Promoting addiction recovery through treatment and mutual aid: evidence from recent research and systematic reviews

Prof. dr. Wouter Vanderplasschen
Ghent University, Belgium
Addiction & Recovery cluster

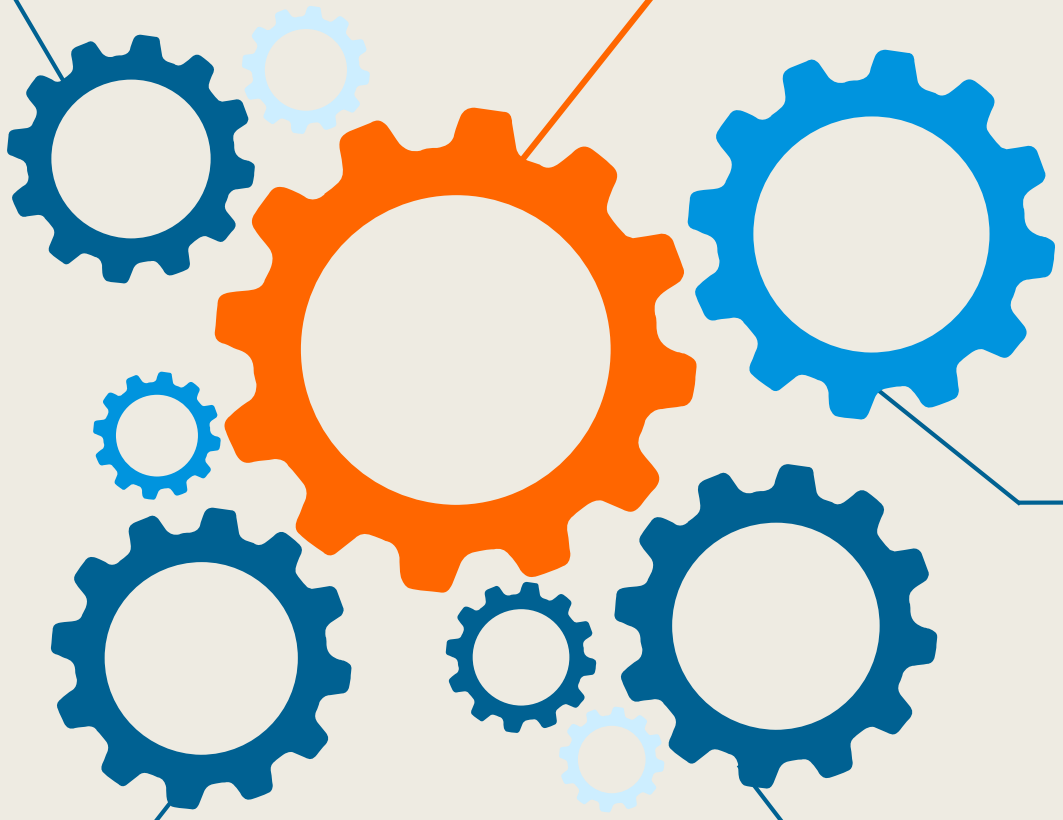
UNIVERSITEIT GENT

FACULTEIT PSYCHOLOGIE EN PEDAGOGISCHE WETENSCHAPPEN

Our research

Intersectionality

Research team Recovery & addiction



Holistic view: person-centred & context-oriented approach

Integrative approach: Quantitative and qualitative research

Perspective of service users and experts by experience

Measuring capital in active addiction and recovery: The development of the Strengths And Barriers Recovery Scale (SABRS)

David Best (D.Best@derby.ac.uk)
University of Derby https://orcid.org/0000-0002-6792-916X
Wouter Vanderplasschen
Universiteit Gent
Mulka Nisic
Recovered Users Network

"Personal recovery depends on NA unity": an exploratory study on recovery-supportive elements in Narcotics Anonymous Flanders

Anne Dekkers[1*], Sam Vos[2] and Wouter Vanderplasschen[1]

Comparing three stages of addiction recovery: long-term recovery and its relation to housing problems, crime, occupation situation, and substance use

Thomas F. Martinelli, Gera E. Nagelhout, Lore Bellaert, David Best, Wouter Vanderplasschen & Dike van de Mheen

Review

Recovery capital among migrants and ethnic minorities: A qualitative systematic review of first-person perspectives

Aline Pouille, Charlotte De Kock, Freya Vander Laenen & Wouter Vanderplasschen

Published online: 02 Nov 2020

Substitute addictions in the context of the COVID-19 pandemic

DEBORAH LOUISE SINCLAIR[1,2*], WOUTER VANDERPLASSCHEN[2], SHAZLY SAVAHL[3], MARIA FLORENCE[1], DAVID BEST[4] and STEVE SUSSMAN[5]

Perspectives on addiction recovery: focus groups with individuals in recovery and family members

Anne Dekkers, Clara De Ruysscher and Wouter Vanderplasschen

Department of Special Needs Education, Ghent University, Ghent, Belgium

From monologue to dialogue in mental health care research: reflections on a collaborative research process

Peter Tomlinson & Clara De Ruysscher

Mothering, Substance Use Disorders and Intergenerational Trauma Transmission: An Attachment-Based Perspective

Florien Meulewaeter, Sarah S. W. De Pauw and Wouter Vanderplasschen*

Department of Special Needs Education, Ghent University, Ghent, Belgium

The Concept of Recovery as Experienced by Persons with Dual Diagnosis: A Systematic Review of Qualitative Research From a First-Person Perspective

C. De Ruysscher[a], S. Vandevelde[a], W. Vanderplasschen[a], J. De Maeyer[b], and S. Vanheule[c]

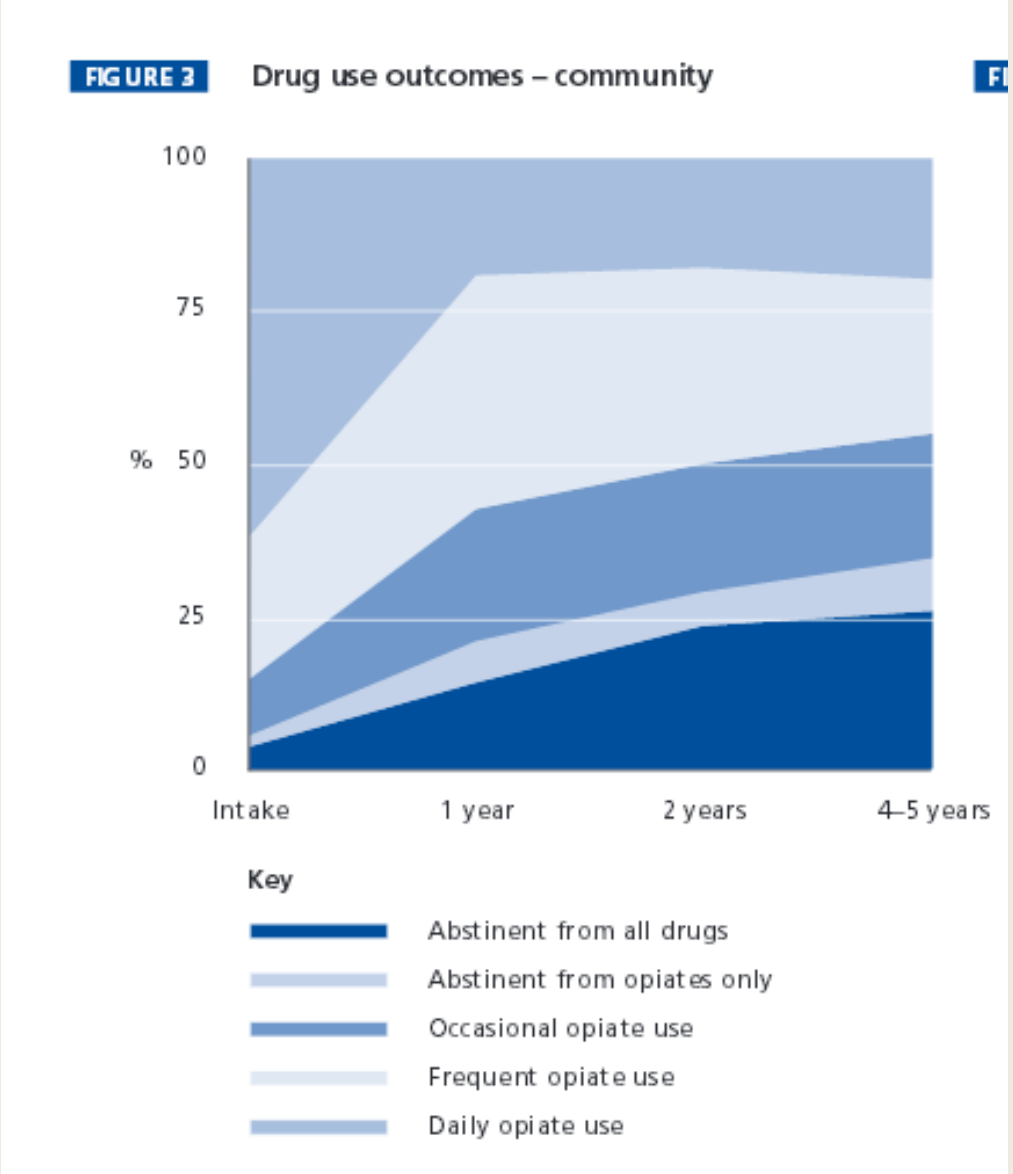
[a]Department of Special Needs Education, Ghent University, Ghent, Belgium; [b]Department of Health, Education & Social Work, University College Ghent, Ghent, Belgium; [c]Department of Psychoanalysis and Clinical Consulting, Ghent University, Ghent, Belgium

