

# UTILIZATION OF A FAMILY PLANNING PROGRAM BY THE POOR POPULATION OF A METROPOLITAN AREA

JOSEPH D. BEASLEY

AND

RALPH F. FRANKOWSKI

Studies conducted in New Orleans during 1964 and 1965, revealed marked variations in the information concerning basic reproductive physiology, the ovulatory cycle and effective means of contraception among all social classes in the metropolitan New Orleans area. Lack of information was especially noted within the lower socioeconomic group where approximately 90 per cent of the males and females in the metropolitan area did not understand the relation between the period of ovulation and fertility. These studies also indicated that approximately 27 per cent of the lower socioeconomic population could be classified as either sterile or subfecund. Within the fecundable portion, it was estimated that 62 per cent used no method of contraception during their most recent year of cohabitation. Approximately 38 per cent had used some form of contraception; frequently, however, its use was sporadic and in most cases lower socioeconomic couples employed highly ineffective coitally-related methods. No basic motivational blocks to the effective use of family planning techniques were noted; rather the respondents expressed a strong desire to control fertility.

At the time these studies were conducted, no organized family planning services of any kind were available to the lower socioeconomic group in the New Orleans metropolitan area. Neither the charity hospitals nor the public health facilities provided these services. This information has been fully described in previous writings and will not be dealt with here. Low-income couples who did practice contracep-

tion, therefore, did so with their own funds, in most cases employing nonmedical techniques, and in a few cases utilizing medical methods, apparently prescribed by private physicians.

Research on the epidemiology of infant mortality and fetal mortality in the metropolitan New Orleans area since 1964, indicates that the lack of effective fertility control in the lower socioeconomic group is a significant obstacle to the achievement of family health and stability. For example, an estimated one-half of the women in the lower socioeconomic group who experienced a stillbirth or infant death during 1964 had a recognizable health problem preexisting conception, thereby increasing the probability of a stillbirth, an infant or a maternal death. This group of high-risk mothers also lacked information about reproductive physiology and contraceptive methodology. Because no information or services relating to modern family planning were offered, contraceptive practices ranging from aspirin and Coca Cola douches to diluted potash douches had been used in attempts to prevent unwanted pregnancy. The group gave no indication of any marked motivational blocks that would have prevented the acceptance and usage of modern family planning methodology; on the contrary, they expressed strong motivation for family planning services.

These studies led to the formulation of the hypothesis that the failure of the indigent population to control fertility effectively was caused primarily by lack of access to health services that would have provided instruction and care in modern family planning methods, and an inadequate understanding of basic reproductive physiology and contraceptive methodology. On the basis of preliminary data derived from a pilot study in Lincoln Parish, it was hypothesized that an adequately designed patient-oriented family planning program would be utilized by the majority of indigent families.

#### PURPOSE OF THE PROGRAM

The first goal of the Orleans Parish Family Planning Demonstration Program was to develop and organize a system for the delivery of family planning information and services capable of identifying, contacting, educating and providing such services to all indigent families of the metropolitan area, thereby enhancing the system of health services to this group.

The program's second major goal was to accomplish this objective within the three-year period July 1, 1967, to June 30, 1970.

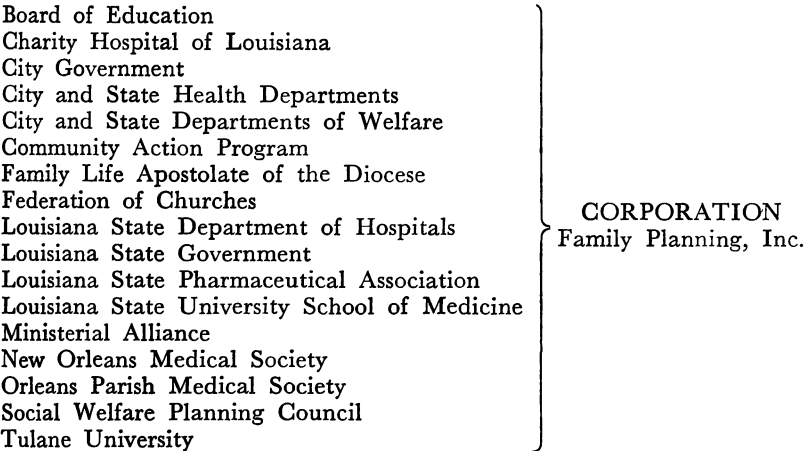
A third objective was to evaluate the program—measure its impact on fertility rates among the target population and its impact on the various obstacles to family health that are often associated with the lack of family planning.

**OPERATIONAL PLAN**

Following the decision in the spring of 1966 to conduct a demonstration program, the period between July 1, 1966, and October 1966, was spent in formulating a plan by which such a program could be initiated. The plan has already been described in detail, so it will only be outlined here.

In October, 1966, the plan was initiated with the formation of a private nonprofit corporation designated as the agency responsible for implementing the service aspects of the demonstration program and coordinating the efforts of other agencies that cooperate with the program. This corporate mechanism was chosen, after considerable study, because the limited available funding required the use of existing resources and personnel with maximum efficiency and a degree of administrative flexibility that did not currently exist among the organizations participating in the program. Figure 1 shows the participating or cooperating agencies. From October, 1966, through April, 1967, two major classes of activity were necessary. The first

**FIGURE 1. PARTICIPATING AND COOPERATING AGENCIES IN THE NEW ORLEANS DEMONSTRATION PROGRAM**



was to evaluate existing resources among the participating agencies and to develop the mechanisms of coordination necessary between the various agencies and the program. The second was to secure funding. These goals were accomplished by April, 1967, and the active preparation of facilities, recruitment and training of personnel, and other logistics began. The program was initiated officially on June 27, 1967.

The corporation is the agency responsible for the development, implementation and coordination of family planning in the metropolitan New Orleans area (as well as in the state). The results reported in this paper could not have been accomplished without the administrative cohesiveness and flexibility afforded by the corporate mechanism. This mechanism permitted information to be gathered that was necessary for internal decision-making in program operation and external decision-making in program development and funding. It provided the administrative capacity to deal with over 25 federal, regional, state and local agencies related to the program. It also afforded an instrument for the use of systems analysis, time effort studies, automated data processing and fiscal processing that are crucial elements of modern management technology. This type of modern management technology has not been sufficiently applied to the development and implementation of family planning programs in other parts of the United States, or in the international field. The experience with the corporate mechanism, backed up by consultation and research from university and other types of organizations, indicates that it would be wise not to discount the potential health and demographic effects of family planning programs before it is learned how to apply the available technology effectively. Whether family planning programs can affect health and fertility variables is a question that has not been properly examined. The results achieved to date appear to be sufficiently encouraging to withhold judgement until the hypothesis can be properly tested. One of the major functions of the Orleans Parish Research and Demonstration Program is concerned with testing this hypothesis.

#### DEMOGRAPHIC CHARACTERISTICS

The New Orleans Standard Metropolitan Statistical Area consists of three parishes (counties): Orleans Parish, Jefferson Parish and St. Bernard Parish. Orleans Parish can be identified as the central city of New Orleans, and Jefferson and St. Bernard Parishes basically form

the urban ring. In 1960, the total population of the Standard Metropolitan Statistical Area was reported to be 868,480 persons (69 per cent white, 31 per cent black) with 72 per cent resident in Orleans Parish. Within Orleans Parish 63 per cent of the population was classified as white.

Estimates of the total population for July 1, 1966, indicated that the statistical area had experienced a relative growth of 15 per cent since 1960. The 1960 census data and 1967 population estimates for the three parish area are given in Table 1. Net migration estimates provided by the Bureau of the Census indicated that Orleans Parish had experienced a negative net migration of approximately 28,000 persons whereas the urban ring had experienced a positive net migration of approximately 58,000 persons. As of July 1, 1967, it was estimated that 66 per cent of the total population of the statistical area resided in Orleans Parish.

Table 1 also gives the female population data (aged 15 to 44 years) for 1960, and as of July 1, 1967. As of July 1, 1967, an estimated 210,500 females aged 15 to 44 resided in the statistical area. Information obtained from the 1965 metropolitan New Orleans Survey was applied to this total estimated female population to provide an estimate of the number of women eligible for the family planning program. At a 95 per cent confidence interval, the survey showed that between 16 per cent and 23 per cent of women could be classified both as fertile and belonging to the lower socioeconomic class. In this group were women with family income under \$4,500, education of head of household no more than one year of high school, and occupation of head of household in the service or laborer category, resulting in an estimated 33,700 to 48,400 women who met program eligibility requirements.

TABLE I. POPULATION ESTIMATES FOR THE NEW ORLEANS STANDARD METROPOLITAN STATISTICAL AREA

<i>Date of Estimate</i>	<i>Orleans Parish</i>		<i>Jefferson and St. Bernard Parishes</i>		<i>Standard Metropolitan Statistical Area</i>	
	<i>Total Population</i>	<i>Female Population Aged 15-44</i>	<i>Total Population</i>	<i>Female Population Aged 15-44</i>	<i>Total Population</i>	<i>Female Population Aged 15-44</i>
1960 Census	627,525	129,692	240,955	52,348	868,480	182,040
July 1, 1967	653,800	135,300	341,200	75,200	995,000	210,500

TABLE 2. GENERAL FERTILITY RATES FOR THE NEW ORLEANS STANDARD METROPOLITAN STATISTICAL AREA

<i>Year</i>	<i>White</i>	<i>Black</i>	<i>Total</i>
1960	112.3	167.3	129.1
1967	78.5	138.7	95.9
Percentage decrease	30.1	17.1	25.7

The general fertility rate is defined as the ratio of all births to the number of women in the age interval 15 to 44 years. It is used as births per 1,000 women of childbearing age.

