Therapeutic communities for addictions in Europe: development, current practices and available evidence

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Overview

1. **Background of the study**
2. **Development of TCs**
3. **Objectives**
4. **TCs in Europe today**
5. **Available evidence**
6. **Conclusions**

1. Background

- Study commissioned by the EMCDDA (European Monitoring Centre for Drugs and Drug Addiction)

- Research period: 2011 –2012
- Launch publication: March 2014

Rationale and aims of the EMCDDA-publication

- Practices in European TCs + population profiles and outcomes are hardly documented
- Renewed interest in recovery and drug-free treatment due to the limitations of harm reduction, devastating influence of drugs on the developing brain and limitations of pharmacological Tx

- Objectives of the Insights Publication:
  - Characterize recovery-oriented treatment in Europe and identify recent evolutions and future directions
  - Review TC effectiveness with a scope on studies performed in Europe
  - Propose guidelines and recommendations for future development of TC-treatment, based on a comparative study across EU-countries

What is a therapeutic community?

- Several definitions
- Diverse practices
- What is typical of a TC according to you?
  - Main characteristics
  - Core elements

2. Development of TCs

- Drug-free TCs:
  - long history (since 1958) + model for many residential Tx programs
- Definition:
  - "*a drug-free environment in which people with addictive problems live together in an organized and structured way to promote change toward a drug-free life in the outside society*" (Broekaert, Kooyman & Ottenberg, 1998, p. 595).
  - Many variations, not necessarily residential

The rise and fall of TCs in Europe

- Implemented in Europe in late 1960s - early 1970s
  - Adaptation of the behaviorist American model to European culture and treatment traditions (e.g. milieu therapy, psycho-analysis)
- Quickly spread across Europe (1980s)
  - Differences between Western and Eastern Europe
  - Predominant treatment model until:
    - Spread of the HIV/AIDS epidemic
    - Expansion of MMT and harm reduction
- 'Closed' communities and closure of TCs in several countries (1980s-1990s)

TCs under pressure

- Anno 2014, TCs are challenged for:
  - High costs of lengthy treatment
  - Lack of evidence resulting from systematic reviews (Smith et al., 2006; Malivert et al., 2012)
  - Low coverage rate of drug addicts
  - High drop-out and relapse rates
  - Changing views on addiction
  - Altered client expectations, social norms and theoretical insights regarding lengthy stays in closed communities

- Situation varies substantially across Europe:
  - eg. North vs. South and East Europe
  - Modified TCs for specific populations, shorter term programs and smaller scale units

Common findings

- TCs have been widely evaluated
  - Early reviews underscored the strong relationship between TIP and success
    - Abstinence : 85-90% among graduates vs. 25-40% among early drop-outs (Holland, 1983)
  - Applicability of controlled study design in TC environments?
    - Lack of adequate control conditions
    - High attrition rates
    - Reciprocal influence of resident and TC environment
  - Most studies from US, few and mostly uncontrolled TC-studies from Europe
    - Need for a systematic and comprehensive review of available evidence from European longitudinal studies + from controlled studies

3. Objectives

- Identify the number of TCs in Europe and their capacity + availability of TC treatment across the EU
- Review the available evidence from controlled and longitudinal (field effectiveness) studies

4. TCs in Europe today

4.1. Methods

- Identification of key informants/country (EFTC, EMCDDA focal points, TC experts, country reports, …)
- Three core questions:
  - 1. What is the number of addiction TCs in [Member State]? ... TCs
  - 2. What is the total capacity (number of beds) of these TCs? ... beds
  - 3. What is the total number of residents in these TCs per year? ... Residents
- Missing information for Germany and Croatia
- Sources of bias: conceptual discussions (‘unofficial TCs’), ≠ health care systems, accuracy of registration and reporting (2011), changes in # persons treated/year

Table 1: Overview of the number of TCs per country, their capacity and (estimated) number of clients per year (2011), as well as an estimation of the average number of clients per TC/country and the estimated number of treated clients per available bed/year

Country	Number of TCs	Total capacity	Number of clients per year	Average number of clients per TC	Number of treated clients/bed per year	Number of TCs/ 100 000
Austria	9	269	599	30	2,23	0,107
Belgium	8	204	357	25	1,75	0,073
Bulgaria	3	60	140	20	2,33	0,040
Croatia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cyprus	1	50	86	50	1,72	0,125
Czech Republic [b]	10	160	394	16	2,46	0,095
Denmark	1	15	41	15	2,73	0,018
Estonia	1	26	82	26	3,15	0,074
Finland	4	58	264	14	4,55	0,074
France	11	380	n.a.	34	n.a.	0,017
Germany	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Greece [a]	11	417	980	38	2,35	0,097
Hungary [c]	14	374	738	27	1,97	0,140
Ireland	2	45	75	22	1,67	0,044
Italy	798	n.a.	n.a.	n.a.	n.a.	1,317
Latvia	2	6,5	14	3	2,15	0,089
Lithuania	19	330	620	17	1,88	0,585
Luxembourg [a]	1	25	44	25	1,76	0,200
Malta	7	129	360	18	2,79	1,750
Netherlands	8	n.a.	n.a.	n.a.	n.a.	0,048
Norway	5	123	323	25	2,63	0,101
Poland	85	2 852	10 000	34	7,01	0,223
Portugal	57	1 977	3 584	35	1,81	0,535
Romania	3	25	n.a.	8	n.a.	0,014
Slovakia [b]	19	347	857	18	2,47	0,349
Slovenia	4	112	n.a.	28	n.a.	0,195
Spain [b]	129	n.a.	8 134	n.a.	n.a.	0,273
Sweden	1	11	27	11	2,45	0,011
Turkey	0	0	0	0	0	0,000
United Kingdom	10	454	851	45	1,87	0,016
Total	1 223	8 449.5				

