Development of an Adolescent Maternity Project in Rochester, New York

HEALTH SERVICES FOR PREGNANT TEENAGERS have not kept pace with the demand, despite a gradual change over recent years in attitudes in the United States toward women who become pregnant out of wedlock. Even in geographic areas with adequate facilities for teenagers, the pregnant adolescent and her boyfriend may find it difficult to enter the health system. Inaccessibility of clinics and financial barriers are two reasons frequently cited for the failure of teenagers to get appropriate medical care. A major challenge then for planners of health programs is to establish accessible, economical, comprehensive facilities that will provide pregnant teenagers with the medical and psychological care they need in one setting. Such programs should teach adolescents about their sexuality and the responsibilities they bear as sexually mature people. We describe the development of one such program, the Rochester Adolescent Maternity Project (RAMP), established at the University of Rochester Medical Center in 1969.

Of the total number of births in the United States in 1970—an estimated 3,731,000 (*1*), approximately 690,000 were to teenagers, of which 200,000 were illegitimate. Since the 1960s, the trend has been away from the post-World War II tradition of early marriage with childbearing within wedlock toward having children out of wedlock. The generally wider availability of legalized abortion in recent years has resulted in some decrease in the numbers of babies born to teenagers, but adolescent pregnancy still is a major health problem (*2*).

Factors believed to contribute to conception during adolescence are the younger age at which today's children mature (*3*), increased sexual activity at an earlier age (*4*), and failure to use or ineffective use of contraception (*5*). Teenagers who are already pregnant may exert peer pressure on their girlfriends to also become pregnant; boyfriends may want to prove their masculinity through fatherhood. At the time of conception the girl is frequently depressed; real or fantasized loss of loved ones often closely precedes it.

Once pregnant, adolescents are at high risk medically. Their major obstetrical problems, especially if they are very young, are a higher incidence of anemia, toxemia, excessive weight gain, and cephalopelvic disproportion, as compared with pregnant women in their twenties. Also, as a group, the babies born to young mothers have a higher incidence of prematurity, respiratory distress syndrome, and mor-

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tality than do babies born to older women (*7–9*).

Moreover, teenagers face severe educational problems both during and following pregnancy. Many, having dropped out of school, are uneducated and unemployable and may stay on public assistance their whole lifetime. Additional pregnancies and more children are likely, which will only increase the burden on both the young mother and government. Even if dissatisfied with her maternal status, the teenage mother may be unable to free herself from a pattern of repeat pregnancies. Nor does teenage marriage often provide a solution, since it is frequently short lived. One of every two teenage marriages ends in divorce within 5 years.

By 1972 an estimated 200 programs had been established in the United States to provide comprehensive care for pregnant teenagers (*10–12*). Howard and Ettinger (*13*) have reported that most of these special projects offered "(1) early and consistent prenatal care, (2) continuing education on a classroom basis, (3) counseling on a group or individual basis." The goals of these projects were to offer excellent medical and psychosocial services to adolescents during pregnancy, to encourage adolescents to choose options other than repeat conceptions, to return young mothers to school with a view to making them ultimately financially independent of government support, and to maximize their babies' chances for optimum survival.

Adolescent Health Care in Rochester

Because of a lack of specialized health services for teenagers in the Rochester community, the Adolescent Clinic was established in 1962 at the University of Rochester Medical Center. The clinic, sponsored by the Departments of Pediatrics, Psychiatry, Medicine, and Obstetrics-Gynecology at the university's School of Medicine, provides care to adolescents with medical problems, behavioral problems, or both.

The first director and project nurse in the clinic recognized that specialized maternity services for pregnant teenagers were needed in the community as well as the services being offered in the Adolescent Clinic. Although other colleagues agreed with the concept of specialized care for pregnant teenagers, many were not convinced that such a project would be efficient or economical. To demonstrate the feasibility of such a program, the director and nurse elected to begin services and then work at resolving specific issues as they arose. Therefore, RAMP began in 1969 with one patient, with an obstetrical resident providing medical care, and with the Adolescent Clinic project nurse offering nursing and psychosocial support. The program grew rapidly in numbers of patients and staff. RAMP's clinical program is described in another report (*11*).

Because of the increasing size of the Adolescent Clinic and of RAMP, it was decided in 1972 to incorporate both components into an Adolescent Program. Much time and effort of the program director had to be turned to RAMP, since as this component grew, major issues demanded attention, including funding, staffing, relationship to the community, evaluation, and cost of services.

