Evidence reviews – 2010

Evidence review
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PH26 Evidence statements

Evidence statement number R2.1 indicates that the linked statement is numbered 1 in review 2. **Evidence statement ER1.1** indicates that the linked statement is numbered 1 in expert report 1.

Where a recommendation is not directly taken from the evidence statements, but is inferred from the evidence, this is indicated by **IDE** (inference derived from the evidence) below.

Recommendation 1 : evidence statements R2.1, R2.2, R2.3, R2.4, R2.5, R2.6, R2.7, R2.8, R2.9, R2.10, R2.11, ER1.6, ER1.10, ER1.11; IDE

Recommendation 2 : evidence statements R2.1, R2.2, R2.3, R2.4, R2.5, R2.6, R2.7, R2.8, R2.9, R2.11, ER1.6, ER1.10; IDE

Recommendation 3 : evidence statements R2.2, R2.3, R2.4, R2.5, R2.9, R2.11, R2.12, ER 1.5, ER1.8, ER1.9, ER1.10, ER1.12; IDE; additional evidence PH10

Recommendation 4 : evidence statements R2.1, R2.2, R2.3, R2.4, R2.5, R2.6, R2.7, R2.8, R2.9, R2.10, R2.11, R2.12, ER1.1, ER1.2, ER1.5, ER1.6, ER1.8, ER1.12; IDE

Recommendation 5 : evidence statements ER1.3, ER1.4; IDE

Recommendation 6 : evidence statements R2.3, R2.12, ER1.6, ER1.8, ER1.9, ER1.12; IDE; additional evidence PH15

Recommendation 7 : evidence statements ER2.2; IDE

Recommendation 8 : evidence statements R2.1, R2.2, R2.3, R2.4, R2.6, R2.7, R2.10, R2.11, R2.12, ER1.10, ER1.11, ER1.12; IDE

Please note that the wording of some evidence statements has been altered slightly from those in the evidence reviews to make them more consistent with each other and NICE's standard house style.

Evidence statement R2.1

Two qualitative studies (one [+] Northern Ireland and one [-] USA) and five survey studies (France, UK, Australia, New Zealand and South Africa) provide evidence that not all staff ask all pregnant women about their smoking status during consultations. One (-) study reports data from a lower income/educated population. Three studies (one [++], one [+], one [-] and one narrative provide evidence that staff may not ask about smoking status because of concerns regarding damaging the relationship between themselves and a pregnant woman.

Evidence statement R2.2

Five qualitative studies (one [-] USA and four [+] from South Africa, Sweden, Northern Ireland and USA) and three surveys (France, Australia and GB) provide evidence that the information and advice currently provided by health professionals is perceived as insufficient or inadequate by some women and by professionals themselves. There is the suggestion that advice could be more detailed and explicit, and that professionals find discussion of individual smoking behaviours challenging. Three of the studies (one [-] and two [+]) report data from a lower income/lower educated/deprived area.

Evidence statement R2.3

Five qualitative papers (three [+] from Sweden, South Africa and GB and two [-] from GB and USA) describe how the style or way that information/advice is communicated to pregnant women smokers can impact on how the advice or information is received. Concerns regarding advice being construed as nagging or preaching are reported, together with the recommendation that a more caring, empathetic approach may be helpful.

Evidence statement R2.4

One qualitative study ([+] Northern Ireland) and four surveys (Australia, France, New Zealand and USA) provide evidence that there is variance in practice among staff in regard to the type of intervention offered during and following a consultation, such as whether a leaflet is offered, whether there is referral on to a specialist programme, or whether ongoing personal support is offered.

Evidence statement R2.5

There is evidence from one qualitative study ([+] South Africa) and two surveys (GB and USA) that there is limited knowledge/availability/use of guidelines or protocols in practice. There is evidence from one survey (Australia) that having guidelines/protocols in place may be associated with an increase in the number of smoking interventions offered.

Evidence statement R2.6

Evidence from four qualitative studies (one [++] New Zealand and three [+] from Sweden, South Africa and USA) three surveys (GB, France and New Zealand) and a narrative report (USA) suggests that record-keeping practices and follow-up enquiries may be inconsistent among practitioners. Pregnant women smokers and recent mothers differed in their views regarding the frequency with which they should be asked about their smoking.

