What Have We Learned from Three Decades of Methadone Maintenance Treatment?


After thirty years of experience the essential questions concerning efficacy and safety of methadone have been decisively answered. Dozens of independent studies, conducted by critical evaluators in different countries, have agreed in finding that maintenance with methadone is both safe and effective over periods of years when the medicine is prescribed in adequate daily dose under competent supervision. In this editorial, I would like to supplement this general finding with several specific conclusions that, in my opinion, can be drawn from the methadone experience.

To do this, it is best to begin with the near-universal appraisal that methadone, given to previously intractable heroin addicts in an adequate, daily oral dose establishes a high level of tolerance that blocks acute narcotic effects and abolishes the recurrent dysphoria (craving) that is usually associated with long-term abstinence from heroin and other opiate drugs. As a consequence, in the majority of cases the use of heroin is reduced immediately and totally stopped within a few weeks after starting treatment.

This effect is specific for addiction to drugs of the opiate class. Narcotic craving is not relieved by non-opiate medications or psychotherapy. Conversely, methadone has no unique value in treatment of non-opiate addictions--alcohol, cocaine, sedative and tranquilizers--or smoking. The therapeutic environment of a good methadone clinic can help in dealing with these complicating problems, but credit for improvement in these areas must go mainly to persistent, supportive counseling.

It can also be concluded that long-term, high dose maintenance is compatible with normal health and function. Indeed, it is clear that the treatment has contributed to the survival of thousands of patients who entered the program in New York fifteen or more years ago. A majority of their peers who did not enter treatment are now dead, in prison or vanished.

This is not to say that methadone cures narcotic addiction; it controls the symptoms of withdrawal and normalizes the function of heroin addicts while the medication is being taken. Social rehabilitation of a patient in a methadone program therefore does not mean that he or she no longer needs the medication. Relapse after early termination is common.

On the other hand, methadone patients are not necessarily committed to a lifelong dependence on the medication. A significant fraction of the abstinent ex-addicts in New York today has previously been stabilized and socially rehabilitated in methadone programs. The key to this result is the realization that the most important objective in treatment of an addict is support of good health and normal function. This may or may not require continuation of maintenance. An obsessive preoccupation with abstinence is self-defeating, leading to low-dose programs (which
fail to stabilize the patient), premature discharge from treatment and low self-esteem if long-term abstinence seems unattainable.

Available data suggest that the longer a patient continues in a maintenance program that provides adequate doses (e.g. five years or more), the greater his or her probability of permanent abstinence after termination of treatment. Apparently, the neurochemical adaptations produced by thousands of heroin injections (with sudden impact on the nervous system and rapid elimination) are capable of gradual repair in some cases under the steady conditions of methadone maintenance.

When placing methadone maintenance treatment in a broader social and political context, it is essential to note the two instances (New York City and Hong Kong) where methadone maintenance programs have been rapidly expanded to treat thousands of patients without serious administrative problems and without interfering with the work of drug-free programs. The critical factors in these expansions were firm political support and administrative skill. They succeeded in attracting and rehabilitating many addicts who had rejected abstinence-oriented programs, and they were cost effective (estimated ratio of monetary benefit to cost, over 10).

However, for me the most educational experience of the past three decades was to learn that the traditional image of the narcotics addict (weak character, hedonistic, unreliable, depraved, dangerous) is totally false. This myth, believed by the majority of the medical profession and the general public, has distorted public policy for seventy years. This was not an original discovery. I had an exceptionally gifted teacher, Marie Nyswander, who taught me how to listen to patients rather than rush into their problems with preformed judgements. Now, having listened to thousands of addicts under widely different conditions, in different cultures, I can say that the typical heroin addict is a gentle person, trapped in chemical slavery, pathetically grateful for understanding and effective treatment. In short, a sick person needing treatment.

Given these findings, a community afflicted with an epidemic of heroin addiction should welcome a maintenance program and do everything possible to optimize its rehabilitative services, but this has not been the general response in the US and Europe. Arguments surrounding maintenance have been so muddled by conflicting political interests, by ideological posturing and by disinformation in media, that the public has remained confused and prejudiced, and so also are the politicians that it votes into office. When methadone programs have been permitted, the support has often been limited by restrictions. Much of the past three decades in the United States has been wasted in controversy, while thousands of heroin addicts remain untreated and now are major vectors in the spread of AIDS.

This background will explain my enthusiasm on reading a report that came onto my desk in late 1993. Entitled "National Methadone Policy" [1], drafted by a working group on behalf of Ministerial Council on Drug Strategy, dated May 1993, this statement considers the potential of methadone maintenance as a public health measure, the indications and conditions for optimal use and the guidelines for expansion of services in the Commonwealth of Australia. In my thirty years of experience in the field this stands out as an exceptionally rational analysis, notable because it comes form a group of concerned public officials without previous
identification with methadone. Its clear focus is matched only by that of the public health leadership in the Crown Colony of Hong Kong.

Although I have met and admired individual Australian clinicians who have done pioneering work on the utilization of methadone, I was not involved in the preparation of this report and so can praise it without restraint. The committee did its homework. Perhaps the mistakes of politicians in the United States and Europe--attempting to deal with addiction as a criminal problem--coupled with the indifference of the medical profession and the folly of therapists squabbling like medieval scholars over ideological positions while ignoring untreated addicts on the street, have had the good effect of a bad example well analysed. These mistakes need not be repeated in the Commonwealth of Australia.

Remarkably, it appears from other statistics that the world-wide epidemic wave of AIDS has not yet penetrated the needle-using addict populations of Australia and Hong Kong to a significant extent (apparently less than 5% in 1992). Nevertheless, the potential for spread is there, and once introduced into a critical number of needle-shares, AIDS and hepatitis infections spread rapidly. Whatever the reason for its good fortune, Australia at this moment has an opportunity, to prevent an epidemic. Judging from the enlightened leadership reflected in the Policy Statement, I believe that it can succeed in doing so.

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