Rochester Adolescent Maternity Project

Funding. The position of the obstetrical resident who first served RAMP was funded by Strong Me-

morial Hospital, while the nurse was supported by the Adolescent Program. In the period when these two professionals were providing all the medical and psychosocial services for the pregnant girls, only a limited number of patients could be cared for in the program. The need to extend RAMP's services to greater numbers became increasingly apparent as the multiple problems of pregnant teenagers became identified. To expand the project so that more pregnant girls in the community could receive special care required outside funding, since third-party payment mechanisms covered only traditional medical expenses. Because, however, RAMP was considered a model, the staff believed RAMP would be able to qualify for such outside funding as an innovative project.

In 1970, therefore, an application for independent funding of RAMP was submitted to the Rochester-Monroe County Youth Bureau, which had supported other community youth programs in the county. RAMP's request was for monies for health care, while most other community groups were seeking assistance for recreational programs. In the discussions that took place between RAMP staff members and the community-based, mostly white, middle-class board members after the application, some board members raised questions as to whether provision of improved services for pregnant teenagers would not actually encourage adolescent sex. These board members argued that if a health care site were made especially attractive, teenage girls might become pregnant just to receive its services. Members of the RAMP staff replied that since most of the teenagers were already pregnant when they sought medical help, by then the major issue was prevention of another pregnancy.

Prevention was defined in the context of decreasing obstetrical problems in these young, high-risk mothers through optimal prenatal care, minimizing pediatric problems in the newborns by rigorous obstetrical and pediatric surveillance, and encouraging the use of contraception to avoid additional teenage pregnancy. This concept, however, was difficult for laymen on the board to grasp. The RAMP staff therefore directed the discussions toward the pragmatic issue of the possible saving of public monies over several years that could result from the program. We expressed the hope that by investing in optimal care during an adolescent's pregnancy, the young mother might be helped to avoid pregnancy during the remainder of her adolescence, finish her education, and become employable and thus would not be solely reliant on government for her own and her baby's support over perhaps both their lifetimes.

Despite some continued concerns about the possibility that provision of services would encourage teenage sex and pregnancy, in 1971 the Youth Bureau funded RAMP as a model project with a clear limit of 3 years of full support before phaseout. Permanent support would have to be sought elsewhere if the project was to continue beyond the 3 years.

Therefore, from 1972 through 1974, private sources of funding for RAMP were actively sought at the local level, but to no avail. This lack of success perhaps again reflected the community's ambivalence about sponsoring a program for sexually active teenagers. Thirty-party payment mechanisms were fully used in order to continue the program in 1975 with Youth Bureau phaseout funds. To this date, however, future permanent funding is still uncertain.

Staffing. With the support of the Youth Bureau, new personnel were gradually added so that by 1972 the staff consisted of the equivalent of two full-time nurses, four part-time obstetricans, a full-time secretary, a full-time social worker, a part-time psychologist, and two part-time nursing assistants.

As the staff grew, the previous excellent communication among staff members deteriorated, both because more people worked in the project and because the several part-time staff members saw each other only irregularly. To improve communication, weekly meetings were scheduled to discuss the direction of the program and staff problems. When issues of patient care arose, individual conferences were also called. The weekly meetings led to a realization by senior staff that the young professionals providing most of the direct patient services needed special training for, and support in, their work with this difficult group of teenagers. The young professionals became discouraged easily when idealistic solutions failed to resolve chronic problems. The RAMP staff turnover was high initially, but once the issues of the emotional overcommitment of the junior staff were defined, the support and guidance of the senior staff helped overcome this difficulty (*14*).

The nurses in RAMP, who are responsible for the coordination of patient care, integrate their nursing care with that provided by the obstetricians and social workers. Each pregnant girl is assigned a nurse, and this nurse is the one staff member who is constant throughout the girl's pregnancy and delivery. The adolescent sees her nurse individually for ob-

stetrical care, health education, and counseling, both during and after the pregnancy. This relationship is crucial according to both the nurses and the girls (*15*). Supervision and guidance of the nursing staff was provided by the project nurse. Since, developmentally, many of the teenagers are in an important phase of identity formation, the nurse serves as a role model. Many of these pregnant youngsters need nurturing, and the nurses fill a maternal role.

As the number of patients increased, greater obstetrical coverage was required than one part-time obstetrician could supply. There needed to be 24-hour on-call obstetrical coverage. In 1972, therefore, the part-time obstetrician was replaced by a group practice of four part-time physicians. At first the teenagers disliked this change, as they so reported in a consumer evaluation. Many of the girls wanted their own physician to give them all their prenatal care and also to deliver their babies (*15*). As the girls gradually became used to the group practice, however, negative comments declined.

