Strategies

for
Smoking Cessation
in pregnancy

Why pregnancy?

- **"teachable moment"** (McBride 2003) - increased perception of the risk and potential for adverse outcomes of pregnancy
- Higher proportion of women **stop smoking during pregnancy** than at any other times in their lives (Lumley 2005)
- But only about 1/3rd of the women who quit during pregnancy are **still quit 12 months** after the baby is born (Lumley 2005)
- Smoking remains one of the few **preventable causes of adverse pregnancy outcome**, associated with:
  - Low birth weight
  - Very pre-term birth (<32 weeks)
  - Perinatal death
  - Maternal harm (ectopic pregnancy, spontaneous abortion, abruptio placentae)
  - SIDS
  - Lower likelihood of breastfeeding

Why have a strategy?

- To set Aims and Objectives for activity to reduce the prevalence of smoking and pregnancy and thereby improve maternal, child and family health
- To set benchmarks for measuring progress
- To develop systematic coherence in services for pregnant smokers and their families
- To incorporate effective measures into routine clinical practice
- to encourage the development and evaluation of innovative practice
- target: "to reduce the percentage of women who smoke during pregnancy from 24% to 15% by the year 2010"

Key components of a strategy

- **The consumer – who's the strategy for?**
- **data collection**
- **staff training**
- **effective interventions**
- **innovative practice**
- **collaboration and co-ordination**
- **targets and interim / process measures**

What do we know about pregnant smokers?

Think having a smaller baby doesn't matter

•Social disadvantage

Having a partner who smokes

Want a "healthy baby"

Low income

Most of those who stop do so before booking, or in the first trimester

Recall advice from midwife (79%)

81% agree " it's never too late to stop smoking"

Being without a partner

80% think father should stop smoking too

•Previous pregnancies (and having smoked through previous pregnancies)

Don't know about effects of smoking on fetus

Fewer years in education

Consumer views.....

Women who smoked before or during pregnancy commented on:

- **the adverse effects of smoking cessation programmes**

in particular the

- **guilt, anxiety and additional stress**

experienced by women who continue to smoke, and the

- **Detrimental effects on their relationships with family and maternity care providers.**

Ref: Lumley: Cochrane Library 2005

Data

- IFS 2000 indicated a reduction in the prevalence of smoking before or during pregnancy since 1985.
- Prevalence currently 20% in UK
- Next IFS 2005 – report 2006
- DSC Notice 50/2002 requires Maternity Trusts to record smoking
  - in 12 months before pregnancy
  - at booking
  - at delivery
- BUT.... self report; retrospective; not validated

Thorax 2000 Guidance for health professionals

Hospitals and midwifery services should implement efficient systems for recording smoking status and keeping these records up to date

- **Smoking status readily accessible - prominently displayed in patient notes or computer records**
- **Pre-requisite for BI opportunistic advice**

Improving data quality and use

- 100% collection
- ? 10% anonymous validation
- Near-patient validation as motivator
- Regular feedback to mws; hvs; sure start teams; practice nurses and GPs
- Data broken down by Maternity Trust; locality and General Practice areas

Training

Clinicians, midwives, and other staff who may be involved in discussing smoking with patients or clients should receive adequate training to enable them to do this effectively.

Thorax 2000 Guidance for health professionals

Recommendation….

Thorax 2000 Guidance for health professionals

- "Pregnant smokers should receive clear, accurate and specific information on the risks of smoking to the fetus and themselves and be advised to stop smoking."
- "Advice should be given as early as possible on confirmation of pregnancy, and corroborated by all relevant health professionals".
- "it is the basic right of pregnant smokers to be advised of the specific risks"

Training

- In the context of a smokefree NHS…..
- What measures for pregnant smokers , their partners and families?
- All 'front-line' staff to give Brief Intervention (3 mins)
  - raising the issue of smoking and stopping smoking (ask)
  - discuss possibility of quitting (assess)
  - relevant and tailored advice (advise)
  - Offers of support (assist)
  - Information about specialist stop smoking services (arrange)
  - Ask again at next appointment (again)
  - Applaud quit attempts

"Pregnant smokers should be offered specialist support with stopping smoking"

Thorax 2000 Guidance for health professionals

Specialist support should be:

- **Appropriate**
- **Convenient**
- **Involve partner and other family members if appropriate**
- **Flexible and diverse**
- **Include pharmacotherapy**
- **Provided by health professional who had received specific training**

Interventions? what's proven effective with pregnant smokers?

- **Intensive interventions from specialists**
  - May be resource intensive, but needs to be weighed against potential benefits to mother, fetus and subsequent pregnancies, ETS etc.
  - n.b. women who smoke through pregnancy characteristically have multiple disadvantage and strongest nicotine dependence.
- **Interventions tailored to "intention" "motivational state" "readiness"**
  - 'stages of change' may not be appropriate in pregnancy. Might be more effective to work with constructs of 'motivational state' and 'readiness'.
- **Interventions tailored to stage in pregnancy**
  - earlier focus on fetal health, later focus on remaining smoke-free post natal for mother and baby's/child's health

Interventions

- **Multi-component approach – video, self-help booklets, partner booklets, post-delivery booklet**
  - All proven to have some effect. Improved in combination with 1-1 support and motivational approach
- **Involving partners**
  - RCT of multi-component intervention for partners showed significant effect – 7% more likely to stop smoking up to 6 months post natal. NNT 14 to get 1 stopping smoking (Stanton et al 2004) .
- **NRT ??**

  Still too little research evidence to make clear recommendation but…

  Need cost/benefit appraisal. Outcomes likely to be beneficial.

Observational studies

- **Near patient cotinine tests**
  - can be used as educational approach to explain effects of nicotine and positive encouragement to stop smoking (Cope et al 1996)
- **Social support**
  - Few studies, but issue recommended for research. (Lumley 2004/2005)
  - ¼ of women who stopped smoking lived with partners who also stopped smoking – although numbers very small. (Aveyard et al 2004, unpubd.)
  - Partners not influenced by self-help literature.
- **Harm reduction**
  - In theory – but evidence tends to support likely compensatory smoking
- **Sometimes behavioural change can precede cognitive change**
  - Contrary to 'stages of change' – but complimentary to 1-1 support and building confidence

Collaboration and co-ordination

- education – for girls and boys about dangers of smoking and passive smoking
- Pre-conception advice and support
- GPs and practice nurses
- Midwives
- Health visitors
- Sure start teams
- Mother and Toddler groups, Playgroups and nurseries
- For Dads – Pubs; Leisure Centres; Football grounds
- Media – magazines; television; mobile phones; role models etc.

So what might a strategy contain?

- **Integrated care** – involving co-ordinated approach from a range of agencies
- **A programme of training** on BI for staff from all agencies with referral for specialist support from trained advisors
- **Data collection** to measure prevalence and progress + validation and feedback to health professionals
- **Early intervention** – with focus on the first trimester of pregnancy and support to remain quit thereafter
- **Intensive intervention** – multi-component interventions; convenient and 1-1
- **Focus on partners** – and social support
- **Evaluation** – ? Quit Targets - end of pregnancy and 6 and 12 months post natal
- Process measures to inform focus of interventions