Table 2 gives a general indication of the fertility patterns in the Standard Metropolitan Statistical Area from 1960 to 1967. The general fertility rate dropped from 129.1 in 1960, to 95.9 in 1967, a relative decline of 26 per cent. Ethnic-specific fertility rates indicated that the general fertility rates for whites decreased 30 per cent and the rates for blacks declined 17 per cent. It is hypothesized that much of the difference in fertility performance between the white and black populations is the result of the unavailability before 1967 of family planning information and services for the indigent families.

#### DEFINITION OF FAMILY PLANNING AND ITS RELATION TO POPULATION POLICY AND FERTILITY CONTROL

The design of the Orleans Parish Family Planning Program has been based on (1) studies of social characteristics of the population that the program is attempting to reach, (2) studies of patterns of death and illness among the population, (3) operational research conducted in Lincoln Parish, a county of 34,700 people. The Lincoln Parish Program is now going into the fourth year and has been used as a "model" for the development of systems and methodology. This operational research has been incorporated into the Orleans Parish program from the start, and all data collection instruments were developed and pretested and have been maintained constant. It has provided a sample frame or patient universe that has allowed a unique opportunity to conduct operational research for examining methods of making the program more effective in attaining its goals.

These past and continuing studies indicate that family planning is a positive idea, giving individuals the information, advice and service necessary to plan the conception of a child under circumstances that will give the product of that conception an optimal opportunity to develop his physical, intellectual and emotional potential as a human

being. The 1959 United Nations Declaration of the Rights of the Child agrees that a child should have these rights, but only takes into consideration the child after conception. If the rights of the child and the intent of the declaration are to be fulfilled, the rights of the child prior to his conception must now be considered. Regardless of its population policy, a nation must concern itself with major obstacles that prevent attainment of family health and stability necessary to foster optimal development of the child. Society's major obstacles, particularly prevalent in the lower socioeconomic groups, are first, the unwanted child; second, the criminal or nonmedically supervised abortion; third, the high-risk mother who is ill, but continues to become pregnant because of ignorance and lack of family planning services, placing herself and her children in jeopardy. The fourth problem is prematurity. Data indicate that increasing the interval between births will decrease the incidence of prematurity and, hence, related conditions such as mental retardation. Because the basic cause of about 50 per cent of mental retardation is not understood, the information now available must be put to maximum use to reduce mental retardation and to accomplish this rapidly. The single factor that could have the largest impact on prematurity and therefore, the reduction of mental retardation among the poor in this society would be the practice of child spacing. The fifth obstacle to family health is that of the battered child, meaning, in the broad sense, physical abuse, neglect or emotional deprivation. The sixth problem is lack of adequate nutrition. The seventh is pregnancy occurring out of wedlock, especially the teenage pregnancy. An eighth obstacle is that of maternal and infant mortality. The ninth is society's apathy toward all its children in making the commitment necessary to insure each child's fullest development.

Family planning is, therefore, a health measure in itself; it is absolutely essential if the obstacles to family health and stability—which clearly exist among the poor—are to be removed. Unless these couples have the information and services necessary to give them the power to control their own reproduction, they will find it extremely difficult to overcome these obstacles, and society will be unable to help them to have wanted, wellborn children with native capacity for the full development of intellectual, emotional and physical well being. Such goals are desirable for the individuals and families involved, and for society as a whole, and they cannot be attained unless the families have the power to control their reproduction. Although one of the

hypotheses being tested in this program is the determination of the impact of a well-designed and -administered family planning program on lowering fertility rates, it is clearly recognized that the program is a valid social effort in itself.

At the same time, it should be obvious that family planning should be considered as only one component of an overall population policy. It is an essential component, and it is yet to be determined to what extent it can reduce fertility rates. Obviously many other demographic, political and social variables must be considered in designing a population policy for the purpose of decreasing the rate of population growth and attaining a balance between man's resources and his numbers. But family planning programs are valid in themselves for health and social reasons and must be an integral part, but only a part, of overall population policy. Until the fertility variables affected by family planning programs have been determined and properly tested, family planning should not be abandoned as one of the methods that can be used to decrease the rate of population growth.

The New Orleans Program, therefore, is not presented as a total program incorporating all the recognized aspects that are jointly important in decreasing fertility rates. It is, however, a family planning program designed, administered and evaluated to estimate the effect of such family planning on health and social objectives as well as on fertility variables.

#### SUMMARY OF THE TWO-YEAR PROGRAM RESPONSE

The Orleans Parish Family Planning Clinic System is composed of a central clinic and three satellite clinics. The central clinic is located at the transportation hub of the city in the immediate vicinity of the two medical schools in the community and the community charity hospital. The satellite clinics are located in a public housing area and in neighborhoods that have been designated as poverty areas. Participation in the program during the first two years was highest during the third quarter of the first year of program operation (Table 6).

Table 3 gives the total number of program contacts, appointments kept and number of acceptors of contraceptive methods during the first two years of program operation. In this period of time a total of 24,230 initial contacts were made through the program, which resulted in 17,459 first admissions to the clinic program. As a consequence of their first admission experience 16,762 women adopted



TABLE 3. CUMULATIVE TOTAL PROGRAM RESPONSE AND ACCEPTANCE RATES\*

<i>Cumulative Rates</i>		<i>Rate per 100</i>	<i>Rate per 100</i>
		<i>Females Aged 15-44 Years</i>	<i>Estimated Program Eligible Females** 15-44 Years</i>
Total program contacts	24,230	11.5	50.1-71.9
Total first admissions	17,459	8.3	36.1-51.8
Total acceptors	16,762	8.0	34.6-49.7

\* Period ending June 30, 1969.

\*\* The total number of women in the New Orleans Standard Metropolitan Statistical Area was estimated in the following manner. Beginning with a baseline estimate of 210,500 women, aged 15-44, resident in the SMSA as of July 1, 1967, this estimate was adjusted by information obtained from the 1965 Metropolitan New Orleans Survey. The 1965 Area Survey gave a 95 per cent confidence interval of 16 per cent-23 per cent for the percentage of women who would be classified as both fertile and belonging to the lower socioeconomic class. Applying this confidence interval to the baseline population estimate resulted in an interval estimate of 33,700 to 48,400 women in the SMSA who are eligible for program participation.

TABLE 4. FIRST ADMISSIONS BY TIME PERIOD OF ADMISSION AND SOURCE OF REFERRAL

<i>Time Period</i>	<i>Post-partum</i>	<i>Source of Referral</i>			<i>Total</i>	<i>Per Cent</i>
		<i>Auxiliary Outreach Worker</i>	<i>Self or Friend</i>	<i>Other</i>		
Ending June 30, 1968	5,452	960	1,852	942	9,206	52.7
Ending June 30, 1969	5,131	912	1,446	764	8,253	47.3
Total	10,583	1,872	3,298	1,706	17,459	
Per cent	60.6	10.7	18.9	9.8		

TABLE 5. CUMULATIVE INITIAL APPOINTMENTS MADE, KEPT, AND PROPORTION KEPT BY TYPE OF APPOINTMENT\*

<i>Type of Appointment</i>	<i>Number of Appointments Made</i>	<i>Number of Appointments Kept</i>	<i>Proportion of Appointments Kept</i>
First appointment (I <sub>1</sub> )	24,230	14,426	0.60
Second appointment made by phone or mail (I <sub>2</sub> )	8,657	1,907	0.22
Third appointment made at time of home visit (I <sub>3</sub> )	2,799	1,126	0.40
Total	35,686	17,459	0.49

\* Period ending June 30, 1969.

some method of family planning. The data in Table 3 relate to the entire New Orleans Standard Metropolitan Statistical Area. Data are presented in Tables 13 and 14 for the city of New Orleans alone.

The response to the program is also presented in Table 3, related to both estimates of the total female population aged 15-44 and the program-eligible population. Since the inception of the program an estimated 11 per cent of the total female population aged 15-44 has been contacted by the program. This represents an estimated contact rate of between 50.1 and 71.9 contacts per 100 program-eligible women. The acceptance rate is estimated between 34.6 and 49.7 acceptors, per 100 eligible women.

#### SOURCES OF PATIENT REFERRAL

First admissions for each year and source of patient referral are given in Table 4. The major source of patients is the postpartum referral system. This system, established and maintained by the program, accounted for 61 per cent of the total patient load during the two-year period. An additional 19 per cent of the patient load could be attributed to friend or self referrals. These referrals occurred prior to the full development of the current community educational program.

The Family Planning Auxiliary Worker System accounted for 11 per cent of the total patient load. This system, described elsewhere in detail, forms the outreach and follow-up component of the program. Other types of referral, predominantly from established poverty-oriented agencies, accounted for the remaining ten per cent. These data indicate that to establish an effective program a comprehensive set of contact mechanisms must be created by the operating program to bring about maximum contact with the potential patient population. Programs must provide aggressive and dynamic outreach systems to reach potential participants.

Table 5 indicates the manner in which appointments to the program were kept. The first column of Table 5 describes three types of clinic appointment. If a woman fails to keep her first clinic appointment she is subsequently contacted by telephone or mail. If she fails to keep this second appointment a home visit is made by one of the program's family planning auxiliary workers. This follow-up responsibility is an integral part of the auxiliary worker system. After the follow-up cycle is completed, no further patient contacts are made and the patient's record is closed unless she initiates a reopening at a subsequent date.

