care. Then, when they get sick and miss work or lose jobs, they are likely to become even poorer.

For a long time, poverty rates have been especially high among Black, Hispanic, and Native American women—especially those who are single heads of households. And now they are being joined by the "nouveau poor"—white middle-class women raising children alone and older women. Overall, it is alarming to realize that more than three-fourths of the poor in this country are women and children.

The rapid rise in the participation of women in the labor force has been a mixed blessing for women: Work outside the home provides income, status, and self-esteem and generally is associated with good health. But it also brings exposure to occupational hazards and frequently to additional stress— particularly since employed women still assume nearly all responsibility for household management and child care.

Since women have lower rates of employment, more intermittent employment, and lower earning power than men, they are at a disadvantage with regard to health insurance coverage, pension plans, and social security benefits.

I want to highlight some of the Task Force recommendations that address the factors I have mentioned:

First, we recommend longitudinal research to assess how the interaction of social and biological factors affect women's health over the life course. Second, we ask for more attention—in research and service delivery—to the health problems of mid-life and older women.

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We appeal for efforts to increase access to health care for women who are underinsured, elderly, or isolated socially or geographically.

We recommend that women as individuals—as well as organizations that are interested in women's well-being—do the following:

- Stay informed about issues that affect women's health.
- Promote public education on health matters.
- Participate in the personal and political processes that empower women and promote their health.

Women's Health: A Course of Action

Women's Physical Health and Well-Being

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Synopsis

A relatively small number of physical disorders are unique to women, are more prevalent or serious in women, or require special prevention or intervention strategies in women. Among the earliest of these to appear developmentally are precocious puberty, for which an effective treatment has recently been developed, and anorexia and bulimia, which are increasing in frequency among young women without effective treatment. Arthritis, diabetes, lupus erythematosus, gallstones, and osteoporosis are other diseases in this category.

Reproductive health concerns are a major focus of women's health. The hundred-fold reduction in maternal mortality related to pregnancy is one of the major public health achievements of this century. Despite effective contraceptives, over half the pregnancies in this country are unintended; thus, solving the related problems of infertility and unintended fertility are research priorities. Improving pregnancy outcome, particularly reducing the rate of prematurity, also needs increased attention.

Cancer is the leading cause of death in middle-aged women. Lung cancer has replaced breast cancer as the primary cause of cancer death among women due to the increase of cigarette smoking among women. Smoking contributes to numerous other causes of death and disability among women. Of all things women could do to improve their health, the most important would be to avoid smoking.

ONE OF THE INITIAL tasks of the PHS Task Force on Women's Health Issues was limiting the universe of women's health concerns so that they could be managed within 18 months. That universe was defined as disorders that are unique to women, more prevalent or serious in women, or require special prevention or intervention strategies in women. Keep in mind, of course, that most disorders affect both men and women.

This discussion looks across the developmental age span and examines what problems and considerations fall in these categories. The first of these that occurs developmentally is precocious puberty, which is sexual development that starts much too early, sometimes as early as age two. This is a rare disorder that affects about five times more girls than boys. An effective treatment has recently been developed at the National Institutes of Health (NIH). Using luteinizing hormone-releasing hormone analogues, the pituitary can be "turned off," which eliminates the stimulus to the gonads and thus reverses the signs and symptoms of precocious puberty and delays puberty until the normal time. This has been a significant clinical advance, which is based on Nobel prize-winning basic research in reproductive biology supported by NIH.

Next to appear developmentally are eating disorders. Anorexia and bulimia are up to 10 times more frequent in females than males. Obesity also is more prevalent in females than in males. The cause of these eating disorders is still not known, and there is no effective treatment. These disorders affect a significant and probably increasing proportion of the population, and since severe anorexia and bulimia have a mortality of 10 to 15 percent, it is extremely important that we do more research to try to understand them and develop a more effective treatment.

With menarche comes the entire set of reproductive health concerns that will be part of women's lives even after menopause. Many issues need to be addressed here, including pregnancy and unintended nonpregnancy, pregnancy care, and menstrual cycle disorders.

Looking first at unintended pregnancy, it should be noted that women today have far greater control over their reproductive life than at any time in history. Yet 52 percent of pregnancies in the United States are unintended, either at all or at the time that they occur. Nearly half of these unintended pregnancies occur among teenagers.

