Koop Finds Abortion Evidence "Inconclusive"

Right-to-lifers fail to get hoped-for evidence to reverse Roe v. Wade when Supreme Court reconsiders the issue this spring

SURGEON GENERAL C. Everett Koop's decision last month not to release a report of his staff's study on the health effects of abortion was a disappointment for both sides of the debate.

Koop said that because of the paucity of good data on abortion and the methodological deficiencies of the research, "the scientific studies do not provide conclusive data about the health effects of abortion on women." The study focused primarily on abortion's psychological effects. There has been much less controversy over the physical effects—with a death rate of about 0.8 per 100,000, legal abortion is ten times as safe as childbirth.

President Reagan requested the study in June 1987, reportedly persuaded by right-to-life supporters that it would help efforts to overturn Roe ν . Wade, the 1973 Supreme Court decision legalizing abortion. Brian Wilcox of the American Psychological Association (APA), who contributed his own literature review to the study, says White House advisers had concluded that it would be impossible to muster an antiabortion consensus on moral grounds, so they decided to follow the model supplied by the antismoking campaign and develop a case on public health grounds.

The conflict is likely to reach a new pitch in the coming months—the Supreme Court on 9 January agreed to reopen the issue when it voted to review a case, Webster ν . Reproductive Health Services, in which lower courts found Missouri's antiabortion statute unconstitutional. The National Organization for Women has planned a "prochoice" demonstration in Washington, D.C., on 9 April.

Koop's exercise covered some 250 published research articles, most of them case studies, says study director George Walters. The results have been closely guarded, although Koop is expected to comply with an official request for them made by Representative Ted Weiss (D–NY), chairman of the subcommittee on human resources and intergovernmental relations of the Government Operations Committee.

Koop, in a 9 January letter to President Reagan, implied that his decision would come as a shock to those for whom it was a "foregone conclusion" that the negative health effects of abortion on women were "so overwhelming that the evidence would force the reversal of Roe ν . Wade."

With regard to psychological sequelae of abortion, Koop wrote that "at this time, the available scientific evidence . . . simply cannot support either the preconceived beliefs

All the major studies on psychological effects of abortion were found to be "flawed methodologically."

of those pro-life or of those pro-choice." He said all the major studies were found, after evaluation by several Public Health Service agencies, to be "flawed methodologically." He added that the physical effects "are difficult to quantify and prove" because of inadequate records and the fact that 50% of women who have had abortions "apparently deny having had one when questioned."

According to Walters, investigator bias was not regarded as a big problem. But the abundance of methological flaws included lack of consistency in the definitions of emotional stressors; failure to control for preexisting emotional problems; absence of control groups; distorted samples; and very low follow-up rates. Walters says "no one disputes" that women usually feel relief immediately after an abortion, but delayed reactions are another question.

One outside researcher who reviewed the evidence, Henry David of Bethesda, Maryland, says Koop's performance was "very even-handed." Wilcox of the APA says Koop did a "very thorough job." He concurs from his own review of more than 100 studies that because of the methodological discrepancies and the multitude of medical, psychological, and demographic variables involved, the research "did not permit reaching scientifically sound conclusions."

Nonetheless, says Wilcox, "the wealth of

data available suggests that most women will not suffer lasting psychological trauma following the procedure." This confirms the conclusions of a 1975 report by the Institute of Medicine (IOM) that assessed the preliminary effects of Roe ν . Wade. The IOM reported that abortion was not "associated with any detectable increase in mental illness." A 1971 survey of legal abortions, conducted by the Population Council, found the occurrence of postabortion psychosis to be 0.2 to 0.4 per 1000 legal abortions—less than the 1 to 2 per 1000 incidence of postpartum psychosis. As for lesser effects, the IOM report concluded that "the feelings of guilt, regret, or loss elicited by a legal abortion in some women are generally temporary and appear to be outweighed by positive life changes and feelings of relief.'

Current estimates of the prevalence of postabortion psychiatric illness range from 0.5% to 15% over time spans from 1 week to 10 years, according to Wilcox. Apart from case studies, which usually document problem abortions, "no studies showed a lot of psychiatric distress." He found nothing that could even compare to the prevalence and duration of postpartum depression, which affects 7% of mothers. He says that although "we searched and searched and searched," there was no evidence at all for the existence of the "postabortion synclaimed by some right-to-life drome" groups.

Wilcox says some of the best research was performed by Nancy Adler of the University of California (San Francisco), who found that older and married women experienced less guilt from abortion, and teenagers were at higher risk for psychological complications—but also were at higher risk after births (two-thirds of births to teenagers are of unwanted children according to the Population Crisis Committee).

According to Wilcox, studies showed that, in addition to cases where abortion is coerced, "a history of negative relationship with the mother" was particularly associated with emotional problems. Overall, he found that the "level of support from significant others is probably the single most important determinant of psychological reaction to abortion."

Wilcox says there are no good studies anywhere comparing women who have had abortions with the most relevant control group: those who have borne unwanted children to term.

Koop asserted in his letter that "when pregnancy, whether wanted or unwanted, comes to full term and delivery, there is a well-documented, low incidence of adverse mental health effects." This presumably re-

730 SCIENCE, VOL. 243

fers to acute or short-term effects. The IOM report related that a 1972 literature review by Scottish researchers concluded that among women who were denied abortions and had the children, "a large minority suffer considerable distress, and a small minority [eventually] develop severe disturbance."

