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) (take out, first line)



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









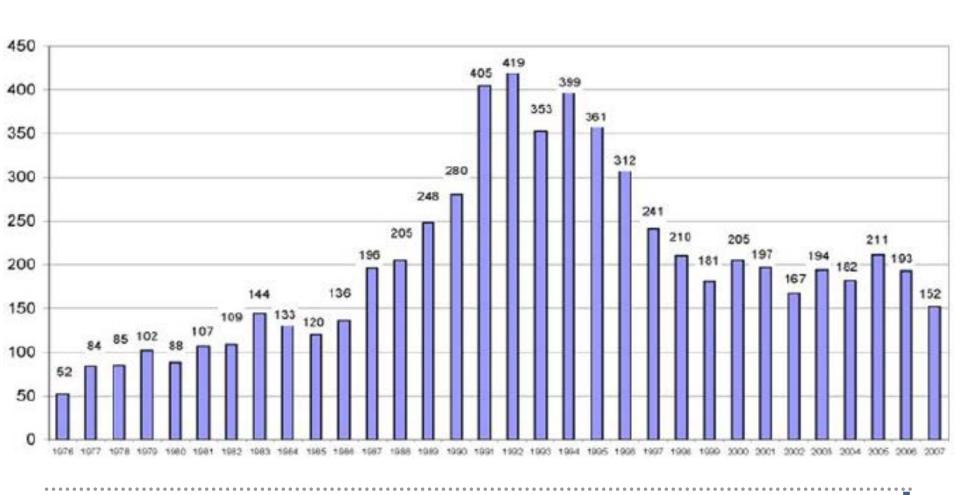
Therapeutic Goals



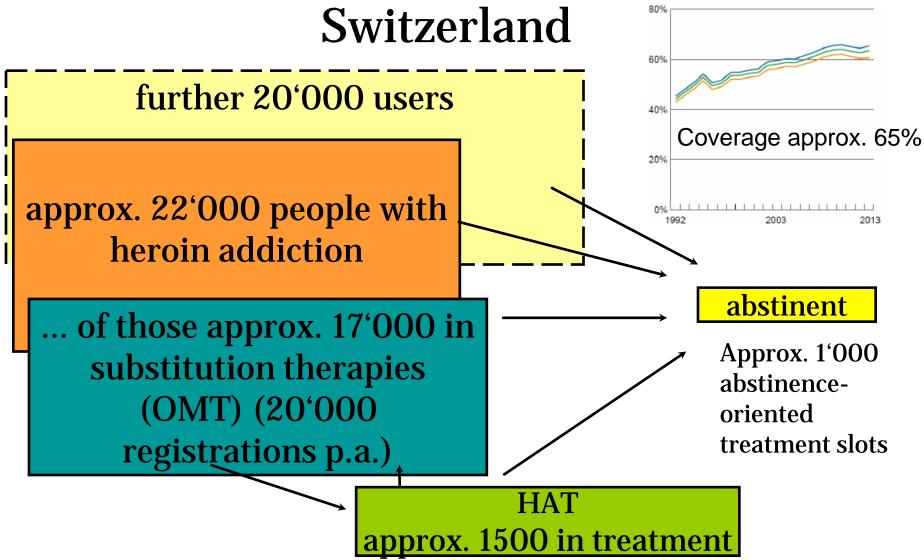
Abstinence seen as a possible state, not as goal per se



