

Use of Paraprofessionals to Motivate Women to Return for Post Partum Checkup

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A PROJECT that employed paraprofessionals in a health setting was conducted by Planned Parenthood of New York City with the cooperation of two municipal hospitals. Its purpose was to test the hypothesis that paraprofessionals can be trained to motivate women discharged from obstetrical services of municipal hospitals to return for post partum and postabortal checkups and family planning services.

Started in July 1967, the project lasted for 27 months. During this time almost 2,000 women who had failed to keep their post partum appointments (about 35 percent of those discharged from the two participating hospitals) were referred to the project staff.

Methodology

Two weeks after they were discharged from the hospital, the women were sent letters by the hospital reminding them of their appointment dates for post partum examination. Our study population consisted of 1,841 women who had not kept their appointments by week 6. They were divided into three groups, in a random nonalphabetical order: (a) an experimental group containing 60 percent of the sample (1,112 women), (b) control group 1, 25 percent (453 women), and (c) control group 2, 15 percent (276 women).

Each women in the experimental group was telephoned or, if she had no telephone, was sent

a letter 6 weeks after discharge to remind her of the post partum checkup date. If she did not keep her appointment as a result of this intervention, a home interview was attempted at 10 weeks. During these contacts, babysitting and escort service to the hospital were offered, and another appointment was made. Primarily, we used the experimental group to determine whether intervention could increase the return rate of patients to the post partum clinic.

Control group 1 also received a telephone call or letter at week 6, but no further contact was attempted. Control group 2 was not contacted until 12 weeks after discharge, and a home interview was attempted at this time. Control group 2 was used to provide a baseline against which the success or failure of various forms of intervention could be measured.

Eleven neighborhood women were trained to

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locate, interview, and, if possible, induce patients who did not keep their appointments to return to the post partum clinic.

Paraprofessional Community Health Workers

Selection and orientation of staff, particularly the paraprofessionals, was the project staff's first task. (The staff consisted of different people at different points during the course of the project. Typically, the office staff included the project director, a research associate, a volunteer, and a secretary. The field staff consisted of neighborhood paraprofessionals—a supervisor, two clerks, and eight others at any one time.) The paraprofessionals were recruited from the same neighborhood as the target population and had the same sociocultural background (1); roughly, half of these women were black and half Puerto Rican—a ratio similar to that of the target population (2). The decision to select the staff according to these criteria was based on well-documented practice (3).

Most of the literature on paraprofessionals dates from the period 1965–66. This recent increase in the number of publications on the subject reflects the growing public and private concern with helping the poor. Riessman and Popper (4) and Harrington (5) have written extensively concerning “new careers for the poor.”

We anticipated that the paraprofessionals themselves would benefit from this experience—what Riessman has called “the helper therapy principle” (6). This principle notes that the peer teacher (for example, the more experienced or advanced aide) gains significantly from imparting information; that is, he learns from teaching.

Planned Parenthood of New York City has employed neighborhood workers since 1960. A 1966 report by Planned Parenthood and an Office of Economic Opportunity-sponsored organization described a project in which women of low income and little education were encouraged to use family planning services by being offered babysitting and escort services.

At the present time, paraprofessionals are working in each of the Planned Parenthood neighborhood centers in New York City. They are performing important tasks such as patient education and speaking before groups in the

community. Thus the employment of paraprofessionals for this project was not a departure from established practice by the agency.

Approximately 25 women applied for the part-time positions. After each of the 25 had been interviewed at length by the project director and the field supervisor, who was a community worker, 11 were selected.

Foremost among the qualifications sought was a warm and outgoing personality—a woman who liked to meet people, who wished to help others, and who seemed able to relate well to others.

Some of those hired had heard about the project at the two municipal hospitals in the study, where they had been patients. We telephoned a local self-help agency in Harlem, and two women responded; two others were recruited through a local church; and a few heard about the project through acquaintances who had been hired.

Although no specific educational level was required, obviously we needed women who could administer an extensive questionnaire. In addition, an ability to grasp the essentials of reproduction, childbirth, and family planning was needed. This selection process produced a staff of 11, none of whom had any college experience; two did not have a high school diploma. Since the project provided only part-time employment, mothers of school-age children could arrange their interviewing in the field with some degree of flexibility.

Training and Weekly Meetings

The training at the start of the project consisted of 15 sessions of about 3 hours each. In these meetings we combined traditional methods of training interviewers with approaches especially tailored to meet the needs of this particular group of trainees. For example, we recognized that in the beginning the trainees had a relatively short attention span, so we broke down the formal presentations of material into short units. Whenever possible we conducted the sessions in a way that permitted maximum participation by the entire staff.

We concentrated on group discussions, demonstrations, and workshops rather than on formal lectures. We spent some time role play-

ing interview situations, making the task to be performed gradually more difficult by portraying uncooperative patients and simulating other negative situations. We discussed the delicate subject matter of birth control in general and the different meanings it has for people of various ethnic and religious backgrounds.