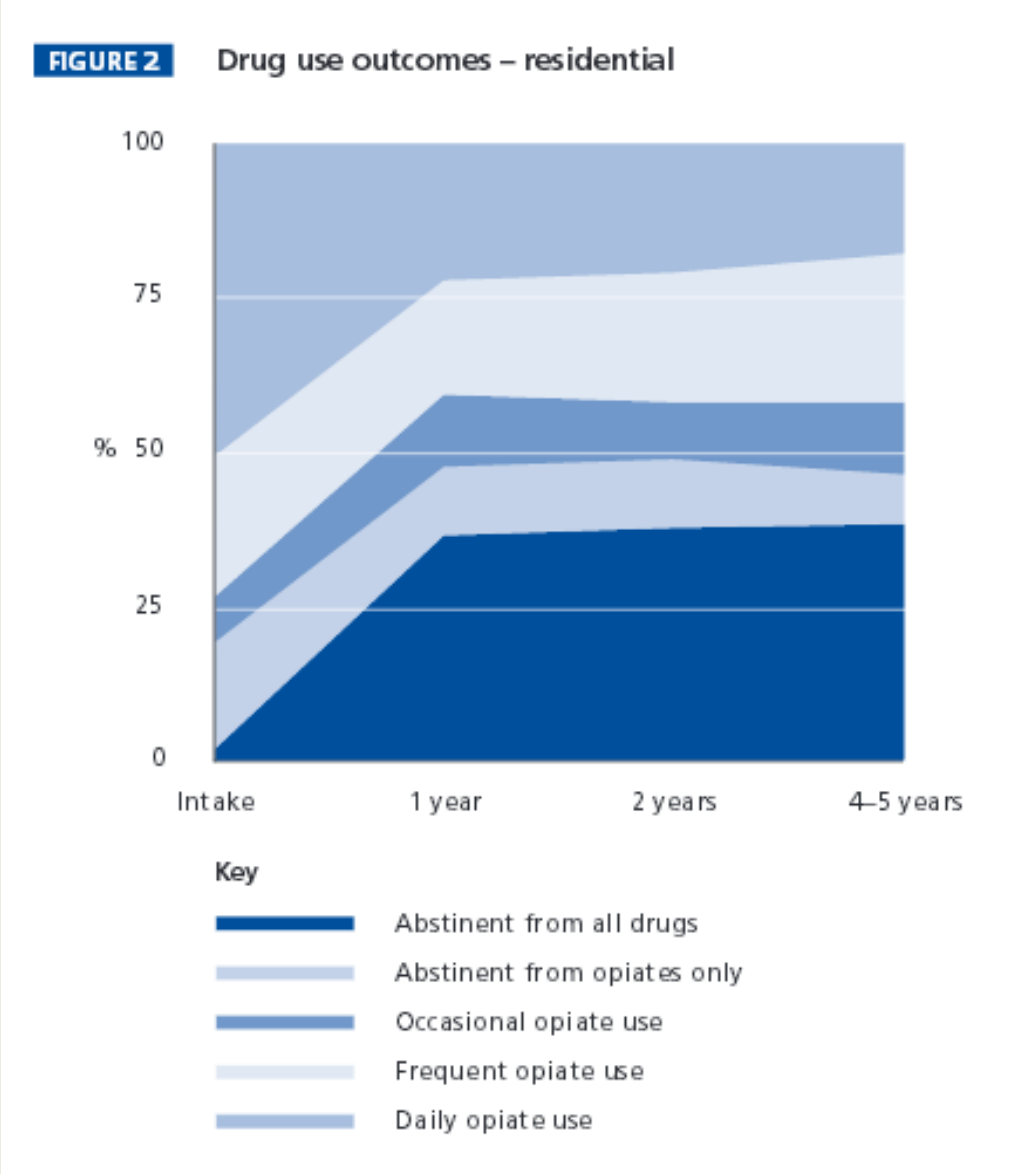
Presentation outline

1. Does treatment work?
2. From chronic relapsing brain disorder to addiction recovery
3. The role of treatment and support in individuals’ recovery stories
4. What about the effectiveness of various interventions?
5. What to conclude from the evidence?

Does treatment work?

5 year outcomes after community-based and residential Tx (NTORS study UK)





1-year outcomes after starting outpatient alcohol Tx (UKATT, 2005)

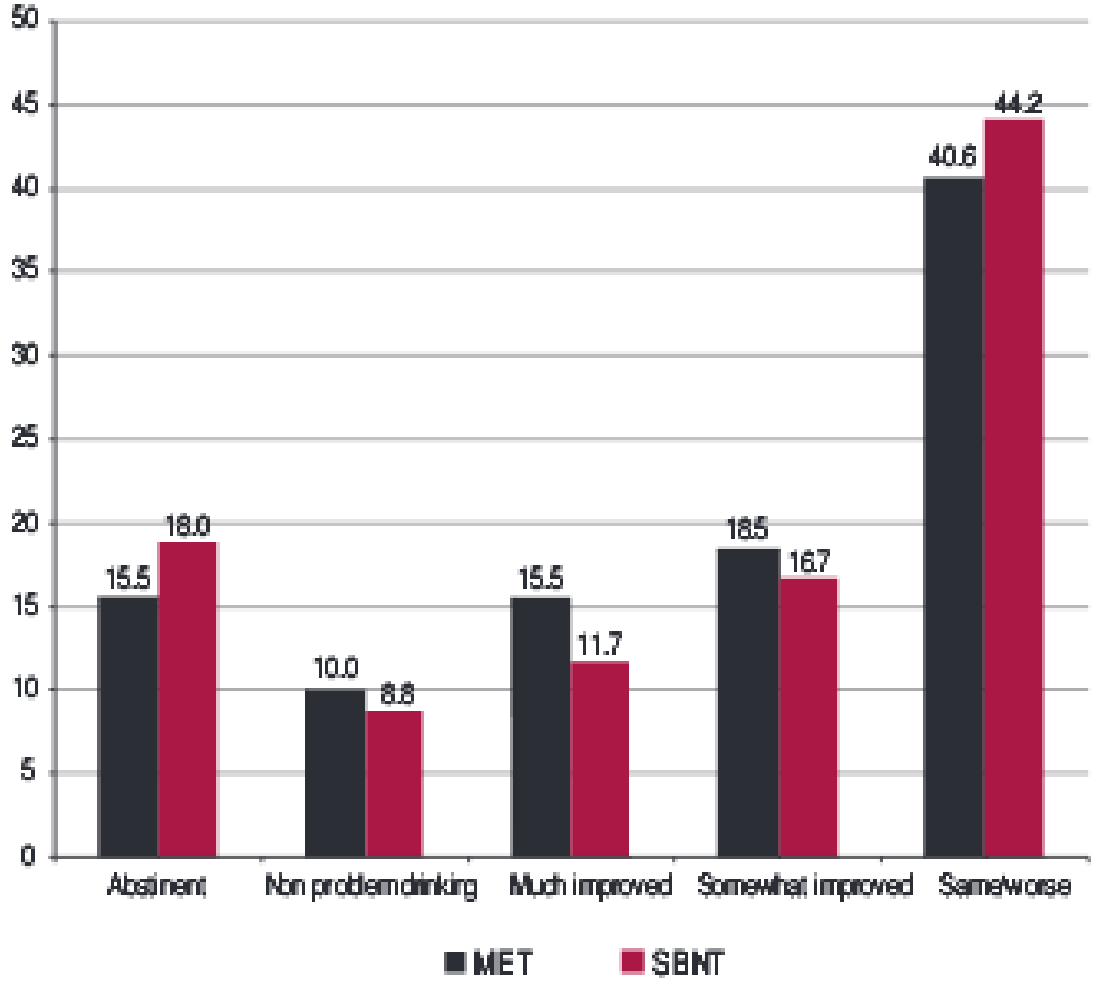


Figure 3c: Categorical treatment outcomes from the UK Alcohol Treatment Trial

What do we know about the role of treatment from the literature?

(Vanderplasschen et al., 2011)

- Importance of Tx (vs. No Tx), despite substantial treatment gap
- Outcome rates slightly better after residential Tx than after outpatient and short-term Tx in terms of abstinence
- Drop-out and relapse rates after Tx are high
- Improved outcomes associated with retention and continuity of care
- Client variables play a role: SES, family situation, a supportive social network, job, co-occurring mental health problems
- Also program variables: therapeutic orientation, specialized and trained staff, supervision/intervision

Some key findings about treatment & recovery (Scott & Dennis, 2003)

- MOST ADDICTS relapse unless treated early and effectively.
- MOST ADDICTS cycle more than 3 times through periods of untreated addiction, treatment, sobriety, and incarceration
- MOST ADDICTS experience a trajectory for recovery based on genotype *(severity of biological addiction)*
- MOST ADDICTS improve the odds ratio for remaining sober after one year of sobriety
- MOST ADDICTS achieve self-sustainable recovery (low odds ration for relapse) after 5 years of sobriety
- MOST ADDICTS take over 30 years to achieve 5 years of sobriety.

From chronic, relapsing brain disorder to addiction recovery

Recovery?!

"... a voluntarily maintained lifestyle characterized by sobriety, personal health and citizenship".

(Betty Ford Institute Consensus Panel, 2007)

"The process of recovery from problematic substance use is characterized by voluntarily-sustained control over substance use which maximizes health and wellbeing and participation in the rights, roles and responsibilities of society."

(Drug Policy Commission Recovery Consensus Group, UK, 2008)

"... the experience (a process and sustained status) through which individuals, families, and communities impacted by severe alcohol and other drug (AOD) problems utilize internal and external resources to voluntarily resolve these problems, heal the wounds inflicted by AOD-related problems, actively manage their continued vulnerability to such problems, and develop a healthy, productive, and meaningful life."

(White, 2007, p.236)

Multiple dimensions of recovery

(Van der Stel, 2013)

- Clinical recovery
- Personal recovery
- Functional recovery
- Social recovery

Personal recovery as driving force

The prevalence of addiction recovery

(Best et al., 2019)

