AOD Provider Collaborative

COUNTIES MANUKAU HEALTH

1C: A healthy lifestyles approach for people living with co-existing mental health and substance use problems

Professor Amanda Baker

ODYSSEY changing lives

THE UNIVERSITY OF AUCKLAND Te Whare Wānanga o Tāmaki Makaurau NEW ZEALAND

MEDICAL AND HEALTH SCIENCES CENTRE FOR ADDICTION RESEARCH

CHAMP Counties Manukau Mental Health and Addictions Partnership

A healthy lifestyles approach for people living with co-existing mental health and substance use problems

Amanda Baker PhD

NHMRC CENTRE OF RESEARCH EXCELLENCE
in MENTAL HEALTH and SUBSTANCE USE

Overview

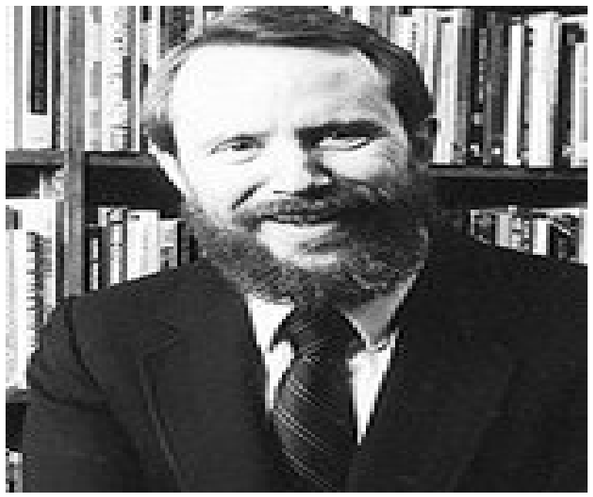
- History
- Co-existing MH /AOD – Treatment findings
- Why healthy lifestyles?
- Results from healthy lifestyles studies
- Recommendations for practice

