

Conceiving the New World Order

The Global Politics of Reproduction



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The Normalization of Prenatal Diagnostic Screening

Carole H. Browner and Nancy Ann Press

This chapter offers a political-cultural analysis of some of the means by which prenatal diagnostic testing and the option of selective abortion are becoming routine parts of prenatal care in the United States. Our intent is to contribute to two debates about the nature of prenatal diagnostic testing. The first concerns the interests of the state in establishing programs of prenatal diagnostic testing. The second considers how such tests come to be regarded by their designated recipients, pregnant women, as essential to high-quality prenatal care.

We argue that the popularity of prenatal diagnostic testing stems, in part, from American society's growing tendency to view human traits and behaviors, especially negative ones, through a "prism of heritability" (Duster 1990: 2)—that is, to designate genetics as the source of all human "defects," weaknesses, and limitations. Prenatal diagnostic technologies, then, promise to provide Americans another means to assert control over a natural process.

American eugenic movements date to the early part of the twentieth century. By 1931 over thirty states had passed compulsory sterilization laws, and by 1935 over twenty thousand people had been sterilized by state action (Kevles 1985). Motivated by civic desires to eradicate poverty and reduce the number of social "misfits," these laws made alcoholics, drug addicts, epileptics, the mentally ill, criminals, poor people, and those with limited mental abilities prime targets. The logic of this selective thrust was that negative traits and behaviors were biologically transmitted from one generation to the next. Racism played no small part in these early eugenic efforts; nonwhites constituted the overwhelming majority of those sterilized (Rodriguez-Trias 1978).

Mandatory eugenic control programs such as these would be met with

public outrage today. Yet many in American society still hold strong beliefs about the kinds of people who should be part of that society. Some have persuasively argued that combining such beliefs with increasingly popular genetic explanations for human behavior opens the door to "neoeugenic" thinking (Chavkin and Rosenfield 1990: 451, Rothman 1989: 115-16).

Earlier eugenics programs sought to purge the social body of "unwanted" elements; they designated whole categories of people unfit to reproduce. In contrast, the chief rationale for genetic screening today is to provide pregnant women with information they can use to decide whether to abort an affected pregnancy. Also, in contrast with earlier eugenics movements, the intent today is not to select out individuals with undesirable social characteristics but rather those with specific physical or mental disabilities. Today's neoeugenic programs of prenatal diagnostic testing and selective abortion operate at the level of the individual pregnancy. They are designed to save parents from the "tragedy" of having a handicapped child.

The success of these contemporary eugenic control programs rests upon two elements: the willingness of individual women to take personal responsibility for deciding whether to bear a disabled child and society's endorsement of induced abortion as a legitimate course of action—and, in most cases, the preferred course—in the event of a "defective" pregnancy. The vast majority of the conditions that can be prenatally diagnosed today have neither treatment nor cure. Therefore, from society's perspective, it is far less costly for a woman to abort her disabled fetus than for the public to underwrite a lifetime of social services. While fierce debate on the range of issues surrounding the development and dissemination of technologies for prenatal testing continues unabated, the development of these technologies and the planning of mass prenatal testing programs are rapidly moving forward (Stanworth 1987). Although California currently has the only state-mandated program for screening fetal defects in the United States, the establishment of others, in both the United States and Canada, is expected (Cunningham and Kizer 1990: 900).

In this account, we show that the California program of prenatal diagnostic screening has proven socially and culturally acceptable to most pregnant women in the state. We argue that a key reason for its success is that the language used to promote the program obscures its eugenic potential. Instead it is marketed by emphasizing its ability to reassure a pregnant woman that her fetus is probably free from the particular birth defects the program screens for. This reassurance is offered through the language and legitimating power of "objective" science: a normal test result carries the power of absolute truth. And while reassurance is obvi-

ously important to anyone seeking medical attention, it is essential for pregnant women living in a society that increasingly insists they abstain from all behaviors deemed "risky" to a developing fetus.

Although the notion of risk is freely used in both popular and scientific literature, it is seldom defined, perhaps because the concept is so fundamental to contemporary existence. It rests on the assumption that unpredictable dangers are an inherent feature of modern life. In addition risk implies uncertainty: it denotes something which may or may not occur. And while life in technologically simple societies was objectively no less risk-laden than life today, unlike many others, Americans believe that all risks can—or should—be minimized through human intervention.

