

Use of Skip Tracing and Regular Methods to Find and Interview Post Partum Women

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STATE and Federal funds for the provision of family planning services in the public sector have become increasingly available since 1965. In Michigan, as elsewhere, administrators, legislators, recipients, taxpayers, and others have been asking if the objective of these services is being met; that is, the prevention of births unwanted among the medically indigent population by use of effective contraceptive methods, delivered in an efficient, dignified manner.

A post partum study at Wayne County General Hospital in Michigan was designed to ascertain by interviewers the awareness, attitudes, and practices of family planning among a group of medically indigent women, recently post partum, with the aim of evaluating the delivery and success of family planning services in Wayne County. (A woman was considered to be medically indigent if she used county hospital facilities, although

charges for such services ranged from none to part payment to full payment for hospitalization.)

John Y. Takeshita, Ph.D., was principal investigator of the hospital study. Statistical data were obtained from hospital records and from the Center for Population Planning, University of Michigan, of which Leslie Corsa, Jr., M.D., is director.

Method

The 1,964 women surveyed were those who had terminated a pregnancy by live birth or fetal death in Wayne County General Hospital between July 1, 1966, and June 30, 1968, and who had resided in Wayne County outside the cities of Detroit, Hamtramck, and Highland Park, Mich. Medically indigent women residing in the designated area who conceived during this period were likely to have been delivered in Wayne County General Hospital, but a small number of medically indigent women may have terminated their pregnancies elsewhere.

According to the study design, each woman was to be interviewed while she was still in the ward at the hospital, immediately after termination of pregnancy, but nearly 15 percent were not interviewed because they could not be reached in time. Some of these women had abortions, were hospitalized as a result, and were out of the hospital in 24 hours; or they delivered a live

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infant on Friday and left the hospital the following Monday before they could be interviewed. For such women, the interviewers obtained as much information as possible from the daily log kept in the ward and from records of the admissions office.

For the remainder of the study patients, the interviewers obtained identification (name, address, and telephone number and name, address, and telephone number of friend or relative), demographic characteristics (age, race, marital status, number of pregnancies, number of living children, years of school completed), and attitudes toward future size of family (desire for more children and interest in using birth control methods). The interviewers then advised the patients about birth control methods and the availability of family planning services in the area.

With the patient's approval, the interviewer made an appointment for a post partum examination and for family planning services in the clinic of the Wayne County General Hospital. If relevant, a birth control method was initiated before the woman left the hospital, and an appointment was made for a return visit to the clinic.

The 2-year study period was divided into four cohorts of 6 months each (A-D). Women were assigned to a cohort according to the termination date of their pregnancy; for example—

Cohort A—terminated pregnancy between July 1 and Dec. 31, 1966

Cohort B—terminated pregnancy between Jan. 1 and June 30, 1967

Cohort C—terminated pregnancy between July 1 and Dec. 31, 1967

Cohort D—terminated pregnancy between Jan. 1 and June 30, 1968.

The interviewers attempted to query at home the women in cohort B, who were 6 months post partum. When they were 1 year post partum, an attempt was made to interview the women in cohort B who had been interviewed successfully at 6 months, plus all the women in cohorts A, C, and D. At 2 years post partum, another attempt was made to interview all the women having completed interviews a year earlier, and at 3 years a similar attempt was made with the women in cohort A.

Information collected during the ward interview was brought up to date in the later interviews, and detailed histories of reproduction and contraception were obtained. The women were

queried again about their desire for additional children as well as their current attitude toward contraception and the family planning services with which they were familiar.

History of Interviewing

In the summer of July 1, 1967, five women, three white and two black, were hired part time to interview the study's post partum women at home. Of the three white women, two had interviewing experience; the third, a college senior, had no experience but had worked with low income families in a program of home visiting and cultural enrichment. Of the two black women, one had previous interviewing experience; the other had none, but she lived among low income families and was active in community affairs.

The recruits were obtained primarily through contact with two well-known research organizations at the University of Michigan and with the State Employment Service. During the 3 years of interviewing, a few women left and were replaced. Most new interviewers were white, experienced, and between the ages of 30 and 55.

After September 1968, the interviewing staff of five remained the same until the end of the study, June 30, 1970. One additional woman was hired in February 1969. Of the six women, one was black and five were white and all had interviewing experience.