Note :

[a] = 2010 data ; [b] = 2009 data ; [c] = 2008 data ; n.a. = not available

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4.2. Main findings

- Spread all over the EU (except Croatia, Turkey)
- N=1200, but 2/3 in Italy
- Low number of TCs (<5) in many countries (Denmark, Latvia, Romania, Sweden), but more established in South (Greece, Italy, Spain, Portugal) and Eastern Europe (Hungary, Lithuania, Poland)
- Challenges: closedown of TCs, reduction of Tx length and number of beds
- Estimation of number of TC beds in EU: 15 000

Main findings

- Varying capacity (15-25/TC), but higher in some countries (Cyprus, France, Poland, UK)

- Average number of TC-residents/year: indication of client turnover + Tx length
  - Varies from 3 to 18 months, usually between 6 and 12 months
  - 2:1, but higher in some countries (Poland, Finland) and lower in other countries (Belgium, Ireland, Cyprus)

- Number of TCs/capita:
  - Italy, Malta: > 1 TC per 100 000/inhabitants
  - Mostly :1 - 2 TCs per 1 000 000/inhabitants; higher in Lithuania, Portugal, Slovakia and lower in Denmark, France, Sweden and UK

- Cave! lack of standardized data collection methods

5. AVAILABLE EVIDENCE

Available reviews

- At least 4 independent reviews of TCs in English language literature
  - Lees, Manning & Rawlings (2004)
  - Smith, Gates & Foxcroft (2008)
  - De Leon (2010)
  - Malivert, Fatseas, Denis, Langlois & Auriacombe, 2012)

- Divergent conclusions:
  - ≠ scope, objectives, selection criteria, analytic methods
  - Few studies retained in all 4 reviews

- 29 controlled studies on TCs (8 RCTs)
- Democratic TCs for personality disorders, as well as addiction TCs
- Strong positive effect of TCs compared with control interventions
- Substantial study heterogeneity
- Addiction TC outcomes significantly more effective than outcomes of democratic TCs (! More severely disturbed population)

Psychiatric Quarterly, Vol. 75, No. 3, Fall 2004 (© 2004)

A CULTURE OF ENQUIRY: RESEARCH EVIDENCE AND THE THERAPEUTIC COMMUNITY

Jan Lees, Nick Manning, Ph.D.,
and Barbara Rawlings, Ph.D.

This paper presents data from a systematic review and meta-analysis of 29 published studies of therapeutic community effectiveness using controls, including 8 randomised control trials. Meta-regressions suggest that the two types of therapeutic community, democratic and concept-based, and the age of the study, are the key sources of heterogeneity in the collection of studies analysed. Otherwise, heterogeneity is low and the meta-analysis confirms the effectiveness of therapeutic community treatment with overall summary log odds ratio for the 29 studies of −0.512 (95% ci −0.598 to −0.426).

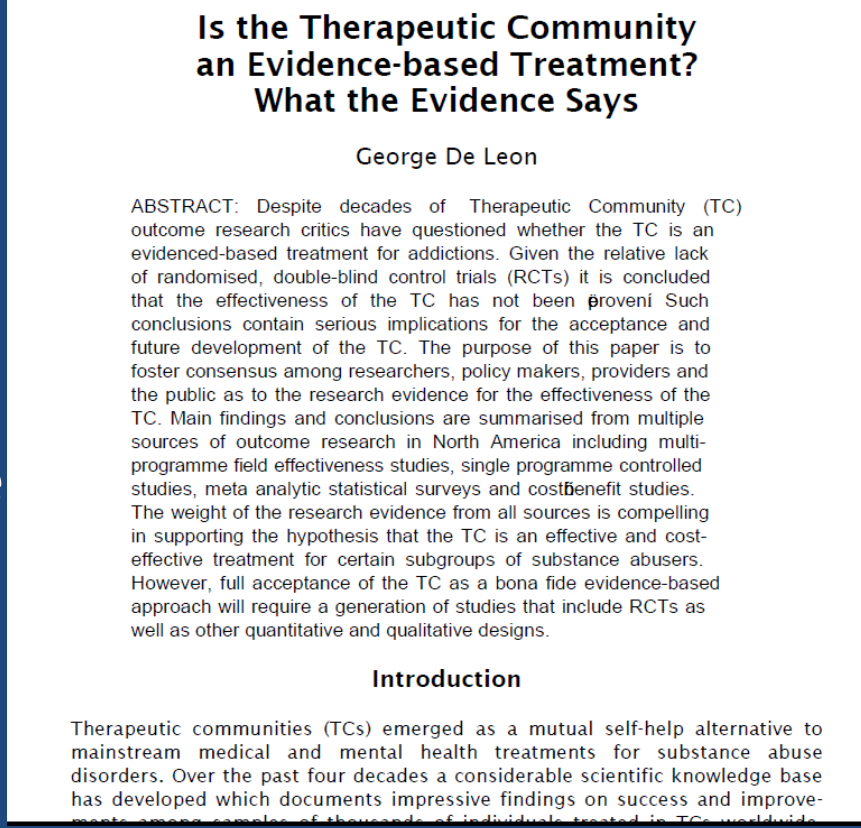
The Cochrane Library
Published Online: 16 JUL 2008
Abstract | Full Article (HTML) | Figures | Tables | References | Other Versions
Wiley Online Library

Therapeutic communities for substance related disorder (Review)

Smith LA, Gates S, Foxcroft D

- 7 RCTs of drug-free TCs, compared with varying control conditions (day TC, community residence, short TC program, …)
- Focus on substance use and retention
- Few evidence that TCs offer significant benefits compared with other types of residential Tx or other types of TCs
- Poor evidence due to lack of studies + its methodological limitations (high attrition rates, drop-out from Tx)

