There is now some robust data on the role of pharmacotherapy, in the form of drug substitution, in the management of opiate dependence. The efficacy of methadone maintenance treatment has been well reported and there is considerable interest now in exploring the diversification in the use of other opioid agonists in the substitution treatment of opiate dependence.

There is extensive interest in a multidimensional approach to the measure of treatment outcome in drug dependence. Such measures look at the impact on patterns of drug and alcohol use, risk taking behaviour such as injecting and sharing, impact on mental and physical well being and on social well being including impact on criminal behaviour.

Numerous reviews of methadone maintenance (Farrell et al 1994, Ward, Mattick and Hall 1997 and Marsch 1998) indicate a consistent finding of impact on reducing opiate consumption, reducing injection risk behaviour and reducing criminality in major studies. The majority of studies report a 60% reduction in heroin consumption and in criminal behaviour and a commensurate improvement in reports of health and social well being.

A recent National UK study of the impact of treatment, in an observational study reports that, at two years of community treatment with a mixture of methadone and other psychosocial interventions, 20% had achieved total abstinence, indicating that for a significant minority methadone treatment does not imply indefinite treatment. However there was also a major cohort who required longer term methadone maintenance. The cost effectiveness evaluation of this intervention is estimated to range from a saving of between £3 and £7 pound for every £ spent on treatment.

In many European countries there is a clear policy thrust to increase the level of provision of methadone maintenance treatment in primary care settings. The limited data available indicates that outcomes in primary care settings match those of more specialist settings (Task Force 1995).

The issue of the role of the other aspects of a treatment programme requires further consideration, in particular the role of supervised versus unsupervised medication and the role of adjunctive psychosocial interventions. There is major variation in the range and provision of such services (Farrell et al 1996). There is also major variation in programme effectiveness (Ball and Ross 1991). Mc Lellan et al indicate the efficacy and cost effectiveness of moderate levels of psychosocial interventions in conjunction with methadone maintenance but there is a need for further evaluation of these interventions. Recent work by Mc Lellan (1999) and colleagues indicates in a randomised study that the introduction of case managers into drug and alcohol treatment services can significantly improve treatment outcomes.

THE DEVELOPMENT OF NEW CLINICAL PROCEDURES

Oral methadone is likely to remain the most commonly used substitute, but alternative long acting mu opioid agonists (Jaffe and Martin 1990) will also become available. Since 1993 levo-alpha-acetylmethadol (LAAM) has been approved for use in American clinics. The effects of LAAM are characterised by delayed onset and longer duration of action than methadone. Dosing in the range 70-100mg appears capable of suppressing withdrawal symptoms for 48-72 hours, thereby permitting three-times weekly administration (Ling et al. 1994).

Research on the feasibility and effectiveness of LAAM maintenance in the British context would now be beneficial. It is likely that this drug will need to be dispensed in an oral formulation under direct supervision. Given the delayed onset of action (some three to six hours following intravenous administration), LAAM may lead to a serious risk of overdose if take-home doses are provided.

There is also international interest and some practice (particularly in France) in using buprenorphine (tremgesic), a partial mu opioid agonist, for substitution (Johnson et al. 1995). Buprenorphine is not orally active and tablets must be taken sublingually. In Britain, the history of buprenorphine has been marred by harmful illicit use associated with tablet injection (particularly in Scotland). Research and development initiatives will need to assess supervised administration in order to minimise the risk of diversion if this agent is to be used successfully.

There is also continuing interest in the prescribing of injectable diamorphine itself as a small element within a methadone prescription regime or, in some cases, as the sole substitute. Internationally, a controlled trial of supervised diamorphine administration in maintenance treatment is reaching completion in Switzerland (Uchtenhagen et. al. 1996, Farrell and Hall 1998). A study has been commenced in the Netherlands and other countries are debating embarking on projects implementing heroin prescribing. Further research to profile the characteristics of patients for whom diamorphine substitution is a possible management strategy would now be of value. However no good comparative efficacy studies have been conducted and preliminary data does not support there being a major role for injectable prescribing, particularly in situations where treatment demand exceeds treatment provision (Farrell and Hall 1998).

IN CONCLUSION

There is a growing acceptance of the value and efficacy of opiate substitution treatment using a range of opiate agonist substitutes. There is a need for further exploration of the impact of other treatment processes and the amount of psychosocial intervention required to achieve the most cost-effective intervention.

The current challenge is to fashion treatment programmes in a manner that provides the most effective gains in both health behaviour and reduced criminal offending behaviour and is delivered in a fashion that ensures rapid and equitable access. Case managers or other co-ordinator approaches are required to ensure that individuals with complex physical, psychological and social problems receive appropriate care.

References available on request from
The Office For Health Gain