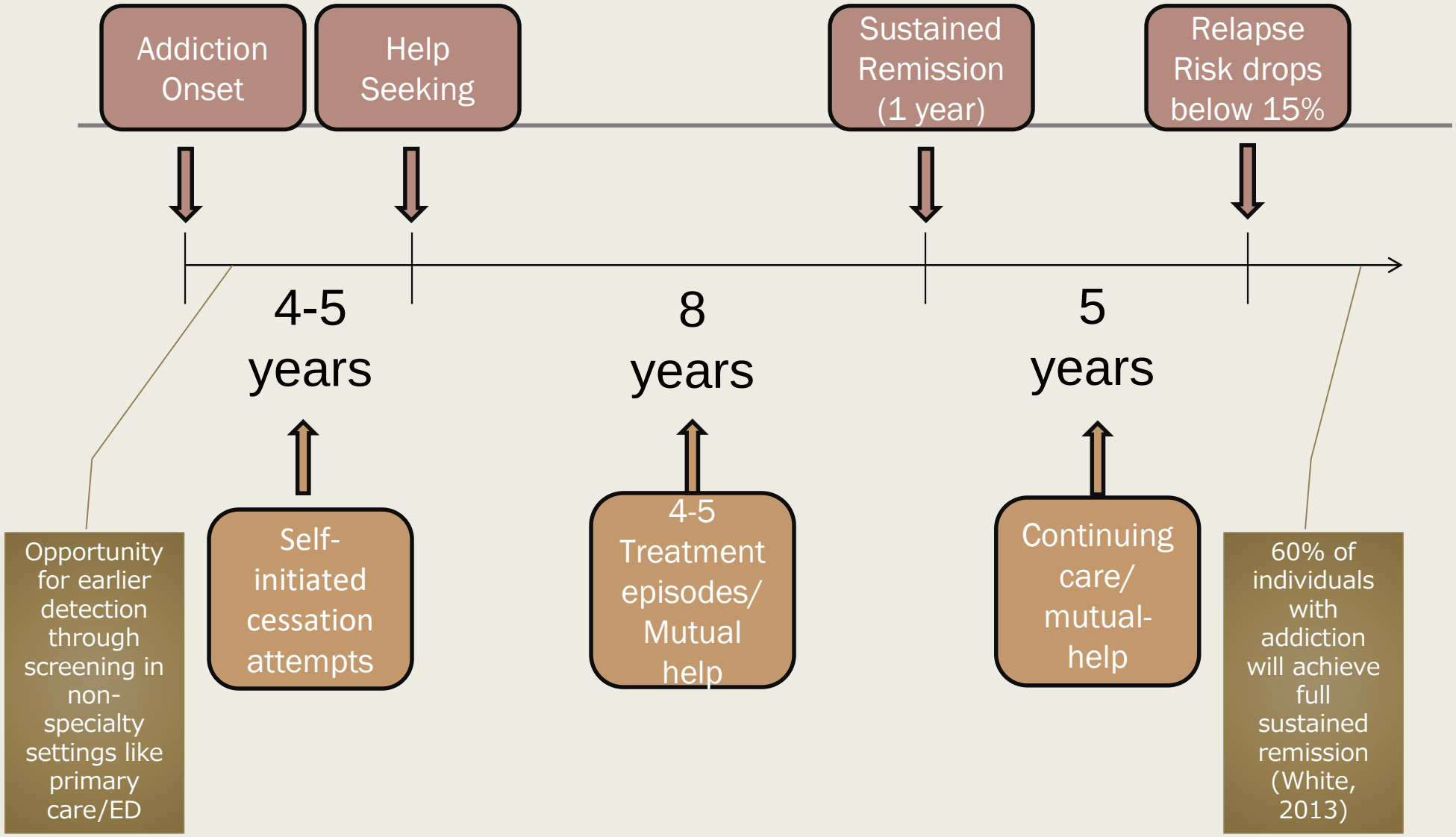
- Sheedy and Whitter (2009) estimated prevalence at 58%, but with marked variability (30% - 72%)
- "Clinical fallacy" and worker attitudes as reasons for underestimation

- White (2012) analysed remission rates in a review of 415 scientific reports published between 1868 and 2011:

– *White argues that between 5.3–15.3% of the adult population in the US are in recovery from a substance use disorder (> 25 million people)*

– *49.9% of those with a lifetime substance use disorder will eventually achieve stable recovery (increased to 53.9% in studies published since 2000)*

From addiction to recovery in persons with severe dependence (White, 2013)



The role of treatment and support in individuals’ recovery stories

How do people resolve a drug/alcohol problem?

ELSEVIER

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

Full length article

Prevalence and pathways of recovery from drug and alcohol problems in the United States population: Implications for practice, research, and policy

John F. Kelly[a,*], Brandon Bergman[a], Bettina B. Hoeppner[a], Corrie Vilsaint[a], William L. White[b]

[a] Recovery Research Institute, Massachusetts General Hospital, 151 Merrimac Street, and Harvard Medical School, Boston, MA, 02114, United States
[b] Chestnut Health Systems, W Chestnut St, Bloomington, IL, 61701, United States

Table 2
Recovery pathway choices of U.S. adults who endorsed "used to have a problem with drugs or alcohol, but no longer do" (9.1% (SE =0.28)).

Pathway	weighted%	SE
Used support	**53.9**	**1.60**
Professionally assisted recovery support (aka formal treatment) (any)	**27.6**	**1.43**
Outpatient addiction treatment	16.8	1.21
Inpatient or residential treatment	15.0	1.08
Alcohol/drug detoxification services	9.1	0.91
Anti-relapse/craving medication use (any)	**8.6**	**0.93**
Recovery support services	**21.8**	**1.40**
Mutual-help groups	**45.1**	**1.60**

46.1% did so without support: unassisted / natural recovery

Kelly et al. (2017). Prevalence and pathways of recovery from drug and alcohol problems in the U. S. population. *Drug and Alcohol Dependence, 181,* 162-169.

REC-PATH: Recovery pathways and societal responses related to illicit drug use in UK, NL & BE

- Multi-country, multi-method study on addiction recovery in Europe, with special focus on:
  - *Voices of those in recovery*
  - *Women's recovery pathways*
- Recovery stages:
  - *Early (< 1 year)*
  - *Sustained (1-5 years)*
  - *Stable recovery (> 5 years)*
- Focus on illicit drugs
- Building capacity for future recovery research

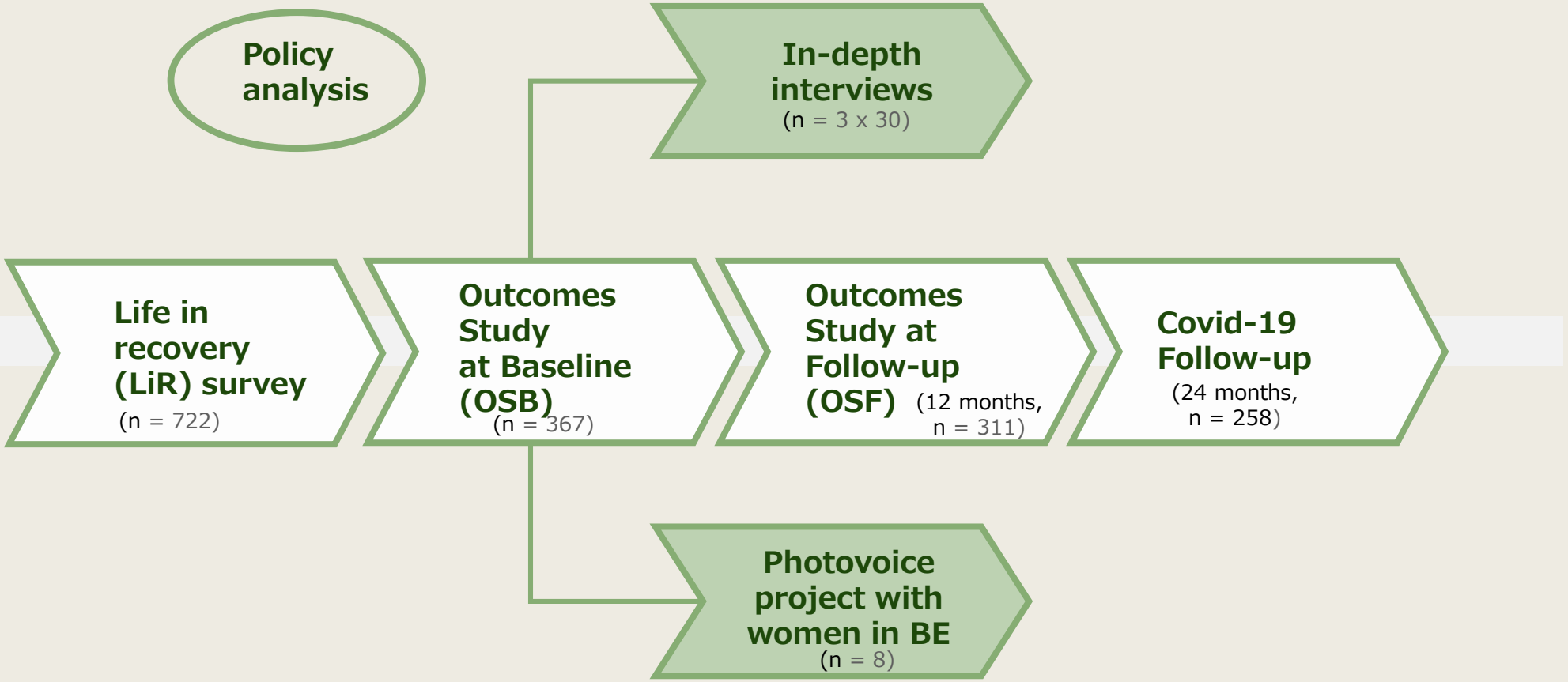
NIHR | National Institute for Health Research

ZonMw

fwo Research Foundation Flanders Opening new horizons

Belgian Science Policy Office belspo

REC-PATH study design (2017-2021)



At least five mechanisms of behaviour change (Best et al., 2018)

---

1. 12-step mutual aid
2. Other peer-based support groups
3. Outpatient community treatment
4. Residential treatment
5. Natural/unassisted recovery

Which support mechanisms do persons in addiction recovery use (REC-PATH)?

(Martinelli et al., 2021)

Table 2. Recovery pathways: combinations of treatment and support ever used.

	Total ($n = 367$) *n* (%)
Natural recovery[a]	17 (4.6)
Only member of mutual aid group	20 (5.4)
Only patient of outpatient treatment	18 (4.9)
Only attended residential treatment	21 (5.7)
Mutual aid + outpatient	33 (9.0)
Mutual aid + residential	50 (13.6)
Outpatient + residential	58 (15.8)
Member/patient/attended all three types of treatment and support	150 (40.9)

[a]Never used any treatment or support.

Recovery indicators according to recovery stage & gender

256 women in recovery (36.7%)

Taylor & Francis
Taylor & Francis Group

Drugs: Education, Prevention and Policy

ISSN: 0968-7637 (Print) 1465-3370 (Online) Journal homepage: https://www.tandfonline.com/loi/idep20

Comparing three stages of addiction recovery: long-term recovery and its relation to housing problems, crime, occupation situation, and substance use

Thomas F. Martinelli, Gera E. Nagelhout, Lore Bellaert, David Best, Wouter Vanderplasschen & Dike van de Mheen

Table 3. Multivariate logistic regression of recovery stage with having housing problems, being involved in crime or criminal justice, and having work or education, and substance use in the last 30 days.