We made special efforts to make the entire staff aware of the fact that coercion was never to be used. We emphasized that doing this work requires a great deal of tact; this is particularly true with postabortal patients. The importance of maternal health and preventive medicine for the patients themselves, their families, and the community was discussed.

The personnel of the two hospitals instructed our staff in the different methods of birth control and in basic anatomy and physiology. We showed films dealing with human reproduction and family planning methods. We helped clear up misconceptions about sexual functions and physiology.

The teamwork approach of the project was especially stressed. The value of the interviewer's recording every answer exactly as given was discussed, and it was emphasized that the office staff would know only as much as the field-worker brought back to them.

We repeatedly reinforced the confidence of the women in their ability to carry out their task. This was achieved at first by going over each question in the questionnaire slowly, always soliciting questions and suggestions.

With the help of a volunteer we compiled an extensive directory of social and health agencies

in the immediate community. The interviewers frequently were asked questions by patients and were able to guide them to sources of help.

We discussed the importance of reassuring anxious patients who complained about a variety of physical ills and of firmly guiding such patients to the proper medical facilities.

Many patients were beset with problems. Because many of them lived alone and were socially isolated, the interviewer became the link between the hospital or the social agency and the patient. This link became even more meaningful when there was a language barrier in addition to their other problems. (Seven of our community health workers were fluent in Spanish as well as English.)

Throughout the project we held weekly staff meetings that included additional in-service training; these proved of great value. At these meetings the work of the previous week was reviewed, new assignments were given, and a forum was provided for airing difficulties and frustrations the interviewers may have experienced.

It is important for the paraprofessional to be able to tell an understanding audience of the difficulties encountered—to share her impressions and feelings—and also the hopelessness of some of the patients visited. Staff members often made suggestions for alleviating some of these conditions. These were carried out whenever possible. For example, we called the social workers at both hospitals in the study to draw their attention to some persons who needed immediate help. We were also in contact with

Table 1. Ethnicity of women in experimental and control study groups, Planned Parenthood project (in percentages)

| Study groups | Black | Puerto Rican | White | Oriental | Other | Unknown |
|-------------------------------|-------|--------------|-------|----------|-------|---------|
| Both hospitals (N=1,841)..... | 65.1 | 23.2 | 4.6 | 0.2 | 5.2 | 1.8 |
| Experimental (N=1,112)..... | 63.9 | 24.0 | 4.7 | .1 | 5.5 | 1.8 |
| Control 1 (N=453)..... | 68.6 | 20.1 | 4.8 | .2 | 4.4 | 1.8 |
| Control 2 (N=276)..... | 63.8 | 25.0 | 3.6 | .4 | 5.1 | 2.2 |
| Hospital 1: | | | | | | |
| Experimental (N=625)..... | 88.6 | 9.1 | .3 | | .2 | 1.8 |
| Control 1 (N=259)..... | 93.1 | 5.0 | | | | 1.9 |
| Control 2 (N=158)..... | 89.9 | 8.2 | | | | 1.9 |
| Hospital 2: | | | | | | |
| Experimental (N=487)..... | 32.2 | 43.1 | 10.3 | .2 | 12.3 | 1.8 |
| Control 1 (N=194)..... | 36.1 | 40.2 | 11.3 | .5 | 10.3 | 1.5 |
| Control 2 (N=118)..... | 28.8 | 47.5 | 8.5 | .8 | 11.9 | 2.5 |

other sources of help in the community when intervention seemed desirable.

In the earlier sessions we observed some interesting phenomena regarding interpersonal relationships of staff. For example, during the first session the Puerto Rican women sat in one group and the black women in another, and the two groups conversed little with each other. After about 2 months, conversation and exchange of ideas, job-related or otherwise, were frequent. All the workers had each other's telephone numbers and called upon each other whenever necessary; for example, for company on an evening interview on a "tough" block.

These meetings were the only occasions at which the entire staff came together. They made it possible to maintain and promote among the interviewers a feeling of participation in a team working toward common goals, and they helped to keep up the momentum of the project and the high morale of the staff.

The major emphasis throughout the initial training and the weekly meetings was to motivate clients to return for post partum care. We discussed the techniques the interviewer might use to encourage patients to return. One question we asked the interviewer after she visited the patient was: "Do you think the respondent will keep the appointment with the clinic?" As time went by, the interviewers became more expert in predicting which of their patients would return.

Sociodemographic Factors

To determine if all differences in post partum return rate and rate of family planning acceptance were due primarily to the different degrees of our intervention, we carefully compared the three study groups for similarities in sociodemographic variables such as ethnicity, religion, pregnancy outcome, and parity. Although the populations of the two hospitals differed in some of these variables, each group contained women from both hospitals; thus the groups were comparable. Differences in response to intervention among these groups thus can probably be attributed to intervention techniques.