Although interviewing was largely confined to the areas in Wayne County outside Detroit, the 1967 Detroit riots, with the resulting increase in suspicions and hostility among racial groups, had their effects on the interviewers. The black interviewers were sensitive to what they thought was rejection on the part of a few white women in the study group who were to be interviewed. All interviewers hesitated about going into "bad" areas at night or during the summer months because there were many more young people "hanging around" during those days. Interviewing was therefore almost completely suspended during the summer of 1968.

Procedures. The initial interviewers were given 1 week of intensive training, which included a general introduction to the study, information on family planning and contraceptives, general techniques of interviewing, detailed discussion of the questionnaire, discussion of contact procedures, a field trial, and review of the field trial. They also were instructed in the procedures that were to be used for locating the women. All the

interviewers subsequently hired were experienced; they received general but less intensive training.

The interviewers were advised to offer certain relevant services. For example, if the situation warranted, they could distribute pertinent literature, answer questions about family planning services, help the woman make an appointment and arrange transportation, and refer her to qualified technical sources (medical or social services). The interviewer had a dual role: she was a collector of information as well as purveyor of services.

A letter was sent to each woman to be interviewed, giving the reasons for the study and telling her that an interviewer (name given) would be visiting within 3 weeks. The woman was encouraged to call the hospital's family planning clinic if the time set for the visit was inconvenient so that a more suitable time could be arranged with the interviewer.

Soon after the woman received the letter, the interviewer went to her home, wearing a badge with the university's name on it. To obtain a successful interview, the interviewers were encouraged to probe freely and to play on the woman's sympathy, saying "I have traveled such a great distance. . . ." Telephoning the woman before the visit, which had been tried during a pretest period and had resulted in a number of refusals, was at first discouraged, but later was found useful.

If the woman was not at the address visited and the current occupant could give no information concerning her whereabouts, the interviewers were instructed to call or visit the friend or relative listed on the cover sheet if they were in the area. She also was encouraged to inquire at a local grocery or drugstore. The interviewers were told not to discuss with informants any confidential information about the nature of the study or about the woman who was to be interviewed.

Results. The interviewers increased their completion rate by—

- Checking the telephone book for current addresses before starting out in the field, checking addresses under a maiden name as well as a married name, checking current address of given friend or relative if the name was not common
- Using the telephone judiciously
- Contacting neighbors on each side of given address and also across the street
- If the woman was not at home, making at least four visits at different times of the day before giving up.

A clerk also checked for address changes in the files of the hospital's admission office. The search often proved helpful in obtaining a new address or the address of another contact. In many instances, all these suggestions already were being used by the interviewers. Realizing that everyone differs in her work style and that certain approaches work better for some people than for others, no strict standard of procedure was imposed, and each interviewer could use the technique that worked best for her.

The completed interview rate for the first phase was approximately 60 percent for cohort A and 63 percent for cohort B. These low rates reflect a highly mobile population.

Almost no one refused information. Except for the information obtained from the ward interview or hospital records, however, nothing was known about the women who could not be located.

Comparison of the characteristics of the women who were interviewed with those who were not revealed no significant differences except in race. A larger number of black than white women were interviewed, but the number of cases analyzed was too small to draw conclusions (1).

Skip Tracing

The situation did not improve. Only 65 percent of the women in the C cohort were located and interviewed. One interviewer, however, completed more than 90 percent of the interviews assigned to her. Because of the generally low completion rate and uncertainty about the amount of bias being introduced by not locating some women, the investigators asked the interviewer with 90 percent success to attempt to locate and interview some of the women who could not be found by the other interviewers. She began this work on a trial basis in May 1968, expressing enthusiasm for the work and confidence in her new assignment.

Of 14 interview schedules returned because the women could not be found, this interviewer located and completed interviews with six women and located five others. In September 1968, after another trial, this interviewer became the skip tracer for the study and did only skip trace interviewing from that time to the end of the study.

("Skip tracer" is a term that refers to a person employed, usually by a credit company, to locate persons who have left unpaid bills behind. We

at first used the term in jest, but with time it became official.)