Many American women now regard pregnancy as the ultimate risk (Davis-Floyd 1992). This view is not based primarily on fear of medical perils, which today in reality are few. Rather women view pregnancy as supremely risky because society imposes nearly total responsibility on them as prospective mothers for assuring a favorable birth. Many women therefore consider pregnancy the time when they most willingly defer to medical control (Oakley 1981). They want clinicians to reassure them that their pregnancies are proceeding uneventfully and that they themselves are acting in an appropriately responsible manner.

We intend to show, then, that the California program of prenatal screening is promoted through two constructs deeply rooted in twentieth-century popular American culture: that scientific knowledge represents absolute truth (Ziman 1976) and that our culture is increasingly preoccupied with notions of risk (Hubbard 1990). For pregnant women, these risks are ubiquitous because anything might conceivably harm the health or well-being of their developing fetuses. Adhering to the tenets of scientifically based prenatal care is their only culturally approved means of reassuring themselves, and others, that they are doing all that can be done during pregnancy.

Specifically, we will examine how one diagnostic test is becoming a "routine" part of prenatal medical care, even for those not considered to be at risk for a defective pregnancy. The alpha-fetoprotein (AFP) blood test screens for neural-tube defects (NTDs) and the possible presence of Down syndrome. As a screening device, it cannot provide a definitive diagnosis. Yet because experts see this "simple blood test" (State of California 1988: 1) as safe, easy to administer, and inexpensive, it is increasingly regarded as a cost-effective and viable way to reduce a woman's "risk" of bearing a disabled child (Crandall et al. 1983, Cunningham and Kizer 1990).

NTDs occur in the United States in one to two live births per thousand. They are not simple genetic errors but rather seem to be caused by an interaction between genes and the environment. Children with NTDs are

more often born to women of lower socioeconomic status and with poor diets. The two major types of NTDs are spina bifida (a lesion on an incompletely closed spinal cord) and anencephaly (the lack of a brain). For every 1,000 women who take the AFP test, 50 to 100 have abnormal readings. Although statistically only one is carrying an affected fetus, all will require further testing before a definitive diagnosis can be made: repeat AFP testing, one or more sonograms, amniocentesis, or some combination of these. Several weeks generally elapse between the first questionable test result and a definitive diagnosis. In cases of persistently ambiguous test results, a definitive diagnosis cannot be made until birth.

In 1986 California became the first state to mandate that all prenatal-care providers offer their clients AFP testing. Each year since then, more women have undergone the procedure. By 1990, over 60 percent of eligible Californians were tested, up from 40 percent in 1986 (State of California 1990: 28). Yet this apparent normalization of AFP screening in California has been accompanied by little empirical information about the views and experiences of women who take the test.

In the following sections, we therefore examine some of the mechanisms used by two different groups in their efforts to normalize AFP screening in California. First, we look at how the program is promoted by its administering agency, the Genetic Disease Branch of the California Department of Health Services. Next we consider methods used by prenatal-care providers at one Southern California health-maintenance organization (HMO) to encourage their clients to undergo AFP screening. Finally we explore why each year more women take the test. We will argue that women consent to prenatal surveillance in part because of society's ubiquitous preoccupation with the relationship between "risk" and pregnancy outcome—a preoccupation that augments pregnant women's own feelings of vulnerability, helplessness, and personal responsibility for the well-being of their offspring during pregnancy.

RESEARCH METHODS, STUDY POPULATION, PRELIMINARY FINDINGS

In designing our study of how a group of pregnant women felt about the AFP test and the factors they took into account when deciding whether to be tested, we were particularly interested in the potential influence of ethnicity, social class, and degree of religiosity (as determined by an instrument we devised) on their decisions about AFP testing. We therefore constructed a study population made up of equal numbers of Mexican American and non-Hispanic white women from middle- and lower-class backgrounds, all of whom were raised Catholic. We considered women middle class if they received their prenatal care through an em-

ployer contract and lower class if MediCal paid for their prenatal services. We collected our data at two branches of a Southern California HMO whose patient population represented this particular demographic mix.

The sample consisted only of women at no known risk for bearing a child with a birth defect because we wanted to interview women who were likely to be experiencing their first exposure to the notion that they were appropriate candidates for a prenatal diagnostic procedure. We interviewed only women who received normal, or negative, AFP test results because this is the experience of the vast majority of women who undergo AFP testing. We conducted semistructured, open-ended interviews, which generally lasted one to two hours, either in our informants' own homes or at the HMO.