Of the total 1,841 women, 65.9 percent were born in the continental United States, 23.5 percent were born in Puerto Rico, and 7.8 percent in

other countries. The place of birth was unknown for 2.8 percent.

Hospital 2 had a much higher percentage of women born in Puerto Rico and other countries, presumably Latin America, than in the United States. The majority of patients at hospital 2 were Catholic (67 percent), while at hospital 1 most were Protestant (72 percent). Hospital 2 had more than twice the number of Puerto Ricans, half the number of blacks, and more than twice the number of whites than hospital 1 (table 1).

As shown in table 2, 51 percent of the women were in the age group 19-25 years. Hospital 1 had a greater percentage of women aged 16-18 years and 31 years and over. At hospital 2, the greater percentage was in the age group 26-30 years.

Interestingly, 43.4 percent of the women reported being single, and an additional 10.3 percent were either separated or deserted. Hospital 1 had a larger percentage of single women than hospital 2 (table 3).

More than one-fourth (26.1 percent) of the study population had an abortion during the hospital stay covered by the study. The percentage of abortions was higher for hospital 2 than for hospital 1 (table 4). At both hospitals, 26.9 percent of the women studied had only one child—from a previous pregnancy (if the current outcome was abortion) or a child born during the study—23.8 percent had two children, and 6.1 percent had six or more. Generally, the patients at hospital 1 had more children than those at hospital 2 (table 5).

Women Who Kept Initial Appointments

Initial post partum appointments were kept by 217 women. They were interviewed by the community health workers at the hospital while waiting to be examined. Of these women, 60.4 percent were born in the continental United States, 26.7 percent in Puerto Rico, 8.8 percent elsewhere, and place of birth was unknown for 4.1 percent. Their marital status was 48.4 percent married, 5.5 percent separated or deserted, 41.9 percent single, and 4.2 percent unknown. Fifty-nine percent were black and 27.6 percent Puerto Rican; 40.6 percent were Catholic and 50.7 percent Protestant.

The only significant difference seen in the 217 women who kept their initial appointments compared with the three study groups was a higher percentage of live births and a lower percentage of abortions: 79.3 percent live births and 16.1 percent abortions in contrast to 68.2 percent live births and 26.1 percent abortions for the study groups. We had expected at the start of the study that the women who had had abortions would be least likely to return to the hospital for a post partum checkup. The figures cited seem to bear this out, since among the group with fewer abortions more of the scheduled appointments were kept.

As for age distribution of the 217 women compared with the three study groups, a larger percentage were younger—29 percent were 19–21 years old and 42.9 percent were under 21. The

women who kept their initial appointments also showed a significantly higher rate of acceptance of family planning methods, as pointed out later.

Intervention

The women in the experimental group who had telephones were called to remind them of the post partum examination. Those who were reached were asked if they would like to make an appointment for this examination and were told about the availability of family planning services at the hospital. A reminder letter was sent to those for whom no telephone contact was possible. The hospital records were then checked, and for the women who did not keep the appointment after this intervention a home interview was attempted. We reached 269 or 24.2

Table 2. Ages of women in experimental and control groups, Planned Parenthood project (in percentages)

| Study groups | Age groups (years) | | | | | | | |
|-------------------------------|--------------------|-------|-------|-------|-------|-------|---------|---------|
| | 10–15 | 16–18 | 19–21 | 22–25 | 26–30 | 31–40 | 41 plus | Unknown |
| Both hospitals (N=1,841)----- | 1.3 | 13.7 | 25.9 | 25.1 | 18.4 | 13.0 | 1.1 | 1.5 |
| Experimental (N=1,112)----- | 1.2 | 13.8 | 26.6 | 25.1 | 18.7 | 12.8 | 1.0 | .8 |
| Control 1 (N=453)----- | 2.0 | 14.8 | 26.5 | 22.7 | 18.1 | 13.7 | .9 | 1.3 |
| Control 2 (N=276)----- | .7 | 11.2 | 22.1 | 29.3 | 17.4 | 12.7 | 1.8 | 4.7 |
| Hospital 1: | | | | | | | | |
| Experimental (N=625)----- | 1.3 | 15.4 | 24.8 | 25.0 | 18.2 | 13.4 | 1.0 | 1.0 |
| Control 1 (N=259)----- | 2.7 | 14.8 | 24.9 | 23.3 | 16.3 | 16.0 | 1.2 | .8 |
| Control 2 (N=158)----- | .7 | 12.6 | 22.8 | 27.2 | 15.2 | 12.6 | 1.9 | 7.0 |
| Hospital 2: | | | | | | | | |
| Experimental (N=487)----- | 1.0 | 11.9 | 29.0 | 25.3 | 19.3 | 11.9 | 1.0 | .4 |
| Control 1 (N=194)----- | 1.0 | 14.9 | 28.9 | 22.2 | 20.6 | 10.8 | .5 | 1.0 |
| Control 2 (N=118)----- | .9 | 9.4 | 21.4 | 32.5 | 20.5 | 12.8 | 1.7 | .9 |