TABLE 6. FIRST ADMISSIONS\* OF THE ORLEANS PARISH CLINIC SYSTEM BY TIME PERIOD OF ADMISSION AND CLINIC DESIGNATION

<i>Time Period</i>	<i>Central</i>	<i>Desire</i>	<i>Algiers- Fischer</i>	<i>Sara Mayo</i>	<i>Total</i>
1967 quarter 3	1,940				1,940
1967 quarter 4	2,067	95	35	41	2,238
1968 quarter 1	2,371	161	77	90	2,699
1968 quarter 2	2,115	92	67	55	2,329
1968 quarter 3	2,172	64	42	83	2,361
1968 quarter 4	2,041	29	14	82	2,166
1969 quarter 1	1,874	21	59	72	2,026
1969 quarter 2	1,572	53	42	33	1,700
Total	16,152	515	336	456	17,459

\* Totals reflect data revisions based on reallocation of first admissions to time period of admission.

TABLE 7. SELECTED STATISTICS FOR FIRST ADMISSION PATIENTS

<i>Reported Statistic</i>	<i>Period Ending June 30, 1968</i>	<i>Period Ending June 30, 1969</i>	<i>Cumulative</i>
Total first admissions	9,206	8,253	17,459
Black	95.7%	92.6%	94.2%
24 years of age or younger	55.9	57.0	56.4
Parity three or less	62.4	68.0	65.1
Less than 12 years of formal education	69.5	67.8	68.7
Contraceptive history			
No reported previous use	40.5	48.9	44.5
Use of less effective methods only	35.0	23.7	29.6
With previous use of pill or IUD	24.3	26.9	25.5
2 or more pregnancies in last 3 years	48.9	35.0	42.3
First pregnancy below age 18	51.7	48.9	50.4
Planning status of last pregnancy			
Taking a chance	78.8	83.3	80.9
Planned	11.0	10.7	10.9
Method failure	9.0	5.2	7.2
Receiving welfare assistance	18.9	21.4	20.1
Unemployment (patient and husband where applicable)	37.1	38.7	37.8
Postpartum referral	59.2	62.0	60.5
Adopting contraception	96.3	95.6	96.0
Pill	62.2	67.4	64.7
IUD	20.1	9.8	15.3

The exception to this would be the extensive and vigorous intervention by health auxiliaries if patients are found to have life-threatening lesions such as early cancer of the cervix.

Table 5 shows that 60 per cent of the women kept their initial appointments without program assistance in follow-up. The total number of women who kept an appointment was increased from 14,426 to 17,459 or 21 per cent as a result of the follow-up system. Thus, in addition to adequate sources of referral, it should be noted that a large-scale appointment and follow-up system is necessary to insure high levels of participation. It is gratifying to observe that 72 per cent of all women from the metropolitan area who were offered appointments to the program eventually kept their appointments.

Until July, 1968, appointments were generally restricted to residents of New Orleans. The acceptance rate for appointments during the first program year for New Orleans was estimated at 90 per cent. After July, 1968, appointments were given to all area residents and residents of nine surrounding counties for service at the central facility. During 1968-1969, clinic facilities were developed in the Standard Metropolitan Statistical Area counties and acceptance rates for 1969-1970 for the Statistical Area are expected to be similar to levels achieved in New Orleans during the first year. These data substantiate the strong motivation in this population toward participation in the Family Planning Program.

### *Profile of Patient Characteristics*

Table 7 gives a brief comparative profile of demographic and social characteristics of women admitted as patients over the two-year period. In summary, a woman entering the program would likely be (1) black (94 per cent), (2) 24 years of age or younger (56 per cent), (3) at parity three or less (65 per cent), and (4) educated at less than a high school level (69 per cent). She would be characterized by (1) a reported history of no previous contraception (45 per cent) or a previous use of only ineffectual contraceptive methods (30 per cent), (2) two or more pregnancies in the last three years (42 per cent), (3) a first pregnancy experience at less than 18 years of age (50 per cent) and (4) "taking a chance" on her most recent pregnancy (81 per cent). The typical patient is likely to receive no welfare assistance (80 per cent) and have a high unemployment rate (38 per cent). This unemployment percentage was computed as a response to an inquiry about the employment of the woman and husband if present.

TABLE 8. CUMULATIVE MARITAL STATUS OF FIRST ADMISSION PATIENTS\*

<i>Marital Status</i>	<i>Number</i>	<i>Per Cent</i>
Never married	4,085	23.4
Married with husband present	8,934	51.2
Common-law marriage	646	3.7
Married but separated	3,141	18.0
Divorced	420	2.4
Widowed	217	1.2
Unknown	16	
Total	17,459	

\* Period ending June 30, 1969.

Table 8 gives the reported marital status of the first admission patients. Of the total first admissions only 51 per cent reported being married with husband present, 18 per cent reported themselves as married but separated, 23 per cent reported never having been married and eight per cent of the women reported being a partner in a common-law marriage, being divorced or widowed. For policy reasons only a small proportion of the never-married, never-pregnant population is being served.

It is most likely that a woman entered the program as a result of a postpartum referral ( 61 per cent) and after entering the program she adopted some type of contraceptive (96 per cent) (Table 7). The type of contraceptive most frequently chosen was the oral pill.

In general, the characteristics reported above appear to be stable over time. Three exceptions should be noted. First, during the second year of program operation a 14 per cent decrease was observed in the number of women admitted to the program who had experienced two or more pregnancies in the last three years. The decrease can be partially attributed to the fact that patients admitted during the second year were on the average slightly younger and at a lower parity level than women seen during the first year. Patient recruitment strategies also contributed to this decrease.

The second exception is the type of contraceptive method adopted by patients over the two-year period. Use of the intrauterine contraceptive device decreased ten per cent during the second year of the program. During the second year patients tended to choose the pill and other methods in preference to the IUD. Because it is believed that this may adversely affect the patient's ability to control fertility, a revision of the clinic educational program is presently under way.

TABLE 9. SELECTED REPRODUCTIVE PERFORMANCE STATISTICS FOR FIRST ADMISSION PATIENTS

<i>Reported Statistic</i>	<i>Period Ending June 30, 1968</i>	<i>Period Ending June 30, 1969</i>
Total first admissions	9,206	8,253
Total never pregnant	39	62
Per cent with 1 or more infant deaths	10.5	8.3
Per cent with 1 or more stillbirths	6.5	5.6
Per cent with 1 or more miscarriages	17.4	16.1
Per cent high risk*	58.0	53.9
<b>Last Pregnancy Outcome</b>		
Per cent full term	81.4	80.9
Per cent premature	11.8	11.9
Per cent stillbirth	2.0	1.7
Per cent miscarriage	3.4	3.7

\* A patient was classified as "high risk" if at least one of the following conditions was present: (1) six or more children, (2) under 17 or over 40 years of age, (3) history of a previous stillbirth or infant death, (4) experience of a premature birth at the most recent delivery, (5) last birth out of wedlock, (6) a potentially hazardous intercurrent medical condition.

The third exception is a small increase in white participation in the clinic. Only four per cent of total admissions during the first year were white women, but during the second year this increased to seven per cent. The increase in white participation is a recent occurrence and hopefully an indication of further participation by that group.

Table 9 gives a brief summary of the reproductive performance of women admitted during the two-year period. During the first year only 39 never-pregnant women were admitted as patients; in the second year 62 never-pregnant women were admitted as patients. Again, it should be emphasized that the small number of never-pregnant patients is primarily the result of the policy of the program for most of the period under study. Of the ever-pregnant women, it should be noted that those women admitted during the second year had a slightly better reproductive history. Naturally, this performance is associated with age and parity. However, most of the differences can be associated with patient recruitment strategies used during the first year. During that period an intensive recruitment effort was directed toward women who had experienced reproductive difficulties (high-risk mothers). This is most clearly seen if the percentages of high-risk patients are compared over the two-year period. Little distinction can be made between first- and second-year patients regarding their most recent pregnancies.

TABLE IO. REPORTED AGE AT FIRST PREGNANCY AND YEARS OF FORMAL EDUCATION\*

Age at First Pregnancy	Years of Formal Education						Un- known	Total	Per Cent
	3 or Less	4-6	7-8	9-11	12+				
13 or Less	10	52	145	82	5	2	296	1.7	
14-15	27	214	917	1,592	125	4	2,879	16.5	
16-17	22	176	901	3,590	921	9	5,619	32.2	
18	17	64	289	1,222	1,043	3	2,638	15.1	
19	6	51	200	727	1,043	5	2,032	11.6	
20+	41	120	348	1,077	2,231	5	3,822	21.9	
Unknown or not applicable	1	7	17	78	66	4	173	1.0	
Total	124	684	2,817	8,368	5,434	32	17,459		
Per cent	0.7	3.9	16.1	47.9	31.1	0.2			

\* Period ending June 30, 1969.