We were also interested in the role health-care providers might play in shaping women's understandings about the AFP test and their ultimate decision about whether to be tested. We therefore observed thirty of our forty informants' prenatal intakes, along with the intakes of five others who were subsequently lost to follow-up. During these intakes, information about the AFP test was provided, and women usually did not have to decide on the spot whether to be tested. We observed the entire prenatal intake but paid special attention to the segment during which information about the AFP test was conveyed. We noted what women were told, what questions they asked, and how they were answered. We took detailed notes during these observations based on a series of preestablished categories. We also interviewed six of the seven nurses at the two HMO branches who performed prenatal intakes.

Our sample consisted of forty women, ten from each ethnic and social-class group (ten middle-class Mexican Americans, ten middle-class non-Hispanic whites, and so forth). They were between twenty and thirty-four years old (the mean age was 26.75) and had had from no to four children at the time of the interview (the mean was 1.5). Mean household income was just over \$11,000 for women on MediCal and \$43,000 for middle-class women.

Early in our data collection we discovered that most women in our sample were agreeing to AFP testing. In fact, 90 percent accepted the test, an acceptance rate similar to that at other HMOs in Southern California. We found that in our small sample AFP acceptance did not vary significantly by religiosity, social class, or ethnicity. Interestingly, however, all four informants who refused the test were "less acculturated" Mexican American women, as measured by their scores on a standardized instrument (Marín et al. 1987). In the following analysis we will therefore focus on why the vast majority of the women we interviewed agreed to AFP screening. Before concluding, we will also briefly consider the reasons given by those who refused the test.

PROMOTION OF THE AFP TEST TO PREGNANT WOMEN

Techniques Employed by the State

The most obvious means by which California promotes its program of prenatal diagnostic screening is by subsidizing all patient costs associated with AFP testing, including any needed follow-up tests such as ultrasound and amniocentesis, along with therapeutic abortion in the event of a positive diagnosis if a woman has no insurance coverage of her own. Other means of promoting the program are less concrete. They include establishing it as an "official" state program; emphasizing the feelings of reassurance that a normal, or negative, AFP test result will provide; and minimizing mention of the possibility that the test outcome may be "bad." Below we discuss these processes in some detail.

Since 1986 the state has mandated that all providers of prenatal care offer the AFP test to all women who enter care prior to their twentieth completed week of pregnancy. Providers are also required to maintain records demonstrating that all eligible clients have been offered the test. Thus a large majority of pregnant Californians will at least know that they are eligible for this test; they are also likely to have been told that it is offered through a state-administered program. Both these facts lend legitimacy to the test.

Other means by which the California AFP program is legitimized are seen in a content analysis of the nine-page AFP booklet written by the Genetic Disease Branch of the State of California and given to all pregnant women eligible for testing (State of California 1988). Written in large bold letters on the white surface of the booklet's cover are the words "The California Alpha-Fetoprotein Screening Program." The official seal of the Genetic Disease Branch appears prominently on the lower right of the cover, superimposed over a map of the state. The design of the back cover of the booklet is similarly "official." It is blank except for the name and address of the Genetic Disease Branch and the names of the governor, the secretary of health and welfare, and the director of the Department of Health Services.

The booklet's tone is cool, impersonal, and nonthreatening. On page 1, the AFP test is described as "a simple blood test" in which "a small amount of blood is taken from the pregnant woman's arm" for subsequent analysis. Page 2 lists eight possible outcomes in response to its question "What does a positive test result mean?" But of the eight, the first five have nothing to do with fetal abnormalities but instead reflect the fact that the test frequently detects conditions other than birth defects (incorrectly calculated pregnancy dates, the presence of twins, normal variation in AFP level). It is not until halfway through the book that the

defects the test is designed to detect are defined and their symptoms are even mentioned.

In keeping with what appears to be the central effort of the text—to minimize test-associated anxiety—only on the booklet's last page does one find the question "What happens if the tests show that the fetus has a birth defect?" The response is a four-line, obscurely written paragraph in which the reader is told that she will be provided with "information . . . about what treatments are available" and that "different options will be discussed." The words *abortion* or *pregnancy termination* do not appear at any point. Thus even in this key section of the booklet, the test's potential significance is underplayed.

