EDITORIAL: TECHNOLOGY ASSESSMENT—ANSWERS TO ALL QUESTIONS?

Medical technology has presented society with a series of opportunities, problems, and conflicting objectives. Although it is generally felt that good technologies ought to be made available, there is at the same time serious concern about the cost of unlimited access. Ethical problems also abound, making judgments about new and existing technologies extraordinarily difficult (5). As a result, politicians, public health decision makers, and the lay public are increasingly turning to the professionals in technology assessment for guidance. Under these mounting pressures, where are the limits of such assessments? While efficacy, safety, and cost-effectiveness are well accepted domains of assessment, what about those more sensitive ethical questions which are of primary interest to both the public and the decision makers?

A case in point is the problems arising from developments in reproductive health and prenatal care which are discussed in this issue of the *Journal*.

How, for instance, do the values of individuals and of society affect the development of medical technologies, their assessment, and their introduction into clinical practice? Recent evidence from the U.K., the United States, and now Switzerland indicates surprisingly good acceptance by pregnant women of alpha-feto-protein (AFP) screening for neural tube defects in the fetus (3,4). This contrasts with attitudes of some decision makers, particularly in the U.S. (whose acceptance has been slow due to the abortion issue), and of the medical profession (who demand certain safeguards in the control of laboratories doing AFP-screening). To what extent will the increasing public demand outweigh the cautionary hesitance of the assessors?

The process continues. In a recent pilot study, 82% of the women interviewed (n = 134) said they would choose the new technique of chorionic villi sampling (CVS) to detect fetal abnormalities if it was found to carry no more risks than amniocentesis (7). CVS allows fetal diagnosis by gene mapping, karyotyping, or biochemical assay at 9 rather than at the 17 weeks of gestation required for amniocentesis. An international trial has now been planned to compare CVS with amniocentesis in a randomized controlled fashion (6). Only the future will show whether—with the public's changing attitudes among other constraining factors—a truly randomized trial is possible.

A second issue concerns the alternatives to the technology under scrutiny. A question often left unaddressed is whether the money and resources devoted to a given therapeutic program would be better spent in the area of prevention. For example, having children is recognized as a legitimate aspiration, while in-

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fertility is increasingly considered a health impairment. Thus, important resources are invested in such reproductive health techniques as in-vitro fertilization, despite a world tending toward overpopulation.

Finally, there is a third issue which points to the limits of technology assessment: the lack of studies of the morbidity caused by complex technology, and particularly of the possibilities for its misuse. The freezing of human embryos has led to concerns regarding the possible harm of thermal manipulation. But there are also concerns arising from the indefinite lengthening of embryonic existence independent of the mother (2), and the resulting potential for misuse, a problem which can be exacerbated by self-serving politicians (1).

Thus the issues of individual and collective attitudes, possible alternatives to technologies, and the potential for their uncritical use demonstrate the diverse problems technology assessment has to consider beyond its more classic preoccupations. To shrink systematically from such difficult issues would betray the fundamental nature of technology assessment, yet to believe it can provide answers to all crucial questions involving the application of technology would only encourage an uncritical use of a powerful scientific tool. The trick will be to establish a balance.

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THE TECHNOLOGY OF PRENATAL CARE

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SECOND ANNUAL MEETING

International Society for Technology Assessment in Health Care

May 30 - 31, 1986
National Academy of Sciences
Washington, D.C.

SPECIAL SESSIONS - INVITED PAPERS:

- **Forecasting Medical Technology**
- **Presentation on the Council on Health Care Technology**

CONTRIBUTED PAPER SESSION:

Abstracts have been solicited to cover topics such as results of specific technology assessments, analyses of interactions between people and technology, technology as a force in social and organizational change, and technology as it is created, produced, applied, and paid for.

KEYNOTE SPEAKER

SOCIETY BUSINESS MEETING

POST-MEETING SITE VISITS FOR NON-U.S. ATTENDEES:

Sessions are being arranged at agencies and institutions involved in technology assessment in Washington, Baltimore, Philadelphia, and Boston during the week of June 2-5.

A summary of the scientific program will appear in the *International Journal of Technology Assessment in Health Care* following the meeting.

The meeting is being held in cooperation with the World Health Organization.

For meeting information, contact:

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