocaine epidemic things in some ways increased. However, many people used those statistics to validate methadone treatment for heroin addiction. Similar results were found wherever methadone treatment was introduced on a large public health scale such as in Hong Kong by Dr. Robert Newman. The statistics were introduced into congressional testimony and even overseas. Mark Parrino of AATOD used these statistics in testimony before legislative committees.

I was brought over to Belgium because they were discussing the introduction of methadone. I told them they wouldn’t see anything unless they had a large population coming into treatment. Then you see that medical treatment of addiction impacts on the crime and the vital statistics of the community at large. That was published in NIDA Monograph 93 on “The Criminal Justice System and Opiate Addiction.”

After I went to Belgium, I wrote a paper that was published in the Belgian *Archives of Public Health* in 1995 under the title "A Point in Time: the impact of expanded methadone maintenance treatment on citywide crime and public health in New York City 1971-1973." I co-authored this article with Joycelyn Woods. I included the statistics in that paper, so that little trek down to the Department of Health and the Police Department yielded some very good numbers, which were used effectively.

About publications-I should add that when I was employed at the state, I was asked by Dr. Sherman Kupfer, the editor of the Mount Sinai Journal of Medicine to be a guest editor for an issue devoted to methadone maintenance treatment. Dr. Barry Stimmel recommended me to Dr Kupfer. I planned a double issue for October/November of 2000 and a single issue for January 2001. The articles cover many issues concerning methadone treatment as of 2000/2001 and I was told by the journal staff that the issues when they were first released had more computer hits than any other issue and website at Mt. Sinai. What I liked about the journal is that it can be downloaded without a fee and it is downloaded throughout the world.

NC: What do you feel is the most important issue facing the field now?

HJ: The issue that I feel is the most important is the one of social stigma. It has been an issue for methadone patients from the beginning. My dissertation dealt with the stigma endured by socially rehabilitated and employed patients in a special program known as methadone medical maintenance. Stigma is not only directed towards patients, it is also directed towards the program and the medication itself. Stigma is the underlying factor that drives policy and results in either no methadone programs within a community or excessive delays and regulations before a program is opened. The reporting rules to a clinic may be more severe than the reporting rules for persons on probation and parole.

I was older, and I didn’t want to stay in school. I was eating dinner with my friend John Ball, the sociologist, and all of a sudden the stigma topic came to my mind because of the pain issues that I studied and the other issues that I had, plus talking with methadone patients about how they feel being on methadone. Being on methadone has its own unique stigma, especially because of the concept that you

are just substituting one addiction for another. In a sense the stigma of heroin addiction is transferred to methadone since it is regarded as a heroin substitute. So I had all the references, and wrote the dissertation in about eight months.

NC: How did you come to think about stigma as a sociological concept?

HJ: First of all it is a major issue for sociological study, and there was the ground breaking work of Erving Goffman. Well, I think of my own life. I have a lot of cousins, and a big family. As far as I know, the others, except for one cousin, didn't have the type of unique physical and emotional issues that lead to stigma at a very early age. I lived a very painful life, especially during my adolescence. So I felt that I knew what alienation meant as a teenager, as a child, as a young adult. It had a very profound effect on me. Goffman's work hit the nail right on the head, "spoiled identity." Methadone patients carry an invisible stigma that alters their entire life. I'm very particular about my dress, the way I present myself, because of my physical impairments. I have diabetes; but that's not so stigmatizing. I have a heart condition, but that's not

stigmatizing. But a deformity is. The others may be hidden. But a deformity is very stigmatizing, especially if it is a visible and it interferes with your interaction in daily life.

My dissertation rewrote Goffman in terms of a specific case—the invisible stigma that methadone patients face. For instance, take gay people. I interviewed some gay people in the study. To be on methadone in New York is a greater stigma than being gay. I didn't realize that. At one point, a gay patient in the study told me that he was in ACT-Up, a gay civil rights group fighting for funding for AIDS research and services, but had to hide the fact that he was a methadone patient. Another methadone patient told me that he was in a gay pride demonstration, but he would never participate in a methadone demonstration. I also interviewed some lesbians who indicated that they easily found out who was gay in the office, but if their status as methadone patients were known they would be the first to be blamed in the office if anything such as a pocket book disappeared.

