An Experiment in the Interrelation and Coordination of Family Planning, Maternal and Child Health

J. Courtland Robinson, A.B., M.D.

Chairman, Dept. of Ob & Gyn.

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Family planning has in the past few years gained a great deal of impetus here in Korea and is more and more being accepted by the people. In order for it to become an integral part of the Korean way of life it must fit into the maternal and child health services of the country. In what follows I have tried to spell out in some detail a program which was started here at Severance Hospital with the hope that it would become an example for other city hospitals to use.

Because of the difference which exists between countries on some of the traditional methods of maternal and child care I would like to describe briefly what things are like here in Korea. Antepartum care and a hospital delivery are relatively new concepts to Korea. Or better I should say that although the idea was introduced to Korea a good many years ago it has never really taken hold. The typical pattern today in Korea for the very average women is to do almost nothing during her pregnancy till she goes into labor and then either a member of her family or a neighboring older woman will help. Only if and when complications set in will the average family turn to more trained help and this of course only when it is available. This later is of course true only in the larger population centers. Doctors out in the rural areas are almost unknown.

Exact figures for all of Korea are not completely available but the general estimate is that on the average about 5% of women seek hospital care with an additional 10 to 15% turning to a relatively well trained midwife. The rest simply stay home and are cared for by a member of the family or an older neighbor. In some contrast are the figures to be found in the large cities but here the figures are also in-accurate. It has been estimated that only around 20 to 25% of the women in the city of Seoul have a hospital delivery. This figure may be higher if one counted absolutely all cases who even came near a hospital or doctor during their pregnancy for any purpose. From our own experience at Severance only about half of the patients we deliver are seen antepartum and of this only a smaller fraction are seen sufficiently often to be said to have had good or adequate antepartum care. To perhaps make the point clearer and I admit this is somewhat embarrassing to me but at Severance we deliver on an average of only some 700 cases a year and this in a city of over 3.5 million people in and a hospital which has been in operation for almost eighty years. In most other countries in a comparable situation we should be up somewhere in the 3000 to 4000 range. However, it is not
because we have not tried but the idea of antepartum and hospital care just has not appealed to the Korean family.

Related to these are the figures for maternal and infant mortality. Although somewhat uncertain for Korea, the estimates put them rather high. At Severance we have a perinatal mortality rate of around 50/1000 but this of course is not representative of the community. A maternal mortality figure is almost impossible to get. However, I think we may assume that it is relatively high although with the general increase in longevity that has been found here in Korea the maternal mortality rate has probably gone down. Two things we can be sure of is that it is probably not as low as it could be and that there is probably an unnecessary amount of maternal morbidity.

Associated with this picture of maternal complications there is also the high pregnancy wastage to be seen in stillbirths and more importantly in the high neonatal death rate. Here also I can not give figures but the ancient Korean tradition of not naming a child till 100 days have passed is still common and this surely goes with the general idea that babies are a very risky business and until they have gotten some what bigger it is best to be cautious. Part of this early fetal death rate is probably a continuum of antepartum influences but part is related to the care and treatment of the newborn. A careful survey among the very poor families by a social service agency revealed that by 1 year of age 50% of the babies in this very high risk group had died.

Having painted a brief review picture of maternal and child health here in Korea I would like now to turn to some of the social studies that have been done here in Korea, partly under the auspices of the PPFK, on attitudes among married women about children. In any group of women there is a small percentage who are very enthusiastic about family planning and a much larger group who should be interested but are relatively indifferent. Now this indifference is found largely among women who have had a few children and think they want to stop but apparently they are not well motivated. In a recent survey almost 50% of the women questioned stated they already had enough children but this figure does not fit very well with the figure of 18% who are currently practicing contraception. Now it is my opinion that one of the reasons for this discrepancy is that although at the moment the woman has enough children she is still sufficiently afraid that they will not all survive so that she therefore continues to have children in order to assure herself and her husband of enough grown children. When you ask the average women about the ideal number of children she probably pictures in her mind mature healthy grown children not small babies.