Evidence statement R2.7

Three qualitative studies (one [++] New Zealand and two [+] from South Africa and Sweden), seven surveys (four from Australia, two from USA and one GB) and one narrative report (USA) suggest that staff perceive that they have limited skills and knowledge to implement successful smoking cessation interventions.

Evidence statement R2.8

Two qualitative studies (one [+] South Africa and one [-] Australia), seven surveys (three from Australia, two from USA, one New Zealand and one GB) and one narrative report (USA) provide evidence that staff perceive that lack of time is a significant barrier to the implementation of smoking cessation interventions.

Evidence statement R2.9

One qualitative study ([+] South Africa), six surveys (four from Australia and two from USA) and narrative from one study (USA) suggest that staff perceive that limited resources, in the form of either staff or patient education materials, impact on the delivery of interventions. These papers report findings from Australia and the USA – their applicability to the UK may need to be considered.

Evidence statement R2.10

Two qualitative studies (one [+] Sweden and one [+] South Africa) and seven surveys (three from Australia, two from USA, one New Zealand and one GB) suggest that staff perceptions regarding the limited effectiveness of interventions may impact on their delivery of services. One paper (USA) describes a lack of firm reasons for non-attendance given by women who did not attend a smoking intervention programme.

Evidence statement R2.11

Four surveys (two from Australia, one New Zealand and one GB) provide evidence that typical practice in regard to smoking cessation advice and management of care can vary between doctors and midwives. It is reported that GPs are more likely to advise women to quit smoking completely, whereas midwives are more likely to advise gradual reduction. Also, the evidence suggests that midwives are more likely to refer on to other agencies and record smoking status. GPs may be more likely than midwives to raise the subject of smoking at subsequent consultations.

Evidence statement R2.12

One qualitative study ([+] GB) and two narrative reports (both USA) describe obstacles to pregnant women smokers accessing services as including: the length of sessions; difficulty making telephone contact; and a lack of transport or child care. It is suggested that domiciliary or very local services, the provision of crèche facilities, appointment systems or telephone counselling could be suitable service delivery options. One study (USA) suggests, however, that telephone support services may have poor success in terms of contact rates.

Evidence statement ER1.1

There is good evidence from one recently updated systematic review (++) on the effectiveness of interventions for promoting smoking cessation in pregnancy.

The review included 72 trials. Pooled results show that cessation interventions reduce smoking in late pregnancy (risk ratio [RR] 0.94, 95% confidence interval [CI] 0.93 to 0.96) and reduce incidences of low birth weight (RR 0.83, 95% CI 0.73 to 0.95) and pre-term births (RR 0.86, 95% CI 0.74 to 0.98) while increasing birth weight by a mean of 53.91 g (95% CI 10.44 g to 95.38 g).

The overall finding of the updated review is that smoking cessation interventions used in early pregnancy can reduce smoking in later pregnancy by around 6% (or 3% using studies least prone to bias).

Evidence statement ER1.2

There is good evidence from one recently updated systematic review (++) on the effectiveness of financial incentives for promoting smoking cessation in pregnancy. Four trials in the review examined financial incentives. A meta-analysis found that financial incentives paid to pregnant women to promote smoking cessation were found to be significantly more effective than other intervention strategies (RR 0.76, 95% CI 0.71 to 0.81).

Evidence statement ER1.3

There is mixed evidence from one recently updated systematic review (++) and one recent trial ([++] USA) (not included in the review) on the effectiveness of nicotine replacement therapy (NRT) for promoting smoking cessation in pregnancy.

In the review, meta-analysis of data from five trials found NRT to be effective (RR 0.95 CI 0.92 to 0.98). However, a large, double-blind, placebo-controlled trial, published after the review searches were completed, found no evidence that NRT was effective for smoking cessation in pregnancy (RR 0.96, 95% CI 0.85-1.09).

Evidence statement ER1.4

There is no evidence that NRT either increases or decreases low birthweight. There are insufficient data to form judgements about any impact of NRT on stillbirth or special care admissions (two [++]).