NC: Didn't methadone arise to destigmatize addiction?

HJ: It was an attempt, but here's the conundrum. Working

people, enter methadone to correct an addiction. This is directly what Goffman says, that disabled people are trying to correct themselves. I'm always correcting myself. I personally go to the gym for my diabetes and my heart. But I really go to the gym because maybe something will happen, and I won't have this problem with the erbs palsy and physical body imbalances, and I'd be totally developed on both sides equally. That isn't going to happen. My heart, my diabetes, they are not stigmatizing to me. The only thing that's stigmatizing about diabetes is when they say you're lazy and you're fat, you don't exercise and you don't eat right.

NC: What else has the focus on stigma allowed you to see?

HJ: It enabled me to pay attention to patients with physical disabilities in my work in the 1990s when I was employed at OASAS. With Joan Randell, then head of rehabilitation for the agency and now assistant commissioner of the New York City Human Resources Administration, I organized the first meeting in New York City on Chemical Dependency and Physical Disability. I befriended Dr. Thornhill, a physiatrist who was head of the Department of Physical Medicine at Harlem Hospital. He was deeply concerned with problems of

disability that he saw among young drug users in Harlem, especially those addicted to cocaine and crack. He was the type of doctor who would walk along Lenox Avenue in the vicinity of Harlem Hospital and speak with young people whose disabilities were directly related to their drug use and destitution. This was reflected in his service. For example, stroke patients were clearly subdivided into two groups—the elderly who suffered strokes and patients under 45 who suffered strokes related to cocaine/crack use.

Many professionals and patients in wheelchairs attended this meeting, but there was little interest from OASAS. The commissioner at the time made one visit to Dr. Thornhill at Harlem Hospital as a result of the meeting. I thought surely they would take up this topic and develop services for this population. I organized a citywide group around the issue but the agency did not respond. The report was filed in a drawer and never saw the light of day. Nothing came out of our efforts. I felt that a lot of people were hopeful that OASAS would allot some money for services. However, for a few months light was shed on a previously hidden issue. I also suggested to Dr. Joyce Lowinson, the senior editor of *Substance Abuse: A Comprehensive Textbook*, that a chapter on physical disability and substance abuse be included, and it

was.

NC: Can you tell me more about the history of medical maintenance in New York City?

HJ: Medical maintenance was organized By Dole and Nyswander at the Rockefeller University, with the help of Mary Jeanne Kreek, who assisted with a letter to CSAT modifying the regulations. I was brought in from OASAS to assist in the creation of the program at Rockefeller. Previous to this Don Des Jarlais and I had completed a small unpublished report for OASAS in March of 1983 titled "Methadone Patients in Conventional Society" concerning patients who were doing well in the clinic, working outside of the drug addiction field in private businesses or for public agencies. I interviewed 47 patients for this report. Most were married, working class patients who had families and were doing very well. The major problem they faced was social stigma. I remember one married couple-both husband and wife were successful methadone patients-relating that the stigma of being a methadone patient was also directed against their young sons, who were outstanding students and athletes. After the parents' status as methadone patients became known, the family had to leave their church, convert to

another religion, and transfer their sons to another school. Others indicated that their jobs would be in jeopardy if their status as methadone patients were known. Managing the social stigma directed towards methadone was their major social concern. This report set the stage for the development of medical maintenance. Unfortunately, it was never published but it is available from Phil Appel at OASAS as Treatment Issue Report #32.

