

Review of Family Planning / Health Integration Efforts and Evaluation Results in Korea

Sook Bang

(Soonchunhyang University)

<Contents>

I. Introduction	V. A Case Study on FP / MCH Integration : Seosan Project, Korea
II. The History of its Integration Efforts in Korean FP Programs	VI. Lessons from Operational Research on FP Integration in Other Countries
III. Clarification of Integration Issues	VII. Summary and Recommendation
IV. Previous Studies on Integration of FP with Other Services	

I. Introduction

In Korea, Family Planning was adopted as a national policy in 1962 to reduce the rate of population growth and to improve the status of maternal and child health. Since then, Korea has developed various strategies and program measures to expand the supply of FP*services and information and to create a demand for family planning during the past quarter century.

In such a process, integration of family planning with health and other development programs has been one of the issues to further enhance FP acceptance and to assist individuals to make FP decisions (Bang 1985).

This paper attempts to :

1. briefly review the historical program development related to the integration of family planning activities.
2. Clarify the definition, rationale and evaluation of integration
3. present previous studies on the potential of integrating FP with other services in Korea.
4. describe a case study on the evaluation of the integrated approach of FP / MCH**undertaken in rural Korea (Seosan County)
5. and finally to report the lessons learned from operational research on the integration of service delivery in Korea and other countries.

* This Paper was presented by Dr. Sook Bang, Director, Institute of Population and Community Medicine, Soonchunhyang University, Onyang, Korea as a background paper for the workshop on Family Planning Policy & Programme management, 17-29 August 1987 at KIPH, Seoul, Korea.

* FP : Family Planning

** MCH : Maternal and Child Health

II. The History of its Integration Efforts in Korean Family Planning Programs

Immediately after the adoption of FP as a national policy in 1962, FPP was vigorously initiated as a categorical program aiming at reducing the rate of population growth under the responsibility of M/H&SA. The Economic Planning Board (EPB) blessed the program as an investment providing cost-benefits to help the economic growth. In 1966, however when an eminent MCH expert from the U.S.A. advised the M/H&SA & PPFK to integrate FP with MCH services (Wallace 1968), FP advocates, then felt it was too early to integrate for the following reasons (Yang 1966):

1. The population problem was so urgent that family planning had to be given first priority over other health programs such as TB control & MCH.
2. Development of the MCH program in Korea was in an infant stage, and it would take too much time & cost to develop.
3. If the govt. invested the money in MCH, it would slow down the progress of FP program so far achieved, because the MCH program would also claim a lion's share of the limited available budget.
4. Furthermore, it would be costly to employ the more qualified personnel needed to carry out the more complicated MCH work while the simple CP technology could be delivered by the unipurpose workers with short-term training.

In other words, an idea of integration of MCH with FP was not well accepted for two major reasons: (1) priority in terms of cost-benefits of FPP and (2) possible competition of available resources between FP/MCH.

Thus, while one of the goals of FPP was MCH

improvement, the actual implementation in practice was a categorical program to reduce population growth rate.

However, starting in the late 1970s when FP acceptance attained a plateau at 44 percent level (Cho, 1986) and the added FP input did not commensurate its output, a new government (the 5th Republic) began to look into the possibility of integrating MCH with FP in order to further strengthen the population control program as a part of the 5th Economic-Social Development Plan which emphasized the social aspects, aiming at welfare state by the year 2,000 (EPB, 1981).

In this context, since 1981 some policy changes were made in organization, personnel, resource allocation toward the integration of MCH with the on-going FPP (M/H&SA 1982). For example:

1. In the administration, a new family health section, Public Health Bureau was established in the M/H&SA by merging the FP section and the MCH section (a MCH section was first established in 1963 when FP became a national policy. The section became a MCH Bureau in 1972 with two sections FP section & MCH section).

2. For field personnel, the government upgraded uni-purpose workers (temporarily employed in FP, TB, MCH respectively) as regular health workers with civil service status in 1981, asking them to perform multi-purpose work after receiving an additional 4 months training.

3. For research, the Korea Institute for Population and Health (KIPH) was inaugurated in 1981 by merging two institutes, KIFP (established in 1971) and KHDI (established in 1975).

FPP : Family Planning Program

M/H&SA : the Ministry of Health and Social Affairs

CP : Contraceptive

PPFK : the Planned Parenthood Federation of Korea

4. In resource allocation, the meager resources and budget for MCH by 1980 had increased to 3 billion won in 1985 as the government agreed to obtain a \$30 million loan from World Bank population funds to build 90 MCH centers (since 1982) at the county level.

5. The 1973 MCH law was revised in 1986 to strengthen both FP/MCH activities.

In 1981, a new population policy and program was adopted to augment population control by integrating CP-supply oriented FPP with incentive and disincentive measures such as special subsidies to sterilized couples and free primary health care to a child of those sterilized after having one child. This program was supported by other Ministries, especially the Ministry of Home Affairs. During a period from 1982 to 1985 for this new policy and program, 100 billion won or 57 percent of a total of 181.5 billion won for FP from 1961 to 1985 was spent (M/H&SA, 1986). Because of this booster program campaign, there was a phenomenal increase of tubectomy acceptance and this resulted in an increase of FP acceptance from 58 percent in 1981 to 70 percent in 1985 (Cho 1986).

But the budget for MCH was still low. For example in 1985, the annual budget for FPP was ₩30 billion, but in the same year the budget was ₩3 billion for MCH and this included ₩2.7 billion to repay a portion of the World Bank loan which was used for construction of MCH center buildings.

As we reviewed the brief history of Korean FPP as mentioned above, much of the FP service delivery in Korea has been achieved by the categorical program of the technical agency (M/H & SA) which has direct responsibility, authority and resources for family planning, and

has administrative lines from high levels in the bureaucracy of the Ministry of Home Affairs down to the individual field workers.

The strength of this categorical FP program lies in its limited goals, the acquisition of resources and the building of an organizational process specifically for the demographic goals and also the commitment to the goals of family planning has also led to develop extensive linkages with other sectors such as mass media, and the private sector (private practitioners clinic, hospital). Contrary to Korea, a few countries such as Thailand, Malaysia, Sri Lanka, Singapore show successful cases where FP has become an integral part of the regular rural health and MCH programmes. In part, the success in this area comes largely from using the existing health network to increase the contact points with the local population (ESCAP 1981).

Thus the potential requirements of integrating structure and process can be different between countries depending on the stage of development of FPP in different program settings. Before presenting the potentials of integration in Korea, it is proper to clarify the integration issues especially in terms of definitions, rationale, evaluation of integration.

III. Clarification of Integration Issues

As mentioned earlier, starting in the late 1960s, FP acceptance in many national programs attained a plateau and many experts and many international meetings recommended that FP must be integrated into health services and other development programs including rural development. One of the main concerns, however, is how many integrated family planning projects

are "real" integration rather than "symbolic". There are few studies and reports to explain the real meaning and practice of such integration.