Drug Deaths 1976 - 2007



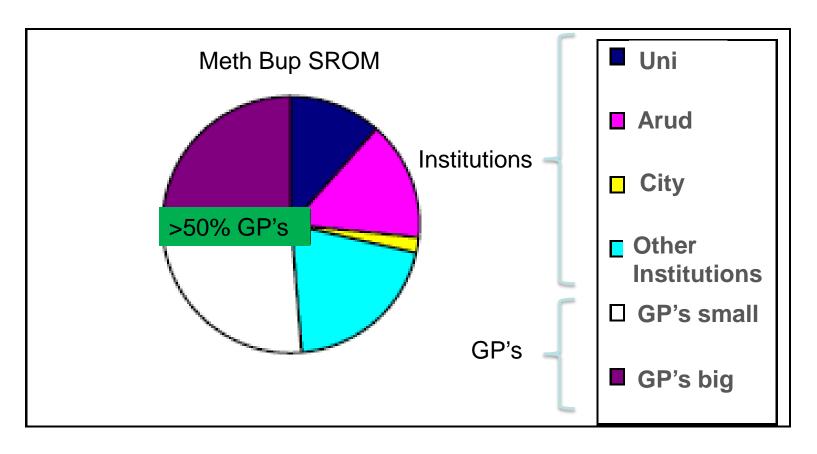
Supply and Demand of OMT and HAT in



Switzerland: approx. 8.3 Million Inhabitants



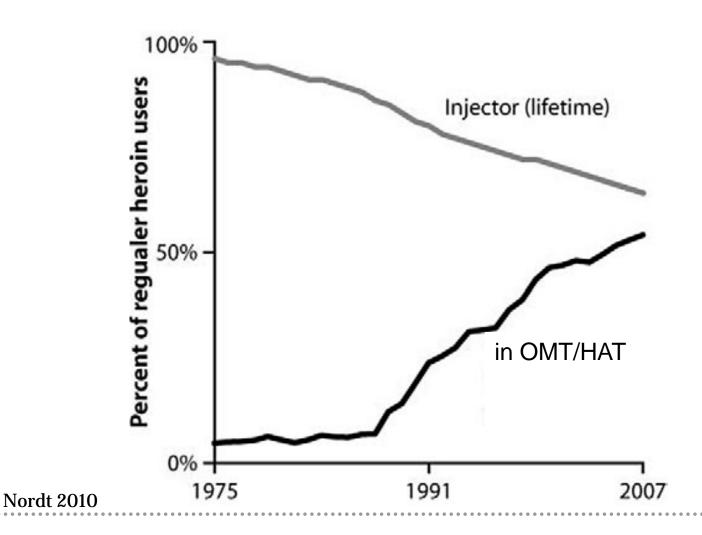
OMT in the Canton of Zürich



HAT restricted to licensed centres