Good contraceptives are available, but they are not used or not used effectively, partly because of unjustified fear of adverse side effects. Forty percent of women having an abortion say that they did not use contraceptives because of fear of side effects. Research has demonstrated that the newer oral contraceptives do not increase the risk of breast cancer, they decrease the risk of ovarian and endometrial cancer, and they do not increase the risk of cardiovascular disease unless the woman is a smoker. Also, spermicides do not increase the risk of prematurity or of birth defects. Still, there is a need for better contraception and a number of new approaches are being studied.

Pregnancy care is one of the greatest medical success stories of this century. There has been a hundredfold decline in maternal mortality associated with pregnancy since 1900, from about 1 in 100 deaths to less than 1 in 10,000. The reasons are many: changes in the timing and spacing of pregnancies, fewer pregnancies overall, a shift to safer ages of childbearing, better prenatal and intrapartum care, and better management of infection and hemorrhage.

There is still room for improvement in pregnancy outcome. The focus is now on decreasing the incidence of low birth weight and prematurity, decreasing the incidence of birth defects, and decreasing the incidence of unintended pregnancy.

Infertility research has also made it possible for many of the 10 to 15 percent of couples who are infertile to have their own children. Some of the examples of progress are drugs to induce ovulation or spermatogenesis, microsurgery to repair blocked tubes, and *in vitro* fertilization.

Through basic studies of physiology, much has been learned about menstrual cycle disorders. It has been demonstrated recently that prostaglandin inhibitors can relieve the symptoms of dysmenorrhea in about 75 percent of young women. New approaches are being developed to treat endometriosis that can relieve the cyclic pain of this disorder and often restore fertility as well.

Estrogen use can markedly reduce the physical and

behavioral symptoms of menopause, and researchers are now trying to learn whether it can continue women's natural protection against cardiovascular disease as well. Transdermal administration of estrogens may be a safer route than other methods.

Cancer is the leading cause of death in women from ages 35 to 54 years. For years, breast cancer was the leading cancer killer among women, but now lung cancer has surpassed it as women adopt the habit of cigarette smoking. This is a dramatic and frightening change. Lung cancer, a disease that is largely preventable, now kills more women than breast cancer, and the only portion of the population showing an increase in cigarette smoking is young women.

As an example to show how incongruous this is, the National Institute of Child Health and Human Development recently supported studies which showed that the intrauterine device (IUD) is associated with a slightly increased risk of tubal infertility. Within 4 months of the reporting of these studies, nearly all manufacturers had removed IUDs from the market in the United States.

The IUD's association with infertility is not frequent. Infertility is unfortunate, but it is not like death from lung cancer. But while women are afraid of the IUD and IUDs are unobtainable, the sad fact is that women are smoking more, not less. There is no one action that women could take that would do more to improve their health than to stop smoking or never start.

To return to breast cancer, there is no clearer example of the effectiveness of the women's health movement than what has happened with breast cancer treatment. Modification in surgical procedures and the increased role of the woman in the decision-making process concerning treatment are clear consequences of women taking a more active part in their health care.

There have also been advances in chemotherapy. We have learned that breast cancers that have estrogen receptors respond well to a drug called tamoxifen. Researchers are now looking at breast cancers that have progesterone receptors and experimenting with a new drug called RU-486 that may have a role comparable to tamoxifen in treating breast cancer.

There are a number of other disorders that were included in the Task Force report because of their increased frequency among women. Gallstones, for example, occur four times more frequently in women than men. A number of experimental drugs are being used as an alternative to a surgical approach. The cause of gallstones is still unknown, and an active research program is under way relating to this disorder. Thyroid abnormalities are four to five times more common among women than among men. There is effective treatment, but the cause is still not known. Arthritis and diabetes are other disorders that affect large portions of the population and are more common in women.

'For years, breast cancer was the leading cancer killer among women, but now lung cancer has surpassed it as women adopt the habit of cigarette smoking.'

Lupus erythematosus is a disease in which 90 percent of the victims are women. The mortality rate, which had been very high, has decreased considerably with recent treatment advances, and the outlook is much improved at present.

Osteoporosis is a disorder predominantly of postmenopausal women. Much has been learned about the role of exercise, calcium, vitamin D, and postmenopausal estrogen replacement in preventing this disorder. There is still much to learn about the right regimens to apply, and what is most effective in preventing the progress of osteoporosis.

In conclusion, there are a number of important disorders that are more frequent in women than in men or that differentially affect women. Through research, considerable progress has been made against many of these but much still needs to be learned about others. Most striking has been the hundredfold reduction in maternal mortality in this century.

Many of the disorders that differentially affect women or are adverse to their health are influenced by lifestyle. Of all the things women could do to improve their health, the most important would be to avoid smoking.