Smokefree mums and bubs

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AlfredHealth

theAlfred Caulfield HOSPITAL Sandringham HOSPITAL MSHC MELBOURNE SEXUAL HEALTH CENTRE

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Highlights

106,683
Emergency presentations
(Alfred and Sandringham)

111,923
episodes of inpatient care

11,665
elective surgeries performed

96 lung transplants **+** **20** heart transplants

9,016
employees

524
volunteers

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Our transition to Totally Smokefree – May 2008

Rapid transition – within three months

Objectives:

- To reduce exposure to passive smoke
- To demonstrate public leadership

Actions:

- Policy change
- Communication strategies
- Signage

Impact:

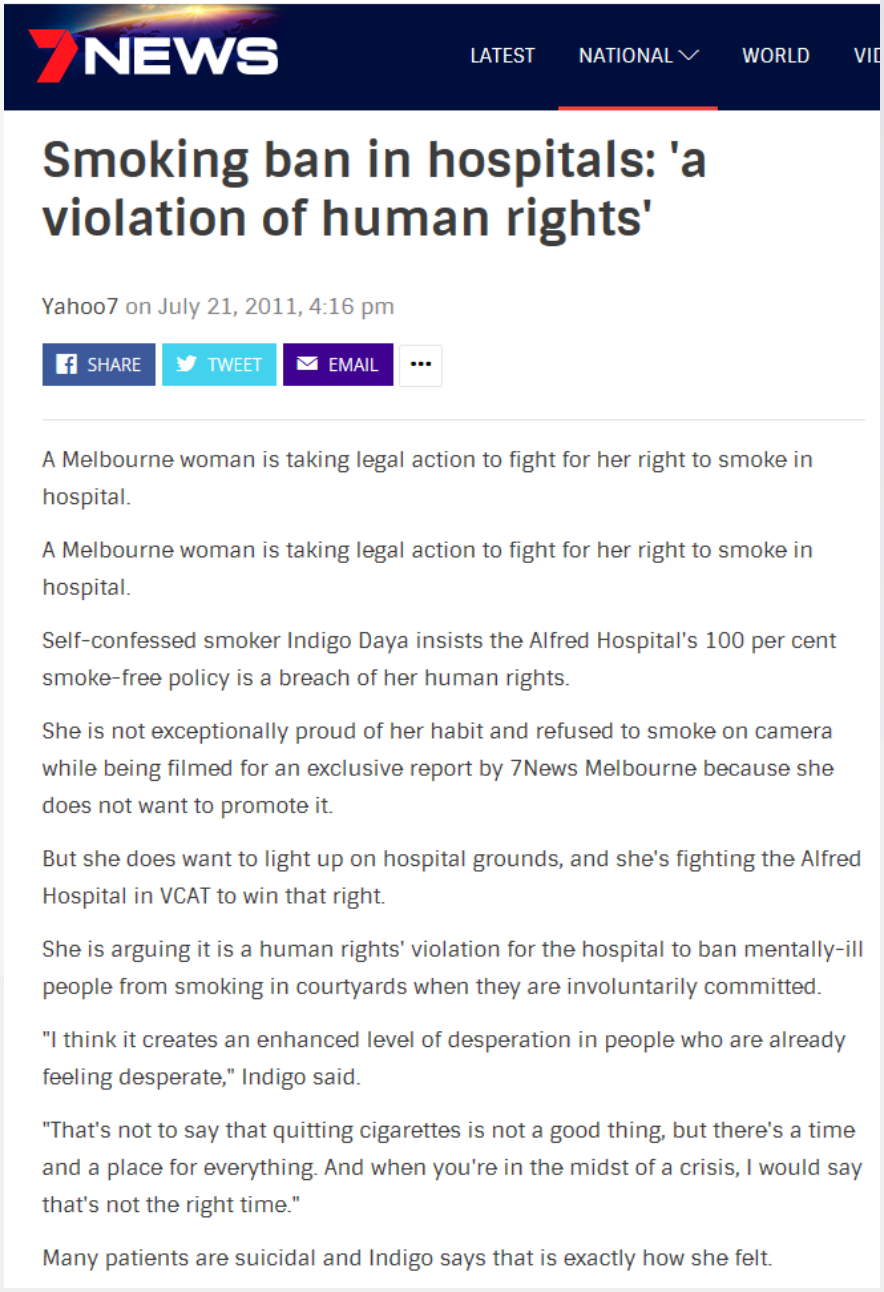
- High awareness
- Mixed compliance
- Unchanged clinical practice

totallysmokefree
a breath of fresh air

Totally Smokefree at The Alfred Video
Click below to view

https://www.alfredhealth.org.au/about/healthy-communities/smokefree-environment

A problem - A legal challenge



7NEWS LATEST NATIONAL WORLD VID

Smoking ban in hospitals: 'a violation of human rights'

Yahoo7 on July 21, 2011, 4:16 pm

SHARE TWEET EMAIL ...

A Melbourne woman is taking legal action to fight for her right to smoke in hospital.

A Melbourne woman is taking legal action to fight for her right to smoke in hospital.

Self-confessed smoker Indigo Daya insists the Alfred Hospital's 100 per cent smoke-free policy is a breach of her human rights.

She is not exceptionally proud of her habit and refused to smoke on camera while being filmed for an exclusive report by 7News Melbourne because she does not want to promote it.

But she does want to light up on hospital grounds, and she's fighting the Alfred Hospital in VCAT to win that right.

She is arguing it is a human rights' violation for the hospital to ban mentally-ill people from smoking in courtyards when they are involuntarily committed.

"I think it creates an enhanced level of desperation in people who are already feeling desperate," Indigo said.

"That's not to say that quitting cigarettes is not a good thing, but there's a time and a place for everything. And when you're in the midst of a crisis, I would say that's not the right time."