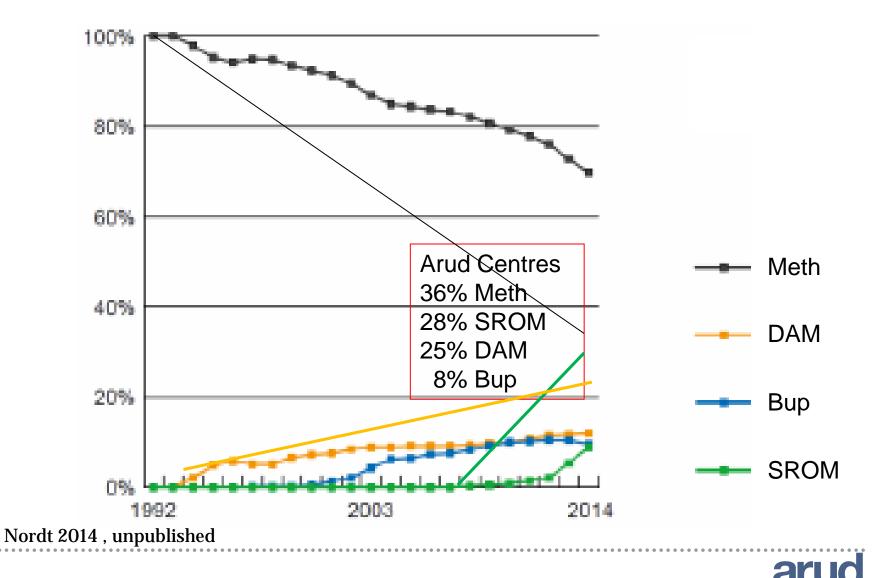


Treatment Coverage and Injecting

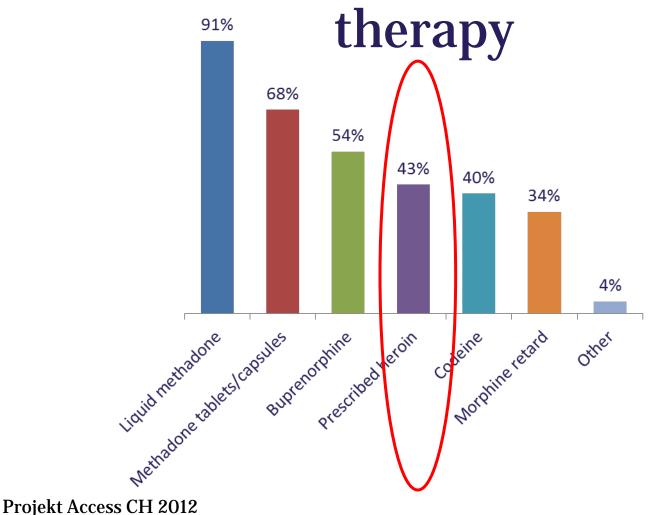




Diversification Canton of Zurich



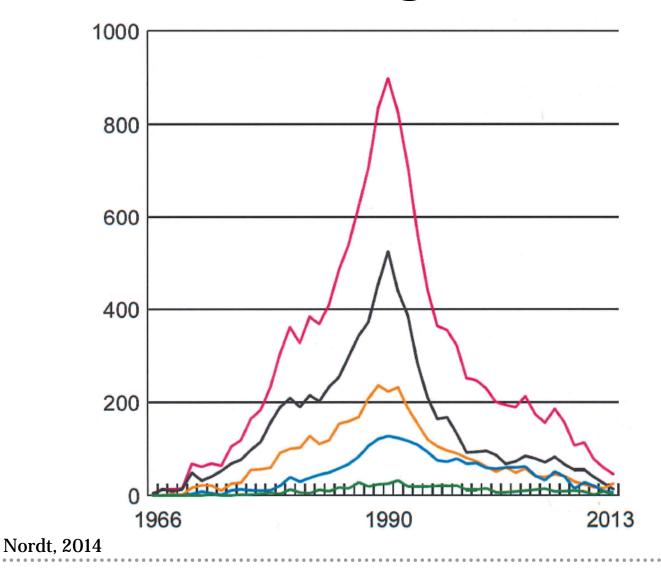
Awareness of available OMT options prior to initiation of