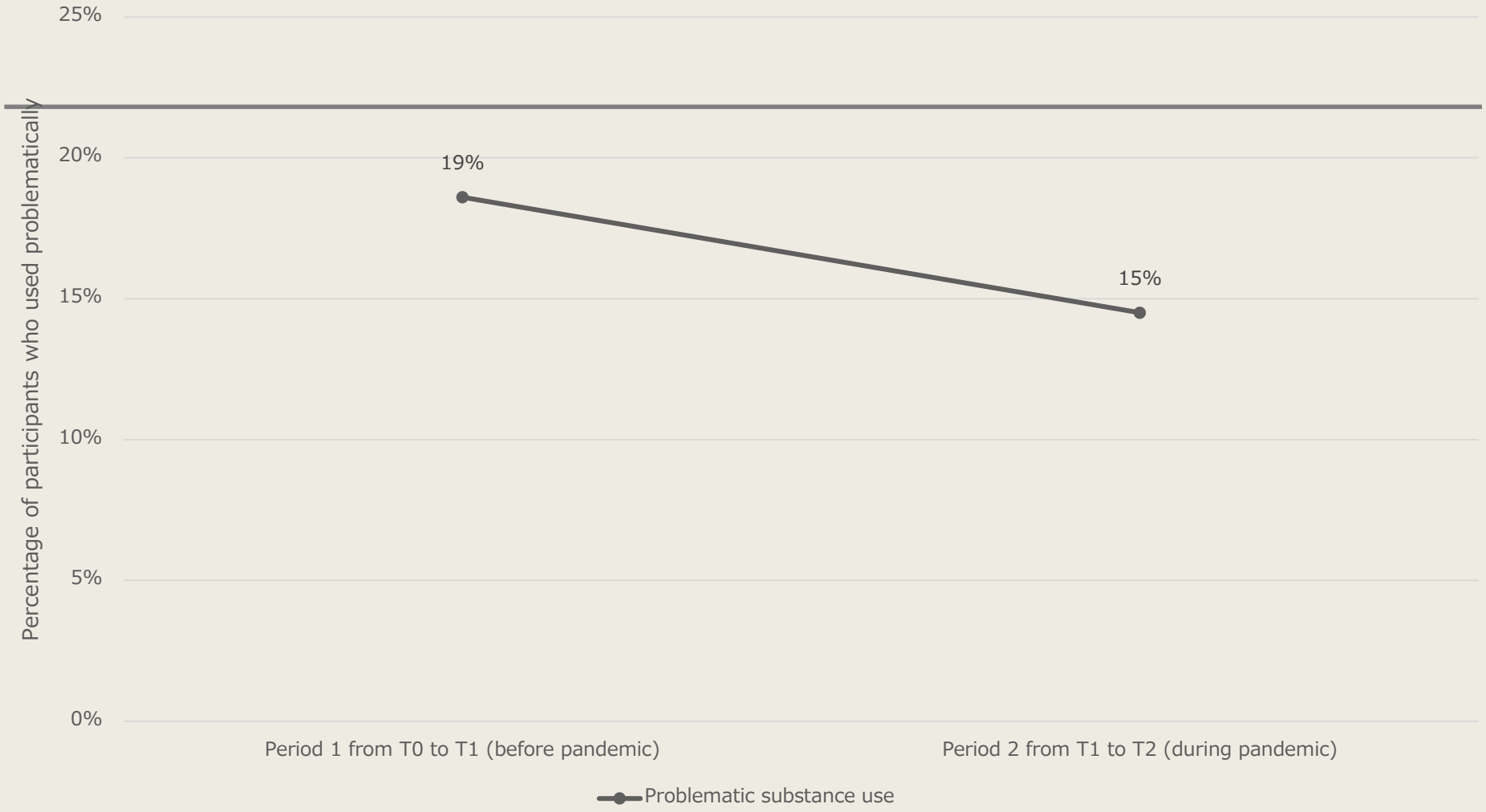
	Housing problems OR (95% CI)	Crime OR (95% CI)	Occupation situation OR (95% CI)	Alcohol Use OR (95% CI)	Illicit Hard Drug Use OR (95% CI)	Cannabis Use OR (95% CI)	Abstinent from drugs, alcohol, and opiate subs OR (95% CI)
Recovery Stage							
Early	1	1	1	1	1	1	1
Sustained	0.34 (0.16–0.74)**	0.44 (0.25–0.79)**	3.58 (2.18–5.85)***	0.80 (0.48–1.36)	0.51 (0.27–0.99)*	0.60 (0.32–1.13)	1.41 (0.88–2.25)
Stable	0.12 (0.04–0.36)***	0.24 (0.11–0.51)***	4.94 (2.75–8.90)***	1.54 (0.87–2.74)	0.40 (0.17–0.90)*	0.84 (0.40–1.74)	1.00 (0.59–1.67)
Gender							
Male	1	1	1	1	1	1	1
Female	0.97 (0.47–2.02)	0.87 (0.49–1.56)	0.81 (0.53–1.24)	1.45 (0.99–2.11)	0.82 (0.45–1.49)	0.88 (0.51–1.49)	0.78 (0.55–1.10)

Table 2. Differences in housing problems, crime, occupation situation, and substance use by recovery stage.

Recovery Stage	Early (n = 127)	Sustained (n = 290)	Stable (n = 305)	*p* Value Chi2
Housing problems	14.2	5.5	2.0	<0.001
Have you been having acute housing problems in the last 30 days? (yes)	11.0	5.2	2.0	<0.001
Have you been at risk of eviction in the last 30 days? (yes)	8.7	1.7	1.0	<0.001
Crime	26.8	12.1	5.6	<0.001
Have you been involved in offending in the last 30 days? (yes)	11.8	5.9	4.3	0.012
Have you been involved with the criminal justice system in the last 30 days? (yes)	15.7	7.2	1.6	<0.001
Occupation situation	53.5	82.4	88.2	<0.001
Have you been continuously working full-time in the last 30 days? (yes)	19.7	32.8	52.5	<0.001
Have you been continuously working part-time in the last 30 days? (yes)	8.7	24.1	23.3	0.001
Have you been at (..) education (..) within the last 30 days? (yes)	15.7	31.4	25.6	0.004
Have you volunteered in the last 30 days? (yes)	28.3	45.9	36.1	0.002
Substance use in the last 30 days				
Alcohol use (yes)	25.2	18.6	24.9	0.131
Illicit hard drug use (yes)	16.5	7.9	4.9	<0.001
Cannabis use (yes)	17.3	9.0	8.9	0.019
Abstinent from alcohol, illicit drugs and opiate substitutes (yes)	63.0	73.4	70.2	0.099

Note: All numbers are percentages unless otherwise specified.

Return to problematic drug use before and during the COVID-19 pandemic



Turning points towards addiction recovery: a contextualized understanding of its underlying dynamics (Lore Bellaert, 2022)

Findings

Gender	Female	15
	Male	15
Recovery stage	Early (<1)	10
	Sustained (1-5)	10
	Stable (>5)	10

Multiple turning points
- experiences
- facilitators

Layered pieces of an ongoing ‘recovery puzzle’

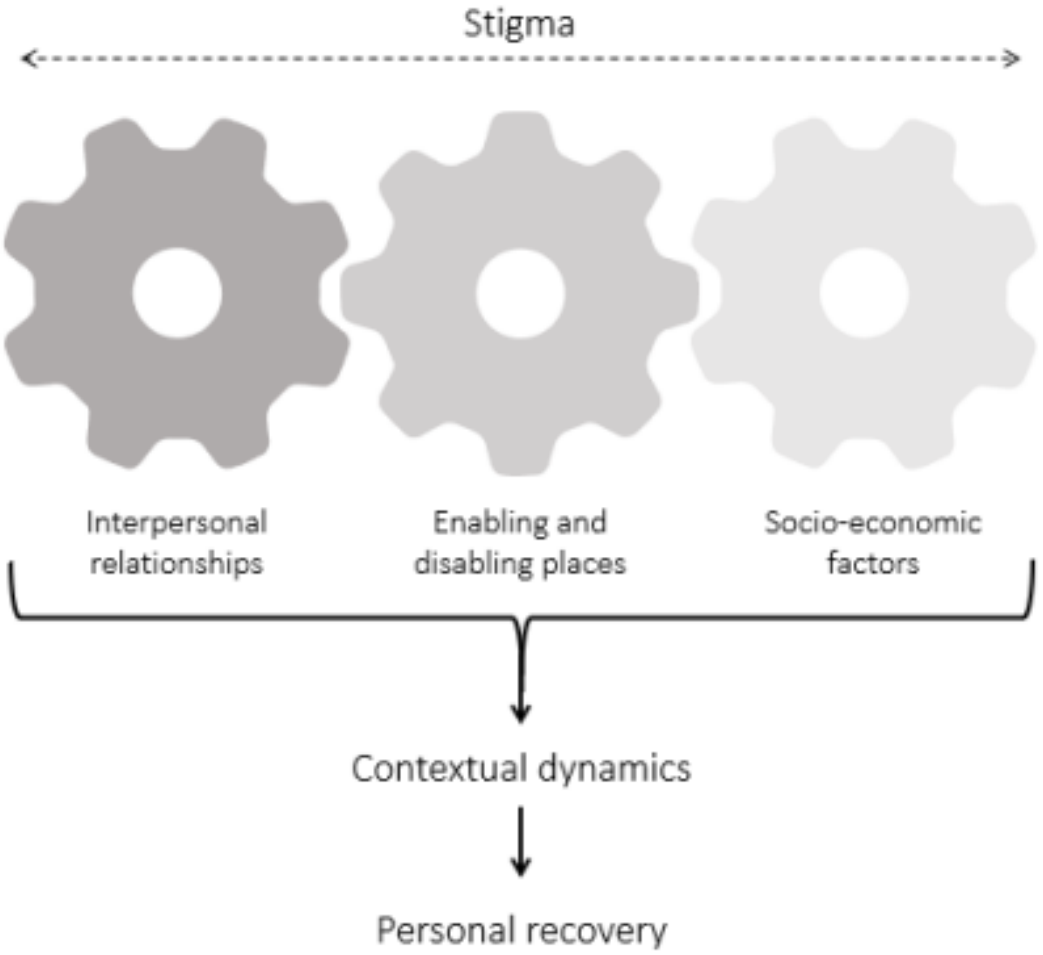
REC-PATH RECOVERY PATHWAYS
ERANID European Research Area Network on Illicit Drugs
UNIVERSITY OF DERBY
TILBURG UNIVERSITY
GHENT UNIVERSITY
IVO Onderzoek naar welzijn, zorg & verslaving
HO GENT

Turning points towards addiction recovery
(Bellaert et al., 2022)

- Adverse drug-induced experiences
- Becoming a parent
- ‘Hitting rock bottom’
- (Dis)engagement of social networks and environments
- Addiction treatment

The ambiguous role of contextual dynamics in drug addiction recovery (Bellaert et al., 2022)

Figure 1. Visualization of the research findings: the interrelatedness of contextual dimensions of addiction recovery processes



The importance of recovery capital (Best & Laudet, 2010)

The role of recovery capital

Recovery capital is crucial at different stages of the recovery continuum (Best e.a., 2010; Laudet & White, 2008; Best & Laudet, 2010).

