Is There a Way Out of this Clinic? An Adult and Community Education Perspective on Methadone and the Absence of Rehabilitation

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Abstract

This paper critically examines methadone treatment from the perspective of adult and community education and questions the absence of rehabilitation. It identifies biomedicine and the methodology of evidence based medicine as the discourses that determine our understanding of addiction and treatment. It is especially critical of psychiatry for the over medicalisation of addiction treatment and the communities uncritical acceptance of the assumptions of medicine. The paper then looks at the Crinan project, as a model of good practice in drug treatment and asks what makes adult and community education an effective component of treatment that works uniquely in a way that medical model does not?

Introduction

"Every revolution evaporates and leaves behind only the slime of a new bureaucracy", (Kafka, cited in Preece, 2002, p.89). It too seemed like a revolution when in 1996 drug treatment, in the form of methadone maintenance, became more widely available in Dublin, after local protests about the increased number of drug related deaths among young people, during a time now referred to as the second heroin 'epidemic'. The protests allowed the community to reclaim the streets as the heroin dealers were driven underground. The drug dealers, many of whom were heroin users themselves, did not go away and with the advent of the mobile phone they found new ways to sell heroin. Methadone clinics became key locations where drugs were bought and sold. Like the dealers, the epidemic did not go away either, as deaths associated with methadone became a feature of the drug problem. The new epidemic was a silent one. Death from a prescribed drug has a different impact. Drug users die silently from the long-term side effects of poly drug use, prescribed and un-prescribed and after years

of multiple failed or ineffective treatment episodes. The cause of death is often blamed on the drug users for their moral failure, diseased brain, flawed genetics and inability to remain drug free while on methadone.

Ten years later, methadone may have silenced the protesters and calmed the fears associated with HIV infection, but it has done little to help the majority of heroin addicts move out of the cycle of addiction. The drug problem has deepened over the intervening period and while today thousands of addicts can avail of methadone, there is widespread frustration in local communities about the lack of rehabilitation. Methadone promised to reduce drug related crime associated with the demand for heroin and yet, despite the availability of methadone, the demand for heroin remains. Heroin related prosecutions have increased significantly from 296 in 1995 to 778 in 2004 (Connolly, 2006). Alcohol, cannabis, cocaine and benzodizaphine use are widespread among patients on methadone and there are new fears associated with the introduction of crystalmeth, a new and even more dangerous substance.

The new bureaucracy left behind in the wake of this treatment revolution, has created a huge network of local drug task forces, national organisations and committees, professional bodies and local communities at an estimated cost of 70 million euro annually. The key positions within this new bureaucracy are held by consultant psychiatrists who effectively control every aspect of addiction treatment in Ireland. Underpinned by the powerful discourse of medicine, psychiatrists exert enormous control and influence over the management, delivery and evaluation of methadone treatment programmes.

Adult and community education; an emerging discourse in drug treatment.

The drug treatment centre or clinic is not a site usually frequented by researchers from the adult education tradition and yet it is a research site with profound consequences for personal learning and development, conscientization, empowerment and social change. It is also a site that reflects disturbing inequalities, injustice, oppression and individual suffering within society. Equally, it is a site inhabited by powerful professionals with competing interests that include patient care, publishing research, continuous professional development, maintaining the status quo and sometimes, career progression.

Rooted in the tradition of conscientization (Freire, 1972), adult and community education helps us to unmask oppressive power, overcome alienation and engage learners in a process of liberation. Freire believed the role of education was to liberate people from systematic oppression. The conscientization of methadone patients involves connecting them with the hidden curriculum that has shaped their addiction and now shapes their treatment. The hopes of methadone patients should not be limited by lifelong treatment but instead should be transformed through a process of lifelong learning, leading them away from dependency toward liberation. The methadone patient as a lifelong learner is encouraged to become a critically reflexive and politicised human subject (Ryan, 2004).