In this connection, when the author was in the ESCAP (United Nations Economic and Social Commission for Asia and the Pacific), in collaboration with Prof. Gayl Ness (the University of Michigan), we reviewed the definition, type and level of integration and developed an evaluation scheme to assess the integrated program (ESCAP 1977). Also, recently, Seward and Fong(1983) reviewed the same. In this section, to clarify the integration issues, it is proper here to summarize some of those review in terms of (1) definition, (2) dimensions,(3) rationale and assumption, and (4) methodology for evaluation.

1. Definition :

According to the Oxford dictionary, integration is the making up or composition of a whole by adding together or combining the separate parts or elements. When applied to the integration of family planning with health and other development activities, the basic meaning of integration is the bringing together of specialized and differentiated units or activities into a single or more coordinated whole set of activities. Stated more explicitly, integration implies interactive linkages between specialized activities.

Recently an ESCAP meeting generalized this meaning as a concept that connotes broad approaches to linking differentiated functions in interdependent fashion that are adapted to meeting the basic needs of the people in different local situations (ESCAP 1981).

2. Dimensions :

Integration has occurred in countless different ways in varying contexts, and can be viewed along several dimensions.

1). Levels of Integration

Firstly level of integration can take place at various levels (ESCAP 1978). At the national level, the establishment of an umbrella coordinating committee can enable policy makers to take account of development-population interrelations in the formulation of overall development programmes (**policy integration**).

Integration can also occur among ministries or agencies, as when family planning activities are subsumed within maternal and child care in the health ministry, or the staff of family planning and health agencies are encouraged to interact (**Agency or sector integration**).

Finally, integration may be evident at the level of programme service delivery. For example, family planning and health services may be delivered by the same multi-purpose field-workers, or single-purpose workers in a clinic may be directed to work together as a group (**role integration**).

2). Type of Integration

It is also possible to differentiate between administrative or service integration(UNFPA 1979). "Administrative integration" implies that an organization, such as a government ministry, has administrative control over several specialized services. This form of integration addresses issues of administrative authority, responsibility, jurisdiction and accountability. "Service or functional integration" involves the linking together of several functions at the point of service delivery, such as a rural health clinic, and is concerned with issues of worker roles and time allocation, referrals and individual contacts.

3). Structure and Process of Integration

The form of integration can be conceptualized in terms of its structure and its process(ESCAP 1979). The "structure of programmes" can be

designed in such a way as to bring together specialized activities. For example, integrated programmes for health and family planning have been designed in which family planning activities are to be carried out by health field staff along with their health duties. The "process of integration", on the otherhand is the extent to which the prescribed integration is actually delivering all services equally well.

While structural integration can help facilitate the process of integration at the delivery level, it does not necessarily guarantee such a uniting of activities.

4). Services Mixes

A final dimension of integration is services mixes & organizational designs. These questions are related to the comprehensiveness, timing and sequence of combining different activities. One approach is to introduce a comprehensive package of activities together at the same point in time.

For example, the Alma Ata 1978 declaration calls for the introduction of family planning as part of Maternal and Child Health services within a comprehensive primary health care programme (WHO 1978).

An alternative approach would be a selective combination of relatively low-cost services which over time can develop into more fully integrated programmes, that are able to incorporate a wider range of services as capacity grows (Winikoff & Brown 1980).

3. Rationale and Assumption of Integration

The rationale for integration of FP with health can be described in the context of three aspects : namely (1) Fertility-development interrelations : (Mauldin & Berelson 1978), (2) Fertility-health interactions(Omran & Standly 1981) and (3) Child-survial hypothesis(Taylor & Newman 1976).

Growing evidence regarding such relationships

between fertility and health have led scholars and planners to speculate about, and experiment with the integration of these variables at the programme delivery level.

At the conceptual level, it has been hypothesized that integrated programmes and potentially more efficient and more effective than single purpose programmes which deliver services separately. Several authors have suggested that the integration of family planning and health has potential to increase efficiency and lower the costs of delivery. For example, it is hypothesized that a delivery system using multipurpose health field-workers to provide both family planning and health services should require fewer worker-client contacts and less worker time and should be less costly per person assisted than the delivery of these same services separately (Johnston & Meyer 1977).

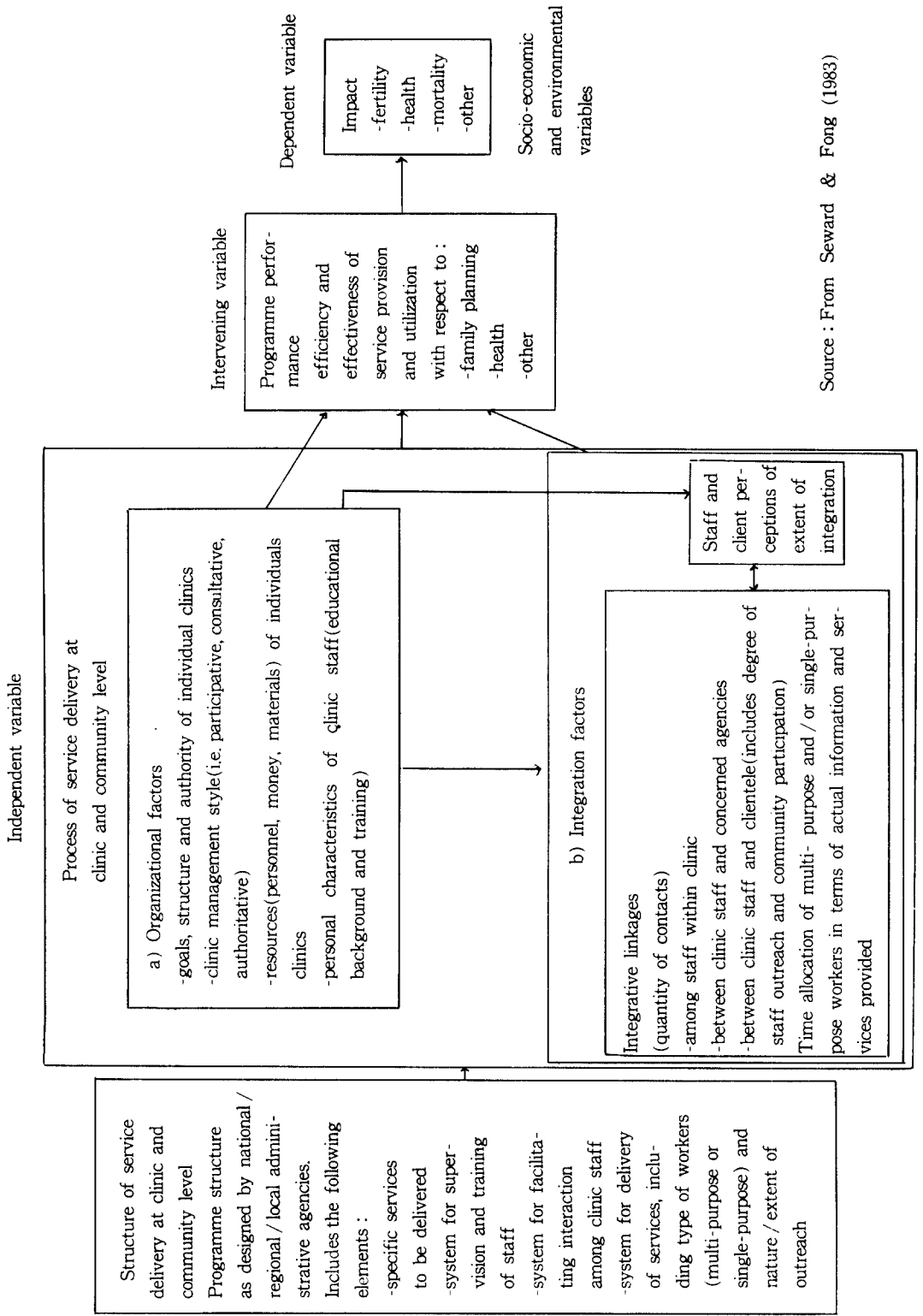
The hypothesis related to greater effectiveness of integrated family planning and health service delivery is based on four assumptions : (1) greater accessibility to the client population most at risk, (2) higher motivation of workers, (3) the possibility of explicitly strengthening the natural interrelations between health and fertility and (4) child-survival hypothesis.