- Critical evaluation of the assertion that TC effectiveness is not proven
- Non-exhausitve review of North American literature on addiciton TCs
- Consistent evidence of TC effectivene
  - numerous field effectiveness studies
  - controlled studies: better outcomes
  - meta-analyses: 4 found small to moderate effect sizes, 2 found insufficient evidence
  - Cost-benefit analyses: in favor of TC treatment, in particular reduced costs associated with criminality and gains in employment
  - Most TCs routinely use evidence-based interventions like MI, CBT, …



Is the Therapeutic Community an Evidence-based Treatment? What the Evidence Says

George De Leon

ABSTRACT: Despite decades of Therapeutic Community (TC) outcome research critics have questioned whether the TC is an evidenced-based treatment for addictions. Given the relative lack of randomised, double-blind control trials (RCTs) it is concluded that the effectiveness of the TC has not been proven. Such conclusions contain serious implications for the acceptance and future development of the TC. The purpose of this paper is to foster consensus among researchers, policy makers, providers and the public as to the research evidence for the effectiveness of the TC. Main findings and conclusions are summarised from multiple sources of outcome research in North America including multi-programme field effectiveness studies, single programme controlled studies, meta analytic statistical surveys and cost-benefit studies. The weight of the research evidence from all sources is compelling in supporting the hypothesis that the TC is an effective and cost-effective treatment for certain subgroups of substance abusers. However, full acceptance of the TC as a bona fide evidence-based approach will require a generation of studies that include RCTs as well as other quantitative and qualitative designs.

Introduction

Therapeutic communities (TCs) emerged as a mutual self-help alternative to mainstream medical and mental health treatments for substance abuse disorders. Over the past four decades a considerable scientific knowledge base has developed which documents impressive findings on success and improve-

Research Report

European Addiction Research

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Effectiveness of Therapeutic Communities: A Systematic Review

Marion Malivert[a, b] Mélina Fatséas[a, b] Cécile Denis[a, b] Emmanuel Langlois[c]
Marc Auriacombe[a, b]

[a]Addiction Psychiatry, Laboratoire de psychiatrie et CNRS-USR-3413-Sanpsy, Université Bordeaux Segalen, [b]Département d'Addictologie, CH Charles Perrens et CHU de Bordeaux, and [c]Centre Émile Durkheim – Science politique et sociologie comparatives (UMR 5116), Université Bordeaux Segalen, Bordeaux, France

- Systematic review of 12 follow-up studies of TC effectiveness during and after Tx
- Studies on prison TCs excluded
- Tx completion: 9-56%, program cessation most often after 15-30 days
- Decrease in substance use during follow-up, still 21-100% used or relapsed
- 20-33% re-entered Tx
- Large differences between studies in Tx duration + length of follow-up period
- Tx completion and retention identified as robust predictors of abstinence

5.1. Methods (eligibility criteria)

- ***Eligibility criteria***

  - Intervention: Drug-free TCs for the treatment of drug addiction
  - Target population: Adults addicted to illegal drugs
  - At least one of the following outcome measures was reported:
    - substance use (illicit drug use, alcohol use, …)
    - length of stay in Tx(retention, treatment completion/drop-out)
    - employment status
    - criminal involvement
    - health and well-being
    - family relations
    - quality of life
    - treatment status
    - mortality
    - …

5.1. Methods (eligibility criteria)

- Type of studies → **Controlled studies**
  - Randomized controlled trials and quasi-experimental studies comparing (prospectively) residents that followed TC treatment with
    - a control group that was treated in a usual care setting ('treatment as usual'/standard of care) or another type of TC (e.g. shorter program/day TC)
    - or with a control group out of treatment (e.g. in prison/waitlist controls).
- Studies needed to report findings on TC outcomes in adequate format and separately from other types of interventions (e.g. aftercare).
- No language or country restriction was applied for selecting this type of studies.

5.1. Methods (search strategy)

- Database search (up to December 31st, 2012):
  - ISI Web of Knowledge (WoS)
  - PubMed
  - DrugScope
- No language or publication year restrictions.
- Key words : “therapeutic communit*” AND “drug* or addict* or dependen* or substance use” AND “outcome* or evaluation or follow-up or effectiveness”
- Narrative review

- Reference lists of retrieved studies and available reviews
- The International Journal of Therapeutic Communities