The original criteria for medical maintenance were worked out by Nyswander and myself with Dole's approval. I was brought onto the team to assist with the structure. We wanted to assure that doctors could treat the patients as any other patient within their medical practice, so it was important that certain social issues be resolved such as chronic unemployment, criminality, polydrug abuse, and non-compliant behavior. To demonstrate that behavior was changed I told Dr. Dole and Nyswander that patients should be able to establish a strong trend. It was my feeling that three years of continuous behavior should be indicative of an established trend. Some patients may not do well for the first two years of treatment, and this should not disqualify them for future medical maintenance. So we decided that at the beginning the patients should be in treatment for five

years and show the last three years as continuous compliant behavior that would not cause undue issues in a private office. Within the first years of treatment patients resolve issues, are correctly stabilized, or in some cases really do not do well until their third year of treatment. Some take years to adjust and become responsible patients.

Dr. Nyswander recruited patients who were known to her in the program. These patients were in methadone treatment for over 10 years. Many were employed in the methadone clinic system as counselors or administrators. At this point in their treatment, they were socially adjusted and could be transferred outside the clinic system to a private physician. The original patients were treated by Dr. Nyswander at The Rockefeller. I created a structured form for her to complete so we had records of doses prescribed, urine reports, physician’s notes on personal and social behavior, and a section for medical problems. This way information could be easily retrieved. Drs. Dole and Nyswander then decided that the physicians who were recruited to work in the program should not be part of the clinic system but should have medical practices which would allow patients to be treated within the mainstream of medicine.

Dr. David Novick, an internist with a specialty in liver disease, was chosen as the first physician. He also had an office-based practice in internal medicine at Beth Israel Medical Center. He recruited Dr. Edwin Salsitz, an internist with a specialty in pulmonology, who had worked on the detoxification ward at Beth Israel. His attitude toward methadone was shaped by the dysfunctional, unemployed methadone patients sent to the ward for detoxification. Dr. Salsitz related that he was shocked when the first medical maintenance patients came to his office. They were well dressed, working, polite, and their demeanor fitted in with rest of the patients in his practice. He then did a 180 degree turn in his attitude towards methadone treatment. The patients that he treated on the detoxification unit were in contrast socially destitute while those that he treated in his practice were working middle and upper class patients.

Methadone had transformed the lives of the patients who were in medical maintenance. Because of the social problems of chronic unemployment, minority status, homelessness, and destitution, the patients on the ward were not socially rehabilitated. Their condition had nothing to do with

methadone but with the lack of services to bring them out of poverty. Now medical maintenance admission criteria have been reduced to four years in treatment and three continuous years of stability. If you show us subsequently three continuous years that you have taken your methadone as directed, you haven't sold it, you are not abusing other drugs, you have not been arrested, then you've stabilized your life. You have shown that you could be treated by a private doctor as any other medical patient. The federal government now has regulations that compliant patients in clinics can get up to one month in take home medications after two years of compliant treatment. Over the years the original cautious criteria have been substantially reduced.

Novick, Salsitz, and other physicians at Beth Israel established the model for methadone medical maintenance. They saw patients in the privacy of their offices, collected urine samples, observed ingestion of one dose, and, if satisfied with the patient's adjustment, distributed a 28 day supply of methadone diskettes. The patient reports once every two weeks for the first month, and then once every 28 days. If problems arise, such as a traumatic event, a serious illness or accident, job loss, or death in the family, the patient may be seen more frequently. The

physician could treat smoking and write prescriptions for other conditions if the patient needed extra help. The medical maintenance physician cooperated with the patient and other physicians if the patient needed surgery and would advise about pain management. The medical maintenance physician became the coordinator of medical treatment for the patient. If indicated, call backs for counting of medication may be done to verify that the patient is taking the medication as directed.

My friend Dr. Robert Newman advocates for the prescribing of methadone by private physicians and the dispensing of methadone to the patient in pharmacies as in Europe and Canada. It didn't work out that way in the United States because methadone is a highly controlled medication for the treatment of addiction. It is less highly controlled for pain. You can get methadone for pain without the restrictions that are in place for chemical dependency. But once methadone is prescribed for the diagnosis of chemical dependency, the whole wall of regulation is placed in your way. The first drugstore program in the United States where methadone is dispensed on a physician's order was opened up as a cooperative program between the Vincent P. Dole Institute of Weill Cornell Medical Center and a local Duane