4. Evaluation of Integration

There are many pilot projects based on the above rationale and assumptions. On the basis of the conceptual and methodological lessons learned in previous research, a framework for evaluating integrated family planning programmes has been proposed(Seward & Fong 1983). A framework is presented schematically in Fig. 1.

The framework described in Fig. 1 proposes a methodology for measuring the process of integration at the clinic / community level, and for evaluating integration in terms of programme performance and impact.

Fig. 1. Proposed Framework for Evaluation of Integrated Family Planning Programmes



Source : From Seward & Fong (1983)

IV. Previous Studies on Integration of Family Planning with Other Services

In spite of the categorical FPP in Korea, there have been some efforts to study the potential of integration of FP with health and other programs at various levels.

At the service delivery level, many community health (CH) demonstration projects as undertaken by universities and hospitals (Soonchunhyang 1986) asking health workers to functions as multiple health workers to perform FP and other work (role integration).

They also set up village health post workers to link health workers and the villagers in the delivery of FP, MCH and other health services. Most of CH projects were not originally designed to compare the effectiveness of multipurpose workers in comparison with uni-purpose workers. Thus, net effects of role integration on FP and other health services can rarely be measured.

Another issue of integration at the service level, is a proper service mix, requiring a selective combination of relative low-cost services.

In collaboration with JOICFP (1983) which advocates a humanistic approach to FP, PPFK conducted an integrated Family Planning-Nutrition-Parasite control program for 1977-1985 in Hawsung (PPFK 1987).

The objective of the project was to increase the worker's credibility to persuade FP by providing antihelmintics. The project also developed village committees for community participation.

At the sector or agency level, the FP workers and New Village Movement (Community development) workers are instructed to interact for promotion of FP (sectorial integration).

In order to examine this aspect, an experimental study on the integration of FP/Health

care with community development program was conducted in Ichon by Yonsei University (Ahn et. al. 1983).

It reported that the degree of village integration is related to commitment, educational level & solidarity and it is also related to the productivity of the New Village Movement. This in turn, provided better results in FP. Thus it concluded that community "integration" is an important factor. But integration between FP/New Village Movement (Saemaul Undong) for FP performance was not successful due to :

1. Lack of administrative / organizational linkage between the two sectors.
2. Role and responsibility assigned by different lines of command was not well delineated.
3. Lack of detailed instruction on their respective roles in linking the two programs.

Therefore, the Ichon study indicated that integration of FP/Saemaul was not well achieved due to organizational factors inherent to the Korean FPP and Saemaul program.

To evaluate the organizational determinants of integrating FP in the New Village Movement, a study was undertaken by the Seoul National University (Yu & Kim 1979) as a part of ESCAP-Korea/Malaysia study.

While the Korea study looked into the integration of FP with Saemaul Undong, the Malaysia study focused on the integration of FP with MCH (Fong 1979).

In this ESCAP study, integration was defined as a linkage process of specific elements or activities to achieve their common goal. The linkage process variables have two dimensions; one is related to organizational factors (i.e. leadership, authority etc.), another is related to inter-linkage factors (i.e. quantity of contacts). It is hypothesized that these two process variables are related

to FP performance.

The Korea study concluded that organizational factors were related to the performance of Saemaul but not to the increase of FP performance. The better performance of Saemaul was not always related to the FP performance. However, in the Malaysia study the better performance in MCH is related to better FP performance.

The differences between the two programmes can also be used to provide some prescriptions for integration. According to the ESCAP's review (ESCAP 1981), integration in the Malaysian programme appears to be working fairly well. It is important to note, however, that this is an integration with MCH, where the difference in the tasks being linked together is not great. Further, the Malaysian integration scheme was carefully planned over a number of years of close negotiation between the National Family Planning Board and the Ministry of Health. The training and supervisory requirements were carefully worked out, as were the numbers and type of additional staff needed specifically for integration.

In the Republic of Korea, however, integration was assessed with the community development programme. In this case, there was a negative relationship between family planning performance and community development performance. Further, time given by the family planning staff to community development was negatively associated with family planning performance.

The Korean programme was not specifically planned to be integrated programme. It was planned to be and has operated as more or less a single-purpose programme, though with considerable variance at the local level, where the township chief has some administrative control over the field-workers.

Since it was not planned for integration, it did not address the specific resource and administrative problems that arise in the more complicated organizational setting of the integrated programme. Since it was not planned for this, whatever additional integration did take place detracted from programme performance (ESCAP 1981).

V. A Case Study on FP / MCH Integration : Soesan Project Korea

Taking into account the previous studies done in Korea and the method of evaluation mentioned in section III, the author undertook a "service research" project on FP / MCH integration in Soesan County, Korea in collaboration with WHO (Bang et.al, 1987). We briefly summarize the project highlights as follows :

1. Title :

An Intervention Study on Integration of Family Planning and Maternal / Infant Care Services in rural Korea, 1981-1984.

2. This project was a service-cum-research effort with a quasi-experimental study design developed to examine the health benefit of an integrated FP / MCH approach that provides crucial factors missing in the present on-going programs in Korea.