Of the 83 interviewing schedules given to the skip tracer in September 1968, including women not otherwise located and women not available or repeatedly not at home, in jail, and so on, she completed 45 or about 54 percent of the interviews. From October 1968, the skip tracer followed 366 women who could not be found by the regular interviewers. She located all but 10 percent and completed interviews of approximately 59 percent of the total. She found another 23 percent of the women but could not

interview them because they had moved out of the county. The remainder of the women refused to be interviewed, were on vacation, in prison, and so forth.

The outcome of attempts to contact the women in the study at 12 months post partum who had terminated their pregnancies at Wayne County General Hospital during July 1, 1966, through June 30, 1968, is given in table 1.

Skip tracing contributed 11 percent to the final proportion of interviews completed at 12 months post partum, as shown in the following tabulation:

Table 1. Outcome of attempts by regular interviewers and skip tracer to contact women at 12 months post partum

Outcome	Regular interviewer				Skip trace interviewer			
	Number	Per-cent	Average number of at-tempts	Stand-ard deviation	Number	Per-cent	Average number of at-tempts	Stand-ard deviation
Total.....	1,594	100.0	2.4	1.83	366	100.0	5.5	3.30
Sterilized ¹	85	5.3	2.0	1.47	9	2.5	5.6	1.53
Interview completed.....	1,101	69.1	2.5	1.86	208	56.8	5.8	3.24
Refused.....	64	4.0	3.2	2.27	3	.8	6.3	.94
Not located.....	² 40	2.5	2.3	1.80	35	9.6	6.7	3.76
Moved out of Wayne County ³	210	13.2	1.8	1.44	83	22.7	4.1	2.61
Moved, whereabouts unknown.....	65	4.1	2.2	1.35	22	6.0	6.0	2.88
Not at home.....	6	.4	7.0	1.91	.....	.....	.....	.....
Deceased.....	4	.3	1.2	.43	2	.5	2.0	0
Other ⁴	19	1.2	2.7	2.12	4	1.1	5.2	2.38

¹ Women sterilized in C cohort by 6 months post partum were not interviewed again at 12 months post partum, but they are included in tabulation.

² Not given to skip trace interviewer because of time limitation.

³ Women no longer living in Wayne County at 12 months post partum were excluded from study.

⁴ Other consists of such categories as in prison, in other institutions, away on vacation, and so forth.

Table 2. Actual time and total time spent per regular and skip trace interview

Time, in minutes	All interviews		Regular interviews		Skip trace interviews	
	Number	Percent	Number	Percent	Number	Percent
Total.....	1,403	100.0	1,186	100.0	217	100.0
Interview time:						
14 or less.....	9	0.6	9	0.8	.....	.....
15-29.....	359	25.6	345	29.1	14	6.4
30-59.....	804	57.3	652	55.0	152	70.0
60 or more.....	188	13.4	144	12.1	44	20.3
Not available.....	43	3.1	36	3.0	7	3.2
Total time:						
14 or less.....	.....	.....	.....	.....	.....	.....
15-29.....	80	5.7	80	6.7	.....	.....
30-59.....	909	64.8	815	68.7	94	43.3
60 or more.....	406	28.9	283	23.9	123	56.7
Not available.....	8	.6	8	.7	.....	.....

Status	Number	Percent
Eligible for interview.....	1,964	100.0
Interviews completed.....	1,403	71.4
Regular procedure.....	1,186	60.4
Skip tracing.....	217	11.0

The skip tracer made 1 to 17 attempts to obtain one interview; the regular interviewers made 1 to 14 attempts. The following tabulation shows that the skip tracer made more than twice the average number of attempts by the regular interviewer to obtain an interview.

Type of interview	Complete	Incomplete
Regular procedure.....	2.5	2.2
Skip tracing.....	5.8	5.0

After contact was established and the interview was granted, the skip tracer spent about 10 minutes longer than the regular interviewers in conducting the interview. She had to cover information for a longer period of time. Interviewers were asked to record the time length of interviewing and the total time spent per interview (table 2).

Approximately 49 minutes were used for a skip tracer interview and 38 minutes for a regular interview. The skip trace interviewer averaged 58 minutes and the regular interviewer, 47 minutes. The standard deviation for regular interviews was 16.4 and for skip trace interviews, 13.3. Standard deviation for total time was 15.4 for regular interviewing and 13.4 for skip tracing.