This analysis is also rooted in a radical philosophy of adult education that seeks to challenge dominant ideologies, contest hegemony and resist discourses of domination that bolster the position and power of elite groups at the expense of others. Supported also by critical theory, adult education engages in a process of examining how meanings are constructed through the socio-historical structures in society and looks at how individuals and groups re-constitute relations and the social world in every day life (Hyde, Lohan and McDonnell, 2004). Critical theory has been particularly useful in examining discourses, seeing them as historically, socially and institutionally constructed statements, beliefs and practices that we take for granted (Ryan, 2004). They do not simply reflect or describe reality, but play an integral part in constructing it (Lupton, 1998). Turner (1987) examined the biomedical discourse and underlined the relations that exist between medical practices and institutions, and the distribution of power and resources in contemporary societies. He suggested that biomedicine has created an unhealthy reliance on drugs and doctors, as well as a questionable use of resources in healthcare systems.

Illich (1976) suggested that medicine was contributing to the growth in iatrogenic diseases. These are diseases caused by the excessive use of medicine. Treatment services for heroin addicts in Ireland, have become overly reliant on the use of methadone and other drugs as the primary solution, to what is fundamentally a social problem. The continued medicalisation of heroin addiction is unsustainable. Increasing the numbers of people on methadone, without investing in sustainable rehabilitative pathways to facilitate people eventually detoxifying and exiting methadone treatment, may in fact be increasing the harm caused to society. Within communities affected by the drug problem,

there is a subdued acceptance that methadone is not as effective as the evidence suggests, in helping people move out of the cycle of addiction. More and more people are becoming trapped in the cycle of methadone treatment because of the insufficient number of rehabilitation pathways. The cost effectiveness of committing resources to the provision of methadone without a proper rehabilitative infrastructure must be questioned. Political leaders have generally not encouraged or participated in explicit debate about methadone or other harm reduction measures (Butler and Mayock, 2006). The psychiatrists dominate the debate through research published in medical and academic journals. The government in turn trusts the psychiatrists and the research they generate to support the efficacy of methadone. In the absence of sufficient research transparency and the gap between the evidence and the reality on the ground, there is a need for a closer and more independent examination of methadone maintenance treatment programmes as they operate in Ireland.

Psychiatrists cannot be blamed for all the problems associated with methadone or the lack of alternative and sustainable rehabilitative pathways out of addiction. They are a highly committed group of professionals contributing to solving the drug problem and, for the most part, work collaboratively with communities and other professions. It is in their interest to see people recover from dependency and move beyond methadone and into rehabilitation. The community and voluntary sector must share some responsibility for where we are today in relation to drug treatment. The social analysis of the structural causes of poverty, unemployment and drug addiction may have been effective in a pre-Celtic Tiger economy but 'the rising tide', has not raised all boats equally. The social analysis of the 1980s and 1990s on its own will not challenge the dominant position methadone holds in treating heroin dependence.

The community sector has been strong in analysing the structural causes that impact on drug use in marginalised communities and also in lobbing and negotiating for more services, but in the process may have become disempowered by their uncritical acceptance of the assumptions of medicine and psychiatry in treating addiction. Many communities are feeling tired and disempowered by the lack of progress in implementing the National Drugs Strategy (National Drugs Strategy, 2001). While the strategy has been successful in increasing the number of people on methadone to 7,074 by May 2004, it has also created a treatment bottleneck.

This paper seeks to unmask the medical hegemony behind methadone treatment, question some of the evidence that emerges through the methodology of evidence based medicine and cast doubt on some of its claims for effectiveness.Clearly methadone should form part of treatment for dependent heroin users in the context of real multi-disciplinary teams, organisations and communities, which are not subjugated or eclipsed by one profession or philosophy to the exclusion of others. The problem is not methadone itself, but the way in which the medical profession continues to dominate and control how addiction is defined and treated. Following on from this critique, I will examine the case of the Crinan project and outline some of the ways it has managed to counter the hegemony of medicine and integrate adult and community education with medical and psychotherapeutic models of treatment. First, let us look at what has happened to addiction treatment under the dominance of the biomedical discourse.

Addiction treatment under the biomedical discourse

Dominant beliefs about how addiction research should be conducted are constructed through the philosophy of positivism and the scientific method. By applying statistical techniques to test competing theories positivism asserts that it is possible to uncover the laws of nature and produce objective ontological truths about the world. Positivism has played a central role in advancing the agenda of biomedicine and ensuring its continued dominance.