Reade pharmacy with OASAS as the organizing agency. John Perez, who was head of methadone for OASAS, Dr. Eugenia Curet, the administrator of the Weill Cornell Methadone Program and the Dole Institute and Dr. Ann Beeder, the physician of the Dole Institute and the methadone program, and myself, who was in charge of organizing medical maintenance for OASAS, were the major players. This was the first pharmacy program in the United States. We had to get a special safe, a special lock, and an alarm system for the pharmacy. Their regular safe has OxyContin, morphine, and other opioids including methadone for pain, but methadone for chemical dependency has to be registered and stored separately by the pharmacy. It cost about $2,600 to bring the pharmacy into compliance with DEA standards. Then we had to get the approval of CSAT, the DEA, and the OASAS legal division to proceed. Three agency approvals–two federal and one state- were required plus a DEA inspection of the safe, the lock and the alarm system. The Duane Reade pharmacy was made a satellite of the clinic and designated a narcotic treatment program with a memorandum of understanding between the clinic and the pharmacy. The prescribing physician’s office was designated as a satellite of the clinic with methadone orders transmitted electronically to the pharmacy. the patient presents his or her picture ID to the pharmacist

and receives a 28 day supply of methadone.

Then I worked with the Whitney Young Methadone Program up in Albany. The administrator, Joseph Lacoppola, organized medical maintenance in a primary care unit where the doctor who prescribes the methadone is located. There is a DEA licensed pharmacy that can dispense methadone in the primary care center. The Whitney Young primary care unit services the local community and is about 10 blocks from the methadone clinic. In order to meet the DEA criteria, $6,000 had to be invested in the primary care center for a new safe to store methadone for chemical dependency and an alarm system. The primary care center was designated a narcotic treatment program and a satellite of the regular methadone clinic. The program is now in operation with about 25 patients who have been compliant patients in methadone treatment for ten or more years. The methadone patients have their own doctor. The doctor has to be associated in some way with the methadone clinic, a satellite. The patient sees the physician in the primary care center and the pharmacy in the primary care center fills the physician’s methadone orders. The patient is worked up to a month’s supply. Urine tests are administered.

The opening of this unit was delayed almost a year because of headlines involving deaths from methadone prescribed by pain physicians and other physicians not associated with drug treatment programs in other parts of the country. There have been a number of deaths attributed to methadone in the past few years. Studies have shown that the overwhelming number of these deaths have been from methadone prescribed by private doctors including pain doctors. They did not screen their patients well enough, obviously, and the patients sold the methadone into the streets, and people died. Also methadone is a bit tricky to prescribe at the beginning of treatment, and many physicians may not be educated about the stabilization process which involves achieving a steady state of methadone during the first week. Clinic physicians, however, are trained in the stabilization procedures. And methadone may not be the sole cause of death, since many of people who die are polydrug users with serious alcohol problems. On autopsy many drugs are found. I was on a panel in Washington a number of years ago with scientists and medical examiners from across the country examining death records with methadone mentions. At the time the majority of the deaths were polydrug abuse deaths and the source of methadone was primarily outside the clinic system. But deaths involving pharmaceutical medications,

including methadone, have been increasing and have become a major public health issue in certain parts of the country.

NC: Do you think that buprenorphine will have a salutary effect on public health?

HJ: Buprenorphine has a better safety profile. There is a ceiling effect and it is more difficult to overdose on it. So the government has classified buprenorphine as a Class 2 drug, which means it can be prescribed outside of a clinic setting. Physicians can prescribe it in a private office, clinic, or primary care setting. Whether or not it is as effective as methadone, I don't know. It appears to be but the studies are with small n's over a short period of time. The problem with buprenorphine is that it's a partial agonist, not a full agonist. This may be good for patients if all they need is a partial agonist. But for patients who need a full agonist, the medication may be insufficient, and they would need methadone.