– ***Personal recovery capital****: personal characteristics and skills which can be supportive for recovery, such as specific competences, severity of dependence and style of attribution*

– ***Social recovery capital****: includes the social network of the individual and the extent to which the individual experiences support and acceptance from this network*

– ***Community recovery capital****: concerns the extent of support that is available within the wider community, such as housing, employment, training, treatment and self-help groups*

frontiers in Psychology

ORIGINAL RESEARCH
published: 26 March 2021
doi: 10.3389/fpsyg.2021.663447

The Strengths and Barriers Recovery Scale (SABRS): Relationships Matter in Building Strengths and Overcoming Barriers

*David Best[1], Arun Sondhi[2], Lorna Brown[1], Mulka Nisic[3], Gera E. Nagelhout[4,5], Thomas Martinelli[4], Dike van de Mheen[6] and Wouter Vanderplasschen[7]**

TABLE 1 | Final set of included items (n = 32) in the Strengths And Barriers Recovery Scale (SABRS).

Recovery Strength items	Recovery Barrier items
– Exercise regularly	– Have untreated emotional or mental health problems
– Have a GP	– Make regular visits to the emergency room
– Have regular dental checks	– Regular use of health services
– Have good nutrition	– Smoke
– Take care of your health	– Have your drivers' licence revoked
– Maintain a driving licence	– Drive under the influence of alcohol or drugs
– Maintain a bank account	– Damage property
– Able to pay your bills	– Been arrested
– Maintain stable housing	– Been charged with a criminal offence
– Remain in steady employment	– Been to prison
– Further your education or training	– Have bad debts
– Start your own business	– Were unable to pay the bills
– Participate in family life	– Regularly missed school or work
– Plan for the future	– Dropped out of school or college
– Volunteer	– Fired or suspended from work
	– Lose custody of children
	– Experience family violence

TABLE 2 | Number of strengths and barriers while in addiction and recovery (n = 1,313).

	Strengths (addiction)	Strengths (recovery)	Barriers (addiction)	Barriers (recovery)
Mean	4.71	10.53	8.59	2.58
SD	2.91	3.25	3.30	2.31
Minimum	0	0	0	0
Maximum	15	15	17	17

TABLE 3 | Mean number of strengths and barriers while in recovery and growth of strengths and reduction of barriers, by recovery stage (n = 1,313).

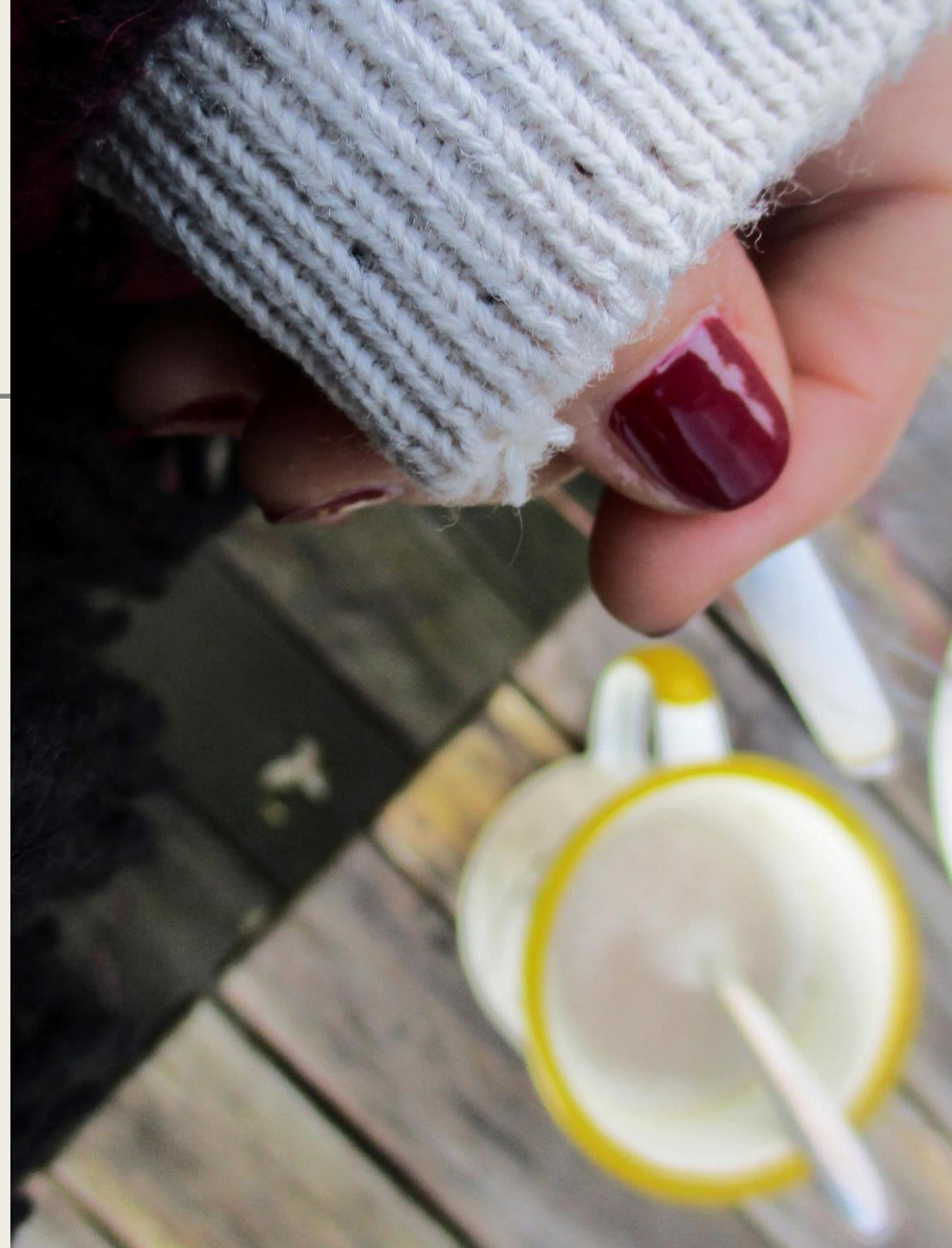
	Early recovery	Sustained recovery	Stable recovery	*F*, significance
Strengths	8.59	10.46	11.69	102.39, $p < 0.001$
Barriers	3.07	2.58	2.33	11.19, $p < 0.001$
Change in strengths	3.33	5.66	7.37	109.84, $p < 0.001$
Changes in barriers	−4.74	−6.13	−6.64	24.50, $p < 0.001$

Photovoicing Recovery Pathways

4 core themes

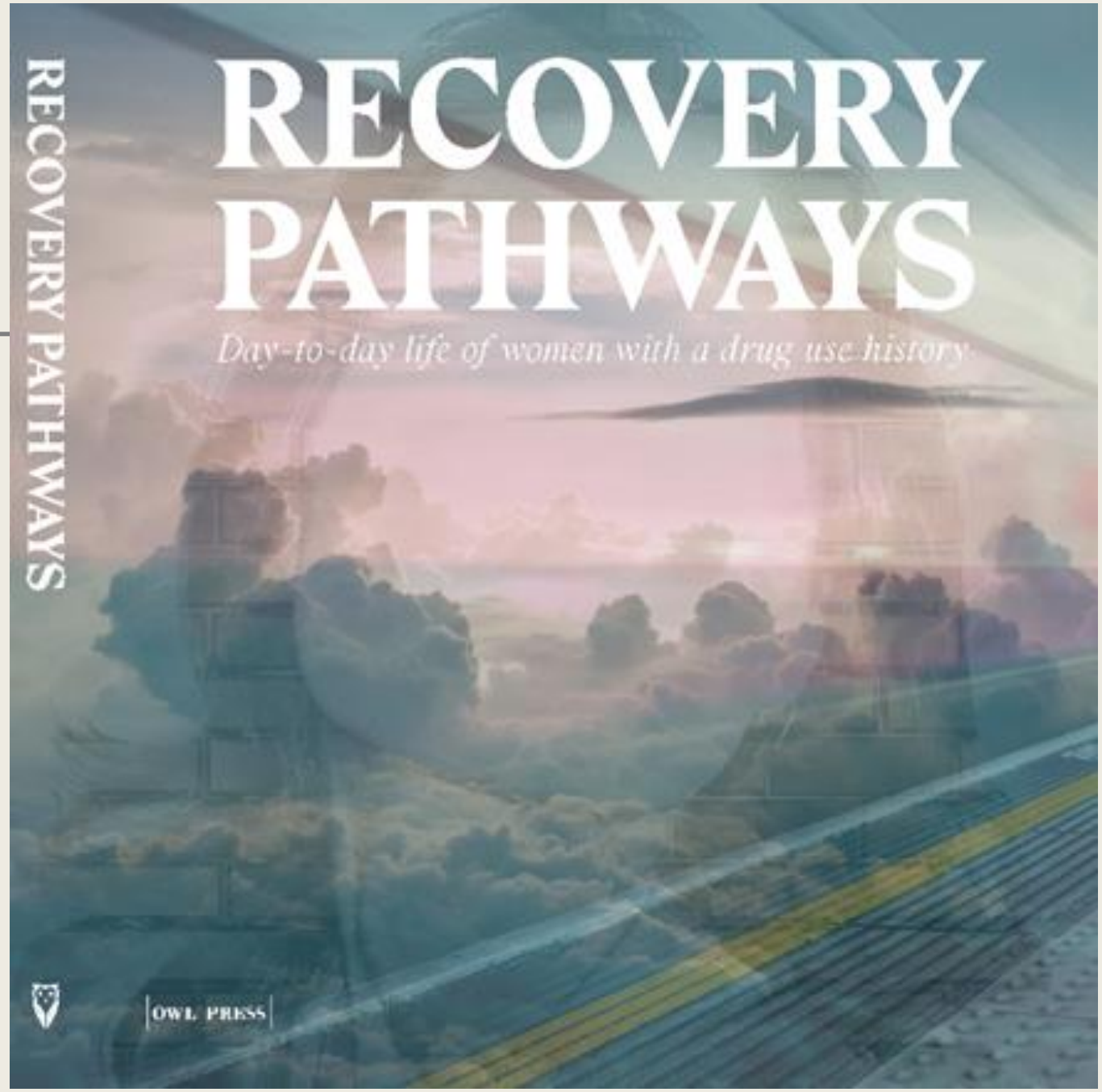
1. (Re-)building me
2. Untangling what life is and what addiction is
3. Becoming (re)connected
4. Enacting future perspectives

https://www.photovoicingrecoverypathways.com/



Photobook ‘Recovery Pathways: Day-to-day life of women with a drug use history’ (OWL PRESS)

https://vimeo.com/525544742/12bf08e24b




What about the effectiveness of various interventions/types of support?