Evidence statement ER1.5

There is good evidence from one recent systematic review (++) on the effectiveness of self-help interventions for smoking cessation in pregnancy, although the extent of UK evidence is limited.

Fifteen trials were included in the review and 12 in the primary meta-analysis which found that self-help interventions were effective (Odds ratio [OR] 1.83, 95% CI 1.23-2.73). A further meta-analysis failed to find evidence that more intensive self-help interventions had greater impact than less intensive ones.

Evidence statement ER1.6

There is evidence from four UK studies (all [+]) that NHS Stop Smoking Services are effective in supporting pregnant women to stop smoking.

The NHS Stop Smoking Service interventions for pregnant women described in these articles consist of a combination of behavioural support (delivered in a range of settings and formats) and NRT (for most but not all women). They report varied outcomes but those that included 4-week post-quit date outcomes reported quit rates of between 32% and 48%. However, evidence from a national study of smoking cessation services for pregnant women in Scotland found that the reach and effectiveness of services varied significantly between health boards. Some areas offered no tailored (specialist) smoking cessation interventions for pregnant women.

Evidence statement ER1.8

There is limited evidence about whether the form of delivery can affect the effectiveness of smoking cessation interventions for pregnant women.

One trial ([++] UK) found some evidence that stage-matched interventions for smoking cessation in pregnancy were more effective, particularly in improving women's readiness to quit, but concluded that it was difficult to interpret this finding as the stage-based interventions were also more intensive. Another qualitative study ([+] UK) summarised the delivery characteristics of stop smoking services for pregnant women that were perceived to be successful by key stakeholders. These characteristics included: training of midwives in how to refer pregnant smokers to specialist services, offering NRT to almost all clients, having an efficient system of providing prescriptions, offering home visits, and providing intensive multi-session behavioural support delivered by specialist staff.

Evidence statement ER1.9

There is limited evidence that the site or setting of the intervention influences the effectiveness of smoking cessation interventions for pregnant women in the UK. One study ([+] UK) found that most stop smoking services in Scotland offered home visits by trained advisers to pregnant women. An analysis of routine service data suggested that, for those home-based services for which data on engagement (whether a woman attended the first appointment with a specialist adviser) were available, about 50% of those referred engaged compared with 20% for clinic-based services.

Evidence statement ER1.10

There is good evidence that women in the UK under-report smoking during pregnancy and that CO monitoring can aid in the identification of pregnant smokers. Two studies (one [++] and one [+]) found that around one in four pregnant women in the west of Scotland do not accurately disclose their smoking status when asked during the booking visit with a midwife. One of these studies described how routine CO monitoring in antenatal clinics, if implemented consistently, can improve the accurate identification of pregnant smokers and facilitate referral to smoking cessation services.

Evidence statement ER1.11

There is very preliminary evidence from two observational studies that opt-out referral pathways can increase the number of women who engage with NHS stop smoking services and result in larger numbers of women quitting smoking, when compared with opt-in referral pathways.

Evidence statement ER1.12

Two studies (one [+] UK and one [-] UK) explored pregnant women's views about smoking cessation services. Barriers to accessing services included, among others, feeling unable to quit, lack of knowledge about services, difficulty of accessing services, fear of failing and concerns about being stigmatised.

Evidence statement ER2.2

There is moderate evidence that multi-component interventions that include free nicotine replacement therapies are effective in encouraging partners who smoke to stop smoking. Nine studies (five [+] from USA, the Netherlands, Australia and two from the UK, one [++] Australia, three [-] from Sweden, China and Norway) examined whether specific interventions were effective in encouraging partners and 'significant others' who smoke to stop smoking. Interventions that had non-significant outcomes include: a media education campaign, partner-delivered booklet, counselling, biofeedback-based interventions,and self-help guidance.

Two randomised control trials from the US and Australia had significant outcomes. These interventions offered free NRT patches to partners, in conjunction with smoking cessation resources and multiple telephone counselling sessions which encouraged partner support, or along with a minimal intervention which included video and print materials on smoking cessation and multiple contacts to address the male partner's smoking. However, the effect of treatment on overall quit rates was not sustained at follow-up periods.

Applicability: both studies with significant findings took place outside of the UK. Therefore, findings may not be directly relevant to the UK.