

# TOBACCO DEPENDENCE TREATMENT IN DAILY PRACTICE

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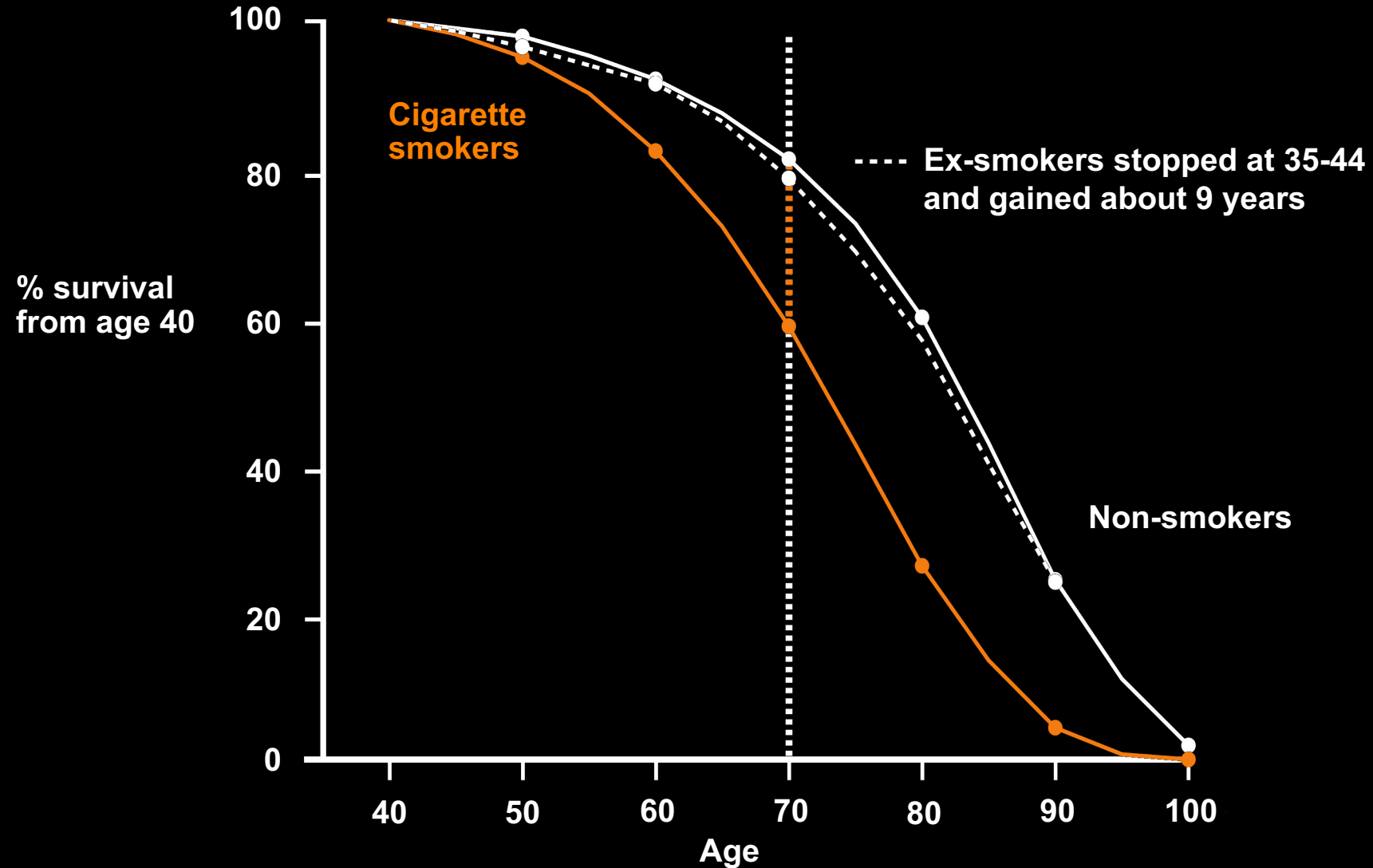


## Main messages for the individual smoker

- The risk is big: about **half** are killed
- Those killed in **middle** age may well lose 10, 20, 30 or more good years
- **Stopping** smoking works



# Effect of stopping smoking at about age 40



# TOBACCO DEPENDENCE

- recognized as a disease by the WHO in 1992: in the 10th version of International Classification of Diseases, diagnosis F 17
- causes almost every 5th death
- effective treatment exists and should be offered by doctors and available to all smokers