Health Issues 1984

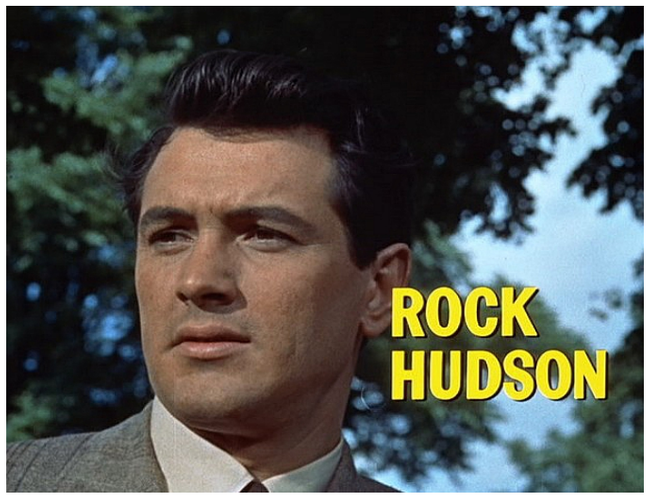
Deinstitutionalization

Severe mental illness

Motivational Interviewing

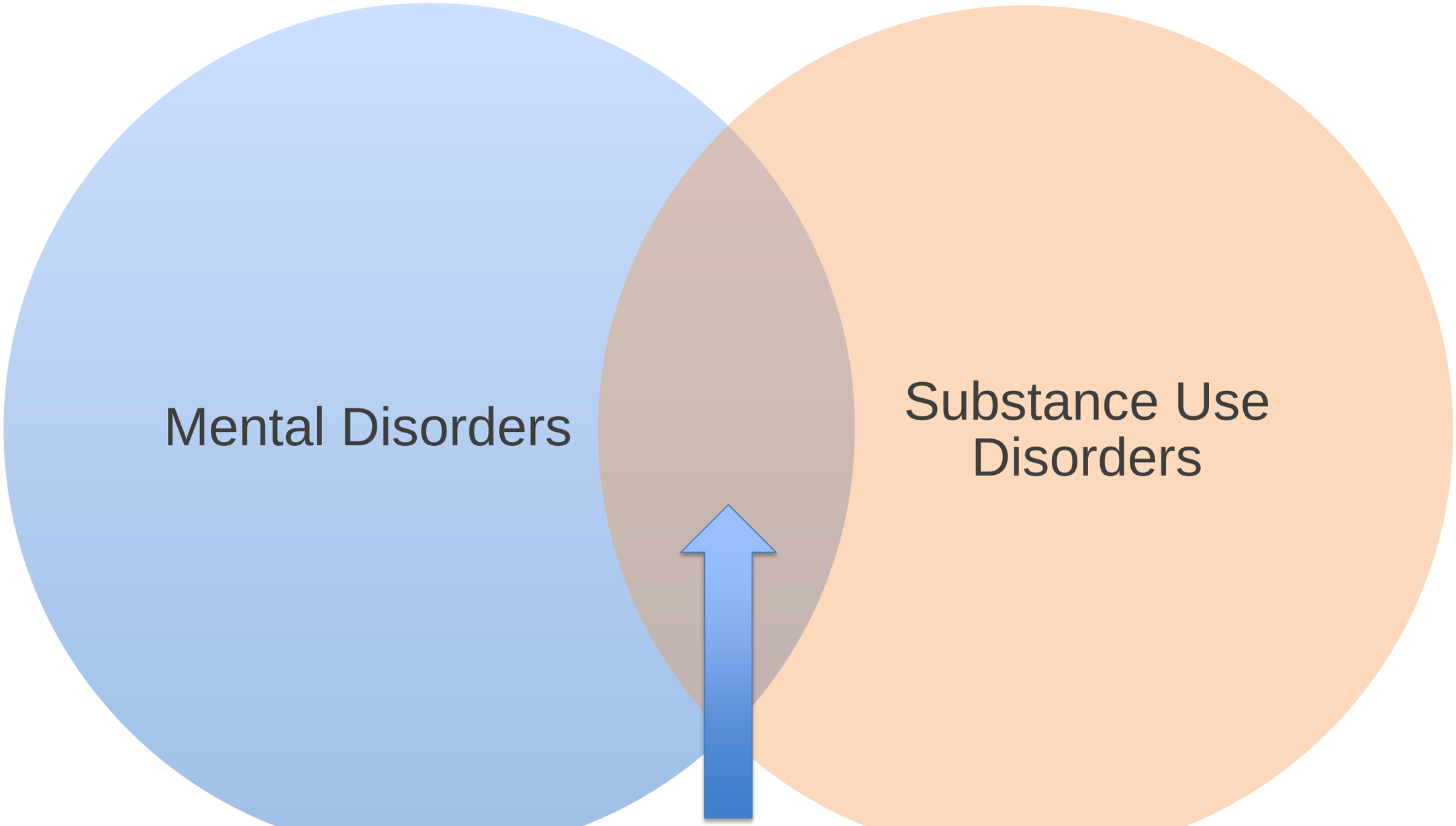


HIV epidemic & harm reduction

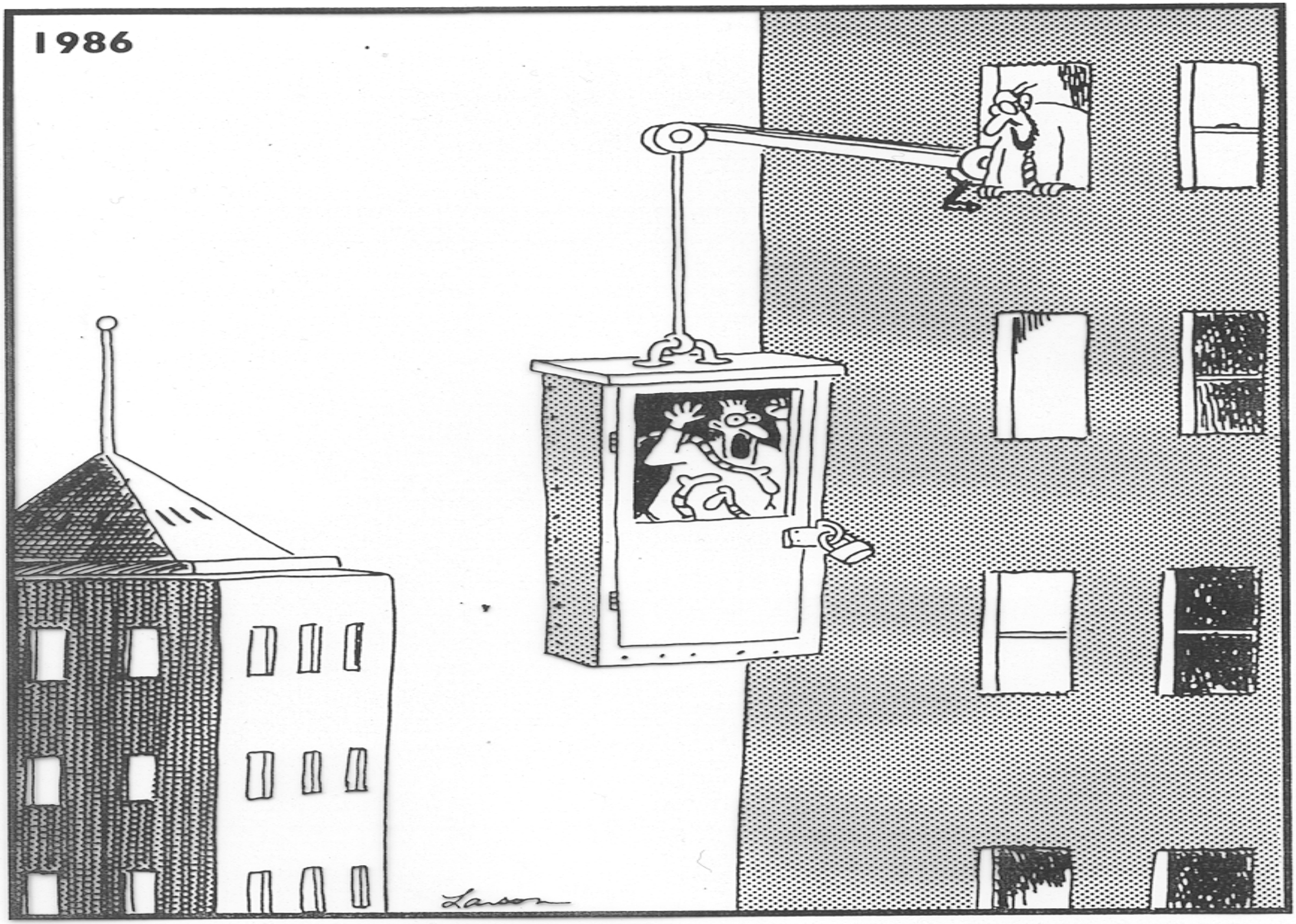


Treatment Silos

Dual Diagnosis 1990s



Dual Diagnosis



Professor Gallagher and his controversial technique of simultaneously confronting the fear of heights, snakes, and the dark.

Early Studies

People with mixed MH & AOD diagnoses

Acta Psychiatr Scand 2002: 106: 233–240
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ACTA PSYCHIATRICA SCANDINAVICA
ISSN 0001-690X

Motivational interviewing among psychiatric in-patients with substance use disorders

Baker A, Lewin T, Reichler H, Clancy R, Carr V, Garrett R, Sly K, Devir H, Terry M. Motivational interviewing among psychiatric in-patients with substance use disorders.
Acta Psychiatr Scand 2002: 106: 233–240. © Blackwell Munksgaard 2002.

Objective: There were three aims of the present study: 1) to document patterns of substance misuse among psychiatric in-patients with comorbid alcohol and other drug (AOD) use; 2) to examine associations among psychiatric and substance use diagnoses and readiness to change; and 3) to evaluate the effectiveness of an opportunistic motivational interview on engagement in a Specialist Substance Misuse Service (SSMS).
Method: One hundred and sixty subjects were randomly assigned to receive either a motivational interview or no intervention.
Results: Overall, 66.3% of subjects met intervention threshold for cannabis, 60.6% for alcohol and 22.5% for amphetamines. There was a bimodal distribution of stage of change for cannabis use which was associated with age, with precontemplation being associated with older age and less frequent use. Attendance at the SSMS was low and unrelated to intervention status.
Conclusion: A different approach to treatment is recommended, including early intervention among cannabis users.

Amanda Baker[1], Terry Lewin[1,2], Heidi Reichler[1], Richard Clancy[2], Vaughan Carr[1,2], Rachel Garrett[1], Ketrina Sly[1], Holly Devir[1], Margarett Terry[2]

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Key words: behaviour therapy; cognitive therapy; comorbidity; dual diagnosis; in-patients, schizophrenia; substance abuse

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People with SMI and using alcohol and/or other drugs

BRITISH JOURNAL OF PSYCHIATRY (2006), 188, 439–448

Cognitive–behavioural therapy for substance use disorders in people with psychotic disorders

Randomised controlled trial

AMANDA BAKER, SANDRA BUCCI, TERRY J. LEWIN, FRANCES KAY-LAMBKIN, PAUL M. CONSTABLE and VAUGHAN J. CARR

Addictive Behaviors 34 (2009) 852–858

Contents lists available at ScienceDirect

Addictive Behaviors

The long and the short of treatments for alcohol or cannabis misuse among people with severe mental disorders

Amanda Baker [a,*], Alyna Turner [a,1], Frances J. Kay-Lambkin [b,2], Terry J. Lewin [c,3]

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Journal of Substance Abuse Treatment 46 (2014) 281–290

Contents lists available at ScienceDirect

Journal of Substance Abuse Treatment

Regular articles

Randomized controlled trial of MICBT for co-existing alcohol misuse and depression: Outcomes to 36-months ☆

Amanda L. Baker, Ph.D. [a,*], David J. Kavanagh, Ph.D. [b], Frances J. Kay-Lambkin, Ph.D. [c], Sally A. Hunt, M.Psych. (Clin.) [a], Terry J. Lewin, B.Com. (Psych)Hons. [d], Vaughan J. Carr, M.D. [e], Patrick McElduff, Ph.D. [f]

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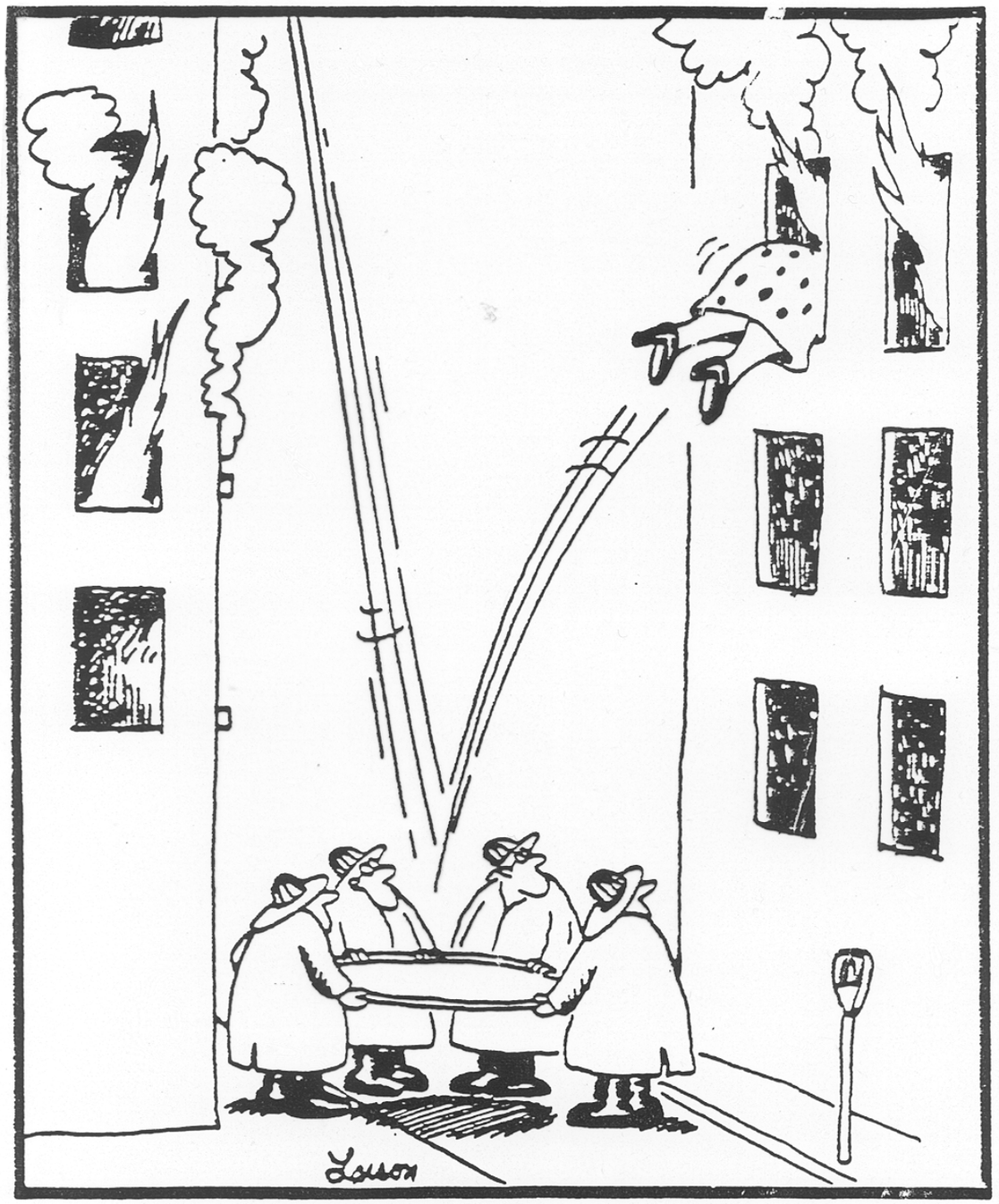
Treatment findings

- Large proportion of clients
- If undetected, can affect progress
- Screen, assess and treat MH / AOD
- Start with a brief integrated intervention and step up treatment, monitoring MH / AOD

Why has tobacco dependence been treated differently to other drug dependence in mental health or substance abuse settings?