Interviewing cost about \$37,000 for the 3-year study period, including interviewers' hours in the field, mileage, and travel (table 3). Travel refers to total time spent on a given day going from interviewer's home to home of the first woman interviewed, and time spent returning from home of the last woman interviewed to interviewer's home. Costs per interview increased beginning September 1968 because hourly rates and com-

pensation for mileage increased and because interviewers were exhorted to make more attempts to find the women.

As expected, the average cost of a completed skip trace interview was higher than that of a regular interview because the skip tracer received a higher hourly rate, spent more time looking for the women, and, once she found them, spent more time with them. The skip trace interviewer incurred almost \$5,250 of the total cost. She added 51 cents to the average cost per completed interview—from \$10.82 to \$11.33 (table 3).

Characteristics of the Women

The women interviewed by the skip tracer differed in a number of ways from the women seen by the regular interviewers (table 4). The difference in the proportion of completed interviews by race is the most puzzling. White women were more difficult to locate and interview than black women. In the original study group of 1,964 women, about 66 percent were white and about 33 percent were black. Of the 1,184 regular interviews, only 57 percent were of white women.

The skip trace interviewer was able to find proportionately more white women (75 percent) in her group of 217 women than the regular interviewers could find. Of the 561 women who were never interviewed, 81 percent (453) were white. More than half of the never interviewed women (303) had moved out of Wayne County or out of the State. Most of these women were white.

Other significant differences follow: when interviewed in the ward, a larger proportion of the women (51 percent), subsequently skip traced, said they wanted more children as compared with 38 percent of those interviewed by the regular procedure. The skip traced women also were younger; 79 percent were under age 25 when they entered the study as compared with 70 percent of the women who were interviewed by the regular method.

The skip traced women had fewer living children when they entered the study; 26 percent had three or more as compared with 36 percent of the regularly interviewed women.

Women interviewed in the regular manner and women interviewed by the skip tracer accepted the use of a contraceptive method at approximately the same rate (table 5). The skip traced women accepted at a slightly lower, but not significantly lower, rate.

Table 3. Cost of skip trace and regular interviews during study, July 1, 1967–June 30, 1970

Type of interview	Number completed ¹	Total cost	Average cost of completed interview
Total.....	3,270	\$37,064.95	\$11.33
Regular.....	2,940	31,815.20	10.82
Skip trace.....	330	5,249.75	15.91

¹ Includes 6-month and 1st, 2d, and 3d post partum interviews.