3. The Specific Objectives :

1) To test the effectiveness of trained nurse / midwives (assigned as change agents in the Health Sub-Center) to bring about the changes in the eight FP / MCH indicators, namely : (i) FP / MCH contacts between field workers and their clients (ii) the use of effective FP methods, (iii) the inter birth interval and / or open interval, (iv) perinatal care by medically qualified personnel, (v) medically supervised delive-

ries, (vi) the rate of induced abortion, (vii) maternal and infant morbidity, and (viii) perinatal and infant mortality.

2) To measure the integrative linkage (contacts) between MW and HSC workers and between HSC and clients.

3) To examine the organizational or administrative factors influencing integrative linkage between health workers.

4. Study Design :

The above objectives called for quasi-experimental design setting up a study and control area with and without a midwife. An active intervention program (FP / MCH minimum "package" program) was conducted for a 2 year period from June 1982—July 1984 in Soesan County (see Fig.1)* and "before and after" surveys were conducted to measure the change(see Fig.2).

5. Service Input :

This study was undertaken by the Soonchunhyang University in collaboration with WHO. After a baseline survey in 1981, trained nurses /midwives were introduced into two health subcenters in a rural setting (Seosan County) for a 2 year period from 1982 to 1984.

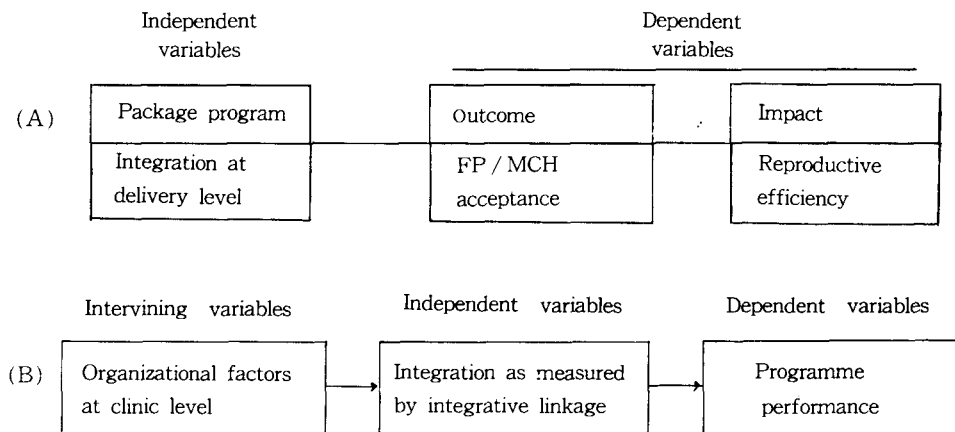
A major service input was the establishment

of midwifery services in the existing health delivery system with emphasis on the Nurse / Midwife's role as the link between health workers (nurse aids) at the health sub-center level (see Fig.3), and village health workers, and the referral of risk patients to the private physician (OBGY specialist). Additional inputs planned on the study area are given in Table 1. An evaluation survey was made in August 1984 to assess the effectiveness of this alternative integrated approach in the study areas in comparison with the control area which had normal government services. Some data obtained from this evaluation were analyzed as follows :

6. Method of Evaluation :

In this study, the primary objective was first to examine to what extent the FP / MCH package program brought about changes in the predetermined eight indicators(outcome & impact measures) and the following relationship was first analyzed. (see (A) scheme).

Nevertheless, this project did not automatically accept the assumption that if two or more activities were integrated, the results would automatically be better than a non-integrated or categorical program. There is a need to assess



* All the figures and tables are shown in the Appendix.

the "integration process" itself within the package program. The process of integration was measured in terms of interactive linkages or the quantity and quality of contacts between workers and clients and among workers. Integrative linkages were hypothesized to be influenced by organizational factors at the HSC clinic level including HSC goals, structure, authority, leadership style, resources, and personal characteristics of HSC staff.

The extent or degree of integration, as measured by the intensity of integrative linkages, was in turn presumed to influence programme performance. Thus as indicated diagrammatically below (see(B) scheme), organizational factors constituted the independent variables, integration as the intervening variable and programme performance with respect to family planning and health services as the dependent variable :

Concerning organizational factors, however, due to the limited number of HSCs(two in the study area and 3 in the control area), they were studied by participatory observation of an anthropologist who was independent of the project. She examined whether the assumed integration process actually occurred or not. If not, what were the constraints in producing an effective integration process.

7. Summary of Findings :

A. Program Effects and Impact

(1). Effects on FP use :

During this 2 year action period, FP acceptance increased from 58 percent in 1981 to 78 percent in 1984 in both the study and control areas (see Table 2). This increase in both areas was mainly due to the new family planning campaign drive by the Government for the same study period. Therefore, there was no increment of FP acceptance rate due to additional input of MW to the on-going FP program.

But in the study area, quality aspects of FP were somewhat improved, having a better con-

tinuation rate of IUDS (52% vs 41%) and pills (22% vs 12% at 12 months) as shown in Table 3 and use of less effective contraceptive (CP) methods in comparison with the control area (18.4% vs 25.1%) as shown in Table 4.

(2). Effects on use of MCH services :

Between the study and control areas, however, there was a significant difference in maternal and child health care. For example, the coverage of prenatal care was increased from 42 percent for 1981 birth cohort to 78 percent for 1984 birth cohort in the study area(see Table 5). In the control area, the same increased from 41 percent (1981) to 65 percent (1984). It is noteworthy the almost two thirds of the recent birth cohort received prenatal care even in the control area, indicating the there is a growing demand of MCH care as the size of family norm becomes smaller.

There has been a substantive increase in delivery care by medical professions in the study area, with an annual increase rate of 10 percent due to midwives input in the study areas. The project had about two times greater effect on postnatal care (68% vs 33%) and delivery care (45.2% vs 26.1%) as shown in Table 6.

The study area had better reproductive efficiency (wanted pregnancies with FP practice and healthy live births survived by one year old) than the control area, especially among women under 30(14.1% vs. 9.6%) as shown in Table 7-1 and 2.

While it was too early to assess to impact of the integrated program on the infant mortality rate, there was a trend to show more a declining rate in the study area than in the control area (see Table 7-3).

B. Effects on Interactive Linkage

This project made a contribution in making several useful steps in the direction of service integration ; namely :

1). The health workers have become familiar

with procedures on how to work together with each other (especially with a midwife) in carrying out their work in FP/MCH and,

2). The health workers have gotten a feeling of the usefulness of family health records (statistical integration) in identifying targets in their own work and their usefulness in caring for family health.

3). Villagers were much more likely to visit the health subcenter clinic in the study area than in the control area (58% vs 31%) as shown in Table 8 and for more combined care (45% vs 23%) as shown in Table 9.

On the other hand, because of a lack of required organizational factors, complete linkage was not obtained as the project intended.

1). In regard to the government health worker's activities in terms of home visiting, there was not much difference between the study and control areas though the MWs did more home visiting than Government health workers.

