

# Replacing the Last Week of a Motivational Inpatient Alcohol Withdrawal Programme by a Day-Clinic Setting

G. Reymann HJ. Danziger

Westfälisches Zentrum für Psychiatrie, Psychotherapie und Psychosomatik, Dortmund, Deutschland

## KeyWords

Day-clinic, setting and costs • Qualified withdrawal • Alcohol-addicted patients • Relapse • Motivation to treatment

## Abstract

The impact on the motivation to treatment of a qualified alcohol withdrawal programme was evaluated in a pre/post setting. Over a period of 2 years we compared the results of replacing the last week of an inpatient setting by day-clinic treatment. In the first year, 202 patients were treated in a 3-week inpatient setting, whereas in the second year, 149 patients out of 212 (70.3%) changed into day-care for the third week. The total treatment period was nearly equal in both years (16.2-17.4 days) and the average costs of detoxication were reduced by 8%. The amount of irregular discharges (21.7 vs. 23.6%) was almost unchanged. As a severe disadvantage the overall rate of patients who agreed to enter a succeeding stringent long-term treatment regressed significantly from 45.0 to 34.4% ( $p < 0.05$ ).

Copyright© 2001 S. Karger AG, Basel

## Introduction

While there has been a tendency to develop treatment and rehabilitation programmes that take place in a day-care setting over several months, acute detoxication of alcohol-addicted patients in Germany is mainly done in an inpatient setting [1, 2]. This is primarily based on two Professional reservations: (1) the risk of a relapse or a therapy interruption might be higher when an inpatient setting is replaced too early by a day-clinic setting [3] and (2) the rate of patients who will accept further abstinence-orientated treatment programmes might decrease in case an inpatient setting is replaced too early by a day-care setting.

## Hypotheses

'If parts of an inpatient setting are replaced by a day-clinic setting, the rates of disciplinary discharges and therapy interruptions of acutely treated alcohol addicts will increase.'

'If parts of an inpatient setting are replaced by a day-care setting, the number of alcohol addicts who are prepared to enter an after-care System will decrease.'

---

## KARGER

Fax+ 41 61 306 1234  
E-Mail [karger@karger.ch](mailto:karger@karger.ch)  
[www.karger.com](http://www.karger.com)

©2001 S. Karger AG, Basel  
1022-6877/01/0072-0056\$ 17.50/0

Accessible online at:  
[www.karger.com/journals/ear](http://www.karger.com/journals/ear)

G. Reymann, MD  
Westphalian Hospital for Psychiatry  
Psychosomatics Psychotherapy and Department for Addiction  
Marsbruchstrasse 179, D-44273 Dortmund (Germany)  
Tel. +49 231 4503777, Fax +49 231 4503783, E-Mail [reymann-bochum@t-online.de](mailto:reymann-bochum@t-online.de)

## Material and Methods

The quoted hypotheses were verified in a semi-prospective study of a 2-year pre/post comparison that was carried out on an open admission ward. This unit of 18 beds is part of a department for addicted patients integrated into a hospital that is responsible for the Psychiatric care of more than 1 million inhabitants. Only patients using legal drugs are admitted to this unit.

In the ward there are two therapy approaches: one Programme comprises the branch of crisis intervention. Patients not willing to accept sufficient treatment or not willing to abstain from alcohol enter this Programme. Furthermore, all patients who are actually admitted to hospital for emergency reasons do so. They are discharged as soon as the actual problem that made them come is over.

The other form of therapy is a qualified withdrawal (QW) which commonly lasts 3 weeks. Its intention is to motivate alcohol-addicted patients to enter the after-care System. Within a therapeutic community a team of physicians, nurses, social workers and non-verbal therapists provide a structured therapeutic Programme in a group setting. From the first day of detoxification and diagnostics the patient is supported to set up realistic individual goals. Later there is an intensive counselling preparing a subsequent long-term treatment [4, 5]. In most of the cases, the indication for a QW is provided by the general physician, by a regional medical advice centre for addicts or by an institutional outpatients department.

Well-motivated patients within the crisis intervention programme are encouraged to switch over to QW. Since both programmes are run by the same staff in these cases the days of crisis intervention are taken into account for the 3 weeks of QW [3]. Arrangement of long-term therapy is made easier by the combination of a selection of patients and an intensive therapy Programme focussed on the special needs of persons addicted to legal drugs.

The study included all patients that were found in a QW from June 1, 1997 until May 31, 1999. From June 1, 1998, QW was changed into a day-care setting after a period of 2 weeks [6]. From Monday to Friday between 9 a.m. and 4 and 6 p.m. respectively - except for bank holidays - the patients were integrated in the inpatient setting.