Many patients are suicidal and Indigo says that is exactly how she felt.

A new approach- May 2012

Refresh and relaunch

Objectives:

- To reduce exposure to passive smoke
- To demonstrate public leadership
- To facilitate smoking cessation (and manage temporary abstinence)
- To denomalise smoking (prevent uptake and reduce the risk of relapse)

Actions:

- Refreshed communication strategies
- Clinical management of nicotine dependency – clinical guideline
- Education

Impact:

- High awareness
- Increased compliance (but less of a focus on compliance!)
- Reduced smoking around campus perimeter
- Achievement of best practice clinical management

Enablers

Organisational leadership

- Problem that needs a solution
- Communicate publicly and actively
- How can we not...?

Clinical leadership

- Commit to best practice
- Allocate resources – people and pharmaceutical
- Support for patients AND staff who smoke

Education

Continuous improvement

- Measure performance
- Innovate – test new approaches

…and long term!

Clinical Leadership

Clearly defined clinical leadership
Everyone's responsibility can be no one's responsibility

Integrated within existing practice
Without major resource injection

Systematic
Every person

Every time

Especially in those areas with greatest challenges

Measure performance

Normalise practice

Emotionally compel health professionals (starttheconversation.org.au)

Clinical management of nicotine dependency

Clinical leadership by pharmacy

- Pharmacist initiation of NRT
- Supported by nurse initiated NRT
- Within agreed treatment algorithm

All forms of NRT available

- DTC approval
- Global supply- ward imprests

Following discharge

Stop Before the Op

Smokefree outpatient clinic

Good News for Smokers

Support for Patients Video
Click below to view

https://www.alfredhealth.org.au/about/healthy-communities/smokefree-environment/smoking-support-for-patients

Support for inpatients

PATIENT SUPPORT

LED BY OUR PHARMACISTS, WE PROVIDE PATIENTS WITH SUPPORT BEFORE, DURING AND AFTER ADMISSION.

BRIEF **INTERVENTION ADVICE**, WHICH CAN INCLUDE STOP-SMOKING MEDICINES

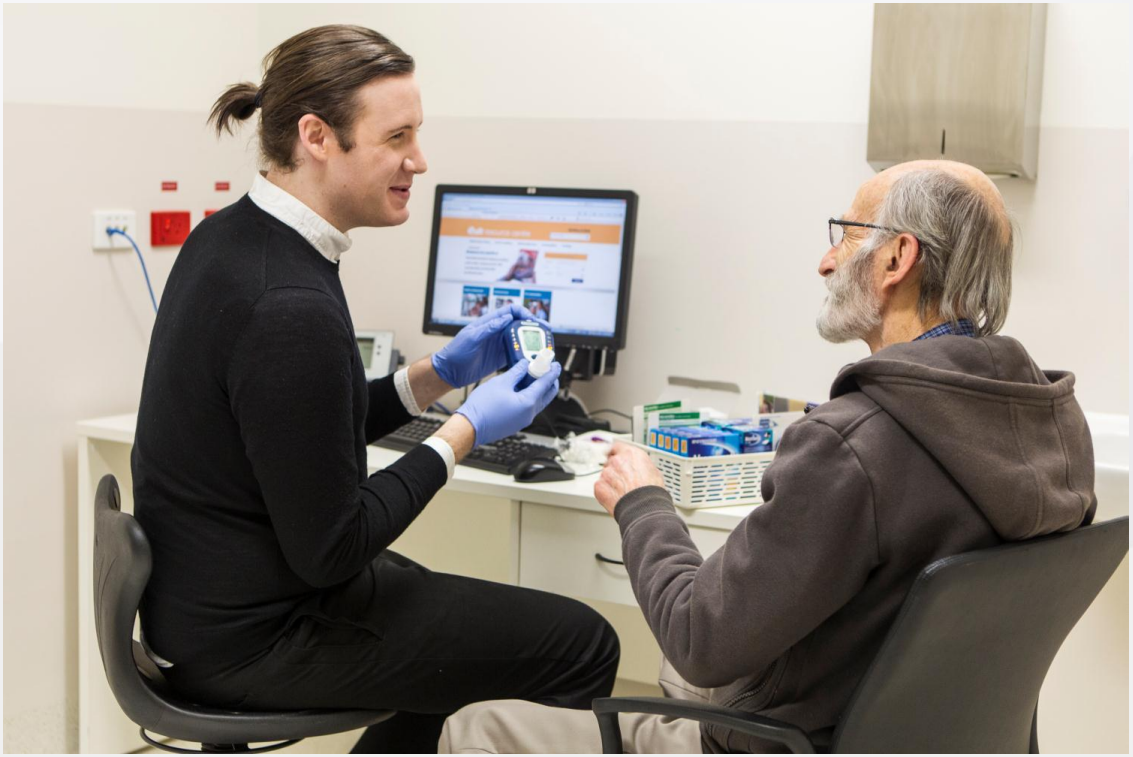
OUR INPATIENTS ARE **4 TIMES MORE LIKELY TO QUIT** THAN THOSE WHO RECEIVE NO SUPPORT

x4

PROPORTION OF PATIENTS GIVEN ADVICE AND SUPPORT TO QUIT HAS RISEN FROM 14% TO **MORE THAN 95%**

95%

Smokefree outpatient clinic



OUR OUTPATIENT SMOKEFREE CLINIC CESSATION RATES ARE **IN THE ORDER OF 42%**

42%

Stop Before the Op

2x SMOKEFREE

Patients were more than **2 times** as likely to be smokefree on the day of surgery

INTERVENTION: **23.3%** (42/181)
vs
CONTROL: **7.9%** (23/292)

4x QUIT ATTEMPTS

Patients were more than **4 times** as likely to make a quit attempt prior to surgery

INTERVENTION: **53.6%** (97/181)
vs
CONTROL: **11.0%** (32/292)

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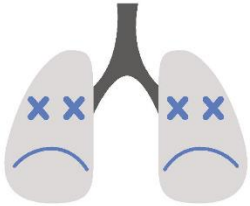
GOOD NEWS FOR SMOKERS

SUPPORTING STAFF WHO SMOKE **TO QUIT**

TOBACCO SMOKING IS A LEADING PREVENTABLE CAUSE OF DEATH AND DISEASE IN AUSTRALIA.

