
There are more than 80 types of human papillomavirus (HPV) and approximately 30 strains are associated with genital infection. Several of the strains can be associated with cervical neoplasia. Evidence is accumulating to show that detection of persistent HPV infection could help detect those at most risk of cervical neoplasia disease progression. This study looked at the diversity of HPV infection and its association with cervical neoplasia. It used 3444 randomly selected samples, which were residual from liquid-based cytology samples. Its aim was to investigate the overall prevalence of HPV, the type specific prevalences, and the number with multiple infections. This was then compared with the cytological assessment for neoplasia.

Approximately 10% of the samples showed some HPV type detected in 20% of samples, and 77% of these showed a high-risk type of HPV. Surprisingly, 42% of the positive samples from under-25-year-olds were HPV-positive.

Several of the strains can be associated with cervical neoplasia and this may influence the addition of HPV virus. The overall prevalence of HPV, the type specific prevalences, and the number with multiple infections. This was then compared with the cytological assessment for neoplasia.

The results also showed that with increasing severity of dyskaryosis on cervical sample there was an increasing prevalence of HPV virus. Infection with multiple HPV types were found in 3.4% of negative sample and in 33.3%, 41.8% and 40.4% of samples with borderline, mild or high-grade dyskaryosis, respectively. HPV infection with a single type showed a very similar picture. Cytological assessment for neoplasia is in progress and this may influence the addition of HPV testing to the cervical screening programme. The result of current pilot studies looking for HPV in under-25-year-olds may also help with this decision.

Reviewed by Laura Patterson, MRCP, DFFP
GP Non-penal, Avante Specialist in Family Planning, Swannd, UK


This paper analyses the cost-effectiveness of a contraceptive method used by users of the IUD in relation to the prevention of pregnancy and cost saving of a method. It does not include all methods, for example, implants, and excludes vasectomy costs.

The probability of a woman discontinuing a method or complications requiring medical treatment was estimated from USA national data and surveys. The model used some assumptions about how long a woman uses contraception. The study only included parous women, and it assumed that if a patient discontinued a method she would start another. It was assumed that if a woman giving birth a woman would start a method within 2 months and that, when calculating the cost for barrier methods, it is likely that any calculations can only give a rough estimate of the cost-effectiveness of a particular method.

Reviewed by Judy Murty, DRCOG, MFFP
SCMO, Contraception and Sexual Health Services, Leeds, UK


This is another report derived from the data acquired for a study of a Family Planning Association (Ipa) Study. Readers will remember that the study recruited about 17 000 married women between the ages of 25 and 39 years, from 17 family planning clinics between 1968 and 1974, who used oral contraceptives (OCs), a diaphragm or an intrauterine device. By the end of December 2000, 889 women had died.

The study found no overall increased risk of death from all causes among women who used OCs (regardless of duration of pill use) compared with women in the study who had never used OCs. Although the data suggested that the overall risk of death was lower among OC users than among non-users, this did not quite reach statistical significance.

In comparison with non-smokers, light smokers showed a slightly increased death rate from all causes of around 25%, and heavy smokers (women who smoked more than 15 cigarettes a day) showed more than a doubling of death risk from all causes. Even in women who smoked 5–14 cigarettes a year, the harmful effects of smoking were already apparent.

The study provided no surprises in reporting that in users of OCs compared with non-users, there was a decrease in mortality from uterine and ovarian cancer. Moreover, OC use could not be related to increased mortality. The numbers are all small with wide confidence intervals. Although women who took OCs and did not smoke, or only smoked lightly, showed no increased mortality from ischaemic heart disease, women who took OCs and smoked heavily showed a slightly increased death rate.

The study did not show any relationship between length of OC use, variance in use and increased mortality, nor between smoking and breast cancer mortality. These figures need to be considered together with the knowledge that this study did not recruit young women starting OCs before the first full-term pregnancy and that only 16% of the total number of women who died had recent or current exposure to OCs. A large number of other causes of death were examined for their relationship to smoking and OC use. This is unusual and may be due to the difficulties in discussing specific risks with an individual woman.