The doctors are now getting training to write buprenorphine prescription. They have to have a full day's training, and they have a limit of about 25 or 30 patients. The limit for institutions has been lifted, so an institution like a

hospital can have a few physicians who are prescribing or in a group practice. People have abused buprenorphine in Europe, and there have been deaths involving buprenorphine in Europe and New Zealand, especially if patients injected benzodiazepines. Strangely enough, in many countries where widespread buprenorphine misuse has been reported, the patients went into methadone treatment. In order to avoid misuse, the federal government has now approved suboxone, a naloxone/buprenorphine, combination to discourage injection.

NC: Do you think methadone will ever become office-based?

HJ: Buprenorphine is going to be office-based. Office-based methadone has not kept up because of the regulations, and because patients are locked into methadone clinics who shouldn't be. There have not been any additional medical maintenance programs developed in New York State after I left, when six or seven were functioning. On the other hand, there are thousands of physicians now who are prescribing buprenorphine throughout the country because it's under a different set of regulations.

Over time, buprenorphine may overtake methadone in terms of being the primary or initial medication for treatment.

Again, it's a niche drug because it may not be sufficiently strong for certain cases. But patients are finding that they can adjust well on buprenorphine even with histories of high opioid dependency, so we have to see how this will work out in practice. If you only had one drug to choose to maintain people on addiction, medically speaking, methadone would be better because it can treat everybody. Large studies have shown that retention is better with methadone, which can be used to treat people who have very high levels of dependency, very low, or medium. Methadone has had some international successes. China now is establishing methadone programs. Within the next three years they hope to stabilize over 300,000 people.

NC: Are the regulations governing methadone in New York State stricter than other states?

HJ: It depends on the state. At present the methadone regulations in New York State are stricter than the federal regulations. New methadone regs are being promulgated in New York State. The current take-home medication regulations in New York are stricter than the federal government because they don't want to take chances with methadone diversion and abuse. The federal government states that people who have

done well and are in treatment two or more years can have a month's supply of methadone. In New York State, it's four years, with three continuous years of successful compliant treatment. There are no such regs for buprenorphine patients. They can be on buprenorphine for a month or two and then get a month or two month supply, or they can be on buprenorphine a week and get a month's supply or two months' supply. It depends on the doctor and the patient. So you have essentially now two different medications under two different regulatory issues that are now competing for patients.

NC: How do you feel about this seeming competition between methadone and buprenorphine?

HJ: I, for one, feel that we should have more medications. There was a long-acting drug called LAAM that was removed from the market because it was associated with torsades de pointes, very rapid beats of the heart. In Europe this was found in a few cases. But where they had the drug histories of the patients with these cardiac arrhythmias, they found that cocaine was involved within 24 hours of the arrhythmia. I wouldn't overrule the possibility of arrhythmias with LAAM or with methadone or with any medication depending on the

dose. Perhaps LAAM should be reevaluated, and those persons who are able to be stabilized on it without arrhythmia should be allowed to do so because it's a two- or three-day medication. Same thing with buprenorphine, which is a two-day medication for some people. It depends.

NC: Would you set up medical maintenance programs to use whatever the best drug is for the patient?

HJ: Yes. I would set it up like Dr. Salsitz has done in New York. He has both buprenorphine and methadone patients. He asked methadone patients if they wanted to transfer. Only about 28 out of over 200 transferred to buprenorphine and they've done very well. One or two may have gone back to methadone. The remaining patients have done well on methadone, so there is no reason for them to transfer to suboxone [buprenorphine]. Ideally the doctor and the patient should have a choice of which drug they feel best suited for. The issue now is regs. I have a physician friend in Sydney, Australia, Dr. Andrew Byrne, who has been prescribing methadone and buprenorphine for chemical dependence in private practice for over ten years. The reporting regulations for both medications are practically the same. At any time, the overwhelming majority—about 75 to

80% of the patients are on methadone—and 20 to 25% are on buprenorphine. He has had patients who have switched medications and doses until they arrive at a satisfactory regimen with either medication. That is better medicine than being governed by reporting regulations in certain approved settings.

