





# RELAPSE CURVE IN A GROUP OF SMOKERS WHO SEEK PSYCHOLOGICAL TREATMENT FOR SMOKING CESSATION ACCORDING TO GENDER

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✓ Smoking is the leading preventable cause of morbidity and mortality worldwide

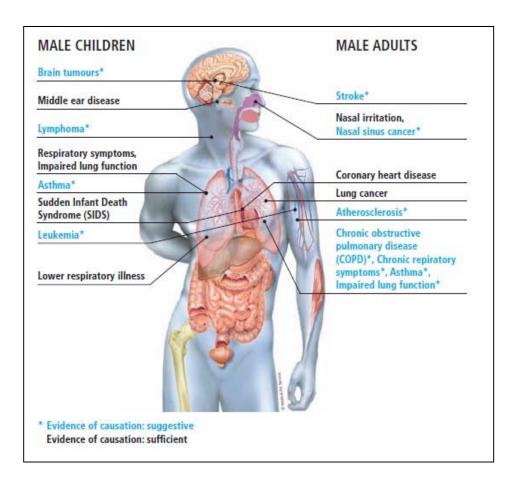
✓ 5.000.000 people die in the world each year

due to tobacco use



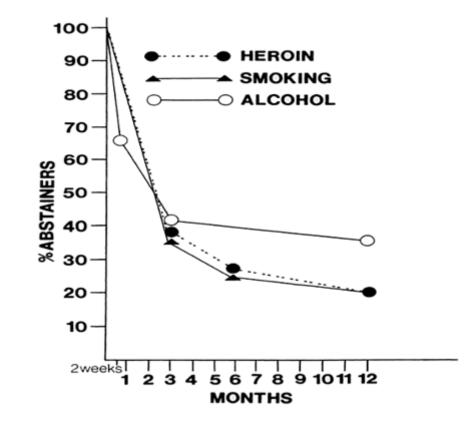
✓ Smoking is related to physical health

problems



- ✓ 70% of people who quit smoking relapse within 3 months
- ✓ 80%-85% of all attempts end in relapse within 1 year
- ✓ The risk of relapse remains at 10% yearly even after 30 years of abstinence

RELAPSE CURVE (Hunt, Barnett, & Branch, 1974)



- ✓ 84 separate smoking treatment studies
- ✓ About two thirds of all relapses occurred within the first 90 days following treatment

### WHY DO SMOKERS RELAPSE?

Shiffman et al. (1985): Shiffman (1989):

- > Meal time
- > Alcohol
- ➤ Negative affect
- > Social situations
- > Boredom
- > Possitive affect
- Substitute of food

> Emotional disorder

- Working
- Social occasions
- > Relaxation

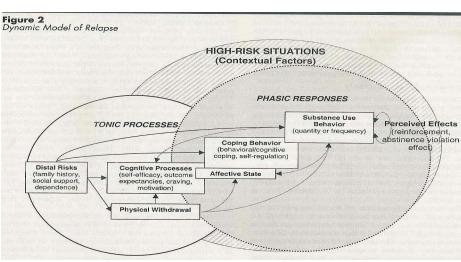
# WHY DO SMOKERS RELAPSE?

# Marlatt, & Witkiewitz (2005):

Intrapersonal: self-efficacy, outcome expectancies, craving, motivation, coping, emotional states

> Interpersonal: social and emotional

support



# WHY DO SMOKERS RELAPSE?

- > High cigarette consumption
- High stress
- ➤ Low self-efficacy
- Low number of quit attempts
- Low social support
- > High alcohol use
- > Weight increase

# GENDER DIFFERENCES IN SMOKING BEHAVIOUR

#### Women vs. men

- Mood management
- Weight and apetite control
- Smoke fewer cigarettes
- ➤ Inhale less deeply
- > Brands with lower nicotine and tar
- More influence by non-nicotine stimuli associated with smoking
- > Greater conditioned reinforcement

# **AIM**

To analyze if there were differences in the relapse curve in men and women who quit smoking after receiving a cognitive behavioural treatment for smoking cessation

# **METHODS**

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- SAMPLE: 266 participants who quit smoking at the end of a psychological treatment for smoking cessation
- Pretreatment assessment and informed consent
- ➤ The Smoking Cessation Program (Becoña, 2007)

# THE SMOKING CESSATION PROGRAM (Becoña, 2007)

- √ 6 sessions in groups
- ✓ Treatment contract
- ✓ Self-report
- ✓ Graphic representation
- ✓ Information about tobacco
- ✓ Stimulus control
- ✓ Nicotine fading
- ✓ Activities for avoidance of withdrawal syndrome
- ✓ Physiological feedback (CO)
- ✓ Relapse-prevention strategies



# **METHODS**

Assessment of smoking status at end of treatment and at 1, 3, 6, and 12 months follow-ups



# **METHODS**

#### **ABSTINENCE:**

- Self-reported corroborated by CO
- ➤ Point-prevalence: 24h at the end of treatment, 7 days prior to 1, 3, 6 months follow-up, 30 days prior to the 12-month follow-up