The biomedical discourse became dominant early in the twentieth century and continues to exercise control over how we define and understand illness, disease and treatment. According to Baer (2001) a combination of economic growth, social change and the discovery of germ theory and other medical advances gave biomedicine a greater political and economic advantage over other forms of medicine in what was a pluralistic field of practice that included homeopathy, botanic medicine and osteopathy. Discourses like biomedicine are maintained through hegemony, a process that explains how dominant classes persuade subordinate ones to accept, adopt and internalise their values and norms through structural rather than coercive means (Gramsci, 1971).

Along with securing a hegemony over medical practice, biomedicine extended its influence into psychology and addiction through the practice of psychiatry. As a medical specialty, psychiatry's primary goal is to treat mental illness and behavioural disorders such as substance dependence, clinical depression, bipo-

lar disorder, schizophrenia and anxiety disorders. A great deal of psychiatric research has been carried out to try and determine the influence of biochemical imbalances and genetic influences on various mental illnesses. Psychiatry holds that these biochemical imbalances can be corrected, changed or controlled through a chemical intervention in the form of a psychiatric drug (Davies and Bhugra, 2004).

There have been criticisms of the scientific method of psychiatric classification with specific criticisms of the Diagnostic and Statistical Manual (DSM) (American Psychiatric Association, 1994) the dominant system for the classification of mental disorders and diseases including addiction and substance use dependency (Crowe, 2000). According to Duffy, Gillig, Tureen and Ybarra's (2002), critique of the DSM is part of a larger debate about the major competing theories of knowledge or paradigms of positivism and social constructivism.

> When science reigns and medicine and the governments are united in a therapeutic state, people perceive countless human problems as the products of diseases and seek to remedy them with medical interventions such as drugs.
> (Szasz, 2001, p. xxiii)

Psychiatry has been criticised for its over-reliance on psychiatric drugs and its close links with the pharmaceutical industry. Prescription-related disease is a pandemic according to McGavock (2004). Prescribed drugs are now a major cause of morbidity and mortality. McGavock argues that the uncritical application of evidence-based medicine, unnecessary prescribing and the excessive and unjustified promotion of drugs has made this problem worse. The medicalisation of everyday problems has expanded the market for pharmaceutical drugs. As a vulnerable population with higher levels of educational disadvantage heroin users are at greater risk of being over diagnosed and over prescribed. Access to addiction treatment data or to participants in treatment is strictly controlled by psychiatrists who have a vested interest in the outcomes of any research in this area. Evidence based medicine (EBM) is the dominant scientific methodology employed to examine addiction treatment and is central to the continued dominance of the biomedical discourse in the treatment of addiction. Studies are generally designed, monitored and controlled by a consultant psychiatrist or clinical psychologist and are published in prominent medical journals.

Evidence-based medicine

EBM uses techniques from science and statistics, such as meta-analysis of scientific literature, risk-benefit analysis, and randomised controlled trials to inform healthcare professionals to make better decisions regarding current best evidence in their everyday practice. However, EBM continues to provoke debate and has been criticised on for its over reliance on positivism, its narrow definition of evidence and its inability to integrate other non statistical data such as professional experience and patient specific factors (Sehon and Stanley, 2003). Jones and Sagar (1995) argue that EBM can only answer those questions for which it is suited and often clinically important details may be hidden, overlooked or simply 'averaged out' by the methods of the study. Studies can be designed to produce certain outcomes making it easier for sponsors to purchase the results they seek. EBM research strongly influences what research is conducted, who receives funding, who conducts the research and what research is published. Questions that could potentially present aspects of addiction treatment negatively are less likely to be funded from government or industrial sources and unlikely to be published in medical journals. Editors of medical journals play a central role in the promotion or suppression of ideas in medicine (Miettinen, 1999). In addition, pressures on researchers to succeed, to publish and to bring in increased funding or to meet the expectations of governments appears to be increasing and may be a contributory factor (Breen, 2003).

