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**HEROIN ADDICTION &  
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## Opioid Dependence and Quality of Life: Changes in the Heroin Epidemic

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In the drug abuse arena, Health Related Quality of Life (HRQL) can play a helpful role in (a) assessing the impact of drug use on a subject's quality of life; (b) comparing the degree of impairment in relation to the general population or to other chronic conditions; (c) evaluating changes after treatment is provided and (d) comparing subgroups of drug users. In fact, HRQL has been used, among other variables, to assess treatment outcomes. As HRQL comprises subjects' perceptions of their health, it offers another way of assessing health status.

In Barcelona, estimates of how the incidence and prevalence of heroin use evolved, based on data collected from heroin users who initiated their first treatment for heroin dependence between 1991 and 2003 [5], show that heroin use started in the early seventies without becoming a conspicuous problem until the early eighties. As in the rest of Spain, it was a very important public health issue by the end of the eighties, and this continued into the early nineties, when its prevalence reached its highest point, decreasing afterwards, though its incidence had begun to fall much earlier.

Since the early nineties, in Barcelona, we have measured the HRQL of heroin users in several different studies. In most of them we used the Nottingham Health Profile (NHP), a generic instrument, mainly to evaluate changes related to methadone maintenance treatment (MMT) [2-4, 6]; but also another generic instrument, the SF-12 [1].

Our first study, which began in 1992, analysed 135 subjects: 69% were males, with a mean age of 29.6 years and an average of 10.2 years since first heroin use; 90% were injectors and 65% were HIV+. The mean value for the global NHP score was 56; this improved to 26 after 12 months in MMT. The corresponding value for the general population was 16 [6].

In a second study, beginning in 1996, to evaluate dif-

ferent intensities in MMT support, 586 patients starting their first MMT were studied: 78% were males, with a mean age of 31 years (SD 6.7) and an average of 10 years since first drug use (SD 5.7); 58% were current injectors and 25% were HIV+. Mean global NHP score was 41 at entry to treatment; this improved to 17 after 12 months in MMT [3, 4].

Another study, which began in 2000, was designed to study psychiatric comorbidity in patients entering MMT, while assessing its impact on HRQL. The instrument used on that occasion was the SF-12, which has two component summary scores, one physical, the other mental. 189 subjects were recruited in 3 drug treatment centres in Barcelona: 77% were male, had a mean age of 33.8 (SD 7.5) years and an average of 11 years since their first heroin use; 70.4% had injected in the past, 51.4% were current injectors, and 24.3% were HIV+. Mean physical (44.1) and mental (36.9) component scores showed impairment by comparison with standardized values for the general population (50), but no differences were observed in terms of comorbidity [1].

Further results on the HRQL of Barcelona heroin users came from a wider study that assessed multiple issues in young heroin users (18 to 30 years old) recruited outside treatment centres in three Spanish cities (Barcelona, Madrid and Seville). The Barcelona subgroup included 364 subjects: 69% were men, with a mean age of 24.9 years and an average of 7.3 years since first heroin use; 75.8% were current injectors and 17% were HIV+. Their mean global NHP score was 32.8.

Taking all these results together allows us to evaluate the evolution of heroin users' health impairment at different stages of the heroin epidemic, its improvement during methadone treatment and its relationship to values for the general population. The changes observed need to be analysed, taking into account variables that

evolved during the epidemic and that are included in HRQL, such as the proportion of intravenous drug users, proportion of subjects with positive serology to HCV, and polydrug use.

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#### Conflict of Interest

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