# **RESULTS**

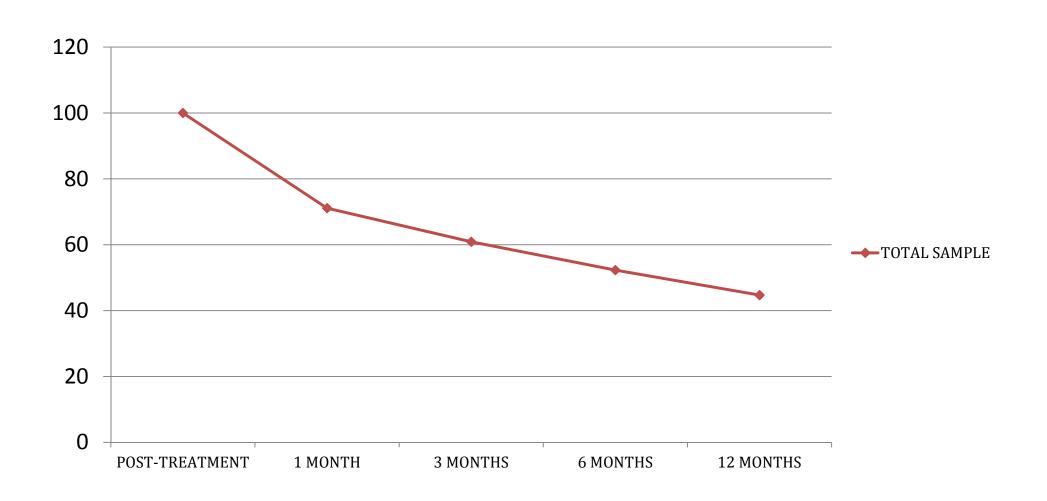
# SOCIODEMOGRAPHICS AND TOBACCO USE

	%
GENDER	
Women	59.77
Men	40.23
MEAN AGE	41.20
CIG/DAY	19.52
QUIT BEFORE	38.7
FTND	
Dependent (≥6)	37.2
Non-dependent (<6)	62.8

# **RELAPSE**

	1 Month	3 Months	6 Months	12 Months
Men	29.0	37.4	49.5	57.0
Women	29.1	40.3	46.5	54.1
Total	29.1	39.1	47.7	55.3

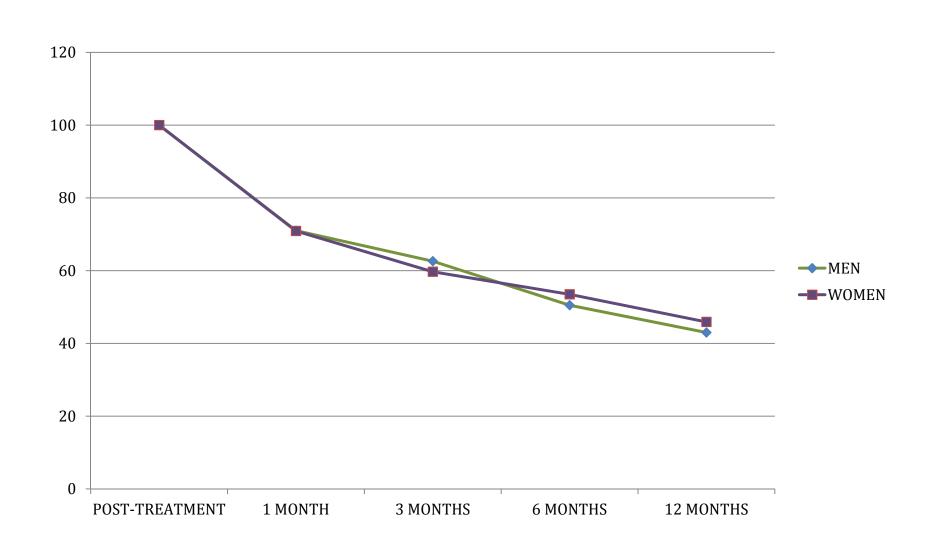
# RELAPSE CURVE



# **RELAPSE**

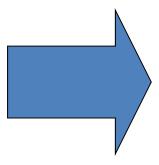
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# **RELAPSE CURVE**



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No gender differences in relapse

- ➤ No differences between men and women in quitting:
  - ✓ Caraballo et al., 2014
  - ✓ Marqueta, Nerín, Jiménez-Muro, Gargallo, & Beamonte, 2013
  - ✓ Pascual-Lledó et al., 2006

- ➤ Men are more likely to quit than women:
  - ✓ Jiménez-Ruiz et al., 2014
  - ✓ Monsó, Campbell, Tonnesen, Gustavson, & Morera, 2001

- >Men are less likely to relapse:
  - ✓ García-Rodríguez et al., 2013

- > Type of smoking cessation treatment
  - ✓ Mood management strategies
  - ✓ Problem solving strategies
  - ✓ Exercise and nutrition components
  - ✓ Nicotine fading: no withdrawal

# LIMITATIONS

- ✓ Results based on a clinical sample:
  - ✓ Higher nicotine dependence
  - ✓ Psychopathology
- ✓ Spanish sample

# **CONCLUSION**

- The relapse curve shows a decrease in abstinence rates over time
- No differences according to gender in the smoking relapse process

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 Ministerio de Economía y Competitividad (PSI2012-31196) y Fondo Europeo de Desarrollo Regional (FEDER)