2). In assessing the service performance of MW and health workers, as shown in Table 10, the midwives balanced their workload between 40 percent FP, 40 percent MCH & 20 percent other activities (mainly immunization). However, 85-90 percent of the services provided by the health workers were other than FP/MCH, mainly for immunizations such as the encephalitis campaign. In the control area, a similar pattern was observed. Over 75 percent of their service was other than FP/MCH. Therefore, the working pattern shows the health workers are a long way from becoming multi-purpose workers even though the government is pushing in this direction.

When MW (new workers with higher qualifications) were introduced to HSC, it was noted that there were conflicts between the existing

HSC workers (Nurse aids with less qualification than MW) for the beginning period of the project. The cause of the conflict was studied by an anthropologist and it was pointed out that these functional integration problems stemmed from the structural inadequacies of the health sub-center organization as indicated below :

1). There is still no general consensus about the objectives and goals of this project between the project staff and the existing health workers.

2). There is no formal linkage between the responsibility of each member's job in the health sub-center.

3). There is still little chance for midwives to play a catalytic role or establish communicative networks between workers FP/MCH services in the health sub-center.

Based on the above findings the project recommended to the County Chief (who has power to control the administrative staff and the technical staff in his county) is the following :

(1). In order to solve the conflicts between the individual roles and functions in performing health care activities, there must be goals agreed upon by both.

(2). The health sub-center must function as an autonomous organization to undertake the integration health project. In order to do that, it is necessary to support administrative considerations, and to establish a communication system for supervision and to control the health sub-centers.

(3). The administrative organization, tentatively, must be organized to bind the health worker's, midwives and directors jobs by an organic relationship in order to achieve the integrative system under the leadership of health sub-center director.

* There was also difference in level of performance between MWs assigned in the study area, depending on MW's personal characteristics in terms of age, training and working experiences.

After submitting this observation report, there has been better understanding from frequent meetings and communication between HW/MW in FP/MCH work as the program developed.

8. Lessons learned from the Seosan Project (on issues of FP/MCH integration in Korea)

As a majority or about 80 per cent of the couples are now practicing FP, as indicated by the study, there is a growing demand from clients for the health system to provide more MCH services than FP in order to maintain the achieved small size of family through FP practice. It is fortunate to see that the government is now formulating a MCH policy for the year 2,000 and revising MCH laws and regulations to emphasize more MCH care for achieving a small size family through family planning practice.

Goal consensus in FP/MCH should be made among the health workers and administrators, especially to emphasize the need of care of "wanted" child. But, there is a long way to go to realize the "real" integration of FP into MCH in Korea, unless there is a structural integration of FP/MCH because a categorical FPP is still first priority to reduce the rate of population growth for economic reasons but yet for health/welfare reasons.

There should be more financial allocation : (1) a midwife should be made available to help to promote the MCH program and coordinate services. (2) there should be a health sub-center director who can provide leadership training for managing the integrated program.

Need of management training for middle level health personnel is more acute as the Government has already constructed 90 MCH centers attached to the County Health Center but without adequate manpower, facilities, and guidelines for integrating the work of both FP and MCH.

There is a need for "organizational support", if the decision of integration is made to obtain

benefit from both FP and MCH. In other words, costs should be paid equally to both FP/MCH (or any health services). The integration slogan itself, without the commitment of paying, such costs, is powerless to advocate it.

The local government still considers these MCH centers only as delivery centers to take care only of those visiting maternity cases. The MCH center should be a center for management of all pregnancies occurring in the community and the promotion of FP with a systematic and effective linkage of resources available in the county such as Village Health Worker, Community Health Practitioner, Health Sub-Center, Physicians and Health Workers, Doctors and Midwives in MCH Center, OBGY specialists in clinics and hospitals as practiced by the Seosan Project at the primary health care level.

VI. Lessons from Operational Research on FP Integration in Other Countries

So far we reviewed the experience gained in Korea. Recently, the Population Information Programs (PIP) of the Johns Hopkins University published an article to review lessons for policy and programs learned from operational research on the integration issues of FP service delivery (PIP 1986). It is also proper here to quote some of lessons from those integration efforts in other countries.

In most settings where national FPP is strong, integration of FP with other health and development measures at the service delivery level is not necessary to increase CP use as experienced in Bangladesh (Degraff et.al. 1986), Tunisia (Maguire 1982), and Columbia (Gomez 1985).

However, offering other health services can provide credibility for FP providers and can help develop rapport between community health wor-

kers and clients. These observations come from places as apart as Bangladesh(Phillips 1984), Tanzania (Nangawe 1984), Tunisia (Maguire 1982) and Zaire (Bertrand 1985).

Phasing in a small number of new services over-time may be the most feasible way to implement an integrated CBD*program as used in Bangladesh (Phillips 1984) and Sudan (Tom 1984). In other words, it warns us that under the premisses of integration, the program leaders should not over load the workers with high technology which can not be handled by health workers and villagers Therefore, if we wish to be successful in integrating FP with other services, the following lessons must be kept in mind.

①. The project can establish credibility through offering tangible services (such as parasite control drugs and maternity care services) depending on cost and feasibility in a given local situation.

②. The project should have flexibility to avoid overloading workers with too many new tasks at once.

③. The project should carefully select the measures to be offered, based on feasibility as well as popular approval and potential health benefits (Kols et.al. 1982, Wawer 1985).

④. The project needs careful planning in introducing the new services to be integrated (Phillips et al. 1984).

⑤. Failure often comes from the integrated program area, because the offer of many health measures takes attention away from FP (Maguire 1982).

VII. Summary and Recommendation

Based on the above lessons learned from the various studies done in Korea and other count-

ries, we can summarize the integration issues of family planning programmes as follows :

1). "Integration" is not the end itself but the means to bring together the elements of an integrated program. In selecting such elements, they should be focused on the needs of the people or community(if possible with the help of experts) but not just by the program administrators.

2). Integration means the process of linking each special task toward the common goal, the organizational factors and integrative linkage factors. Therefore, to implement "assumed" integration for a certain benefit (which is a goal), there needs to be an effort to link the two or more service thru the frequent contact and working together in terms of planning, implementation and evaluation.

3). However, such linkage at the service delivery level will not be effective without policy and program level integration in terms of organizational factors to support the interactive / linkages in developing integration strategies for family planning with other programs.

4). The management of the integrated program is essential to relate organizational performance. This relationship should continually be assessed as to whether the assumed linkages are actually occurring, what are the organizational factors that are interfering with the effective linkages and whether the yield from each element equals the yield from the integrated program (ESCAP 1981).

5). Since many field workers and administrators are not well trained in managing an integrated program, a management workshop is necessary to delineate the common goals and objectives of an integrated program to enhance understanding of meaning and value of each area

*CBD : Community-Based Program

(i.e. FP, MCH) and to clarify each worker's role and to clarify each worker's division of labour in carrying out the specific elements of the integrated program (The needs are more acute in a country like Korea where the field workers and administrators are more familiar with the categorical program).