Medical maintenance can be adopted in many venues, but to me the best venue is a primary care center like we have in Albany. That's the finest model I have helped to develop. Second to that, there are some excellent private doctors. With methadone you have a problem getting the drug because, if you're going to go the pharmacy route, you have to get a cooperative pharmacy and set it up so that it complies with methadone regulations and agency approvals. With buprenorphine, patients take a prescription to the pharmacy that has the doctor's DEA number and an X as a prefix. This notifies the pharmacist that this is buprenorphine with naloxone (suboxone) for the treatment of chemical dependency. In the Cornell methadone pharmacy program, CSAT did not want the patients bringing in prescriptions. The physician faxes electronically the methadone orders and the patients present their ID cards and receive their methadone in the pharmacy. I did not want patients taking an observed

dose of methadone in a pharmacy before other customers because it's stigmatizing. CSAT agreed to this procedure.

I am also against stating that methadone and now buprenorphine are substituting one drug for another. Substitution therapy is a stigmatizing term because it blurs the differences between heroin addiction and the medications to treat an addiction. Although heroin, methadone and buprenorphine are narcotics, they have different pharmacologies and are taken for different purposes. However, when I go to Europe, I am sometimes in the minority. The Europad conference is against the term substitution therapy but it is used in the Harm Reduction Conferences and by the World Health Organization for both methadone and buprenorphine treatment. I tell them that this can be very stigmatizing and very confusing for the public. People who are not trained, including politicians, think you're prescribing legal heroin, and you are not.

Substitution implies there's really no difference in the different narcotics. It blurs the whole concept. Patients have told me that when they hear the word "substitution," they feel the pain of heroin addiction coming back. You don't want that, as I've explained to the harm reduction

people and members of the World Health Organization. Both medications are considered substitution therapies by the World Health Organization. Substitution for what? The actions of these drugs are so different from heroin—you are correcting the impairments caused by heroin addiction and normalizing the patient. You're treating the craving. That is probably the issue because some professionals regard the craving as psychological, and it's easier for them to say, Oh, we'll prescribe heroin, we'll prescribe methadone, buprenorphine, oral morphine as if these substitute for one another. Prescribing agonists medications is fine if they are effective and under medical control and you understand why they are being prescribed.

A working parent, a methadone patient who is on methadone and holding a job, hearing people talk about methadone on television at night, has told me he sometimes feels like breaking the television set. Patients are angry and they're aware of the stigma that these words bring on them and especially if they have children.

I worked with Dole and Nyswander, and I never heard them use the term "substitution therapy" for methadone treatment. Never. In fact, the first article I wrote with Dr. Dole in

1970 brought up the issue that some people criticize methadone maintenance as just substitution. Dole and Nywander in an early paper called methadone treatment a medical treatment for diacetylmorphine (heroin) addiction. In another paper they indicated that although methadone is a narcotic as used in maintenance it has also anti narcotic properties such as the blockade effect, which blocks the euphoric effects of other narcotic drugs without substituting for them. They did not consider substitution therapy to be good medical practice.

NC: How do you respond to the claim that this is just a fight over words, just semantics?

HJ: I am for a language that does not bring more harm to people. Maybe I am wrong but the term substitution therapy may be perceived as adding a patina of stigma not only to patients who are prescribed methadone but also those who are prescribed buprenorphine. This may also be cultural since there is a group of patients in Europe who accept the term substation therapy. In the United States, patients are generally not in favor of the term. I use the simple term medical treatment. The United States government uses medical or medication assisted treatment. I am not too fond of that

term, but it is better than substitution therapy. Why don't they just use medical treatment, medication, agonist treatment or pharmacotherapy? These terms preserve confidentiality and can be used in programs that prescribe a variety of medications.

Now my friend Bob Newman, who has done so much for public health worldwide, wants to eliminate the clinic system and get doctors to prescribe and pharmacies to dispense. It's not going to be easy nor will it happen soon in this country, if it ever does. He feels that issue over what to call methadone–whether it is called "substitution therapy" or not—is just not worth it. He sees it as semantics and says that there are far more important reality-based issues, such as to increase the accessibility of treatment and develop a humane approach to treatment. He has adopted the language of the World Health Organization and the harm reduction movement, so he uses the term "substitution therapy." Dr. Salsitz personally has to educate patients who come into medical maintenance about addiction and the role of methadone as a medication and that it is not a heroin substitute. He spends hours trying to clear up misconceptions. At least in the United States and in New York, the substitution concept has really impacted

unfavorably in families, leading to estranged marriages and strained family relationships. The family feels that patient is still a weak-willed heroin addict, even though the patient is a compliant productive methadone patient.

