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## **Development of a monitoring system for heroin-assisted substitution treatment in Switzerland**

Gschwend, Patrick ; Rehm, Jürgen ; Lezzi, Stefan ; Blättler, Richard ; Steffen, Thomas ; Gutzwiller, Felix ;  
Uchtenhagen, Ambros

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<sup>1</sup> *Addiction Research Institute, Zurich*

<sup>2</sup> *Institute for Social and Preventive Medicine, Zurich*

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## Development of a monitoring system for heroin-assisted substitution treatment in Switzerland

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### Summary

**Objectives:** Switzerland introduced heroin-assisted treatment as a routine treatment for drug addicts. As a result the evaluation instruments were changed from a detailed scientific project to a routine monitoring system. The process for developing this monitoring system is described.

**Methods:** The questionnaires and assessment instruments were restyled with staff of the treatment agencies. Indicators measuring quality of treatment and measures from the future national statistic on the addiction support system were integrated into admission, course and discharge questionnaires. Currently a system for feedback to treatment agencies is being developed.

**Results:** All 21 treatment agencies are participating in the monitoring. Assessment quality is high.

**Conclusions:** The described monitoring should provide continuous delivery of basic relevant data on patients.

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**Keywords:** Heroin prescription – Monitoring – Switzerland – Opioid addiction – Treatment.

Opiate addiction constitutes a major public health problem in Switzerland (Bundesamt für Gesundheit 1998; Gmel 1997; Gmel & Maag 1999; Rehm 1995a; Rehm 1995b; Schweiz. Fachstelle für Alkohol- und andere Drogenprobleme 1999). To reduce the consequences of opiate addiction an integrated strategy including prevention, abstinence treatment, harm reduction, and repression measures has been developed and evaluated (Gervasoni et al. 2000). One part of this strategy was the Swiss Medical Prescription

of Narcotics Research Program (PROVE). Within this programme, it is possible to prescribe heroin, morphine and methadone for treatment purposes to opiate addicts for whom other treatment was ineffective.

Based on the positive outcomes of a first experimental phase of this programme (Uchtenhagen et al. 1999), heroin-assisted treatment has been implemented in Switzerland as part of an integrated overall treatment system for a specific target population (Tab. 1). Following the completion of the research phases it became a routine therapy programme. Currently, there are around 1200 treatment slots for this form of treatment available in Switzerland.

As the treatment shifted from experimental to routine treatment, the form of evaluation had to change as well. Following a general trend in public health, a monitoring system was established (Teutsch & Churchill 2000). Monitoring systems allow focussed and continuously updated surveillance of health in the general population. They have been established also in the area of illicit drugs. Such monitoring systems comprise mainly epidemiological developments, which can be used to predict health services needs (e.g., the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), see [www.emcdda.org](http://www.emcdda.org)). However, monitoring does not have to be restricted to epidemiology. Treatment monitoring systems can provide important information about trends in treatment needs and health services utilisation patterns, e.g., the German EBIS and SEDOS now called EBIS-A and EBIS-S (Türk & Welsch 2000a; Türk & Welsch 2000b); or integrated information for specialised addiction treatment agencies (Ogborne et al. 1998). This article describes the development of a system to monitor heroin-assisted treatment in Switzerland systematically by establishing electronically registered intake, follow-up and discharge interviews. One aim of this system is to make available diagnostic and anamnestic information on the

health and social situation of patients at entry, during the course of treatment and at discharge (Tab. 2).

## Research on heroin-assisted treatment in Switzerland

### *Study PROVE 1994 to 1997*

In the study on medical prescription of opiates (PROVE), 800 treatment slots had been set up for heroin substitution in Switzerland between 1994 and 1996 (Uchtenhagen et al. 1996a; Uchtenhagen et al. 1996b; Uchtenhagen et al. 1997). Between 1.1.1994 and 30.6.1996, 1035 clients entered the programme. The first phase of research ended by December 31<sup>st</sup>, 1996.

The analyses showed – according to the entry criteria – that a group of long-time opiate addicts with severe social and health problems could be reached (Uchtenhagen et al. 1999). A sub-sample of 237 patients, who had been in treatment for at least 18 months, showed marked improvement of their social and health status (Steffen et al. 1999). The results of this research have led to a wider international discussion of heroin-assisted treatment (Drucker & Vlahov 1999; Farrell & Hall 1998; Krausz & Behrendt 1998; Soyka 1998; World Health Organization 1999).

