2 -5 july • 2014

IPCRG presentations on respiratory diseases

Strategies towards smoking cessation. How to maximize the opportunities for smoking cessation in primary care

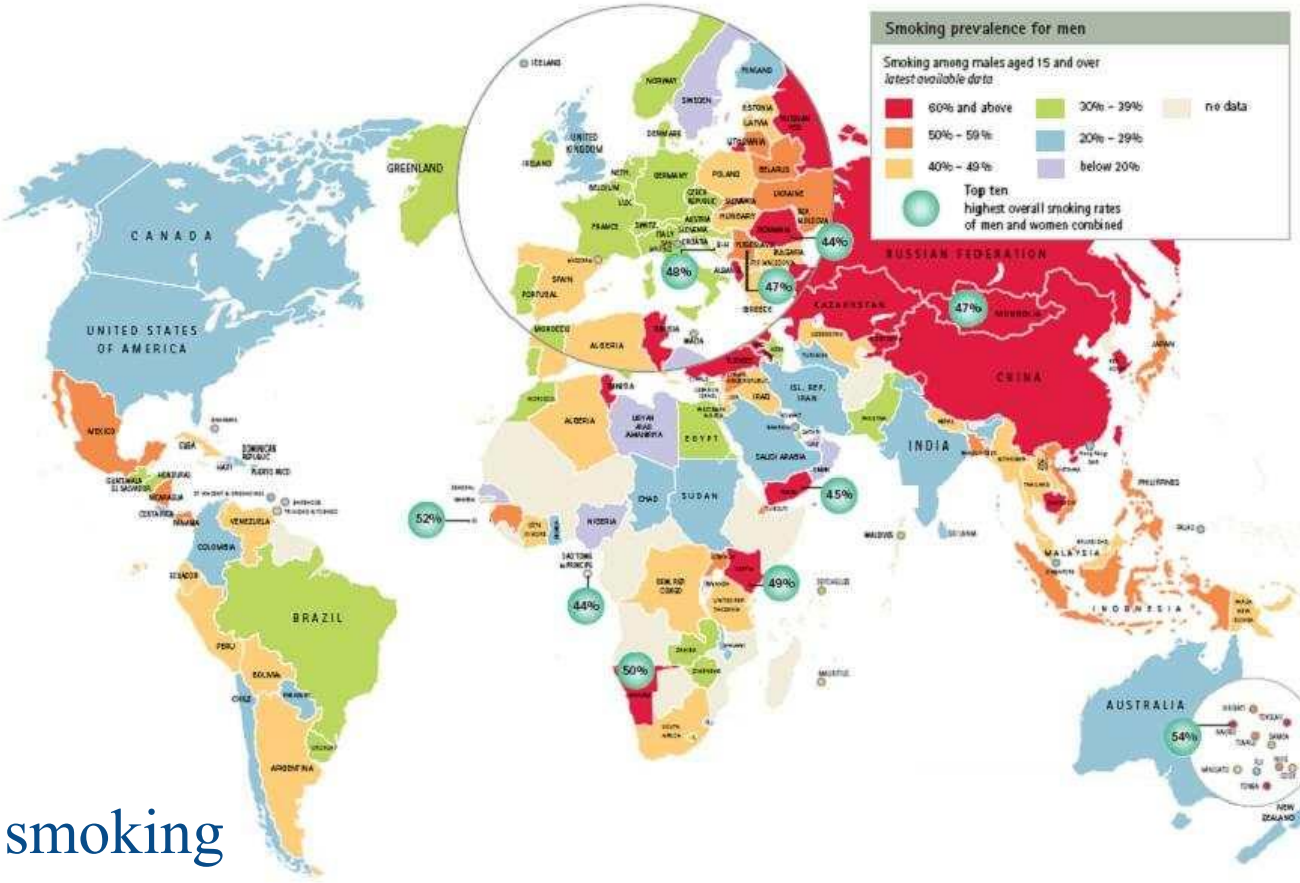
International Primary Care Respiratory Group IPCRG

First approach – Interventions- Motivational Approach-Follow up

Svein Høegh Henrichsen

The smoking epidemic

- 75% of smokers live in low or middle income countries



Male smoking

World Health Organization. The Tobacco Atlas. http://www.who.int/tobacco/statistics/tobacco_atlas/en

Prim Care Respir J. 2008 Sep;17(3):185-93.

IPCRG Consensus statement: tackling the smoking epidemic - practical guidance for primary care.

van Schayck OC, Pinnock H, Ostrem A, et al.

International Primary Care Respiratory Group

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Campaigns and Consultations
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Guidelines
Journal
Publications & Resources
Opinion Sheets
Research
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Links
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Smoking Cessation

The IPCRG is increasing its attention to the issue of smoking and its impact on respiratory health. Recent initiatives include

- **A joint response with the European Federation of Asthma and Allergy Associations, EFA, to a recent European Commission consultation on smokefree Europe.**
- **A desktop helper for practitioners on brief interventions for smoking cessation.** (CCL **"Some Rights Reserved"**)

  Also available in **Turkish, Italian (Swiss), German (Swiss), French (Swiss)** and **Greek.** The views expressed in these sheets are not necessarily those of the IPCRG.
- **Tackling the smoking epidemic** (CCL **"Some Rights Reserved"**)
  First international guidance launched for primary care practitioners on smoking cessation
  Launched November 1st 2007
- **Smoking Cessation Slide Set** (Powepoint) (CCL **"Some Rights Reserved"**)
- **No Smoking poster** (Powerpoint) (CCL **"Some Rights Reserved"**)
- **IPCRG Consensus statement: Tackling the smoking epidemic - practical guidance for primary care** Van Schayck et al. http://dx.doi.org/10.3132/pcrj.2008.00060

Spanish Resources

Go here for **Spanish materials** and see **here** the use of champions like Barcelona Football Club

Page updated on 16 May 2011 11:33

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OPINION
IPCRG OPINION 3

Helping patients quit smoking: brief interventions for healthcare professionals

How to help smokers quit: flowchart

Ask about tobacco use (smoking and smokeless tobacco) for all patients and reassess users at every clinic call/at least once a year. This alone doubles the rate of success. Document smoking status/stage of motivation/tobacco burden.

ASK

Have you used tobacco in the last 12 months?

No – never: Congratulate.
Reinforce non-use. Patients who have smoked in the past should be asked about smoking for some years after quitting. Relapse is unlikely after 5 years abstinence.

Yes - Quit in the last 12 months:
Congratulate.
Ask if they need help to remain smoke free. Advise them to contact you or to seek other counselling if they have any difficulty (quit line, smoking cessation clinic, other ...)

Yes – Current smoker: Take brief smoking history including number of cigarettes smoked a day, year started smoking, presence of smoking-related disease, previous quit attempts and what happened?

Use non-judgmental questions such as "How do you feel about your smoking at the moment?

Express concern/interest and not criticism.

ASSESS: Motivation to stop:
On a scale from 1-10 how interested are you in trying to quit?

1	2	3	4	5	6	7	8	9	10

Are you planning to QUIT in the next 6 months?

Not planning to **QUIT**

NO NOT READY (PRECONTEMPLATION)

- Focus on motivation.
- Advise the patient on the benefits of quitting without criticism/confrontation.
- Respect the patient's decision.
- Ask if you may tell the patient about the dangers of smoking.

ADVISE

- Ask, *"Is there anything that might help you consider quitting?"* or *"Can you imagine any benefits of quitting?"*
- Offer help if the patient should change his/her mind.

ARRANGE

- Follow up – ask patient if you should discuss smoking again at next consultation.

Planning to **QUIT** within the next 6 months

YES, but not yet... UNSURE (CONTEMPLATION)

ADVISE

- Focus on their ambivalence, help them motivate themselves.
- Offer help by asking:
  "What are the things you like and don't like about your smoking?"
  "Have you tried to quit before?"
  "How did you get on when you last quit?"
  "What would have to happen for your motivation score to increase?"
  "How can I help you increase your confidence in quitting?"

ASSIST

- Explore barriers to cessation.
- Offer help quitting.
- Refer to quit line or other counselling, refer to smoking cessation unit if patient prefers.
- Hand out written material/contact numbers.
- Follow up consultation or telephone contact within 6 months OR remember to ask when you next see the patient.

Planning to **QUIT** within a month

YES READY TO QUIT

ASSIST

- Provide assistance in developing a quit plan.
- Help patient to set a quit date. Discuss abstinence and suggest coping strategies. Encourage social support.
- Assist in dealing with barriers such as fear of failure, stress coping, weight gain, social pressure.
- Give nutritional advice: sleep well, avoid caffeine and alcohol. Physical activity may help.
- Assist in giving advice on pharmacotherapy for smoking cessation: NRT (adequate dosage during sufficient time, help through the first 4-7 weeks). Withdrawal symptoms occur mostly during the first 2 weeks and are fading after 4-7 weeks.
- Assist with a prescription for varenicline or bupropion when indicated.

ARRANGE

- Follow-up consultations/phone calls - ideally weekly first weeks, then monthly.

5 As of smoking cessation: ASK, ASSESS, ADVISE, ASSIST, ARRANGE[1]

International Primary Care Respiratory Group IPCRG

Writer: **Dr Svein Hoegh Henrichsen** Reviewer: **Dr Nicholas Zwar** Editor: **Hilary Pinnock**
Supported by an unrestricted educational grant from Pfizer.
The views expressed in this sheet are not necessarily those of the IPCRG.

