

Adherence to blended smoking cessation treatment



Lutz Siemer

Research group Technology, Health & Care

Step up to Saxion saxion.edu



Consortium RookvrijLeven

- Technology, Health & Care Lectorate, Saxion University of Applied Sciences
- Department of Psychology, Health & Technology; University of Twente
- Department of Pulmonary Medicine; Medical Spectrum Twente
- Department Online Treatment and Prevention; Tactus Addiction Treatment







UNIVERSITY OF TWENTE.



Introduction

- Smoking cessation can significantly reduce the risk of developing smoking-related diseases
- Several face-to-face methods are proven effective (Fiore, Jaén, Baker, & al., 2008).
- Internet-based interventions can be helpful especially if the information is appropriately tailored to the user (Civljak, Sheikh, Stead, & Car, 2010)
- Can blended treatment be "the best of both worlds"?
- Little is known about adherence to blended treatment



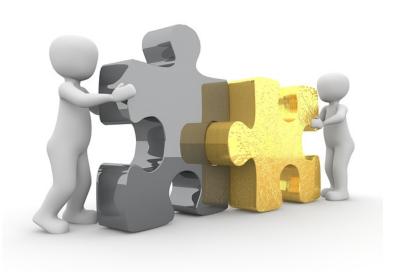
Questions

- Is our method of measuring adherence to Blended Smoking Cessation Treatment (BSCT) adequate?
- What is an adequate level of adherence (threshold)?
- How is the adherence to BSCT?
- What predicts adherence to BSCT?



Definition: Blended smoking cessation treatment (BSCT)

... a combination of faceto-face treatment with internet sessions into one integrated smoking cessation treatment which can be delivered in routine care settings





Blended Smoking Cessation Treatment

	Week	Session	Mode of delivery
1	1	Goal setting	Face-to-face
2	3	Measures for self-control	Web
3	5	Dealing with withdrawal	Face-to-face
4	7	Breaking habits	Web
5	9	Dealing with tempters	Face-to-face
6	11	Food for thought	Web
7	14	Think differently	Face-to-face
8	18	Do differently	Web
9	22	Action plan	Face-to-face
10	26	Closure	Web



Web-based session at Rokendebaas.nl

Je hulpverlener: Lutz Siemer test_test



Doel s	Doel stellen Minimaliseren Sluiten					
		Print deze opdracht				
2	Einddoel Wil je een stopdatum vaststellen? Nee Ja Ik ben rookvrij vanaf: 1-3-2016	Mijn volgende stap naar mijn einddoel De volgende activiteiten doe ik in het vervolg rookvrij: 1. nie tmeer in huis roken 2				
+	Vorige	① ② ③ ④ ⑤ ⑥				



Definition: Adherence

- Problems in context of counselling:
 - premature termination of the treatment
 - failures to complete between session tasks and exercises







Definition: predictors

... patients' characteristics that correlate with the expected outcome (adherence)



(vs. determinants =
causal relation)





Known predictors to adherence in smoking cessation treatment

- Early abstinence success
- Older age
- Less heavy smoking
- Active drug treatment
- Higher education







Study subjects

- Patients of the Stoppen met Roken poli (RookvrijLeven study)
- n=75 adherence analysis
- n=29 adherence and quitting





Data collection

- Predictors: intake measurement (online questionnaires)
- Quitting: 3- and 6-months follow-up online questionnaires
- Adherence: data from xCare, DSV and rokendebaas.nl
 - Selecting 18 activities to trace patients
 adherence over the course of the treatment





Results: "measuring right?"

Dose-response relationship between adherence and quitting

	Average numbe		
	adherence		
	Quitter	Smoker	p-value
3 months (n=25)	12.5	9.6	0.08
6 months (n=17)	14.4	9.6	0.03



Results: "threshold?"

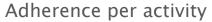
Patients self-reporting abstinence at six months after treatment start (n=17) were adherent to at least 11 (61%) of the 18 activities of BSCT.