6). The benefit of integration can not occur automatically. The evaluation of the integrated program has different prospects; depending on the question: who benefits from what? We have in the Asia region a wide range of integrated FP programs in all development areas. These programs currently show wide variance in the amount of interagency coordination or integration, and in the quantity and quality of services provided. In this connection we recommend policy makers and researchers to assess the so-called "integrated" family planning program by asking the following eight basic questions (Bang 1975):

- (1) What are the goals of the larger integrated program, or of the specialized elements of the program?
- (2) How many different agencies are involved in the project and what is the nature of their inputs?
- (3) What is the nature of the coordination and communication among the various agencies?

- (4) What is the nature of the personal resources available for the project?
- (5) What is the size and array of inputs into the project or program?
- (6) How much and what kinds of evaluation have been done on the project?
- (7) What have been the outputs of the project?
- (8) Who has received the most benefit from the project?

In summary, the danger is that new ideas for integration, for increased communication activities, and for more community-based activities may become simply a new set of symbols giving promise of some simple magical solutions to complex and difficult problems. New programs and new approaches should mean more than expansion of administrative structures, more jobs, more payments and power for a growing corps of administrative personnel. In any case, for the benefits of the integrated program, cost must be paid.

Thus, if the aim of the integrated approach to FP and other development is to provide better family planning and other services to the rural and urban masses, we should do our best to find ways and means of effectively and efficiently integrating all the available developmental activities to ensure maximum benefits for all.

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Appendix : Figures and Tables