Smoking cessation is a key aspect of comprehensive tobacco control

- Smoking cessation support is part of a comprehensive approach to tobacco control
- The importance of promoting cessation of tobacco use and provision of treatment is described in Article 14 in the Framework Convention for Tobacco Control
- Smoking cessation service development varies widely around the world

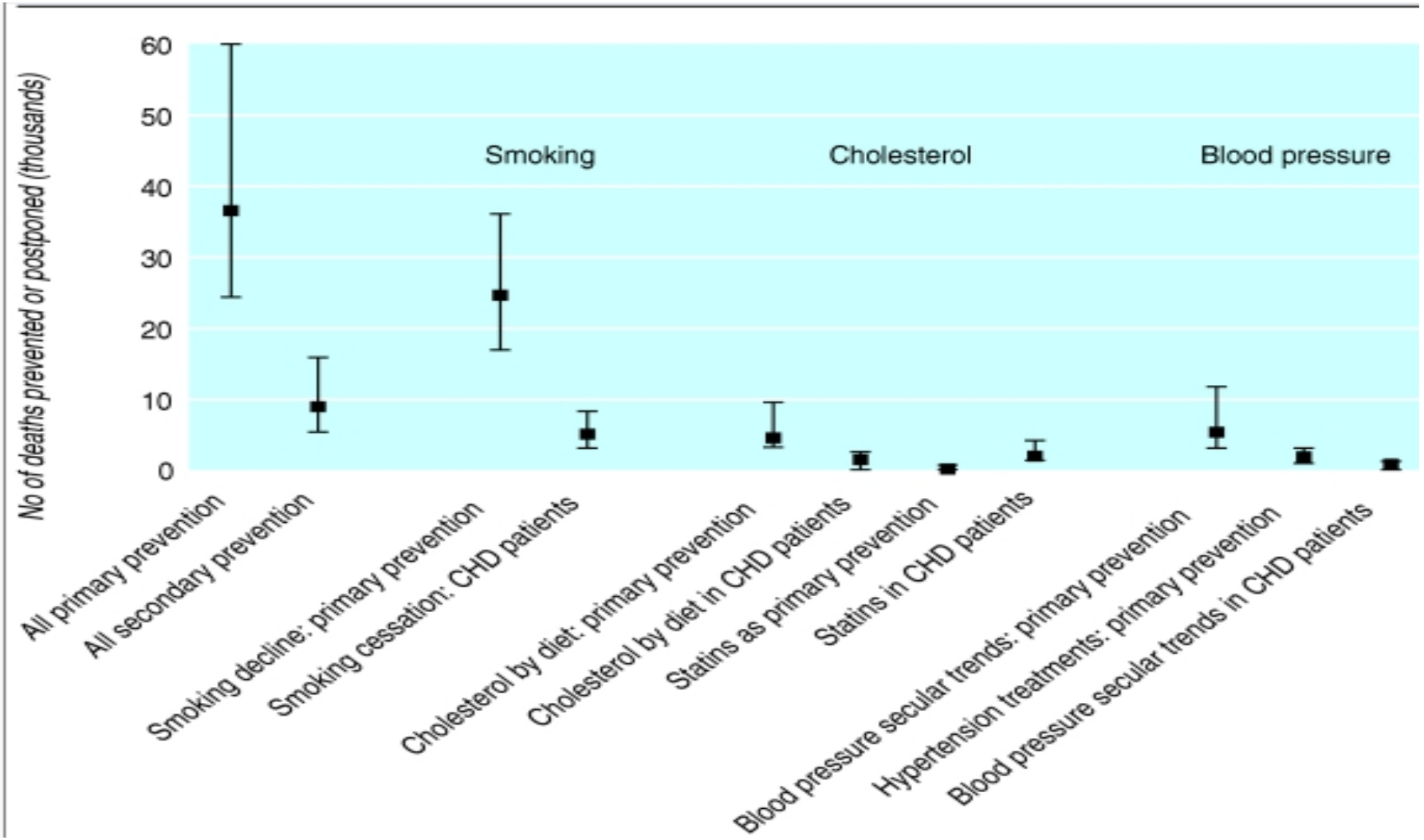
Pine-Abata H, McNeill A, Murray R, Bitton A, Rigotti N, Raw M. A survey of tobacco dependence treatment services in 121 countries. Addiction

Should we do smoking cessation in primary care?

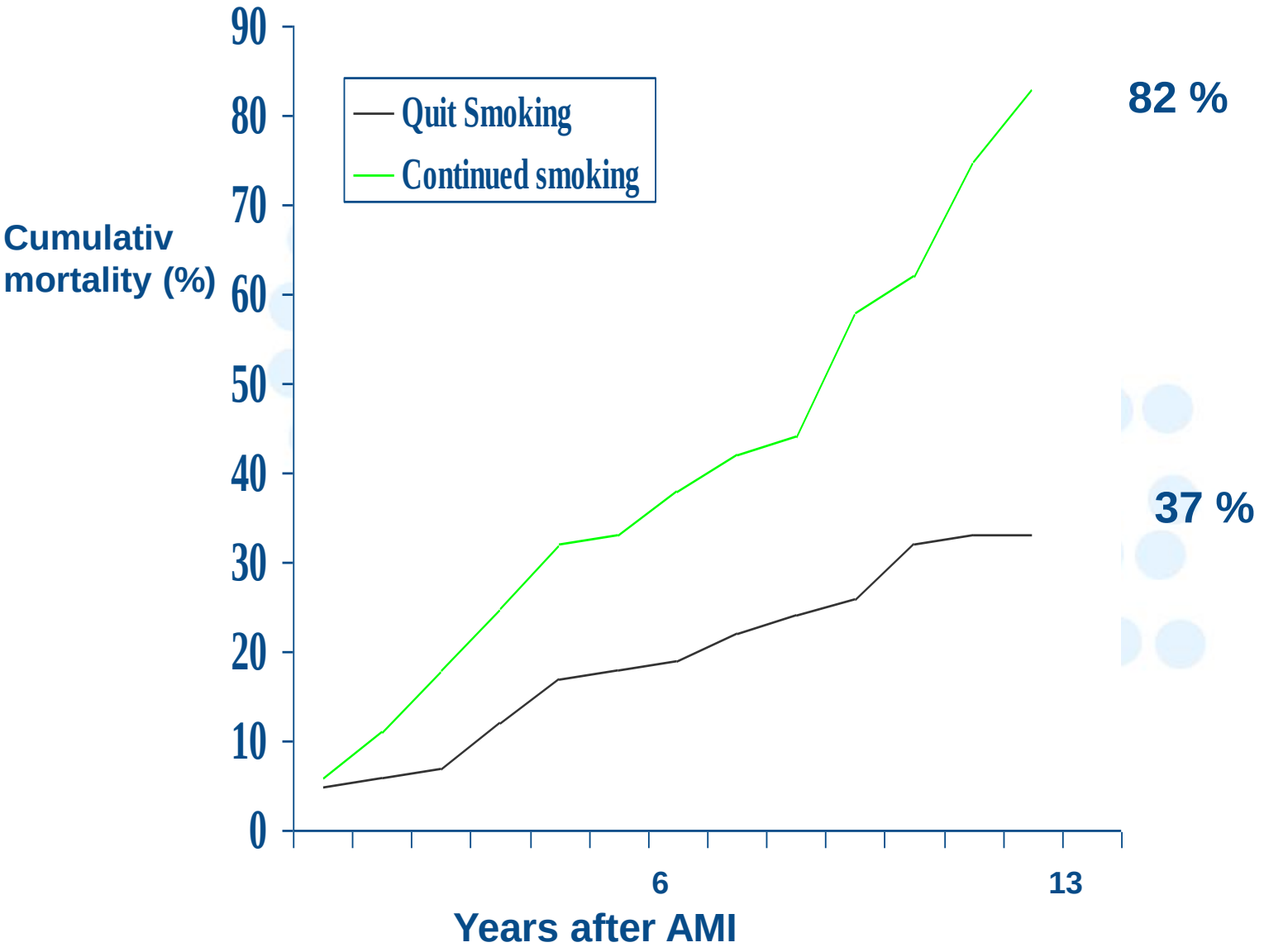
- Yes ?
  - Why??
- No?
  - Why?
- What are the barriers??

- Lack of time?
- Underestimation of the impact of their role;
- Not enough knowledge?
- Apprehension for not "loosing the patient";
- Reluctant to intervene in someone's private life;

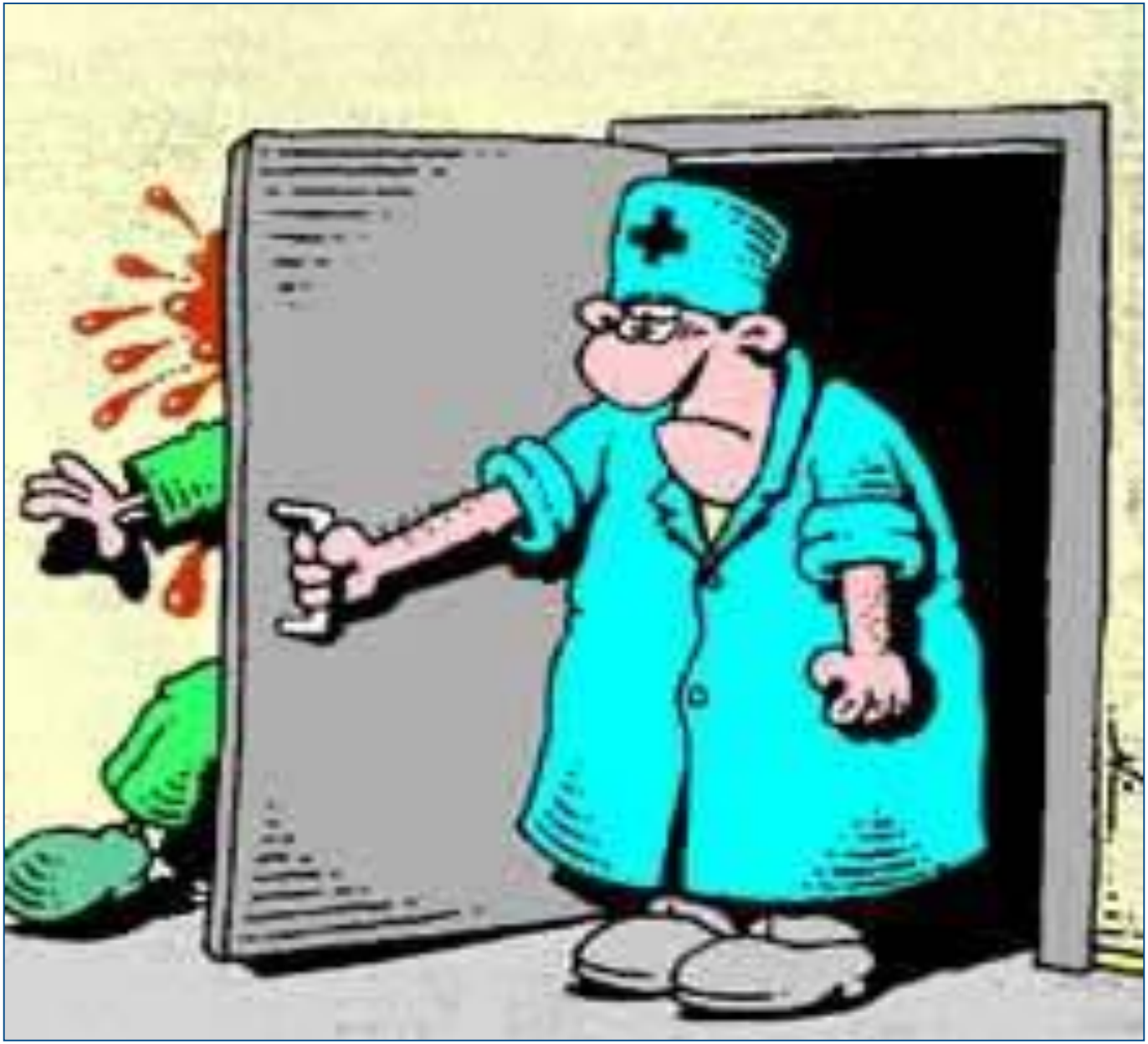
Is there a role for primary care?