Mesa Grande: a review of clinical trials of treatments for AUD (Miller & Wilbourne, 2002)

Table 3 Summary scores for treatment modalities with three or more studies.

	All studies, regardless of population severity						*Clinical populations only*			
Treatment modality	*Rank order*	*CES*	*% +*	*N*	*Mean MQS*	*% MQS ≥ 14*	*% Clinical*	*Rank order*	*CES*	*% +*
Brief intervention	1	280	68	31	12.68	48	48	1	136	73
Motivational enhancement	2	173	71	17	13.12	53	53	11	37	56
GABA agonist	3	116	100	5	11.60	20	100	3	116	100
Opiate antagonist	4	100	83	6	11.33	0	100	4	100	83
Social skills training	5	85	68	25	10.50	16	84	2	125	63
Community reinforcement	6	80	100	4	13.00	50	80	5	68	100
Behavior contracting	7	64	80	5	10.40	0	100	6	64	80
Behavioral marital therapy	8	60	62	8	12.88	50	100	7.5	60	63
Case management	9	33	67	6	10.20	0	100	7.5	60	67
Self-monitoring	10	25	50	6	12.00	50	83	18	−3	40
Cognitive therapy	11	21	40	10	10.00	10	88	9	41	50
Client-centered counseling	12.5	20	57	7	10.57	0	86	13	28	67
Disulfiram	12.5	20	50	24	10.75	17	100	10	38	50
aversion therapy, apneic	14.5	18	67	3	9.67	0	100	15.5	18	67
Covert sensitization	14.5	18	38	8	10.88	0	100	15.5	18	38
Acupuncture	16.5	14	67	3	9.67	0	100	17	14	67
Aversion therapy, nausea	16.5	14	40	5	10.40	20	100	14	20	40
Self-help	18	11	40	5	12.00	30	60	12	33	67
Self-control training	19	9	49	35	12.80	51	63	20	−8	45
Minnesota model	20.5	−3	33	3	11.33	33	33	25	−22	0
Exercise	20.5	−3	33	3	11.00	0	33	21	−11	0
Stress management	22	−4	33	3	10.33	0	66	25	−22	0
Family therapy	23	−5	33	3	9.30	15	100	19	−5	33
Aversion therapy, electric	24.5	−13	40	20	10.55	67	100	22.5	−13	40
Twelve-Step facilitation	24.5	−13	33	3	15.67	0	100	22.5	−13	33
Antidepressant, SSRI	26	−16	53	15	8.60	0	53	25	−22	50

Cochrane Library

Cochrane Database of Systematic Reviews

Alcoholics Anonymous and other 12-step programs for alcohol use disorder (Review)

Kelly JF, Humphreys K, Ferri M

Manualized AA/TS interventions produced higher rates of continuous abstinence; non-manualized AA/TSF performed as well as other established treatments

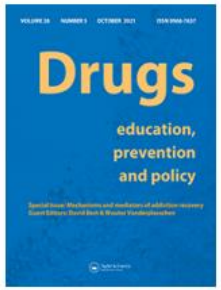
AA/TSF may be superior to other treatments for increasing the percentage of days of abstinence, particularly in the longer-term. AA/TSF probably performs as well as other treatments for reducing the intensity of drinking, alcohol-related consequences and addiction severity.

Four of the five economics studies found substantial cost-saving benefits for AA/TSF

In conclusion, clinically-delivered TSF interventions designed to increase AA participation lead to better outcomes in producing higher rates of continuous abstinence. This effect is achieved largely by fostering AA participation beyond the end of the TSF intervention.

Self-Management and Recovery Training (SMART Recovery) (Beck et al., 2017)

- SMART Recovery offers an alternative to predominant 12-step approaches to mutual aid (eg, AA).
- Modest number of studies + diverse methods; inconclusive findings and few studies on functional outcomes
- Given the positive effects of SMART Recovery and SMART Recovery informed interventions to enhance client-centred, collaborative care that is tailored to the needs and preferences of individuals, clinicians need to be aware of the range of mutual aid support options available



Drugs: Education, Prevention and Policy

ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/idep20

Are members of mutual aid groups better equipped for addiction recovery? European cross-sectional study into recovery capital, social networks, and commitment to sobriety

Thomas F. Martinelli, Dike van de Mheen, David Best, Wouter Vanderplasschen & Gera E. Nagelhout

Table 1. Sample description split by lifetime membership of mutual aid groups.

	Lifetime members of mutual aid groups $N = 253$ (68.9%)		
Gender, %women	34.8		
Age, *mean in years (SD)*	*42.9 (10.7)*		
Country, %			
UK	39.7		
Netherlands	43.4		
Belgium	17.1		
Education level, %			
None/primary	4.8		
Secondary	39.7		
Higher	55.6		
Recovery stage, %			
<1 year	11.9	24.3	
1–5 years	39.3	40.9	
>5 years	48.8	34.8	
Chronic mental health problems, % yes	34.7	42.6	$p = .144$[a]
In paid employment, %	63.5	45.2	$p = .001$[a]
Abstinent from illicit drugs, %	94	74.8	$p < .001$[a]
Days used illicit drugs in past 30 days, *mean (SD)*	*0.83 (4.32)*	*2.96 (7.52)*	$p < .001$[b]
Abstinent from alcohol, %	80.6	52.2	$p < .001$[a]
Days used alcohol in past 30 days, *mean (SD)*	1.64 (4.86)	5.48 (8.53)	$p < .001$[b]
At what age did you first realize you had a problem with substance use? *mean*	*25.2*	*23.8*	$p = .129$[b]
Have you ever *attended* a mutual aid group? (yes)	100	31.6	$p < .001$[a]
Have mutual aid groups played a role in enabling your recovery? (yes)	95.3	10.5	$p < .001$[a]
Are you currently attending a mutual aid group? (yes)	71.9	4.4	$p < .001$[a]

[a]Chi2 test.
[b]Independent sample *t*-test

Table 4. Multiple linear regression analyses of the relationship between social group membership, recovery capital, and commitment to sobriety and lifetime membership of a mutual aid group.

	Social group membership, β (95% CI)				
Independent variables	Member of different groups	Maintaining social groups	Joining new groups	Recovery capital, β (95% CI)	Commitment to sobriety, β (95% CI)
Lifetime membership of mutual aid groups	0.188***	0.055	0.292***	0.211***	0.288***
	(0.074, 0.301)	(−0.061, 0.171)	(0.183, 0.402)	(0.105, 0.319)	(0.177, 0.394)
Age	0.008	0.056	−0.085	0.044	0.156**
	(−0.110, 0.125)	(−0.064, 0.177)	(−0.198, 0.029)	(−0.068, 0.155)	(0.043, 0.267)
Gender					
Men	Ref	Ref	Ref	Ref	Ref
Women	0.070	−0.122*	0.056	−0.021	0.041
	(−0.034, 0.174)	(−0.228, −0.016)	(−0.044, 0.156)	(−0.119, 0.077)	(−0.058, 0.140)

Opioid substitution treatment

Drug and Alcohol Dependence 161 (2016) 1–8

Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

Review

Opioid substitution therapy: Lowering the treatment thresholds

Georgios Kourounis[a,b], Brian David Wensley Richards[a,b], Evdokia Kyprianou[c], Eva Symeonidou[c], Minerva-Melpomeni Malliori[d], Lampros Samartzis[a,b,*]

[a] St George's University of London, Medical School at the University of Nicosia, Agiou Nikolaou Street 93, Engomi, 2408 Nicosia, Cyprus
[b] Department of Addiction Psychiatry, Athalassa Psychiatric Hospital, Cyprus Mental Health Services, Leoforos Lemesou 199/2, 1452 Nicosia, Cyprus
[c] Cyprus Anti-Drugs Council, Leoforos Lemesou 130, City Home 81, 2015 Strovolos, Cyprus
[d] Department of Psychiatry, School of Medicine, National and Kapodistrian University of Athens, 72, 74, Vassil. Sophias Avenue, 11528 Athens, Greece

ARTICLE INFO

Article history:
Received 24 July 2015
Received in revised form 2 December 2015
Accepted 21 December 2015
Available online 30 December 2015

ABSTRACT

Background: Opioid substitution therapy (OST) has been established as the gold standard in treating opioid use disorders. Nevertheless, there is still a debate regarding the qualitative characteristics that define the optimal OST intervention, namely the treatment threshold. The aim of this review is twofold: first, to provide a summary and definition of "treatment thresholds", and second, to outline these thresholds and describe how they related to low and high threshold treatment characteristics and outcomes.

Contingency management

Drug and Alcohol Dependence 178 (2017) 318–339

Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

Review

Contingency Management interventions for non-prescribed drug use during treatment for opiate addiction: A systematic review and meta-analysis

Tom S. Ainscough[a,b,*], Ann McNeill[a,b], John Strang[a], Robert Calder[a], Leonie S. Brose[a,b]

[a] Addictions Department, Institute of Psychiatry, Psychology and Neuroscience, King's College London, London, UK
[b] UK Centre for Tobacco and Alcohol Studies, UK

Study or Subgroup	Std. Mean Difference	SE	Weight	Std. Mean Difference IV, Random, 95% CI
133 Preston et al.(2)	-0.1	0.26	5.1%	-0.10 [-0.61, 0.41]
023 Groß et al. (3)	0.1	0.28	4.7%	0.10 [-0.45, 0.65]
189 Katz et al. (3)	0.21	0.28	4.7%	0.21 [-0.34, 0.76]
181 Umbricht et al. (1)	0.23	0.22	6.1%	0.23 [-0.20, 0.66]
182 Downey et al. (5)	0.46	0.32	3.9%	0.46 [-0.17, 1.09]
097 Chutuape et al.(3)	0.49	0.28	4.7%	0.49 [-0.06, 1.04]
094 Peirce et al. (5)	0.51	0.1	10.3%	0.51 [0.31, 0.71]
174 Petry et al. (5)	0.52	0.14	8.8%	0.52 [0.25, 0.79]
147 Epstein et al. (3)	0.52	0.14	8.8%	0.52 [0.25, 0.79]
134 Schottenfeld (3)	0.57	0.14	8.8%	0.57 [0.30, 0.84]
011 Katz et al. (1)	0.58	0.2	6.7%	0.58 [0.19, 0.97]
156 Petry et al. (1)	0.6	0.26	5.1%	0.60 [0.09, 1.11]
131 Petry et al. (3)	0.6	0.32	3.9%	0.60 [-0.03, 1.23]
061 Dunn et al. (4)	1.02	0.33	3.7%	1.02 [0.37, 1.67]
017 Epstein et al. (1)	1.02	0.22	6.1%	1.02 [0.59, 1.45]
013 Silverman et al. (1)	1.1	0.3	4.3%	1.10 [0.51, 1.69]
176 Silverman et al. (1)	1.21	0.36	3.3%	1.21 [0.50, 1.92]
072 Cutuape et al. (5)	2.74	0.74	1.0%	2.74 [1.29, 4.19]
Total (95% CI)			**100.0%**	**0.57 [0.42, 0.72]**