Random Control Trials (RCT), the gold standard of EBM, are expensive to run and so researchers often turn to the pharmaceutical industry to fund research trials. Recent studies have demonstrated a statistically significant association between industry funding and authors' conclusions in medical RTCs (Djulbegovic, Lacevic, Cantor, Fields, Bennett, Adams, Kuderer and Lyman, 2000). It is clear that clinical research sponsored by the pharmaceutical industry impacts on how doctors practice medicine. Physicians are affected by their interactions with the pharmaceutical industry. There are extensive ties between the pharmaceutical manufacturers and clinical researchers (Blumenthal, Lambert and Jenny-Avital, 2004). This relationship has a significant effect on the research process and how pharmaceutical products are represented and marketed.

EBM and methadone

EBM is the dominant framework within which researchers have evaluated methadone maintenance treatment (MMT) which has been the gold standard treatment for heroin addiction for nearly 40 years and is generally claimed to be

'effective'. However, there is an absence of independent research with most of the EBM studies supporting the efficacy of MMT coming from medical sources with a vested interest in presenting evidence in such a way that any negative or unfavorable findings are obscured. This raises questions about the real effectiveness of MMT.

MMT has been generally associated with a reduction in criminal activity among individuals participating in treatment (Rothbard, Alterman, Rutherford, Liu, Zelinski and McKay, 1999). However, calculating this reduction is complex and much of the evidence comes from small-scale studies affected by selection bias where programmes have high dropout rates resulting in exaggerated programme effects. Recent studies have been more cautious in their claims for MMT.

Unemployment remains a common problem among methadone patients with vocational training having no significant impact on employment (Zanis, Coviello, Alterman and Appling, 2001). Segest, Mygind and Bay (1990) found in their study an 87 per cent unemployment rate among a cohort of methadone patients and found no clear relationship between MMT and improved employment. Lidz, Sorrentino, Robison and Bunce (2004) examined three models of vocational training, none of which improved employment or rehabilitation rates. Peters and Reid (1998) examining methadone treatment in Scotland found no improvement in employment status. Studies on the impact of MMT on employment from within psychiatry tend to report better results (Drake, McHugo, Bebout, Becker, Harris, Bond and Quimby, 1999).

According to Hickman, Madden, Henry, Baker,Wallace, Wakefield, Stimson and Elliott (2003) MMT is associated with a decrease in mortality among drug users in treatment. However, methadone remains a significant factor in the number of drug related deaths, which mortality statistics tend to under-report or fail to reflect the wider causes of deaths associated with methadone or side effects of prescribed and non prescribed poly drug use. Studies have shown that the proportion of accidental overdose deaths attributed to methadone alone can differ substantially. While the factors associated with accidental overdose are complex and usually related to a combination of factors, there is reason to be concerned with the number of deaths associated with methadone. The fact that many patients continue to use a combination of drugs including heroin, cocaine, cannabis, alcohol and benzodizapines in addition to their prescribed

methadone gives cause for concern. An Irish study of 851 patients in North-Dublin, carried out by the Royal College of Surgeons in Ireland (Royal College of Surgeons Ireland, 2006) found that 77 per cent of methadone patients had a history of cocaine use while in treatment. Many patients terminate their treatment prematurely and return to regular drug use. Peters and Reid (1998) found in their study that only 39 per cent remained in treatment for at least 12 months. Fischer, Rehm, Kim and Kirst (2005) in their review found that evidence of MMT's effectiveness on primary treatment objectives is mixed and appears to be largely short-term. They conclude that the quality and methodological standards of the evidence of the effectiveness of MMT are limited and far less impressive than usually presented.

It is clear from this analysis of the biomedical discourse and the methodology of evidence based medicine that supports the efficacy of methadone treatment, that psychiatry should not be allowed exclusive access or control of this research domain. There is a need for greater transparency and partnership in how treatment programmes for drug users are designed, managed and evaluated. While within medicine there is a move towards a holistic model of treatment, this move is constrained by the dominance and power of the biomedical discourse and the control exerted by psychiatrists over addiction treatment in Ireland. One project that has managed to develop a more holistic approach to treatment is the Crinan project in the north inner city of Dublin.

Adult and community education in practice: The Crinan project

The Crinan project was established in 1997 in response to the needs of young adults seeking treatment for addiction to heroin and other drugs in the north inner city of Dublin. Managed by a partnership between the statutory sector, the local community and a voluntary group, the project has managed to combine and integrate an adult and community education approach with medical and psychotherapeutic models of treating heroin and cocaine addiction. In examining the Crinan project as a model of good practice in drug treatment, I will seek to outline how adult and community education is an effective component of treatment that works in a way that the medical model does not.