Fears about worsening mental health symptoms & AOD use



Tobacco

- Less behavioural disturbance
- Fears of patients not coping/aggression
- NRT widely available

Hughes & Weiss (2005)

A Randomized Controlled Trial of a Smoking Cessation Intervention Among People With a Psychotic Disorder

Amanda Baker, Ph.D.

Robyn Richmond, Ph.D.

Melanie Haile, M.Psych.(Appl.)

Terry J. Lewin, B.Com.(Psych.) Hons.

Vaughan J. Carr, M.D., F.R.A.N.Z.C.P.

Rachel L. Taylor, M.Clin.Psych.

Sylvia Jansons, R.N.

Kay Wilhelm, M.D., F.R.A.N.Z.C.P.

Objective: Despite extremely high rates of smoking among individuals with psychotic disorders and the associated financial and health costs, few studies have investigated the efficacy of smoking cessation interventions among this group. The purpose of this study was to compare an integrated psychological and nicotine replacement therapy intervention for people with a psychotic disorder with routine care alone.

Method: The authors recruited 298 regular smokers with a psychotic disorder residing in the community and randomly assigned them to a routine care comparison condition (N=151) or an eight-session, individually administered smoking cessation intervention (N=147), which consisted of nicotine replacement therapy, motivational interviewing, and cognitive behavior therapy. Outcome variables included continuous and point-prevalence abstinence rates, smoking reduction status, and changes in symptoms and functioning.

Results: While there were no overall differences between the treatment group and comparison group in abstinence rates, a significantly higher proportion of smokers who completed all treatment sessions stopped smoking at each of the follow-up occasions (point-prevalence rates: 3 months, 30.0% versus 6.0%; 6 months, 18.6% versus 4.0%; and 12 months, 18.6% versus 6.6%). Smokers who completed all treatment sessions were also more likely to have achieved continuous abstinence at 3 months (21.4% versus 4.0%). There was a strong dose-response relationship between treatment session attendance and smoking reduction status, with one-half of those who completed the intervention program achieving a 50% or greater reduction in daily cigarette consumption across the follow-ups, relative to less than one-fifth of the comparison subjects. There was no evidence of any associated deterioration in symptoms or functioning.

Conclusions: These findings demonstrate the utility of a nicotine replacement therapy plus motivational interviewing/cognitive behavior therapy smoking cessation intervention among individuals with a psychotic disorder. Further development of more efficacious interventions is required for those who do not respond to existing interventions.

(Am J Psychiatry 2006; 163:1934–1942)

“A national disgrace”

National Mental Health Commission. A Contributing Life, the 2012 National Report Card on Mental Health and Suicide Prevention (2012)

- Life expectancy shorter
- Cardiovascular disease: single largest cause of the death

Leading causes of death

(AIHW 2012)

Men	%	Women	%
CHD	16.7	CHD	15.3
Lung cancer	6.6	Stroke	9.8
Stroke	6.2	Dementia	8.0
Respiratory	4.4	Lung cancer	4.4
Prostate cancer	4.3	Breast cancer	4.1

Unhealthy behaviours and leading preventable causes of death

(AIHW 2012)

Disease	Behaviour	Biomedical
CHD/ stroke	Smoking, Inactivity, Alcohol, Diet	Obesity, high BP, Cholesterol
Cancers	Smoking, Inactivity, Alcohol, Diet	Obesity
Respiratory	Smoking	

Health behaviours & health protection

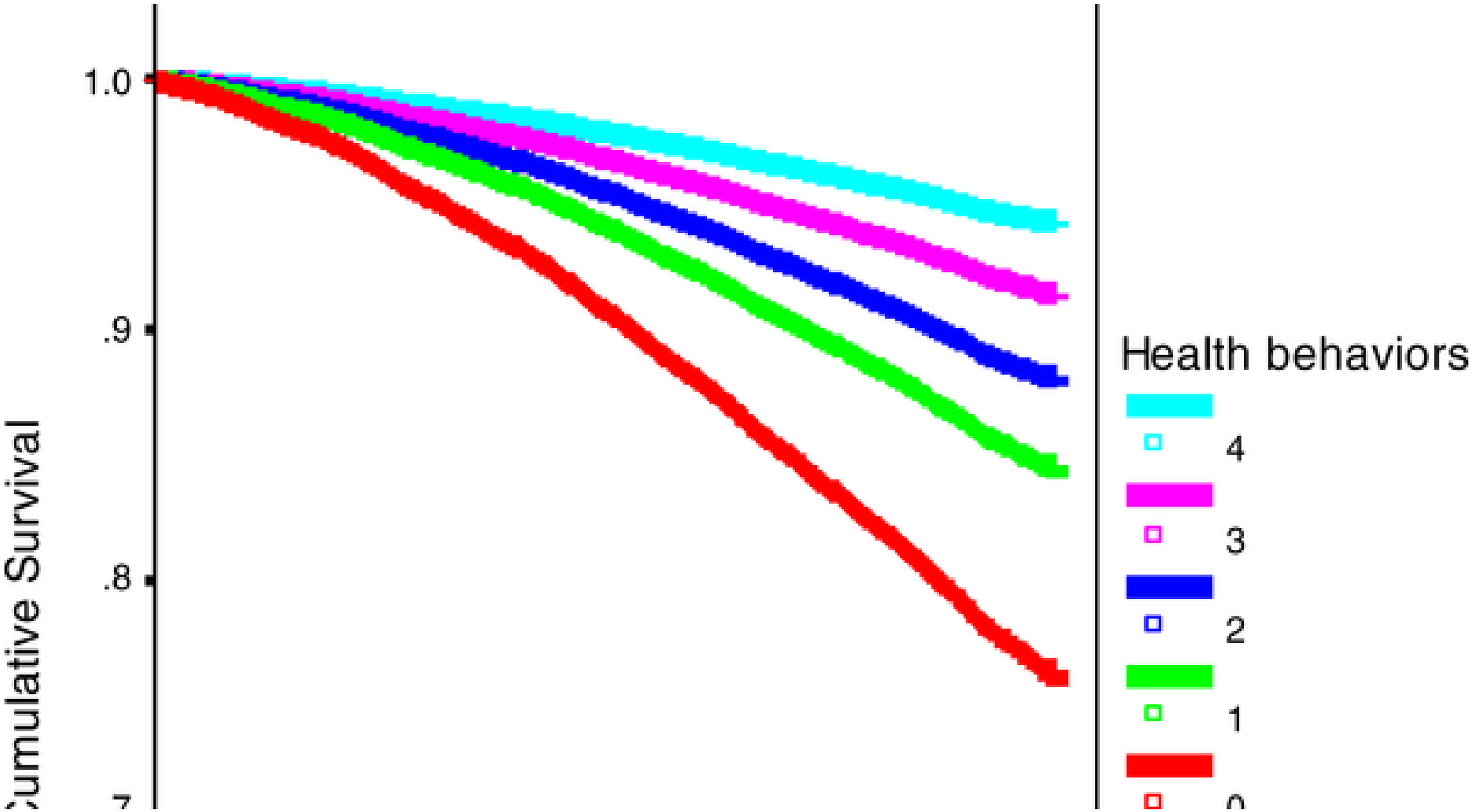
(Khaw et al 2008)

Health Behaviour	How Scored
Smoking habit	Nonsmoker = 1
Fruit and vegetable intake	Five servings or more daily as indicated by blood vitamin C = ≥50 nmol/l = 1
Alcohol intake	One or more, but less than 14 units, a week = 1. One unit = approximately 8 g of alcohol; i.e., one glass of wine, one small glass of sherry, one single shot of spirits, or one half pint of beer
Physical activity	Not inactive = 1; i.e., if sedentary occupation, at least half an hour of leisure time activity a day; e.g., cycling, swimming; or else a nonsedentary occupation with or without leisure-time activity

doi:10.1371/journal.pmed.0050012.t001

Health score of 0 vs 4 = 14 year difference in chronological age for mortality risk