BUT THE COSTS OF SMOKING GO BEYOND HEALTH.



OUR 2016 STAFF HEALTH CHECK TOLD US THAT APPROXIMATELY **4.5% OF OUR 8000+ EMPLOYEES SMOKE**

THAT IMPACTS

OUR STAFF

by affecting their health and wellbeing, as well as their hip pocket

OUR PATIENTS

because healthy staff provide better care

US, AS EMPLOYERS

by costing an estimated **$3594** USD per person annually from absenteeism and loss of productivity due to smoking breaks[1]

ALFRED HEALTH VALUES THE HEALTH OF ITS STAFF. SO, WE WANTED TO SUPPORT STAFF WHO SMOKE TO QUIT...

...BUT QUITTING ISN'T EASY!

RELAPSE IS COMMON AND SOCIAL NETWORKS PLAY A BIG PART.

TO GIVE OUR STAFF THE BEST CHANCE AT QUITTING, WE CONSULTED WITH STAFF AND LOOKED AT THE EVIDENCE TO SEE WHAT WORKS.

1. Berman, 2014.

THE INITIATIVE

We developed a program to support staff who smoke to quit, following best practice.

STAFF HAD ACCESS TO:

NICOTINE REPLACEMENT THERAPY to help with cravings and withdrawal symptoms

FACE-TO-FACE OR PHONE CONSULTATIONS to give personalised advice

GROUP CONSULTATIONS for a support network through the quit journey

EMAILS AND TEXTS for ongoing support and motivation

WE ADVERTISED THE PROGRAM TO STAFF

PEOPLE JOINED FOR DIFFERENT REASONS

"TO LIVE A LONG AND HAPPY LIFE"
"FOR MY LUNGS"
" FOR MY FAMILY"
"FEEL GOOD AND SMELL GOOD"
"SAVE MONEY"

AND IT WORKED.

ALMOST 50% OF STAFF WHO JOINED THE PROGRAM REMAIN **SMOKEFREE**

50%

WHAT PEOPLE SAID

"YOU BOUNCE OFF EACH OTHER'S MILESTONES AND ACHIEVEMENTS."

"I DON'T MISS ANYTHING. I CAN STILL GO OUT WITH MY BUDDIES."

"I AM MORE PRODUCTIVE AT WORK NOW."

"GIVING UP SMOKING TURNED OUT TO BE LESS DIFFICULT THAN I IMAGINED."

FLOW-ON EFFECTS

When staff quit smoking, it not only improves their health and wellbeing and productivity at work, it also makes talking to patients about quitting easier.

COMMITTED TO BEING SMOKEFREE

WE'VE MADE OUR HOSPITAL A TOTALLY **SMOKEFREE ENVIRONMENT**.

WE'RE PROVIDING BEST-PRACTICE **SUPPORT FOR OUR STAFF** WHO SMOKE TO QUIT.

WE'RE PROVIDING BEST-PRACTICE **SUPPORT FOR OUR PATIENTS** TO QUIT SMOKING BEFORE, DURING AND AFTER ADMISSION.

FOR MORE INFORMATION CONTACT ALFRED HEALTH AT PREVENTION@ALFRED.ORG.AU

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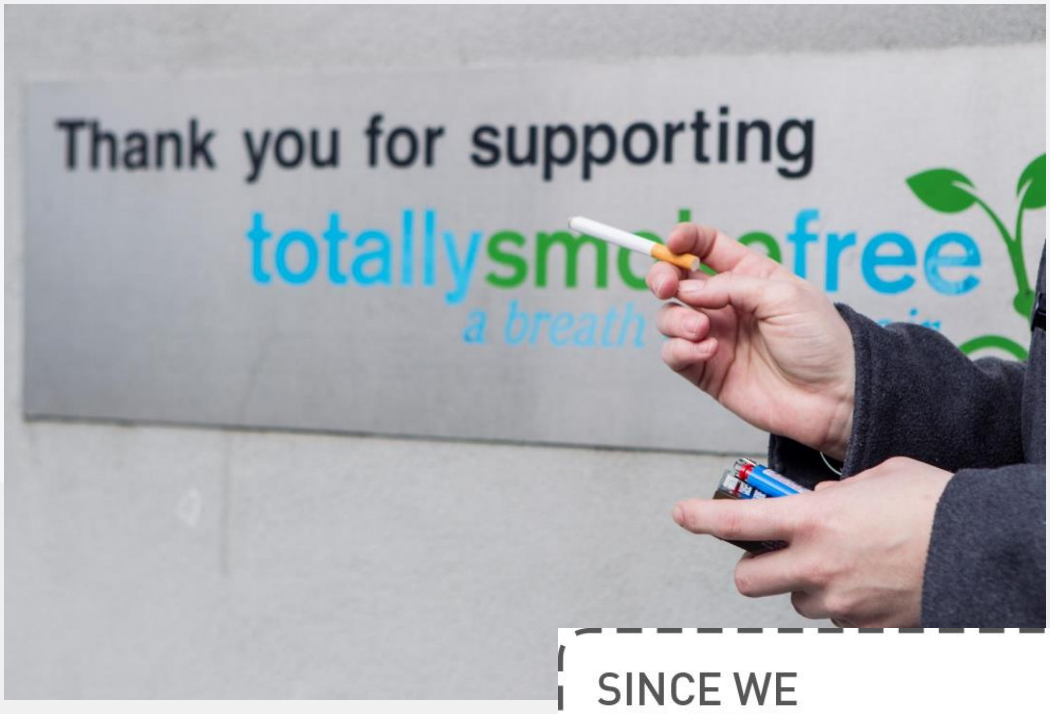
Support for Staff
Click below to view

https://www.alfredhealth.org.au/about/healthy-communities/smokefree-environment/smoking-support-for-staff

