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CORRESPONDENCE

Stopping smoking—again

Dear Sir,

I read with interest the commentary by Lumley (1991) on stopping smoking. I agree fully that as health workers, we must strive towards a progressive reduction in cigarette smoking in pregnant women. The effect of passive inhalation on the developing fetus is uncertain. However, we know that the effects of passive smoking is around one half to one third that of direct smoking (Hirayoma 1981) and this is likely to contribute to increased nicotine and carbon monoxide levels in the feto-maternal circulation. As such we must also re-educate the women's partners and family members who smoke regarding its deleterious effects on the fetus.

In all cases of stopping an addiction, the person's motivation is of prime importance. I fear that a reduction in fetal birthweight in pregnant women who smoke may not be a strong enough deterrent, especially when smaller babies are often erroneously seen as advantageous and more likely to be successful vaginal deliveries. What is necessary may be more direct aural and visual demonstration of the effect of smoking on the fetus. One interesting study (Kelly *et al.* 1984) showed reduced fetal heart variability and increased fetal heart rate on CTG as well as reduced fetal movements within minutes of smoking. All these improved when the women reduced or stopped smoking. Allowing the woman to see and hear the changes in her fetus's heart rate caused by her smoking provides a much stronger incentive to stop.

Perhaps videotaped evidence of similar trials revealing the direct effects of smoking on the fetus can be shown either at antenatal visits or via the community midwives to the heavier smokers among pregnant women.

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First trimester prenatal diagnosis

Dear Sir,

We read with great interest the commentary by Neilson & Gosden (1991) concerning chorion villus sampling (CVS) or amniocentesis for prenatal diagnosis, which echoed the concerns of the MRC Working Party on the Evaluation of Chorion Villus Sampling (1991), that early amniocentesis should only be available within the confines of a randomized trial. We fully concur with this opinion and that is why we have been conducting a randomized trial of early amniocentesis and chorion villus sampling at 10–13 weeks gestation, since January 1990. The aim of the trial is to determine the safety and diagnostic accuracy of the two techniques. As both techniques are performed in exactly the same way (transabdominal insertion of a 20 gauge needle) by experienced operators, the results will reflect the risks associated with sampling the different tissues rather than differing techniques and wide range of operator experience.

A sample size calculation has illustrated that if the fetal loss rate following CVS is approximately 4%, and the difference between CVS and early amniocentesis is 1%, 6700 patients need to be studied before it can be demonstrated that this difference is significant. We have reported the cytogenetic outcome of the first 650 patients (Byrne *et al.* 1991) and established the entry criteria for the trial: (i) a singleton pregnancy from 10–13 weeks gestation with a minimum fetal crown-rump length of 38 mm, and (ii) fetal karyotyping for low risk indications, such as advanced maternal age, family history of chromosomal abnormality (in the absence of balanced parental translocation) and parental anxiety. After counselling, patients either choose early amniocentesis or CVS or to be randomized between the two procedures. The procedure related pregnancy loss will not be reported until completion of the trial or if anonymous interim statistical review confirms there to be significant differences that should be made public. Considering the sample size calculation we plan for the trial to become multicentre and are at present accepting applications from other European centres with experience in ultrasound guided invasive techniques and cytogenetic support.

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