Table 4. Selected characteristics of women interviewed

Selected characteristics	Number of interviews			Percent of interviews			X ² value (regular and skip trace)
	Total	Regular	Skip trace	Total	Regular	Skip trace	
Total ¹	1,403	1,184	217	100.0	100.0	100.0	
Marital status:							0.30 < P < .50
Married.....	803	671	132	57.7	57.1	61.1	
Single.....	377	326	50	27.0	27.7	23.1	
Other.....	214	179	34	15.3	15.2	15.7	
Not available.....	9	8	1	-----	-----	-----	
Race:							P < .001
White.....	834	672	161	60.1	57.4	74.9	
Black.....	554	499	54	39.9	42.6	25.1	
Not available.....	15	13	2	-----	-----	-----	
Source of antenatal care:							.10 < P < .20
Wayne County General Hospital.....	837	725	111	69.1	69.8	64.5	
Other.....	221	180	40	18.2	17.3	23.3	
None.....	154	133	21	12.7	12.8	12.2	
Not available.....	191	146	45	-----	-----	-----	
Previous contraceptive use:							.80 < P < .90
Yes.....	375	324	50	31.0	31.2	30.1	
No.....	833	716	116	69.0	68.8	69.9	
Not available.....	195	144	51	-----	-----	-----	
Desire for more children:							.001 < P < .01
Yes.....	488	401	85	40.2	38.4	51.2	
Undecided.....	173	151	22	14.3	14.5	13.3	
No.....	550	491	59	45.5	47.1	35.5	
Not available.....	192	141	51	-----	-----	-----	
School years completed:							.30 < P < .50
8 or less.....	111	94	17	9.0	8.9	10.1	
9-11.....	665	567	98	54.2	53.5	58.3	
12.....	406	356	48	32.9	33.6	28.6	
13 or more.....	48	43	5	3.9	4.1	3.0	
Not available.....	173	124	49	-----	-----	-----	
Outcome last pregnancy:							.50 < P < .70
Live birth.....	1,223	1,035	186	87.2	87.4	85.7	
Fetal death.....	180	149	31	12.8	12.6	14.3	
Number of living children:							.10 < P < .20
0.....	42	36	6	3.3	3.3	3.4	
1.....	517	437	79	40.9	40.2	44.6	
2.....	264	217	46	20.8	20.0	26.0	
3.....	142	126	16	11.2	11.6	9.0	
4.....	112	100	12	8.9	9.2	6.8	
5 or more.....	188	170	18	14.9	15.7	10.2	
Not available.....	138	98	40	-----	-----	-----	
Age at termination of pregnancy (years):							.02 < P < .05
19 or less.....	507	424	82	36.1	35.8	37.8	
20-24.....	491	401	89	35.0	33.9	41.0	
25-29.....	197	170	27	14.1	14.4	12.4	
30-34.....	121	109	12	8.6	9.2	5.5	
35 or more.....	87	80	7	6.2	6.8	3.2	
Number of pregnancies:							.02 < P < .05
1.....	470	394	75	36.3	35.5	40.8	
2.....	291	241	49	22.4	21.7	26.6	
3.....	150	127	23	11.6	11.5	12.5	
4.....	111	104	7	8.6	9.4	3.8	
5 or more.....	273	243	30	21.1	21.9	16.3	
Not available.....	108	75	33	-----	-----	-----	
Religion:							.30 < P < .50
Protestant.....	1,093	920	171	79.1	79.0	79.9	
Catholic.....	265	223	42	19.2	19.1	19.6	
Other.....	23	22	1	1.7	1.9	.5	
Not available.....	22	19	3	-----	-----	-----	

¹ Total includes 2 interviews for which type of interviewer code was not assigned in this tabulation.

Table 5. Contraceptive acceptance rates, by selected characteristics of women interviewed

Selected characteristics	Total interviews		Regular interviews		Skip trace interviews	
	Number	Acceptance rate	Number	Acceptance rate	Number	Acceptance rate
Total ¹	1,403	84.3	1,184	84.6	217	82.5
Marital status:						
Married.....	803	88.0	671	88.7	132	84.8
Single.....	377	80.6	326	80.4	50	82.0
Other.....	214	76.2	179	76.5	34	(73.5)
Race:						
White.....	834	82.3	672	82.7	161	80.1
Black.....	554	87.2	499	87.0	54	88.9
Sources of antenatal care:						
Wayne County General Hospital.....	837	86.6	725	87.3	111	82.0
Other.....	221	85.1	180	83.9	40	(90.0)
None.....	154	81.2	133	79.7	21	(90.5)
Previous contraceptive use:						
Yes.....	375	91.2	324	92.0	50	86.0
No.....	833	83.4	716	83.4	116	83.6
Desire for more children:						
Yes.....	488	83.2	401	83.5	85	81.2
Undecided.....	173	85.5	151	84.8	22	(90.9)
No.....	550	88.2	491	88.4	59	86.4
School years completed:						
8 or less.....	111	83.8	94	84.0	17	(82.4)
9-11.....	665	85.6	567	85.9	98	83.7
12.....	406	86.2	356	86.2	48	(85.4)
13 or more.....	48	(89.6)	43	(88.4)	5	(100.0)
Outcome last pregnancy:						
Live birth.....	1,223	85.4	1,035	85.8	186	83.3
Fetal death.....	180	76.7	149	76.5	31	(77.4)
Number of living children:						
0.....	42	(78.6)	36	(75.0)	6	(100.0)
1.....	517	81.6	437	81.5	79	82.3
2.....	264	87.5	217	88.9	46	(80.4)
3.....	142	89.4	126	90.5	16	(81.3)
4.....	112	87.5	100	87.0	12	(91.7)
5 or more.....	188	89.4	170	88.2	18	(100.0)
Age at termination of pregnancy (years):						
19 or less.....	507	84.6	424	84.9	82	82.9
20-24.....	491	83.1	401	83.5	89	80.9
25-29.....	197	85.3	170	84.7	27	(88.9)
30-34.....	121	86.8	109	88.1	12	(75.0)
35 or more.....	87	83.9	80	83.8	7	(85.7)
Number of pregnancies:						
1.....	470	81.7	394	80.7	75	86.7
2.....	291	84.2	241	85.9	49	(75.5)
3.....	150	91.3	127	92.1	23	(87.0)
4.....	111	87.4	104	87.5	7	(85.7)
5 or more.....	273	86.8	243	86.4	30	(90.0)
Religion:						
Protestant.....	1,093	84.5	920	84.7	171	83.6
Catholic.....	265	83.8	223	84.8	42	(78.6)
Other.....	23	(82.6)	22	(81.8)	1	(100.0)