Perimeter based smoking



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Continuous improvement

Definition of “success”

Beyond compliance

Evidence of problems does not mean a policy is ‘inappropriate or a failure’

Consistency

Between staff and between departments

Making an exception can be a cause of aggression

Inequalities

In smoking AND quitting

Clinical leadership

Don’t let it be an OHS issue only

Influence clinical practice

A little bit of evidence

Plenty of emotion

start the conversation

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Smoking in pregnancy

Smoking in pregnancy is the most important preventable risk factor for poor maternal and infant health outcomes

•2014- 11% pregnant women smoked at some point during their pregnancy (AIHW 2014)

•Increased risks of miscarriage, stillbirth, prematurity, low birth weight, perinatal morbidity and mortality

•Children of smoking mothers are more likely to start smoking themselves (Leonardi-Bee et al. 2011)

•Rates significantly higher in high priority populations such as ATSI, socially disadvantaged women

•The more cigarettes smoked, the greater the risk of complications and birth weight.

Quitting in pregnancy

- **Quitting during the first trimester**
  - Reduce risk of birth complications
  - Lower risk of prematurity
  - Same chance of healthy birth weight
  - Reduce perinatal morbidity and mortality
- **Quitting at any time during the pregnancy produces health benefits**
- **Cutting down not sufficient**
  - Compensatory smoking- tend to smoke the remaining cigarettes harder by taking more and larger puffs, and holding each puff longer.

Barriers to quitting in pregnancy

- **Fast nicotine metabolism (CYP2A6)**
  - Elimination of nicotine affects the rate at which the person who smokes must ‘top up’ their nicotine
- **Mental illness**
- **Other substance use**
- **Stress**
- **Behavioural and psychological dependence**
- **Having a partner who smokes or living with smokers**
- **Concerns about weight gain**

Okay so what can we do?

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Importance of brief intervention

Brief advice from a healthcare professional prompts people to quit

NNT 1 in 33

Increases long-term abstinence rates by 1-3 percentage points (above unassisted quit rates, which are around 2-3%)