Techniques Employed by Providers

During observations of thirty-five prenatal intakes, we found that providers invariably observed the legal mandate to inform their clients about the AFP test. However, the quantity and content of the information varied significantly from client to client and from provider to provider. Although we had anticipated the possibility of bias based on ethnicity, social class, or both, we did not detect it. Instead we found that what and how much a woman was told about the AFP test had to do with how rushed the provider was that day, how preoccupied she was with other matters, and how well informed she believed the client already to be.

A woman, then, might receive only the following scant information from the intake nurse: "And there's also a blood test we can do for you which looks for some birth defects in the baby. It's called AFP and has to be done between the fifteenth and twentieth weeks of pregnancy." In contrast, another woman might receive a rapid-fire barrage of seemingly disconnected facts from a different nurse in the same facility:

There's a blood test called AFP. It's a screening test. It's fairly new . . . but you had your children recently. . . . Do you remember hearing about this test? [Informant indicates she has not heard of it.] It's a blood test taken from your arm. What it does is it detects neural-tube defects or any problems with the baby's brain. It can't tell you something definite; that means if there is an abnormal result we would do further tests. The test is at no cost to you. It is optional—you don't have to have it. Now . . . the only thing I have to figure out is if you are within the time frame for the test. . . . Do you think you'd be interested in this test from what I've told you?

Content analysis of the thirty-five prenatal intakes we observed revealed that the mechanics of the test, such as how it is performed and when it must be done, were emphasized far more often than seemingly more important information, such as what the test screens for. For in-

stance, the AFP "window" (the five-week interval during which the test can be performed) was mentioned in 89 percent of the intakes, more often than any other piece of information. The fact that the AFP is a blood test was mentioned 83 percent of the time. But only 54 percent of clients were told that the AFP screens for "neural-tube defects," which, when they were told, were vaguely defined as a "misgrowth of the spine" or "abnormalities of the brain." Other descriptions of the test were even more vague—for instance, the AFP "tests for something in the baby" or "tests for something wrong with the baby." Never was information conveyed about the physical or emotional effects of the conditions the test screens for or their prognosis for quality of life. The kinds of decisions a woman would face in the event of an abnormal, or positive, diagnosis were never mentioned. In fact, the words *abortion* and *pregnancy termination* were used only twice in all thirty-five intakes.

Our conclusion is that providers offer no more information than is absolutely necessary to make women aware of the test's existence. In this sense, clients are informed about the AFP in much the same way they are told about other routine prenatal tests for maternal conditions such as diabetes or tuberculosis. Conveying information about the test in this way seems likely to lessen anxiety and increase test acceptance.

Copious data from our content analysis demonstrate that despite providers' denial of this fact, much of the information they give their clients about the AFP test, along with the way they convey it, encourages women to take the test. Some examples include:

Specific reference to the fact that the AFP Program is *offered by the state*: "This is our AFP program, the government screening here in California."

Mention of the fact that the test is *recommended by the HMO*: "We do recommend the test for everyone, though you have the option not to have it done."

The suggestion that the test is becoming *standard among women like themselves*: "Most people decide to have the test." "After you've read through the booklet let us know if you don't want to have it."

The suggestion that the test *can be scheduled along with other required tests*: "So Pedro in the lab . . . will give you two appointments. One for your diabetes blood test and one for the AFP."

Reassurance that the test *procedure is benign*: "It's just a poke in the arm."

Statements that *minimize the possibility of a bad outcome*: "What this blood test can do for you is check the development of the baby."

Use of *direct persuasion*: Nurse: "I'll need to know if you'll be having the test." Informant: "We don't have to have this, right?" Nurse: "No, but then you'll have to sign a form. They just take a blood sample. It's not harmful to you or the baby."

Use of *indirect persuasion*: "Now if you want to schedule your next visit about a week after [the beginning of informant's AFP window], we can draw your AFP at the same visit. That way you won't need to make another visit."

Imparting of *misinformation*: "This is a screening test we're doing on all women that the state requires, but you have to read the booklet and sign it in the back and we keep the signed copy in the chart."

WOMEN'S EXPECTATIONS FOR PRENATAL CARE

We turn now to what we have learned from our informants about their expectations for prenatal care, and we show how the California AFP program directly addresses their concerns. Our objective is to demonstrate that despite the fact that women are provided with little information about the test and its purposes, most accept it, in part because they want reassurance that they are doing everything possible to reduce "risk" during pregnancy.