The duties of coordination of appointments, clinic operations, and finances were gradually assumed by the RAMP secretary. As she became acquainted with individual patients, she also took a greater part in helping the teenagers decide about their transportation and arrive at solutions to other practical problems.

The social worker is responsible for psychosocial consultations about the girls with both individuals and community agencies. She also works out adoption plans with existing community services. The psychologist evaluates the teenagers whom the staff refer to him for such psychological problems as depression, retardation, and psychosis. He recommends appropriate treatment plans or treatment facilities.

At first the nursing asisstants were chosen from among RAMP patients who had delivered (*16*), but as the project grew, these girls were unable to handle the large numbers of patients efficiently (*17*). Therefore, since 1972, college students, primarily those enrolled in the University of Rochester School of Nursing, have assumed the nursing assistant positions. The research assistant is responsible for keeping accurate statistics on the program and reporting changes in the patient population.

The staff problems that still remain include the difficulties in arranging for clinical coverage when the part-time staff member responsible for it is absent and the constant need to devise new ways for communication among health team members about patient care and program issues.

Community relations. The RAMP staff is seeking to convince the community that it should provide education within the community for pregnant girls and day care for their children. Selection of the site for education of these girls is still a sensitive issue. The RAMP staff assists those teenagers who want to stay in their home schools during their pregnancies. Some local school administrators, however, oppose this, even though New York State law mandates that pregnant girls can remain in school. Adolescents who prefer to go to other schools than their neighborhood ones are encouraged to transfer to the city school district's special education program for pregnant adolescents. Health personnel who are unfamiliar with an individual school's administrative structure have sometimes found contacts with the schools about the teenagers' educational progress frustrating. Health workers frequently have had to use their scarce time in arranging educational testing and in school conferences when girls need help with school placement or alternative school programs. Although this role might better be assumed by school personnel, the pregnant teenager, who also is often a poor student, is seldom a high priority. The RAMP staff considers the support of education of great importance.

Day care, subsidized federally, by the community, or privately, for children of teenage mothers, as well as for children of older women, is available only on a limited basis in Rochester. No day care is available for infants, and few facilities exist for children under the age of two. Many young mothers leave their babies with their own mothers. If unable to do so or to find alternate child-care arrangements, they may remain at home and out of school. Resolution of the issue of day care is a major community challenge for which no immediate solutions are at hand.

In an effort to persuade the community to take more responsibility for the care of sexually active and pregnant teenagers and their children, the RAMP staff initiated a series of meetings with community-based health providers. Representatives of health, educational, and social services and of local youth agencies assembled to examine the availability and accessibility of community facilities for sexually active adolescents. These meetings revealed that the staffs of the agencies caring for teenagers had little knowledge about the procedures of other agencies within the same city. There were also large gaps in services to young people in some geographic areas and a duplication of such services in others. A need for coherent communication at the community level

and for joint planning of future services became apparent.

Evaluation. Programs like RAMP need to be evaluated from the time clinical services begin. There were 1,200 births to married and unmarried teenagers in Monroe County in 1973. At its highest operating level, RAMP cared for only 10 percent of these girls, since its emphasis was on care for the unmarried teenager. If one were considering whether care should be provided for all of the pregnant young women in Monroe County, including the married, the answer might be found in evaluative data on RAMP, the program for the unmarried that is already in operation. Evaluation of RAMP-like programs, however, is difficult because of the lack of tools for measuring subjective data.

From the beginning, research was an integral part of RAMP; the research assistant kept careful statistics of the rates of kept and canceled appointments. Eighty percent of the patients over a 3-year period either kept or canceled their appointments (that is, did not simply break them). In our parent institution, the rates for general clinic appointments kept or canceled averages only between 55 and 60 percent. In a 1972 survey of RAMP consumers, 90 percent of the young people studied said that they would return to RAMP again for obstetrical care if they needed it; 97 percent would return for gynecologic care (*15*). In 1973, 27 teenagers who had been cared for in RAMP in the years 1969–71 were visited in their homes and interviewed. Eleven (40 percent) had had a repeat pregnancy, an event that occurred on the average 2½ years after the birth of the first child. However, 6 of the 11 repeat pregnancies occurred within marriage or were planned, or both. Thus, only 5 of the 27 teenagers (22 percent) had a repeat pregnancy that was unplanned or out of wedlock. These figures compare favorably with those for other adolescent maternity programs (*10*). Fourteen of the 27 girls visited (50 percent) were partially or totally financially independent. Again, these results are comparable to those of our colleagues in other cities (*10*).

