

Appropriateness of methadone maintenance treatment for opiate addiction: treatment goals and effectiveness

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Vader and collaborators present the results of a multi-disciplinary expert panel that evaluates the appropriateness of methadone maintenance treatment for opiate addiction. The outcome definition represents a crucial scientific issue when dealing with efficacy of treatments. What is the desired outcome for treatments of opiate addiction? We wonder whether the current scarcity of sound scientific evidence on efficacy of treatment for drug addiction actually depends on the reluctance of scientists to deal with this problem, on inadequacy of methods or reveals a social and political disagreement on the desired treatment goals.

Is duration and quality of life, as for all other diseases, the goal of this treatment or is the only acceptable outcome abstinence from the use of any drug? Could the principle of "substitution" be accepted by those who deny even a temporary, therapeutical, substance dependence?

Evidence of methadone effectiveness comes from randomised controlled trials conducted in English speaking, non Latin countries. Would the extremely heterogeneous availability of methadone maintenance treatment (2002 EMCDDA annual report: www.emcda.org.) result from scarcity or weakness of evidence regarding efficacy? Whereas, would the available scientific evidence be unable to deal with cultural and social differences and prejudices?

To promote health and well-being of people who misuse opiates the problem seems to be not only the scientific challenge of evaluating treatment effectiveness but to promote a social and political consensus and commitment regarding the goals of these programs.

An evidence-based approach to the treatment of opiate addiction would mean that the evidence in existence be incorporated into the clinical and social decision process and all

other decisions be made with some uncertainty. The Swiss authors address the issue from where most evidence is available and then go beyond the few certainties (methadone, high dosages, long duration, ancillary services) giving specific suggestions on the practical aspects of treatment and recommending areas of further research.

We have a lot to learn from the experience reported here. The panel members were given reviews of the Swiss and international literature to provide a foundation for evidence-based recommendations. This is original in the addiction field where most guidelines do not relate to any systematic reviews of literature, and many are flawed by non-scientific subjective assumptions. The current generation of clinical guidelines usually include grading by level of evidence and strength of recommendation (Grilli et al. 2000): these two characteristics help to differentiate the level of "scientific" judgement from the level of "clinical" and "personal" judgement.

The authors recommend that high quality clinical studies should be fostered and funded; they suggest not only primary research but also the development of ongoing programmes to monitor the state of scientific literature, which means conducting and maintaining systematic reviews.

It is recommended that the criteria adopted by the project might be used both retrospectively and prospectively to identify areas of lack of appropriateness in the field of opiate substitution treatment.

Moreover longitudinal studies to monitor and measure outcomes of treatment for drug addiction are very much needed; attempts have been made in the States (Fletcher et al. 1997), UK (Gossop et al. 2002), and Italy (www.studiovedette.it).

In fact, even for treatments having robust evidence of efficacy from well-designed randomised controlled trials and systematic reviews, the observed actual effectiveness may be very different; context or population factors could act as effect modifiers.

Could the efficacy of methadone maintenance treatment be modified by local or population factors? The answer can be inferred from comparative outcome studies and is probably yes. Mortality of problem drug users, which is one of the evaluated outcomes of methadone maintenance treatment, varies impressively between western countries, regions, social class, gender, time and many other characteristics (Bargagli et al. 2000). Different factors may explain these findings: the legal status of the heroin trade, distribution, consumption and heroin users themselves can affect the provision of substitution treatment. In addition, even where methadone maintenance is offered, its effect on treatment retention varies greatly (D'Ippoliti et al. 1998). Therefore its efficacy is actually modified by local, partially unknown factors, largely attributable to different policies of drug control.

Prejudice or moral judgment, even among care-givers, can strongly influence the outcome of treatment. The authors of

this Swiss paper do their best to deprive each "scenario" from prejudices and social biases, but these are both implicit in the culture and social background of the panel components. This is the main strength of their work, but also the inherent weakness of their results, that cannot be generalized without taking into account local and contextual factors. Unfortunately the essentially "pragmatic" Swiss social environment, would not be observed in many other countries. The process of developing a clinically effective treatment from one judged theoretically effective requires careful attention to local conditions of organizations, providers and social-health systems. Therefore the study conducted by the Swiss authors to derive explicit recommendations regarding appropriateness is extremely relevant. Efforts on promoting effectiveness and appropriateness of treatment for heroin addiction could yield good results if the human rights and dignity of people who voluntarily or addictively use heroin are recognized and their health protected and promoted as for any other condition, regardless of moral judgment or legal status.

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