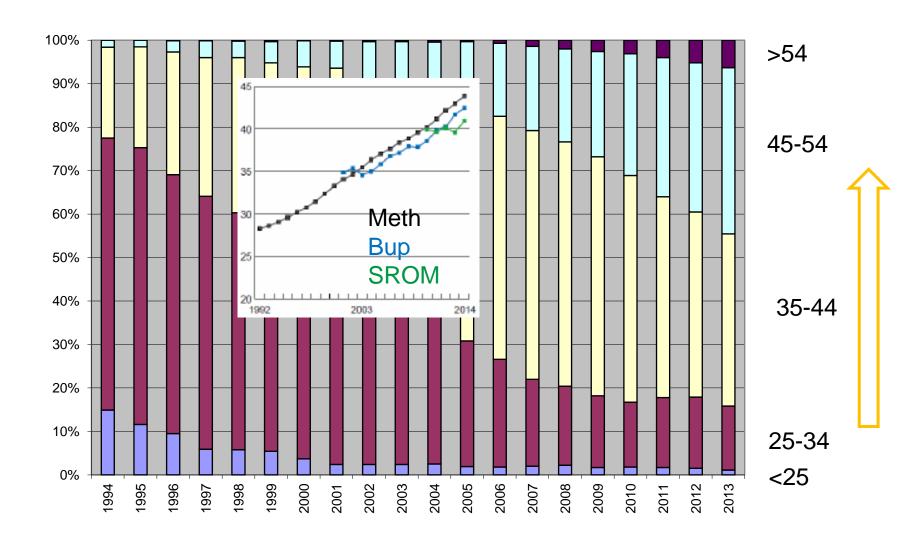


Incidence of Regular Heroin Use



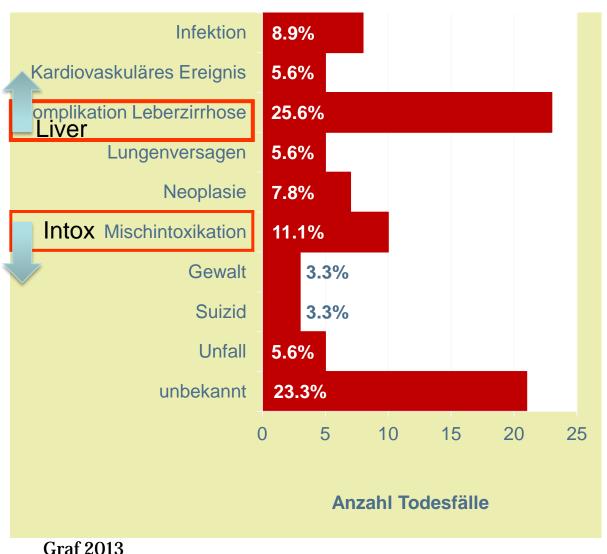


Age of Patients in OMT/HAT





Causes of Death





Arud Cohort 2005-2012



Aging and Comorbidities

Average Age: >40 Years

HIV Prevalence 12%, HCV 68%

Mortality caused by physical deseases >> drug related deaths

Increasing need of internists

8 days inpatient treatment/patient/year

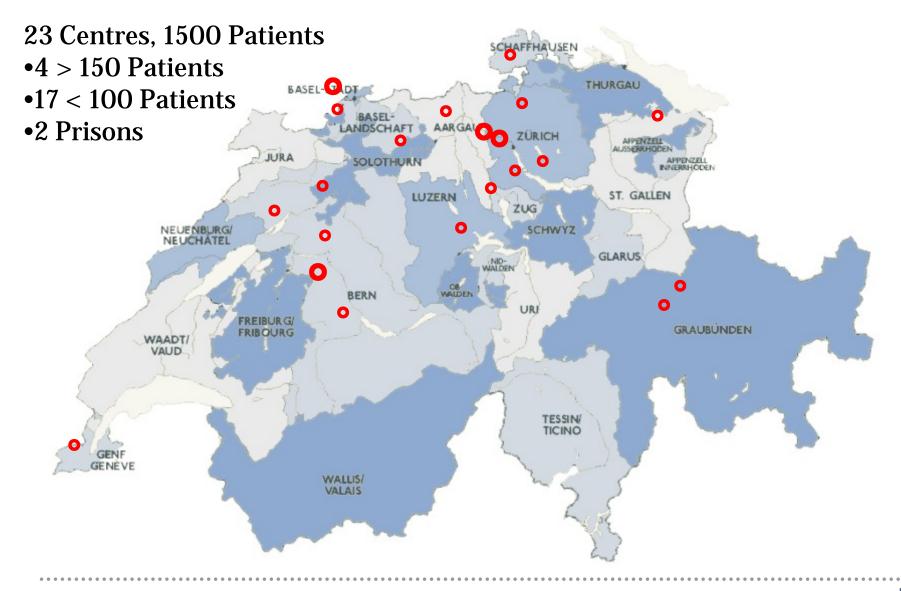


Key Points of OMT

- 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

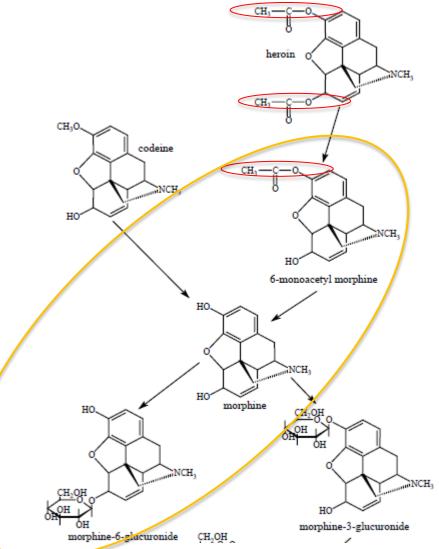


HAT in Switzerland





Morphine and Diacetylmorphine



Diacetyl morphine (DAM) as Prodrug

