

Pam Sims gives guidance in the light of the recent government decision.

# The Morning After Pill

The Morning After Pill (MAP) was first publicly debated in the mid-eighties. It was judged not to cause early abortion under the terms of the 1967 Abortion Act by the then Attorney General in 1983.<sup>1</sup> The view now held by the medical establishment at large is that pregnancy starts after implantation of the embryo.<sup>2</sup>

The method licensed for use since 1984 (marketed as PC4 by Schering) has been the Yuzpe regimen. Two pills each containing 50 mcg of ethinylloestradiol plus 250 mcg levonorgestrel (or its equivalent 500 mcg norgestrel) are given 12 hours apart, starting within 72 hours of unprotected intercourse.

The treatment has been remarkably safe though a common side effect was nausea and vomiting. There were also theoretical, but unfounded, concerns over possible thrombotic side effects of the oestrogen component.<sup>3</sup>

Age	1975	1999	%rise
Under 15	2.3	3.3	43%
15	7.5	8.2	9%
16-19	17.5	26.0	49%

Rates of abortions per 1,000 women per year, Residents of England and Wales.  
Source: Abortion Statistics Series AB nos. 24 and 26, ONS

## How it works

The precise mechanism of action of MAP is uncertain.<sup>4</sup> Ovulation is delayed if it is taken early in the cycle, fertilisation is probably not affected neither is the function of the corpus luteum. Early trials<sup>5</sup> of high dose oestrogen showed impairment of tubal transport with a consequent increased risk of ectopic pregnancy, more recent data on the risk of ectopic shows no increase in risk. There has been no evidence of teratogenicity in the event of an ongoing pregnancy. There is conflicting evidence on the endometrial effects of MAP. However a recent review of published literature confirms that 'The Yuzpe regimen could not be as effective as it appears to be if it worked only by preventing or delaying ovulation.'<sup>6</sup>

Not every act of intercourse results in pregnancy. The risk of pregnancy after a single act of intercourse at any stage of the menstrual cycle is 2–4%. In the days around ovulation it rises to 20–30%. In clinical trials there are two ways of expressing results. One gives the overall failure rate and includes the women who would

never have become pregnant anyway. The other expresses the ratio of observed to expected pregnancies and an estimate of the probability of pregnancy occurring at that particular stage of the cycle is made.<sup>7</sup>

## Recent Developments

A multicentre international trial was set up by WHO to compare the Yuzpe regimen with progestogen alone in the form of levonorgestrel. The dosage was 750 mcg also taken twice within 72 hours and 12 hours apart. The results were reported in the *Lancet* in 1998.<sup>8</sup>

- Levonorgestrel alone was significantly more effective in preventing ongoing pregnancy after a single act of unprotected intercourse than the combined oestrogen-progestogen preparation.
- Both methods were more effective the earlier the first dose was given after intercourse.
- Results of an earlier study showing significantly less nausea and vomiting were confirmed.

Levonorgestrel (as Levonelle-2, also marketed by Schering) is now fast becoming the drug of choice. It prevents 85% of expected pregnancies from continuing, rising to 95% if started within 24 hours of coitus. The overall failure rate is 1.1% when expressed as a percentage of all those treated. Levonelle is more expensive than PC4 (cost price £5 per pack) although the price may possibly come down.

## Social Background

In spite of the rapid rise in use of MAP abortion rates have not changed significantly. There are over 150,000 per year in England and Wales. Of particular concern is the sexual activity of teenagers; conception rates have steadily increased with teenage abortion more dramatically rising (see figure). We now have the highest rates in Europe.

In the White Paper on 'Teenage Pregnancy'<sup>9</sup> the Government aims to halve the rate of teenage conceptions amongst the under 18s by 2010. Sex education and availability of contraception are supposedly the answer.

## Prescribing

Contraception, including MAP has always been available by NHS prescription free of charge through GP's, family planning clinics and increasingly A and E departments. Since the Gillick ruling in 1985 girls under 16 have been able to receive contraception without parental knowledge, though this is not encouraged. There have been two recent developments:

## KEY POINTS

The MAP levonelle-2 has recently become available over the counter in pharmacies without prescription to girls above 16. The view of the legal and medical establishment is that pregnancy begins after implantation; so the morning after pill, although it acts, at last in part, by preventing implantation is widely viewed as a contraceptive rather than an abortifacient. Teenage pregnancy, sexually transmitted disease and abortion rates have risen despite wider availability of the MAP. The key underlying ethical issues centre around the status of the embryo, the context of sexual intercourse and the lesser of two evils debate.

- As of 1 January 2001 MAP was made available over-the-counter (OTC) to women over 16. The Ministerial Order was introduced in December 2000 and confirmed in the House of Lords on 29 January 2001.
- Extension of Patient Group Directions. PGD's have long enabled non-medics to prescribe certain, usually basic, drugs. A Ministerial Order passed in August 2000 greatly expanded the scope for such prescribing.