### *Second phase of research 1998 to 1999*

At the end of the first phase of research on June 30, 1996, due to legal reasons no new clients could enter into heroin-assisted treatment in Switzerland. Only after the 1997 revision of the Swiss government decree on fostering scientific evaluation on methods for drug prevention and improvement of living conditions of drug addicts, could new clients be recruited.

In the first phase of research of the heroin-assisted treatment, basically the feasibility of this new treatment form and its overall outcome had been analysed, while research in 1998 and 1999 focused mainly on medical and social ancillary care in heroin-assisted treatment programmes (Steffen et al. 1999).

### *Third phase of research since 2000*

At present, heroin-assisted treatment in Switzerland is being transferred from a research programme into a routine treatment programme. However, heroin-assisted treatment will only be conducted in appropriate and interdisciplinary treatment centres. The indication criteria will remain the same, with the exception of minimum age, which was lowered from 20 to 18 (Tab. 1). This guarantees that heroin-assisted treatment can be integrated into the existing therapeutic network as an additional treatment for long-term heroin addicts.

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**Table 1.** Entry criteria for heroin-assisted treatment

Minimum age of 18 Evidenced heroin dependence of at least two years Multiple failed former treatment attempts, exceptions are possible Considerable medical and/or social deficits Willing to give up driver's license Informed consent
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As a result of the new phase, the old evaluation instruments had to be revised. To establish the basis for future studies and to provide current data on heroin-assisted treatment, a monitoring system has been installed. In the following chapters we outline the process of establishing this monitoring system.

## Monitoring system HeGeBe

### *Aims*

The purpose of the monitoring system is to:

1. Provide standardised information on characteristics of patients entering heroin-assisted treatment, on the course and outcome of heroin-assisted treatment, and on problems and complications with such treatment.

As of 2001, the monitoring system will provide quickly and easily standardised data on heroin-assisted treatment in Switzerland. Furthermore, the full monitoring system will allow representative statements of the client's development and of this new therapeutic programme. Particularly self reports on key issues will be confirmed, e.g., current validation of cocaine, benzodiazepine, and amphetamine side consumption. Questions on patient's illegal activities have already been validated by objective judicial data in an independent investigation (Kilias & Rabasa 1998).

2. Provide timely feedback to treatment institutions with respect to monitoring treatment.

Relevant follow-up information will be available within one month after evaluation in order to allow for possible changes in the therapeutic programme. This is not feasible at present. Currently checking of data (plausibility controls, checks for completeness, etc.) and reporting usually takes several months thereby often rendering data irrelevant as new developments constantly occur. At present, a better data concept is being developed, which will allow us to provide timely feedback not only to the treating institutions but also to the Swiss Federal Office for Public Health (BAG) (Fig.1). An information system will be established, which will automatically integrate new information obtained from intake and discharge interviews. It would also integrate

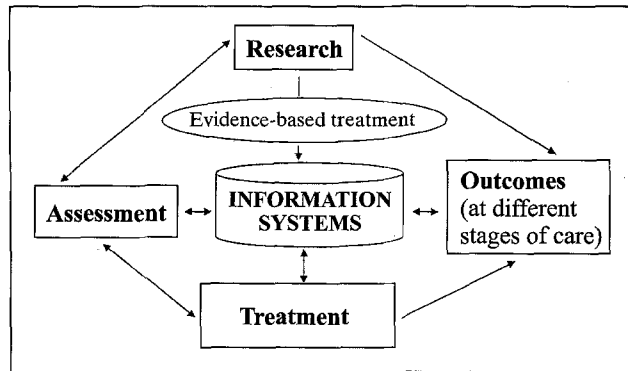


Figure 1. The role of an information system

automatically the follow-up information (e.g., evaluation with notebook and CAPI systems) and also report half-automated deviation from the estimated figure.

3. Generate knowledge on how to best implement heroin-assisted treatment and a system for monitoring treatment programmes for dependent people.

With the evaluation and combination of various data (possibly also from other studies), different questions can be formulated. To accomplish this aim, a new open database will be established which will integrate all data from the three phases on heroin-assisted treatment in Switzerland. Thus, indications for appropriate treatment of individual client groups can be obtained. This information will be given to other counselling agencies in the drug field, especially to projects which are involved with methadone-assisted treatment.