Our pregnant informants reported feeling a constant, overwhelming sense of responsibility for the outcomes of their pregnancies and the subsequent health of their children. One woman, pregnant with her second child, described her fears after she gave birth to her first:

Now my daughter was born with a dislocated hip. . . . [Ultimately] I was so happy because they said, "Nothing the mother does causes that." 'Cause I thought did I eat something wrong, did I move something, did I do something weird, did I exercise wrong? . . . Or when she was coming out the vaginal canal, did it happen? . . . 'Cause you know with your first child you kind of think, Oh, my God, I created this . . . um . . . problem. . . . One time, when I was five months along I had this horrible side pain. . . . I don't know why I never called the doctor. Then I didn't feel her kicking for a few days. Then I kinda got nervous. So I thought maybe that was the time this happened. I kept thinking did I do this? Did I do that?

Most reported being preoccupied with any and all of their actions but particularly with what they ate and drank and how they spent their time. They readily gave up foods they believed to be unhealthful, especially alcohol, sugar, and caffeine. One woman, for instance, reported that she had stopped frequenting bars because she had heard that fetal alcohol syndrome was "going around" and she didn't want her fetus to "catch it." The women also modified their habits regarding rest and exercise. And perhaps most notably they did all they could to reduce stress for fear of its short- and long-term negative effects on their children.

As is now common many informants believed that illness is a state of mind. As one prospective mother explained, "Just what your psychologi-

cal feelings are toward that baby in the first place can cause you a miscarriage. . . . You're gonna be rejecting it before it's born. . . . A baby feels everything you feel. And he already knows." The women in our study population also believed that miscarriage was often caused by stress and other victim-blaming activities such as not taking care of themselves, doing drugs, overexercising, trying to stay too thin, not eating well, wearing heels.

The prospective mothers seemed likely to hold themselves responsible for the fate of their pregnancies in part because of what they regard as society's ubiquitous scrutiny of pregnant women. They report being constantly bombarded by unsolicited advice (and often feeling angry as a result). When asked, "Has anyone given you their opinion about what you should do during your pregnancy without your asking?", only two said no. The rest gave replies like "The whole world." "All the time." "Everybody wants to tell you how you can have a better pregnancy." "Everybody seems to have something on what you should do."

The overall effect of this relentless public scrutiny is not altogether clear, but it does seem to contribute to the general lack of confidence our informants expressed in their own bodies and their own judgments regarding the management of their pregnancies. When asked "Who provides you your most valued source of prenatal information?", only 20 percent said they trusted themselves more than anyone else. In contrast, nearly two-thirds indicated that physicians provided their most reliable, and often their only, prenatal advice. "If you want an honest opinion, closest to the truth as you can get, ask the doctor" was the most commonly expressed view.

These replies demonstrate that the women in our study were firmly committed to the value of professional prenatal care despite the fact that they had little understanding of its purpose. When asked "Why do health care providers think it's important for women to receive professional prenatal care?", their responses were vague. Said one woman, "I don't really know specifically what their reasons are. I just think it would be important." Said another, "I just think you need to be looked after. . . . There's a lot of complications." This vagueness may reflect the fact that for the vast majority of pregnant women scientific research has documented few unequivocally positive relationships between specific prenatal interventions and birth outcomes (Chalmers, Enkin, and Keirse 1989). In fact, providers may consistently stress the educational functions of prenatal care for they have little else to offer.

From a cultural perspective, however, professional prenatal care serves a different purpose: it is an act of reassurance that alleviates anxiety and reduces fears of maternally induced poor fetal outcomes. By first highlighting everything that could go wrong in a pregnancy and then certi-

fying that one's own appears to be proceeding normally, prenatal caregivers alleviate the very anxieties they have helped to create (Green 1990).

WHAT THE AFP TEST OFFERS PREGNANT WOMEN

Given this context of fear and anxiety, how did our informants respond to the results of the AFP test? For some—but not for all—a normal, or negative, test result did help allay some of the anxieties they expressed.

Space does not permit us to offer a detailed analysis of what women learned about the AFP test from the state-prepared booklet and the intake interviews, but we can summarize by saying that they retained little. In interviews we conducted between two and six weeks after the test, we found that 80 percent recognized the name *AFP test* and remembered receiving a booklet. But far fewer retained any of its content, as is indicated by the following representative exchange:

Interviewer: Do you remember if someone discussed the AFP test with you?

