medical agents like RU486 that may affect postfertilization or implantation events. The current political power of this minority has stalemated federal policy and even medical research in this area for most of the past decade.

When it comes to the future of contraception, the crystal ball is murky. Science is still a steadfast hero, with monumental accomplishments and promising possibilities: spermicides and barriers that provide improved protection against both pregnancy and sexually transmitted infection; refined systemic steroid methods, possibly even for men; vaccines; and, in the more-distant future, a new generation of systemic methods that act on pregnancy-specific targets to block fertility without disrupting normal hormonal events. Bringing possibilities to actuality and making them available are the difficult problems. Coherent public policy and funding commitment are lacking; without them, better options will slip elusively farther and farther into the future.

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Hysterectomy and Ovarian Removal—A Major Health Issue in the Perimenopausal Years

IN THEIR EARLY 40s, many women begin showing the first signs of approaching menopause—their periods get closer together as the follicular and luteal phases of the cycle contract, and fertility is lessened. Even though the cessation of periods does not occur until an average age of 51, physicians should begin much earlier to advise ways of making the transition into the postreproductive years as healthy as possible. The importance of exercise and a high-calcium, low-fat diet in preventing heart disease and osteoporosis are discussed elsewhere in this issue. Helping patients give up smoking, excessive alcohol use, and drug dependency are other ways to ease the menopausal transition.

Preserving the uterus and ovaries whenever possible is of paramount importance. Currently about a third of women in the United States have had a hysterectomy by the age of 60; their average age at the time of hysterectomy is 43 years. Many of these women have both ovaries removed as well; the National Center for Health Statistics reports that bilateral oophorectomy was done at 25% of hysterectomies in 1965 and at 41% in 1984.[1] The most common indications for hysterectomy since 1970 have been fibromyomas (27% of cases), prolapse (21%), and endometriosis (15%), with cancer being the indication in 10% of cases.

While some hysterectomies are necessary to save lives and relieve suffering, others are more elective. The prevalence of hysterectomy in the US—33% by age 60—contrasts substantially with a 13% prevalence rate in the United Kingdom and a 9% rate in France.[2] One reason to avoid hysterectomies whenever possible is the mortality rate (1/1,000), pain, and the expense of this major operation. In addition, several studies have shown an increased rate of cardiovascular disease in premenopausal women who have had a hysterectomy, even when one or both ovaries are preserved, indicating a possible hormonal function of the uterus. Sexologists are concerned that as many as a third of women having a hysterectomy, even with preservation of the ovaries, notice a diminution in intensity of excitement and orgasm, which is probably explained by the absence of cervical stimulation (which may enhance sexual excitement) and the diminution of pelvic engorgement after obliteration of the venous plexus in the broad ligaments. A Finnish gynecologist compared total to supracervical hysterectomies and found a better preservation of sexual response after the supracervical operation.[3] Preserving the cervix obviously leads to the risk of carcinoma of the cervix. This disease is easily detected by a Pap smear, however, and a woman may wish to continue having Pap smears if cervical stimulation is important to her.

There is currently a serious debate about removing healthy ovaries at the time of hysterectomy to prevent ovarian cancer. On the one hand, ovarian cancer occurs in about 1% of women and is a devastating disease. It has a low survival rate because it is difficult to detect in its early stages by pelvic examination. On the other hand, a woman undergoing bilateral oophorectomy suffers serious menopausal symptoms and an increased risk of heart disease unless she uses replacement estrogen. Even with replacement estrogen, she may suffer from a loss of libido, vigor, strength, and emotional well-being. Replacement of androgens may alleviate these symptoms,[4] but dosages and the safety of this approach need to be researched.

Reducing the number of elective hysterectomies should be made easier by new therapies for common gynecologic problems. Danazol, gonadotropin-releasing hormone, and conservative surgery are being used for endometriosis. Slowly growing fibromyomas can simply be watched over time and monitored with ultrasonography if desired. Myomectomy can be used for large symptomatic fibromyomas, and laser ablation or resection of the endometrium is available for the menorrhagia often seen with submucous fibroids. The trend toward lower parity will make symptomatic pelvic relaxation less common. A careful avoidance of unopposed estrogen replacement and the use of progestogens for endometrial hyperplasia will reduce the incidence of uterine cancer. These alternative methods of treatment should be evaluated before hysterectomy whenever possible to enhance the physical and psychological well-being of perimenopausal women. When oophorectomy is done, careful attention must be given to hormonal replacement. The effectiveness and route of androgen replacement should be a field of vigorous research.

Overall, women should be given full information about the cardiovascular, oncologic, and sexual implications of hysterectomy and prophylactic ovarian removal. They should decide their course in a more collaborative way than is the current practice.

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Health Promotion—Advice for Women

COUNSELING HEALTHY WOMEN on how to remain healthy includes reminding them to fasten their seat belts, update their immunizations, and limit their coffee, alcohol, and other drug consumption, as well as discussing smoking cessation and weight maintenance or reduction.

Smoking should be forcefully proscribed. Smoking as few as one to four cigarettes per day is associated with a twofold increased risk of fatal or nonfatal myocardial infarction in women. Women who smoke are at increased risk for cancer of the lung, larynx, bladder, pancreas, and perhaps both in situ and invasive carcinoma of the cervix. Smoking reduces fertility, increases the rate of spontaneous abortions, increases the incidence of placenta previa and abruptio, and retards fetal growth, resulting in infants with a lower average birth weight. Even more alarming are the data that suggest that there may be a long-term effect on children as a result of maternal smoking during pregnancy. The damage to children as a result of passive smoking is well documented, as is the increased incidence of skin wrinkles in their mothers.

Exercise should be liberally prescribed by physicians. Weight reduction programs that incorporate regular exercise improve a woman's chances of maintaining weight loss. Not only are calories expended but appetite is decreased, perhaps as a result of increased levels of endorphins. In addition, exercise increases the metabolic rate for several hours after the exercise period has concluded. Improved cardiovascular fitness, lowered blood pressure, and a better lipid profile also accrue to women who exercise regularly. Perhaps most important, there are psychological benefits, and women can be reminded that pursuing fitness can be fun.

Finally, to promote a woman's continued good health, clinicians are well advised to educate their women patients about safe sexual practices. As the incidence of some sexually transmitted diseases, including human immunodeficiency virus infections, rises, the need for open and frank discussion becomes more compelling.

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What if in my waking hours a sound should ring through the silent halls of hearing? What if a ray of light should flash through the darkened chambers of my soul? What would happen, I ask many and many a time. Would the bow-and-string tension of life snap? Would the heart, overweighted with sudden joy, stop beating for very excess of happiness?

HELEN KELLER