The Oxford Ipa Study is one of only three large-scale studies of long-term OC safety. It provides valuable data on the long-term effects of contraceptive use as well as morbidity and mortality among women of childbearing age. It does have some limitations. Long-term studies are subject to cohort effects, follow-up and number dwindle. The numbers of deaths from any cause in this age group is (thankfully) small. Most of the OCs used in the 1970s and early 1980s contained more estrogen. It is unclear whether the findings can be extrapolated to the pills in use currently. Also, some effects of OCs (e.g. on cardiovascular disease or breast cancer) have been shown to apply mainly to current or very recent users, OCs may then be stopped when serious illness occurs, but death may not occur for many years. The analysis of the effects of smoking only considered the amount recorded at recruitment. The authors state that 17% of light smokers and 14% were heavy smokers.

The headlines in the news should have been: ‘Oral contraceptive use not harmful’. But, as usual, good news is no news. What we did not see either was the bad news: ‘Young women are killed by smoking’. This is an important study reporting the harmful effects of smoking on the health of young and middle-aged women. All women who work in contraceptive care are in contact with healthy individuals who might otherwise not see a health professional. Our primary task is to help them with their contraceptive needs, but we also have a responsibility to tell them about activities damaging to their future health.

Reviewed by Gill Wakley, MD, MFFP
Visiting Professor in Primary Care Development, Staffordshire University and Freelance GP and Writer, Aberavon, UK


This is the fourth paper in recent years that has suggested that hormonal emergency contraception (EC) can be used on the fourth or fifth day after unprotected sexual intercourse (UPSII). This paper cites an imaginary woman who reported 4 days after UPSII. The authors recommend that progestin-only emergency contraception (POEC) be prescribed. This is justified by reference to clinical studies in which hormonal EC on the fourth and fifth days appeared to be effective. It will be relevant to compare this to the other three papers. The first paper described POEC given to 131 women before 72 hours after UPSII compared to POEC given to 169 women between 72 and 120 hours after UPSII. The pregnancy rates were respectively 0.8% and 1.8%.

The authors concluded that POEC could be given up to 120 hours after UPSII. The second paper was the World Health Organization (WHO) study previously reviewed in the Journal Club section of this Journal. It was a study of 4136 women requesting EC who were randomly given either mifepristone or levonorgestrel up to 120 hours after UPSII. For the levonorgestrel group the pregnancy rates on Days 4 and 5 after UPSII were 1.1% and 4.8%, respectively. The mifepristone rates on Days 4 and 5, respectively, were 1.0% and 5.0%. The authors state that the small numbers of women given delayed treatments in this trial makes our estimation very imprecise. The third paper compared 675 women who had used Yuzpe regime EC within 72 hours with 111 who had Yuzpe regime EC between 72 and 120 hours after UPSII. The users were put into two groups: perfect users and typical users. The pregnancy rate in the perfect group was 0.9% and the pregnancy rates for the 120 hour groups were, respectively, 1.9% and 3.6%.

The authors concluded that Yuzpe regime EC could be given up to 120 hours after UPSII especially if an IUD was contraindicated. So the question is whether the limit should be 72 hours. But, as recently reviewed in the Journal Club section of this Journal, this is an important study providing valuable data on the long-term effects of emergency contraception. The authors concluded that POEC could be given up to 120 hours after UPSII. The author recommends that progesterone-only emergency contraception (POEC) be prescribed. This is justified by reference to clinical studies in which hormonal EC on the fourth and fifth days appeared to be effective. It will be relevant to compare this to the other three papers.

References

Reviewed by Michael Cox, FRCOG, MFFP
Consultant Obstetrician and Gynaecologist (Retired), Nuneaton, UK