Informant: That blood test? That I get at fifteen or twenty weeks?

Interviewer: Um hum. Do you remember what they told you?

Informant: Um, oh, I think it's to find out if the baby has some of those diseases or to check out if he's—the blood, or something like that.

Given this typical exchange, it should not be surprising that informants' understanding of the purpose of the test was limited. Nearly 75 percent were unable to identify the term *neural-tube defect*, and half of those who did confused it with ectopic pregnancy. Only about 50 percent were familiar with the term *spina bifida*, and far fewer were able to correctly define it. Informants were equally vague about the meaning of test results. None of those interviewed, for instance, knew what kinds of test results were considered abnormal. More than one-third did not know what the customary course of action would have been had their own test result been abnormal. In addition, one-third incorrectly believed or suspected that the test was required by the state. However, informants did retain much of the procedural information stressed during the face-to-face intakes. All knew, for instance, that the AFP was a blood test, and close to 75 percent remembered that it had to be performed within a specific time period.

Whether these prospective mothers, or others like them, would have been less likely to have agreed to AFP screening had they been better informed is an open question. However, for the most part they indicated that they were completely satisfied with the quantity and content of the information they received. This result contrasts with the results of much other research on health education, which consistently shows that most patients want to be better informed about the medical procedures they

will undergo (for example, Faden et al. 1981). We feel that pregnant women were satisfied despite the relative paucity of information for two main reasons: they did not want to hear about problems with their fetuses that were only hypothetical, and they trusted the institution to tell them more in the event of a problem, as the following quotes reveal:

Interviewer: Were you satisfied with the amount of information you were given about the AFP test?

Informant A: It was fine. I really didn't want that much information.

Informant B: Yes, because I don't really . . . need all the final details—just the truth.

Informant C: Pretty well. If it had been positive I would have wanted to know more.

These findings seem to reveal that while a negative result provided immediate reassurance that the fetus was unlikely to be affected by an AFP-related condition, ultimately such a result was neither significant nor memorable: it was quickly transformed into a "nonevent." Since few worried about AFP-related conditions prior to being tested because they were not aware that they existed, the specific reassurance provided by a normal test result was of marginal value. We know from our ongoing data collection, however, that as the test is becoming more widely known, more women report to others the reassurance they feel when they receive a normal test result. In our view, this is the most important reason for the test's widespread appeal. As those who have studied amniocentesis have shown (Marteau et al. 1989, Rapp 1988, Rothman 1986), reassurance is a chief reason women seek prenatal diagnostic testing.

Before discussing the specific reasons such a large proportion of the women in our sample agreed to be tested, we might consider why any woman would not accept the AFP test: a simple blood test with no inherent risk to prospective mother or fetus and capable of providing useful information about fetal development. We gained some understanding about this question from the four women we interviewed who refused to be tested. Their reasons fell into three groups. The first derived from some women's opposition to abortion, either categorically or selectively for such reasons as genetic disability. Not only did these women see no need for test results that would not lead them to take any sort of action, but they were fearful that a positive result would cause them too much worry, as they knew there was nothing they could or would do about it. Similarly, one woman who was theoretically opposed to abortion feared that a positive, or even an ambiguous, test result might "tempt" her to consider aborting the disabled fetus. The second kind of opposition to AFP testing concerned some women's lack of trust of the test results themselves. Some expressed fear that any result, whether negative, posi-

tive, or ambiguous, would only add additional anxiety throughout the pregnancy. Finally, one woman had unwavering confidence in her ability to bear healthy children based on her previous reproductive experiences and felt no need for "objective" verification of this fact.

While the small number of women who refused the AFP test had strong, clear, and specific reasons for doing so, the remaining 90 percent had far more vague and nonspecific reasons for taking the test. These reasons seemed based less on personal conviction regarding the beneficial nature of the procedure than on a general feeling that it would be a "good thing" for them to do. Informants' explicit reasons are listed below, in declining order of frequency.

To be reassured: "[The booklet] says that if you're gonna have the amniocentesis you wouldn't need the. . . . But, like me, I want to be on the safe side. I'll take all of them." "I didn't want to feel guilty. As it is, I was feeling guilty all the way through; like I say I don't drink, I don't smoke, you know, take my prenatal pills. You know I just felt a lot of guilt."

To be prepared: "Just so that I would be able to prepare myself for it. . . . Just like if you were studying for a test, . . . you'd feel more comfortable than not studying for it at all."