(Khaw et al 2008)



CVD risk behaviours in people with psychosis vs general population

(Morgan et al, 2012; AIHW 2012)

Behaviour	Psychosis	General
Smoking	72% men 59% women	18% men 15% women
Alcohol use disorder (lifetime)	59% men 38% women	35% men 14% women
Insufficient physical activity	97%	62%
Insufficient fruit & vegetables	100%	94%

Nicotine & Tobacco Research Advance Access published April 1, 2015

Nicotine & Tobacco Research, 2015, 1–9
doi:10.1093/ntr/ntv039
Original Investigation

Original Investigation

Randomized Controlled Trial of a Healthy Lifestyle Intervention Among Smokers With Psychotic Disorders

Amanda L. Baker PhD[1], Robyn Richmond PhD[2], Frances J. Kay-Lambkin PhD[1,3], Sacha L. Filia BSc(Hons)[4], David Castle MD[5], Jill M. Williams MD[6], Terry J. Lewin BCom(Psych)Hons[1,7], Vanessa Clark BPsych Hons[1], Robin Callister PhD[8], Natasha Weaver PhD[9]

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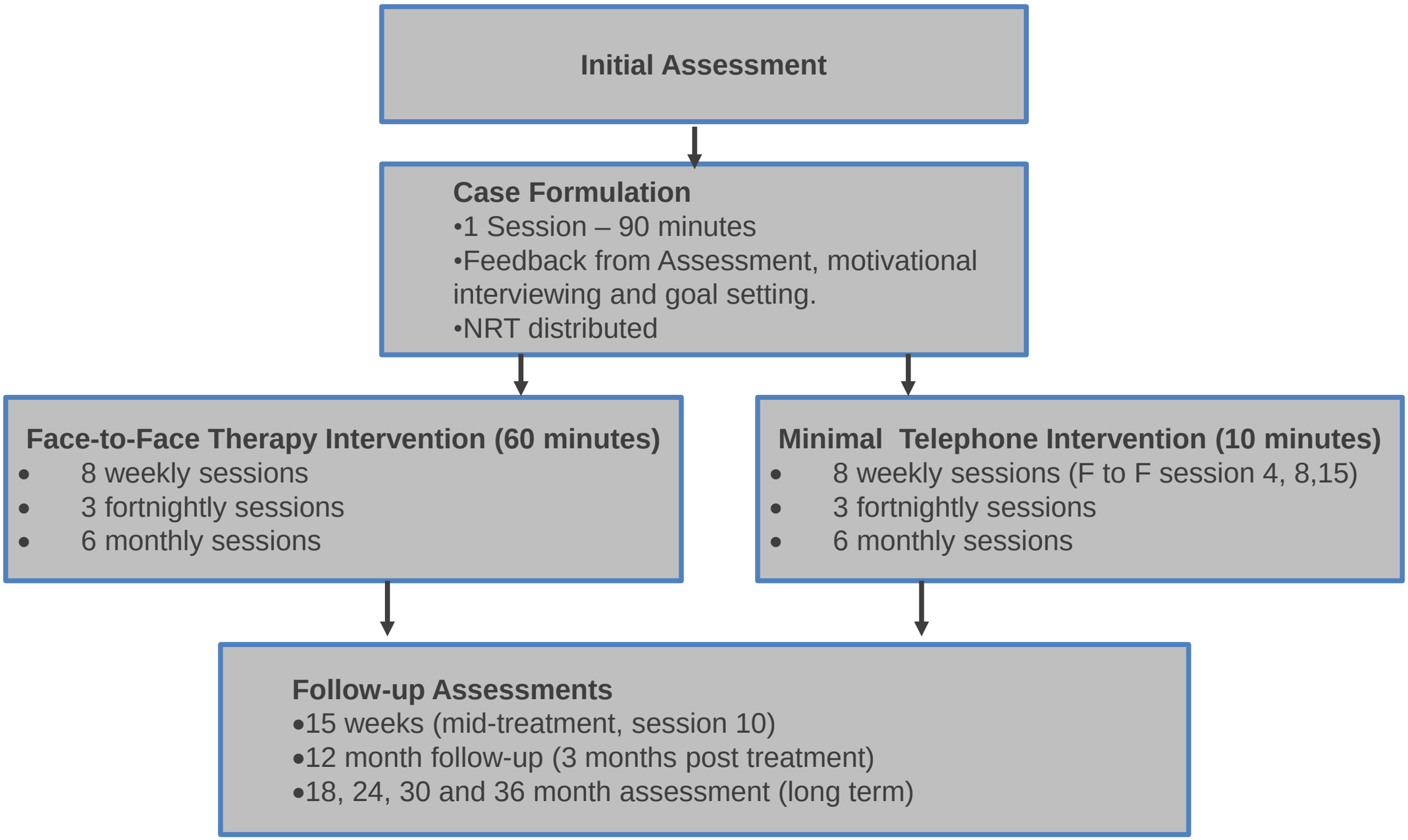
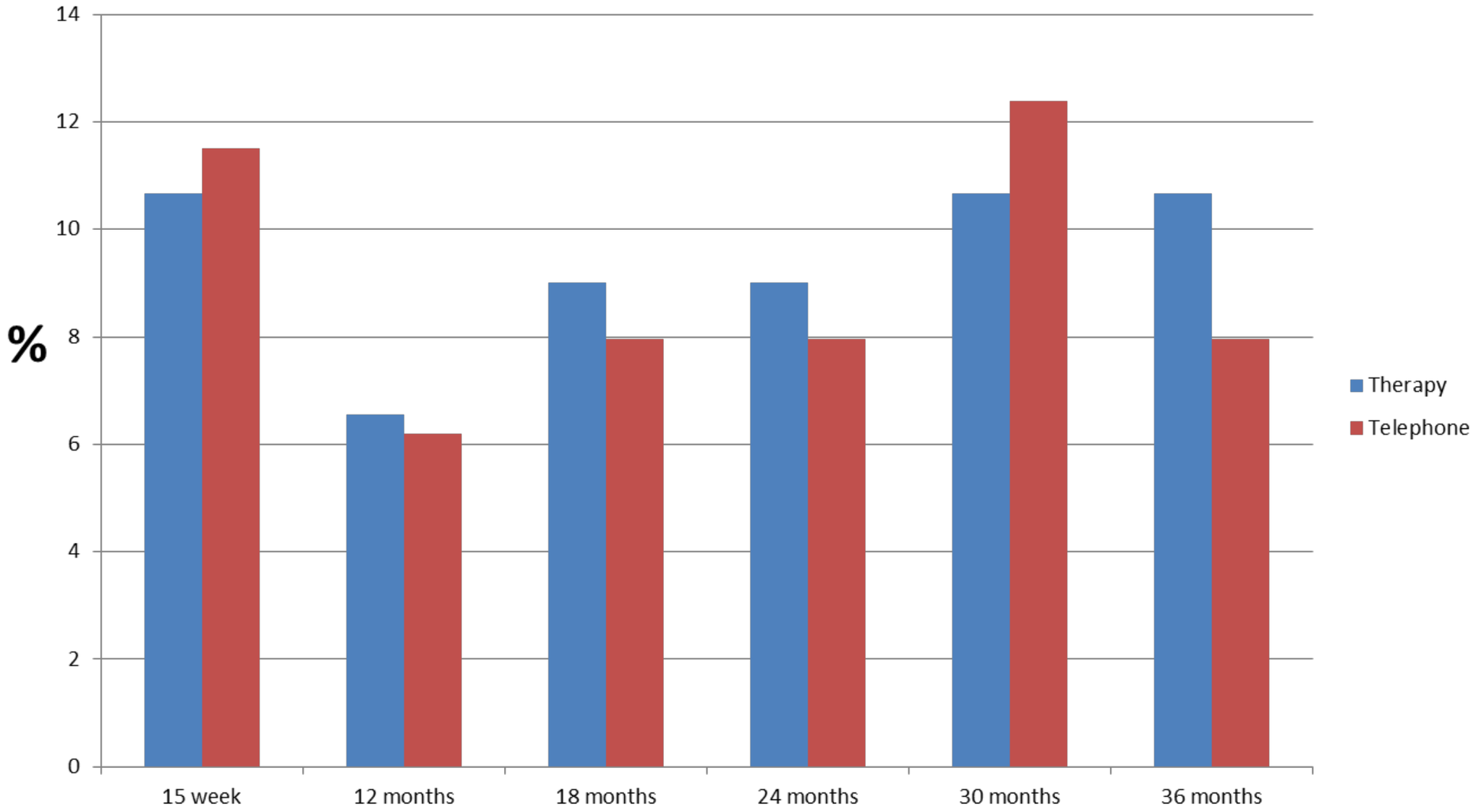
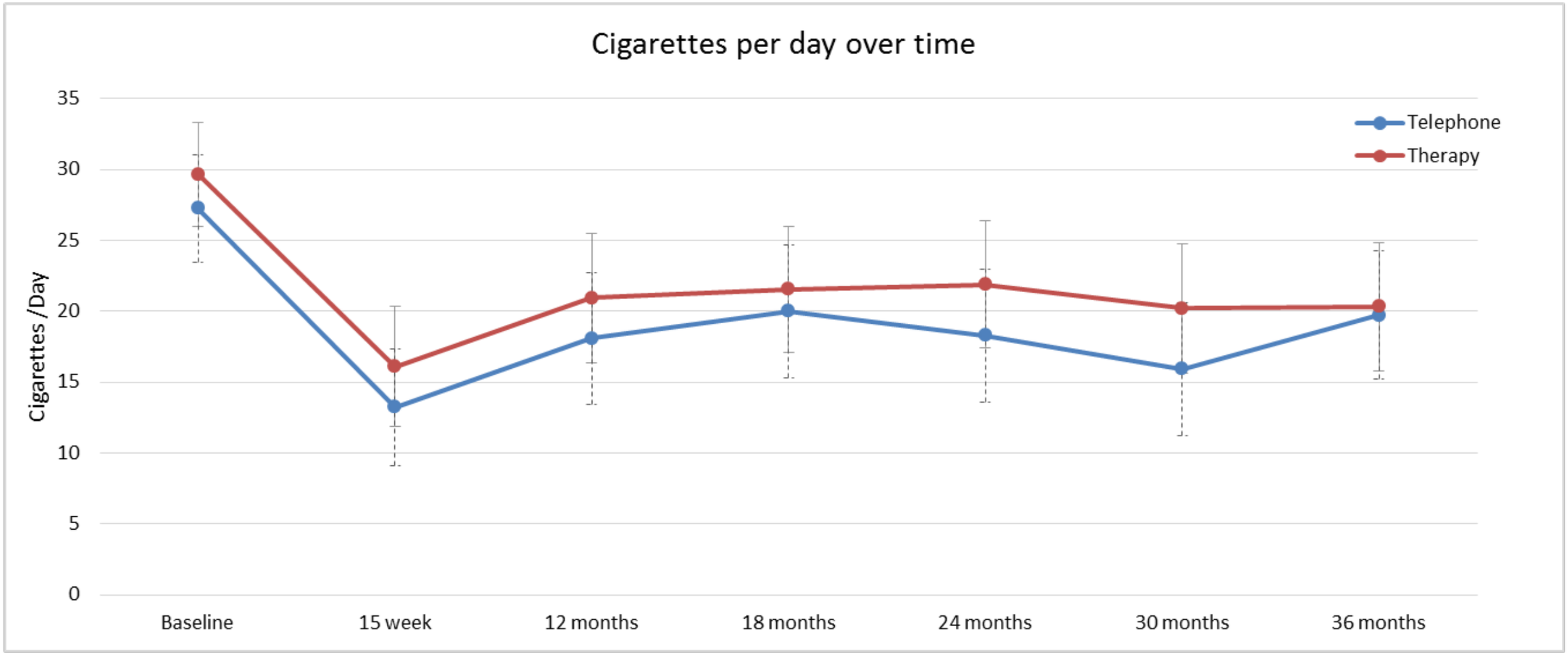
Healthy Lifestyles Methodology (N=235)