TABLE II. AGE AND PARITY DISTRIBUTIONS OF FIRST ADMISSIONS BY REPORTED MARITAL STATUS\*

Age	Parity							
	0-1		2-3		4-5		6-7	
	Ever Mar- ried	Never Mar- ried	Ever Mar- ried	Never Mar- ried	Ever Mar- ried	Never Mar- ried	Ever Mar- ried	Never Mar- ried
Under 20	1,479	1,292	738	307	21	4	0	0
20-24	1,230	818	2,350	601	747	114	112	13
25-29	263	124	1,120	255	1,151	134	561	63
30-34	43	27	355	73	566	61	494	44
35-39	23	3	119	23	233	16	214	17
40+	12	1	61	8	89	13	93	5
Unknown	7	4	13	3	12	2	8	1
Total	3,057	2,269	4,756	1,270	2,819	344	1,482	143
Per cent	22.9	55.5	35.6	31.1	21.1	8.4	11.1	3.5
	8+		Unknown		Total		Per Cent	
Under 20	0	0	0	0	2,238	1,603	16.8	39.2
20-24	12	1	0	1	4,451	1,548	33.3	37.9
25-29	186	12	1	0	3,282	588	24.6	14.4
30-34	409	25	0	0	1,867	230	14.0	5.6
35-39	393	16	0	0	982	75	7.4	1.8
40+	236	4	1	0	492	31	3.7	0.8
Unknown	6	0	0	0	46	10	0.3	0.2
Total	1,242	58	2	1	13,358	4,085		
Per cent	9.3	1.4						

Table excludes 16 cases where marital status was unknown.

\* Period ending June 30, 1969.

TABLE 12. CONTRACEPTIVE METHOD USED MOST FREQUENTLY IN THE PAST COMPARED WITH METHOD SELECTED AT TIME OF FIRST ADMISSION

<i>Previous Method</i>	<i>Method Selected at First Admission</i>					<i>Total</i>	<i>Per Cent</i>
	<i>None</i>	<i>Pill</i>	<i>IUD</i>	<i>Foam</i>	<i>Other Traditional</i>		
None	386	5,130	932	1,208	112	7,768	44.5
Pill	120	3,070	740	483	46	4,459	25.5
IUD	7	13	35	4	2	61	0.3
Jelly, cream, foam	60	1,394	464	400	37	2,355	13.5
Other traditional	92	1,682	488	485	69	2,816	16.1
Total	665	11,289	2,659	2,580	266	17,459	
Per cent	3.8	64.7	15.3	14.8	1.5		

### *Detailed Characteristics*

Tables 10, 11 and 12 provide more depth on critical points previously mentioned. Table 10 is a cross-tabulation of reported age at first pregnancy and completed years of formal education. Approximately 31 per cent of the patients had at least a high school education, 21 per cent had eight or fewer years of education and 48 per cent reported 9–11 years of formal education. Simultaneously, 66 per cent of the patients reported a first pregnancy at age 18 years or younger. Moreover, Table 10 indicates the association between years of formal education and age of first pregnancy. As age of first pregnancy advances the total years of formal education increases. Although the direction of causality cannot be determined from these data, the association is striking and reinforces the urgent need for family planning programs to engage in both research and program development to determine methods of preventing the initial teenage pregnancy.

Table 11 is a three-way cross tabulation of age by parity by marital status. It should be noted that 23 per cent of the patients reported they had never been married. It also appears that the proportion of women who never married is inversely related to both age and parity. Of those patients who had never married 77 per cent were under 25 years of age as compared with 50 per cent of the ever-married women, and 87 per cent of the never-married women were parity three or less as compared with 58 per cent of the ever-married women.

Of the total number of women participating in the program during the first two years of operation, 51 per cent were at parity three or less and below age 25. This indicates that family planning programs



with this design are capable of reaching families at a critical time in the reproductive age period.

Table 12 compares the contraceptive method used most frequently in the past by clinic participants with the contraceptive method selected at the time of first admission. Although 45 per cent of the patients had previously used no contraceptive, 96 per cent of them adopted some method of contraception as a result of their clinic experience.

Several transitions in method used can also be observed in Table 12. First, one notes that nearly two out of three patients selected the pill. In general, the pill was the method most often selected regardless of previous usage. The only exception was in the previous use of the IUD. In this case the woman was most likely to select the IUD again as her preferred method of contraception.

The general trend of the patient population was toward adoption of effective (pill or IUD) methods and abandonment of more traditional methods. For example, in the past only 26 per cent reported using an effective method as compared with 80 per cent adopting an effective method after admission to the clinic program.

### *Black and White Participation*

Tables 13 and 14 represent an attempt to estimate clinic participation rates in relation to the estimated number of women who can be classified as financially eligible for admission to the program. The data

TABLE 13. ESTIMATED PARTICIPATION OF FINANCIALLY ELIGIBLE BLACK WOMEN\* IN THE ORLEANS PARISH FAMILY PLANNING PROGRAM

<i>Eligibility, Admissions and General Fertility</i>	<i>Age Group</i>						<i>Total</i>
	<i>15-19</i>	<i>20-24</i>	<i>25-29</i>	<i>30-34</i>	<i>35-39</i>	<i>40-44</i>	
1. Estimated number of financially eligible women	7,076	5,733	4,777	4,158	4,018	4,033	29,795
2. First admissions	2,775	4,471	2,944	1,600	828	333	12,951
3. Per cent of financially eligible women admitted	39.2	80.0	61.6	38.5	20.6	8.3	43.5
4. General fertility (1967)	139.0	210.5	155.3	88.7	46.7	17.5	119.5
5. Per cent of total births (1967)	27.6	33.9	20.8	10.4	5.3	2.0	100.0
6. Estimated participation rate	12,951/(29,795)(67.2) = 64.7 Per 100 Eligible Women						

\* Data restricted to Orleans Parish residents only.

TABLE 14. ESTIMATED PARTICIPATION OF FINANCIALLY ELIGIBLE WHITE WOMEN\* IN THE ORLEANS PARISH FAMILY PLANNING PROGRAM

<i>Eligibility, Admissions and General Fertility</i>	<i>Age Group</i>						<i>Total</i>
	<i>15-19</i>	<i>20-24</i>	<i>25-29</i>	<i>30-34</i>	<i>35-39</i>	<i>40-44</i>	
1. Estimated number of financially eligible women	2,126	2,252	1,875	1,404	1,400	1,700	10,757
2. First admissions	129	226	168	86	48	19	676
3. Per cent of financially eligible women admitted	0.8	1.3	1.2	0.8	0.5	0.1	0.8
4. General fertility (1967)	51.8	140.1	95.7	58.2	35.2	6.5	69.5
5. Per cent of total births (1967)	14.7	42.2	24.0	10.9	6.6	1.5	100.0
6. Estimated participation rate	$676/(10,757)(67.2) = 9.4$ per 100 Eligible Women						

\* Data restricted to Orleans Parish residents only.

presented in these tables are restricted to women who are residents of the city of New Orleans. This residence restriction was adopted because the clinic program has been fully operational in New Orleans for the entire two years. Admission of women from surrounding parishes has been a relatively recent occurrence.

Row 1 of Table 13 gives 1967 mid-year estimates, by age groups, of the number of financially eligible black women in New Orleans. The procedures and assumptions for the computations in Tables 13 and 14 are given in Table 15. Row 2 gives the number of first admissions by age group. These are first admissions who named New Orleans as their place of residence, and the age grouping refers to the patient's age at admission. Row 3 gives the percentages of financially eligible women admitted to the program. Row 4 gives estimated age-specific fertility rates for the entire black population in 1967, and row 5 is the percentage distribution of these births by age of mother.

From row 3 of Table 13 it is evident that an estimated 44 per cent of the black financially eligible population was admitted to the program during the first two years. In more depth, the age-specific percentages indicate that the greatest impact occurred in the age group 20-24. The estimated admission rate in this group is 80 per cent. It is also interesting to note that the age-specific admission rates are ranked in the same order as the baseline age-specific fertility rates. The admission rates also appear to be consistent with the percentage

distribution of births with one exception. This exception occurs in the age group 15–19. On a percentage basis this group accounted for 28 per cent of the total black births in 1967. Thus, relative to age groupings, the 15–19 group ranked second in the distribution of births, third in general fertility and third in admission. This may well be

TABLE 15. PROCEDURES AND ASSUMPTIONS FOR THE COMPUTATIONS PRESENTED IN TABLES 13 AND 14

1. The distribution of women 15–44 years of age by five-year age groupings was obtained for Orleans Parish, 1967, from estimates provided by the Division of Business and Economic Research, Louisiana State University in New Orleans. These projections are based on a cohort survival technique from numbers of women by race and age as given in the 1950 and 1960 U.S. Census. Details may be found in the publication: "The Population of Louisiana: Projections by Race, Sex and Age." Population Study No. 1, Louisiana State University in New Orleans, February, 1968.
2. The population projections were reduced in each age category by applying the per cent of families in Orleans Parish classified as poor, by race. The per cent of families classified as poor was 25.6 per cent for the parish as a whole, 50.1 per cent black and 13.4 per cent white. These data were obtained from the Office of Economic Opportunity Information Center, *Community Profile* as reported in the publication: "Statistical Abstract of Louisiana," Louisiana State University in New Orleans, 3rd edition, 1969, Row 1, Tables 13 and 14.
3. Under the OEO criteria for economic status, an individual is considered poor if his personal income or the income of the family to which he belongs inadequately provides for his subsistence. The exact criteria were those developed by the Social Security Administration. The classification is based upon 1960 U.S. Census data for Orleans Parish.
4. Row 2, Tables 13 and 14, gives the number of women by age admitted for the first time to the Orleans Parish Family Planning Program. These women were reported residents of Orleans Parish and the age grouping is given at the time of admission.
5. When the number of women admitted is divided by the number of estimated financially eligible women, an age-specific admission percentage was computed. This percentage does not take into account any qualifying factors relative to eligibility other than financial criteria, Row 3, Tables 13 and 14.
6. Rows 4 and 5, Tables 13 and 14 give the estimated age-specific fertility and per cent distribution of births, by age of mother, for the general population, 1967. These data reflect Orleans Parish only.
7. The estimated participation rate was computed for each population by applying an estimate of the number of women currently not available for service because of factors such as pregnancy, sterility, sensitivity, no need and so forth. This percentage estimate is based upon data reported in Family Planning and the Reduction of Fertility and Illegitimacy: A Preliminary Report on a Rural Southern Program, Beasley, J. D. and Parrish, V. W., *Social Biology*, June, 1969. This is a local estimate and reflects the best local data available.

because of overestimation of the eligibles in the age group 15–19. The program's admission policy is giving particular attention to the unmarried teenager. A similar reexamination should occur in all existing programs and in public policy regarding admission of unmarried teenagers to family planning programs.

