Is Sterilization the Answer?

The lamentable lack of knowledge about the consequence of sterilization perhaps accounts for the strong opposition to it by the Cornell students and faculty when they were polled recently on various methods of birth control ("Population control, sterilization, and ignorance," 23 Jan., p. 337). Fifty-two percent of males and sixty-one percent of females said they would never undergo sterilization, even after having had the desired number of children. About one-half favored the oral contraceptives over all other available means. Even a large proportion of biology students confessed ignorance or doubt about the well-established fact that vasectomy does not abolish the ability to ejaculate. In India about 5 million vasectomy operations have been performed since 1956 and complaints about any adverse effect of the operation on the sexual function of the sterilized men have been almost absent.

The results obtained at Cornell certainly emphasize the need for very comprehensive sex education including physiology of reproduction and methods of birth control. The valiant efforts of SIECUS (Sex Information and Educational Council of the U.S.) to introduce sex education in the schools have recently been opposed by a few conservative groups such as the John Birch Society. It needs the active support of scientists and other open-minded persons so that everybody can acquire adequate knowledge of sex and its related aspects in life. Only then can we expect adults to make a more intelligent choice of the method of family planning or limitation. If this is true for a highly literate society as in the United States, it is much more true for other societies with lower literacy levels.

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... With regard to bilateral vasectomy, the disturbing dearth of knowledge and lack of acceptance is particularly unfortunate. This simple pro-

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cedure is safe, reliable, and is hardly inconvenient. Furthermore, no outward sexual effect results from it including the retention of the ability for adequate ejaculation. Although it has been traditional to warn individuals before embarking on this procedure that their decision should be considered irrevocable and the success of an operation to reverse the effect of vasectomy is only marginal, this posture is no longer tenable.

With the improved methods of storage of human semen (freezing and freeze-drying) (1), subsequent insemination following vasectomy, should the need arise, is a feasible and practical prospect. Undoubtedly our experience with artificial insemination in animal husbandry has been most reliable. This alternative, however, is not possible in case of female sterilization (bilateral tubal ligation). At least, so far, we have not been successful in obtaining and preserving human ova in a satisfactory functional condition. Nevertheless, recourse to reparative surgery may provide a partial answer for the time being.

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Reference

1. J. K. Sherman, Fert. Steril. 14, 49 (1963).

. . . If one can judge emotional health from scores on attitudes toward having children and respect for a person's sexual apparatus, Cornell ranks A +. To quote the authors: "Only 6 percent opted in favor of vasectomy as the preferred form of contraception once the full family size had been achieved; the corresponding number favoring ligation of the oviducts was 2 percent. A majority said they would *never* undergo sterilization . . . the operation was judged to be as undesirable as abortion and abstinence. . ."

Before the authors conclude that it is the sudents' and faculty's ignorance of the outcome of vasectomy and tubal ligation which produced their abhorrence of altering the sexual apparatus, perhaps they should investigate the psychological outcome of tubal ligation, vasectomy, abortion, and abstinence.

I disagree that these results mean the students and faculty are "unable or unwilling to apply to itself the simple arithmetic . . ." (of population control). I conclude the students' and faculty's insight about population and the control of population is much greater than the investigators'.

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... While it is true that people should be educated in the biological sciences, biologists or sociologists should not take the attitude of dictators who received their well-deserved punishment during and after the Second World War. Having grown up in that era, I look upon Eisner's editorial the same way I used to regard the enunciations of Rosenberg and his pseudoscientific supporters.

Do we hate our own species so much that it is regarded as a crime if people want to have at least three children? Animal husbandry is only possible because we (man) are superior to the animals. But, for heaven's sake, nobody should do husbandry with us. . . .

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Sublimnos: "Volkswagen" of Underwater Habitats

Sublimnos, Canada's first underwater habitat, is now available at no cost to scientists who wish to conduct investigations. It is located in the cool and oligotrophic water of Georgian Bay (10 meters in depth) on Lake Huron where the ecosystem is very simple. The bottom is sand and clay in a protected bay with a shoreline of boulders. Water visibility varies between 2 and 15 meters (average 6 meters). Summer temperatures vary between $22^{\circ}C$ and $4^{\circ}C$.

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