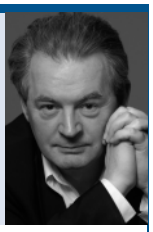
BJPsych | The British Journal of Psychiatry (2015)
207, 3–4. doi: 10.1192/bjp.bp.114.160986

Editorial

Heroin-assisted treatment: has a controversial treatment come of age?†



Michael Farrell & Wayne Hall

Summary
This editorial considers the findings of the systematic review of heroin-assisted treatment, with six different studies from six different countries, published in this issue. The meta-analysis focuses on supervised injected heroin and reports significant crime reduction and an overall cost-effectiveness of treatment. Despite this body of evidence, policy makers remain reluctant to develop this treatment further. The question remains, what else is required to convince policy makers of the value of such treatment for severe and refractory heroin dependence?

Declaration of interest
None.

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Use of heroin in the treatment of heroin dependence over the past 60 years

In this issue Strang and colleagues[1] report a meta-analysis of six trials of heroin-assisted treatment of heroin dependence in six different countries. Their results indicate that this controversial form of treatment has a role when responding to heroin dependence. Heroin was prescribed as a treatment for heroin dependence in the UK in the 1950s and early 1960s as part of a large-scale uncontrolled and minimally unevaluated social experiment. It fell into disrepute because of the cavalier prescribing practices of a small number of private practitioners[2] and a single small controlled study that suggested that oral methadone treatment produced equivalent outcomes.[3]

In the 1980s and 1990s, there was renewed advocacy of heroin prescribing by a UK psychiatrist.[4] His advocacy inspired Swiss clinicians and the government to trial heroin-assisted treatment as part of their response to an epidemic of heroin dependence in the 1990s.[5] The Swiss undertook a series of medical and social experiments on heroin-assisted treatment in the early 1990s. They converted the English model of minimally supervised prescribing into a tightly regulated form of clinic-based treatment that involved directly supervising heroin administration multiple times per daily up to 7 days a week.[6] This highly structured form of heroin-assisted treatment became the standard way of delivering heroin treatment in subsequent treatment trials in Holland, Germany, Spain, Canada and England. It has recently been implemented as an addiction treatment service in Denmark.

Current practice

Strang and colleagues, who have participated in these various trials, have undertaken a meta-analysis of the trials evaluating this form of supervised injectable heroin maintenance.[1] They conclude that prescribing heroin as part of a highly regulated regimen is an effective treatment for heroin dependence in patients who have failed to respond to other forms of opioid agonist maintenance treatment. When the initial results of the Swiss trials were published we suggested that there was probably a niche role for heroin-assisted treatment, namely, as treatment for the minority of patients with severely intractable heroin dependence that failed to respond to other forms of agonist treatment.[7] The trials summarised by Strang and colleagues confirm that this is the case. The review of the evidence undertaken by the Cochrane Group also concluded that, on the basis of the expanded current evidence, 'heroin prescription should be indicated to people who [are] currently or have previously failed maintenance treatment, and it should be provided in clinical settings where proper follow-up is ensured'.[8]

The current paper also noted that adverse events were more frequent in the heroin-treated groups, with several trials reporting cases of sudden-onset respiratory depression in people receiving injectable diamorphine, at a rate of about 1 in every 6000 injections. Strang *et al* note that these risks are best managed in highly structured and supervised treatment programmes.[1]

Another critical question that we posed in 1998 was whether heroin-assisted treatment was a cost-effective way of treating heroin dependence. The studies summarised in this review report a significant cost–benefit of the treatment, largely as a result of the very substantial law enforcement savings from reduced crime among treated patients. Evidence of effectiveness and cost-effectiveness of heroin-assisted treatment have not been sufficient to persuade many governments to implement it in addiction treatment services.[9] Despite the positive evaluations heroin-assisted treatment remains unavailable in the USA, Australia, Ireland, France and many other countries. Even countries that allow heroin-assisted treatment, have only implemented it on a small scale.