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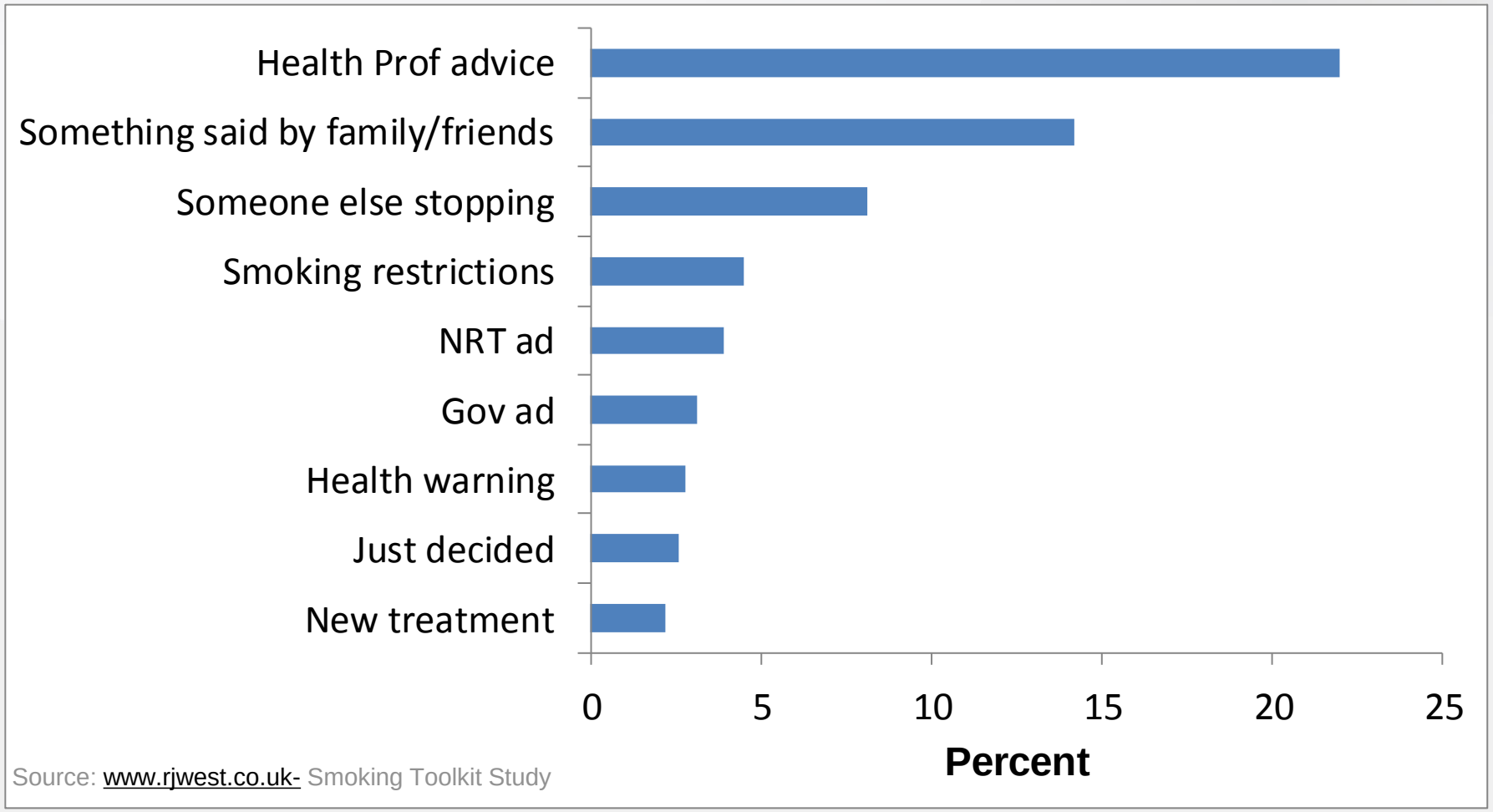
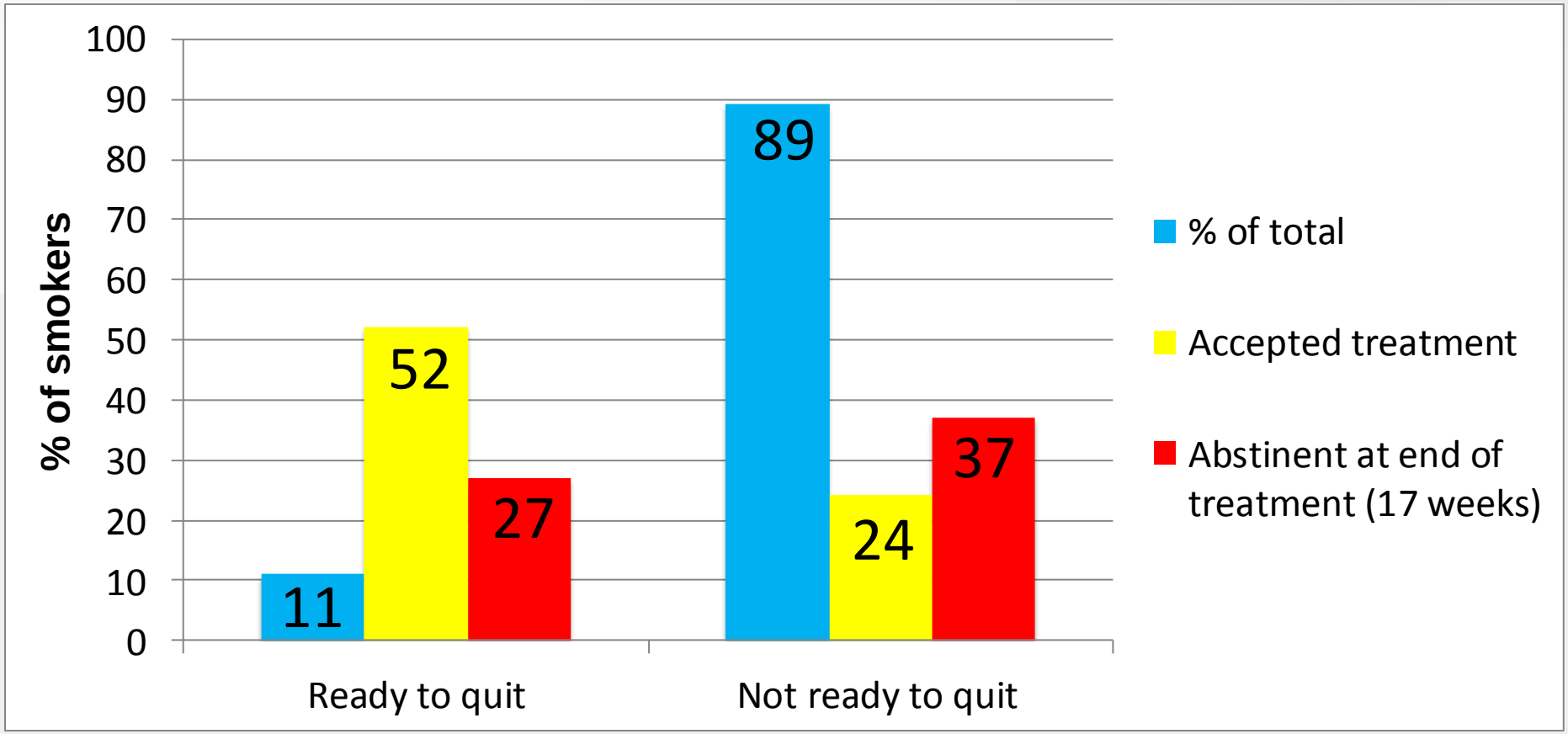
Stead et al. 2013