Contraindications for this switch to day-clinic were an acute relapse, a considerable restriction of the patient's ability to control his/her abstinence, the lack of abstinent social contacts in his/her circle of acquaintances, a lack of nocturnal abode, and a severe psychiatric or somatic disease that needed inpatient treatment.

During the whole period of our study, medical staff amounted to 98% and was in accordance with the German decree for Psychiatric Staff (PsychPV). Apart for two medical positions, for which new doctors were being trained, and a member of the nursing staff, the multi-professional team for this unit remained unchanged during the 2 years.

Since there seemed to be no significant difference between the therapy interruption initiated by the Institution or the patient, we choose for the first hypothesis a summarizing examination as end point. As end point for the second hypothesis we choose the rate of all patients who were willing to accept further stringent rehabilitation and treatment programmes. We only counted those cases in which a definite admission date was appointed by the rehabilitation centre and if the centre agreed to take over the costs for treatment. Generally, subsequent to medical consultation, the patient could change into an inpatient setting of psychotherapeutic, psychiatric or somatic treatment. A change into a continuous outpatient setting was consid-

**Table 1.** Contraindications for the change of an inpatient detoxication into a day-care setting 2 weeks after admission (no double values)

	Contraindications		Patients
	n	%	%
Current relapse	0	0.0	0.0
Restricted capability of control	17	33.3	8.0
Lack of abstinent social contacts	12	23.6	5.7
Of no fixed abode	4	7.8	1.9
Psychiatric contraindications	6	11.8	2.8
Somatic contraindications	12	23.5	5.7
Total	51	100	24.1

ered to be successful only if, during the course of QW, the patient negotiated a set date for the Start of his/her further treatment programme.

The significances were calculated by the  $\chi^2$  test as a unilateral check with the aid of the statistical programme SPSS 8.

## Results

During the first study year, 203 patients began a QW. Only one therapy was performed in a day-clinic setting and will be neglected henceforth to preserve clarity. In the second year of our examination period, 212 patients entered a QW. In 149 cases (70.3% of all admissions of the second year), the therapy was continued in a day-clinic setting after the second week. Twelve patients were discharged or transferred to another unit within a fortnight. In 51 cases, there was at least one contraindication given against a change into a day-clinic setting. Table 1 lists the results of Contraindications in the second group (without double values).

The average age was 41.2 years in the first period and 43.5 years in the second. The female ratio was 18.3% in the first year and 26.9% in the second. The average time of therapy amounted to 16.2 days in our first study. In the second year the time of inpatient therapy amounted to 14.4 days on average. In our study, we also took the weekends and bank holidays during the day-clinic therapy into account. This approach seemed reasonable because abstinent periods in times without therapy were thought to be essential for the patient's motivation. Thus, the average treatment time in a day-care setting amounted to 6.3 days (Standard deviation 2.26, median 7 referred to 149 patients treated in a day-care setting). The total treat-

**Table 2.** Number of successful changes from QW into continuous stringent treatment programmes

	Setting	
	Only inpatient QW	Inpatient land day-care QW
Time of examination	1.6.1997-31.5.1998	1.6.1998-31.5.1999
Patients	202	212
Outpatient rehabilitation	10(4.9%)	8 (3.8%)
Outpatient psychotherapy	4 (2.0%)	10(4.7%)
Total outpatients	14 (6.9%)	18 (8.5%)
Inpatient rehabilitation	51 (25.3%)	32 (15.1%)
Inpatient psychotherapy	14 (6.9%)	14 (6.6%)
Further inpatient therapy	12 (5.9%)	9 (4.2%)
Total inpatients	77 (38.1%)	55 (25.9%)
Total	91 (45.0%)	73 (34.4%)

ment time of all QW amounted to 17.4 days in the second study year.

In the first study year, 3,272 treatment days for 202 detoxifications were needed. In the second year, out of 212 detoxifications, 2,751 days were spent in an inpatient setting. Furthermore, 670 working days in a day-clinic setting were needed. Since costs paid for a work day in a day-clinic represent 60% of the costs for a day spent in an inpatient setting, these 670 days actually correspond to the costs of merely 402 inpatient days. Thus the average costs decreased by 8.0%, if the last week of a detoxication was carried out in a day-care setting.

#### *Types of Discharges*

The rates of detoxifications during which at least one relapse was known amounted to 4%, disregarding of whether or not the last week was spent in a day-care setting. The number of therapy Interruptions initiated by the patient increased from 35 (17.3%) to 41 (19.3%). Every year saw nine so-called disciplinary discharges (4.5 and 4.3% respectively) as a continuation of the therapy appeared senseless because of the patient's actual behaviour.