# TOBACCO DEPENDENCE – DIAGNOSIS F 17

- Benefits of stopping smoking: Treatment of F17= prevention of many diseases
- One of the most cost-effective medical interventions

# USEFUL VIDEO

- Helps to patients:
- Understand the power of each puff
- Why to take medication
- Why someone can have bigger problem to stop than another
- Why any single cigarette in the future leads mostly back to smoking

# TREATMENT OF TOBACCO DEPENDENCE

- Condition: THE PATIENT WANTS TO STOP
- Psycho-social-behavioural intervention – changing the life-style, preparing non-smoking solution for situations when typically smoked
- Pharmacotherapy to combat withdrawal symptoms

# WITHDRAWAL SYMPTOMS

- ✿ Craving for cigarettes
- ✿ Bad moods / depression
- ✿ Sleep disturbances
- ✿ Irritation / frustration / anger
- ✿ Anxiety
- ✿ Difficulty concentrating
- ✿ Restlessness
- ✿ Increased appetite



# NICOTINE DEPENDENCE

- Half-time of nicotine about 2 hours
- Dependent smoker typically lights the first cigarette within 1 hour after waking-up
- Mostly smokes 10 or more cigarettes/day
- ➔ pharmacotherapy for dependent smokers against withdrawal symptoms (not against smoking!!!)