To comply with institution or physician: "It's mandatory." "It depends on the doctor."

For no specific reason: "It sounded important." "They mentioned about having the test and I said 'OK, sure, you know . . . why not?'"

To correct congenital problems: "If they find out something, maybe it could be corrected."

To decide whether to continue the pregnancy: "Now if there's going to be something really heavy, I wouldn't bring a baby that was really going to be bad off and suffer into this world."

That reassurance was mentioned most often (by two-thirds of those who agreed to be tested) and pregnancy termination least (by two women) may reflect the fact that our pilot sample consisted only of Catholic women. Non-Catholic women may respond differently to our questions, an issue we are now investigating.

We can conclude that prenatal care gives women a feeling of control in a domain where their own personal sense of competence is continually challenged by relentless societal scrutiny and ongoing evaluation. The AFP screening test is a welcome part of such care. It provides a specific, tangible, and reassuring way for pregnant women to help keep their anxieties in check during a difficult and stressful period.

CONCLUSIONS

There has never been a broad-based attempt to define the societal purposes of prenatal diagnostic testing. While some regard it as a humanitar-

ian (and cost-effective) method for preventing unnecessary grief and suffering by the disabled and their families, others see it as an example of "the new eugenics," whereby pregnant women and their health-care providers are left personally responsible for deciding what kind of life is worth living.

Yet AFP screening is promoted as a risk-free procedure that provides valuable knowledge based on empirical science, offers reassurance, and reduces risk. These features are attractive to those pregnant women who regard scientific knowledge as truth and who are preoccupied with the harm they inadvertently may be causing their fetuses during gestation. This fit among diverse objectives enables those who promote and those who participate in the California AFP screening program to avoid acknowledging its eugenic significance. It also enables them to avoid, at least for now, the considerable controversy surrounding abortion that may engulf prenatal diagnostic testing programs some time soon.

New prenatal diagnostic tests continue to be developed and applied at progressively earlier stages of pregnancy. Tests for cystic fibrosis, juvenile diabetes, melanoma, rheumatoid arthritis, and retinitis pigmentosa already are close at hand. And, as others have observed, once a test exists, whether a woman accepts it is not a neutral act: refusal carries the explicit rejection of technical expertise and implies a reluctance on the part of the expectant mother to do everything in her power to assure the health and well-being of her developing fetus. In reality, however, the acceptance of prenatal tests by pregnant women may depend more on whether they are presented in ways that help reduce uncertainty or anxiety, regardless of their more controversial features. It is important to recognize that the seemingly innocuous language of reassurance and individual choice masks the neoeugenic interests that in part have motivated the expansion of the new reproductive technologies.

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EIGHTEEN

Postmodern Procreation: A Cultural Account of Assisted Reproduction

Sarah Franklin

What is in crisis here is the symbolic order, the conceptualisation of the relationship between nature and culture such that one can talk about the one through the other. Nature as a ground for meaning can no longer be taken for granted if Nature itself is regarded as having to be protected and promoted.

—MARILYN STRATHERN. *After Nature*

Popular conceptions of new reproductive technology often take as their starting point the birth of Louise Brown, the world's first "test-tube baby," born in Oldham, Lancashire, in July 1978. From an anthropological perspective, this conception story is an overdetermined one. With the birth of Louise Brown also came into being a new kind of public debate about conception, in which unprecedented procreative possibilities raised moral uncertainty and political controversy. Both the moral issues and the political implications remain controversial today. In the process of formulating legislation, for example, considerable concern continues to be expressed about how to establish a legitimate foundation for decision making and debate in the field of assisted reproduction.

Feminists have shared these concerns and dilemmas and have struggled to come to terms with rapid advances in the field of reproductive technology. Reproduction has long been a significant focus of feminist theory and politics because of the way in which its control has been seen as instrumental to the subordination of women in a patriarchal culture. Early feminist critiques focused upon motherhood as a patriarchal institution (Rich 1976), the medicalization of pregnancy by the male-dominated medical profession (Donnison 1977; Ehrenreich and English 1973a, 1973b, 1978), the history of birth control (Gordon 1977), and the patriarchal desire to control the reproductive process (Firestone 1970, O'Brien 1981). To these and many other early feminist accounts of reproductive politics has since been added a substantial body of feminist analysis concerned specifically with the emergence of new reproductive tech-