

Most girls receive sexual health and contraception advice at school at the age of 12–13 years and the average age of first intercourse in the general population is 17 years.<sup>10</sup> Over 32% of 14–15-year-old girls have had intercourse.<sup>15,17</sup> In this survey women received sexual health advice in their late teens, but would have preferred to have received advice earlier. However, no unplanned pregnancies occurred before contraceptive advice was given, suggesting that the age of provision of sexual health information is not the most important factor in preventing unwanted pregnancies. Discussions with the specialist CF nurses highlighted the observation that ‘specialists’ and parents often view sick young adolescents as ‘children’ and do not see that they are developing into young adults.

The patient’s GP or CF team were the main sources of advice and information regarding contraception and sexual health. However, the CF team lacked knowledge and training in the full range of modern contraceptive methods. Only one-third of the women surveyed had ever attended specialist contraceptive services. This may explain why none of the study participants currently used an IUD, IUS or Implanon®. Although it is the practice of the CF teams to offer patients an appointment at the hospital-based contraception and sexual health clinic,<sup>17</sup> most patients decline or fail to attend this appointment, and many state that they would rather see their GP. Patients with CF have to attend many clinics and may not wish to attend further appointments at a different time or location. Provision of accurate and detailed written information would help CF staff, contraceptive services and the patients’ GPs to provide up-to-date advice about contraception options, potential drug interactions, fertility and sexual health. Information on how to access contraceptive and sexual health services across the region could also be included.

Unfortunately at present there is no reproductive health guidance available for women with CF and there have been conflicting opinions in the medical literature over the years. A simple, easy-to-understand leaflet to supplement the fpa (Family Planning Association) leaflets would give specific advice for those with CF and help CF specialists to advise women appropriately.

Provision of specialist sexual health clinics at the same time and in the same location as CF services would allow discussion about contraception, fertility and pregnancy options alongside consultations with the CF physician. The most appropriate time for this would be in the early teens, before these young women become sexually active.

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## References

- Dodge JA, Lewis PA, Stanton M, Wilsher J. Cystic fibrosis mortality and survival in the UK: 1947–2003. *Eur Respir J* 2007; **29**: 522–526.
- Davis PR. Cystic fibrosis since 1938. *Am J Respir Crit Care Med* 2006; **173**: 475–482.
- Sawyer SM. Reproductive and sexual health in adolescents with cystic fibrosis. *BMJ* 1996; **313**: 1095–1096.
- Canny GJ, Corey M, Livingstone RA, Carpenter S, Green L, Levison H. Pregnancy and cystic fibrosis. *Obstet Gynecol* 1991; **77**: 850–853.
- Edenborough FP, Mackenzie WE, Stableforth DE. The outcome of 72 pregnancies in 55 women with cystic fibrosis in the United Kingdom 1977–1996. *Br J Obstet Gynaecol* 2000; **107**: 254–261.
- Hillman B, Aitken ML. Pregnancy in patients with cystic fibrosis. *Clin Obstet Gynaecol* 1996; **39**: 70–86.
- Fitzpatrick SB, Stokes DC, Rosenstein BJ, Terry P, Hubbard VS. The use of the oral contraceptive pill in women with cystic fibrosis. *Chest* 1984; **86**: 863–867.
- Kopito LE, Kosasky HJ, Schwachmen H. Water and electrolytes in cervical mucus from patients with cystic fibrosis. *Fertil Steril* 1973; **24**: 512–516.
- Oppenheimer EA, Case AL, Esterly JR. Cervical mucous in cystic fibrosis: a possible cause of infertility. *Am J Obstet Gynecol* 1970; **108**: 673–674.
- National Statistics Online. Women of reproductive age-parity. 2007. <http://www.statistics.gov.uk> [Accessed 18 August 2008].
- Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit Guidance (January 2007). *First Prescription of Combined Oral Contraception*. <http://www.ffprhc.org.uk> [Accessed 14 August 2008].
- Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit Guidance (April 2005). Drug interactions with hormonal contraception. *J Fam Plann Reprod Health Care* 2005; **31**: 139–151.
- Faculty of Family Planning and Reproductive Health Care. Statement on MHRA Guidance on Depo-Provera. 18 November 2004. [http://www.ffprhc.org.uk/admin/uploads/Depo\\_Provera\\_alert\\_statement.pdf](http://www.ffprhc.org.uk/admin/uploads/Depo_Provera_alert_statement.pdf) [Accessed 14 August 2008].
- Haworth CS, Selby PL, Horrocks AW, Mawer EB, Adams JE, Webb AK. A prospective study of change in bone mineral density over one year in adults with cystic fibrosis. *Thorax* 2002; **57**: 719–723.
- Faculty of Family Planning and Reproductive Health Care Clinical Effectiveness Unit Guidance (October 2004). Contraceptive choices for young people. *J Fam Plann Reprod Health Care* 2004; **30**: 237–251.
- Guillebaud J. *Contraception: Your Questions Answered* (4th edn). Edinburgh, UK: Churchill Livingstone, 2004.
- Roberts S, Green P. The sexual health of adolescents with cystic fibrosis. *J Roy Soc Med* 2005; **98**(Suppl. 45): 7–16.

## JOURNAL REVIEW

**Sensitivity and specificity of multimodal and ultrasound screening for ovarian cancer, and stage distribution of detected cancers: results of the prevalence screen of the UK Collaborative Trial of Ovarian Cancer Screening (UKTOCS).** Menon U, Gentry-Maharaj A, Hallett R, Ryan A, Burnell M, Sharma A, *et al.* *Lancet Oncol* 2009; **10**: 327–340

Epithelial ovarian cancer (EOC) remains a disease with a poor prognosis and little has been achieved in the preceding decade to improve outcomes in women affected by this malignancy. One potential strategy to reduce mortality from EOC is to detect the disease at an earlier stage, given that women with FIGO Stage I disease have >90% 5-year survival whereas 5-year survival is under 30% in patients with Stages III and IV. The UK Collaborative Trial of Ovarian Cancer Screening (UKTOCS) set out to examine whether screening for ovarian cancer will reduce mortality from ovarian cancer. It is hugely impressive in its scale and will surely

provide an answer. This paper, however, is a report of the performances of the two testing schedules used in the prevalence screen. Over 100 000 postmenopausal women were randomised to screening with either annual ultrasound (USS) or multimodal screening (MMS) using ultrasound and CA125 (measured as an undisclosed algorithm, rather than a single test). A further 101 359 women were allocated to a control group whose results were not examined in this publication. In the MMS group, 90.9% were low risk and returned to annual follow-up, however nearly 1 in 10 had an intermediate or high-risk result leading to further testing. Ultimately there were 97 women who proceeded to surgery and 46 of these had benign or no disease at operation or final histology. In the USS group, 88% were low risk, while 12% required further testing, leading to 845 operations of which 92% were benign. The decision for surgery was taken by the individual consultants following “clinical assessment” and it is not clear whether there were uniform

guidelines for clinicians to follow in listing a participant for surgery. The operations in the MMS group more commonly involved laparotomy and major complications arose in both groups; 2.8% (22/787) in the USS group vs 4.3% (2/47) in the MMS group. In cases of EOC that were detected only 50% were early stage. Overall MMS performs significantly better than USS with respect to specificity (99.8% vs 98.2%) but not sensitivity (89.4% vs 84.9%). There were more false-negatives in the USS group (8) than the MMS group (4). Although the authors suggest that these screening tests are feasible, it has yet to be demonstrated that they are cost effective, and eventually that they reduce mortality from EOC, and it will be 2011 at the earliest before these data are made available.

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