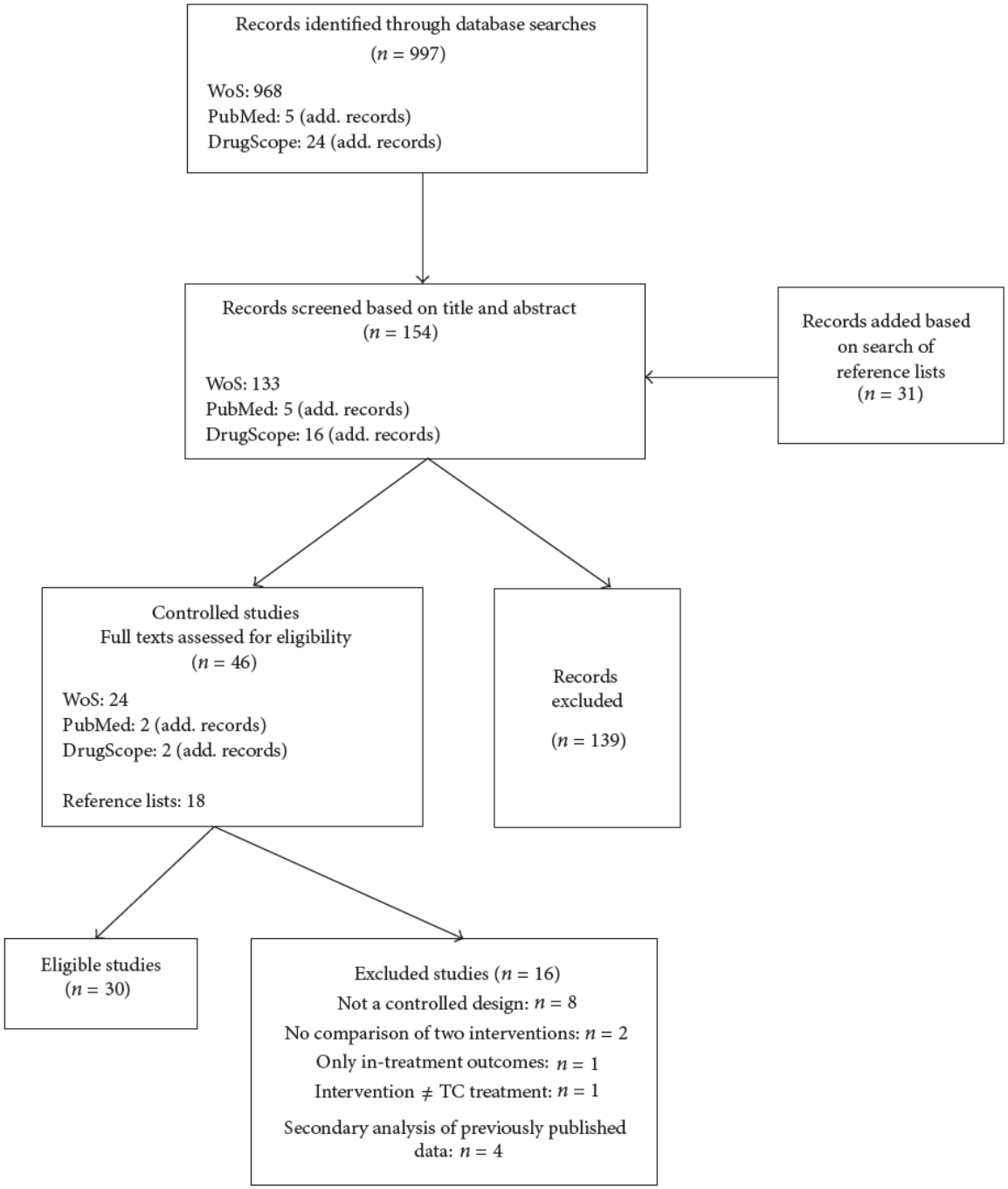


Figure 1: Flowchart of the search process and number of studies retained/excluded in each phase.

Overview of included studies (n=16)

	Authors	Study design	Participants	Intervention + comparison group
1.	Sacks et al., 2011 (Colorado, US)	Prospective controlled study design. Outcomes 12 months post TC-entry	127 male offenders (substance use & mental disorders, prison Tx	Re-entry MTC (n=71) 6 month program Controls: parole supervision case management (n=56)
2.	Zhang et al., 2011 (California, US)	Prospective controlled study design (QES) Outcomes 1 and 5 years after prison release	798 male offenders with documented history of substance abuse	Prison-based TC (n=395) 18 month program Controls: matched group of untreated inmates in nearby prison (n=403)
3.	Messina et al., 2010 (California, US)	Prospective, randomised controlled study design Outcomes 6 and 12 post-release	115 female offenders with documented history of substance abuse	Gender-responsive MTC in prison (n=60) 6 month program Controls: standard prison TC (n=55) 6 month program

	Authors	Study design	Participants	Intervention + comparison group
4.	Welsh et al., 2007 (Pennsylvania, US)	Prospective controlled study design (QES in 5 state prisons) Outcomes up to 2 years post-release (on average after 17 months)	708 male inmates admitted to drug Tx in prison	Prison TC (n=217) Controls (n=491): 3 other types of drug Tx (drug education, out-patient Tx, self-help groups)
5.	Sullivan et al., 2007 (Colorado, US)	Prospective, randomized controlled study design Outcomes 12 months post-release	139 male inmates with substance use and other psychiatric disorders	Prison MTC (n=75) 12 month program Controls: standard mental health Tx in prison (n=64)
6.	Morral et al., 2004 (Los Angeles, US)	Prospective controlled study design (cases assigned by probation) Outcomes 12 months after start TC program	449 adolescent probationers with substance abuse problems	MTC in prison (Phoenix Academy) (n=175) , 9 month program Controls (n=274): alternative probation disposition (res. group homes)
7.	Inciardi et al., 2004 (Delaware, US)	Prospective controlled study design (group assignment by correctional staff) Outcomes 42 and 60 months post-baseline	690 male inmates with substance abuse problems, eligible for work release	Work-release (transitional) TC (n=472), 6 months program Controls: standard work-release, without Tx (n=218)
8.	Prendergast et al., 2004 (California, US)	Prospective, randomized controlled study design Outcomes 5 years post-release	715 male inmates with substance abuse problems	Amity prison TC (n=425), 9-12 month program Controls: no Tx condition (waitlist) (n=290)

	Authors	Study design	Participants	Intervention + comparison group
9.	Greenwood et al., 2001 (San Francisco, US)	Prospective controlled study design (only partial randomisation, since sign. drop-out among control before Tx start) Outcomes 6, 12 and 18 months post admission	261 substance abusers seeking treatment at Walden House	Residential TC (n=147), 12 month program Controls: day TC program (same TC, but returned home at the end the day) (n=114)
10.	Nemes et al. 1999 (Washington, US)	Prospective, randomised controlled study design Outcomes 18 months post-admission	412 substance users seeking Tx at a central intake unit	Standard TC (n=194), 12 month program (10 months inpatient, 2 outpatient) Controls: abbreviated TC (n=218): 12 month program (6 month inpatient, 6 month outpatient + extra services)
11.	De Leon et al., 2000 (New York, US)	Prospective controlled study design (QES: sequential group assignment) Outcomes 12 and on average 24 months post-baseline	342 homeless mentally ill substance abusers	MTC1 for homeless persons (n=183), 12 month program MTC2: lower intensity, flexible program (n=93) 12 month program Controls: Treatment as usual (n=66)
12.	Nuttbrock et al., 1998 (New York, US)	Prospective controlled study design (QES, as allocation based on availability + client preferences) Outcomes 12 months after start Tx	290 homeless men with major mental disorder and history of substance abuse	Modified TC (n=169), 18 month program Controls: 2 homeless community residences (n=121), 18 month program
13.	McCusker et al. 1997a (New England, US)	Prospective controlled study design Outcomes 3 months post-discharge and 18 months post admission	539 drug abusers entering residential Tx at 2 sites	Traditional TC program (6 (n=86) and 12 month alternative (n=75)) Controls: MTC program (relapse prevention) 3 (n=192) and 6 month (n=186) alternatives