The rate of this type of discharge would have been higher if every obvious relapse had indicated the end of therapy. In 1994 we left this punishing *modus operandi*. Since that date in case of a relapse we prefer to support the patient to admit his/her relapse among the team and the other patients, to reflect on how it could have happened and to learn from it with regard to future behaviour [7]. If the relapse occurs during a day-care detoxication, a change into an inpatient setting is requested.

In the second year of the study the total rate of therapy interruptions and disciplinary discharges slightly increased from 21.8% to 23.6%. The difference was not significant.

#### *Transfer to Further Treatment*

Within the 2 years of recruitment there was no change in the availability of long-term treatment in the region of Dortmund and the overall demands on rehabilitation or psychotherapy in Germany showed no significant alterations either. However, within the study the acceptance rates for these treatment programmes receded (table 2).

The switch to different continual inpatient therapies decreased from 38.1 to 25.9% (females from 46.2 to 34.5% and males from 37.0 to 22.3%). On the other hand, the overall change to long-term outpatient therapy increased slightly from 6.9 to 8.5%. On the whole, there was a significant ( $p < 0.05$ ) decrease of successful changes from 45.0 to 34.4%. This rate of succeeding long-term therapy receded in females (54.1 to 41.4%) as well as in males (43.0 to 31.2%).

#### **Discussion**

For an evaluation of day-clinic detoxification outcome it would be best to take into account the 149 patients who actually received day-clinic treatment in the second year and to compare them to those who principally met the inclusion criteria during the first year. However, the team was attached to regular inpatient treatment in the first year. It would not have been able to

identify patients suitable for day-clinic without a bias, since some of the criteria for this setting were based on subjective assessment.

We assume that the number of patients suitable for day-clinic were similar in both years and provide the data of all patients. This seems feasible in order to describe the impact of implementation of a week of day-clinic on the System of healthcare delivery.

Although we routinely checked the patients' breath for alcohol every morning before the commencement of the therapy, the control of abstinence was easier to get round for the patients who spent long periods out of reach of the staff [3]. Since a relapse did not automatically mean a discharge, patients often spontaneously told us about it. We assume that the estimated number of undetected relapses was not considerably higher in a day-care hospital than in an inpatient setting.

Kielstein [8] reports on a day-care hospital in which 9.5% of the therapies were prematurely terminated by the patients and 2.9% were interrupted by the hospital. The rates found in our study are considerably higher (19.3 and 4.2% respectively). Since in both hospitals a relapse was treated in a similar way and since there was no significant increase in irregular discharges in our clinic during the study, this difference may be caused by a selection of patients having severe and multiple diseases.

In most of the cases the patients' motivation and his or her acceptance to begin a longer-lasting therapy is lacking. Therefore, one important parameter of a successful QW is the rate of changes into a further stabilizing after-care system [9].

Dlabal [10] says that the admission to an inpatient detoxication unit is felt by the patient as a severe narcissistic insult since the intake openly underlines his failure concerning his alcohol problem. Dlabal also states that the patient's motivation gradually decreases once the patient is feeling better. If this is the case, Dlabal then offers the possibility to switch over to a day-clinic setting in which the patient has to solve everyday problems of his or her private life, thus helping the patient to gain a more realistic self-assessment. We observed this favourable trend only if immediate confrontation with private problems occurred. If the patient failed to regard the large amount of support of the day-care setting, he or she overestimated the capability to stay abstinent after this treatment period and rejected further stabilizing therapeutic offers. This may explain why the number of patients who accepted further treatment possibilities after day-clinic detoxication receded. This assumption is backed up by the fact that therapies carried out in an inpatient setting were

receding considerably while the number of outpatient therapies increased slightly.

In a 1-year follow-up history of 200 randomized patients who were either treated in an inpatient or in a day-clinic setting for 4 weeks, McLachlan and Stein [11] found some significant differences: In comparison to the preceding year, the number of days spent in an inpatient setting increased after detoxication while the number of admissions was unchanged. After detoxication in a day-care setting both the number of admissions and the number of treatment days significantly decreased. The reduction of inpatient treatment can be a disadvantage for many patients since the costs of sufficient addictive diseases outpatients' treatment are normally not paid by the health insurances in Germany. In the actual German healthcare System most of the addicts have to agree on programmes of inpatient rehabilitation to require adequate intensity of treatment. Whether the increase in the number of female admissions is a result of the introduction of a day-clinic detoxication that facilitates better contact with their children is unclear. This tendency remains to be observed.