Table 14 gives similar data for the white population. Table 14 indicates that only 0.8 per cent of the financially eligible white population enrolled in the clinic program. However, even with the small number of patients, it is interesting to note that the admission rates are directly associated with both the age-specific fertility rates and the percentage distribution of white births for the year 1967.

Row 6 in Tables 13 and 14 is an attempt to relate first-admission patients to the total number of eligible women in New Orleans. A correction factor of about 0.33 was applied to the total number of financially eligible women to correct this figure for the number of women who would be classified as not available for participation in the family planning program. This correction factor was derived from three years of contact experience in the Lincoln Parish Family Planning Program. The correction factor accounts for the number of women currently pregnant, desiring a pregnancy and sterile and so forth. When this factor is applied to the total number of financially eligible women, the results yield a participation rate of 65 per 100 eligible women for the black population as contrasted with a participation rate of nine per 100 for the white population.

The data thus indicate that in the general population a black woman was more than six times as likely to participate in the program than was a white woman. Many lower socioeconomic white patients, because of racial prejudices, appear to be reluctant to attend the clinic. However, investigation is necessary and is currently under way to examine other factors that may explain the significantly lower participation of the white lower-income patients in the clinic program.

Table 16 shows a brief comparison of patient characteristics by ethnic composition. The data presented do not provide any characteristics that appreciably differentiate the two groups beyond the variable of classification. The typical white patient was slightly older and at a lower parity than the black patient. The white patient had, in general, fewer years of formal education and less contraceptive experience than her black counterpart. The white patient also became pregnant at an earlier age; however it was more likely that her most recent pregnancy was planned. Both groups reported approximately the same

TABLE 16. SELECTED FIRST ADMISSION STATISTICS BY ETHNIC COMPOSITION OF THE PATIENT POPULATION\*

<i>Reported Statistic</i>	<i>Black</i>	<i>White</i>
Total first admissions	16,451	998
24 years of age or younger	56.5%	55.0%
Parity 3 or less	64.8	69.9
Less than 12 years of formal education	68.2	77.0
Contraceptive history		
No reported previous use	44.2	49.1
Use of less effective methods only	29.9	25.7
With previous use of pill or IUD	25.6	25.3
2 or more pregnancies in the last 3 years	42.2	44.4
Age of first pregnancy less than 18 years	50.0	57.7
Planning status of last pregnancy		
Taking a chance	81.5	71.9
Planned	10.3	20.9
Method failure	7.3	5.9
Receiving welfare assistance	20.1	19.9
Unemployment	38.1	33.5
Postpartum referral	60.8	57.5
Adopting contraception	96.5	91.5
Pill	64.8	62.3
IUD	15.2	15.8

\*Period ending June 30, 1969.

level of welfare assistance, but the white patient reported a slightly better employment status. Last, the typical white patient was reluctant to use contraceptives, but when a method was accepted, the most probable choice was the pill.

Thus, the data reveal the basic dimensions of similarity among the patients' social, economic and medical poverty.

### *Continuity of Patient and Program*

In any health service program, the ability to maintain contact with the patient is of utmost importance. A crude measure of the program's success in accomplishing this goal is suggested by a comparison of the total number of first admissions with the reported number of clinic closures during a specified period of time. A clinic closure is defined as any patient who keeps an initial appointment and subsequently terminates contact with the program by failing to comply with the revisit schedule. During the first year of program operation the estimated closure rate was 13.6 closures per 100 first admissions.

In other words, during the first year 86 out of 100 patients maintained active contact with the program.

A more refined analysis of oral contraceptive use was recently completed. This study, based on 2,023 patients who entered the program between July 1, 1967, and December 31, 1967, and who selected the pill as their first continuing method of contraception, revealed that the cumulative net probability of continuing with the pill was  $0.70 \pm 0.01$  at 12 months and  $0.60 \pm 0.02$  at 18 months. This was a first segment usage-analysis subject to six competing risks of termination. The cumulative net probability of accidental pregnancy was estimated at  $0.04 \pm 0.005$  at 12 months and  $0.05 \pm 0.008$  at 18 months. Thus both contact and continuity with the patient population has been established by the program.

### IMPLICATIONS

The metropolitan New Orleans Family Planning Research and Demonstration Program was predicated on:

1. Demographic and social studies of medically indigent patients who were to be the primary recipients of the services.
2. Studies of the epidemiology of infant mortality, maternal mortality, prematurity, stillbirths, abortion and the availability and usage of existing health services and resources.
3. A detailed evaluation of all facilities and resources that could be used in the implementation of a family planning program.
4. Operational research in one county with a population of 34,700 was implemented in 1964, and used as a research area where problems of program design could be tested in a small population to gain some indication of their applicability to a metropolitan area of over one million. As a result of this development and consideration of behavioral, political, social and administrative variables, the program design for New Orleans was developed. These research findings indicated that criteria that required priority were:
  - (a) decision-making in the program that could be adapted to serving the needs of the patients.
  - (b) design and administration of the program to enhance the patient's privacy and individuality, and to respect her in-

telligence and freedom of conscience. This would help patients realize their desire to increase the quality of their own lives and that of their children.

Insofar as possible this program was designed and has been administered using these criteria as guidelines. No premises previously asserted by the health profession have been accepted as accurate until the hypotheses on which they were based were tested. In short, the program was designed to meet the needs of patients. Studies indicated that the major problems faced in implementing a family planning program in an area of over one million were organizational, political, social, administrative and educational and not motivational on the part of prospective patients. This implied two principles to be built into the design of the program and its administration. The first was to solve the anticipated problem by utilizing a variety of talents; it was known from the start that this multifaceted problem would require a multidiscipline team working cohesively. The second principle was the need to develop a unique structure that could be used as an instrument to implement the versatility, flexibility and brainpower in an effective manner.

5. After careful study of the data, it was decided that the most flexible, versatile administrative mechanism possible would be a private nonprofit corporation. Such a corporation was established and has been used to develop the capacity and test the ideas of modern management technology to decision-making processes involved in the development, administration and evaluation of the program. This has been a highly successful mechanism to this point. As long as the requirements of Items 1 and 2 are met, a variety of institutional and organizational mechanisms could be used to properly develop family planning programs. It is the authors' opinion, however, that programs that do not consider the factors delineated in Items 1 and 2 will not be successful in achieving their objectives.
6. Studies indicated:
  - (a) a marked lack of information concerning reproductive physiology and contraceptive technology in this metropolitan area of over one million;
  - (b) no organized services designed to meet the needs of patients were available;

- (c) no adequate health delivery system was available to the population in which family planning could be incorporated. For these reasons the staff worked with the cooperating and participating organizations to design a system for the delivery of health care. Such a system had to be developed before a family planning program with the elements specified could be implemented and sustained; hence great emphasis was placed on creating the delivery system. Family planning was offered first, then prenatal care to be supplemented by many other components of primary health care as priorities dictate. All of the studies indicated the presence of strong motivation among the lower socioeconomic population, and especially among the economically deprived black population, for family planning services.
7. Summaries of the evaluation of results of the participation of lower socioeconomic patients during the first two years of the metropolitan New Orleans study have been presented in detail in the tables and the text. However, it is important to emphasize the following points:
- (a) From the initiation of the Orleans Parish program on July 1, 1967, through June 30, 1969, 17,459 families have become active participants in the program.
  - (b) An estimated 85 per cent of all patients who entered the program during this two-year period are still keeping re-visits, indicating continuing active contact with the program.
  - (c) Over 95 per cent of the 17,459 families are from the black segment of the lower socioeconomic section of the population.
  - (d) It is estimated that minimally an 80 per cent acceptance of services has been achieved in the 20-24 age group in the black female population of New Orleans within the two-year period of time.
  - (e) The probability of a black patient keeping an appointment of any type has been six times as great as that of a white patient from a lower socioeconomic group.

These data indicate not only willingness to accept family planning but also very strong motivation and desire for these services among the lower socioeconomic population when offered in an acceptable manner. These families, with their intelligence and perception of their own life



condition, recognize clearly that unless they have the power to control their own reproduction, they do not have the power to control their own destiny or that of their children. If services are made available to the lower socioeconomic segment of the population in the manner described, similar levels of acceptance can be achieved throughout the nation. In summary, the problem neither has been nor is in the patients, particularly in the black patients. It is rather the lack of an effective primary system for the delivery of health care to the indigent, and especially, the lack of a system to provide information about family planning and the means to deliver such services.

8. These results should effectively dispose of the myth that motivation does not exist among the black population for family planning, and the even more destructive myth that the federal government or any other agency is coercing blacks to practice family planning. These two assertions are, in fact, demeaning to the intelligence and ingenuity of indigent black families.
9. This paper has tried to make a clear distinction between family planning and the idea of population policy. Family planning is a valid health measure that is absolutely crucial to all families in this country, particularly those in the lower socioeconomic segment of the population who are suffering most from the lack of information and services that will grant them the power to control their own procreation. The studies indicate that unless the power is made available to the lower socioeconomic group, much difficulty will be encountered in solving major problems that are now obstacles to the attainment of family health and stability.