	Authors	Study design	Participants	Intervention + comparison group
14.	Hartmann et al. 1997 (Missouri, US)	Controlled study design (QES, self-selection for exp. intervention) Outcomes at least 5 months post-release	286 male offenders with a history of substance abuse	Prison TC graduates (n=161) No information on program length Controls: comparison group of eligible persons who did not attend prison TC (n=125)
15.	Bale et al., 1984 (California, US)	Prospective, controlled study design (only partial randomization due to substantial drop-out after group allocation) Outcomes after 2 years	363 male veterans addicted to heroin entering withdrawal Tx	3 TCs (n=181): standard TC (n=25) + two MTCs (n=77 and n=79), 6 month programs Controls: 5-day withdrawal Tx (n=166)
16.	Coombs et al., 1981 (California, US)	Prospective, controlled study design (group allocation by self-selection) Outcomes 11-18 months after leaving TC	207 heroin addicts starting treatment in one of 2 TCs	Long-term TC (n=77) 12 month program Controls: short-term TC (n=130) 3 month program

Overview review results

Table 3.6: Overview of the review results

Reference number of the study/studies	Type of TC	Comparison condition	Follow-up lenghth	Outcome measures					
				Retention	Substance use	Criminal activity	Employ-ment	Health	Family & Social Relations
1.	Prison	TAU	1 year			+			
2.	Prison	TAU	1 year			=			
			5 years			=			
3.	Prison	Other TC	1 year	+	=	=		=	=
4.	Prison	TAU	2 years		=	+	+		
5.	Prison	TAU	1 year		+	+			
6.	Prison	TAU	1 year	=	+	=		+	
7.	Prison	TAU	6 months		+	+		+	
			1 year		+	+			
			3 years		+	=			
			3 years 6 months		+	+			
			5 years		+	+			
8.	Prison	TAU	1 year		+	+			
			2 years			+			
			5 years	=	=	+	=	=	
9.	Community-based	Other TC	6 months	=	+			+	+
			1 year	=	=			+	
			1 year 6 months		=			+	+
10.	Community-based	Other TC	1 year 6 months	=	+	+	+		
11.	Community-based	TAU	1 year		+	=	+	=	
			2 years		+ =	+	+ =	+	
12.	Community-based	TAU	1 year	-	+			+	
13.	Community-based	Other TC	6 months	=	=				
			1 year	-	=	=	+		
14.	Prison	TAU	6 months		=	+			
15.	Community-based	TAU	1 year	-	+	+	+	+	
			2 years	+	+ (illicit) - (alcohol)	+	+		
16.	Community-based	Other TC	1 year	=	+				

Abbreviations: TC=Therapeutic Community, Other TC=Other TC modality, TAU=Treatment As Usual

5.2. Study findings

- 30 publications with longitudinal scope, based on prospective controlled study design
  - Based on 16 original studies
  - 5 RCTs (true randomisation)
  - Majority of studies performed in 1990s + all from US
  - At least 5 additional studies compared with Smith et al. 2006 (all in correctional settings)

Substance use and legal outcomes

- Varying follow-up period (mostly 6-12 months, exc. >36 months)
- Between group differences diminished over time
- 'Substance use' and 'legal involvement' most frequently assessed
  - 10/14 studies: ++ substance use outcomes
  - 9/13 studies: ++ legal outcomes
  - Multiple outcome indicators used:
    - seldom ≥ 2 significant outcomes in one category (cf. Prendergast, 2003)
    - Improvement in one category not necessarily associated with improvement on other domains

Substance use

- Relapse rates between 25 and 55% after 12-18 months
  - 77 vs. 94% 3 years after prison TC
  - Lower relapse rates associated with longer time in Tx + participation in subsequent Tx or aftercare
  - Relapse associated with severity of dependence at Tx entry
- Longer time to relapse among TC-participants
- Substantial heterogeneity

Legal involvement

- 1-year re-arrest and recidivism rates around 40-50%
  - Re-arrest: 63% after 3 years, 80% after 5 years
- Reincarceration rate between 30-55% after 12-18 months (exc. Sacks et al., 2004, 2011: 9-19%)
  - Re-incarceration: 70% after 5 years
- Time to reincarcertion higher in TC-group
- Tx completion and Time in Tx predicted absence of recidivsm
  - Tx completion associated with older age, being on parole and single (instead of poly) drug dependence
- Predictors of drug-free and no re-arrest status:
  - Participation in aftercare
  - Post-Tx employment
  - Older age
- Importance of Tx completion (including aftercare program)
  - Aftercare completers scored better than aftercare drop-outs, who scored better than TC completers and TC drop-outs (Prendergast 2004; Wexler, 1999)

Other outcomes

- 10/16 studies found sign. ≠ on at least 2 domains
- Retention and completion rates in TCs lower compared to other types of Tx
  - Lower completion rates in longer programs
- 5/6 studies: better employment rates
- 5/7 studies: improved psychological outcomes