Another fact which has been learned from the surveys is that the practice of contraception is higher among educated women. One assumption is that they know how but this is not born out by the study for surveys reveal that in general 65% of the women know something about contraception. Why then the difference? It is my opinion that the better educated woman knows that with proper antepartum care, a well conducted delivery, and proper care of her baby she can be assured of having the number of children she and her husband desire. It is in this area that her better education lies and therefore she is able to act in accordance with it whereas her less educated sister who also known about contraception is less likely to practice it because she is still afraid her children will die.

Now much of this is already known but here in Korea it has received little emphasis until very recently and what I want to describe is a small experiment we have been conducting at Severance. It all started back in 1962 when with the help of the PPFK and the Population Council we received a grant to study the effectiveness
of the Lippes loop along with getting a family planning clinic started. Initially our efforts were to study the loop but it soon became apparent that additional information was necessary and thus some of the more careful sociological survey work was undertaken. Also as our insertions were soon running into the thousands we began to seek other ways of serving our patients based upon the concepts that I have already discussed, such as maternal and fetal mortality rates along with the problem of increasing the use of contraceptives among married women with a border line number of children.

I would like now to turn more specifically to the Community Health Service Program that we have gotten started at Severance. It is hard to put a date on this idea for all of us have been seeking ways to better serve our community as well as providing a place to teach our medical and nursing students. It first got underway as a Family Planning clinic with the essential purpose of providing this information and service to the women in our area. And as such it continued for a number of years. In 1964 a grant from OXFAM enabled us to expand our clinic with the addition of some sterility work and very limited antepartum care. We added such things as premarital counseling and most importantly a well baby clinic. With the development of the well-baby service we turned to our pediatric friends who till this point had not had much interest in family planning. Now the primary interest was in protecting and caring for the baby but it also had as an object the getting of postpartum mothers to our family planning clinic. As you are probably aware the postpartum mother is the best motivated woman as concerns family planning. To the postpartum woman the idea of another baby is the farthest thing from her mind and she can be most easily convinced of the value of family planning by the use of some form of contraception.

The third phase started with the introduction of a home delivery service for the women living with in a mile or so radius of the hospital. Like so many projects some money was all it took to get it started and I was fortunately able to get a gift from America so as to put it on its feet. Now obviously the care of the pregnant woman and assistance at delivery is a very good thing but there was a bit more behind our hopes than just this. First I wanted to offer a service which was sort of halfway between not coming at all to our hospital and coming only to have a hospital delivery. By offering antepartum care with the idea that a home delivery could be anticipated meant that our women might be less afraid to come. They were given a choice which to me is very important in trying to educate women to a better method of doing something. We also had in mind that this work would provide a chance for our medical students and nursing students to see medicine practiced in a somewhat different way. If the postpartum mother is well motivated toward family planning why not get her even earlier and really instill in her the concept of family planning along with the fact of an easy pregnancy and a healthy baby. Sure we can not guarantee it but careful studies from many parts of the world have shown that with careful antepartum care and supervised delivery the maternal and infant mortality and morbidity rates can be very much reduced.

Another idea which was behind the addition of a home delivery service was to try and get some figures as to cost. With this data we might be able to access the relative costs when seeking the goal of better care for mother and baby. I hope that someday the city will adopt such a system for all of Seoul. Namely, a center out of which will operate trained midwives to serve a specific geographic area. A central hospital providing support as well as being the focus for the entire program.

Having mentioned briefly just how we got started let me turn now to the Community He-
alth Service Project as it is currently operated at Yonsei University College of Medicine. It was in the fall of 1965 that we finally got around to officially organizing ourselves. At that time and even now about the only departments interested in the program are the Department of Preventive Medicine, the Dept of Obstetrics and Gynecology and the Department of Pediatrics. Two men each from Preventive Medicine and Ob & Gyn and one from Pediatrics made up the first executive committee. This basic steering committee has met from time to time as is necessary and has been aided by outside experts who are interested in the program. At various times we have had nurses, sanitary engineers, public health nurses and even an occasional visitor from overseas. These have all contributed to our general program.

The members of the executive committee are at present Dr. Yang, Jee Mo, Dr. Kwak, Hyun Ho, Dr. J. Courtland Robinson, Dr. Yun, Duk Jin, Dr. Bang, Soo, Dr. Kim, Myung Ho. Although we are not too faithful we do try and meet at periodic intervals.

