Heroin Assisted Treatment (HAT) in Switzerland

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Arud
Centres for Addiction Medicine
Patients in Treatment

- Alcohol, cocaine, cannabis, BDZ, party drugs approx. 1’000
- Opioid maintenance treatment (OMT) methadone/buprenorphine/morphine (SROM) approx. 750
- Heroin-assisted treatment (HAT) approx. 240
Comprehensive Interdisciplinary Medical Care

Therapeutic Staff: 89 Employees

• Psychiatry/Psychotherapy
  17 Physicians
  8 Psychologists

• Internal Medicine
  7 Physicians

• Social Work
  3 Social Workers

• Physician Assistants
  4 Assistants

• Nursing staff
  43 Nurses (part time)
Treatment Concept

Quality of life

Greatest possible reduction of harm

- Flexible, patient oriented goal setting
- Low threshold, easily accessible
- Minimal constraints (barriers)
- Interdisciplinarity
Agenda

- Introduction
- OMT and harm reduction
- OMT and HAT in Switzerland
- Practice in Arud Centres
- Take home messages
Platzspitz
1986 – 1992
Therapeutic Goals

Ensure Survival

Reduce Harm

Stabilise Life Situation

Foster Coping Skills

Abstinence seen as a possible state, not as goal per se
Supply and Demand of OMT and HAT in Switzerland

Further 20,000 users

Approx. 22,000 people with heroin addiction

... of those approx. 17,000 in substitution therapies (OMT) (20,000 registrations p.a.)

Approx. 1,000 abstinence-oriented treatment slots

HAT approx. 1,500 in treatment

Switzerland: approx. 8.3 Million Inhabitants

Coverage approx. 65%
OMT in the Canton of Zürich

HAT restricted to licensed centres
Treatment Coverage and Injecting

Nordt 2010

Injector (lifetime)
Diversification Canton of Zurich

Arud Centres
36% Meth
28% SROM
25% DAM
8% Bup

Nordt 2014, unpublished
Awareness of available OMT options prior to initiation of therapy

- Liquid methadone: 91%
- Methadone tablets/capsules: 68%
- Buprenorphine: 54%
- Prescribed heroin: 43%
- Codeine: 40%
- Morphine retard: 34%
- Other: 4%

Projekt Access CH 2012
Incidence of Regular Heroin Use

Nordt, 2014
Causes of Death

- Infektion: 8.9%
- Kardiovaskuläres Ereignis: 5.6%
- Komplikation Leberzirrhose: 25.6%
- Lungenversagen: 5.6%
- Neoplasie: 7.8%
- Mischintoxikation: 11.1%
- Gewalt: 3.3%
- Suizid: 3.3%
- Unfall: 5.6%
- unbekannt: 23.3%

Arud Cohort 2005-2012
Aging and Comorbidities

Average Age: >40 Years

HIV Prevalence 12%, HCV 68%

Mortality caused by physical diseases >> drug related deaths

Increasing need of internists

8 days inpatient treatment/patient/year
Key Points of OMT

• Access to treatment
• Adequate disclosure of information
• Choice of best tolerated substance in sufficient dosage
• Take homes
• Patient autonomy, no coercion
• Individual goal setting
• Treatment of concomitant conditions
23 Centres, 1500 Patients
• 4 > 150 Patients
• 17 < 100 Patients
• 2 Prisons
Morphine and Diacetylmorphine

Diacetylmorphine (DAM) as Prodrug

6-monoacetyl morphine, morphine and morphine-6-glucuronide as acting agents
Access to HAT

Criteria for admission:
(Swiss narcotics act)
Minimal age 18 Years
Opioid dependence for minimum 2 years
At least 2 prior treatments other than HAT
Physical, psychical or social impairments
Set-up of HAT

Admission takes weeks
Admission criteria rather limiting
Limited take-home doses (max. 2 days)

High threshold, difficult conditions of treatment
Retention

Probability to stay in treatment

Schaub 2013
Costeffectiveness of HAT

Daily costs all over

Homeless heroin user no treatment
CHF 160.- / EUR 145.-

Heroin user in prison
CHF 110.- / EUR 100.-

Heroin user in HAT
CHF 60.- / EUR 55.-

PROVE: Gutzwiler 2000
Arud Centres with HAT

- Start 1994
- 240 Patients in Treatment
- Form of Administration
  - 24% DAM i.v
  - 29% DAM i.v. and p.o.
  - 47% DAM p.o.
DAM prescribed in CH

Kormann 2013
Arud Centres with HAT

- Take-home doses of injectable DAM not possible for technical reasons
- Take-home doses of DAM-tablets for up to 2 consecutive days (approx. 50% with 2 days)
- DAM and methadone or SROM frequently combined (approx. 60%)
DAM-Tablets

Morphine from prodrug DAM acts quicker and reaches higher plasma levels

• Invasion time 20 min. with pronounced effect
• Invasion time 50% quicker than morphine
• Bioavailability 37% better than morphine

Halbsguth 2006
Practice in Arud Centres

DAM i.v.
Max. 6 injections per day
Max. 1200 mg/d
Average daily dose: 600-800 mg/d
Single dose ≤200 mg

DAM p.o. (Tablets à 200 mg)
Max. 3 applications per day
Max. 1800 mg/d
Average daily dose: 1000-1200 mg/d

Individual dosing by the patients within safe limits
Summary

• Good coverage with OMT due to harm reduction approach
• HAT essential part of comprehensive treatment range of various substances
• Increasing proportion of oral DAM application
• Potential of HAT only partly deployed due to restrictions by federal law