Moreover, monitoring HeGeBe serves as a pilot study for the implementation of a national statistic on addiction treatment. In a project, which is known under the name of “act-info” (<http://www.act-info.ch>), data from hospitals and counselling agencies will be transferred into a national statistic, which is standardised and widely compatible. It will also contain evaluations of an information network, which will be available to all participating treatment centres (Bundesamt für Gesundheit & Bundesamt für Statistik 2000).

4. Contribute to the quality management system for heroin-assisted treatment in Switzerland.

Currently, various activities are underway to establish the quality management system HeGeBe. The supply of reliable and compatible data on the treatment offer and course of treatment will ensure that not only the quality of heroin-assisted treatment will be gained but also further developments will be possible (Bundesamt für Gesundheit 2000). Different relevant indicators for quality management are evaluated by the monitoring system HeGeBe. Since the

monitoring system will provide data as a basis for research and decision-making, it will also contribute considerably to the improvement and further development of heroin-assisted treatment.

5. Provide a basis for in-depth research.

The described monitoring system provides the essential basis for future studies which will combine additional data with the basic variables. Therefore, data can be analysed within a wider framework.

#### *Principles and content*

The monitoring system HeGeBe provides information on clients who are in treatment. The aim is the evaluation and documentation of heroin-assisted treatment in a slender basic statistic. The new instruments of monitoring allow us also to evaluate various indicators for quality management. It is therefore an important instrument for quality management. Furthermore, the monitoring system HeGeBe will be part of “act-info” (s.a.) as a pilot. All key variables of the “act-info” system will also be included in the HeGeBe monitor.

As of 2001, relevant psychosocial and medical data will be evaluated in the monitoring system. It is planned to establish intake, yearly course of treatment and discharge interviews (Tab. 2).

#### *Implementation*

As a first step, the current questionnaires used for the evaluation of heroin-assisted treatment were re-examined. The participating treatment centres had the opportunity to provide feedback for the planned monitoring system in 2001.

A working group with representatives from the treatment centres, the BAG and the Addiction Research Institute (ISF) undertook the re-examination. Key areas of the monitoring concern the patient’s social and medical situation as well as substance consumption at entry and during the course of treatment. While the research load had to be shortened, the data should be compatible with data from prior research. Thus, the new questionnaire was designed in a way to allow comparisons of key variables and to be consistent with standard instruments like EuropASI or the SCL-90-R rating scales (symptom-check-list-90-revised). In addition, key variables from the new national monitoring system “act-info” were integrated as well as indicators from the commission on quality control and development in heroin-assisted treatment. The end product also had to be substantially shorter than the prior instruments.

**Table 2.** Overview of data, which have to be collected

Time	Questionnaire	Specification of data
<b>ENTRY</b>		
	Sociodemographic data	Socio-demographic details Living situation Education Working situation Financial situation Partner/Social contacts Treatment centres/Treatments Arranging/Assignment and drug court order
	Medical data	General information (weight and height) Medication HIV/Aids Viral hepatitis Hygiene of needles/Risk of infection Mental health Psychological health Case history of consumption Diagnostic of addiction
	SCL-90-R	Scales 1–9 and global scores
<b>FOLLOW-UP (ANNUAL INTERVIEWS)</b>		
	Sociodemographic data	Socio-demographic details Living situation Working situation Financial situation Partner/Social contacts Treatment centres/Treatments Therapeutic contacts Drug court order
	Medical data	Medication HIV/Aids Viral hepatitis Mental health Hygiene of needles/Risk of infection Psychological health Case history of consumption Diagnostic of addiction Breaks/Interruptions Partly withdrawals/Trials of withdrawal
	SCL-90-R	Scales 1–9 and global scores
	Aspects of treatment and clients' satisfaction	Satisfaction Perspectives of life
<b>DISCHARGE</b>		
	Sociodemographic and medical data	Date of discharge Circumstances of discharge Living situation Working situation Financial situation Partner Drug court order HIV/Aids Viral hepatitis Psychological health Diagnostic of addiction

Treatment centres and the BAG were then given one month to comment on the new questionnaires. Feedback was mainly positive. The suggested changes were discussed in the above-mentioned working group and a revised version was developed. In November and December 2000, the revised questionnaires were piloted in all treatment centres. Then, the questionnaires were revised slightly again. The implementation of the final questionnaires started in 2001.