The increase in the female rate in this study should have no larger impact on the therapy course because in their randomized trial, McLachlan and Stein [11] did not find any gender-specific difference in all Parameters concerning the course of withdrawal.

Fink et al. [12] described no significant differences in a 2-year follow-up after inpatient versus partial day-clinic alcohol detoxification in a randomized trial. They performed inpatient treatment in a ward of general psychiatry while their day-clinic treated individuals with addiction only. The effect of the presence of patients with variant psychiatric diseases that do not present with addiction in the course of withdrawal is unknown.

In this study the decrease of costs was all but moderate because of the limited shortening of inpatient treatment and according to the fact that in almost one third of our patients we regarded a switch to day-clinic to be irresponsible. The reduction of changes to long-term treatment may raise the amount of severe relapses and the costs for subsequent detoxications. As inpatient treatment is replaced by day-clinic to a larger extent, short-term savings in the institutions for detoxication and for rehabilitation may be larger [13]. However, this may lead to prolonged consumption and induce additional harm and the need for subsequent treatment. Up to now it is not evident which is the best amount of inpatient treatment within motivational alcohol withdrawal programmes.

## Conclusion

The findings of our study indicate that in the majority of patients admitted to hospital, the last part of a QW can be performed in a day-clinic setting without increasing the rates of irregular discharges. However, by replacing one

third of the inpatient therapy by day-clinic, the savings were all but small and the number of patients who changed into continual stringent treatment programmes receded. This urges a closer indication for day-clinic therapy and points to the necessity that readmissions into an inpatient setting should be possible at any time.

## References

- 1 Kruse G, Sievers K: Tagesklinische Behandlung von Abhängigkeitskranken. *Psychiatr Prax* 1987;14:174-178.
- 2 Wefelmeyer T: Tagesklinik für Suchtkranke; in Eickelmann B, Reker T, Albers M (eds): *Die psychiatrische Tagesklinik*. Stuttgart, Thieme, 1999, pp 135-145.
- 3 Mirin SM, Batki O, Isbell PG, Kleber H, Schottenfeld RS, Weiss RD, Yandow VW: Practice guidelines for the treatment of patients with substance use disorders: Alcohol, cocaine, opioids. *Am J Psychiatry* 1995;152(suppl 11):1-80.
- 4 Reymann G, Danziger HJ: Die Motivationsförderung in der stationären Akutbehandlung Alkoholabhängiger. *Versicherungsmedizin* 1997;49:178-182.
- 5 Reinert T, Reymann G: Über die Notwendigkeit einer suchtmmedizinisch qualifizierten stationären Akutbehandlung bei Alkoholabhängigkeit. *Psychiatr Prax* 2000;26:294-298.
- 6 Expertenkommission: Empfehlungen der Expertenkommission der Bundesregierung zur Reform der Versorgung im psychiatrischen und psychosomatisch/psychosomatischen Bereich. Bonn, Bundesministerium für Jugend, Frauen, Familie und Gesundheit, 1988, pp 265-278.
- 7 Lauer G, Richter B: Alkoholrückfälle während stationärer Therapie: Empirische Fakten und praktische Vorschläge zur Rückfallaufarbeitung. *Psychiatr Prax* 1995;22:19-23.
- 8 Kielstein V: Indikationskriterien und Prinzipien der ambulant/tagesklinischen Therapie von Alkoholkranken. *Sucht* 1991;37:114-120.
- 9 Mundle G, Mann K: Entzugsbehandlung bei Alkoholabhängigen; in Götz J (ed): *Moderne Suchtmedizin*. Stuttgart, Thieme, 1999, chapt 3.4.4, pp 1-4.
- 10 Dlabal H: Marburger Modell: Integrierte tagesklinische Suchtkrankenbehandlung; in Wagner HB, Krausz M, Schwoon DR (eds): *Tagesklinik für Suchtkranke*. Freiburg im Br, Lambertus, 1996, pp 76-89.
- 11 McLachlan JFC, Stein RL: Evaluation of a day clinic for alcoholics. *J Stud Alcohol* 1982;43:261-272.
- 12 Fink EB, Longabaugh R, McCrady B, Stout RL, Beattie M, Ruggieri-Authet A, McNeil D: Effectiveness of alcoholism treatment in partial versus inpatient settings: 24-month outcomes. *Addict Behav* 1985;10:235-248.
- 13 Dickey B, Binner PR, Leef S, Uyeda MK, Schlesinger MJ, Gudeman JE: Containing mental health treatment costs through program design: A Massachusetts study. *Am J Publ Health* 1989;79:863-867.