Health professional advice is the greatest trigger



Source: www.rjwest.co.uk- Smoking Toolkit Study

Stage of change does not matter



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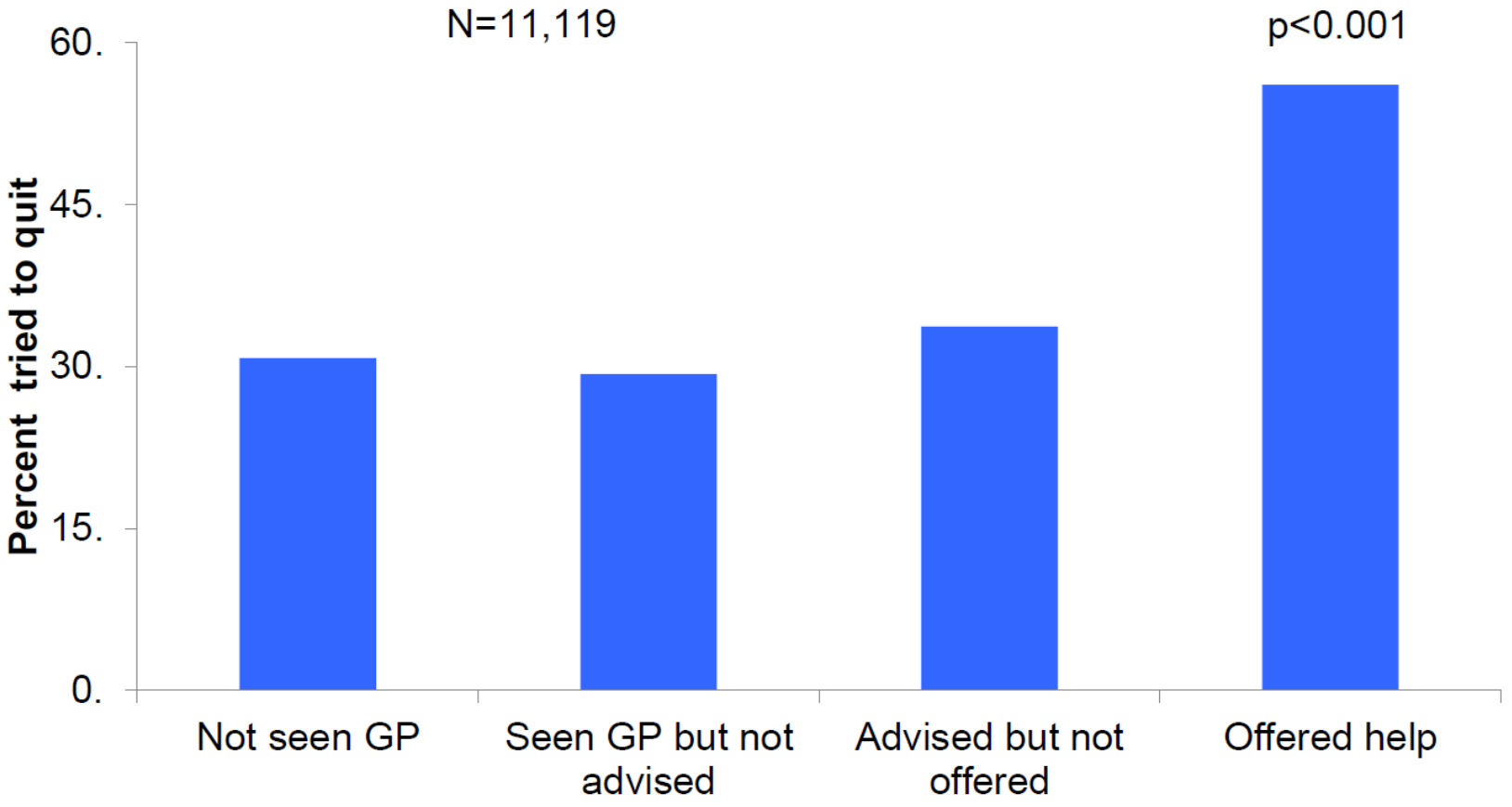
Pisinger et al. 2005

And it's the offer of support that's important



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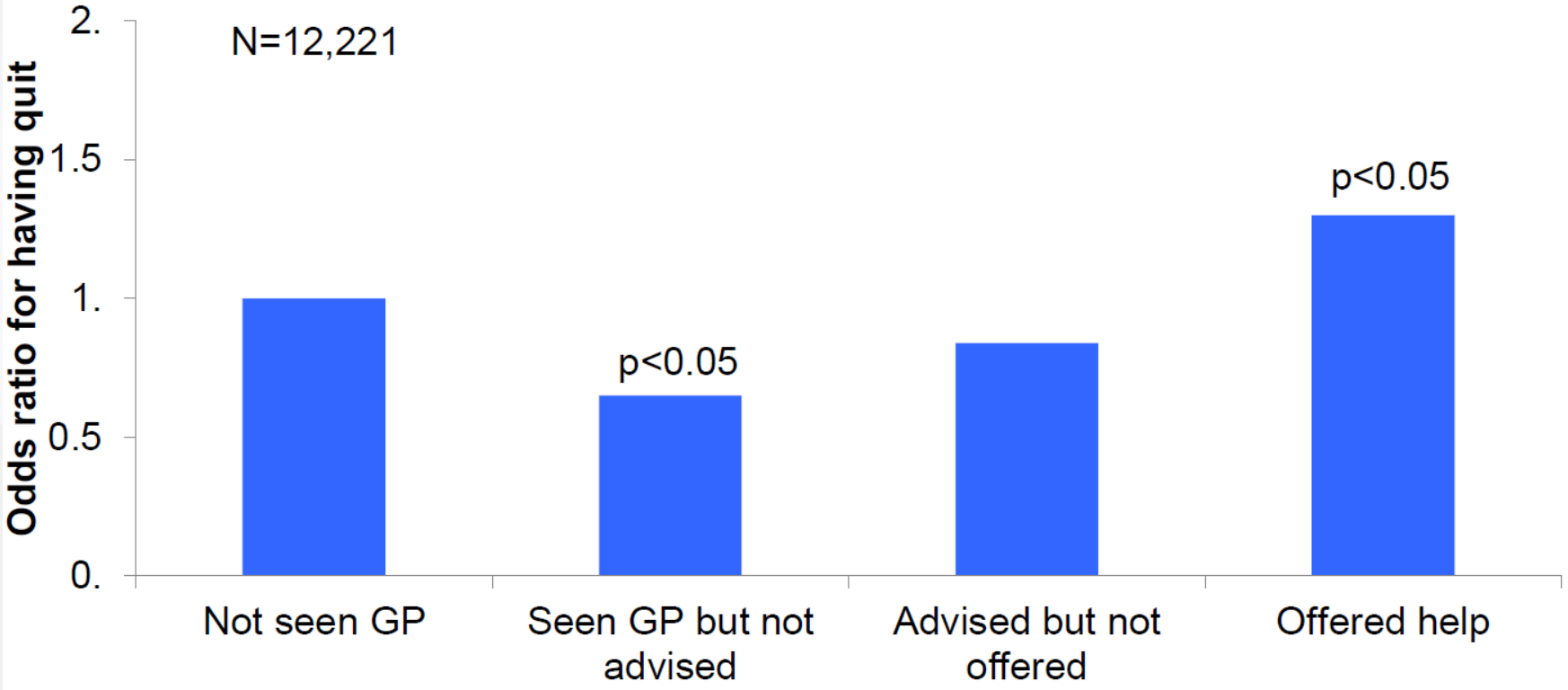
Source: www.rjwest.co.uk- Smoking Toolkit Study