Table 3. Marital status of women in experimental and control groups, Planned Parenthood project (in percentages)

| Study groups | Married | Widowed | Separated or deserted | Single | Divorced | Unknown |
|-------------------------------|---------|---------|-----------------------|--------|----------|---------|
| Both hospitals (N=1,841)----- | 44.3 | 0.4 | 10.3 | 43.4 | 0.9 | 0.7 |
| Experimental (N=1,112)----- | 46.0 | .1 | 10.2 | 43.1 | 1.1 | .9 |
| Control 1 (N=453)----- | 44.2 | .9 | 9.9 | 43.9 | .9 | .2 |
| Control 2 (N=276)----- | 43.5 | .7 | 11.6 | 43.8 | ----- | .4 |
| Hospital 1: | | | | | | |
| Experimental (N=625)----- | 37.3 | .2 | 11.0 | 49.4 | 1.4 | .6 |
| Control 1 (N=259)----- | 40.9 | 1.5 | 11.2 | 44.8 | 1.2 | .4 |
| Control 2 (N=158)----- | 39.9 | 1.3 | 11.4 | 46.8 | ----- | .6 |
| Hospital 2: | | | | | | |
| Experimental (N=487)----- | 54.0 | ----- | 9.0 | 34.9 | .6 | 1.4 |
| Control 1 (N=194)----- | 48.5 | ----- | 8.2 | 42.8 | .5 | ----- |
| Control 2 (N=118)----- | 48.3 | ----- | 11.9 | 39.8 | ----- | ----- |

percent of the women by telephone; of these, 165 or 61.3 percent made appointments by telephone for their post partum checkup but only 28 or 16.9 percent kept them.

Letters were sent to 679 or 61.1 percent of the 1,112 women in the experimental group; 85 or 12.7 percent of these letters were returned as undeliverable. The results of the mailing were disappointing—only seven women kept their appointments, and 393 or 35.3 percent could not be located.

The interviewers contacted 362 or 32.6 percent of the experimental group at home; 275 or 75.9 percent made checkup appointments but only 79 or 28.8 percent kept them.

A group of 87 or 8.1 percent said that they had already returned for a post partum checkup when our interviewers telephoned them. An additional 8.1 percent also told the interviewers during the home visits that they had had their checkup; this percentage includes the women who went to private physicians or other health facilities. (Wherever possible, we verified these claims and found the majority to be correct.)

No significant difference appeared with regard to the number of Puerto Rican or black women who made appointments for checkup, but slightly more of the Puerto Rican women did not keep their appointments. Fewer of the somewhat older women (over 31) kept their appointments.

More single or separated than married women could not be reached for the home interview, and even when reached did not keep their ap-

Table 4. Pregnancy outcome of women in experimental and control groups, Planned Parenthood project (in percentages)

| Study groups | Live birth | Abortion | Other | Unknown |
|-------------------------------|------------|----------|-------|---------|
| Both hospitals (N=1,841)..... | 68.2 | 26.1 | 4.4 | 1.2 |
| Experimental (N=1,112)..... | 69.1 | 25.9 | 4.0 | .9 |
| Control 1 (N=453)..... | 68.6 | 24.7 | 5.5 | 1.1 |
| Control 2 (N=276)..... | 64.1 | 29.3 | 4.0 | 2.5 |
| Hospital 1: | | | | |
| Experimental (N=625)..... | 69.9 | 24.0 | 5.0 | 1.1 |
| Control 1 (N=259)..... | 68.0 | 23.6 | 6.9 | 1.5 |
| Control 2 (N=158)..... | 66.5 | 25.3 | 5.1 | 3.2 |
| Hospital 2: | | | | |
| Experimental (N=487)..... | 68.0 | 28.3 | 2.9 | .8 |
| Control 1 (N=194)..... | 69.6 | 26.3 | 3.6 | .5 |
| Control 2 (N=118)..... | 61.0 | 34.7 | 2.5 | 1.7 |

pointment. This was expected, since married women generally have more stable living patterns (table 6).

A larger percentage of women who had had an abortion could not be reached. While 577 women, or 46.2 percent, of those who had a live birth could be reached for a home interview, only 144, or 30.1 percent, of the women who had an abortion could be reached.