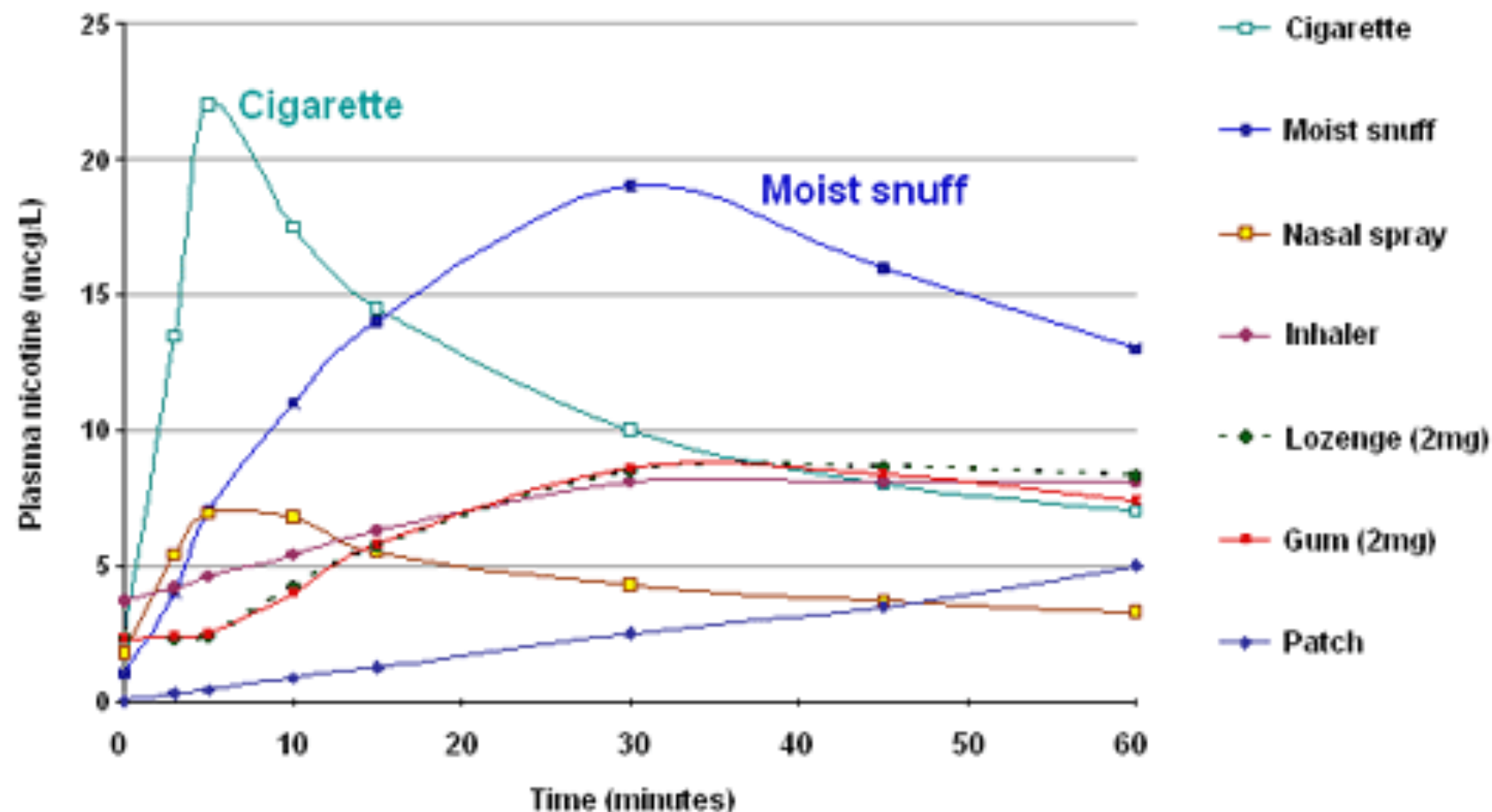
# PHARMACOTHERAPY

- Nicotine replacement therapy – patch, gum, inhaler, lozenge, nasal spray, mouth spray, film,....
- Bupropion
- Varenicline/cytisine

# Nicotine replacement therapy (NRT)

- Patch: slow but long-lasting release
- Other forms (gum, inhaler, lozenge, dissolvable film, mouth spray): quick but short-acting
- Doubles the success rate

## Figure 5: Plasma Nicotine Concentrations for Nicotine-Containing Products



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# Bupropion

- Antidepressant, blocks reuptake of dopamine and noradrenaline
- Doubles the success rate

# Varenicline

- Partial agonist to alpha4beta2 acetylcholine-nicotinic receptors
- Agonistic activity: release of dopamine
- Antagonistic activity: nicotine cannot bind to receptors, the reward after the puff disappears
- Triples the success rate

# Cytisine

- Natural model for varenicline
- Halftime about 4 hours (varenicline 17 hours)
- Inconsistently described efficacy due to lack of quality studies, but v.s similar to varenicline

# TREATMENT OF TOBACCO DEPENDENCE

- Each doctor/nurse: short intervention (up to 5 minutes)
- Specialised centres
- Quitline available
- Smoke-free environment, hospital as one of the first



## BRIEF INTERVENTION -The “5 A’s”/”3A’s”

- **Ask about tobacco use at every visit**
- **Advise to quit in a clear, strong, and personalised manner**
- **A**ssess willingness to make a quit attempt
- **Assist in quit attempt with counselling, pharmacotherapy, and social support, provide contacts**
- **A**rrange follow-up through personal and telephone contact and continue supporting, encouraging, and treating the patient

# BRIEF INTERVENTION

- ASK
- ADVICE
- REFER

# MOTIVATION (IF UNWILLING TO QUIT) - The “5 R’s”

- **R**elevance – gender, age, quitting experience...
- **R**isks – short term, long term, patients diagnosis, prognosis, ...
- **R**ewards – health, food taste, money, smell, ...
- **R**oadblocks – why does not want to stop? – withdrawal, weight gain, smoking friends,...
- **R**epetition – repeat at next visit with EMPATHY

# 4 KEY PROFESSIONS

- Doctor
- Nurse
- Pharmacist
- Dentist

# IMPORTANT SUPPORT

- FCTC WHO [WWW.FCTC.ORG](http://WWW.FCTC.ORG)

Article 14 (b,c): available diagnostics, prevention and treatment of tobacco dependence in health care systems

- **Evidence-based medicine**
- **International guidelines**

## BRIEF INTERVENTION 3(A)

- **ASK**

- **ADVISE to stop**

- **ASSIST with treatment**

**THERE IS NEVER LATE TO  
STOP SMOKING**

**EVERY CIGARETTEE IS DOING  
YOU DAMAGE**

# CENTRE FOR TOBACCO-DEPENDENT, GENERAL UNIVERSITY HOSPITAL, PRAGUE

2005, 2 nurses full-time, 4 doctors part-time

Visits schedule:

- screening (1 hour), mostly with nurses
- intervention (2 hours)
- follow-up visits (30 minutes)