Indirectly bearing on this issue is a longitudinal investigation of unwanted children conducted in Czechoslovakia by Henry David, head of the Transnational Family Research Institute in Bethesda, with the Prague Psychiatric Research Institute. David, who calls it "the only study of its kind in the world," has been conducting periodic follow-ups on a group of 223 children of married women who wanted but were denied abortions, matched with a control group of women who "accepted" their pregnancies. All the children were born in the early 1960s, when women had to apply to a commission for permission for an abortion.

David says the study "demonstrates rather conclusively" that unwanted children are at "considerable developmental risk." Despite comparable IQs and socioeconomic status, they have done more poorly in school than the wanted children, and have experienced more mental health problems as evidenced by crime and drug abuse registers.

There has been little recent research in the United States directed at the effects of abortion, partly because it is now generally accepted as a low-risk operation, and partly because the Reagan Administration stopped funding such research. Now, Koop's office has the go-ahead from the Reagan White House to proceed, in cooperation with the National Center for Health Statistics, in the design of a questionnaire on the psychological effects of abortion. (There has not yet been any communication on the subject with the Bush White House.) This would go to a national sampling of 8,000 to 10,000 women of reproductive age. The big challenge, says Walters, is to design a survey that will elicit a high response rate.

This sample might ultimately form the basis for a longitudinal study, ideally conducted through the Centers for Disease Control, says Walters. Koop, in his letter to the President, says what is needed is a 5-year "prospective study on a cohort of women of child-bearing age in reference to the variable outcomes of mating," designed to include "the psychological effects of failure to conceive, as well as the physical and mental sequelae of pregnancy-planned and unplanned, wanted and unwanted-whether carried to delivery, miscarried, or terminated by abortion." The ideal study would cost about \$100 million; but Koop says "satisfactory" results could be obtained for \$10 million. **■ CONSTANCE HOLDEN**

Reilly Vows Environmental Activism

Breaking with the "research only" stance of the past 8 years, the Bush Administration will soon propose an acid rain bill and other amendments to the Clean Air Act. William K. Reilly, Bush's new EPA administrator, announced the new initiative at his nomination hearing last week. Coming just one day after Secretary of State James Baker's call for action to halt global warming, it signals a major departure from 8 years of environmental inaction under the Reagan Administration.

The acid rain bill was one of several changes Reilly articulated in the hearing before the Senate Environment and Public Works Committee, which was a virtual love-in. This is the first time in EPA's 20-year history that a professional environmentalist has been nominated for the top slot, and the change was clearly welcomed by the liberal committee, which has consistently been at loggerheads with the Reagan Administration. Reilly, 48, former president of the Conservation Foundation and the World Wildlife Fund, was confirmed by unanimous Senate vote on 2 February.

Reilly declined to provide details on the bill, other than say it would be "credible and realistic" and that it would lead to a "substantial reduction of acid rain by the end of the century." The bill will also address the vexing problem of urban ozone, or smog, said Reilly. Some 70 metropolitan areas currently violate federal air quality standards, and meeting them will be expensive and

difficult

A sizable staff is already working on the bill, which Reilly calls his highest priority. "It will be the first thing out of the box." Although he would not be pinned down on a delivery date for the bill, he promised to be back to the committee with his ideas within 3 weeks.

There were no hardball questions at the hearing. Indeed, the committee's only concern seemed to be whether Reilly, known as a consensus builder, will be tough enough for the job. "Will you conciliate away our environmental laws?" asked Max Baucus (D–MT).

"I have always been an advocate for the environment," responded Reilly. "I make no bones about it." Dismissing the notion that consensus building is somehow "soft," Reilly pledged "aggressive



William K. Reilly: "An advocate for the environment."

enforcement" of environmental laws and said one of his first tasks will be to meet with the Attorney General and work with the Justice Department on enforcement.

Reilly also endorsed the idea of creating a new position of assistant administrator for global environmental issues—specifically, for climate change—within EPA. This would be a major restructuring, most likely requiring congressional approval, another indication that the issue has a high place on the Administration's agenda.

Reilly advocated an accelerated schedule for phasing out production of chlorofluorocarbons, or CFCs, which contribute to both greenhouse warming and the thinning of the stratospheric ozone layer. Although he stopped short of endorsing the elimination of CFCs, Reilly said the United States "will be very concerned to go beyond the Montreal Protocol," an international treaty that calls for a 50% reduction in worldwide CFC production by 1998.

On domestic issues, Reilly said he opposed relaxation of fuel economy standards for cars and that he intends to organize an internal review at EPA "with the aim of significantly speeding up clean up" of toxic waste dumps under the Superfund program.

Throughout the 3-hour hearing, Reilly portrayed Bush as a strong environmental president to the sometimes skeptical committee. Reilly intimated, however, that Bush will not elevate EPA to Cabinet status, a move Reilly has advocated in the past, simply because Bush wants to keep the group small. Legislation to do just that is expected to be introduced this session. In response to their repeated questions, Reilly assured the senators that he would nonetheless have the President's ear. "The President made it very clear I will have access. I have been assured I will be in the Cabinet room whenever actions touch upon the environment."

IO FEBRUARY 1989 NEWS & COMMENT 731