Figure 1. Location of the Study and Control Areas in Seosan County

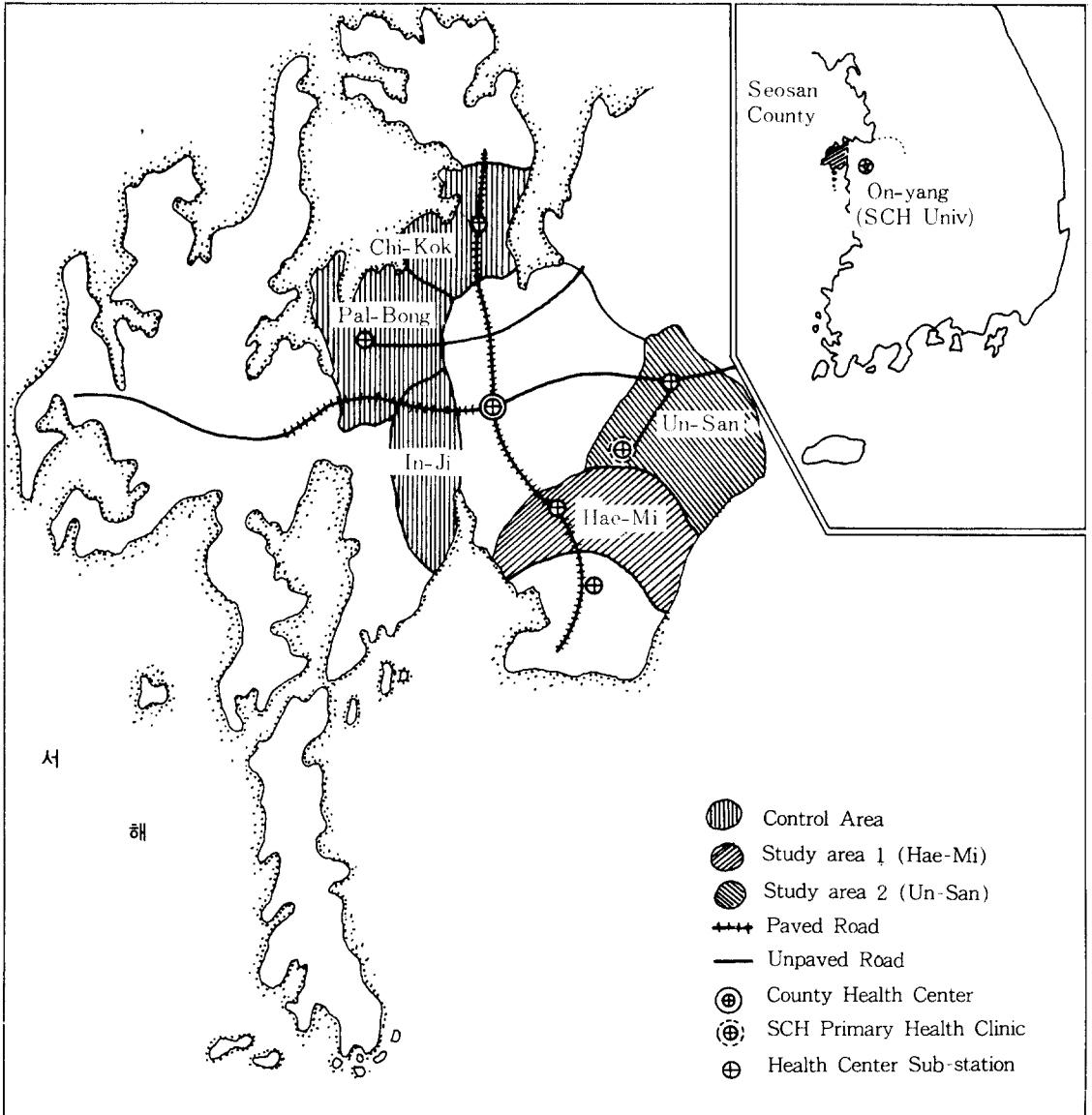


Figure 2. Overall Design of Study

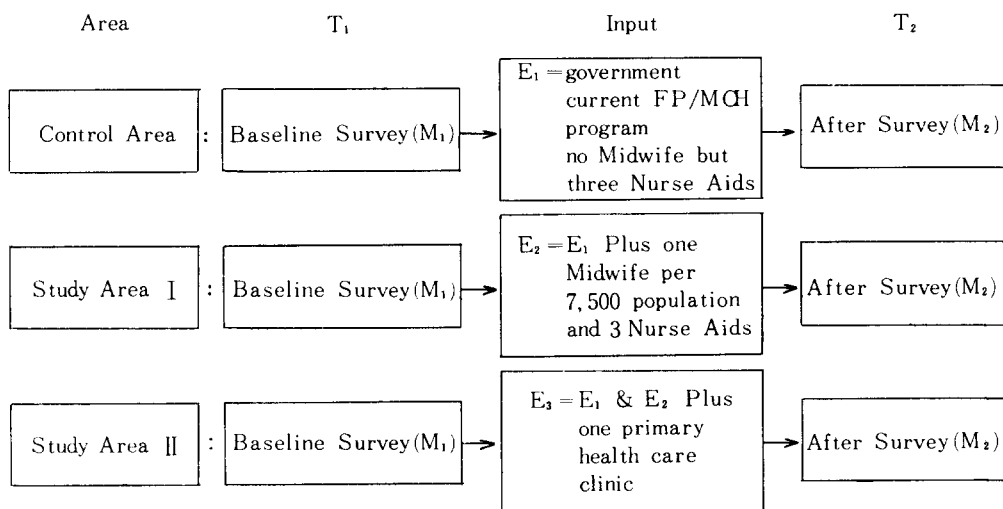
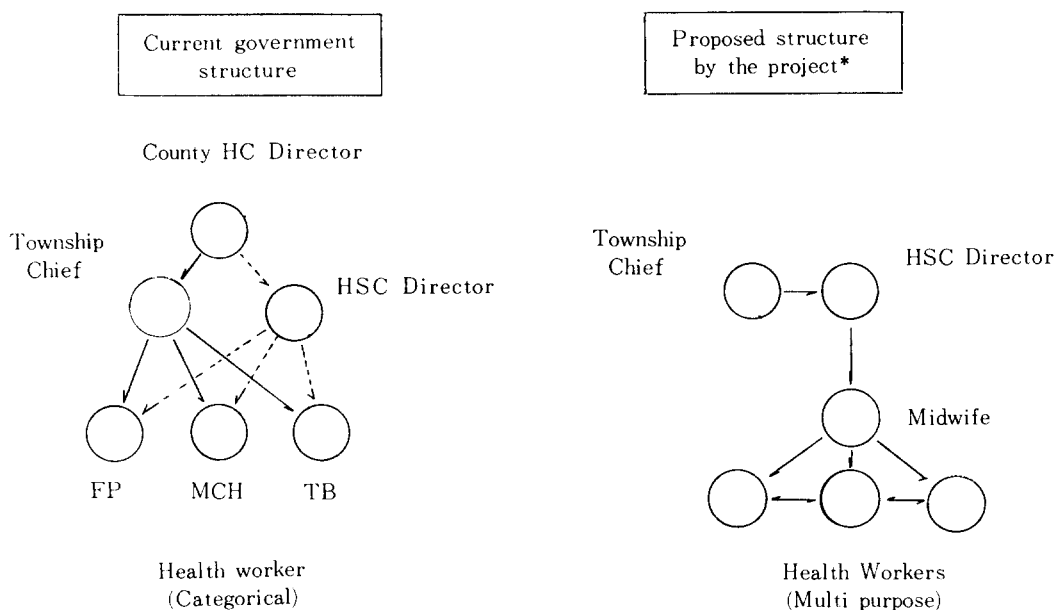


Figure 3. Current and Proposed Health Sub-center Structure



* This proposed structural change is needed not only for this project but also for the country-wide as the health program is currently operated by the dual system by M/Home Affairs & M/HSA .

Table 1. Service Inputs

Current FP/MCH Program Activities	Intended Additional Inputs in the Study Area
1. No midwife	1. Midwife
2. Auxiliary nurses (AN) working mostly as categorical workers (one for MCH, one for FP and one for TB) and slow change to multi purpose workers	2. Auxiliary nurses becoming increasingly multi purpose with stimulation by midwife
3. AN work independently with limited professional supervision	3. AN work with professional guidance from midwife
4. Prenatal and postnatal care given by AN are referred to MD. No screening for risk group	4. Prenatal and postnatal care given by midwife for low risk groups. High risk groups who are adequately identified are referred to MD
5. Group education by AN less frequent	5. Community education by AN and midwife more frequent
6. Case finding and home visiting by AN	6. Case finding and home visiting by AN and midwife
7. Contraceptives are supplied by AN. Women requiring IUD are referred to MD. Abortion cases are referred to doctors	7. Contraceptives are supplied by AN. IUD are inserted by midwife. Abortion cases are referred to qualified doctors

Table 2. Rate of Family Planning Practice and Effective Percent Change (EPC) Before and After Intervention by Study and Control Area, 1981 and 1984

Family planning status	Practice Rate(%)								
	Study Area I (Hae-mi)			Study Area II (Un-san)			Control Area		
	Before (N=680)	After (N=632)	Z-test & EPC*	Before (N=602)	After (N=656)	Z-test & EPC	Before (N=1,202)	After (N=1,070)	Z-test & EPC
Never Used	27.6	18.2	P<.01	29.1	16.0	P<.01	28.0	19.8	P<.01
Ever Used	72.4	81.8		70.9	84.0		72.0	80.2	
Discontinued	(13.3)	(9.0)		(12.3)	(9.0)		(13.3)	(6.6)	
Current Use	(59.1)	(72.8)	33.5	(58.6)	(75.0)	39.6	(58.7)	(73.6)	36.1

*EPC= Effective Percent Change

$$*EPC = \frac{P_2 - P_1}{100 - P_1} \times 100$$

where, P_1 = % in the "before" survey

P_2 = % in the "after" survey

Table 3. Cumulative Continuation Rate of IUD, Oral Pill, Other Methods, by Area, 1984 Evaluation Survey

Month X+ 1	IUD			Oral-pill			Other methods		
	Control area	Study area	Total	Control area	Study area	Total	Control area	Study area	Total
(No. of cases)	(48)	(89)	(137)	(58)	(103)	(161)	(239)	(209)	(448)
1	0.77	0.78	0.78	0.43	1.53	0.52	0.79	0.69	0.65
6	0.60	0.60	0.60	0.20	0.35	0.30	0.60	0.42	0.50
12	0.41	0.52	0.50	0.12	0.22	0.20	0.48	0.25	0.35
18	0.39	0.45	0.43	0.12	0.17	0.15	0.43	0.15	0.29
24	0.39	0.41	0.40	0.09	0.10	0.10	0.40	0.12	0.26

Table 4. Rate of Current Users by Contraceptive Methods Before and After Intervention by Area, 1981 and 1984

Family planning methods current using	Rate & Current User(%)								
	Study Area I			Study Area II			Control Area		
	Before (N=680)	After (N=632)	EPC	Before (N=602)	After (N=656)	EPC	Before (N=1,202)	After (N=1,070)	EPC
IUD	5.4	8.2	3.0	8.6	5.3	3.6	6.2	6.7	0.5
Oral-Pill	5.1	4.6		4.9	2.5		4.5	3.1	
Condom	6.2	4.9		4.5	3.5		3.4	4.2	
Tubectomy	12.7	30.6	20.5	13.7	33.9		15.0	31.2	19.1
Vasectomy	2.9	6.0		3.3	4.3	23.4	1.7	3.2	
Other methods	26.8	18.5	11.3	23.6	25.5	2.5	27.9	25.1	3.9

Table 5. Percent of Women who Received Prenatal Care when She had the Last Child under 2 years old Before and After Intervention by Area, 1981 and 1984

Prenatal care or not	Study Area			Control Area		
	Before (N=535)	After (N=299)	χ^2 -test & EPC	Before (N=406)	After (N=277)	χ^2 -test & EPC
Cared	42.1	78.3	62.5	38.1	63.8	41.5
Not cared	57.9	21.7		61.9	36.2	

Note: * Percent figure of the study area is an average percent of the study area I and II in each respective table.