### Discussion

A project like a monitoring system depends on the motivation and involvement of staff in the participating treatment centres who are in charge of data collection. Therefore, treatment staff has been encouraged to participate in the work and share the responsibility. All treatment centres have been systematically involved during the process of developing and establishing the monitoring system. Questionnaires as well as the CAPI (Computer-Assisted Personal Interview) have been discussed in working groups involving members from treatment centres. Furthermore, special emphasis was placed on comprehensive information for all treatment providers in all phases of the project. The response and specific needs of the treatment centres were then taken into consideration. With this procedure, we hope to counteract potential fears often associated with the implementation of new statistics, e. g., that such statistics could seem to allow comparisons between performance of treatment institutions and eventually would lead to reduced funding for some institutions (Ogborne et al. 1998). First experiences are positive but the full implementation is still ahead.

### Conclusions

We hope that this monitoring system will provide the basic data needed for long-term evaluation of heroin-assisted treatment. With regard to the national and international attention which the project on heroin-assisted treatment has received, data collection and ongoing research are necessary so that examination of this new treatment programme is ensured.

The monitoring system is conceived to be permanent. It serves as a pilot for other monitoring systems and the evolving national statistic on substance abuse treatment.

### Note of thanks

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## Zusammenfassung

### Entwicklung eines Monitoringsystems für die heroingestützte Behandlung in der Schweiz

**Fragestellung:** Mit der Überführung der heroingestützten Behandlung von Drogenabhängigen in der Schweiz vom Studienbetrieb in eine Routinebehandlung wurden die Instrumente der Begleitforschung angepasst und ein Monitoringsystem eingerichtet. Die Aufgaben dieses Monitoring und seine Implementierung werden beschrieben.

**Methoden:** Zusammen mit Vertretern der Behandlungsstellen wurden die bisher verwendeten Fragebogen im Jahr 2000 überarbeitet. Indikatoren zur Messung der Qualitätsentwicklung und Variablen der künftigen nationalen Suchthilfestatistik wurden in die neuen Eintritts-, Verlaufs- und Austrittsfragebogen integriert. Ein System für den Datenrückfluss an die Behandlungsstellen wird entwickelt.

**Ergebnisse:** Zur Zeit nehmen alle 21 Behandlungsstellen am Monitoring teil. Die Datenerhebung in den Behandlungsstellen läuft gut.

**Schlussfolgerungen:** Das hier beschriebene Monitoringsystem wird die fortlaufende Erhebung der essentiellen Basisdaten

von Patienten der heroingestützten Behandlung langfristig gewährleisten.

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## Résumé

### Développement d'un système de surveillance pour le traitement de maintenance à l'héroïne en Suisse

**Objectifs:** Avec le passage de la prescription médicale d'héroïne aux personnes dépendantes des opiacés en Suisse du stade d'étude à celui de traitement de routine, les instruments de recherche ont été adaptés et un système de monitoring a été mis sur pied. La nature des tâches remplies par le monitoring est décrite, ainsi que la manière dont ce dernier a été mis en place.

**Méthodes:** Les anciens questionnaires ont été modifiés au cours de l'année 2000, en collaboration avec les représentants des centres de traitement. Les indicateurs mesurant l'évolution de la qualité et les variables de la future statistique nationale d'aide aux personnes dépendantes ont été intégrés dans les nouveaux questionnaires d'entrée, d'évolution et de sortie. Un système de retour des données aux centres de traitement doit encore être développé.

**Résultats:** Les 21 centres de traitement de maintenance à l'héroïne participent actuellement au projet. La récolte des données dans les centres de traitement fonctionne bien.

**Conclusions:** Avec le système de monitoring décrit, la récolte des données de base des patients en traitement de maintenance à l'héroïne peut être garantie à long terme.

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#### Address for correspondence

**Patrick Gschwend, MA**  
**Addiction Research Institute**  
**Konradstrasse 32**  
**P. O. Box**  
**CH-8031 Zurich**

**Tel.: +41 1 448 11 78**

**Fax: +41 1 273 40 64**

**e-mail: gschwend@isf.unizh.ch**