For these reasons, family planning must be a necessary part of the health services provided by any government regardless of its population. Although family planning is only a part of a population policy, even a nation wishing to increase its population should incorporate family planning into its health delivery system to produce a population of increased potential.

The hypothesis that family planning cannot reduce rates of population growth has not yet been properly tested. Many other social structural factors must be considered in a population policy. However, family planning must also be a part of any population policy. It would, therefore, be extremely dangerous to heed the advice of those who say that family planning programs have failed to reduce fertility rates before such a hypothesis has been adequately tested. This paper pre-

sents evidence that new approaches to program design and administration can produce results in terms of involving and maintaining patient populations. No claims are made at this time as to the ability of the program to reduce fertility rates. However, the impact the demonstrated levels of participation are having on fertility as well as health variables are being monitored and findings will be reported.

Other measures that have been proposed to reduce fertility—such as laws to postpone the age of marriage, punishing those who have illegitimate children, elimination of tax exemption for children and levying a tax on children—would be punitive and injurious to the child. No evidence is available to indicate that such laws would have the desired demographic effect. If the development of the child's potential is, as it should be, the nation's highest priority, these adverse effects must receive very careful attention. It is completely unrealistic to believe that any of these measures would be ruled by any existing state or federal legislature, or for that matter by governments of other nations. For this reason it is even more imperative to continue to stress the type of family planning programs described in this paper.

In discussing overall population policy, it should be made clear that family planning for the black population is not aimed at decreasing the number of blacks. The major reason for placing emphasis on family planning for black families as well as whites is to give them the power, not currently theirs, to control their procreation and thus benefit their families, the society, the children already born and the children to come. Without this power these families will be unable to overcome the major health, social and economic problems that have been described in this paper. The data presented here indicate that the lower socioeconomic segment, and especially the black segment, will grasp this power and use it to its benefit if it is made available in an acceptable manner.

#### SUMMARY AND RECOMMENDATIONS

The nation should proceed to give high priority to funding, development, organization and delivery of comprehensive family planning information and services to all families who lack this service. Inasmuch as the largest segment of the population not receiving these services are members of the lower socioeconomic group and the minority subgroup, high priority should be placed on the provision of adequate family planning services plus an adequate primary health care system.

Research is needed to determine the social and political factors that would encourage small family size. These studies must undertake to develop operational programs capable of achieving this end, but that do not penalize the child as a consequence. Special attention should be given to the development of a national policy that not only includes the lower socioeconomic group but also addresses itself to the problem of decreasing the rate of population growth in all classes of society.

The people, the congress and the administration should recognize that any population policy developed by this nation demands the highest emphasis on research in the area of reproductive physiology and contraceptive development. A very substantial increase in the amount of attention and effort in this area by the scientific community is absolutely essential for the implementation of existing population policies and those to be developed.

These priorities should be implemented simultaneously.

The United States and the world has amply demonstrated the capacity to increase its population at a rapid pace. Future generations will also have this option if they so desire. As a result of the rapid rate of growth, the United States and the world are failing to invest the human and economic capital necessary for the development of children. The goal must be to stabilize national and international populations as rapidly as possible. This will allow greater emphasis on the development of the human resources of children already born and on the large increase in the number of children that will inevitably occur in the next 30 years. It will also allow better understanding of mankind's social, economic and environmental problems and assimilate technology so that it can be applied to the solution of the problems.

It has been amply demonstrated that family planning is valid in itself for health and social reasons. Forces must be combined and the job must proceed of developing the data necessary to solve population problems through cooperative controlled investigation.

## REFERENCES

<sup>1</sup> Beasley, J. D., Harter, C. L. and Fischer, A., Attitudes and Knowledge Relevant to Family Planning Among New Orleans Negro Women, *American Journal of Public Health*, 56, 847-857, November, 1966.

<sup>2</sup> Beasley, J. D., Harter, C. L. and McCalister, D. V., Aspects of Family Planning Among Low Income "High Risk" Mothers, *Advances in Planned Parenthood*, Excerpta Medica International Congress Series, No. 138, 1966, pp. 197-204.

<sup>3</sup> Beasley, J. D. and Harter, C. L., Introducing Family Planning Clinics to Louisiana, *Children*, 14, 188-192, September-October, 1967.

<sup>4</sup> Beasley, J. D., The United States: The Orleans Parish Family Planning Demonstration Program (New Orleans, Louisiana), *Studies in Family Planning*, 25, 5-9, December, 1967.

<sup>5</sup> Beasley, J. D. and Parrish, V. W., A Progress Report on a Southern Rural Family Planning Research Program Conducted in Lincoln Parish, Louisiana, *Advances in Planned Parenthood*, Proceedings of the fifth annual meeting of the A.A.P.P.P., New York Excerpta Medica Foundation, 3, 29-36, 1968.

<sup>6</sup> Harter, C. L., Male Fertility in New Orleans, *Demography*, 5, 61-78, 1968.

<sup>7</sup> Beasley, J. D., Frankowski, R. F. and Hawkins, C. M., The Orleans Parish Family Planning Demonstration Program, *Milbank Memorial Fund Quarterly*, 47, 225-253, July, 1969.

<sup>8</sup> Hawkins, C. M., A Stochastic Description of Oral Contraceptive Usage, Unpublished Doctoral Dissertation, Tulane University, 1969.

<sup>9</sup> McCalister, D. V., Hawkins, C. M. and Beasley, J. D. Projected Effects of Family Planning on the Incidence of Perinatal Mortality in a Lower Class Non-White Population, *American Journal of Obstetrics and Gynecology*, in press.

<sup>10</sup> Siegel, E., *et al.*, A Longitudinal Assessment of the Characteristics of New Admissions to a Community Family Planning Program, *American Journal of Public Health*, 58, 1864-1875, October, 1968.

#### ACKNOWLEDGMENT

*We thank Mrs. Joan Smith for valuable assistance in data processing and Mr. Edwin Neugass for assistance in computer programming.*

#### DISCUSSION

*Miss Gwendolyn Johnson:* The aims of this program are to develop a system for delivering quality family planning service to indigent families; and to identify, contact and, if necessary, to educate the eligible women as to the virtues of family planning. The hypothesis appears to be the same as that upon which the family planning programs of many countries are based: that individuals will regulate their fertility if given the means and information and if educated as to the virtues of controlling the number and spacing of children. In reviewing the extent to which the program goals have been and are being accomplished, the authors are concerned with the effectiveness of the organization and administration of the program, and with the program's status as an instrument of social and health policy.

A question that this paper raises and for which there seems to be no simple answer is: To what may be attributed the considerable accomplishments of this program? Inasmuch as the primary intent of the program is stated to be the improvement of social and health conditions rather than the reduction of fertility, achievements must be measured first in terms of patient response to the program. A large proportion of the estimated eligible population has been contacted; a high percentage has accepted the service; and a remarkably high proportion of those who accepted the service are apparently continuing the practice of birth limitation. The reported continuation rates of 85 per cent may be considered as remarkable, in view of performances in other programs. The question of definition arises, however, in respect both to rates of acceptance and continuation of birth control practice, and a clarification of these terms would have been helpful.

It is worthwhile to consider some of the factors responsible for the extraordinary response. First, the program is based on quality information about the characteristics of the women; and therefore its educational component has probably been very efficient. Further, a high proportion of the women were contacted at a time when they were most susceptible to suggestions about fertility control, that is, in the postpartum period. Then, too, they are urban women and presumably affected by the public dialogue on family planning. In addition, the program provides elaborate machinery for referrals and follow-up. These conditions do not, however, fully explain this really high response rate.

Experience with the program in some other countries indicates that the lower socioeconomic groups tend to be less responsive, and that they often represent the hard core of noncontraceptors whose patterns of reproductive behavior are subject to change only after the small family has gained reasonably wide acceptance. In these countries, too, younger women do not constitute a high proportion of the total client population in the early years of the program. Initial acceptors in most programs have been older, high-parity women who had more than the desired number of children. The authors have provided evidence of contrary response patterns in the New Orleans program: women aged 20-24 have the highest rate of participation, though their relative numbers increased during the second year of the program.

One must presume that the black population, particularly, had apparently already accepted the small family norm that prevails in this country, but lacked the knowledge and means of adjusting its

behavior accordingly. In view of this, and also because belief in the possibility of social advancement is widespread in black communities of the south, attitudes were favorable for behavior changes leading to fertility regulation. In this connection, it may be noted that, insofar as motivation is concerned, the problem for administrators of the New Orleans program differs considerably from that confronting personnel in the family planning programs of developing countries. In the first instance, it is the question of attracting to the program a group that had not conformed with a behavior pattern already established by the larger society. In the developing countries, on the other hand, the problem is one of inducing individuals to adopt values and behavior that are generally alien to the society. This might be a partial explanation for the comparatively high response and continuation rates among the New Orleans black women.

The authors emphasized that the services were offered and made available in a manner acceptable to the people, and I believe that this is a crucial factor in the program's achievements. The stress upon the health and social benefits of family planning reduced opportunities for charges that the program might be a political instrument of the government, thereby improving the likelihood that the black community would accept the program. Dr. Beasley and Dr. Frankowski have made no claims in respect to the demographic impact of the family planning program, although they are carefully monitoring such changes in birth rates as may become evident. One is tempted, however, to look forward to eventual declines in the birth rates, in view of the high level of response particularly among women aged 20 to 24 years—the ages at which fertility in this population group is at its peak.