A retrospective study, comparing obstetrical, pediatric, and psychosocial outcomes for RAMP patients with those for a matched sample of pregnant teenagers cared for in a traditional hospital clinic and a health center, is underway.

Cost of services. For an expenditure of approximately $1,000 per patient for prenatal and hospital care, RAMP has provided extensive medical and psychosocial services at a cost comparable to that of other programs providing only medical services. Further evaluation is needed, however, to cost-analyze the program even more carefully and for a longer period. The cost to Monroe County of supporting a mother and one child on welfare for 1 year has been estimated to be $3,800 (personal communication in 1975 from Mrs. Helen Patterson, Department of Pediatrics, University of Rochester School of Medicine and Dentistry).

Reasons for RAMP's Success

RAMP, one of the oldest projects of its kind in the United States, is beginning its seventh year of operation. Even though future funding is uncertain, the staff is committed to the program's configuration.

Why has RAMP grown despite almost constant problems? One reason is that both the volunteer and the paid staff have been dedicated, persevering because they sense that RAMP provides exemplary care for pregnant youth. RAMP patients have been more relaxed during labor and delivery than non-RAMP adolescents delivered at the same hospital. RAMP patients like the care that they receive, as is evidenced in RAMP rates for appointments kept or canceled and in the patients' responses in a consumer evaluation.

The RAMP staff members understand adolescent growth and development, and this understanding has been incorporated into clinical practice. They recognize that teenage health care requires one to actively reach out to scared, timid patients, telephoning them, sending them letters, and visiting them in their homes if they fail to keep an appointment. A staff that deals with adolescents needs to have some tolerance of the testing behavior that these patients are likely to display. These young people, who usually have had difficulty with many other systems (school, courts), frequently will throw out a challenge to the health system and its adults (just as they have to previous systems with which they have been in contact) to determine if the new system and the adults in it are different. The staff must be aware of this testing behavior, but it must also know when to set limits. For example, after staff members explained to a group of adolescents who had been arriving late for their RAMP appointments that their lateness would not be tolerated, the girls came in on time. Setting limits in this and other situations signified to these teenagers that people cared, and they responded.

The priorities for the staffing of RAMP have now been defined, so that recent recruiting has been better focused. People who work with pregnant teenagers need to be mature and secure in their own

adulthood. Young people often bring a refreshing idealism to such work, but they may not have completed their own adolescence. Senior staff may then have to spend valuable time in helping the younger staff members resolve their own adolescent conflicts instead of caring for the pregnant teenagers.

Constant evaluation of a project such as RAMP is vital, because it helps place major accomplishments in perspective and allows new priorities to be defined. Flexibility in program planning is necessary to accommodate the almost constant changes the project faces as new ideas are generated and conditions change. If services are found to be duplicated, difficult decisions have to be made as to whether to alter or discontinue them. For example, in 1971 the only sites in the Rochester community that provided the continuity of pediatric care that is so vital for the high-risk baby were the private offices of local pediatricians, and patients such as those served by RAMP could not afford this care. Therefore, RAMP set up its own pediatric program and employed a full-time pediatric nurse practitioner and a part-time pediatrician. The pediatric nurse practitioner and the pediatrician provided medical and nursing care during the first year of life to the newborns of RAMP mothers. The young mother was also able to discuss her gynecologic needs with the nurse practitioner who was caring for her baby. This professional thus filled an important role in informing the young mother about contraception and providing sexual counseling. In 1972 and 1973, however, when the Rochester Health Networks, Inc., was expanded and continuous pediatric care became available at the University of Rochester Medical Center, the RAMP pediatric program was discontinued and the babies in it were referred directly to settings from which ideally they will receive care continuously throughout childhood. In contrast, however, after the RAMP staff re-evaluated the need for RAMP's obstetrical and psychosocial services, it was decided that since RAMP was the only agency in the county providing these, they should be maintained.

New Challenges

The RAMP program was established to provide care to teenagers during prenatal, intrapartum, and immediate postpartum periods. The RAMP staff, however, recognized the need for continuing to advise and inform the teenagers about sexual matters after delivery. Another group of teenagers who also needed similar services were the peers and siblings of RAMP patients, since these peers and siblings appeared at high risk of becoming pregnant during their teens.

Therefore, a RAMP II program was begun in 1973. Patients come for care every 6 months and are taught about contraception, are given psychosocial counseling (particularly about sexuality), and are provided with medical care for their gyneocologic needs. RAMP II is staffed by the same four part-time physicians who work in the obstetrical program, plus a volunteer nurse. Staff nurses and the social worker provide assistance as necessary.

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