¹ Total includes two interviews for which type of interviewer code was not assigned in this tabulation.

NOTE: Categories do not necessarily add to total because unknowns have been excluded. Parentheses mean that

denominator was less than 50 and rates should be interpreted with caution. Acceptance rate = women from denominator who started a method post partum ÷ women in given category X 100.

Table 6. Contraceptive continuation rates, by selected characteristics of women interviewed

Selected characteristics	Total interviews		Regular interviews		Skip trace interviews	
	Number of acceptors	Continuation rate	Number of acceptors	Continuation rate	Number of acceptors	Continuation rate
Total ¹	1,183	76.4	1,002	77.8	179	68.2
Marital Status:						
Married.....	707	77.9	595	79.3	112	70.5
Single.....	304	74.7	262	76.3	41	(63.4)
Other.....	163	73.6	137	74.5	25	(68.0)
Race:						
White.....	686	74.6	556	76.1	129	68.2
Black.....	483	79.7	434	80.6	48	(70.8)
Source of antenatal care:						
Wayne County General Hospital.....	725	78.3	633	79.8	91	68.1
Other.....	188	77.1	151	79.5	36	(66.7)
None.....	125	71.2	106	68.9	19	(84.2)
Previous contraceptive use:						
Yes.....	342	85.1	298	85.9	43	(79.1)
No.....	695	74.1	597	75.2	97	67.0
Desire for more children:						
Yes.....	406	72.2	335	73.7	69	63.8
Undecided.....	148	73.0	128	74.2	20	(65.0)
No.....	485	83.7	434	83.9	51	82.4
School years completed:						
8 or less.....	93	86.0	79	87.3	14	(78.6)
9-11.....	569	73.5	487	74.7	82	65.9
12.....	350	82.6	307	82.7	41	(80.5)
13 or more.....	43	(74.4)	38	(73.7)	5	(80.0)
Outcome last pregnancy:						
Live birth.....	1,045	77.6	888	79.2	155	68.4
Fetal death.....	138	67.4	114	67.5	24	(66.7)
Number of living children						
0.....	33	(69.7)	27	(66.7)	6	(83.3)
1.....	422	71.1	356	73.3	65	58.5
2.....	231	78.4	193	78.8	37	(75.7)
3.....	127	80.3	114	79.8	13	(84.6)
4.....	98	82.7	87	82.8	11	(81.8)
5 or more.....	168	89.5	150	88.0	18	(83.3)
Age at termination of pregnancy (years):						
19 or less.....	429	71.3	360	74.2	68	55.9
20-24.....	408	78.2	335	78.5	72	76.4
25-29.....	168	78.0	144	77.8	24	(79.2)
30-34.....	105	81.9	96	83.3	9	(66.7)
35 or more.....	73	84.9	67	86.6	6	(66.7)
Number of pregnancies:						
1.....	384	72.4	318	74.8	65	60.0
2.....	245	77.1	207	76.8	37	(78.4)
3.....	137	73.7	117	74.4	20	(70.0)
4.....	97	83.5	91	83.5	6	(83.3)
5 or more.....	237	84.0	210	84.3	27	(81.5)
Religion:						
Protestant.....	924	75.0	779	76.4	143	67.1
Catholic.....	222	81.1	189	82.0	33	(75.8)
Other.....	19	(94.7)	18	(94.4)	1	(100.0)

¹ Total includes 2 interviews for which type of interviewer code was not assigned in this tabulation.