Drugs have to fulfil safety requirements for OTC sale and pharmacists should be trained to give appropriate advice. Not all countries have pharmacy status. In the US, for example, drugs are either on prescription or on general sale. In certain European countries, such as France, MAP is available from pharmacists without prescription.

Concerns in this country of OTC provision include the following: the young girl may falsify her age, there should be a private place for discussion, there is no access to her medical records and finally the price may be prohibitive. The present charge to the public is £19.99 OTC though some clinics are selling it for £10.

Pharmacists may also dispense MAP under a PGD. This too is the mechanism by which school, and other nurses give the drug. In these instances there is no charge and legally the girl may be under 16. Setting up a PGD involves establishing strict guidelines for use of a drug and regular review.

## Christian Response

There are several ethical questions involved in a consideration of MAP:

- Status of the embryo - when does life begin?
- Sexual intercourse – does it have any meaning?
- Sexual health of teenagers in particular – what are the messages being sent to them these days?
- Individual prescribing habits of doctors – should we give MAP?
- Church's response – is it of any relevance?

Doctors holding the absolutist position, believing that individual human life starts at fertilisation, would not be able to prescribe MAP. By the same token they would have problems with IVF, cloning of embryos, certain IUD's or any other type of postcoital contraception. If we believe

## 'THE NEED FOR MAP IS AN INDICATION FOR FURTHER CONTRACEPTIVE ADVICE.'

that life is a developing continuum from fusion of the gametes onwards then we will have problems with anything that hinders this process. The fact remains that MAP does not always work in this manner – but unless used very early in the cycle (up to day eight) it must do so some of the time.

As we have already seen, use of MAP is very often in women who would not have conceived anyway. From the point of view of a possible embryo no harm is done. However from the point of the culture being encouraged many would argue that great harm is being done and that promiscuity is being promoted.<sup>10</sup> Teenage sexual activity has continued to rise in spite of sex education and availability of contraception. MAP is simply one end of this spectrum.

The question of whether we, as Christian doctors, should prescribe MAP is becoming increasingly academic. As we have seen women are increasingly receiving it from sources other than their doctor. Undoubtedly the progestogen-only drug is very safe indeed, with virtually no contraindications.

Many doctors feel that MAP is the lesser of two evils and better than the abortion request that might follow. However not every woman would become pregnant. And not every woman once definitely pregnant would necessarily want it terminated (though MAP, not being teratogenic, does not in the least remove her option of continuing to term).

GP's, family planning specialists and school nurses may feel they are in better position to provide ongoing counselling and support than a pharmacist in a one off visit. Follow up is very important. The need for MAP is an indication for further contraceptive advice. It should also be seen in the context of sexual health in general with screening for and possible treatment of STI.

The response of Christians and perhaps the Church in general to MAP has largely been condemnatory. Pro-lifers have genuine concerns over the mechanism of action of these pills. The rest of Christendom agonises over the morality of young people as they indulge in sexual activity at an ever younger age. The ideal of sex within marriage and children

(including 'accidents') being accepted as a gift from God seems to be very far removed from the reality of life at the beginning of the 21st century.

Steve Chalke in a recent magazine article<sup>11</sup> has argued the case for the Church to put more effort into providing practical support for youngsters caught in the trap of low self esteem, poverty and early sexual activity. He accepts that we should make a moral stand, but that this should be non-judgmental – 'Jesus called us to be salt not pepper!'

*Pamela Sims is a Consultant in Obstetrics and Gynaecology in Hexham.*

## References

1. Reference was made to the Offences Against the Persons Act 1861, which made causing miscarriage a crime. In fact literature of that time seems to indicate that the law applied at all stages of embryonic development. See Gerard Wright QC. *The Legal Implications of IVF, chapter in Test Tube Babies – a Christian View*. Order of Christian Unity, 1984: 42
2. See for example Guillebaud J. *The Lancet* 1998; 352: 416-417
3. Vasilakis C, Jick SS, Jick H. *Contraception* 1999; 59: 79-83
4. Glasier A. Review article. Emergency postcoital contraception. *New England Journal of Medicine*. 1997; 337: 1058-64
5. Morris JM, Van Wagenen G. *Am J Obstet Gynecol* 1973; 115:101-6
6. Trussell J, Raymond EG. *Obstet Gynecol* 1999; 93:872-6
7. Figures quoted from Faculty of Family Planning and Reproductive Health Care of the RCOG. Recommendations for clinical practice: emergency contraception. Interim Guidance October 1999.
8. Task Force on Postovulatory Methods of Fertility Regulation, WHO. *The Lancet* 1998: 352: 428-33
9. *Teenage Pregnancy*. A White Paper (Cm 4342). The Social Exclusion Unit. June 1999
10. The Morning After Pill. *Promoting Promiscuity*. The Christian Institute: January 2001. [www.christian.org](http://www.christian.org)
11. Chalke S. What might Jesus say to The Church about the Morning After Pill. *Christianity & Renewal* 2001: 47-8 (March)