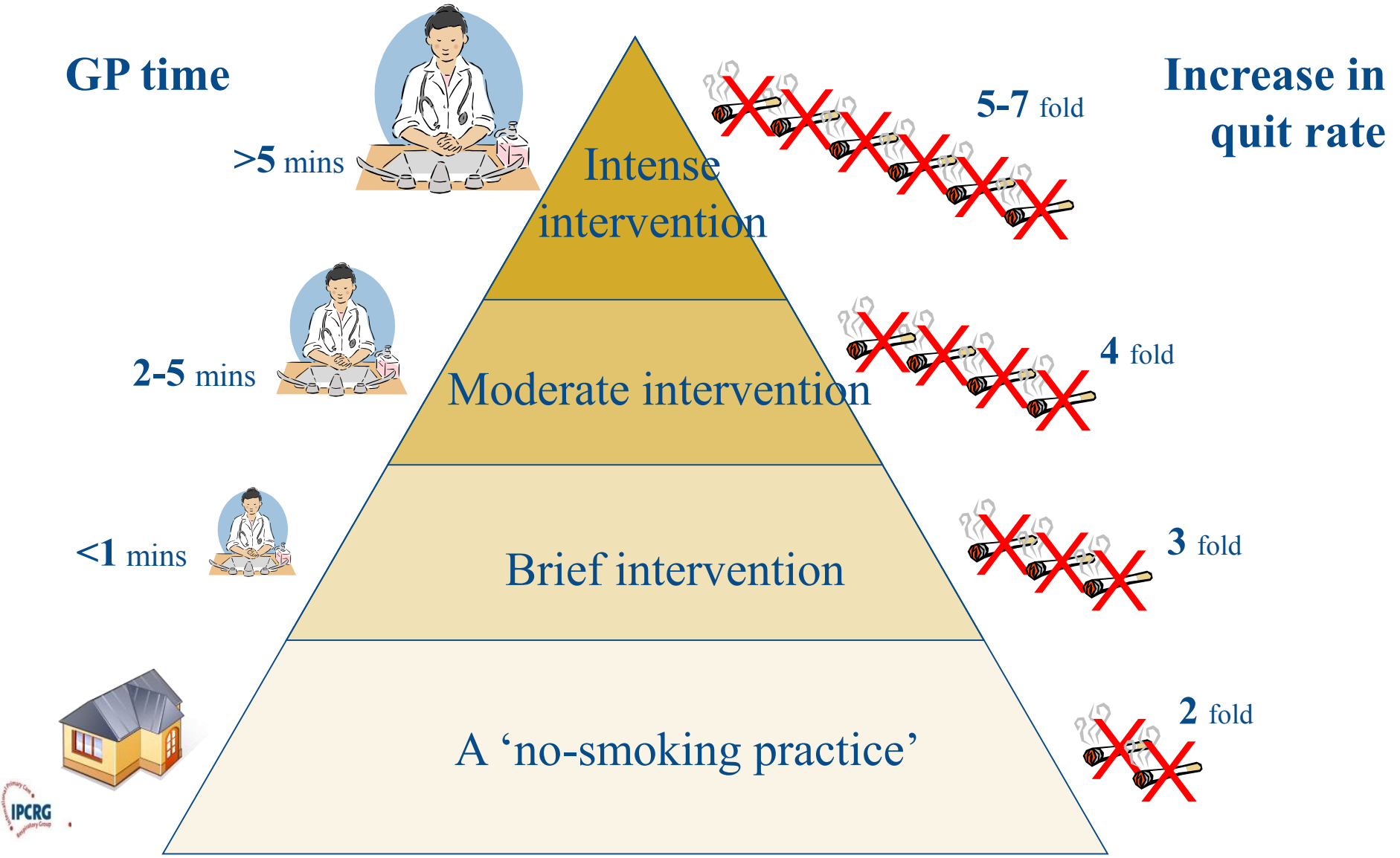
1. Unal B et al. *BMJ.* 2005;331(7517):614



Daly. BMJ. 1983. 498 pas.



A smoking aware practice



Adapted from Litt J, et al. Asia Pacific Fam Med. 2003; 2: 175-9

What is brief intervention?

Minimal intervention:

- Two questions to the patient:
- ***1. Do you smoke ?***
- ***2. Have you considered quitting ?***

Brief intervention in practice

- Cost effective :
  - Smoking cessation € **400** to € **1600**/ life gained
  - 310 other interventions median € **38 000** !!
- We have the opportunity !
  - 80 % of smokers see the GP every year.

Brief intervention in practice

- Acceptable:
  - Patients see GPs as having a key and supportive role.
- Feasible:
  - Advice can take less than one minute
  - May use the time before consultation !

Brief intervention in practice

- It works !
  - Cochrane review (Silagy 2003):
    - Increase is cessation rate of about 2,5 %
    - One quitter for every 20 patients (NNT 40)
  - Combining brief advice with pharmacotherapy can considerably reduce numbers needed to treat (NNT).

Aim in Primary Care:

- Change how we work in Primary Care.
  - Identify all smokers (flag them)
  - Offer those motivated help to quit.

- How ?
- ” *Essential to offer **brief advice** to all when they contact primary care worker.*

The 5 ‘A’s

Ask

Assess

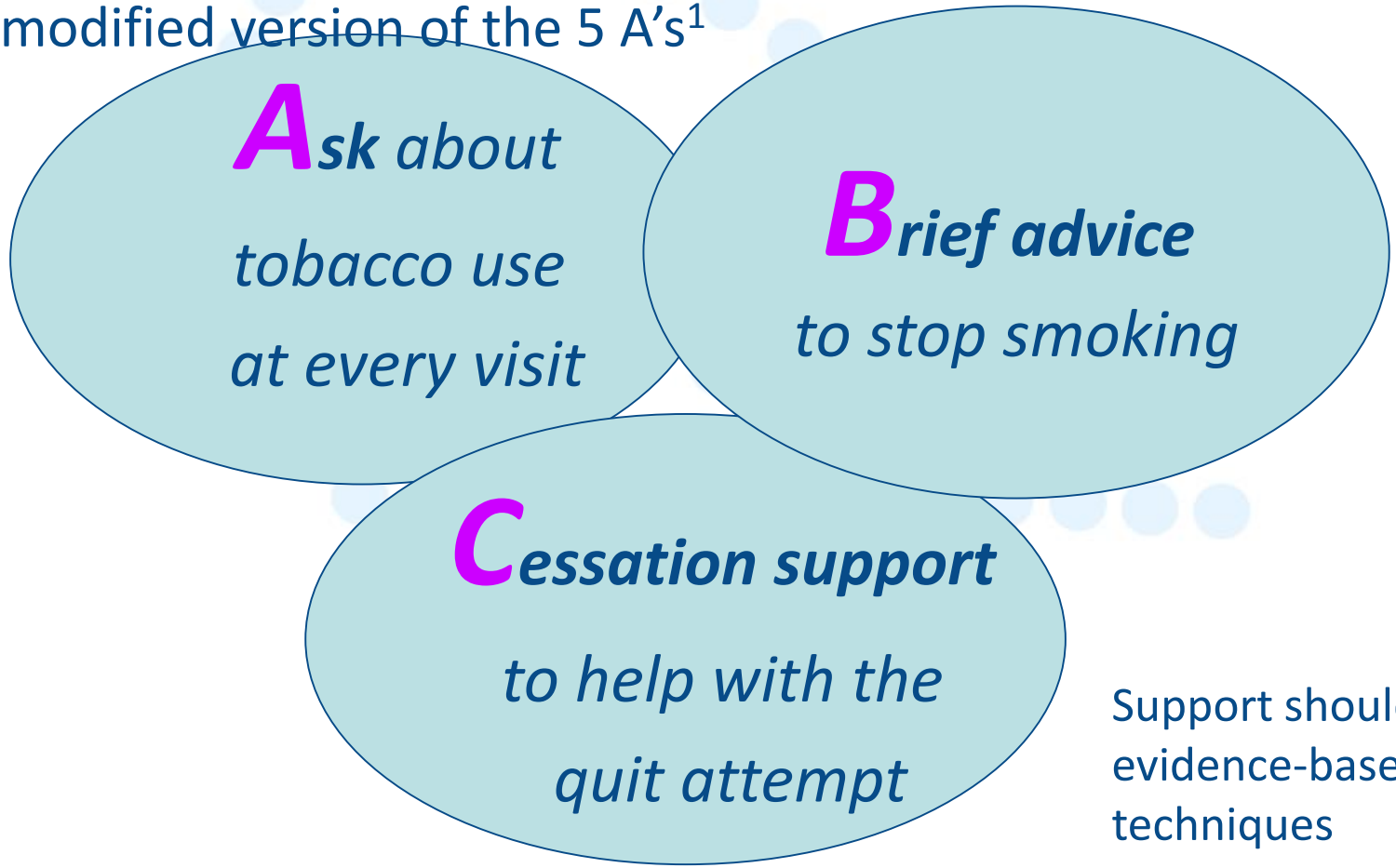
Advise

Assist

Arrange

Tobacco Dependence Support: «ABC»

The 2007 New Zealand Smoking Cessation Guidelines recommend a modified version of the 5 A's[1]



Support should use evidence-based techniques

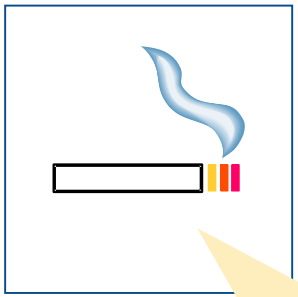
But what about motivation?