Results: Point prevalence abstinence

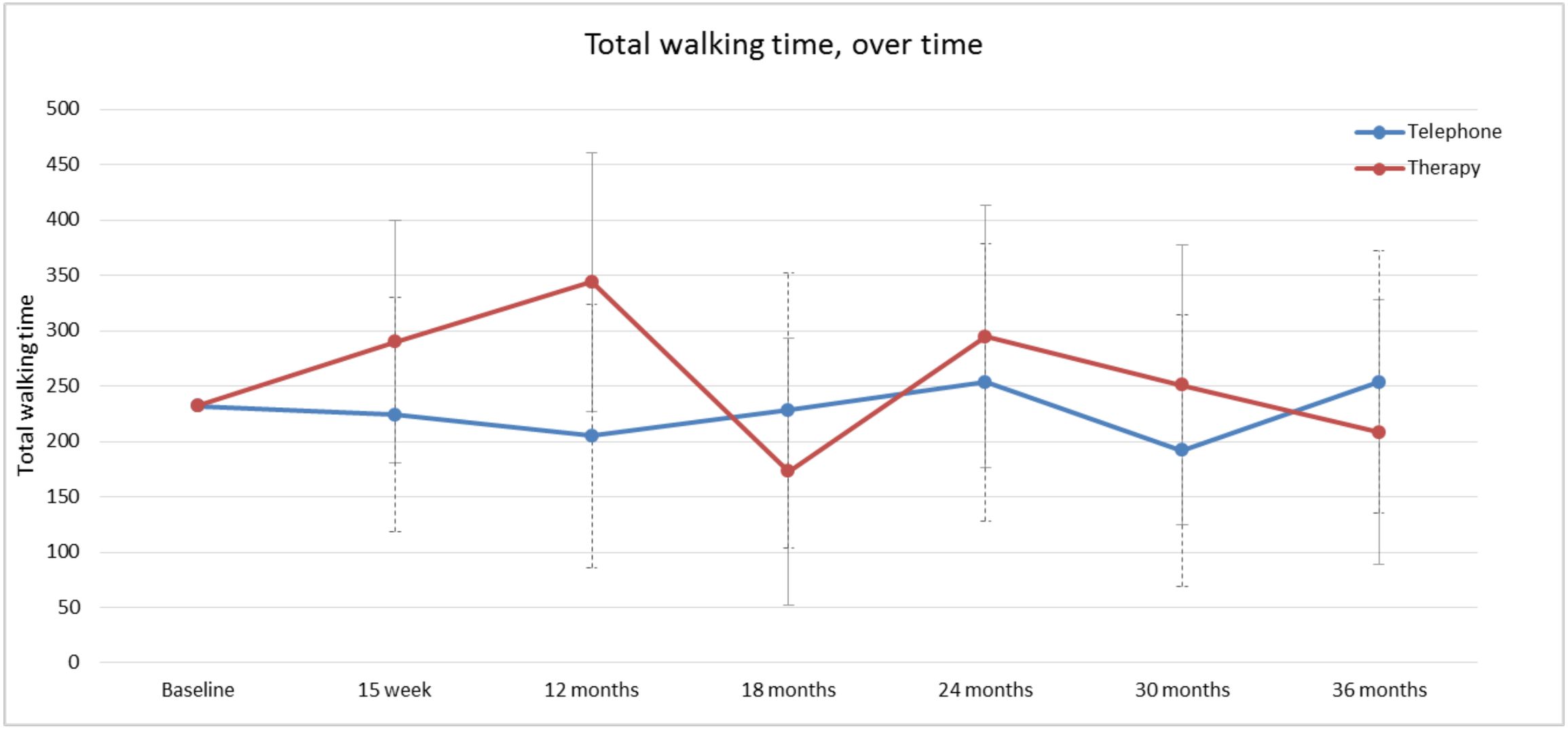


Results: Cigarettes per day
(change from baseline, p<.001)