Community development

Medicine is limited to treating the symptoms of addiction. A community development approach tackles the causes of addiction. It recognises that the deeper systemic causes of addiction must be addressed, if the benefits of treatment are

to be sustainable. Crinan is a community-based project rooted in the principles of community development, working in partnership with other organisations and professionals seeking to bring about long-term community change. The project participates in and is represented on various networks and policy fora influencing policy at local and national levels. As a community based project, its analysis of the drug problem looks at the broader causes of addiction and addresses these through adult education and community development. Addressing socio-environmental, cultural and economic factors, as well as demographic variables such as gender, age and ethnicity is central to this approach. Addressing issues of educational disadvantage, economic and social development as well as the provision of adequate housing, recreational facilities and parks is central to building communities where people have choices other than to use heroin or methadone.

Community education

Medicine requires compliance. Within the medical model, the patient normally becomes a passive recipient and consumer of treatment. As a result, a dependency is created between the patient, the doctor and the medicine. Adult and community education nurtures a degree of resistance to oppressive discourses and an awareness of relationships based on imbalances of power or knowledge. It seeks to enable the patient to become an active participant in their own treatment and rehabilitation process. Barr (1999) suggests that community education, a process of generating liberating knowledge is central to the way the project engages the local community by promoting fresh thinking, new ideas and directions and by placing a greater focus on the systemic and socio-economic circumstances and variables that shape addiction. In Crinan, family support and education groups have been central to this approach. Working with a Parents' Group on changing the family diet or on managing family pain in a non-medical or addictive way, may have a more sustainable and postive effect on the family system or the life of their son or daughter, than a psychological or counselling session.

Bancroft, Carty, Cunningham-Burley and Beckett-Milburn (2003) have shown that support for families of drug users is an integral part of the treatment process and has been shown to be effective. The family is a critical part of the socialisation process for young people and has the potential to guide young people away from problem behaviours and drug use (Kumpfer, Olds, Alexander, Zucker and Gary, 1998).

Arts education

Medicine treats the pain and numbs the emotions. The pharmaceutical industry profits from producing medicines that are supposed to regulate or control the emotions of unhappy, sad or depressed people. Art provides a way for people to come to terms with emotional conflicts, increase self-awareness, and express unspoken and often unconscious concerns about their illness and their lives. The Crinan project engages its participants through art in the form of ceramics, mosaics, paintwork, woodwork and music production. There are no limits on the type of art involved. The mosaics in fact, now form part of the interior design of the project, creating a warm, welcoming and open environment. The Project's art programme is actively helping to create a treatment space, which is very different from the impersonal and clinical environment that is found in the medical led methadone clinics. Arts education provides adults with new contexts for learning, understanding and for constructing new ways of being. It promotes a way of learning and reflecting that focuses on the creative process. The majority of those who have become involved with heroin use have had negative experiences of education and have left school early. Arts education works by facilitating adults to become self-directed learners, to find and apply solutions to their problems and to construct their own pathways out of the addiction cycle. Finlay (2000) documented similar work carried out in the Soilse project where they also used art in an adult and community education context to promote recovery and rehabilitation.

Theatre as adult education

Medicine has become confused with health with more and more people relying on medicine, doctors and hospitals for better health. The expanding medical system is unable to meet the demands being placed on it. In the same way the drug addiction system is becoming overly reliant on doctors, clinics and medicine with more and more people remaining dependent on methadone. The Crinan project has tried to counter the over medicalisation of addiction treatment by applying the works of Boal (1979) and Freire (1972) in both conscientizing and empowering participants to become more aware of the connections between the external and internal oppressions that influence decisions to use drugs. Boal (1995) has demonstrated the effectiveness of theatre as a site for transformative learning among adults experiencing alienation, depression, addiction or any kind of personal oppression. The theatre programme has helped participants to engage more proactively in treatment and the issues that affected their daily lives. O'Brien (2004) applied these techniques as research methodology

in his qualitative study of the Crinan project which looked at drug treatment discourses. He found that while the biomedical discourse dominated the treatment of heroin addiction in Ireland, the Crinan project had managed to hold a different balance between the treatment discourses of medicine, psychotherapy and adult education resulting in the development of a more integrated model of treatment.