As to the effect of the number of children on the post partum return rate and the acceptance of family planning services, we found that women with three to five children more often made an appointment but failed to keep it than those women with fewer children. Possibly

Table 5. Number of living children of women in experimental and control groups, Planned Parenthood project (in percentages)

| Study groups | Number of living children | | | | | | |
|-------------------------------|---------------------------|------|------|------|------|-----------|---------|
| | 0 | 1 | 2 | 3 | 4-5 | 6 or more | Unknown |
| Both hospitals (N=1,841)..... | 8.3 | 26.9 | 23.8 | 13.8 | 14.9 | 6.1 | 6.1 |
| Experimental (N=1,112)..... | 7.9 | 27.3 | 23.5 | 13.6 | 15.7 | 6.3 | 5.8 |
| Control 1 (N=453)..... | 9.9 | 27.8 | 21.2 | 15.0 | 14.7 | 4.8 | 6.2 |
| Control 2 (N=276)..... | 7.2 | 23.9 | 29.3 | 12.7 | 12.3 | 7.2 | 7.2 |
| Hospital 1: | | | | | | | |
| Experimental (N=625)..... | 8.1 | 26.9 | 23.2 | 10.4 | 15.5 | 6.9 | 9.0 |
| Control 1 (N=259)..... | 9.6 | 25.5 | 18.5 | 16.6 | 12.4 | 7.0 | 10.4 |
| Control 2 (N=158)..... | 7.6 | 24.1 | 26.6 | 10.1 | 13.9 | 6.9 | 10.8 |
| Hospital 2: | | | | | | | |
| Experimental (N=487)..... | 7.6 | 27.9 | 23.8 | 17.6 | 15.8 | 5.5 | 1.6 |
| Control 1 (N=194)..... | 10.3 | 30.9 | 25.3 | 12.9 | 18.1 | 2.0 | .5 |
| Control 2 (N=118)..... | 6.8 | 23.7 | 33.1 | 16.1 | 10.1 | 7.6 | 2.5 |

the mother of many children finds it more difficult to arrange for babysitting or to take the children with her. It is also possible, even likely, that she did not return for her post partum examinations after previous pregnancies and so did not see the need for an examination at this time.

As mentioned before, the experimental group was offered babysitting or escort service to the hospital. At hospital 1, an innovation was instituted with this project—the community health worker was permitted to remain with “her” patient during the examination if the patient so desired. However, few women asked for this service. Although 21.3 percent of the hospital 1 patients accepted the offer of escort service or babysitting, they rarely used them.

Among the hospital 2 patients, 18.4 percent accepted escort service and 4.6 babysitting. In some instances, the community health worker arrived at the patient’s home to escort or babysit only to find no one there. In other instances, the interviewer waited in vain at the hospital. We checked the hospital records of these patients and learned that they had not returned for their checkup.

Home Visits

The following are some of the answers that the patients gave to the community health workers during their home visits. To the question why women do not return for their post partum checkup, 15.5 percent at hospital 1

Table 6. Home interviews attempted, percentage of women reached, and percentage who kept post partum appointments, Planned Parenthood project experimental group, by marital status

| Marital status | Number interviews attempted | Percent of women reached | Percent who kept post partum appointments |
|----------------------------|-----------------------------|--------------------------|---|
| Married..... | 290 | 46.9 | 22.0 |
| Widowed..... | 1 | 100.0 | .0 |
| Separated or deserted..... | 66 | 33.3 | 18.2 |
| Single..... | 283 | 37.1 | 20.0 |
| Divorced..... | 7 | 71.4 | 20.0 |
| Unknown..... | 6 | 50.0 | 33.3 |
| Total..... | 653 | 41.7 | 21.0 |

and 13.6 percent at hospital 2 replied that they needed a babysitter. We discussed this previously.

Several women said that they could not afford to miss a day’s work. Some expressed fear of the examination. A few resented examination by a male physician. A few said that they would go to a private physician rather than to the hospital because they could not afford a babysitter (despite the fact that hospital 1 also had an evening session—although for the women without husbands this might not be of much help).

For the query “How did you like it at the hospital during your stay?” there was no difference in evaluation of hospitals between the patients who failed to keep their post partum appointments and those who kept them.

A slightly higher percentage of patients classified hospital 2 as “fine.” But 23.1 percent of the patients at that hospital did not like the food as against only 1.6 percent at hospital 1. A substantially higher percentage of patients who kept their initial post partum examination appointments complained about the food at the two hospitals than did the patients who failed to keep their appointments, but a substantially lower percentage of the hospital 2 patients complained about the physicians.

The returnees apparently found it easier to give specific answers; only 11.1 percent of them gave miscellaneous reasons or no answer in contrast to 54.5 percent of those who failed to keep their appointments.

To the question, Have you ever used birth control? for the groups who had not appeared for their initial post partum examination, 51 percent for hospital 1 and 47.6 percent for hospital 2 said yes. For the returnees, the percentage was 42.9 percent. About 50 percent in the experimental and control 2 groups said they had first learned about birth control in the hospital.