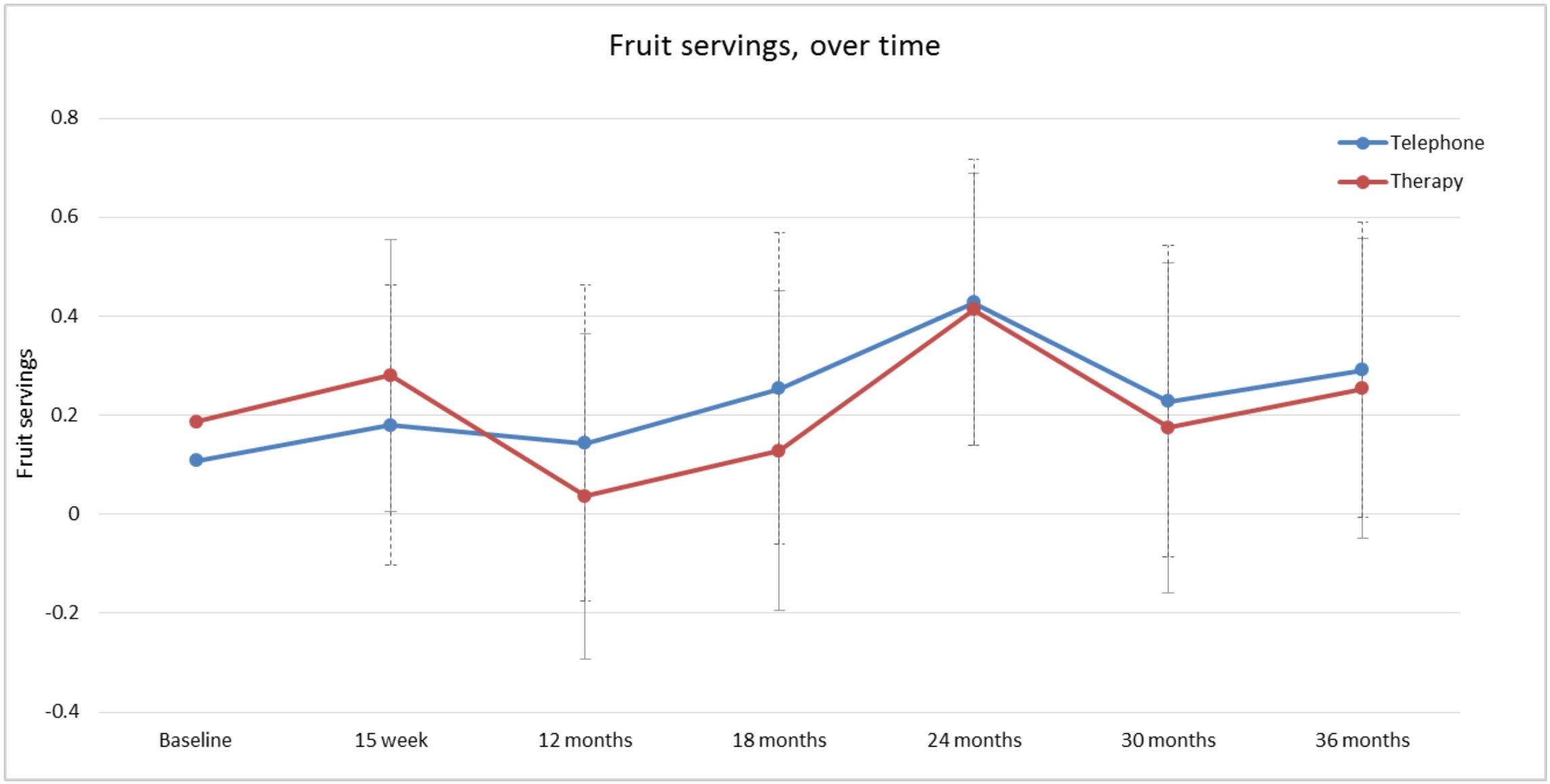


Minutes walking per week

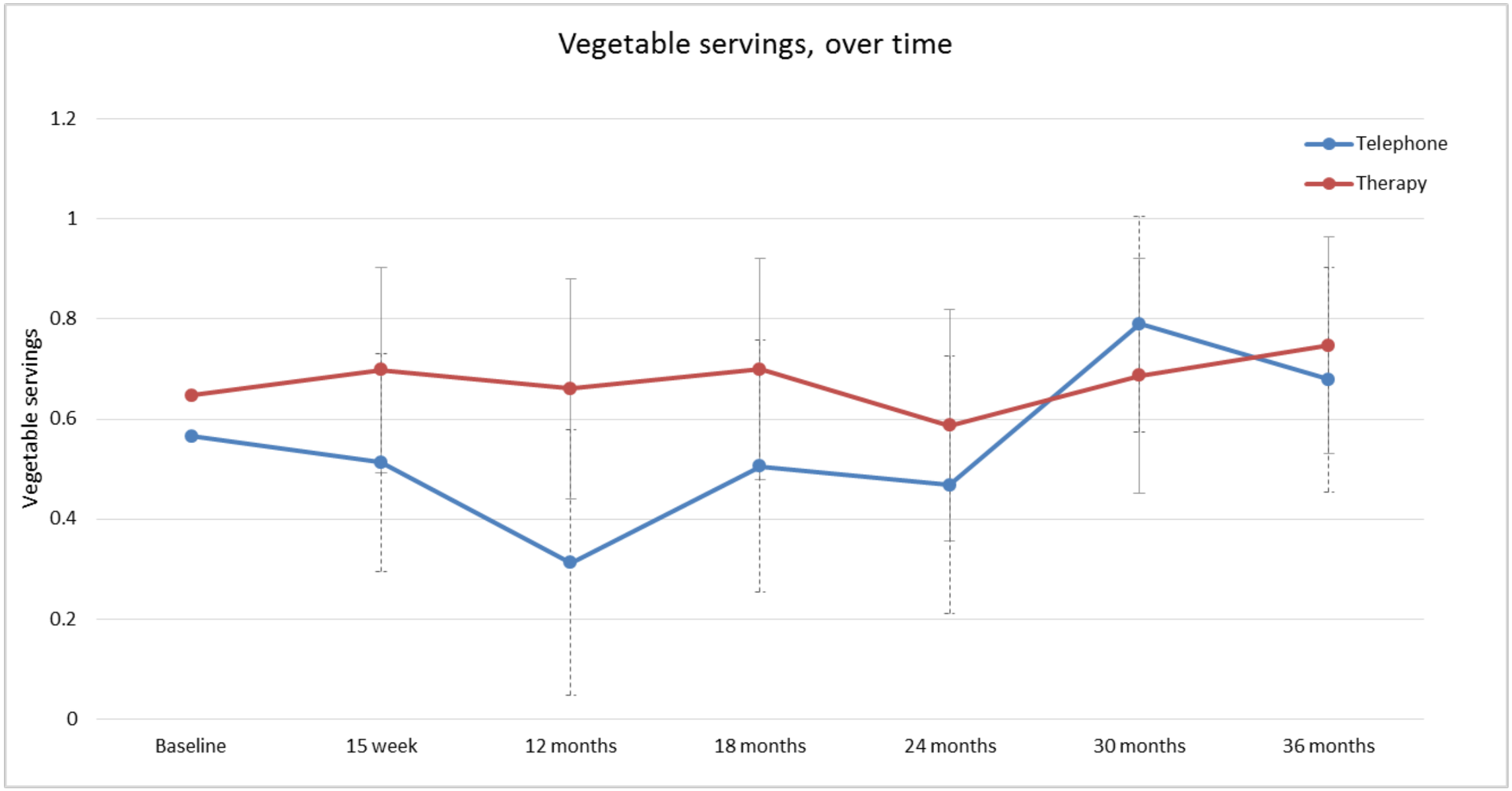
(p=0.02 Therapy vs Phone 12 m)