Alternative and complementary holistic treatments

Access to medicine is limited and treatments are expensive and sometimes exclusive. The cost of health care is rising and low-income earners are often excluded. The growing awareness of the limited effectiveness of medicine in certain domains and its increasing cost, has led many people to turn to alternative and complementary medicine. Alternative and complementary holistic treatments have become part of Crinan's integrated programme of options that includes methadone. Treatments include auricular acupuncture, yoga, herbal therapy and massage. Combining the biomedical approach of methadone substitution with holistic treatments has enabled the project to maintain a comparatively low methadone dose. In an environment where addiction treatment is highly medicalised, the Crinan project has been innovative in educating participants, parents and staff members to seek alternative ways to respond to the pain and stress associated with detoxification. The project has created an environment of detoxification rather than long-term medicalisation, which is the case in many of the methadone clinics. The educational sessions are designed to reflect the various core components of the treatment philosophy in Crinan. All sessional, educational and psychotherapeutic staff come together at regular intervals throughout the year, to review the practice and delivery of this treatment model which integrates psychotherapy and adult education.

Conclusion

What one may ask makes adult and community education work, in a way that medicine does not, in treating drug addiction? Medicine alone treats the pain. Adult and community education engages the non-medicated part of the person and invites them to become an active participant in their own treatment and rehabilitation process. Medicine does what a drug like heroin does; it numbs the pain, treats the symptoms and gives temporary relief. Adult and community education, on the other hand, conscientizes the person to the causes of their drug use problem and equips them with the knowledge and skills required to re-engage with their problems and their underlying causes. This process does

not exclude medicine, but shifts the focus to a process of dynamic engagement with a menu of treatments and options facilitated by a multi-disciplinary team that is not dominated by one knowledge tradition. The Crinan project is currently conducting a qualitative research project in the form of an outcome study to test what it believes to be significant findings based its own observations and project data.

Thomas O'Brien has spent 15 years working with early school leavers and drug users. In 1997 he helped establish and manage the Crinian Project in the north inner city of Dublin. He also spent two years managing a multi-disciplinary team working with mainly homeless teenagers in The Drug Treatment Board in Dublin before moving to Spain.

References

American Psychiatric Association. (1994). *The diagnostic and statistical manual of mental disorders.* Washington, DC: American Psychiatric Association.

Baer, H.A. (2001). *Biomedicine and alternative healing systems in America: Issues of class, race, ethnicity, & gender.* Wisconsin: The University of Wisconsin Press.

Barr, J. (1999). *Liberating knowledge.* Leicester: NIACE.

Bell, J., Mattick, R., Hay, A., Chan, J. & Hall, W. (1997). Methadone maintenance and drug-related crime. *Journal of Substance Abuse*, 9, 15-25.

Bancroft, A., Carty, A., Cunningham-Burley, S., & Beckett-Milburn, K. (2003). *Support for the families of drug users: A review of the literature.* Edinburgh: Effective Interventions Unit (Scottish Executive), 9, 9-11, 27-29, 15.

Best, D., Gossop, M., Steward, D., Marsden, J., Lehmann, P. & Strang, J. (1999). Continued heroin use during methadone treatment: Relationships between frequency of use and reasons reported for heroin use. *Drug and Alcohol Dependence*, 53(3), 191-5.

Blumenthal, D., Lambert, L.A. & Jenny-Avital, E.R. (2005). Doctors and drug companies. *New England Journal of Medicine*, 351(18), 1885-1890.

Boal, A. (1979). *The theatre of the oppressed.* New York: Urizen Books.

Boal, A. (1995). *The rainbow of desire.* London: Routledge.

Bovasso, G. & Cacciola, J. (2003). The long-term outcomes of drug use by methadone maintenance patients. *Journal of Behaviour Health Service Research*, 30(3), 290-303.

Butler, S. & Mayock, P. (2006). An Irish solution to an Irish problem: Harm reduction and ambiguity in the drug policy of the Republic of Ireland. *International Journal of Drug Policy*, 16(6), 415-422.