Heterogeneity: $Tau^2 = 0.05$; $Chi^2 = 34.96$, $df = 17$ ($P = 0.006$); $I^2 = 51\%$
Test for overall effect: $Z = 7.43$ ($P < 0.00001$)

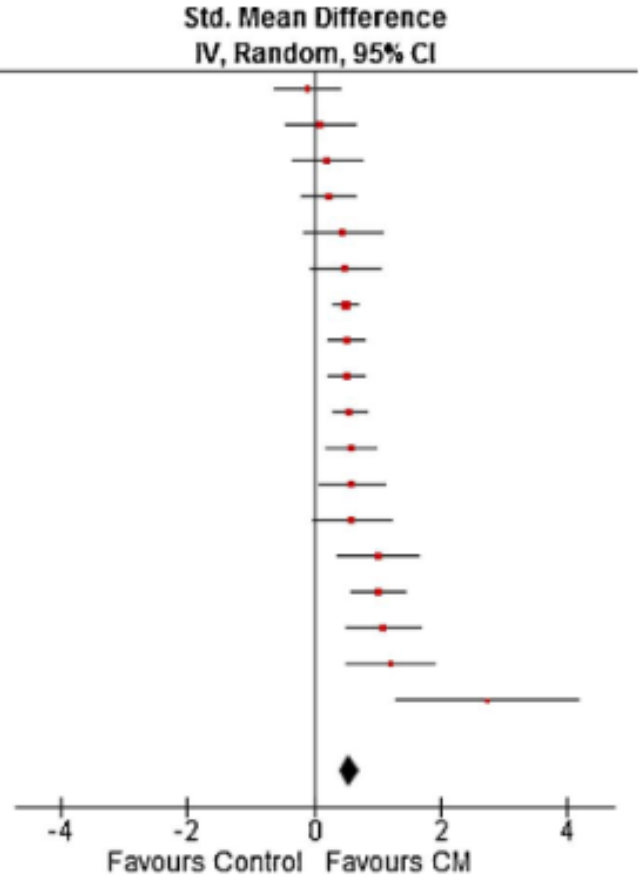


Fig. 2. Forest plot for LDA during treatment of all substances combined. (1) = Cocaine, (2) = opiates, (3) = opiates and cocaine, (4) = Tobacco, (5) = Poly-substance.

Cognitive behavioural therapy (CBT)

The Effectiveness of Cognitive Behavioral Therapy Techniques for the Treatment of Substance Use Disorders A Narrative Review of Evidence

By: Zamboni, L (Zamboni, Lorenzo) [1] , [2] ; Centoni, F (Centoni, Francesco) [1] ; Fusina, F (Fusina, Francesca) [3] , [4] ; Mantovani, E (Mantovani, Elisa) [2] ; Rubino, F (Rubino, Francesca) [1] ; Lugoboni, F (Lugoboni, Fabio) [1] ; Federico, A (Federico, Angela) [1] , [2]

View Web of Science ResearcherID and ORCID (provided by Clarivate)

JOURNAL OF NERVOUS AND MENTAL DISEASE

Volume: 209 **Issue:** 11 **Page:** 835-845

DOI: 10.1097/NMD.0000000000001381

Published: NOV 2021

Indexed: 2021-11-08

Document Type: Review

Abstract

Substance use disorders (SUDs) are characterized by a recurrent and maladaptive use of drugs and/or alcohol. Cognitive behavioral therapies (CBTs) comprise different types of interventions: traditional CBT and the more recent "third wave" behavior therapies, such as acceptance and commitment therapy (ACT), dialectical behavior therapy (DBT), mindfulness-based cognitive therapy (MBCT), and schema therapy (ST). We searched English-language articles published between 2014 and present. This review includes randomized controlled trials (RCTs), quasi-RCTs, pilot studies, and reviews of CBTs for SUDs available on PubMed. Results seem to indicate that CBT and MBCT are effective interventions for SUDs; however, the studies showed a high degree of heterogeneity, so no exhaustive conclusions could be outlined at this time. ACT and DBT in SUD management are limited to few studies and results are therefore inconclusive.

frontiers in Psychiatry

SYSTEMATIC REVIEW
published: xx March 2019
doi: 10.3389/fpsyt.2019.00186

Check for updates

A Meta-Analysis of the Efficacy of Case Management for Substance Use Disorders: A Recovery Perspective

Wouter Vanderplasschen[1*], *Richard Charles Rapp*[2,3], *Jessica De Maeyer*[4] *and Wim Van Den Noortgate*[5]

[1] *Ghent University, Ghent, Belgium,* [2] *Boonshoft School of Medicine, Dayton, OH, United States,* [3] *Wright State University,*

Treatment-related vs. personal functioning outcomes

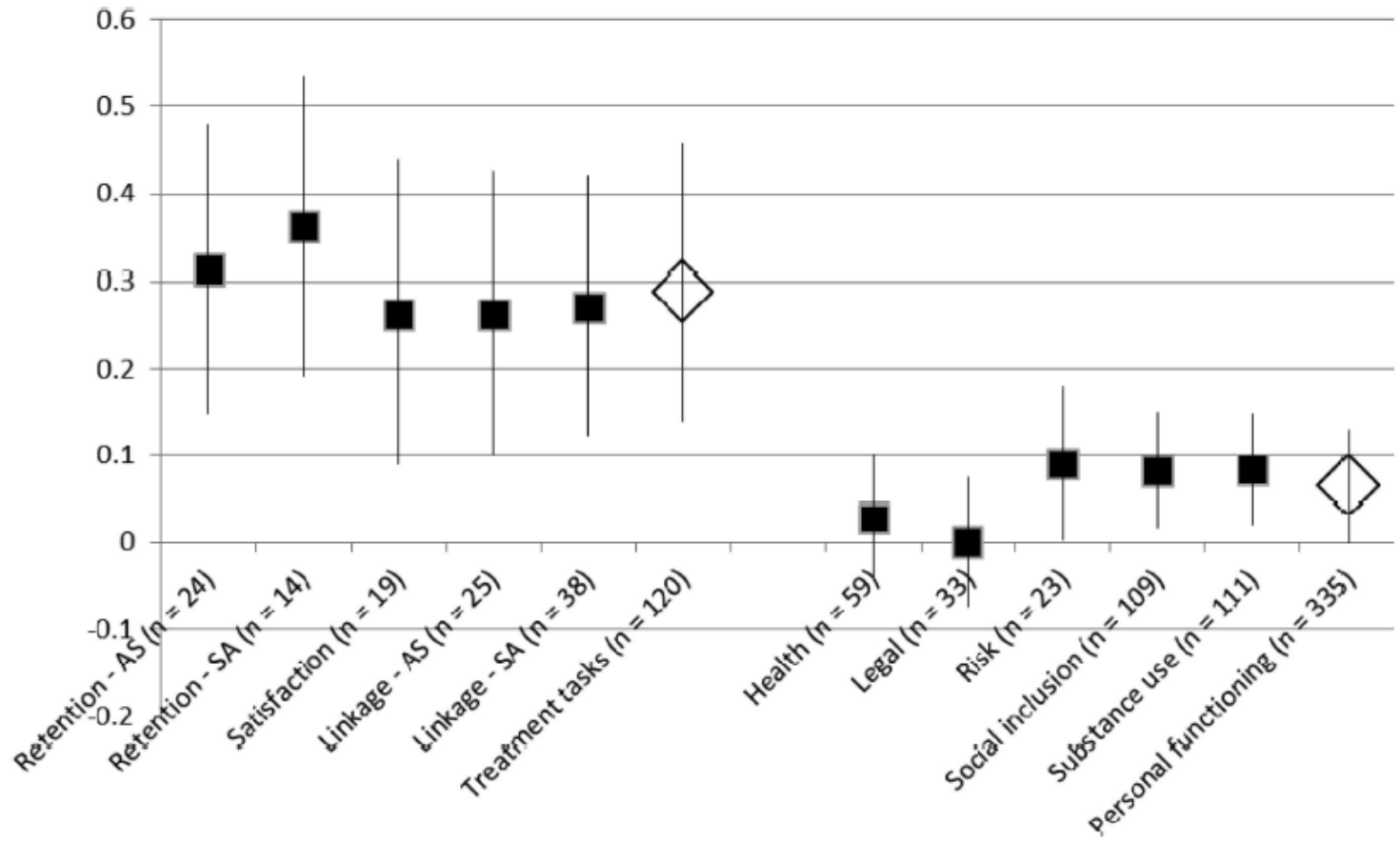


Figure 3. Forest plot of estimated effect sizes by individual (left) and combined (right) outcomes. AS = ancillary services; SA = substance abuse.

Drug and Alcohol Dependence 201 (2019) 227–235

Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

The effectiveness of residential treatment services for individuals with substance use disorders: A systematic review

Dominique de Andrade[a,*], Rachel A. Elphinston[a], Catherine Quinn[a], Julaine Allan[a,b], Leanne Hides[a]

[a] School of Psychology, Lives Lived Well Research Group, The University of Queensland, St. Lucia Campus, Sir Fred Schonell Drive, St. Lucia, 4067, Queensland, Australia
[b] Lives Lived Well, Level 1/55 Little Edward St, Spring Hill, 4000, Queensland, Australia

Residential treatment

- Despite limitations, results provide moderate quality evidence for the effectiveness of residential treatment in improving outcomes across a number of substance use and life domains
- With caution, results suggest that best practice rehabilitation treatment integrates mental health services and provides continuity of care post-discharge.