Not advising may be worse than useless



Results of multiple logistic regression adjusting for age, sex and social grade

Source: www.rjwest.co.uk- Smoking Toolkit Study

Identifying pregnant women who smoke

- **Pregnant women should be assessed for possible smoking at every opportunity (at least once each trimester)**
  - Ensure that stopping smoking is deemed important throughout the pregnancy, not just the initial visit
- **Some women find it difficult to admit they smoke due to social stigma**
- **Disclosure of smoking can be increased by up to 40% through multiple choice questions rather than yes/no question (Fiore et al. 2008, Mullen et al. 1991)**

  Which statement best describes you now?

  a. I smoke regularly now- about the same as before I found out I was pregnant
  b. I smoke regularly now- but more than before I found out I was pregnant
  c. I smoke some now, but I have cut down since I got pregnant
  d. I stopped smoking after I found out I was pregnant, and I am not smoking now
  e. I stopped smoking before I found out I was pregnant, and I am not smoking now
  f. I have never smoked

Role of carbon monoxide monitoring

- **Hand-held carboxymeter**
  - Immediate and non invasive biochemical method
  - Measures expired carbon monoxide
  - Detect active and passive smoking
  - Foetal CO reading in both ppm and %FCOHb
  - Traffic light system to provide visual motivation to the mum to be to quit smoking

Why is it so hard to quit?

People who smoke aren't weak nor are they simply making a bad lifestyle choice.

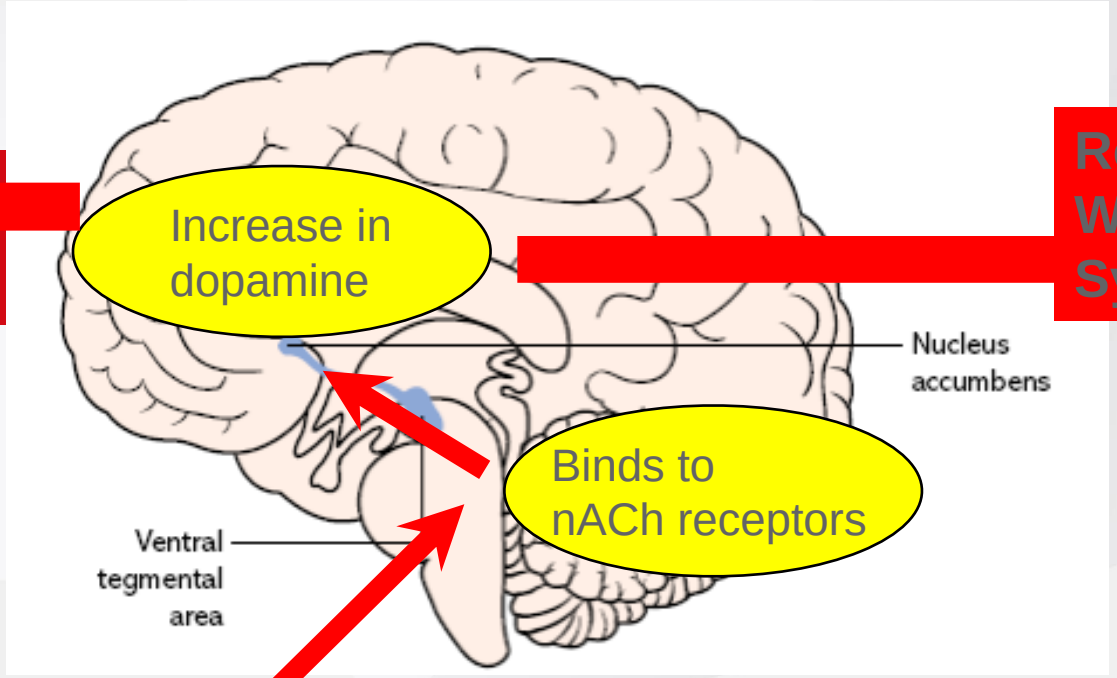
Smoking is a complex process made up of:

- Nicotine dependence
- Behavioural connections
- Psychological connections

Nicotine Dependence

- **Chronic medical condition with multiple cycles of relapse and remission**
  - Relapsed smokers need to be re-engaged and assisted through repeated quit attempts
- **Under recognised by health professionals**
- **Assessment is important**

Positive Reinforcement



Relief of Withdrawal Symptoms

nicotine

Negative Reinforcement

Assessing nicotine dependency during pregnancy

Many women reduce their CPD; measures may be less effective

Consider using strengths of urges to smoke and frequency of urges to smoke scales

- SUTS- ‘in general, how strong have the urges to smoke been in the past 24 hours?’
    - *Slight, moderate, strong, very strong, extremely strong*
- FUTS- ‘how much of the time have you felt an urge to smoke in the past 24 hours?’
    - *Not at all, a little of the time, some of the time, a lot of the time, almost all of the time, all of the time.*

Nicotine withdrawal syndrome

Symptoms begin within hours of quitting/enforced abstinence
•Dizziness, insomnia, restlessness, difficulty concentrating, irritability, increase appetite, mood changes

Duration and severity of symptoms are highly variable among individuals
•Generally worst in first 24-48 hours