In addition to some of the reasons I have already stated I would like at this time to list a number of objectives which we spelled out when we first began to formally organize.

OBJECTIVES

Before going into details concerning the exact nature of the Project it is necessary to spell out certain objectives and concepts which both define the goals as well as the means of achieving them. In some of these statements will be found both a means as well as a goal.

1) Although difficult to support with statistics it is obvious that a need for health services does exist in the community around the hospital.

2) As a Christian organization it is our duty to respond to this need by supplying such a program.

3) The organization of an overall plan in order to keep the goals clearly in mind, as well as a proper relationship between the various phases.

4) The need of departmental cooperation in planning and coordinating the work.

5) The need to pool financial resources to prevent duplication of work, and extend the effectiveness of the aid but only to the extent that the grant allows.

6) To develop a bookkeeping arrangement within the Medical Center whereby grants can be properly audited.

7) An important part of such a project will be to report to the Medical Center administration along with the reports required from the grantors.

8) The accumulation of data and other information so that at some future date the program can be reported on in the Korean Journals as an example to others of how such a program can be operated.

9) Following the pattern found in many medical centers the project will be somewhat independent of the hospital. This will allow for flexibility in the program without committing the hospital to any long range program. Most importantly it will mean that the personnel employed will have no status in the hospital and thus if the project fails there will be no need for the hospital to find new jobs.

10) Based largely on the nature of the current grants the work will center around family planning, maternal and child health and the collection of data.

Having set up an organization and spelled out our objectives within the limits of our financial resources the first item was to establish some sort of geographic area in which to work. Now family planning was already sort of city wide with particular emphasis on our general area. This was true also of the well-baby clinic for in both cases we were dealing with a population which was very mobile and a minimal need to make home visits. In contrast the home
delivery service would of necessity have to be limited if we were going to keep it within reasonable bounds and not have our nurses going all over the city. With this in mind we selected three neighboring Tongs with a combined population of around 45,000. This area also was within a reasonable distance of the hospital and transportation would not be too great a problem. From this population we could expect on the basis of the average delivery rate for the city approximately 1350 babies a year. Now the rate of 30/1000 is probably high since this area has had intensive family planning activity for a number of years. So we reduced this figure to around 800 per year. Now further there are well to do people who will seek medical care and there are in the area a few nurse midwives in general practice so with real optimism we hope to care for around 400 patients a year. So far we have not even begun to reach this figure and some further study is necessary.

The family planning service is a well established program and at present is under the medical supervision of the department of Ob and Gyn with Drs. Kwak and Song being primarily responsible. The bulk of the insertions are done by the resident staff in our department. In addition there are two nurses a social service worker, a secretary and two nurses aids. These people are of course the backbone of the project and provide its day to day continuum. At present the clinic is open four days a week and so far this year we have seen 5,324 persons with a total of 684 loops inserted and 645 women started on the pill. As part of the total program the social worker has made 707 home visits. In addition to the obvious service rendered the work has also contributed to our overall understanding of the loop, the pill, and has provided training for a number of persons not only with in the Yonsei University Medical Center but from outside as well.

Although the pediatric department had always offered a well-baby service it had been within the framework of its normal clinic program and was not separate. With the help of the OXFAM fund and some money from the City Department of Health a nurse was obtained and a separate clinic was established and it has continued to function. In contrast to the family planning and home delivery service it does divide its patients into a paying and non-paying group. To the former we send our hospital patients and it is simply a more efficient way for the department of pediatrics to handle this group. They have in addition offered a free service to the women of the community although they do not limit their area to the extent we do in home delivery. So far this year they have done a total of 4,659 examinations. Their routine is much as you would expect in this kind of service. There are monthly visits for the newborn with the routine immunizations being given as required. Part of the work is done by the staff and part is done by the resident staff. Medical students are incorporated into the program. In addition to this work the department of pediatrics also covers a special milk feeding program by providing medical supervision to babies in this program. This milk feeding program is the special interest of Miss Bournes, a nurse at Severance who tries to help those poor in the neighborhood whose babies are in a poor nutritional state. Although not an official part of the CHSP it does cooperate with us. In addition to the obvious benefit to the newborn an attempt is also made to encourage the mother to practice family planning.