Long-term outcomes

- 6 studies looked at outcomes beyond 12-18 months
  - 5/6: improved legal outcomes
  - 3/6: lower drug use levels, but one study found higher alcohol use among TC participants (Bale, 1980)

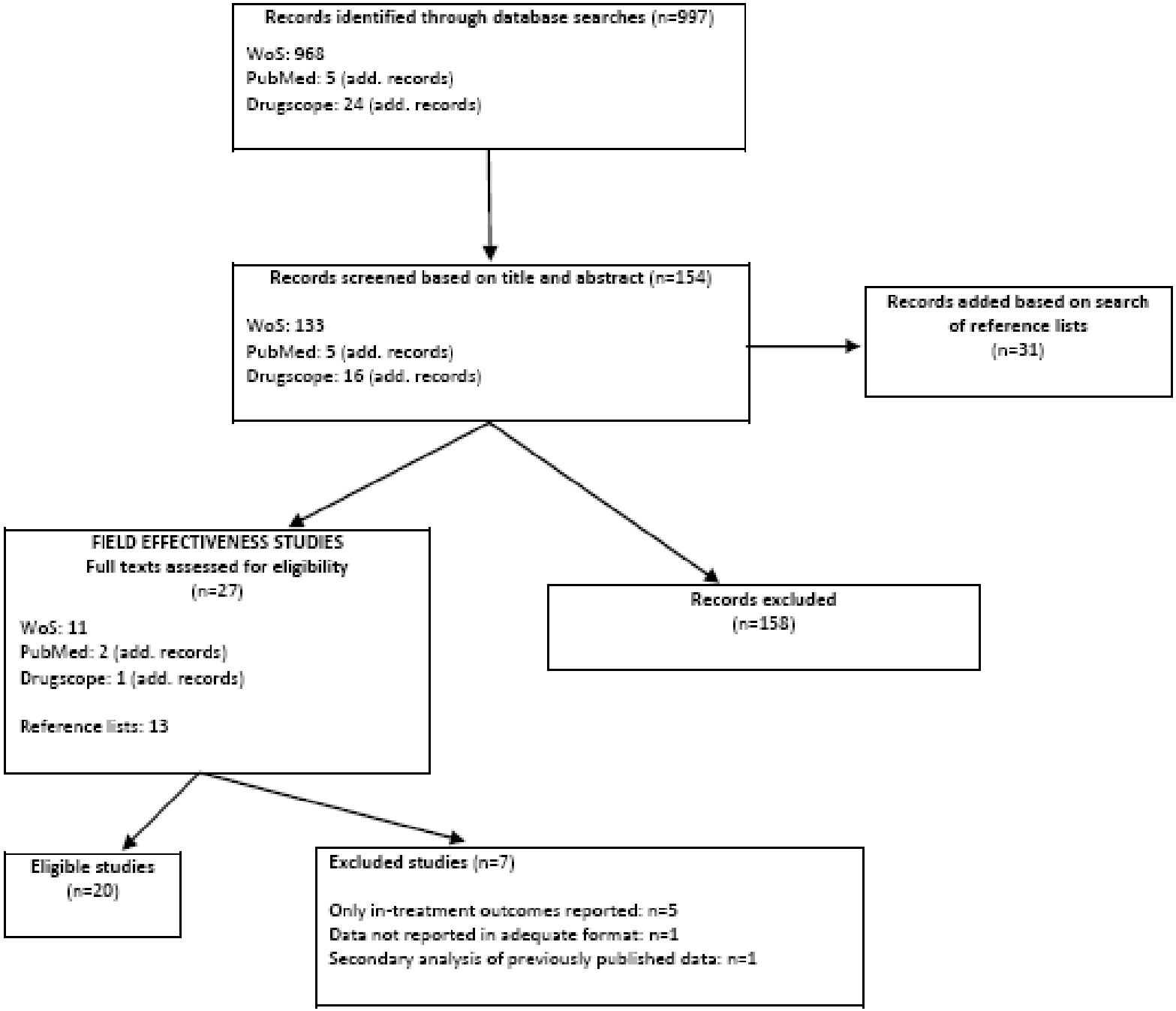
- Comparison condition
  - 11/16: TC vs. usual care
  - 5/16: TC vs. other type of TC
    - Few differences, but better substance use outcomes at first FU (3/5), better employment rates (2/5) and less psychological problems (1/5)
    - ≠ only significant when most and least intensive condition were compared

Community vs. prison TCs

- 7/16 studies in community TCs, 9 in prison TCs
  - Prison TC: different context (compulsory custody and conditional terms and privileges)

- Community TCs:
  - Better substance use outcomes (5/6 studies)
  - Superior legal outcomes (3/4 studies)
  - Prison TCs:
    - Substance use outcomes only marginally better (4/7 studies)
    - Legal outocmes better in 6 studies (out of 9), but effects maintained after 2 (n=3) and 5 years (n=2)

STUDY FINDINGS TCS IN EUROPE


Records identified through database searches (n=997)
WoS: 968
PubMed: 5 (add. records)
Drugscope: 24 (add. records)
Records screened based on title and abstract (n=154)
WoS: 133
PubMed: 5 (add. records)
Drugscope: 16 (add. records)
Records added based on search of reference lists
(n=31)
FIELD EFFECTIVENESS STUDIES
Full texts assessed for eligibility
(n=27)
WoS: 11
PubMed: 2 (add. records)
Drugscope: 1 (add. records)
Reference lists: 13
Records excluded
(n=158)
Eligible studies
(n=20)
Excluded studies (n=7)
Only in-treatment outcomes reported: n=5
Data not reported in adequate format: n=1
Secondary analysis of previously published data: n=1