What do we tell those who are not motivated?

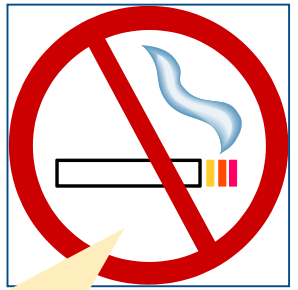
- The majority of smokers are more or less motivated to quit.
- 70 % want to give it up – of these 40 % are willing to fix a quit date.

- Motivation can be influenced – it is not static!

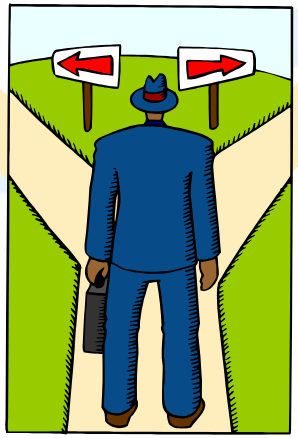
Motivational tension



Offering treatment can influence the choice



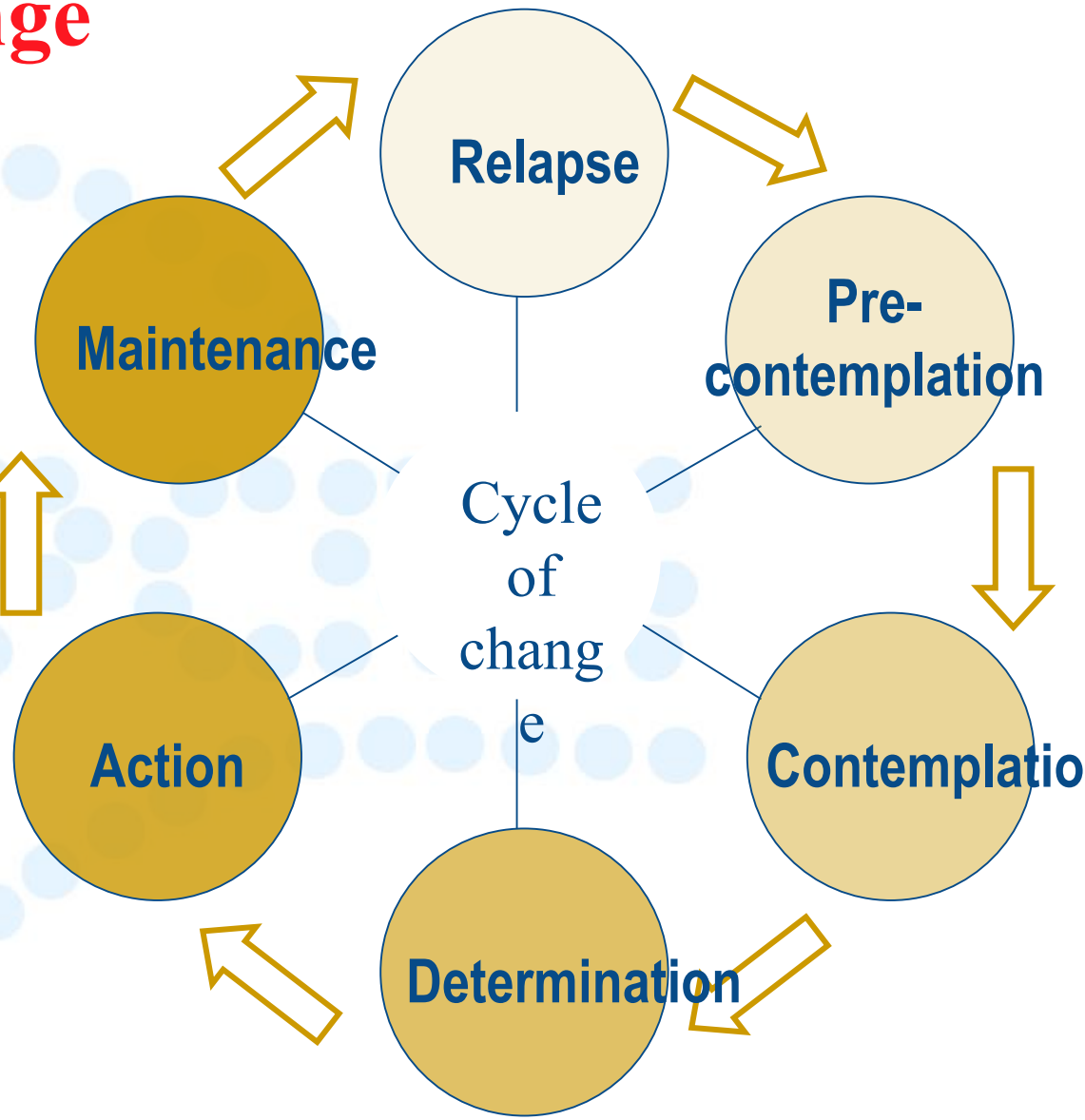
Enjoyment of smoking
Need for cigarette
Fear of failure
Concern about withdrawal
Perceived benefits



Worry about health
Dislike of financial cost
Guilt or shame
Disgust with smoking
Hope for success

Aveyard, P, et al. Managing smoking cessation. BMJ 2007;335:37-41

The cycle of change



Do you smoke?

Have you considered quitting?

Pre-contemplation.

- Minimizing – defiance
  - ”I do not smoke that much, I am sure it does not harm me”
- Rationalisation
  - ”Grandma died at 93 – and she smoked too”
- Protest
  - ”no one is going to tell me….”
- Helpless – defeated
  - ”did try once but I could not do it…too difficult for me…”

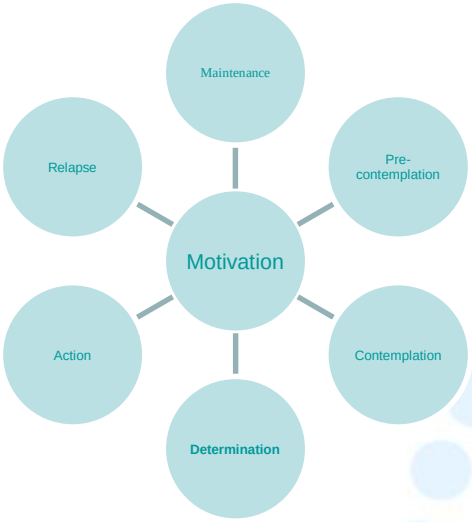
The doctors role

- Be an interested partner – ask and explore.
  - ”Did you ever quit before?”
  - ”What happened then?”
- Be postitive
  - ”2 weeks without smoking – that was great!”
- Ask permission to explain
  - “Do you want me to tell you something about nicotine withdrawal?”
- Offer help on their terms.

Contemplation

- Want to and do not want to..
- Quit?
- Or continue?

Explore the **ambivalence**



From why to how:

Determination

- Choose method
- Choose time
- Make a plan

Offer help and consultation!

Doctors role:

- Make a plan together with your patient
- Offer a back-up – a plan “B”
- Be interested and enthusiastic!!

Action = Smoking cessation!

- Start “Plan A”
  - For example ”5 consultations”
- Important to have a “Plan B”
  - What to do if...?

Doctors role:

- Be available for the patient.
- Follow up with appointments.
- Ask, encourage and give positive feedback!

Relapse….

- Relapse is not unusual!
- Important to gain experience and learn from the attempt.
- Soon as possible back to action

Doctors role:

- Encourage to new quit attempt.
- Point out what was achived.
- Offer more help.

Maintenance.

- The smoker has become a non-smoker
- ”Shadows of the past” is still there
- To be “seen” is still important.

Doctors role:

- Continue to “see” the patient.
- Give encouragement and credit
- Give positive feedback regarding health benefits.

Conclusion, motivation:

- To help a smoker to become a non-smoker is an exciting.
- GPs are in a unique situation where we can do a lot to help.
- Motivation is a dynamic process!

What to assess? Follow up

Obtain the patient's smoking history:

- Age commenced smoking.
- Number of cigarettes smoked daily.
- How soon after waking does the patient smoke.
- Previous attempts/success/aides used.
- Previous withdrawal symptoms experienced.
- Reasons for failure.
- Any smokers in the home.
- Motivation e.g. health, finance, family.

Prepare the patient to quit:

- Set a quit date and formulate coping strategies.
- Compile a diary, jar with cigarette ends and a jar of money.
- Briefly discuss weight, diet and exercise.
- Ask the patient to identify a friend or family member who can be a steady source of support.
- Tell the patient to get rid of cigarettes, ash trays and lighters.
- Discuss smoking cessation aides: N RT , Zyban, varenicicline.