Let us now turn to the maternal health or home delivery service as sponsored by the Community Health Service Project. Our basis objective was to provide as much as possible a free or low cost delivery plan whereby the mothers in the area around the hospital receive the maximum amount of care so that they and their babies will be healthy and normal.

This plan focuses around a staff of attending
and resident doctors, along with a group of nurse-midwives. Through various means of communication the pregnant women of the area are encouraged to come to the hospital for antepartum care. This care is rendered by both the resident doctor and the nurse midwife. After screening by the doctor suitable patients are allowed a home delivery. Perhaps to put it in a better way the doctor tries to select out those patients who because of a poor obstetrical history will require a hospital delivery. In this way we try to have as normal a patient as possible for home delivery. This also makes it more pleasant for the nurse-midwife for it means we have tried to screen out as many problems as possible.

During the course of antepartum care the nurse makes visits to the home both to find where it is as well as to evaluate it in terms of doing a delivery. We have a sort of an unwritten rule that if it is completely unsuitable we will arrange for the mother to deliver in the hospital.

Postpartum the baby will be sent to the well baby clinic and the mother encouraged to attend our family planning clinic. Now in addition to the service rendered to the neighborhood as a witness of the concern of the hospital it will also provide a place to teach medical and nursing students. We are also interested in collecting sufficient data as to costs and the like so that eventually we can present some data on which the city might base its needed maternal and child health program. We are already receiving a minimum of support from the city so we have high hopes that perhaps we can be of some service to them.

I have already described how we picked our neighborhood and have told what we hope to do. However, our plans have not quite turned out as we hoped. The response has been less than expected. First of all I did not hire my first midwife till the first of the year and did not get a full staff till around March. Also I have tried to limit our service to those women who come for antepartum care before the 30th week so this tends to rule out those who might want a free delivery but are uninterested in antepartum care. At present I have four nurse midwives and by adjustment of their schedule there is one on duty every night and no one nurse works more than 44 hours a week including night duty. Antepartum clinic is held every Tuesday and Friday afternoon at which time most of the nurses are present as well as the resident doctor on duty. I try and get there when time permits. A complete history and careful physical exam is done as well as routine laboratory work. The patient is then asked to return at periodic intervals and is usually given iron and vitamins. The nurse will make home visits in between the regular hospital visits until labor begins. When the call comes in the nurse on duty takes her pack and goes to the home. Postpartum she make a daily visit to check on the mother and baby until all is well and then goes less frequently. Because the current patient load is rather light the nurses are able to make frequent home visits, however, this will probably decrease with what we hope will be an increasing patient load.

In March we had our first home delivery and every month since then it has gone up slightly patients with a total of 74 for the year so far. For these 74 women the nurses have made a total of 325 postpartum home visits. Now this is not a very large number of patients but it does suggest that with time the women of our area might become convinced that antepartum care and a proper delivery are good things.

Although we have fairly well solved the more mechanical aspects of the work we are still a long way from understanding our patients much less being able to use this information so as to better motivate them. As one would say their AKP is still poor and just as with family planning we must expend more effort in this direc-
tion. Perhaps someday when the same effort has been spent for maternal and child health we will begin to get better results.

In summary then I have tried to show how in response to a high maternal and fetal morbidity and a poor response to family planning we have developed an over all plan to serve the people of our neighborhood by providing them with an integrated maternal and child health service along with a modern family planning service. This has centered around a cooperative effort of the departments of Preventive Medicine, Obstetrics and Gynecology, and Pediatrics. The basic day to day work has been done by a combination of house staff and nurses which has enabled us to provide this service at relatively low cost. Also under this plan the energies of the senior staff have been channeled more effectively and their energy has not been wasted on unnecessary details or simple routine work.

Finally we hope that out of this will come a pattern of administration and work which might be of use to the City Public Health Department in planning their own programs.

REFERENCES

3) KAVA Social Service Committe, Unpublished figures.