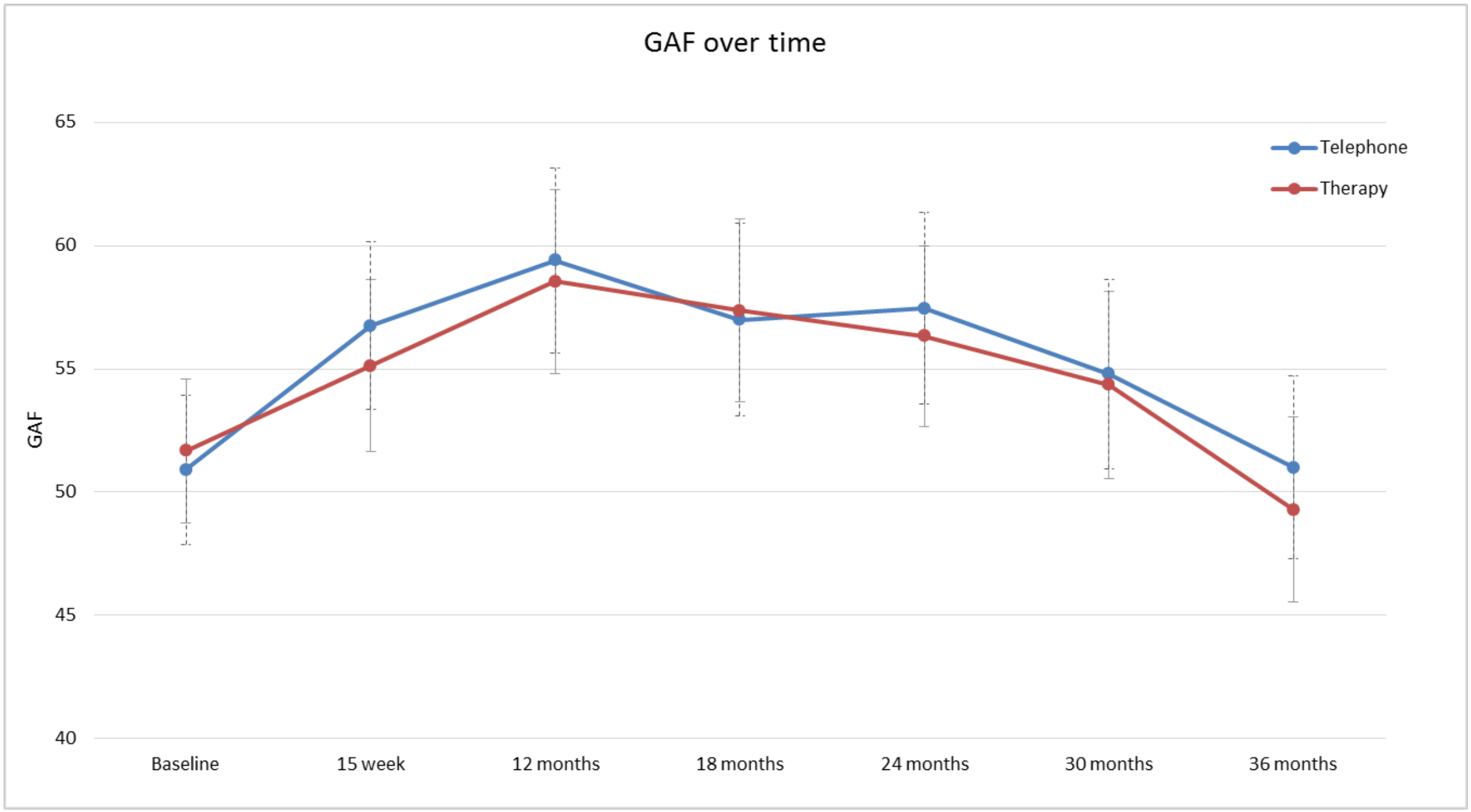
Serves of fruit per day



Serves of vegetables per day



GAF Score


GAF over time
65
60
55
50
45
40
GAF
Telephone
Therapy
Baseline
15 week
12 months
18 months
24 months
30 months
36 months

CVD Risk Score

- Significant improvement both conditions overall time points

Psychiatric Symptomatology

- Significant decrease on BDI-II, no worsening on BPRS

ORIGINAL INVESTIGATION

Multiple Behavior Changes in Diet and Activity

A Randomized Controlled Trial Using Mobile Technology

Bonnie Spring, PhD; Kristin Schneider, PhD; H. Gene McFadden, BS; Jocelyn Vaughn, MA; Andrea T. Kozak, PhD; Malaina Smith, BA; Arlen C. Moller, PhD; Leonard H. Epstein, PhD; Andrew DeMott, BA; Donald Hedeker, PhD; Juned Siddique, DrPH; Donald M. Lloyd-Jones, MD

Arch Intern Med. 2012;172(10):789-796

Decrease Fat Increase Walking	Decrease Fat Decrease Sitting
Increase F&V Increase Walking	Increase F&V Decrease Sitting *p<.001*

- **F&V + leisure screen time:**
  - Increased F&V (1.2 to 5.5 serves)
  - Decreased leisure screen time (219 to 89 mins)
  - Decreased saturated fat intake (12% to 9.5% total energy)

Contents lists available at ScienceDirect

Psychiatry Research

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

'Better Health Choices' by telephone: A feasibility trial of improving diet and physical activity in people diagnosed with psychotic disorders

Amanda L. Baker [a,*], Alyna Turner [a,b,c], Peter J. Kelly [d], Bonnie Spring [e], Robin Callister [f], Clare E. Collins [f], Kathryn L. Woodcock [a,g], Frances J. Kay-Lambkin [a,g], Holly Devir [a], Terry J. Lewin [a,h]

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Keywords:
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Fruit
Vegetables

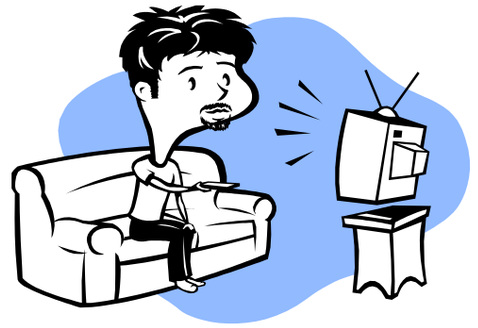
ABSTRACT

The study objective was to evaluate the feasibility of a telephone delivered intervention consisting of motivational interviewing and cognitive behavioural strategies aimed at improving diet and physical activity in people diagnosed with psychotic disorders. Twenty participants diagnosed with a non-acute psychotic disorder were recruited. The intervention consisted of eight telephone delivered sessions targeting fruit and vegetable (F&V) consumption and leisure screen time, as well as smoking and alcohol use (as appropriate). F&V frequency and variety, and overall diet quality (measured by the Australian Recommended Food Score, ARFS), leisure screen time, overall sitting and walking time, smoking, alcohol consumption, mood, quality of life, and global functioning were examined before and 4-weeks post-treatment. Nineteen participants (95%) completed all intervention sessions, and 17 (85%) completed follow-up assessments. Significant increases from baseline to post-treatment were seen in ARFS fruit, vegetable and overall diet quality scores, quality of

Better Health Choices

- Telephone delivered
- 8 sessions (weekly or twice a week)
- Session 1 = 1 hour; sessions 2-8 = 15-30 min
- Targets F&V and leisure screen time
- Can target smoking and/or alcohol use
- Motivational interviewing approach
- Resources manual & F&V pack sent out at start

Primary Outcomes (*n*=17)



Measures	Pre-treatment M (SD)	Post-treatment M (SD)	P-value
Fruit consumption (ARFS)	5.1 (3.1)	6.6 (2.9)	.008
Vegetable consumption (ARFS)	12.2 (4.0)	13.5 (3.5)	.018
Screen time (min/day)	298 (200)	163 (107)	.007

Secondary Outcomes (*n*=17)

Measures	Pre-treatment M (SD)	Post-treatment M (SD)	P-value
Diet Quality (ARFS)	33.2 (10.5)	38.2 (8.1)	.001
Weekday sitting (min/day)	555 (191)	412 (211)	.008
Walking (min/week)	252 (353)	356 (470)	.099
Cigarettes/day (n=5)	29.0 (10.3)	13.2 (14.3)	.082
Cannabis use/day (n=3)	16.2 (18.3)	4.0 (6.9)	.220
Depression	4.5 (3.3)	3.7 (2.8)	.149
Quality of life	25.6 (5.6)	28.4 (6.6)	.017
Global Functioning	57.1	62.6	.008

Limitations of BHC study

- **Limitations**
  - Non-controlled study with small sample
  - Short follow-up time period
  - Self-report measures

- **Future directions**
  - RCT
  - Delivery by other professionals/ consumers

Peer Delivered Better Health Choices – Pilot RCT (Kelly et al)

- Trained peer workers
- Also address smoking and alcohol
- 31 people completed so far (18 = tx, 13 = control)
- 14/18 completed all 8-sessions

Pilot RCT

- Client Satisfaction Questionnaire
  - indicates treatment satisfaction is high
    - (M = 27.5 out of a possible 32)

- Overall satisfaction with the program
  - ‘mostly satisfied’ (29%) or ‘very satisfied’ (71%)

Early smoking outcomes from a stepped wedge RCT of a healthy lifestyle intervention in residential substance abuse treatment

Peter J. Kelly, Amanda L. Baker, Frank P. Deane, Robin Callister, Clare Collins, Isabella Ingram, Camilla Townsend & Jessica Hazleton

UNIVERSITY OF WOLLONGONG AUSTRALIA

This research was funded by:

Research conducted in partnership

Risk Behaviours

Kelly, Baker, Kay-Lambkin, Deane & Bonevski, 2012

Healthy Recovery

8 session group based program

Designed for substance abuse populations

<u>Program Goals</u>

Reduce smoking

Increase physical activity

Improve diet

Healthy Recovery

Components of the intervention

Education and rationale

Group based motivational interviewing

Goal setting and monitoring

Contingency management (smoking)

Nicotine replacement therapy

Methods

Participants (N = 172)

- Attending The Salvation Army Recovery Service Centres
- 74% males, average age = 38 years, 72% alcohol problems
- All participants were smokers