Assess: Fagerstrom Nicotine Dependence Questionnaire

Questions	Answer	Score
1. How soon after you wake up do you smoke your first cigarette?	Within 5 min 6–30 min 31–60 min after 60 min	3 2 1 0
2. Do you find it difficult to refrain from smoking in public?	Yes No	1 0
3. Which cigarette would you hate to give up most?	The first one in the morning Any other	1 0
4. How many cigarettes a day do you smoke?	31 or more 21–30 11–20 10 or less	3 2 1 0
5. Do you smoke more frequently during the first hours after waking than during the rest of the day?	Yes No	1 0
6. Do you smoke if you are so ill that you are in bed most of the day?	Yes No	1 0

8–10 = high dependence; 5–7 moderate dependence; 1–4 = low dependence

CO

CO measure is useful
for reinforcing patient's motivation to quit

Smoking cessation programme

- Initial counselling session (45 minutes).
- Weekly sessions x 4 (20 - 30 minutes each).
- Support literature.
- At one month, cessation validated by expired air CO measurement.
- Non-smokers asked to return at 3 months.

Follow up

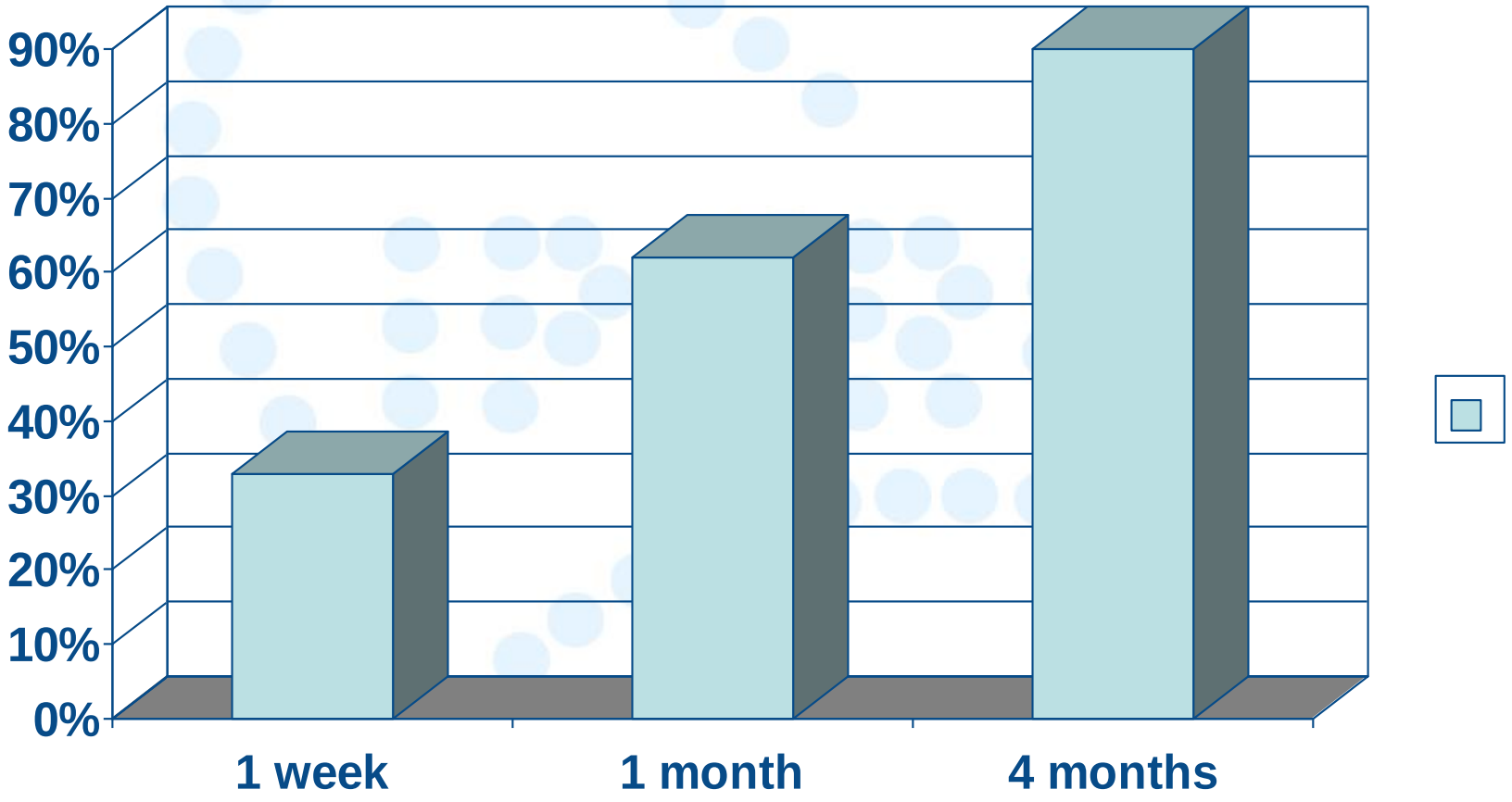
- **Once weekly, the first month**

  (expired CO, weight, blood pressure, consult, offer support, obstacles-problems discussion)
- **Every 3 weeks**

  (Same)
- **Every 3 months, for 1 year**

  (Same + spirometry)

When do they start smoking again?



Inform about withdrawal syndrome

Nicotine withdrawal: Duration

2 days	Lightheadedness
1 week	Sleep disturbance
2 weeks	Poor concentration Craving for nicotine
4 weeks	Irritability or aggression Depression Restlessness
10 weeks	Increased appetite

Nicotine withdrawal: the 4 ‘D’s

Drink water slowly

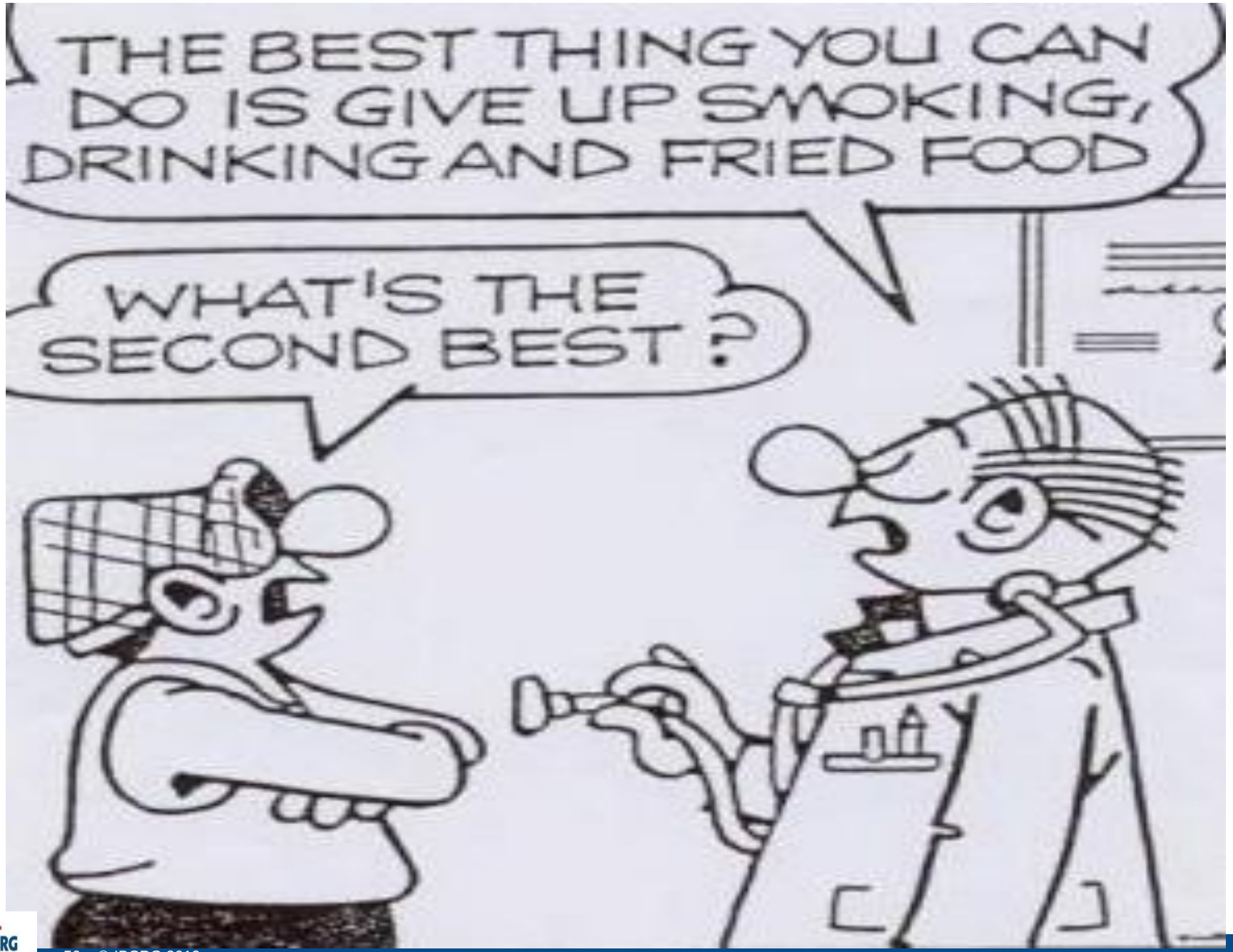
Deep breathe.

Do something **else** (eg exercise)

Delay acting on the urge to smoke

Pharmacotherapy

Ioanna Tsiligianni


THE BEST THING YOU CAN DO IS GIVE UP SMOKING, DRINKING AND FRIED FOOD
WHAT'S THE SECOND BEST?

Medical therapy.

- Offer all who intend to quit.