5.2. Overview of included studies (n=20)

	Authors	Study design + measurement(s)	Participants	Intervention (if applicable: comparison group)
1.	Lopez-Goni et al., 2011 (Spain) (2)	Retrospective cohort design Outcomes 1 year after leaving TC	112 drug addicts who stayed at least 12 months in a Proyecto Hombre TC in Navarra or Asturias	Standard TC 22 month program
2.	Lopez-Fernandez et al., 2011 (Spain)	Retrospective sequential cohort design Outcomes 1, 3, 5 or 10 years after leaving TC	93 persons dependent on alcohol and/or cocaine who stayed at least 3 months in TC	Standard TC 6 month program
3.	Salamina et al., 2010 (Italy)	Prospective cohort design Outcomes 18 months after Tx started	5457 heroin users starting a new Tx episode (VEdeTTE-study)	Comparison of 3 Tx modalities: TC (n=575, or 10%); methadone maintenance (MMT) (n= 2356, or 42.3%) and abstinence-oriented Tx (AOT) (n=2526, or 46.3%)

Overview of included studies (n=20)

	Authors	Study design + measurement(s)	Participants	Intervention (if applicable: comparison group)
4.	Fernandez-Montalvo et al., 2008 (Spain) (2)	Retrospective cohort design Outcomes 6 months to 13 years post Tx (on average 6 years)	155 drug addicts who started Tx in Proyecto Hombre TC in Navarra	Standard TC 30 month program Comparison of completers (n=113) and drop-outs (n=42)
5.	Quercioli et al. 2007 (Italy) (2)	Retrospective cohort design Outcomes on average 8 years after TC Tx	2564 heroin addicts who entered one of 6 TCs in Piedmont region FU: 45% of total sample	Standard TC
6.	Berg et al., 2003 (Norway)	Retrospective cohort study Outcomes 1 to 4 years after starting TC (on average after 3 years)	All 130 drug addicts starting Tx in Phoenix House Haga%	Standard TC 18 month program
7.	Keen et al., 2001 (United Kingdom)	Retrospective cohort design Outcomes 13 months after starting Tx	138 heroin addicts entering residential rehab in Sheffield	Standard TC (including on-site detox, if necessary) 12 month program

Overview of included studies (n=20)

	Authors	Study design + measurement(s)	Participants	Intervention (if applicable: comparison group)
8.	Fredersdorf, 2000 (Germany)	Retrospective cohort design Outcomes 1 to 5 years after TC entry	152 former residents of Synanon Germany	Traditional TC
9.	Van de Velde et al., 1998 (the Netherlands)	Prospective cohort design Outcomes 8, 18, 30 and 48 months after starting TC	100 alcohol and drug abusers who stayed at least 5 months in TC	Standard TC 12 month program
10.	Ravndal & Vaglum, 1998 (Norway) (2)	Prospective cohort design Outcomes on average 5 years after intake	200 drug abusers who applied for TC Tx in Phoenix House Haga	Standard TC 18 months program
11.	Kooyman, 1992 (the Netherlands)	Prospective cohort design Outcomes 3 to 5 years after leaving TC	227 drug and alcohol addicts who were admitted for the first time to TC Emiliehoeve (The Hague)	Standard TC 22 month program Compared with other TC (n=67), outpatient Tx (n=49) and detox (n=14)

Overview of included studies (n=20)

	Authors	Study design + measurement(s)	Participants	Intervention (if applicable: comparison group)
12.	Uchtenhagen & Zimmer-Höfler, 1987 (Switzerland)	Prospective cohort design Outcomes 2 years after starting Tx	248 opiate users selected in various therapeutic settings and prisons	Standard TC (n=79) compared with methadone maintenance (MMT) (n=59) and prison (n=34)
13.	Wilson & Mandelbrote, 1985 (United Kingdom) (3)	Retrospective cohort design Outcomes 10 years after TC discharge	61 drug users admitted to Ley Community (Oxford)	Standard TC 2 year program Comparison of short (<1 month), medium (<6 months) and long stay (≥6 months) group
14.	Ogborne & Melotte, 1977 (United Kingdom)	Retrospective cohort design Outcomes min. 6 months after TC discharge	100 opiate addicts admitted to London TC	Standard TC 10-12 month program

Outcomes ‘field effectiveness’ studies

- 20 studies with longitudinal design and post-Tx evaluation (14 unique studies)
  - Spain (n=3), UK (n=3), Norway (n=2), Italy (n=2) the Netherlands (n=2), Germany (n=1), and Switzerland (n=1); ongoing studies in Czech Republic and Poland
  - Published between 1977 and 2012 (8 since 2000)
  - No separate data reported on TCs in large Tx outcome studies
  - No studies on modified TCs

Outcomes ‘field effectiveness’ studies (2)

- Sign. improvements between baseline and post-treatment assesments
- Positive outcomes mostly related to substance use, employment and social functioning
- TC outcomes superior to those in other settings (Kooyman, 1992; Uchtenhagen, 1987)
- Not all residents benefit equally from TC Tx: 60% improved, 30% unchanged and 10% deterioriated (Van de Velde, 1998; Lopez-Goni, 2010)
- Mortality rates: 7-12% (Berg et al., 2003; Wilson, 1985)

Outcomes ‘field effectiveness’ studies (3)

- TC effectiveness related to length of stay in Tx
- Drop-out high, particularly during first months
  - 27-30% relapses during first month after leaving the TC
  - Completion rates (around 20%) vary between studies + depending on program length
  - TC completers vs. drop-outs: superior outcomes on all outcome measures after 15 and 60 months (except employment) (Lopez-Goni et al., 2010; Fernandez-Montalvo et al., 2008)

Outcomes ‘field effectiveness’ studies (4)

- Success rates (abstinence!) vary between 20 and 55%
  - Fernandez-Montalvo et al., 2008: 44,5% positive overall state of functioning
  - Fredersdorf, 2000: 55% socially integrated
  - 20-30% in studies that included all ‘entrees’ + high follow-up rates
  - Relapse rates: 40-50% (range 22-80%), associated with other negative outcomes
  - relapse becomes less likely after 5 years (Quercioli et al., 2006)
  - High levels of alcohol use among former TC residents!