12 months CO validated abstinence

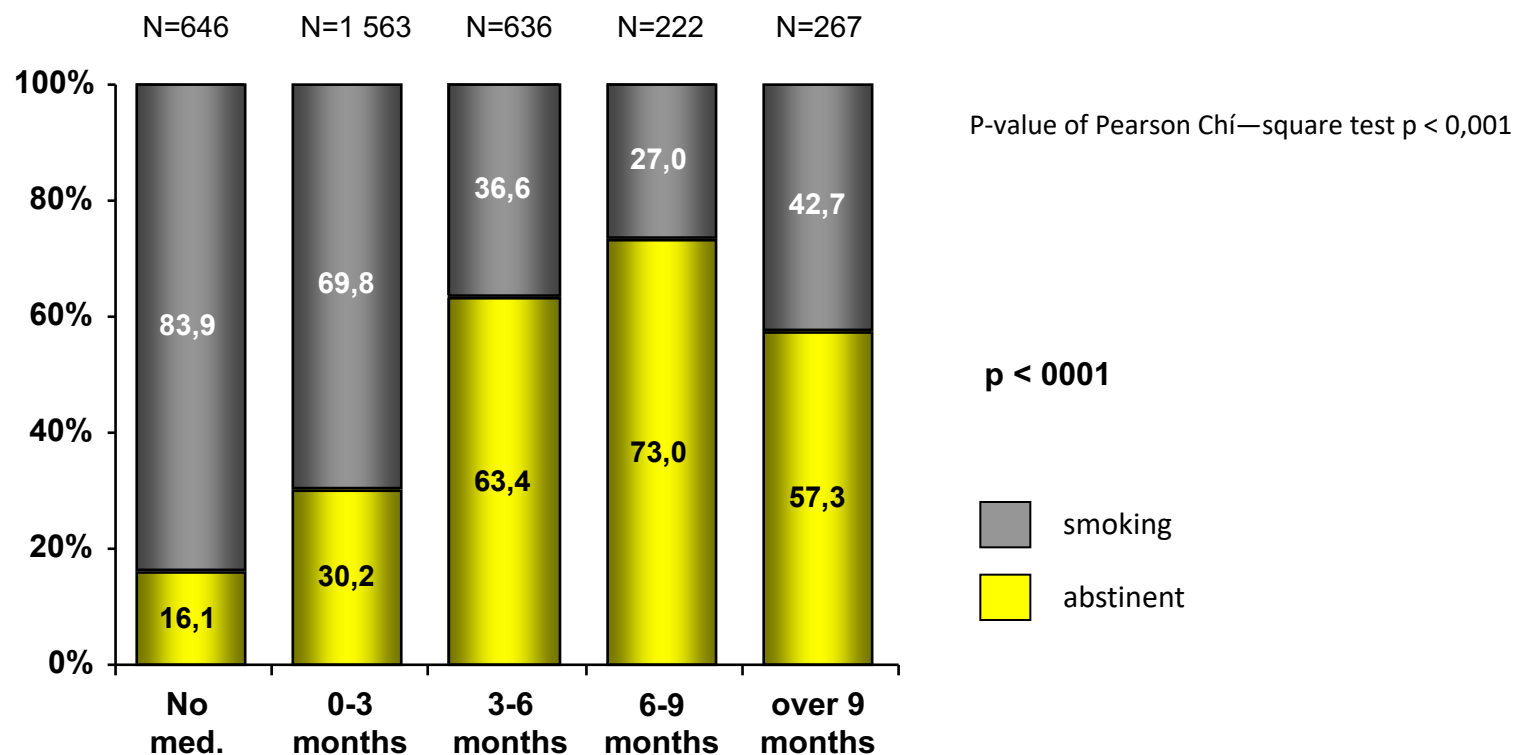
About 450 new patients/year





# SCREENING 1hr (+ INTERVENTION 2hrs), FOLLOW-Ups (ALL), 52-WEEK ABSTINENCE **DURATION OF PHARMACOTHERAPY**

N = 3 334\*



Duration of pharmacotherapy (varenicline, nicotine, and/or bupropion)

\* Missing data about length of pharmacotherapy in 34 patients



# LOW-COST TREATMENT

LYG (life year gained) in Czech Republic – up to a million CZK or more  
(37,000 euro/LYG)

1333 CZK/LYG (50 euro/LYG)★

★ Kralikova et al., 2014, Cas. Lek. ces., 2014



# OTHER SUPPORT

- Pharmacy consultation
- Telephone quitline
- Mobile applications
- Leaflets ...



# THANK YOU FOR YOUR CARE GIVEN TO SMOKERS



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NA TABÁKU

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