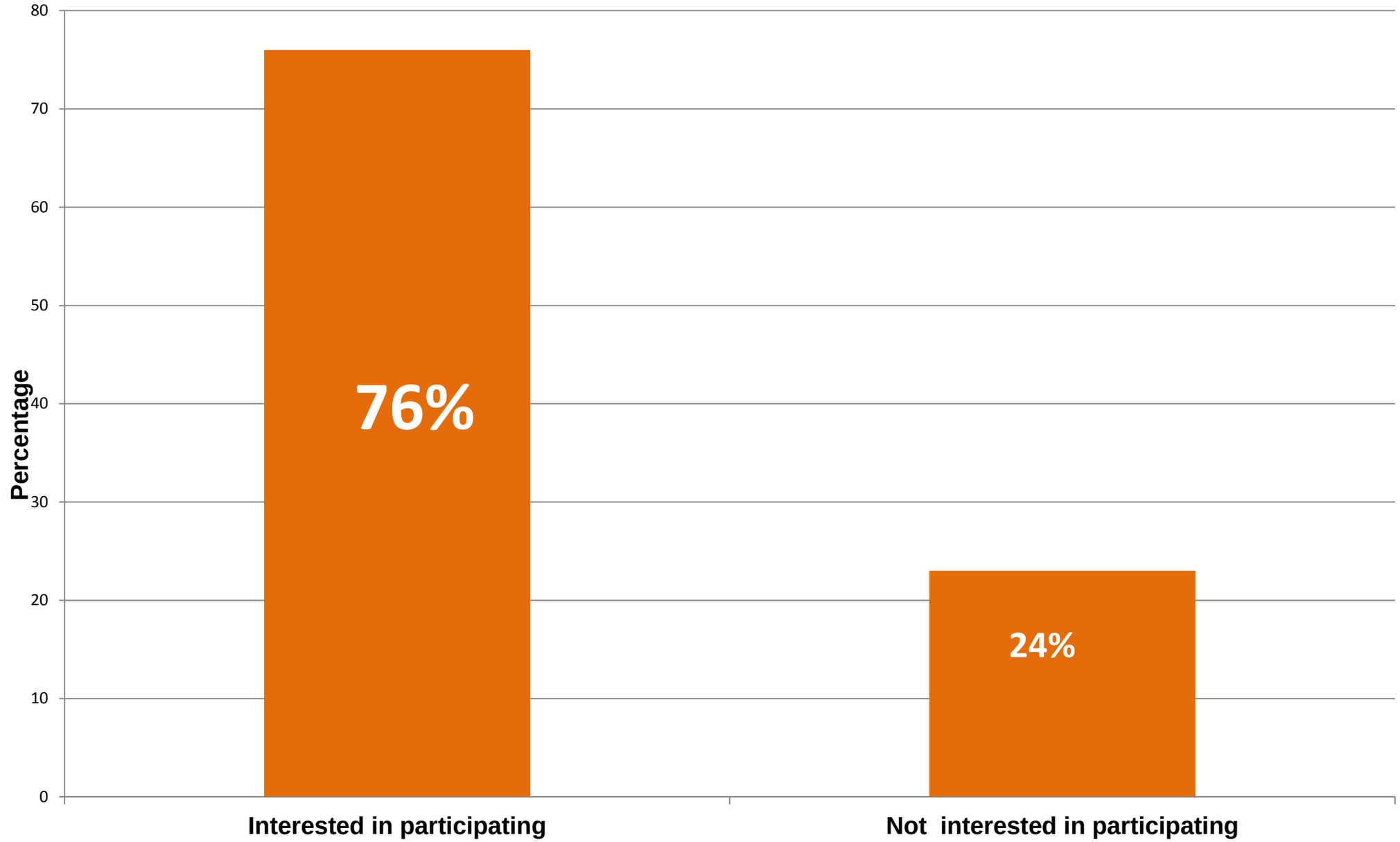
Design

- Stepped wedge randomized controlled trial
- Intention to treat analysis

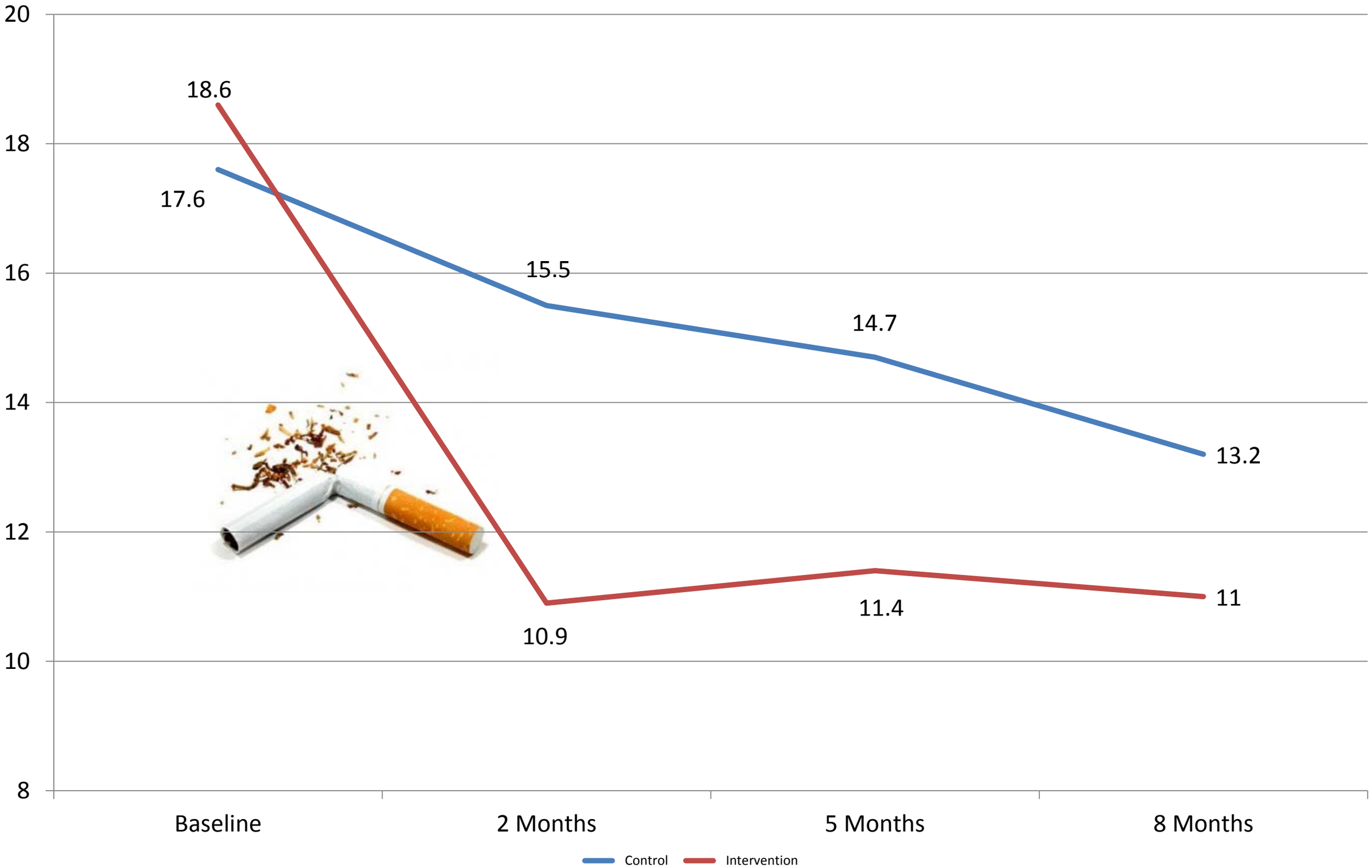
Procedure

- 5-week group program delivered
- Researcher + drug/alcohol workers co-facilitated the groups

Eligible participants interested in participating



Average daily cigarettes smoked



Quit Rates at Follow-up

	2-months	5-months	8-months
Control	2%	6%	8%
Healthy Recovery	**18%**	**12%**	**15%**

Use of Nicotine Replacement Therapy (NRT)

	2-months	5-months	8-months
Control	21%	19%	26%
Healthy Recovery	**60%**	**45%**	**29%**

Healthy Recovery

- **Healthy Recovery**
  - Significantly better reductions in smoking
  - Trend for better quit rates

- **Self efficacy mediates reductions on smoking**

- **Challenge is to embed these types of programs as part of routine care**

Conclusions

- MH / PH
- Health behaviours cluster together
- We can help people to work on a few behaviours at a time if they want to
- Allows flexibility, success over time

THANK YOU

Newcastle, Australia

AOD Provider Collaborative

COUNTIES MANUKAU HEALTH

Thank you

ODYSSEY changing lives

THE UNIVERSITY OF AUCKLAND Te Whare Wānanga o Tāmaki Makaurau NEW ZEALAND

MEDICAL AND HEALTH SCIENCES CENTRE FOR ADDICTION RESEARCH

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Mental Health and Addictions Research Symposium 2016