  - Cave: sampling methods, attrition rates,

Outcomes ‘field effectiveness’ studies (5)

- Less focus on criminal involvement
- Reduction of legal problems + fewer re-arrests and reincarcerations
- Most studies report improved employment and educational achievements
- LOS and program completion associated with better abstinence and reconviction rates
- Positive role of parental involvement + participation in AA/NA immediately after Tx

6. Study limitations

- Only peer-reviewed studies
  - Non-English articles
  - Selection of reported outcomes

- Study heterogeneity:
  - Program characteristics, sampling methods, outcome measures
  - TC modifications: length, special needs groups, …
  - Few replications in similar conditions
  - Program fidelity?!
  - Varying control conditions
  - Differing populations
  - Few ‘official’ or ‘objective data’

- Most studies have found significant differences, but only on one or two domains
- Low number of RCTs (n=5) + often true randomization was compromised, or simply not possible (e.g. prison settings) nor advisable (e.g. self-selection and self-matching hypothesis)
- Poor methodological quality:
  - Small + convenience samples
  - High attrition rates

DISCUSSIETHEMA: ZORG OVER HET KORTEN VAN DE VERSLAVINGSZORG

http://nos.nl/video/640227-zorg-over-korten-verslavingscentra.html

7. Quality standards in TCs

- Increased attention for quality standards
- Developments in TCs
  - Survey of Essential Elements Questionnaire (SEEQ)
  - Service standards for European therapeutic communities for addictions
    - core standards
    - Physical environment
    - Staff
    - Therapeutic environment
    - Treatment programme
    - External relations
  - Standards and goals of the World Federation of TCs

8. What future for the TC?

- Where can we make most impact and achieve the most god at adequate cost?
  - ‘niche marketing’
  - Address vulnerable populations
  - In prison and detention centres
- Urge for closer cooperation between abstinence-oriented and harm reduction services
  - OST: improve health condition and reduce drug use
  - TC: reintegration, social inclusion and drug abstinence
- Increasing importance of shorter programs + outreach and community-based services
  - Reduce cost by shortening programs, involve volunteers and more self-help elements
- Need for ongoing support and continuing care
  - Maintain changes made during residential stay
  - Role of recovered drug users

- A focus on ‘recovery’:
  - Not solely ‘abstinence’
  - Gain more active control over their lives (‘agency’)
  - A way of living a satisfying, hopeful and contributing life, even with the limitation caused by illness (Slade et al., 2008)
  - Importance of subjective quality of life + individuals’ strengths and support systems
  - Stable recovery: social participaton and having meaningful activities and purposes
  - Relapse is part and parcel of the recovery process; should be seen as a learning moment

- Protect TCs and society from dangers inherent to the system and ensure quality of care
  - Open to external control
  - Adherence to standards
  - Accreditation
  - Treatment fidelity

9. Conclusions and recommendations of the EMCDDA study

- Unequal spread of TCs and TC research across Europe
  - explore available data + develop multi-site studies
  - Need for studies with a solid design
- Treatment retention (and completion) associated with better outcomes
- Clinical and anekdotal evidence that TCs produce change
  - TC treatment not effective for all types of substance abusers
  - It works, but why does it work and for whom in what stage of the recovery process?
  - Need for evaluation of cost-effectiveness in European TCs + routine outcome monitoring
- Narrative review does not allow to weigh findings from different studies nor to estimate effect sizes

Conclusions (continued)

- Some evidence for TC effectiveness, at least in US
  - Lower substance use and recidivism rates in > half of the selected studies
  - Positive findings across settings and regardless type of controls
  - 4 studies reported significantly differential outcomes in at least 3 domains
- Need for a recovery-oriented perspective !
- Importance of Tx fidelity
  - Quality standards and goals
  - Training, education, supervision, role of recovered drug users

Conclusions (continued)

- Challenges!
  - Involve the outside community
  - More flexible + individualized approach
  - Study the costs of lengthy Tx in relation to its benefits
  - Bridge the gap between the TC and outside society
    - Structural links between TC and other Tx modalities + with aftercare and ongoing support

- RCTs and controlled designs are needed to prove the impact of TC treatment
  - Look for measurements that retain as many residents as possible in the analyses to minimize attrition
  - Use of in-treatment and process measures (dynamic variables)
  - Use of time to event outcomes, rather than binominal outcome variables
  - Need for confirmation in a meta-analysis

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Hindawi

Review Article

Therapeutic Communities for Addictions: A Review of Their Effectiveness from a Recovery-Oriented Perspective

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Therapeutic communities (TCs) for addictions are drug-free environments in which people with addictive problems live together in an organized and structured way to promote change toward recovery and reinsertion in society. Despite a long research tradition in TCs, the evidence base for the effectiveness of TCs is limited according to available reviews. Since most of these studies applied a selective focus, we made a comprehensive systematic review of all controlled studies that compared the effectiveness of TCs for addictions with that of a control condition. The focus of this paper is on recovery, including attention for various life domains and a longitudinal scope. We searched the following databases: ISI Web of Knowledge (WoS), PubMed, and DrugScope. Our search strategy revealed 997 hits. Eventually, 30 publications were selected for this paper, which were based on 16 original studies. Two out of three studies showed significantly better substance use and legal outcomes among TC participants, and five studies found superior employment and psychological functioning. Length of stay in treatment and participation in subsequent aftercare were consistent predictors of recovery status. We conclude that TCs can promote change regarding various outcome categories. Since recovering addicts often cycle between abstinence and relapse, a continuing care approach is advisable, including assessment of multiple and subjective outcome indicators.