** N=Number of the last live births during a 2 year period before each survey.

Table 6. Percent of Delivery Attendance by Medical persons for those Last Birth Occured for 2 years Before and After Intervention by Area, 1981 and 1984

Delivery attendance	% of Attendance					
	Study Area			Control Area		
	Before (N=535)	After (N=299)	χ^2 - test & EPC	Before (N=406)	After (N=277)	χ^2 - test & EPC
			P < .01			P < .05
Medical Person (Physician)	26.1 (25.0)	45.3 (27.1)	25.7	15.2 (14.1)	28.3 (25.4)	15.4
(Midwife or Nurse)	(1.1)	(18.1)		(1.1)	(2.9)	
Non-medical Person	73.8	54.8		84.8	71.7	

Table 7-1. Distribution of Reproductive Efficiency Score for Last Pregnancy during Last 4 years Period (1981-1984) and by Area

Efficiency	Study Area (N=621)	Control Area (N=512)
1. Induced abortion group	36.6	34.2
2. Fetal death or infant death group	4.0	4.1
3. Unwanted pregnancy but live-birth group	15.0	14.5
4. Wanted pregnancy without family planning, "live-birth" group	33.2	37.9
5. Wanted pregnancy with family planning, live-birth(spacing group)	11.3	9.4
Mean	2.8	2.8

Table 7-2. Distribution of Reproductive Efficiency Score for Last Pregnancy during Last 4 years Period by Age Group and by Study and Control Area

Efficiency Score	Study Area			Control Area			Total		
	>29 (N=277)	30-34 (N=168)	35+ (N=166)	>29 (N=299)	30-34 (N=149)	35+ (N=134)	>29 (N=500)	30-34 (N=306)	35+ (N=300)
1	15.5	27.4	60.8	16.6	38.9	58.9	16.2	20.8	60.0
2	3.2	4.2	5.4	3.1	5.4	4.5	4.5	3.2	5.0
3	19.2	15.5	12.0	12.2	19.5	12.7	15.0	18.0	12.3
4	48.0	25.6	18.1	58.5	23.5	18.7	53.4	27.6	18.3
5	14.1	14.9	3.6	9.6	12.8	5.2	12.2	8.8	4.3
Mean	3.4	2.6	2.0	3.4	2.7	2.1	3.4	2.0	2.0

Table 7-3. Trend of Infant Mortality (per 1,000 live births) by Study and Control Area, Seosan County, 1961-1984

Year	Study Area			Control Area			Whole Area		
	No. of Live Birth	No. of Infant Death	Rate	No. of Live Birth	No. of Infant Death	Rate	No. of Live Birth	No. of Infant Death	Rate
1961-1965	636	82	128.9	577	70	121.3	1,213	152	125.3
1966-1970	993	87	87.6	962	86	89.4	1,955	173	88.5
1971-1975	1,185	66	55.7	1,222	77	63.0	2,407	143	59.4
1976-1981.7	1,022	42	40.7	1,242	47	37.8	2,264	89	39.1
1981-1984.7	522	13	25.6	449	16	34.7	971	29	30.0

Table 8. Contact Rate with Health Workers during the Last One Year Before each Baseline and Evaluation Survey

	Contact Rate		
	Baseline	Evaluation	EPC
Study Area I	(N=680)	(N=632)	
- Home visiting by Govt. health workers	5.0	27.1	23.3
- Health Center visits by eligible women	37.1	62.8	40.9
- Home visiting by midwives	-	40.5	-
- Attending to mother's club activities	23.4	26.9	4.6
Study Area II	(N=602)	(N=565)	
- Home visiting by Govt. health workers	13.0	18.2	6.0
- Health Center visits by eligible women	30.4	51.9	30.9
- Home visiting by midwives	-	14.9	-
- Attending to mother's club activities	34.9	32.9	-3.1
Control Area	(N=1,202)	(N=1,070)	
- Home visiting by Govt. health workers	15.4	27.5	14.3
- Health Center visits by eligible women	32.9	31.3	-2.4
- Home visiting by midwives	-	-	-
- Attending to mother's club activities	37.8	39.4	2.6

Table 9. Reasons for Visiting to Health Sub-Center by Eligible Women during the Last One Year Before each Baseline and Evaluation Survey

Reasons for visit	% Reasons								
	Study Area I			Study Area II			Control Area		
	Baseline (N=252)	Evaluation (N=397)	EPC	Baseline (N=183)	Evaluation (N=293)	EPC	Baseline (N=395)	Evaluation (N=335)	EPC
Family Planning	8.7	4.6	-4.6	13.1	11.0	2.4	13.1	7.7	-6.8
Maternal Care	8.7	1.0	-8.4	14.8	2.5	-14.4	8.5	1.4	-7.8
Infant Care*	35.6	24.9	-16.5	51.1	44.3	-13.9	48.0	56.6	16.5
Combination	23.3	51.4	36.6	12.6	39.0	30.2	17.4	23.0	6.8
Others	23.7	18.1	-7.3	8.4	3.2	5.7	13.0	11.8	1.4

*Immunization

Table 10. Comparison of Monthly Average Number of Service Provided Each Worker for Each Program Activity of the Health Sub-center, Study and Control Areas, May to August 1984

Service Content by Area	Midwife	Health Worker (FP)	Health Worker (MCH)	Health Worker (TB)	Total
Study Area					
Family Planning	399 (39.1)	60 (3.6)	43 (2.8)	26 (1.7)	527 (9.2)
Maternal Care	177 (17.4)	11 (0.7)	43 (2.8)	4 (0.3)	236 (4.1)
Infant & Child care	288 (22.4)	110 (6.5)	151 (9.8)	89 (5.9)	578 (19.1)
Others	216 (21.2)	1,499 (89.2)	1,296 (84.5)	1,377 (92.0)	4,388 (76.6)
Total	1,020 (100.0)	1,680 (100.0)	1,533 (100.0)	1,496 (100.0)	5,729 (100.0)
Control Area					
Family Planning	-	227 (27.2)	-	130 (8.4)	407 (14.4)
Maternal Care	-	48 (4.7)	-	218 (1.0)	67 (2.3)
Infant & Child Care	-	122 (12.0)	-	127 (7.2)	249 (8.6)
Others	-	573 (56.2)	-	1,487 (84.4)	2,060 (71.5)
Total	-	1,020 (100.0)	-	1,762 (100.0)	2,882 (100.0)