There are some general implications here for family planning programs. The representation of family planning as an aid to family health and social stability may reap greater response than appeals on the basis of economic and other considerations that may be less meaningful to, or less easily grasped by, lower socioeconomic groups. Administrators of other family planning programs should be encouraged by this additional evidence that young, low-parity women of lower socioeconomic status will control their fertility and should seek such results in their own programs. In this connection, there is an urgent need for research on the various social, cultural and political conditions in which individuals will and will not adopt family planning within the context of an organized program.

*Dr. Himes:* I wanted to ask two questions of Dr. Beasley. First, I would like to know specifically what he did on coming into contact with the patients. What did he do to motivate them to get them to come to the clinic the first time? I can imagine difficulties of getting a lot of people into services of this kind. My other question is: Once he got them there, what did he do to keep them coming?

*Dr. Beasley:* I would like to thank Miss Johnson for her review of the paper. We are concerned with the problem of fertility and the impact of family planning on decreasing fertility. However, we are saying that this is an hypothesis that needs further examination.

In relation to the questions that Dr. Himes asked regarding what we specifically do to motivate patients to come to the clinic the first time, I would say that we have found very little evidence that this segment of the population was not already motivated to the practice of child spacing. I think this is one of the major factors in program adoption. What we found was ignorance and the lack of availability of acceptable services, even ignorance of the fact that they could control reproduction.

We located a universe of patients, down to the name and address by the use of vital records, health records and records of the official agencies in the city. We developed a health manpower system for outreach work and now have 40 nonprofessional people in the New Orleans program who are working under professional supervision in the neighborhoods of the patients.

We contact every postpartum patient, and every patient in the identifiable universe. We are constantly working on the nonidentifiable universe in terms of making it an identifiable universe, and we are trying to learn more about the group of patients that we are not reaching.

The second problem is patient education. Our thrust is a combination of motivation plus education: education as to what reproductive physiology is, education as to what family planning is, education about the methods of family planning including what is available, the problems with methods and the good points of the various methods and so forth. The objective is full education to ensure that the individual is in a position to make a choice—an educated choice. The patient's total first contact time is about two and one half hours. Only ten per cent of that time is physician time.

The third problem is the education plus maintaining patient contact. This entails the follow-up system that we have developed recognizing that patients are living on a day-to-day basis. Frequently,

there is extreme alienation and resistance to health and welfare delivery systems. Patients distrust the system; yet the fact is that many patients who miss one appointment will make another appointment and keep it if someone expresses concern about them.

Another vital element is that we respect the patient as a mature human being. We believe patients will react positively to a program that is developed with their consent and in their own behalf. I think that this plus the systematic application of modern technology is directly responsible for the observed response to the program.

*Dr. Frankowski:* I would like to expand several points Dr. Beasley mentioned. An important element in the initial contact with a prospective patient is highly individualized attention. Prospective postpartum patients are personally contacted during their confinement period by program nurses. Outside the hospital setting, prospective patients are individually contacted by auxiliary health workers. These health workers are recruited from areas where the majority of the patients reside and are given specialized training in the techniques of patient contact. In general, these workers identify themselves with the patients and exhibit a high degree of empathy.

Relative to patient continuation, there is an exceptionally broad spectrum of medical and social services available to the patient. These services include prenatal care, postpartum care, contraceptive services, annual medical examinations and special educational and social services. We are attempting to establish a cycle of patient care. Whenever a patient misses an appointment for one of the services, a follow-up procedure is initiated. The patient is thus encouraged to take advantage of all the available services. This follow-up mechanism is an important factor in maintaining contact with the patient and is not restricted to contraceptive use.

*Dr. Cornely:* What is the cost of the program? I am interested in this, because in trying to project this over a 50-state plan, I would like to know about the cost. I am beginning to have some suspicions about this kind of program that on the surface appears to be voluntary, but that may not be entirely so. Also the total birth rate in this country is fairly stable and our rate of growth is pretty small. To try to put this plan into operation on a nationwide basis is questionable.

*Dr. Beasley:* In our study of patterns of maternal mortality, infant mortality, and stillbirths, approximately 1,200 deaths were involved, for which we had access to a substantial number of postmortem examinations, coroner's reports and complete hospital records. This was



a retrospective study in which we examined the characteristics of the deaths, and factors of the socioeconomic environment in which the deaths occurred.

These are all multifactorial problems that are quite complex, but from the study we concluded that 55 per cent of the infant deaths occurred to women who, prior to the time of conception, had health characteristics that placed them in a "high risk" category. These women faced a relatively high chance that the pregnancy would result in a catastrophic event either for mother or child. Let me illustrate this point. Some women who have six or seven pregnancies will develop chronic high blood pressure, and with this development are associated changes in the arteries going to the placenta. These are structural changes that mean that if this patient becomes pregnant again there would be interference between her circulation and the circulation through the placenta to the baby. So no matter what type of care you give the mother after she becomes pregnant, there is little that you can do for her.

Because of this, we felt that the medical treatment for such a patient is contraception, just as the medical treatment for someone having active tuberculosis is medication.

To allow a high-risk patient to continue such a cycle, I think, is medical negligence.

From a demographic standpoint, we formed the hypothesis that if you reach only the high-risk group of patients and offer them contraception or if you confine your health care system to the high-risk patient, then you are too late.

What this means is that to affect morbidity and mortality criteria with a family planning program, you have to look at the total universe in terms of introducing rationality in the reproduction cycle. There is an optimum time for a patient to become pregnant, and the point we are making in our program is that you have to look at the total reproductive cycle of the human being. To affect infant mortality and decrease morbidity you have to prevent women from getting into the high-risk position, and the way to do that is to change fertility practices. Spacing is a major controllable factor.

It has been our position in planning that once women become high risk, then care itself, whether it be at Boston Lying-In, Mayo Clinic, Charity Hospital of Louisiana, or what have you, cannot appreciably affect the outcome of the pregnancy.

This is one reason that we have done two things in our program

design. One is that we attempted to identify the high-risk population; we contacted this high-risk population and offered them contraception and they have accepted it as a subgroup at almost the same rates as the other segments of the population.

But, we are also trying to prevent women from becoming high risk by giving them the power to control their fertility by child spacing.

We believe there are implications here for national policy. On the one hand we might spend, as a government, a million dollars to set up clinics for high-risk patients only. However, if you can assist in the adoption of child spacing for the universe of this population for the same amount of money, I think that you have a greater chance to effect mortality and morbidity variables. No country that has reduced the birth rate below 30 has ever failed to reduce its infant mortality.

Perhaps I did not fully answer Dr. Cornely's question. I did not think I said anything about 50 states. I do think we need to put in comprehensive family planning in 50 states, and I think it should be a very high health priority. This is what I mean: we must have a delivery system.

Obviously, one has to look at medical needs other than prenatal care. The only point I am making is that to alter morbidity and mortality you must begin to assist couples to have a conception under conditions in which there is the greatest probability that the product of the conception will have the optimum chance to develop his physical, emotional and intellectual potentialities.

What I am getting at is that the lower socioeconomic group in this country is the prototype of a developing country. In the area in which I work we did not have a system for the delivery of health care. We built a system; we first added the family planning to it, and then we added prenatal care to it.

We will not be able to reduce the morbidity and mortality variables until we begin to look at the fertility practices before the time of conception. By changing the circumstances under which people reproduce, we can increase the probability of a successful outcome. Unless we can do this we limit very greatly what we can do with very expensive medical care after the conception has occurred.

*Dr. Hauser:* But, Dr. Beasley, would you disagree with this? I think you miss what I would call the major thrust of what Dr. Cornely said. I think I would try the proposition that if you increase income levels through adequate jobs, employment and adequate education, you

would cut infant mortality in this group a lot more than anything you could do with your program. Do you disagree with that?

*Dr. Beasley:* The infant mortality rate began to go down in western Europe with the advent of the agricultural revolution. It went down further with the advent of the industrial revolution.

However, we must consider what is feasible in terms of the contemporary situation, and to recognize that family planning is a health policy in itself. It should be implemented, and it should be implemented as part of the total comprehensive health service we are working toward. It should also be implemented as a part of the population policy we should be working toward formulating.

I think we need to begin to think realistically in the United States, not in terms of what would be perfect, but what we can do to help poor families at this time. I completely concede the importance of the social-economic development. But it is a matter, now, of what can we do rather immediately with the present resources.

*Dr. Edwards:* I can understand the high rate of response in terms of the motivational factors, both in terms of the patients themselves and the structural ones. This program really has an outreach that I think is good. The question I want to ask is a very simple one: All that we know about social service programs leads to the conclusion that there are impediments to getting the high response rates you have had. These apply, especially, to the lower-income family—to the problems of getting day care services to get to the clinic, and also transportation services. In many cases potential clients cannot meet the costs of taking care of these things. I would like to know how these things might have entered into your planning for problems that might have contributed to low responses.

*Dr. Valien:* I am quite impressed with the attention Drs. Beasley and Frankowski give to the political aspects of the population situation. I would like to know whether this is in reference to some specific situation that exists in that community.

*Dr. Beasley:* I would say that we do not have a cookie-cutter; we do not think we have a universal answer to the problem of conducting and administering family planning services. We realize that one must be concerned with politics, logistics, anthropology, sociology and family structure of any particular community one deals with, and these vary greatly, both in the United States and in developing countries.

However, we are concerned with trying to develop managerial and

educational methodology and with the importance of trying to identify problems that have some applicability. I think that just as some biologic principles may have general applicability, that modern specialties such as communication technology and managerial technology have general applicability. We are trying to identify such systems and test them in various areas.