- Increase chance of success.
- Groups:
  - NRT
  - Bupropion (Zyban)
  - Varenicline (Champix)
  - other

Pharmacotherapy

Pharmacotherapy + behavioural counselling improves long-term quit rates

Smokers of 10 or more cigarettes a day who are ready to stop should be encouraged to use pharmacologial support as a cessation aid

Approach to the patient according to the dependence

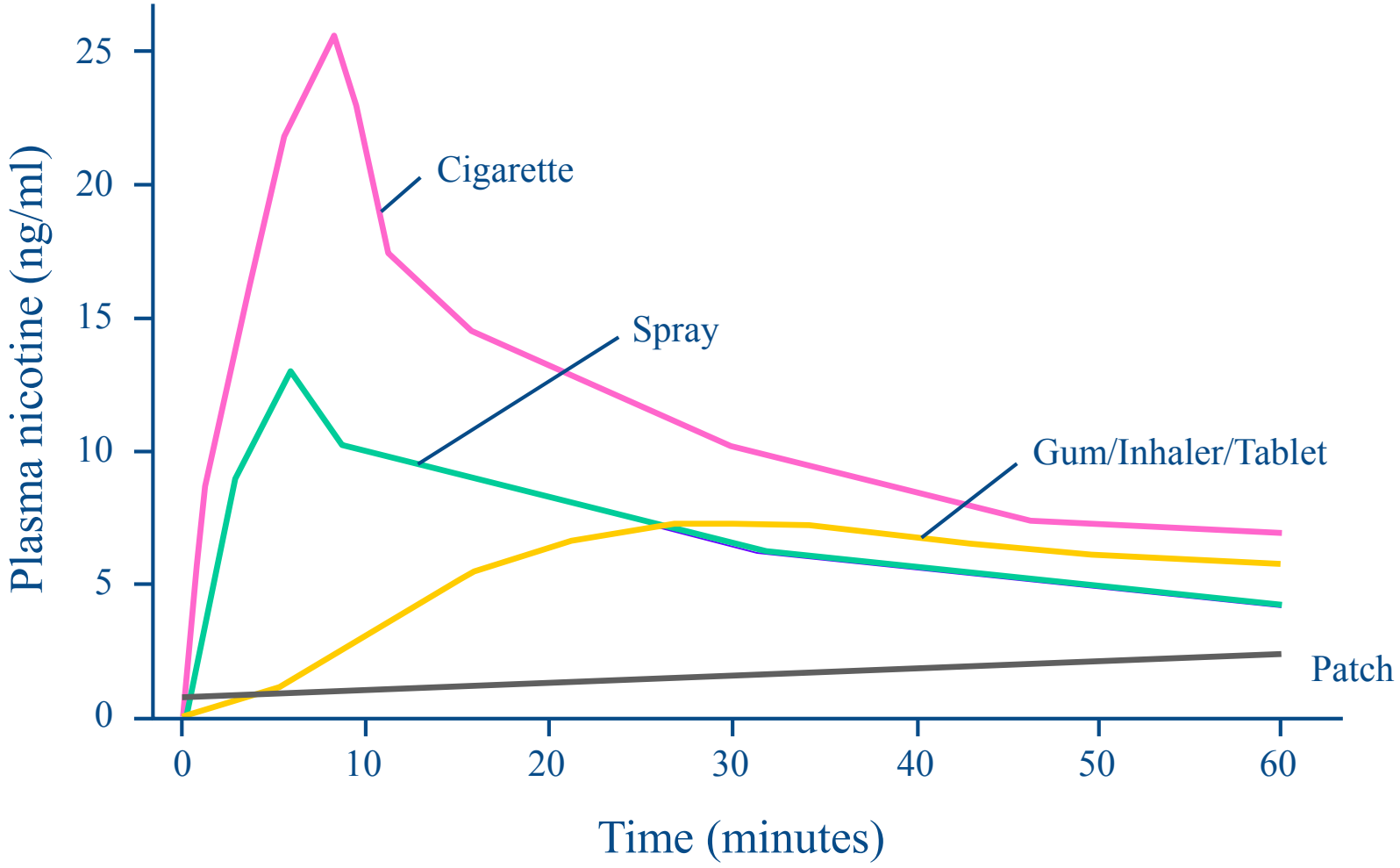
- For patients presenting a Fagerstom score ≤4
  - *Good relationship patient/clinician*
  - *Usually pharmacotherapy is not needed*
  - *NRT may help some patients*

- For patients presenting a Fagerstom score 5-6
  - *NRT with the assistance of a health care practitioner with a minimal training in the field*

- For patients presenting a Fagerstom score ≥7
  - *Support from a physician is helpful*
  - *Pharmacological treatment (NRT or Bupropion or varenicicline)*
  - *A smoking cessation specialist should care for most dependent subjects, who have a history of relapse or psychiatric or drug dependence co-morbidity.*

Fiore MC. Treating tobacco use and dependence. Resp Care 2000;45:1200

Plasma nicotine levels – contrast between cigarettes and NRT



Adapted from: Tobacco Advisory Group of the Royal College of Physicians 2000.

Nicotine Replacement Therapy NRT

- NRT – different forms of administration:
  - Nicotine patches: 16 or 24 hrs
  - Nicotine gum: 2 or 4 mg
  - Nicotine inhalator
  - Nicotine nasal spray
    - (+ sublingual-tablets)
  - o combination may be best?

Available forms of Nicotine Replacement Therapy

Type	Dosage	Dose /day	Comments	Disadvantages
Patch	Seven strengths: 5, 7, 10, 14, 15, 21 and 22 mg (16 or 24 hour release)	One	Change patch site daily, remove at bedtime if sleep disorders Overnight use may reduce early morning cravings Recommended for 8 to 12weeks Advice change of patch site daily.	Skin irritation. Slow delivery Wearing at night may cause sleep problems
Gum	2 mg, 4 mg	20	Flexible dosing Faster delivery of nicotine than patch Recommended for 6 to 12 weeks	No food or drink 15 min before use Jaw pain, mouth soreness, dyspepsia, hiccups
Inhaler	4 mg per cartridge 1 cartridge to be used every 1 to 2 hours while awake	6 to 16 cartridge	Flexible dosing mimics hand-to-mouth behavior Can be used up to 6 months	Mouth and throat irritation Frequent dosing necessary
Nasal spray	0.5 mg per spray 1 to 2 doses every hour	< 40	Flexible dosing Fastest delivery of nicotine among all products Reduces cravings within a few minutes Can be used for 3 to 6 months	Frequent dosing Nose and eye irritation Cough
Sublimgual tablets/ Lozenge	2 mg, 4 mg 1 lozenge to be used every 1 to 2 hours while awake		Flexible dosing Faster delivery of nicotine (like gum) More socially acceptable than the gum Recommended for up to 12 weeks	No food or drink 15 min before use Dyspepsia, mouth soreness, hiccups, nausea, flatulence.

Chew slowly

Stop chewing when you notice a peppery taste or tingle

Park

Chew again when the taste or tingle fades

Correct use of NRT:

- Should not be used for smoking reduction
- Fix a cessation date.
- Use high enough dose to avoid abstinece.
- Wait 6 weeks -2 months to taper off.
- Reduce the dose gradually to stop NRT after 4 weeks.

Bupropion

- Noradrenalin- and dopamin system.
- Originally used as antidepressive
- Reduce craving for cigarettes
- More effective than NRT (?)
- Little side effects
- **Bupropion vs. placebo**
  - Odds ratio 2.73 (1.90–3.94) **Cochrane Library**

Contraindications – Bupropion:

- Known hypersensitivity for Bupropion
- Previous seizure
- Known CNS- tumour
- Bulimia / anorexia
- MAO- inhibitors (Aurorix)
- Bipolar depression
- Liver failure
- Uncontrolled hypertension