NOTE: Categories do not necessarily add to total because unknowns have been excluded. Parentheses mean that

the denominator was less than 50 and rates should be interpreted with caution. Continuation rate = women from denominator still using a method at interview time ÷ women in category who started a method post partum X 100.

Table 7. Selected characteristics of skip traced and never interviewed women

Selected characteristics	Number		Percent	
	Skip traced	Never interviewed	Skip traced	Never interviewed
Total.....	217	561	100.0	100.0
Marital status:				
Married.....	132	317	61.1	56.5
Single.....	50	154	23.1	27.5
Other.....	34	90	15.7	16.0
Not available.....	1			
Race:				
White.....	161	453	74.9	81.3
Black.....	54	104	25.1	18.7
Not available.....	2	4		
Source of antenatal care:				
Wayne County General Hospital.....	111	254	64.5	55.6
Other.....	40	100	23.3	21.9
None.....	21	103	12.2	22.5
Not available.....	45	104		
Previous contraceptive use:				
Yes.....	50	128	30.1	28.0
No.....	116	329	69.9	72.0
Not available.....	51	104		
Desire for more children:				
Yes.....	85	226	51.2	49.0
Undecided.....	22	71	13.3	15.4
No.....	59	164	35.5	35.6
Not available.....	51	100		
School years completed:				
8 or less.....	17	36	10.1	7.8
9-11.....	98	254	58.3	55.2
12.....	48	137	28.6	29.8
13 or more.....	5	33	3.0	7.2
Not available.....	49	101		
Outcome last pregnancy:				
Live birth.....	186	443	85.7	79.0
Fetal death.....	31	118	14.3	21.0
Number of living children:				
0.....	6	33	3.4	6.9
1.....	79	201	44.6	41.9
2.....	46	119	26.0	24.8
3.....	16	47	9.0	9.8
4.....	12	27	6.8	5.6
5 or more.....	18	53	10.2	11.0
Not available.....	40	81		
Age at termination of pregnancy (years):				
19 or less.....	82	188	37.8	33.5
20-24.....	89	217	41.0	38.7
25-29.....	27	89	12.4	15.9
30-34.....	12	42	5.5	7.5
35 or more.....	7	25	3.2	4.5
Number of pregnancies:				
1.....	75	185	40.8	37.8
2.....	49	131	26.6	26.8
3.....	23	54	12.5	11.0
4.....	7	38	3.8	7.8
5 or more.....	30	81	16.3	16.6
Not available.....	33	72		
Religion:				
Protestant.....	171	423	79.9	76.6
Catholic.....	42	122	19.6	22.1
Other.....	1	7	.5	1.3
Not available.....	3	9		

There was a significant difference in the rate at which these women continued to use a contraceptive method. At 12 months post partum, 78 percent of the acceptors among the regularly interviewed women were still using a method as compared with 68 percent of the skip traced women (table 6). As stated earlier, the skip traced women, as compared with the regularly interviewed women, were younger, had fewer children, and said they wanted more children; therefore they had greater reason for discontinuance of a contraceptive method. The following reasons were given for discontinuance of a contraceptive method among the women interviewed by the skip tracer:

<i>Reason</i>	<i>Number</i>	<i>Percent</i>
Total.....	56	100.0
Physiological and psychological.....	20	35.7
Became pregnant while using.....	7	12.5
Wanted to become pregnant.....	9	16.1
No longer needed a method.....	5	8.9
Other (no transportation, forgot, illness, and so forth).....	12	21.4
Unknown.....	3	5.4

The skip tracer interviewed 82 teenagers; 68 said they had accepted a method sometime during the year. Of the 68, more than half (55.9 percent) still were using a method when interviewed at 12 months post partum as compared with three-fourths of the 360 teenager acceptors regularly interviewed. They were asked two questions: (a) did you start using a method . . . and (b) are you still using a method?

Of the 30 skip traced teenagers who had discontinued using a method, only three said they had discontinued because they were no longer having sexual relations; five wanted to become pregnant; three became pregnant while using a method; 13 cited physiological reactions to the method they were using; and the others gave varying reasons for discontinuing a method (husband's refusal to let wife take pills, fear of cancer, no confidence in method, and so on).

