MARIE STOPES
International

Working for Women, their Families and their Environment
Projects Office: 62 Grafton Way, London W1P 5LD
Telephone: 071-388 3740 Fax: 071- 388 1946

The Quinacrine Imperative

Tim Black, MBBS, MRCP, DTM&H, MPH
MSI London

The developing world is undergoing a family planning revolution. Since 1969 contraceptive prevalence rates have risen from 14 percent to 58 percent, or 41 percent excluding China. Knowledge of child-spacing possibilities is now practically universal. Most couples in most countries know of at least two methods of contraception — usually the Pill and sterilisation. Throughout the developing world the majority of couples complete their families after 6 to 10 years. This means they will have to contracept for 25 to 30 years. Access to safe, affordable abortion, legal or illegal, is improving dramatically.

The World Bank, citing the rapid increase in contraceptive usage in Kenya and Bangladesh, now accepts, what programming agencies working in the field have long known, that poverty is not a barrier to family planning. Religion at the programming level as distinct from the policy level, is no longer a significant problem. Portugal, Spain, Italy and Greece have the lowest fertility rates in the world. Morocco, Tunisia, Malaysia and Indonesia have high and rapidly increasing contraceptive prevalence. Similarly, based on programming experience, high infant mortality rates do not appear to be a barrier to contraceptive use. Many countries in Latin America, Asia and Africa have achieved dramatic increases in contraceptive prevalence at times of high infant mortality. While others, such as Kenya, have long had relatively low rates and only slow increase in contraceptive use.

The private sector is now an important source of contraception. In Latin America, Egypt, South Korea and Taiwan, over 60 percent of contraception is obtained from private providers. In Asia and some African countries the numbers of contraceptors obtaining paid-for supplies and services from non-governmental sources is increasing as a result of social marketing programmes and the growing numbers of private medical practitioners.

Of the 58 percent of married fertile couples in the developing world using some form of contraception, 49 percent rely on modern methods (33 percent excluding China). Sterilisation is the most widely used method with 45 percent of all contraceptors relying on this procedure. Of the balance, 25 percent use the IUD, 12 percent the Pill, 5 percent the condom, and other modern and traditional methods account for the rest. The level of unmet need for contraception is rising rapidly. The Demographic Health Survey and other surveys indicate between 20 and 30 percent of developing country couples want to contracept but lack services. Typically half want interval, and half want terminal methods or sterilisation. In global terms there are now 120 million couples wishing to contracept but unable to do so. Just meeting this unmet need would raise contraceptive use to around 67 percent.

In just ten years, by 2006, there will be an additional 200 million more couples of reproductive age. To stay on course for the UN median variant population projection, which anticipates an ultimate global population of around 12 billion by the end of the 21st Century, me must achieve replacement fertility (2.1 children per woman) by 2035. To meet this goal, developing country contraceptive prevalence rates will have to rise by half a percent a year. In sterilisation terms this will require, according to the UNFPA, an estimated 200 million procedures over the next ten years — 60 million just to account for menopausal women. The likelihood of future Pill and other methods scares, means there will al-

most certainly be an even greater increase in demand for terminal methods. The UNFPA projection is almost certainly a serious under-estimate.

Unless funds are made available to aggressively socially market vasectomies, most of the sterilisations will be female procedures — at the very least 85 percent, or 170 million. According to the UNFPA the consumable cost per surgical sterilisation is $7 for a minilap and $12 for a laparoscopic sterilisation.* These figures do not include the costs of the medical team, administrative, travel and marketing costs. Factoring these costs, the overall figure is in the region of $45 a procedure. This means the cost of female sterilisations alone required to remain on course for the UN median variant population projection will be over $7.6 billion. This ignores the opportunity cost of the medical facilities and personnel diverted from other duties for this purpose.

Given this situation there is an urgent need for safe, effective, inexpensive methods of sterilisation that can be delivered by paramedical personnel in rural areas. This is already available for men — vasectomy. Transcervical Quinacrine sterilisation appears to offer this possibility for women. The chemical compound used in this simple IUD insertion-like procedure has been used by millions of people for anti-malarial purposes, over prolonged periods, including 3 million American troops during World War II, at dosages of 3 gm per month — six times that required for sterilisation. It is also a drug approved by the FDA and regulatory authorities in Britain for the treatment of Giardiasis, in both children and adults at a dose four times that required for sterilisations.**

There are legitimate concerns about Quinacrine use. Toxicological and mutagenicity issues need to be resolved. Its ease of use could lead to abuse. It is not yet as effective as other methods of sterilisation, but this is improving with experience. Failure rates are currently comparable to extended use of IUDs. The ectopic pregnancy rate, a potential serious risk, again appears to be comparable to the IUD.

The risks should be set against the historic experience and potential benefits. There has been prolonged, extensive and apparently cancer-free use of this compound since 1930 for anti-malarial and other purposes. Only two small doses are required for sterilisation; the risks to women and their offspring of unwanted pregnancies in rural areas of developing countries are high. Typically 2 to 5 women and 60 to 100 babies will die for every 1000 rural births. Every thousand unwanted rural births prevented by Quinacrine will prevent these deaths.

The unlikely possibility of resourcing the surgical procedures required to achieve the UNFPA target, the magnitude of the surgical task involved, and the lack of time available to identify and research alternatives, are compelling arguments for a priority crash programme to resolve the outstanding toxicological issues. Because in practical programming terms transcervical Quinacrine sterilisation offers a ...

- Safe
- Simple
- Acceptable
- Effective
- Inexpensive

... terminal method of contraception that does not require intervention of doctors or use of expensive medical facilities.

Since it can be delivered by trained paramedical personnel and costs less than $2.50 to deliver, **Quinacrine sterilisation offers the onlv realistic practical, affordable prospect of making the health, maternal and infant death, and abortion preventing benefits of terminal contraception readily available, accessible, affordable and acceptable to all women who have completed their families in urban and rural areas alike.**

Transcervical female sterilisation using Quinacrine (or other compound) along with contraceptive social marketing of condoms and vasectomies to men, and greater private medical sector involvement, would complete the family planning revolution that is taking place. It would ensure that Humankind achieves, or betters, the UN median variant population projection of 12 billion people on Planet Earth.

* Contraceptive Use and Commodity Costs in Developing Countries, 1994-2005. UNFPA Technical Report No. 18, 1995

** It is listed in the 1994 British National Formulary