Nicotine withdrawal symptoms are usually alleviated in 2-4 weeks

Other mechanisms underlying smoking

Psychological connection

•smoking is related to how clients feel, their moods and emotions

•commonly draw a connection between smoking and stress relief, feelings of comfort and relaxation

Behavioural connections

•behaviours that are closely linked to their smoking

•connections tend to be strong and have built up over many years

Current state

- **Survey of Australian GPs and obstetricians, 25% never prescribe NRT (Bar-Zeev et al. 2017)**
- **Similar findings in the UK, NZ and US (Herbert et al. 2005, Glover et al. 2008, Price et al. 2008)**
- **Barriers**
  - Low confidence in ability to prescribe
  - Safety concerns

1 Summary of current international guidelines for the use of nicotine replacement therapy (NRT) during pregnancy

Organisation, year updated	Key points
RACGP, 2014[4]	• NRT may be considered if quit attempts are unsuccessful and the woman is motivated to quit • The risks and benefits need to be explained to the woman • Oral NRT is the first line option, but larger doses or even combination NRT may be needed
RANZCOG, 2014[14]	• Insufficient evidence to routinely recommend NRT use in pregnancy • If the woman is a heavy smoker and unsuccessful in quitting with counselling alone, NRT may reduce the risk to the fetus
NICE, 2010 (update to be released March 2018)[11]	• Use NRT only in women who are unsuccessful in quitting smoking without medication • Only prescribe NRT once women stop smoking • Only prescribe 2 weeks of NRT • Only give subsequent prescription if the woman is still not smoking
New Zealand Ministry of Health, 2014[12]	• Trials have not shown NRT to be effective in pregnancy • NRT is safer than smoking • Women may use NRT in pregnancy once they have been advised of the risks and benefits
CAN-ADAPTT, 2011[13]	• Limited evidence that NRT is harmful in pregnancy • Some evidence that NRT may be effective • Benefits of NRT seem to outweigh potential risks • NRT should be considered if counselling has been ineffective • Oral NRT is preferred after a risk–benefit analysis
USPSTF, 2015[15]	• Current evidence is insufficient to assess the use of NRT in pregnancy
ACOG, 2015[16]	• NRT use in pregnancy has not been sufficiently evaluated to determine safety or efficacy • NRT should only be used under supervision, after a risk–benefit analysis, and only with a clear resolve of the woman to quit smoking
WHO, 2013[17]	• Cannot make a recommendation on NRT use during pregnancy

ACOG = American College of Obstetricians and Gynecologists. CAN-ADAPTT = Canadian Action Network for the Advancement, Dissemination and Adoption of Practice-informed Tobacco Treatment. NICE = National Institute for Health and Care Excellence. RACGP = Royal Australian College of General Practitioners. RANZCOG = Royal Australian and New Zealand College of Obstetricians and Gynaecologists. USPSTF = United States Preventive Services Task Force. WHO = World Health Organization. ◆

Nicotine replacement therapy

- **Reduces motivation to smoke and the severity of withdrawal symptoms**
- **Six forms of NRT available in Australia**
  - Transdermal- patches
  - Intermittent- gum, lozenge, mini-lozenge, mouthspray, inhalator
- **Minimal addictive potential (Zwar et al. 2006)**
- **No serious side effects, usually minor and formulation related**
- **Does not produce dramatic surges in blood levels**
- **No evidence for weaning/tapering dose (Stead et al. 2012)**

Safety and efficacy NRT

Evidence is limited, small numbers of studies and participants

Effect on maternal BP, pulse, fetal HR, uterine and umbilical artery resistance index similar to continued smoking (Oncken et al. 2009, Oncken et al. 1997)

Animal studies have found nicotine to be harmful for the fetus

- Especially for brain and lung development (England et al. 2017)
- Unsure how this can be transferred to humans (Shanks et al. 2009)

Observational studies

- UK population-based cohort; no significant increased risk major congenital anomalities with NRT use (Dhalwani et al. 2015)
- Danish population-based cohort; no significant changes in mean birth weight (one form of NRT), change in mean birth weight but not significant (combination NRT) (Lassen et al. 2010)
- UK cohort study; combination NRT more effective. Single form NRT no effect (Brose et al. 2013)

Safety and efficacy NRT

Randomised controlled trials

•Cochrane meta-analysis included 8 RCTs (Coleman et al. 2015)- five double blinded placebo controlled, three non-placebo controlled

- NRT increased the smoking cessation rate by 40% (8 studies)
- No significant differences in safety outcomes (risk of miscarriage or spontaneous abortion, stillbirth, NICU admissions, neonatal death) (4 studies)
- No significant differences congenital anomalies, caesarean delivery (2 studies)
- No significant differences pre-term birth (6 studies)

Limitations

Almost all trials use a fixed NRT dose regardless of cigarettes per day and dependency

•Higher metabolism of nicotine during pregnancy- increased by up to 60% (Dempsey et al. 2002)

Low adherence to NRT

No studies titrated according to clinical response

- **NRT**
  - Limited safety information available
  - Non-pharmacological strategies should be employed if possible
  - May be considered if failed to quit smoking using non-pharmacological strategies
  - Use the lowest effective dose that controls withdrawal symptoms and cravings
  - Intermittent forms of NRT preferred
- **Varenicline (Champix®)**
  - Limited information available
  - Consider an alternative
- **Bupropion (Zyban®)**
  - Limited information available
  - Consider an alternative

Supporting smoking cessation during pregnancy

Key points

- Non pharmacological strategies should be trialled if possible
- Use the lowest possible dose of NRT that is effective- ideally intermittent products initially
- Regular use of intermittent NRT during the day as a substitute for cigarettes
- Patches are an option (esp. if nauseated); 16 hour use
- Duration of use- at least 12 weeks, can be longer if needed to prevent relapse
- Regular reviews
- Behavioural support essential
- Use of carbon monoxide monitoring
- Post-partum relapse

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