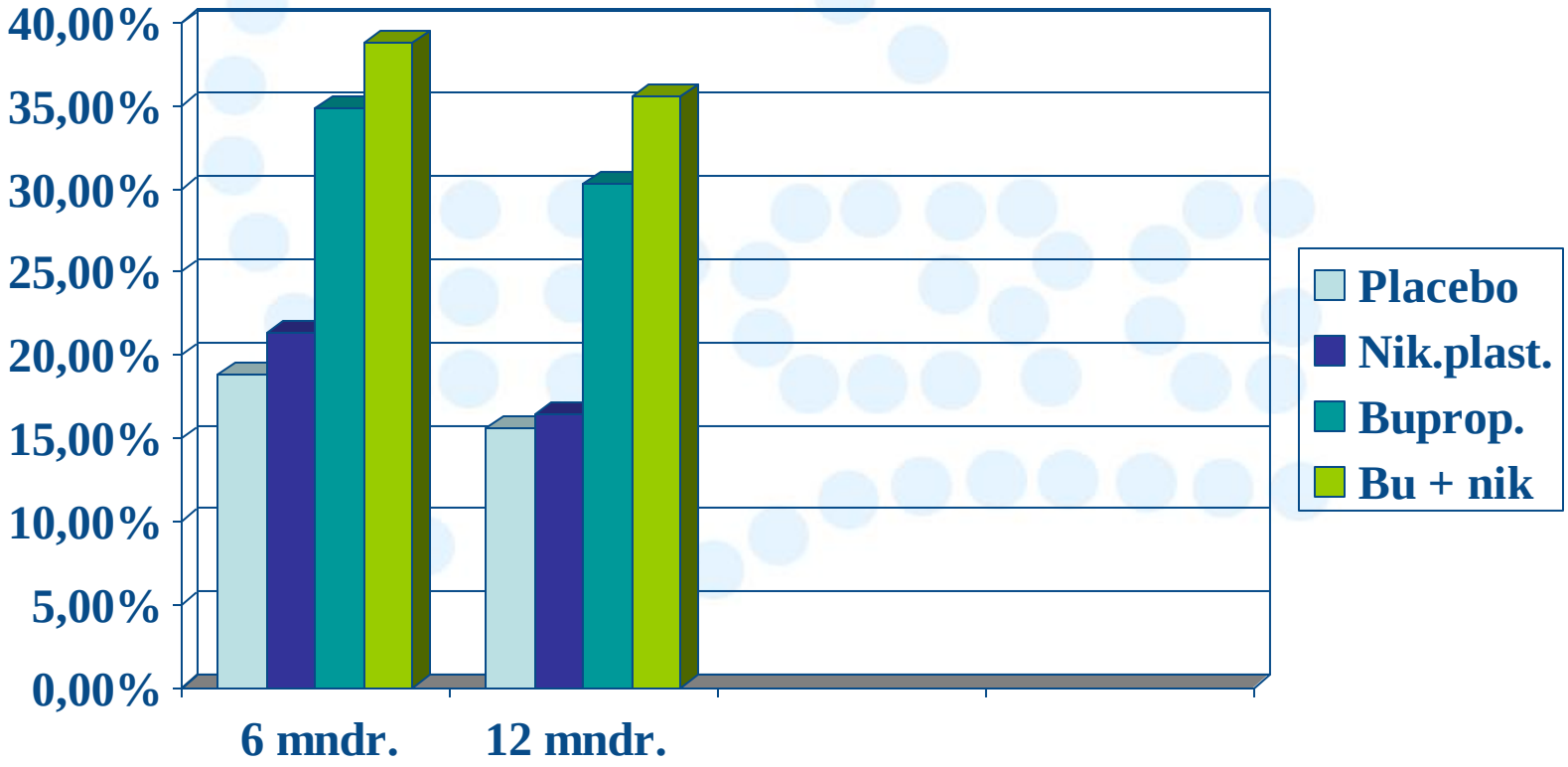
Side effects - Bupropion

- Usually mild and transient.
- Sleep disturbance/insomnia (up to 30%).
- Dry mouth (10-15%).
- Headache (10%).
- Nausea (10%), constipation (10%), and agitation (5-10%)

Bupropion-CYP2B6-interactions

- antidepressants
- antipsychotics
- anti-arrhythmics
- theophylline,
- systemic steroids
- cimetidine
- carbamazepine
- phenobarbital
- phenytoin

Bupropion / nicotine patch / combination.



Bupropion:

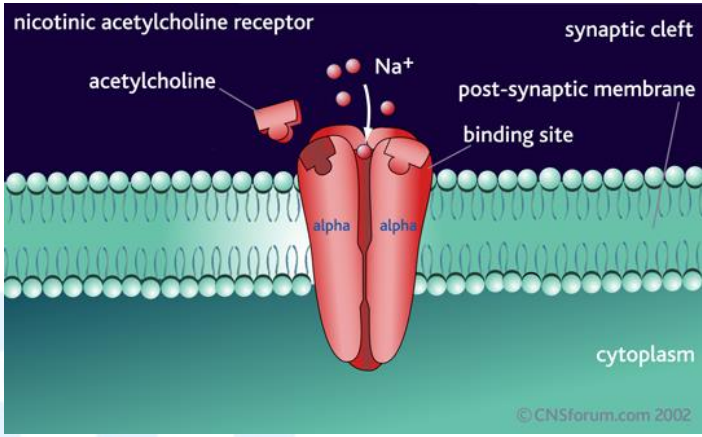
- ***Recommended***:
  - 1 depot tablet daily the first six days.
  - Then 1 depot tablet twice daily for 7-9 weeks (reduce in elderly, liver/renal disease).
  - It is recommended that the patient fix the quit date in week 2 when the dose is increased.

Varenicline

- Varenicline was developed for smoking cessation.
- Target is the nicotine receptor.

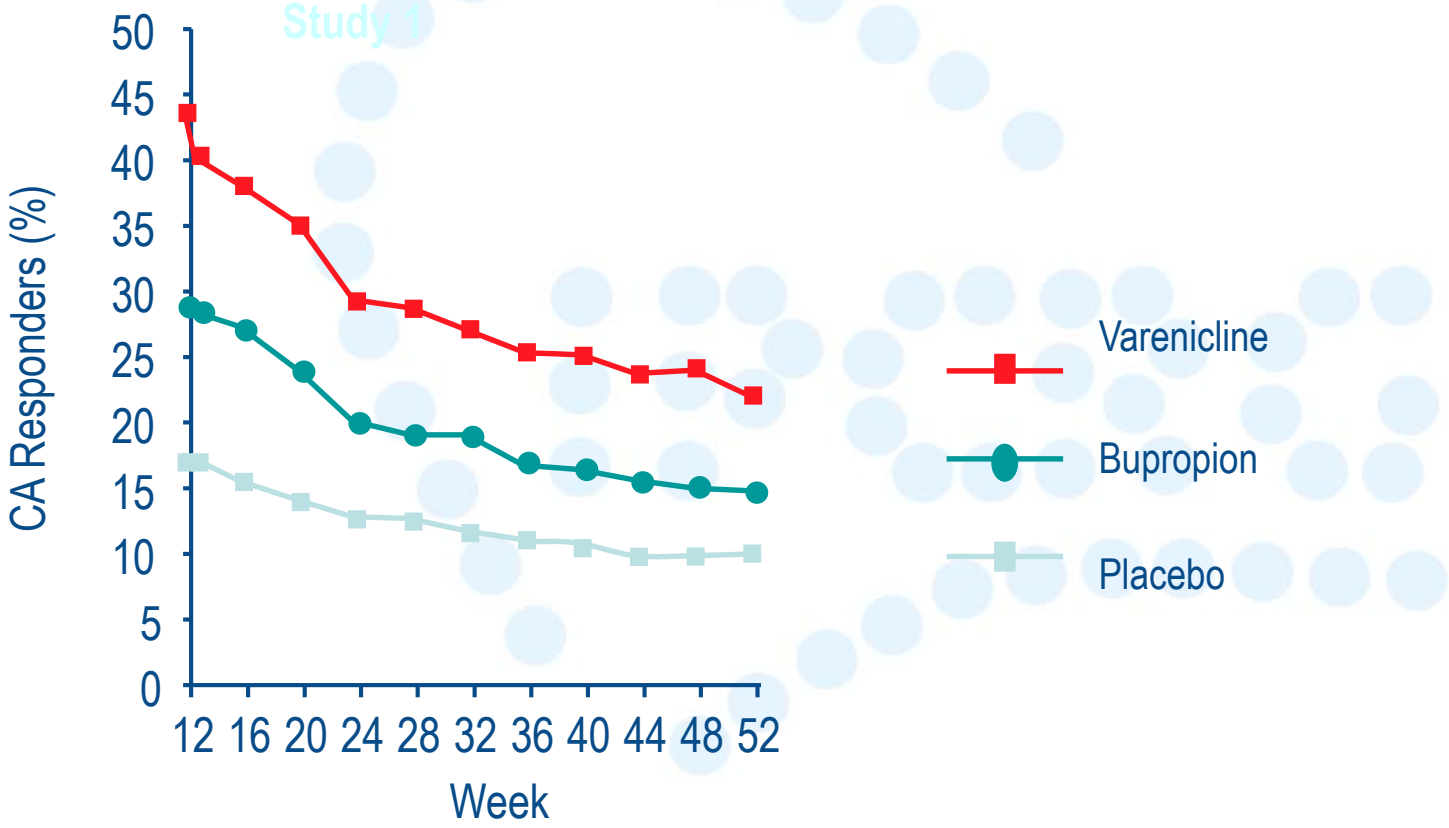
- Partial agonist;
  - Agonist – Stimulates the receptor to reduce craving abstinence.
  - Antagonist—Block the receptor so the effect of smoking is reduced.

- No clinically relevant interactions.



Acetylcholine receptor

Cessation rates with Varenicline

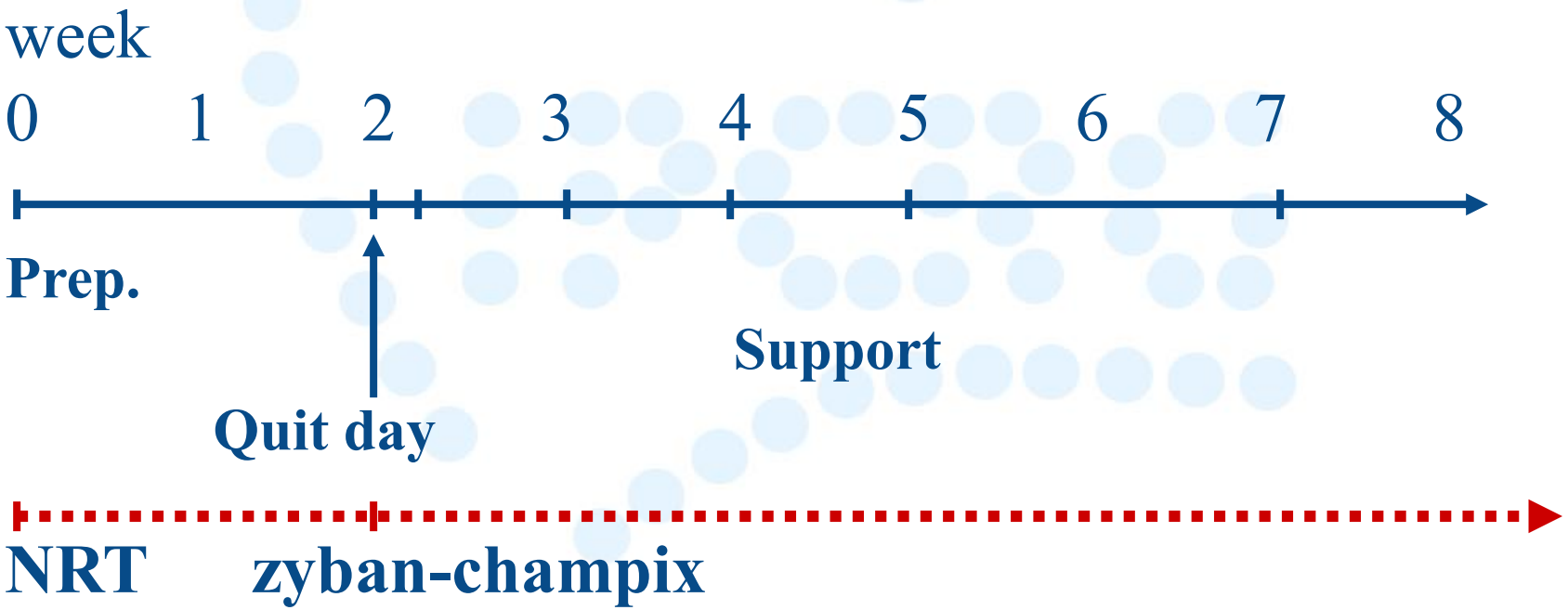


Varenicline-Dosing

- Start one week before quit date.
- Take 0.5 mg tab X 3 days
- Take 0.5 mg tab bid (am/pm) X 4 days
- After first 7 days, increase dose to 1 mg tab in morning and 1 mg tab in evening.
- Take after eating, with a full glass of water
- Reduce the dose in renal failure (CC< 30mL/min) or in hemodialysis

Cahill K, et al. Nicotine receptor partial agonists for smoking cessation. Cochrane Database Syst Rev 2007

Schedule for smoking cessation



Other methods?