Patients Not Locatable

A major problem and disappointment throughout this project was the large number of patients who could not be located (35 percent, or 389 women, in the experimental group and 54 percent, or 149 women, in control group 2). Addresses were wrong or nonexistent or

patients could not be found at home even after repeated visits by the interviewer.

For example, one of the interviewers reported that she had been given the address of the zoo. Another one said that the address given was "in the river." Some of the designated buildings were lofts. Others were vacated houses. In some instances the respondent lived at the designated address but was unavailable for an interview. In some instances, the patient opened her door after being reassured that the interviewer was "only" a community health worker from the hospital. Some of the interviewers had the distinct feeling that the woman answering the door was indeed the patient herself, even though that person denied it. In some instances, the second attempt was more successful.

The significantly higher percentage of women in control group 2 who were not locatable may have resulted from the fact that no attempt was made to contact them until 12 weeks after discharge from the hospital. Among this group, 14.8 percent were reported to have moved in contrast to 7.3 percent in the experimental group.

The high mobility of people in the section of the city where the patients lived certainly contributed to the difficulty in tracing and reaching patients. A number of patients had moved out of the areas covered by the study hospitals but reported the addresses of relatives living in the areas in order to deliver at one of the hospitals. This was especially true for hospital 2, which has stricter residence requirements for some of its services than hospital 1. Also, we noticed that the Puerto Ricans who have had contact with or have relatives working or living nearby prefer hospital 2.

Family Planning Acceptors

The numbers of black and Puerto Rican women who accepted family planning were in proportion to their numbers in the sample: 711 black and 266 Puerto Rican women were in the experimental group. Of 191 acceptors, 142 were black and 39 were Puerto Rican; 113 were Protestant and 66 were Catholic.

A detailed breakdown showed that 30.4 percent of the patients in the experimental group who accepted family planning after a home visit were in the age group 22-25 years, 22.4 percent

19-21 years, and 17.9 percent 16-18 years (table 7).

Fewer women with more than three children accepted family planning services. The highest percentage (39.6 percent) of acceptors was seen among the group of 217 women who kept their initial post partum appointments—93.5 percent of the acceptors returned to the clinic on the date of their appointment.

Hospital 1 had a significantly higher family planning acceptance rate for all groups (table 8). This might be due to the type of ethno-religious population served. Also, this hospital has an evening family planning clinic.

The patient at hospital 2 had to make a separate appointment for the family planning clinic, thus she had to make an additional trip and undergo the gynecological examination twice. (This is no longer true and this project can take some credit for this important change.)

A higher percentage of single, separated, or divorced women came for family planning than married ones.

More women with a live birth accepted family planning than the patients who had had an abortion.

Discussion and Recommendations

Generally, the accomplishments achieved and lessons learned during the 27 months of the project were (a) hiring, training, and supervising

Table 7. Home interviews attempted, percentage of women reached, and percentage who came for family planning service, Planned Parenthood project experimental group, by age groups

| Age groups (years) | Number interviews attempted | Percent of women reached | Percent who came for family planning service |
|--------------------|-----------------------------|--------------------------|--|
| 10-15----- | 8 | 25.0 | 0 |
| 16-18----- | 93 | 41.9 | 17.9 |
| 19-21----- | 175 | 38.3 | 22.4 |
| 22-25----- | 159 | 43.3 | 30.4 |
| 26-30----- | 128 | 39.1 | 16.0 |
| 31-40----- | 79 | 50.6 | 20.0 |
| 41 or over----- | 7 | 42.8 | 0 |
| Unknown----- | 4 | 50.0 | 0 |
| Total----- | 653 | 41.7 | 21.7 |

Table 8. Number of women who kept initial post partum appointments and percentage who accepted family planning service, Planned Parenthood project

| Study groups | Number of returnees | Percent who accepted family planning |
|----------------------------|---------------------|--------------------------------------|
| Both hospitals (N=1,841) - | 217 | 39. 6 |
| Hospital 1 (N=1,042) --- | 106 | 48. 1 |
| Hospital 2 (N=799) ---- | 111 | 31. 5 |

ing paraprofessional workers and (b) the techniques used by these workers to induce patients to return for post partum examinations.

The project's greatest success was that a group of neighborhood women were hired and trained to carry out a series of complex tasks under difficult working conditions. The administration of a lengthy interview form, the techniques of finding strangers and gaining their confidence, and the techniques of dealing with the labyrinth of rules and procedures of large municipal hospitals are tasks that require a variety of abilities. Intelligence, tact, and perseverance are qualities that the paraprofessional must have for the job, and the 11 who worked in the project possessed them in abundance.

During the project only two workers left, and they did so for better-paying jobs that would not have been offered them had they not had the project experience. When the project ended, nine more went on to better-paying jobs.