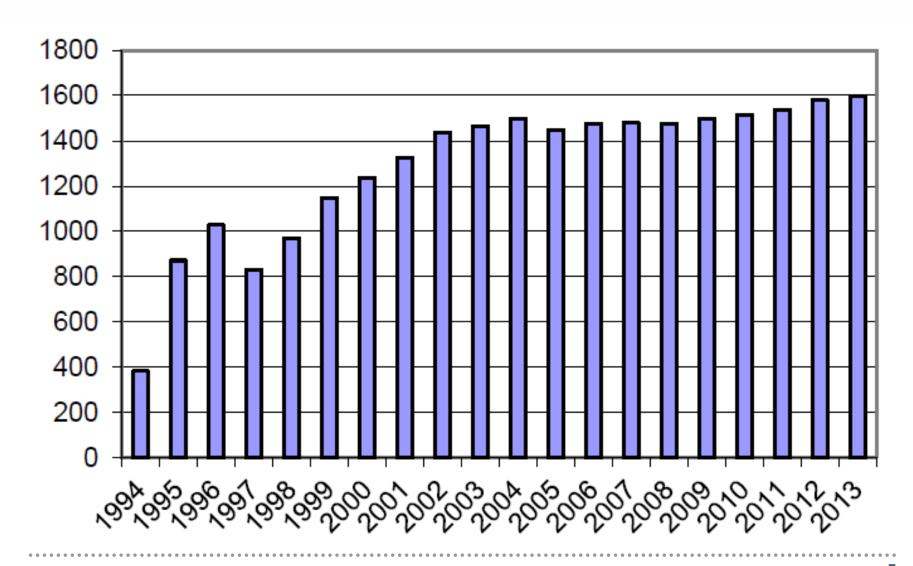
6-monoacetyl morphine, morphine and morphine-6glucuronide as acting agents





HAT-Patients in CH







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



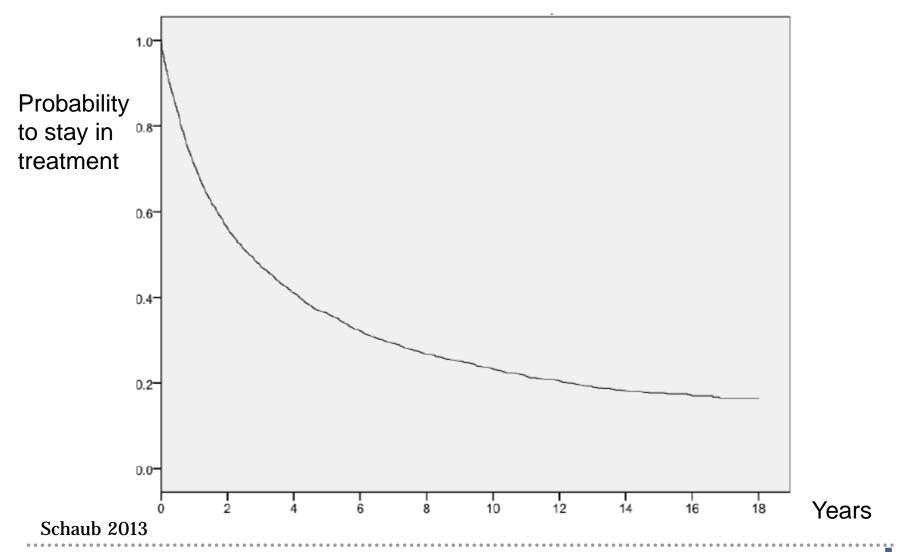
Set-up of HAT

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

High threshold, difficult conditions of treatment



Retention





Costeffectivenes 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

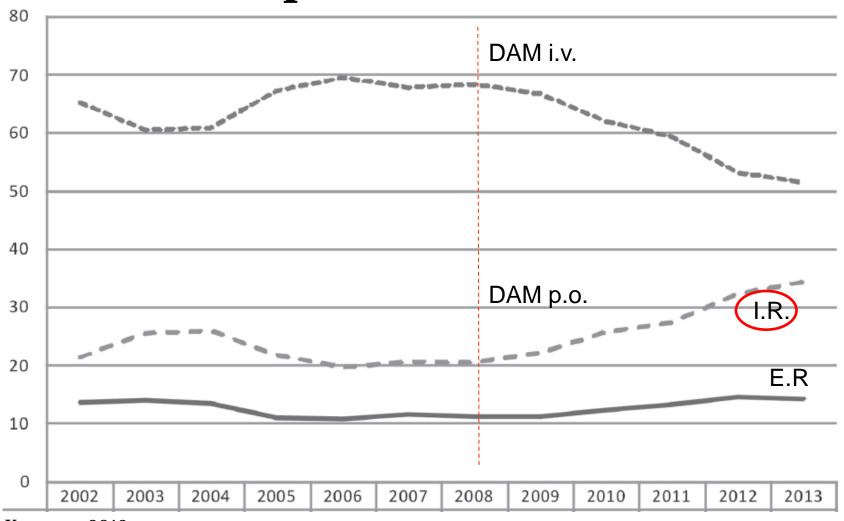


Arud Centres with HAT

- 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



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