- Hypnosis: no documented effect.
- Acupuncture: no documented effect
- Buspiron + other SSRI: no effect
- Klonidin: some effect?
- Nortriptylin: some effect
  - Side effects limit their use.

Electronic cigarettes

E-cigarettes are a class of battery-operated electronic nicotine delivery system (ENDS) designed to provide nicotine through inhalation of nicotine/humectant

Facts

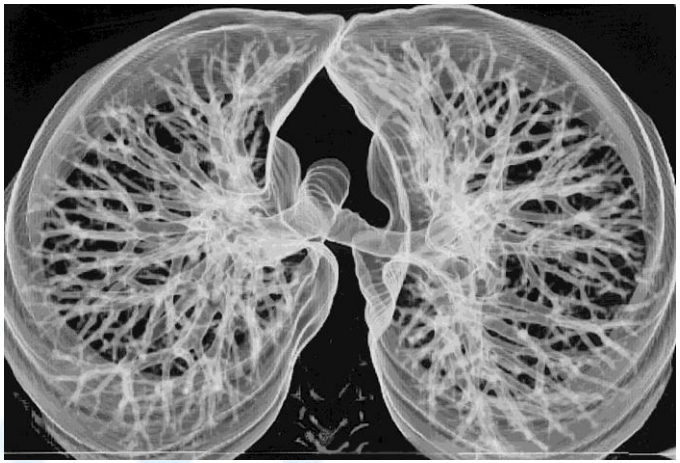
1. neurobiological basis of addiction
2. habitual addictions which reinforce behavior.
   - o “vapor” (propylene glycol),
   - o hand-to-mouth
3. Chemosensory stimulus
4. Lack of combustion

Why care about e-cigarettes?

- Miracle or Menace?
- Tobacco Product ? Medicine ? Electronic Device?
- An emerging market and an evolving device
- Limited science exists
  - Cessation - Switching
  - Topography (draw inconsistency)
  - Constituents
  - Awareness, knowledge
- Huge media attention → PUBLICITY
- Tobacco industry has significantly invested

E-cigarette - Pulmonary System

- No impact on FEV/FVC (n=15), (n=30), (n=58)
- Case reports (Pneumonitis, pneumonia, etc.)
- Increase in respiratory resistance
- Decrease in Exhaled FeNO



CHEST Original Research

TOBACCO CESSATION AND PREVENTION

Short-term Pulmonary Effects of Using an Electronic Cigarette

Impact on Respiratory Flow Resistance, Impedance, and Exhaled Nitric Oxide

Constantine I. Vardavas, MD, MPH, PhD; Nektarios Anagnostopoulos, MD; Marios Kougias, MD; Vassiliki Evangelopoulou, MD; Gregory N. Connolly, DMD, MPH; and Panagiotis K. Behrakis, MD, PhD, FCCP

Pulmonary effects of exposure from e-cig vapor

- Substantial amounts of 1,2-propanediol, glycerine and nicotine were found in the gas-phase, as well as high concentrations of PM2.5 (mean 197µg/m3).
- The concentration of PAH in indoor air increased by 20%
- Aerosolized nicotine seems capable of increasing the release of the inflammatory signaling molecule NO (FENO)

- Nicotine resulting from smoking tobacco cigarettes was 10 times higher than from e-cigarettes (31.6±6.9 vs. 3.3±2.4 µg/m(3)

- Earlier generation e-cigarettes.

- Long term PG/G inhalation?

Summary

Prevent Relapse
Most relapses within 3 first months
Reinforce decision to quit
Follow up
Assist resolving residual problem

Smokers must **want** to stop smoking and must be willing to **work hard** to achieve the goal of smoking abstinence.

Brief Clinical Advice

&

Intensive Smoking cessation Programs

Case report I

Katie is 50 years old, recently widow, unemployed and mother of two children (they all live with her mother). She smokes 30 cigarettes/day. She visited her physician because of a respiratory infection. She has never tried to quit in the past. She has COPD and she takes LABA and theophyline. Her hypertension is uncontrolled.

A) Ask

- **Complete Smoking history**

-age when started smoking

-duration of smoking

-cigarettes/24 h

-nicotine of cigarettes

-previous attempts to quit (which medicine)

-other members in the family that smoke

B) Assess

- **Do you ever think of trying to stop smoking?**
- **Readiness to change (open questions)**

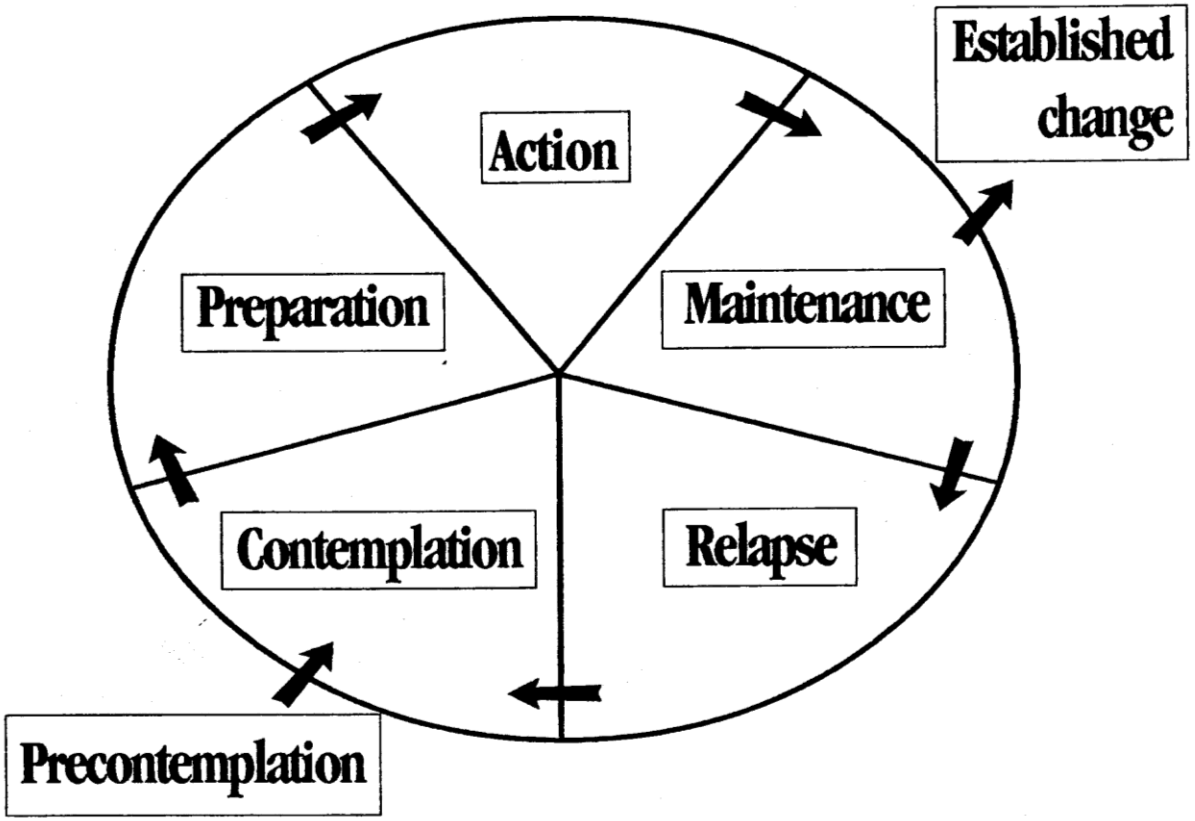
What are the **good things** for you about smoking?

-If you considered changing, what things might be **difficult** for you?

-Do you see any **advantages** in changing?

- **Nicotine dependence (Fagerstrom=9)**

Cycle of change



Based on Prochaska and DiClemente's model

Barriers-Motivation

Barriers against smoking cessation:

-Widow

-Unemployment

Facts favor smoking cessation (motivate):

-Model for children
-Children's health
-Her own health
-Make a new start
-Less money spend

What medication should you give?

-in what dosage?

Case 1: Maria

Age 53

medical history (-),started to smoke 17, attempts to quit in the past none, pack years 80, 50 cigarettes/ day normal

Fagerstrom 11

family history: son smokes

tbs varenicline 0,5-1
quit day: 14
or buproprion
or buproprion plus nicorette patches

Case Amanda: 58 years old, diabetes melitus, sleep apnoea, hypetension, major depression, one suicide attempt 1 year before, epilepsia, started to smoke 20, attempts to quit never, 59 pack years 50/24 hrs normal. Fagerstrom 8, family history: none.

Refer or NRT

Case Jacobs: age 33, history of seizures . Age started to smoke 17, one attempt to quit for 20 days 6 years before, 16 pack years 28/24 hrs heavy. Fagerstrom 9, family history: all children smoke

varenicline 0,5-1

Case Phyl 37 depression pregnant, started to smoke 14, never, 25 pack years 12/24 hrs heavy. Fagerstrom 4, family history: none

NRT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