How could we consider the experience with the paraprofessionals a success when their actual "production" (women returning for post partum examination) was disappointing? It could be argued that they had failed in the single most important area that determined the actual success or failure of the project. After much reflection, however, the staff of the project concluded that the low return rate (25 percent of those interviewed) was inherent in the design of the project, rather than the training or capabilities of the paraprofessionals.

We considered the following facts: (a) the total population consisted of a hard-core group of patients who had ignored their initial appointments for a post partum examination and (b) much of the paraprofessionals' time was

spent looking for patients who had already returned for post partum examination either at the two hospitals in the study or elsewhere.

These factors appear to have contributed heavily to the low return rate of the post partum patients. Intervention earlier, perhaps before hospital discharge, might be a more productive procedure, especially if it is accomplished in a way that encourages a patient's confidence that the paraprofessional will intervene in her behalf with the clinic personnel. Just one personal acquaintance on the inside of an impersonal health service might change this picture drastically. Nevertheless, the procedures of this project cannot be considered a cost-effective method of increasing post partum return rates.

Thus, while we did learn something of the characteristics of women who do and do not return and that babysitting is often cited as the reason for missed appointments but seldom accepted in actuality, we cannot recommend home visiting after an interval of 10 weeks as a worthwhile procedure.

Although we were not able to compare patients who had telephones with those who did not, the findings suggest that a telephone contact, repeated if necessary, might be more cost effective and almost as useful as the far more expensive home interview. If it were feasible for a person who had a good relationship with the patient during her hospital stay to reach this patient by telephone if she did not keep her appointment, a significantly higher return rate might result. Sometimes one telephone call is not sufficient. Every effort should be made to obtain a telephone number where a patient can actually be reached.

Our hypothesis that the home visits would be the most fruitful procedure did not prove out. However, the home visit had value in that some of the women visited were grateful that someone was interested in them. This was especially true where the interviewers were able to provide information about and contact with other agencies.

Letters sent by the project staff to remind patients of their appointments proved ineffectual.

From this project's experience, when a hospital's policy on health care boundaries is enforced, patients who desire to use this particular

hospital will give wrong addresses. This fact was especially visible among patients from hospital 2, and made finding patients very difficult indeed. Where there are strong motivations on the part of patients toward a particular institution, it might be better if such boundaries were abolished. This seems to us particularly important where the special care centers around such a delicate subject as birth control. The language barrier is also an important factor, and women will naturally be more comfortable when good communication is possible.

The results of this project indicate that the hospital that can arrange to have the post partum clinic together with the family planning clinic will be more successful in reaching the family planning acceptor—the women will have to undergo the gynecologic examination only once. Since a number of patients expressed fear and dislike of this examination, having to go through it only once will presumably make a great difference. An evening clinic for the working women and for those still in school also seems indicated as was proved by hospital 1. These were the major areas of this project. However, other recommendations include the following:

- Abortion patients present special problems, and a concerted effort and particular attention are needed for them. Postabortal patients showed a lower return rate than patients who had delivered children.

- It is more difficult to change patterns of health care at a later age, and it is difficult for a woman with several children to keep an appointment at the hospital. Since older women of high parity were less likely to keep their appointments, such women also should be given special attention.

- Different approaches are needed to increase the return rate of the single women. Married women were more likely to return for their checkup—they are less mobile, easier to be located, and have more stable life patterns than single women.

Further studies might attempt to learn if patients who have accepted family planning services continue to use birth control devices. At one hospital in the study, medical students continued the followup of post partum patients. A

comparison of their results with those obtained by the community health workers would be interesting.

Summary

A Planned Parenthood of New York City project, undertaken with the cooperation of two municipal hospitals, was designed to test the hypothesis that paraprofessionals can be trained to motivate women discharged from obstetrical services to return for post partum or postabortal checkup and family planning services. Eleven paraprofessionals were recruited from the neighborhoods of the two hospitals and trained to administer a detailed questionnaire and to impress the patients with the need for these health services.

During the 27-month project, 1,841 patients who had not kept their initial appointments for post partum examination were referred to the project staff. They were divided into an experimental group of 1,112 women and two control groups with a total of 729 women. Each woman in the experimental group was telephoned or sent a letter 6 weeks after discharge to remind her of her checkup date. If she did not keep her appointment after this intervention, a home interview was attempted at week 10. Each woman in control group 1 was also telephoned or sent a letter at week 6, but no further contact was made. Control group 2 was not contacted until week 12, when a home interview was attempted.

Of the experimental group, 269 women were reached by telephone; 165 made appointments, but only 28 kept them. Letters were sent to 679 women, but only seven kept their appointments. Home interviews were carried out with 362 women; 275 made appointments, but only 79 kept them. The greatest difficulty encountered was locating the patients.

The comparison of the control 1 and control 2 groups did not reveal much of interest except for the following: the patients in control group 1, who received a telephone call or a letter (where no telephone was available) but no home visit, had about the same post partum return rate when compared with members of the experimental group after their telephone or letter contacts but not their home interviews.