Breen, K.J. (2003). Misconduct in medical research: Whose responsibility? *Internal Medicine Journal*, 33, 186-191.

Bryant, W.K., Galea, S., Tracy, M., Markham Piper, T., Tardiff, K.J. & Vlahov, D. (2004). Overdose deaths attributed to methadone and heroin in New York City, 1990-1998. *Addiction*, 99(7), 846-854.

Connolly, J. (2006). *Drugs and crime in Ireland: Overview 3*. Dublin: Health Research Board.

Crowe, M. (2000). Constructing normality: A discourse analysis of the DSM-IV. *Journal of Psychiatric and Mental Health Nursing,* 7, 69-77.

Davies, D. & Bhugra, D. (2004). *Models of Psychopathology*. Berkshire: Open University Press.

Djulbegovic, B., Lacevic, M., Cantor, A., Fields, K.K., Bennett, C.L., Adams, J.R., Kuderer, N.M. & Lyman, G.H. (2000). The uncertainty principle and industry-sponsored research. *The Lancet*, 356,9230, 635-638.

Dobler-Mikola, A., Hattenschwiler, J., Meili, D., Beck, T., Boni, E. & Modestin, J. (2005). Patterns of heroin, cocaine, and alcohol abuse during long-term methadone maintenance treatment. *Journal of Substance Abuse Treatment*, 29(4), 259-65.

Donny, E.C., Brasser, S.M., Bigelow, G.E., Stitzer, M.L. & Walsh, S.L. (2005). Methadone doses of 100mg or greater are more effective than lower doses at suppressing heroin self-administration in opioid-dependent volunteers. *Addiction, 100*(10), 1496-1509.

Drake, R.E., McHugo, G.J., Bebout, R.R., Becker, D.R., Harris, M., Bond, G.R. & Quimby, E. (1999). *Archives of General Psychiatry*, 56(7), 627-33.

Duffy, M., Gillig, S.E., Tureen, R.M. & Ybarra, M.A. (2002). A critical look at the DSM-IV. *Journal of Individual Psychology*, 58(4), 363-373.

Evered, D. & Lazar, P. (1995). Misconduct in medical research. *Lancet*, 345, 1161-1162.

Finlay, S. (2000). *No drug can do that.* Unpublished report. The Arts Council, Ireland.

Fischer, B., Rehm, J., Kim, G. & Kirst, M. (2005). Eyes Wide Shut? A conceptual and empirical critique of methadone maintenance treatment. *European Addiction Research*, 11, 1-14.

Freire, P. (1972). *The pedagogy of the oppressed.* London: Penguin.

Geggie, D.A. (2001). Survey of newly appointed consultants' attitudes towards research fraud. *Journal of Medical Ethics*, 27, 344-346.

Gramsci, A. (1971). *Selections from the prison notebooks.* New York: International Publishers.

Healey, A., Knapp, M., Marsden, J., Gossop, M. & Steward, D. (2003). Criminal outcomes and costs of treatment services for injecting and non-injecting heroin users: Evidence from a national prospective cohort survey. *Journal of Health Service Research Policy*, 8(3), 134-141.

Hickman, M., Madden, P., Henry, J., Baker, A., Wallace, C., Wakefield, J., Stimson, G. & Elliott, P. (2003). Trends in drug overdose deaths in England and Wales 1993-98:

Methadone does not kill more people than heroin. *Addiction*, 98(4), 419-425.

Hyde, A., Lohan, M., & McDonnell, O. (2004). *Sociology for health professionals in Ireland*. Dublin: Institute of Public Administration.

Illich, I. (1976). *Medical nemesis: The exploration of health*. London: Marion Boyars Publishers Ltd.

Jones, G.W. & Sagar, S.M. (1995). Evidence-based medicine: No guidance is provided for situations for which evidence is lacking. *British Medical Journal 311*, 258.

Kumpfer, K.L., Olds, D.L., Alexander, J.F., Zucker R.A., & Gary, L.E. (1998). Family etiology of youth problems. In Research Monograph, Number 177: *Drug Abuse Prevention Through Family Intervention*. Rockville MD: National Institute on Drug Abuse, 43.