We compared the women who were interviewed by the skip tracer and those who were never located. They differed significantly in two respects. Of the never interviewed women, 22 percent had no prenatal care as compared with 12 percent of the skip traced women. The skip traced women were more likely to have had a live birth (86 percent) than a fetal death when they entered the study. Seventy-nine percent of the never interviewed women had live births. The skip traced women also tended to be slightly younger than the

never interviewed and were more likely to be married (table 7).

Discussion

The characteristics of those lost to followup in sample surveys are frequently unknown; consequently, the validity of extrapolating the results to a population may be questioned. Social survey literature is well provided with reports of concentrated efforts to reduce the proportion of the unknowns (2-4).

In this study the unusual talents of a skip tracer were exploited in attempting to find and interview post partum women who could not be located in the usual followup. Ten hours a week of in-house time for more than a year and a half were used to prepare lists and schedules for the skip tracing method. Was it worth the additional time and cost? Was enough information collected for a more accurate study and improvement of the family planning service? If the regular interviewers were taught the skip tracing methods, could they be expected to get the same results obtained by the skip tracer?

The information added by the skip trace interviewer did not significantly change the percentage distribution or the acceptance and continuance rates for contraceptives. But the investigators believe that the additional information could be used to improve family planning services.

More than 80 percent of all the women interviewed accepted a contraceptive method, but 32 percent of the acceptors who were skip traced discontinued as compared with 22 percent of acceptors who were interviewed regularly. Their reasons for discontinuance revealed that 25 percent of the skip traced women had wanted to become pregnant or were no longer having sexual relations. Others needed advice concerning more suitable methods. Distribution of their reasons for discontinuance, previously stated, is similar to distribution of the reasons stated by all interviewed women who have stopped using a method (unpublished paper, S. Lelaurain, Center for Population Planning, University of Michigan, 1970).

The skip traced women moved more frequently and did more to obscure their whereabouts. On the average, the skip tracer made 5.8 attempts to locate them as compared with 2.5 for the regularly interviewed women. The administrator of a family planning service needs information about the characteristics of this highly mobile group if adequate and dignified sources are to be provided.

The field supervisor of a social research organization at the University of Michigan was familiar with the quality of work done by the interviewers. She gave them a high rating, but offered the opinion that the skip trace interviewer was especially suited for her job.

The skip trace interviewer differed from the regular interviewers because she was more persevering, ingenious, and flexible. When faced with a wrong telephone number, she thought the numbers might be scrambled, so she rearranged them and made a successful call. When a wrong address was given, she went to the same house number on the next street and found that the woman had lived there. The current tenant supplied the woman's new address. The skip tracer also was able to obtain information from friends or relatives without appearing to be overly aggressive.

The success of the skip trace interviewer was due largely to personality factors, which are not easily transferable. Nevertheless, the techniques she applied routinely could be of value for surveys in which cohorts are followed over a period of time.

Was the use of a skip tracer worth the extra money, time, and effort? Although additional information about the hard-to-locate group was obtained, the validity of the measurements was improved only minimally. To the investigators, who are mainly interested in the delivery of services, the answer is yes, a skip tracer is worth the extra money, time, and effort.

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During a followup survey to ascertain the family planning experience of a selected group of post partum women in Metropolitan Detroit, the unusual talents of an interviewer were exploited in an attempt to find and interview those women who could not be located. This interviewer became known as the skip tracer.

In this report, selected characteristics of the 217 women who were skip traced are compared with those of the 1,184 women who were regularly interviewed. The hard-to-locate women differed significantly from the others in a number of ways: a greater pro-

portion were white—75 percent as compared with 57 percent in the regular series; a larger proportion said they wanted more children—51 percent as compared with 38 percent; they were younger when they entered the study—79 percent under age 25 as compared with 70 percent; and they had fewer pregnancies—20 percent had four or more as compared with 31 percent of the regularly interviewed women.

Both groups accepted a contraceptive at approximately the same rate, but a significantly larger proportion of the regularly interviewed women (78 percent)

than the skip traced women (68 percent) still were using a contraceptive at 12 months post partum. Reasons for their discontinuance of the method are discussed.

The information added by the skip trace interviewer changed only minimally the percent distributions and the overall acceptance and continuance rates. But the investigators believe that the descriptive information about the hard-to-locate women could be used to improve the family planning services in Metropolitan Detroit.