The members of control group 2, who had a home interview at week 12, but who had no previous telephone or letter contact had a significantly higher number of patients "not found," and of those found and interviewed more had returned for a checkup before the interviewer's visit. This probably is due to the longer time elapsed since hospital discharge than for the other two groups.

The more significant findings of the project related to the recruitment, training, and supervision of the paraprofessionals. As a result of their experience in the project, the paraprofessionals demonstrated increased abilities and skills and showed great interest in further education and better employment opportunity.

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Tearsheet Requests

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Program Notes

Training for Ambulance Attendants

The goal of a new training program for ambulance and other emergency vehicle attendants in Kentucky is better care for the injured at the scene of accidents and en route to hospitals. The project is part of the comprehensive emergency service program of the Kentucky State Department of Health.

The project director, Roland H. Dallaire, hopes the program will reach 2,000 emergency attendants within the next 2 years. The program's first classes got underway in January 1969, with 52 persons enrolled for weekly 3-hour training sessions that cover approximately 8 weeks. A 2-hour examination is given at the end.

American Red Cross personnel, physicians, inhalation therapists, and the State police instruct the classes in such subjects as standard and advanced first aid, emergency childbirth, cardiopulmonary resuscitation, psychiatric emergencies, the operation of oxygen equipment, and the operation of vehicles.—*News & Plans* (Kentucky State Department of Health) February 1970.

Tuberculosis on Capitol Hill

More than 2,000 Federal employees on Capitol Hill recently began a 12-month period of treatment with isoniazid to prevent active tuberculosis. The risk of acquiring the disease is reduced by as much as 85 percent during the year of preventive treatment according to Dr. Vedat Oner, acting chief of the tuberculosis division, District of Columbia Department of Public Health. Significant protection is also carried over into subsequent years.

After six cases of active tuberculosis were discovered among Capitol Hill employees, more than 13,000 were given tuberculin skin tests and chest X-rays. Isoniazid was prescribed for those with positive results in the skin testing. No new

cases were diagnosed as a result of the testing, but the X-rays of four persons were suggestive of tuberculosis, and these four were to receive additional diagnostic examinations.

Dr. Oner emphasized that while positive skin tests indicate that the persons have been in contact with tuberculosis germs sometime in the past, the some 2,000 employees taking isoniazid do not have tuberculosis.

Curriculum Guide on Drugs

A comprehensive curriculum guide for teaching about drugs in grades kindergarten through high school was being tested early this year in selected schools in Massachusetts, Ohio, Indiana, California, and Washington. The guide was developed by the American School Health Association's committee on drugs with the assistance of the Pharmaceutical Manufacturers Association. It is scheduled to be published August 1, 1970.

At the lower elementary grade level, the suggested curriculum will stress proper attitudes toward health and factors in the environment, including medicines. At the middle elementary grade level, information about the pharmacological action (both helpful and harmful) of drugs will be included, as well as concepts about solving problems, making decisions, and handling social situations. At both the early and late adolescent levels, more intensive in-depth study of all of these components will be recommended.

Fostering Scientific Creativity

A 17-year-old summer scientific program, pioneered by the New York State Department of Health, seeks to expose high school pupils, college undergraduates, graduate students, and their teachers to an atmosphere of intensive research, to foster scientific creativity, and to aid students in career planning.

The participants in the program work and study during June, July, and August at the Roswell Park Memorial Institute, the department's cancer research and treatment center in Buffalo. Each participant is expected to devote at least 40 hours a week to program activities.

Of 586 persons who applied to take part in the 1970 program, 53 high school pupils, 38 college undergraduates, two graduate students, one medical student, two high school teachers, and two college faculty members were accepted. Grants totaling \$54,420 from the National Science Foundation permitted continuation of the program in 1970.

The summer experience is intended to be primarily educational, rather than a form of summer employment. Funds are available, however, to cover expenses such as lodging and transportation.

Screening Blood for Hepatitis

The New York Blood Center and several other blood banks have been experimenting with a fast new technique to screen out donated blood that might transmit serum hepatitis. The test is at least three times more effective in detection of contaminated blood than standard gel diffusion techniques. Moreover, it takes 1 to 2 hours to get results, compared with 1 to 7 days with the old method, and will cost less than \$1 per test.

The new technique is based on the recent discovery of a protein known as SH (serum hepatitis) antigen, or Australia antigen, in the blood of victims and carriers of hepatitis.

Antibodies to this antigen are combined with a drop of the donor's blood serum. The formation of a precipitate indicates the donor is a carrier of hepatitis. Adequate supplies of antiserum are now available for general use from the blood derivatives program at the New York Blood Center in Manhattan.

Items for this page: Health departments, health agencies, and others are invited to share their program successes with others by contributing items for brief mention on this page. Flag them for "Program Notes" and address as indicated in masthead.