

THE PROVISION OF FAMILY PLANNING CONTRACEPTIVE SERVICES

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Each year there is an additional 20 million couples of reproductive age who will need family planning services. For many couples their needs will not be met since financing for reproductive health services worldwide covers only about half of the US \$ 10 billion needed⁽¹⁾. How these limited funds are best used will depend on numerous contraceptive specific and local factors.

Models for determining the relative costs associated with use of different contraceptive services are country dependent. Few studies have evaluated the relative costs of providing different types of contraceptives. One study, based on data from the United States, found that over a 5-year period, copper T IUCDs, vasectomy, contraceptive implants, and injectable contraceptives were the most cost effective⁽²⁾. The cost model used in this study, not only included the costs of providing each method but also included costs associated with contraceptive failure and adverse effects of each method. Unfortunately, this cost model is not appropriate for other countries and especially developing countries where contraception primarily is provided through national family planning programmes.

In any family planning programme and

especially those with limited resources, it is perhaps desirable to provide contraceptive methods that are highly effective, provide longterm contraception, and minimise the need for specialised medical care both at the time of initiation of the method and over the duration of use. If a programme is to make rational choices as to which methods will be provided, a pre-requisite is knowledge on the acceptability (to both clients and service providers) and the relative risks and benefits of various methods. Assessments of the relative risks and benefits of various contraceptive methods are difficult to make and depend on many local factors such as the availability of emergency medical services and available options in the case of contraceptive failure.

Hormonal Contraceptives, IUCDs, and Implants

Following the introduction of hormonal contraception over 40 years ago, remarkable advances have been made towards the development of trouble-free and highly effective (reversible) methods of contraception. The past 40 years also has generated extensive research on all aspects of contraception. The overall safety of the widely used contraceptives (IUCDs, hormonal

methods, sterilisation) have been studied extensively, and for the most part the troublesome issues relating to safety have been resolved. For IUCDs for example, issues regarding the risks of spontaneous abortion with an IUCD in situ, pelvic inflammatory disease (PID), and post-IUCD infertility have long since been settled. There still are unanswered questions regarding the more difficult to study risks, such as the risks of breast cancer and hormonal contraceptive use and the risk of stroke associated with the use of different estrogens. There seems to be agreement that if there is any increased risk of breast cancer it is small⁽³⁾ and therefore should not limit widespread use of hormonal contraceptive methods.

The past 15 years witnessed the introduction of subdermal hormonal contraceptive implants and hormone-releasing IUCDs intended for long-term use. Among the commercially available implants are Norplant and Jadelle (Schering-Leiras Pharmaceuticals) and Implanon (Organon). Norplant consists of six silastic capsules and Jadelle consists of two silastic rods that release levonorgestrel and have a 5-year use life. Norplant and Jadelle are equivalent with respect to their efficacy and safety. Implanon is a single rod that releases etonogestrel (a desogestrel metabolite) with a 3-year use life. The only hormone-releasing IUCD is the Mirena that has a 3-year use life. Unfortunately, not all of these contraceptives are made available to family planning programmes at a cost that would allow for their widespread use.

Relative Safety and Effectiveness

Contraceptive implants generally are regarded as highly effective and their ease of use makes them an ideal contraceptive for many women,

including adolescents⁽⁴⁾, a perception that is not supported by some studies. The initial enthusiasm for the contraceptive implants in recent years has been tempered following reports of problems associated with their removal.

There are few studies that have provided adequate data on the relative safety and effectiveness of different contraceptive methods, and fewer that are specific to young women including adolescents. The large Norplant post-marketing surveillance study conducted by the WHO included over 16,000 women from 32 clinics in eight developing nations who used Norplant, IUCDs (copper and non-copper bearing), or had sterilisations⁽⁵⁾. The WHO study re-affirmed the efficacy and safety of these methods.

The WHO study provides a balanced assessment of the relative risks of the implants and copper-bearing IUCDs. The 5-year continuation rates were slightly higher for Norplant users compared with copper IUCD users. The discontinuation rates for all medical reasons were essentially the same for Norplant and copper IUCD users. However, removal rates for bleeding problems were higher for Norplant users and rates of removal for pregnancy and other medical reasons were higher for copper IUCD users. Norplant use was associated with small but statistically significant increased risk of gallbladder disease, hypertension, excessive menstrual bleeding, amenorrhoea, and enlargement of ovarian cysts. IUCD was associated with statistically significant higher rates of vaginitis, vaginal discharge, lower abdominal pain, and PID. A little recognised limitation of the WHO study is that less than 1% of women in the study were nulliparous

and less than 20% were under 25 years of age.

Copper-bearing IUCDs have been in use for over 30 years. The two most widely used of these IUCDs (outside of the People's Republic of China) are the Copper T 380 and Multiload (and their generic versions) which have a history of over 20 years of safe and effective use. While in many countries there is little support for the use of IUCDs by adolescents, the WHO does not advise against the use of IUCDs in young women who are at low risk of sexually transmitted infections.

Realising that little can be done to develop IUCDs with pregnancy rates that are much lower than those of the Multiload, Copper T, and levonorgestrel-releasing IUCDs, IUCD development efforts have focused on the design of IUCDs that have the potential to reduce the incidence of expulsion and the need for removal for medical reasons, principally spotting, bleeding, and pain. Whether or not these new developments will offer significant advantages over presently available methods, especially for younger women, will require extensive evaluation.

Comment

In public sector family planning programmes, the relative costs of different contraceptive methods will, by necessity, be a factor that

determines their availability for widespread use. The goal is to provide contraceptive options that allow women to have control over their fertility using methods that are culturally acceptable and which minimise the risks of untoward effects. In the absence of adequate data, the challenge to family planning programmes with their limited resources will be to determine how to maximise the provision of contraceptive services without jeopardising the well-being of their clients.

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