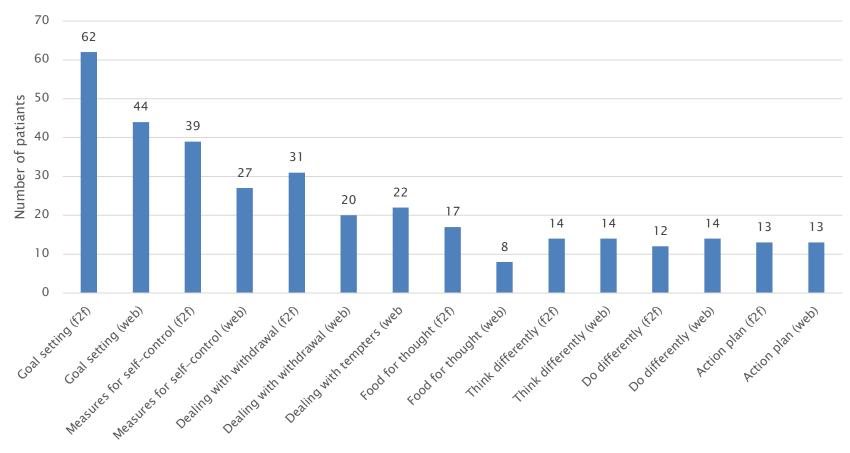
Because BSCT is built on a 50%-50% relation for both modes of delivery, a 60% threshold was applied to detect adherent patients.



Results: adherence to BSCT

Adherence over the course of the treatment (n=75)









Results: adherence to BSCT

Adherence based on the threshold (60%) (n=75)

		web-based		
		adherent	non-adherent	total
Face-to-face	adherent	14 (18%)	5 (7%)	19 (25%)
	non-adherent	3 (5%)	53 (70%)	56 (75%)
	total	17 (23%)	58 (77%)	75 (100%)



Predictors in BSCT (online questionnaire)

- sex
- age
- Marital status
- Housing situation
- Education status
- Main income
- Main day activity
- Internet skills
- Reason to start treatment
- Dependency
- Attitude neg
- Attitude pos
- Self-efficacy
- Readiness to quit
- Earlier quit attempts
- Social support
- · Social modeling

- · Medication in general
- Medication addiction
- Medication psychic
- Medication physical
- Medication others
- Health complaints
- Health + smoking related complaints
- Depression
- Anxiety
- Stress
- DASS total
- Quality of life
- Quality of life (VAS)







Results: predictors adherence to BSCT

- Univariately associated with adherence (p<0.15) were
 - Sex (men more adherent)
 - marital status ("with partner" more adherent)
 - main income ("own income" more adherent than "income support")
 - social modelling ("non-smoking friends" more adherent)
 - use of alcohol, use of other medication, ("less alcohol/medication" more adherent)
 - health complaints, smoking related complaints, and health and smoking related complaints ("less complaints" more adherent)
- <u>Marital status</u> and <u>social modelling</u> were the best independent predictors
 - Patients not having a partner had <u>11-times lower odds</u> of being adherent (OR=0.09; CI: 0.01-0.75; p=0.03).
 - For social modeling graded from 0 (=partner and friends are not smoking) to 8 (=both partner and nearly all friends are smoking) each unit increase was associated with <u>28% lower odds</u> of being adherent (OR=0.72; CI: 0.55-0.94; p=0.02).



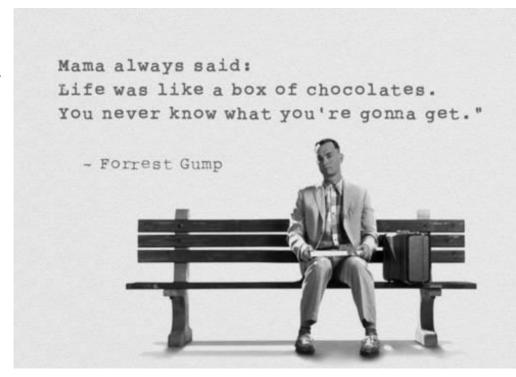
Take-home-messages

In a nutshell:

- Adhere to 60% of the treatment (making it to session 6) and your are "over the hump"!
- Do not live alone when you want to stop smoking!
- Look for non-smoking friends!

Question

 Is this specific for blended treatment or does this apply for cessation treatment in general?





THE END

Questions?

Comments?

Contact

Lutz Siemer

Research Group Technology, Health & Care

Saxion University of Applied Sciences

l.siemer@saxion.nl

