Methadone and Driving

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ABSTRACT

The importance of Methadon substitution of Heroin addicts with regard to driving a car is increasing in the Federal Republic of Germany. Making use of the driving license may be a prerequisite of the intended integration in the society e.g. in a new start of a job. In the paper the experimental studies regarding the ability to drive under Methadon are reviewed, the results achieved are compared and assessed. The consequences for reissuing a driving license are described and a new formulation of adequate criteria is outlined.

INTRODUCTION

Methadone substitution as a treatment of opiate addicts aims at the physical and social rehabilitation of the patients, at stabilizing their situation in life and enabling them to lead a life without drugs (Götz, 1992). This form of substitution therapy has been coming into more widespread use since 1991 and is clearly gaining in importance in the Federal Republic of Germany.

Due to the rates of increase, physicians and those looking after the patients are more and more facing the question of the driver fitness of these patients. An Expert Report on Illness and Motor Traffic (Lewrenz, Friedel, 1992) concluded that polamidone substitution patients as methadone addicts should be treated like other addicts and regarded as unfit to drive. With this conclusion in mind, the question of “Methadone and Driving” was studied by the authors of this contribution.

SURVEY OF THE RELEVANT LITERATURE

Berghaus and Friedel (1994) analyzed the experimental studies into the driver fitness or driver ability of methadone substitution patients which have been published thus far. About ten of these studies compared the psychophysical performance relevant to driving of methadone substitution patients with that of healthy subjects or former heroin addicts getting along without drugs.

Considering the relevant performance areas, such as reaction, attention, and peripheral vision, results are available for a total of roughly 300 substitution patients. In the majority of the studies, the psychophysical performance tests yielded the same results for methadone substitution patients as for the control group. Serious performance deficits were hardly found in any of the studies analyzed. Nevertheless, a number of methadone patients had to be excluded from testing in almost all the studies due to the consumption of additional psychotrophic substances. As regards the evaluation of personality and the psycho-
pathological findings, several studies indicate the necessity of further clarification. On the one hand, the studies show that findings ruling out driver ability have to be expected but that, on the other hand—as a function of the way substitution is practised—there might also be substitution patients who based on their personality and psychopathological results can be regarded as fit to drive.

STUDY BY BERGHAUS et al (1993 a,b)

Commissioned by the Federal Highway Research Institute (BASt), Berghaus et al (1993) conducted an empirical study on methadone substitution and traffic safety. The study, which was undertaken in Cologne, comprised 34 patients. Twenty-one of these patients had to be excluded from the study because the toxicologic analysis of repeated blood and urine samples revealed the presence (or possibly chronic use) of substances other than methadone. The remaining 13 methadone substitution patients, eight males and five females, were aged 26 - 42 years and had been addicted to opiates for periods of between five and 23 years. They had been treated with methadone for a period reaching from a few months to five years with doses between 17.5 and 60 mg. In a case control study they were compared with 13 healthy, drug-free control subjects matched in respect of age, sex and education. In this comparison, psychophysical performance factors, such as immediate memory, tracking, decision-making and reaction, reactive stress endurance, comprehension, maintained attention, speed estimate and peripheral vision with central tracking, were checked by means of the Act and React Test System. The performance of the substitution patients revealed significant shortcomings as regards the tracking task, reactive stress endurance, in the tachistoscopic comprehension test and with respect to peripheral vision with the central tracking task. Three questionnaires on personality characteristics relevant for driving revealed methadone substitution patients to be more apprehensive, less self-controlled and self-reliant, mentally less healthy and less critical as regards their self-awareness than the control subjects. Ten of the 20 scales of the Freiburg Personality Inventory further revealed significant differences in general personality characteristics, i.e. those not directly related to traffic safety (e.g. suspicion, apprehension, depressive reactions, higher excitability).

In addition to the above comparison, six of the 13 methadone substitution patients were selected who—based on the impression of the physicians—could be described as optimal methadone therapy patients (hardly any use of other substances, social re-integration, health stabilization). With respect to their psychophysical performance, they could be compared to healthy subjects. Although some personality scales and psychopathological findings revealed shortcomings (different in nature and intensity) for a few of these patients, they could not be regarded as factors ruling out driver fitness.

STUDY BY GASTPAR (1994)

After the study just mentioned was finished, several other projects are now under progress in Germany. Up to now, results are available from a study by Gastpar, undertaken in Essen. Gastpar studied 34 patients who had been treated with an average dose of 100 mg methadone for a period of at least four months. The patients comprised 11 females and 23 males. Twelve of them revealed not to have taken any other drugs, ten had consumed cannabinoids and twelve other psychotropic drugs in addition to methadone. A preliminary
evaluation of all subjects did not reveal any significant losses as regards performance under the effect of methadone. However, the results varied greatly. The author pointed out that the evaluation of driver ability can only be derived based on the social rehabilitation data during probation and the psychological state of the patients in each case. The importance of comorbidity requires special attention given the fact that about 70% of the patients additionally revealed psychiatric disorders (above all personality disturbances).

COMPARATIVE EVALUATION OF THE DIFFERENT STUDIES

A comparative evaluation of the findings from the different studies revealed the importance and effect of the way addicts are selected for treatment with methadone. The duration of the methadone substitution programmes in the various countries was found to be an essential factor explaining the differences in the results obtained. Therefore we came to the belief that the potential of substitution patients who can be regarded as fit to drive will be the greater the longer the methadone treatment, the more comprehensive the experience gained from this kind of therapy, the more liberal the acceptance criteria applied and the sooner patients who are found to take additional psychotropic drugs are excluded from the treatment.

SUMMARY AND CONCLUSION

The research findings above suggest that a modification of the criteria applied in the Expert Report on Illness and Motor Traffic (Lewrenz, Friedel, 1992) would be appropriate. This was also the opinion arrived at during an expert discussion held at BASt (Joó, 1994). Heroin addicts treated with methadone are generally not fit to drive. A positive evaluation might be possible in exceptional cases when there are special circumstances justifying it. Among these are, for instance, a period of methadone substitution of more than a year, stable psychosocial integration, no evidence of the consumption of additional psychotropic substances, incl. alcohol, evidence of a subject’s readiness to feel responsible for himself/herself and of therapy compliance, and no evidence of serious defects of the personality as a whole. The opinion of the physicians treating the patients also needs to be considered in the evaluation of each case.

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