Rating	Study	Intervention	Outcomes				
			Substance use	*Social*	*Criminal activity*	*Mental health*	*Mortality*
W	Babaie and Razeghi (2013) Iran	TC (ref) vs. RT vs. MMT		+		+	
S	Bergman et al., 2014 USA	IRT: SUD vs COD	+			+	
S	Daughters et al. (2018) USA	RT + LETS ACT vs RT + SC	+	+		=	
S	Davis et al., 2018 USA	RT + MBRP vs TAU (RT + ANA)	+			+	
M	Deane et al., 2013 Australia	Modified TC	+	+	+	+	
M	do Carmo et al., 2018 Brazil	RT	?	?			
S	Eastwood et al., 2018 England	IW vs RT vs IW + RT	+				
S	Harley et al., 2018 Australia	TC		+		+	
M	King et al., 2016 NZ	Modified TC	+	+		+	
S	Lloyd et al., 2017 Australia	RT vs other treatments					–
W	Lookatch et al. (2017) USA	RT – 12 step based				+	
M	McGuire et al., 2018 USA	IRT (day program with housing)	+			+	
W	Morse and MacMaster, 2015 USA	IRT	+	+	+	+	
W	Myers et al., 2018 South Africa	RT vs outpatient	+				
W	Patterson et al., 2018 NZ	RT	+	+	+	+	
S	Rome et al., 2017 Scotland	Integrated TC	+	+	+	+	
M	Roos et al., 2018 USA	Rolling MBRP in RT				+	
W	Schoenthaler et al., 2017 USA	IRT	+	+	+	+	
W	Šefránek and Miovský (2017), 2018 Czech Republic	TC	+		+		
S	Schuman-Olivier et al., 2014 USA	RT	+			+	
S	Teesson et al., 2017 Australia	RT vs. MT vs. detox vs. MT with detox	+		+	+	
M	Turner and Deane (2016) Australia	Modified TC	+	+	+	+	
S	Willey et al., 2016 UK	RT vs. IW vs. Community Setting Psychological therapy vs. CBP			=		

Abbreviations: RTResidential Treatment; IWInpatient withdrawal; MTMaintenance therapies; detoxdetoxification; TCTherapeutic community; IRTIntegrate Residential Treatment; LETS ACTLife enhancement treatment for substance use; SCSupportive counselling; MBRPMindfulness-based relapse prevention; AN

Review Article

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

Wouter Vanderplasschen,[1] Kathy Colpaert,[1] Mieke Autrique,[1] Richard Charles Rapp,[2] Steve Pearce,[3] Eric Broekaert,[1] and Stijn Vandevelde[4]

- Systematic review of 16 controlled studies
- Traditional + modified TCs, in prison and community settings
- Retention + participation in aftercare very robust predictors of TC outcomes, although drop-out in TCs higher than in most comparison conditions
- In majority of studies, TC group had better substance use and legal outcomes than comparison condition
- TCs can promote change regarding various outcome indicators, but continuing care approach needed

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

Mobile apps to reduce tobacco, alcohol, and illicit drug use (Staiger et al., 2020)

- Review of trials evaluating mobile app interventions for problematic tobacco, alcohol, and illicit drug use
- Content considerably diverse: from simple stand-alone apps delivering self-monitoring or psychoeducation, to multicomponent apps with interactive features and audio content, or used as adjuncts alongside face-to-face treatment
- A total of 6 of the 20 app interventions (30%) reported significant reductions in substance use at follow-up compared with comparison condition (small to moderate effect sizes)
- Evidence to date for the effectiveness of apps targeting problematic substance use is not compelling
- YET, mobile telephone-based contingency management systems offer a low-cost approach that facilitates remote monitoring of behavior and delivery of reinforcers and minimizes issues of staffing and resources (Getty et al., 2019). Particularly effective for reducing tobacco and alcohol use among adults not in treatment

SUBSTANCE ABUSE
https://doi.org/10.1080/08897077.2019.1671940

Taylor & Francis
Taylor & Francis Group

REVIEW ARTICLE

Check for updates

The relationship between patient-centered care and outcomes in specialist drug and alcohol treatment: A systematic literature review

Esther L. Davis, PhD (Clin Psyc)[a,b], Peter J. Kelly, PhD (Clin Psyc)[a,b], Frank P. Deane, PhD[a,b], Amanda L. Baker, PhD[c], Mark Buckingham, PostGradDip (Hlth M)[d], Tayla Degan, BPsyc (Hons)[a,b], and Sarah Adams, MCP[e]

Patient-centred support

A total of 25 articles were identified, of which only five included a patient-centered indicator other than satisfaction.

Indicators of patient-centered care showed a generally positive association with improved outcomes, particularly between satisfaction with treatment and substance use.

There were demonstrable relationships between patient-centered indicators and outcomes for people receiving treatment for substance use disorder. However, conclusions are limited due to underrepresentation of patient-reported experience measures (PREMs).

What else to conclude from effectiveness studies in this field?

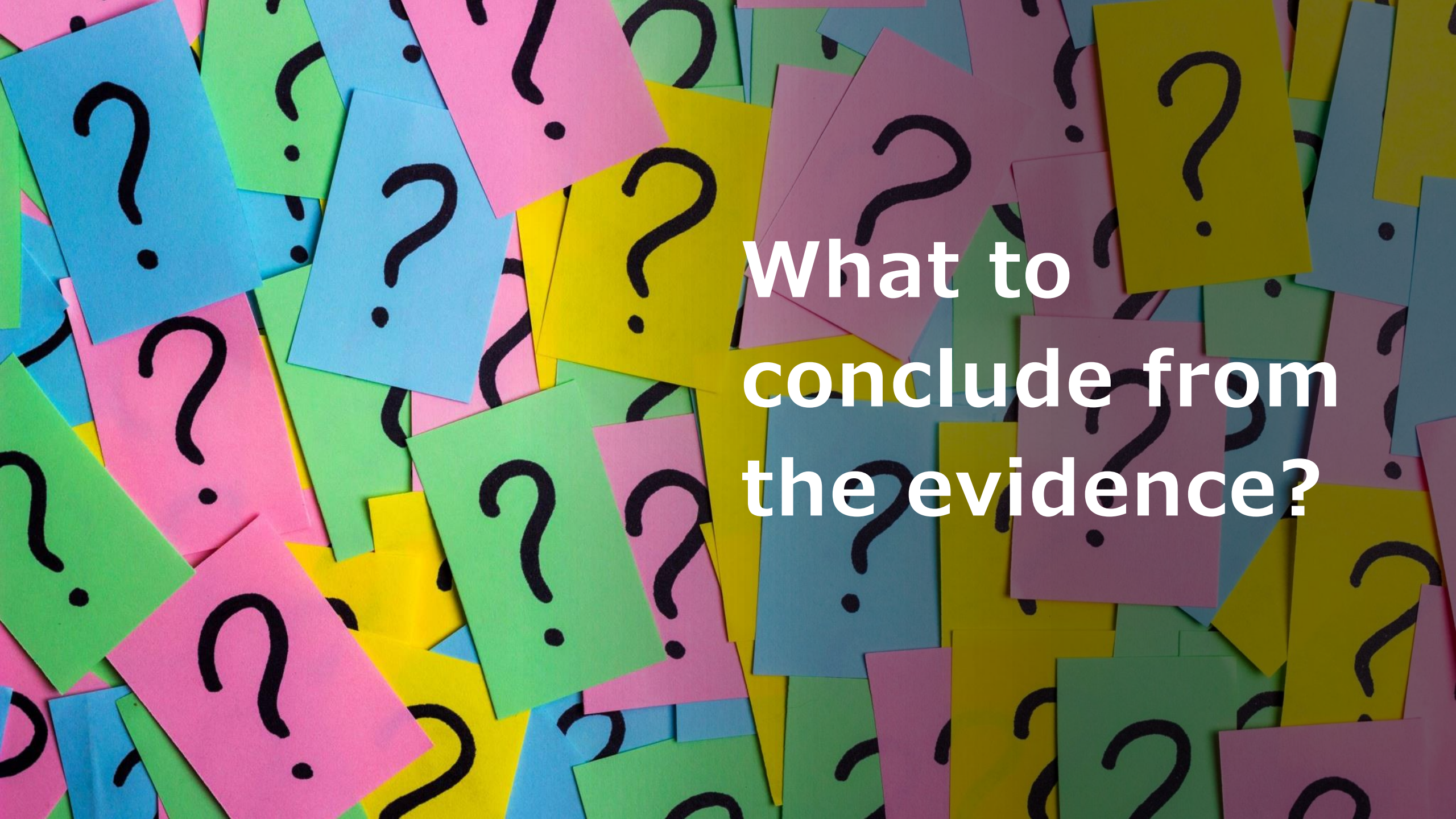
- Combined behavioral and pharmacological interventions are considered best practices, with Cognitive behavioral therapy (CBT) as first-line intervention (Ray et al., 2020)
- Strong evidence that CRA with abstinence-contingent 'incentives' is more effective than CRA (non-contingent incentives) alone for cocaine use (Roozen et al., 2004)
- Efficacy of contingency management programs for treatment of stimulant use disorder (Ronsley et al., 2020).
- Integrated models more effective than single-treatment strategies: importance of comprehensive and sustained psychosocial interventions (Tran et al., 2021)
- Reentry a critical time to provide evidence-based treatments (EBTs) for substance use; no single intervention been proven to be superior (Moore et al., 2020)
- Best clinical practice for dual diagnosis (DD) is integrated mental health and substance use treatment augmented with Alcoholics Anonymous (AA) attendance afterwards: higher rates of alcohol abstinence (Tonigan et al., 2018)
- Effectiveness of occupation-based interventions

- Prison-based interventions:

Results suggest therapeutic communities are effective in reducing recidivism and, to a lesser extent substance use after release. There is also evidence to suggest that opioid maintenance treatment is effective in reducing the risk of drug use after release from prison for opioid users. Furthermore, ongoing care after release from prison appears to enhance treatment effects for both types of interventions (De Andrade et al., 2018)

- To improve retention in outpatient treatment (Dalton et al., 2021)

Review findings indicate (1) behavioral therapy such as cognitive behavioral therapy and contingency management for cannabis and alcohol use disorders, or (2) cognitive behavioral therapy paired with opioid-agonist-therapy for opioid use disorder demonstrate the most promising results


What to conclude from the evidence?

Conclusions

- Recovery is rather the rule than the exception
- Recovery takes time and is a personal, non-linear process: complex interplay of turning point experiences and contextual/timely elements
- Most addicts use various treatment mechanisms before achieving recovery
- Treatment/support not always needed, but enhances/facilitates recovery
- Type of intervention/support depends on person, moment, addiction severity, recovery capital, comorbidity, context, …
- Leave room for innovations: new technologies, person-centred treatment, arts-based research and interventions
- Need for a continuum and continuity of care, including a central role for mutual aid groups and individuals' lived experiences

How to support recovery?
CHIME-D (Leamy et al., 2011)

Connectedness Hope Identity Meaning Empowerment

Questions or contact!

Wouter.Vanderplasschen@ugent.be

Research cluster Recovery & Addiction

www.orthopedagogiek.ugent.be/en

UNIVERSITEIT GENT

FACULTEIT PSYCHOLOGIE EN PEDAGOGISCHE WETENSCHAPPEN