Lenne, M., Lintzeris, N., Breen, C., Harris, S., Hawken, L., Mattick, R. & Ritter, A. (2001). Withdrawal from methadone maintenance treatment: Prognosis and participant perspectives. *Australian & New Zealand Journal of Public Health*, 25(2), 121-125.

Lexchin, J., Bero, L.A., Djulbegovic, B. & Clark, O. (2006). Pharmaceutical industry sponsorship and research outcome and quality: Systematic review. *British Medical Journal, 326*.

Lidz, V., Sorrentino, D.M., Robison, L. & Bunce. S. (2004). Learning from disappointing outcomes: An evaluation of prevocational interventions for methadone maintenance patients. *Substance Use & Misuse, 39*(13-14), 2287-2308.

Lupton, D. (2003). *Medicine as culture: Illness, disease and the body in Western Societies*. London: Sage.

Marsch, L.A. (1998). The efficacy of methadone maintenance interventions in reducing illicit opiate use, HIV risk behaviour and criminality: A meta-analysis. *Addiction*, 93(4), 515-532.

McGavock, H. (2004). Prescription-related illness: A scandalous pandemic. *Journal of Evaluation in Clinical Practice*, 10(4), 491-497.

Miettinen, O.S. (1999). Ideas and ideals in medicine: Fruits of reason or props of power? *Journal of Evaluation in Clinical Practice*, 5(2), 107-116.

National Drugs Strategy (2001). *National Drugs Strategy 2001-2008*. Dublin: Government Publications.

O'Brien, T. (2004). Discourses in drug treatment: Exploring the meaning of drug treatment in the Crinan Youth Project. Unpublished PhD Thesis, Maynooth: National University of Ireland.

Peters, A.D. & Reid, M.M. (1998). Methadone treatment in the Scottish context: Outcomes of a community-based service for drug users in Lothian. *Drug and Alcohol Dependency, 50*(1), 47-55.

Penston, J. (2005). Large-scale randomised trials: A misguided approach to clinical research. *Medical Hypotheses, 64*, 651-547.

Preece, J. (Ed.) (2002). *Cambridge companion to Kafka*. Cambridge: Cambridge University Press.

Rogers, W.A. (2002). Evidence-based medicine in practice: limiting or facilitating patient choice? *Health Expectations*, 5, 95-103.

Rosenfeld, J.A. (2004). The view of evidence-based medicine from the trenches: *Liberating or authoritarian? Journal of Evaluation in Clinical Practice*, 10(2), 153-155.

Rothbard, A., Alterman, A., Rutherford, M., Liu, F., Zelinski, S. & McKay, J. (1999). Revisiting the effectiveness of methadone treatment on crime reductions in the 1990s. *Journal of Substance Abuse Treatment, 16*(4), 329-335.

Royal College of Surgeons Ireland. (2006). Poly drug use among clients on methadone. *Irish Pharmacist*, 6, 6.

Ryan, A.B. (2004). Subjectivity and consumption: concerns for radical adult education. In A. Ryan & T. Walsh (Eds.), *Unsettling the horses: Interrogating adult education perspectives* (pp. 137-160). Maynooth: MACE.

Sehon, S.R. & Stanley, D.E. (2003). A philosophical analysis of the evidence-based medicine debate. *BMC Health Services Research, 3*(1), 14.

Segest, E., Mygind, O. & Bay, H. (1990). The influence of prolonged stable methadone maintenance treatment on mortality and employment: An 8-year follow-up. *International Journal of Addictions, 25*(1), 53-63.

Seymour, A., Black, M., Jay, J., Cooper, G., Weir, C. & Oliver, J. (2003). The role of methadone in drug-related deaths in the west of Scotland. *Addiction*, 98, 995-1002.

Szasz, T. (2001). *Pharmacracy: Medicine and politics in America*. Westport, CT: Praeger.

Turner, B.S. (1987). *Medical power and social knowledge*. London: Sage.

Whitaker, R. (2003). *Mad in America: Bad science, bad medicine, and the enduring mistreatment of the mentally ill*. New York: Basic Books.

Zanis, D.A., Coviello, D., Alterman, A.I. & Appling, S.E. (2001). A community-based trail of vocational problem-solving to increase employment among methadone patients. *Journal of Substance Abuse Treatment, 21*, 19-26.