I do feel that words can also help the situation and that proper language that does not convey stigma is important. At a recent Europad meeting, a representative from the World Health Organization questioned the term “substitution therapy,” and the issue was also brought up at the Harm Reduction Conference in a session on Human Rights. Little by little people across the world are seeing that semantics and language are important in the fight against stigma.

NC: What do you think of the rise of the global harm reduction movement?

HJ: I’m for many of the principles of harm reduction, including needle exchange with education on how to inject and prevent the spread of infectious disease, the use of naloxone to prevent overdose deaths, education about risk behaviors, and, most important, education about methadone treatment and now buprenorphine. In New York City suboxone maintenance was introduced into harm reduction and I have

been involved with evaluation of that program. Many harm reduction centers in New York provide essential counseling and social services including food, laundry, and showering. In Canada there are safe injecting rooms which assist injectors with safe practices.

However, with needle distribution one has to be careful. Needle exchange started in Holland with heroin users. Heroin injection is once every two to six hours, depending on the amount and tolerance of the person. But if the injector is using cocaine or a stimulant, injection can be more frequent—several times an hour—and take place in a binge situation with other injectors. Then there is a real danger of the same needles being used by several injectors. In Vancouver Canada, homeless cocaine injectors binged for several days in cheap hotel rooms in the late 1990s. The same needles from the exchange were used by several injectors and there was an increase in the spread of HIV and Hepatitis C within the city. Since the initial increase, the situation appears to have plateaued and is now under better control. With fast-acting drugs such as cocaine, the effects of a needle exchange may be different than for opiates like heroin unless the exchange provides education and services. Overall evaluations of needle exchanges have been most

positive for curtailing the spread of infection, especially if heroin is the drug of choice.

Some people in the harm reduction movement advocate heroin use for those who fail in methadone treatment. Several countries have small heroin injection programs that appear to be more expensive per capita than programs that use methadone. However, the drug is medicalized in that certain amounts of pharmaceutical heroin are used as determined by the patient and the doctor. In some programs methadone is prescribed to create a base for tolerance so the injector does not get withdrawal symptoms during the night and the amount of heroin used does not escalate out of control.

I doubt whether short-acting injectable drugs can become the basis for a large scale public health program because of administrative expenses, the need to have injectors report several times per day, and the difficulty of controlling the amount used. Pharmaceutical heroin may be supplemented with street drugs. Small pilots have shown that some injectors who have failed in oral methadone treatment do respond favorably. After a few months on heroin, there are transfers to other programs, including back to methadone. The Canadians have also used Dilaudid in their injection pilots

and it appears to be just as effective as heroin. Dilaudid is legal and does not carry the same stigmatized baggage as heroin. I'm not saying people can't function on heroin. They do. In *Addicts Who Survived*, we showed that they functioned while using heroin.

NC: How did your interviewees in *Addicts Who Survived* function?

HJ: They developed an injection regime. They learned early on in their addiction histories that they had to use clean needles to avoid the spread of infectious diseases. Also they calibrated their use of heroin and narcotics. We constantly heard from interviewees that they were not greedy and were able to discipline their use of heroin. If they only had so much, they would not use their entire supply at one time. Also, they were able to develop schemes to avoid the violence of the streets and obtain an almost steady supply of good narcotics; when the addiction got out of control, they went into detoxification programs such as the Public Health Hospital in Lexington, Kentucky. When the upper age limit for methadone treatment was lifted, the older survivors came into treatment. They were able to work as musicians and were employed in other types of work.

Through careful planning they were able to survive. Also, we obtained the ages of their parents and it appears that their parents lived into old age. Thus the survivors were not only careful about their heroin use but genetically were possibly destined to live long lives.

END AUDIO