We are implementing a comprehensive program in one state that has a low per capita income and a very low level of delivery of health services. We have had to work with many agencies in developing a system of delivery in which there are a variety of components.

The cost of delivery of family planning varies, depending upon the quality of the health care delivery system. If there is a good system to which one can add family planning, such as an operating postpartum program, you can add family planning for as little as four to eight dollars per patient per year. In some areas where health services are not highly developed it may cost 100 to 120 dollars per patient, per year. An average of at least 65 or 75 dollars per patient per year will be necessary to provide these kinds of services in the United States.

For this reason, we think that the Bureau of the Budget is absolutely incorrect when they talk about 20 dollars per patient per year. A program financed at this rate will be extremely unsuccessful. If that is all one is going to spend, he should spend it in the postpartum area.

*Dr. Arnold:* I want to speak of "high risk status" as an alternate way of examining the need for family planning services. I think that Beasley and his co-workers have pursued high-risk parity in relation to family planning more than others.

In addition to the normative considerations about the need for family planning and unwanted pregnancies (such as, "ideal family size," "expected family size" and the like), there are medical considerations as well. These are related to the social structural characteristics of the mother and to her state of health including pregnancy itself. Beasley has indicated these in Tables 9 and 10. Of the variables presented, the most representative of medical criteria are: age, previous disease status of the mother and reproductive experience, particularly the existence of a previous illegitimate birth, a premature birth or a fetal death. Each of the latter indicates the possibility of important underlying social biologic processes that may influence subsequent pregnancies. These issues constitute biologic criteria for "need of family planning," which should be incorporated into research and program strategies.

*Dr. Karl A. Smith:* I would like to make a few remarks, not particularly related to Dr. Beasley's paper.

First of all, I would like to thank the Milbank Fund for having invited me to attend. I see that I am the only person here from outside the United States.

I asked myself a few questions when I was invited. Why was I invited? The subject is something that does not intimately concern me. However, I assumed that probably you wanted me to be educated a little about the demographic trends of blacks in the United States. Perhaps you wanted my interest in demography to be developed a little more, and perhaps you wanted me to comment on what is happening in Jamaica.

The next question was: What is this all about? Is this just an academic exercise? It is obvious from some of the discussion here that even if it is an academic exercise, many people involved are not going to leave it as just an academic exercise, and that pleases me very much. I can see that many people here are very much involved in their community. Dr. Cornely's speech firmed up my opinion and demonstrated to me that academics can no longer just sit in their ivory towers and forget what is happening in the world.

This gives me an opportunity to say what I really am. Dr. Kiser told you that I am a medical doctor. I had training in medicine, but I think that I am forgetting what I had. I got myself involved in social and other aspects of family planning. I have managed to confuse the people in Jamaica, because many of them think I am a sociologist. The sociologists do not like to hear this. Some think I am a demographer, and the demographers do not like to hear this. Actually, I spend most of my time now in teaching and my training is in epidemiology.

As described in the discussions, some of the things seem to be very similar to the situations in Jamaica, and other things are quite different, and I feel that I must learn from them.

The historic similarities, of course, you are all aware of. Most of the islands of the West Indies have a majority of whatever the term is now—I hear Negro and I hear black, but people who look like me. This sort of pattern was set some 300 years ago. So it does not make sense for us in Jamaica to be talking about whites and blacks and Negroes. I think the same sorts of things arise, but they take on more the appearance of class structure and the differences between classes.

But we sometimes ape things that happen in the United States and the black power movement spilled over to Jamaica. Some people there

are not quite sure what the term means. Some say we have had black power in Jamaica for at least seven years, that is, since we gained our independence.

I want to say a few words about the institution of marriage. When this was discussed earlier, I thought several things seemed familiar to us in Jamaica. I can remember in my work recently that many respondents, when asked about childbearing before marriage, for instance, would say that marriage was only for the rich, not for the poor. Many said they would get married in time, and this is true; most Jamaicans do get married at a late age, but sometimes it is after their children have married.

Some people want to have proof of fertility before marriage. I do not know whether anybody mentioned this with respect to the United States situation, but I thought one or two came pretty close to it. The strange thing, though, is that most people look up to marriage as the ultimate. They have status once they are married. However, there are a few who, seeing marriages that have failed, will say, "Well, I don't want to enter into it." I remember one girl in particular who regarded a certain wedding ceremony as a circus performance, and she described it as a "puppy show"—a puppet show. She did not want to have anything to do with that sort of performance. So there are many overtones to the attitudes toward marriage.

Dr. Hauser kept saying that we should include in our demographic indices the thing that we in Jamaica call the "visiting relationship." It seems quite clear that we must have a more relevant set of indices than those afforded in official data to describe relations of this type. The middle-class indices, I am afraid, are not adequate.

As for genocide through family planning, I think that this argument is used by a minority, the black power people and a few withdrawn from society.

In fact, the progress of family planning in Jamaica, overall, has been quite striking in the last four or five years. The government came out with a program only five years ago, but we now have a situation in which the middle-class attitudes are changing; the moralizing is disappearing. We have a phase in the national program, now, in which we are bold enough to have advertising of family planning services.

The traditional attitudes that we have discussed are still very much in evidence. At the one extreme we have these very modern advertising gimmicks, and at the other end we have people still talking about drinking a glass of water and spinning around three times as a contra-

ceptive measure. So we have a whole gamut of development. We have the very primitive attitudes still remaining while we have people saying, "Young girl, you don't have to get pregnant, go and do this, that and the other."

There still seems to be a great deal of fear in the rural areas with respect to contraception; fear that is part of the traditional agricultural context of the thing; "we're not rushing to try out these new-fangled ideas." Some of the fears are expressed quite well; others are very vague, just a fear of something new. The fear that most express is that, somehow, contraceptives will ruin one's health.

The business of male responsibility came out in the discussions; the male taking the responsibility for contraception. Speaking of the rural parts, again, I think this is a very great problem. I cannot speak for urban areas because little research has been done. But what I have found is that the men just will not take the responsibility. We know that millions of condoms are sold in Jamaica annually, but our impression is that these are used not as contraceptives but as prophylactic measures against disease. In the rural areas where we offer family planning facilities there are just about three men out of a population of about ten thousand who have come forward and asked for the condom.

I shall touch on the *machismo* complex very briefly. Men are still boasting, not only of their conquests but of the number of children they are siring. Two weeks ago I happened to talk to a man in the country who was boasting that he had 22 children, 14 of which were with his wife. This attitude still prevails, and I think it is going to take a great deal of education to get people to change such attitudes.

Dr. Beasley's paper dealt with the potential impact of a national program of family planning. In Jamaica, my impression is that it is the young women, say those 19 to 25, who are making the greatest use of the services. These are women who have had two or three children. Quite often it seems that these are women who have had an opportunity to see what it means to them personally to space children. They have had a job, and for the first time know what it means to get cash regularly, to be able to buy clothes and to fix their hair and wear nice shoes and go to the movies and so on. They are quite determined that they will continue using contraception because they do not want to go back to their previous situation. So it seems to me that these are the people on whom the impact has been made.

Somebody talked about intention versus action. I think Dr. Beasley

managed to get very large percentages of people who were eligible to use the services. In our situation, only five or ten per cent of people who at an interview said they were ready to use contraceptive services actually turned up two months later to use them. After several letters, messages and visits, the situation did not improve markedly. So we still have a great deal of education to do in those cases.

The question on which several participants seemed to get hot under the collar was this business of our not looking closely enough at the behavioral component of what you get in demographic indices. I do not want to get involved in this again, but, as an epidemiologist I feel that we have to be very careful about how we interpret some of the material, and to be aware of the various types of bias that can creep in.

I think I agree with Dr. Beasley when he says that we need to go still deeper into the sociopsychological, political—and I would add logistical—factors that will determine how much use people make of the services.

We have in Jamaica, a small island with a population of under two million, about 140 centers offering contraceptive services. We are not satisfied that people are making best use of these. People certainly are not tumbling over each other to use the services, despite our advertising. So there are psychological and perhaps even political undertones in family planning programs. I would agree about the need for very detailed cross-tabulations to enable us to look at some of the materials more closely, and perhaps better understand the meanings of responses. I think one has to be very careful as to what conclusions one arrives at from responses people give.

The statement that some people regard children as “old age pensions” is very valid as far as Jamaica is concerned, and I suspect that the only way we are going to get around this is to establish something that will take its place such as a Social Security scheme. I do not know what the Social Security situation here is for unemployed and poor blacks. In our country there is a national insurance scheme that is growing, and this may be the answer to that question.

The pill seems to be gaining favor in Jamaica. The loop was previously pushed because of the obvious advantages in terms of followup, and the belief that it is almost a one-shot method. I do not agree that it is a one-shot method. Programs get into difficulties when people hold the opinion that you put a loop in and forget about it. In our



experience, people have fears about the loop and you must follow them up and reduce their fears.

So there has been a swing to the pill recently, even though rural people have difficulties. They forget to take the pills, they get tired of taking pills, they lend out pills, they borrow pills and the whole schedule is mixed up. I think perhaps there will be a swing back to the loop after some time but I am not sure.

Miss Johnson mentioned some things that seemed to strike home to me: the importance of planning and follow-up, and the importance of not giving the impression in offering the services to people that you are asking them to lose their dignity.

I think we have run into difficulties at each of these stages. I do not think our program was too well planned, certainly we were not nearly as sophisticated as Dr. Beasley was in his whole planning process. The follow-up leaves much to be desired, and I think that many of our professionals and the paramedical people might have given the clients the impression that the project was some sort of charitable thing. They might have given them the impression that they were coercing them into something.