The failure to implement heroin-assisted treatment probably reflects a number of factors. One is a renewed questioning in some countries of the role of oral opioid maintenance treatment because of beliefs that abstinence from all opioids should be the goal of all heroin dependence treatment.[10] Another is the effort by governments (post the global financial crisis) to cut public expenditure. When governments are cutting health services funding it may be more difficult politically to allocate scarce funds to the long-term treatment of heroin dependence. The latter reluctance is no doubt assisted by unstated beliefs among some

†See pp. 5–14, this issue.

politicians and policy makers (and vocal members of the general public) that heroin dependence is not a disorder that is 'deserving' of treatment.

Conclusion

We find ourselves in the addictions field in the position that there is good evidence that heroin-assisted treatment works for a small group of patients with refractory heroin dependence. But governments remain reluctant to invest in it because it requires higher levels of supervision and administration and hence is more expensive than oral forms of opioid maintenance treatment. It is not clear in the current economic and political climate what additional evidence, or arguments, would persuade policy makers to overcome their reluctance to implement this treatment.

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First received 22 Jan 2015, accepted 17 Feb 2015

References

1 Strang J, Groshkova T, Uchtenhagen A, van den Brink W, Haasen C, Schechter M, et al. Heroin on trial: systematic review and meta-analysis of randomised trials of diamorphine-prescribing as treatment for refractory heroin addiction. *Br J Psychiatry* 2015; **207**: 5–14.

2 Spear B. The early years of the British System in practice. In *Heroin Addiction and Drug Policy: The British System* (eds J Strang, M Gossop): 3–28. Oxford University Press, 1994.

3 Hartnoll RL, Mitcheson MC, Battersby A, Brown G, Ellis M, Fleming P, et al. Evaluation of heroin maintenance in controlled trial. *Arch Gen Psychiatry* 1980; **37**: 877–84.

4 Marks J. Management of drug addicts: hostility, humanity, and pragmatism. *Lancet* 1987; **1**: 1068–9.

5 Rihs-Middel M, Hämmig R. Heroin-assisted treatment in Switzerland: an interactive learning process combining research, politics and everyday practice. In *Heroin-Assisted Treatment: Work In Progress* (eds M Rihs-Middel, R Hämmig, N Jacobshagen): 11–22. Swiss Federal Office of Public Health, 2005.

6 Rehm J, Gschwend P, Steffen T, Gutzwiller F, Dobler-Mikola A, Uchtenhagen A. Feasibility, safety, and efficacy of injectable heroin prescription for refractory opioid addicts: a follow-up study. *Lancet* 2001; **358**: 1417–23.

7 Farrell M, Hall W. The Swiss heroin trials: testing alternative approaches. *BMJ* 1998; **316**: 639.

8 Ferri M, Davoli M, Perucci CA. Heroin maintenance for chronic heroin-dependent individuals. *Cochrane Database Syst Rev* 2011; **12**: CD003410.

9 Berridge V. Heroin prescription and history. *N Engl J Med* 2009; **361**: 820–1.

10 McKeganey N. Should heroin be prescribed to heroin misusers? No. *BMJ* 2008; **336**: 71.

100 words

Anorexia nervosa

Ulrike Schmidt

Anorexia nervosa is a serious mental disorder, mainly affecting women. Levels of disability and mortality are high. It typically starts peri-pubertally, i.e. at a developmentally sensitive time. Many sufferers have anxious, perfectionist and obsessional traits. Self-starvation and extreme thinness become rewarding to sufferers, whereas food, eating and normal body size are feared. Early intervention is essential: psychological therapies and/or skilled refeeding in hospital (in severe cases) are the treatments of choice. With family-based treatment, 60–80% of adolescents with anorexia nervosa recover, whereas only 20–30% of adults who have a more enduring form of the illness recover with best available treatments.

The British Journal of Psychiatry (2015) 207, 4. doi: 10.1192/bjp.bp.113.143388

https://doi.org/10.1192/bjp.bp.114.160986 Published online by Cambridge University Press