

**POPULATION
AND
FAMILY PLANNING PROGRAM
IN
KOREA**

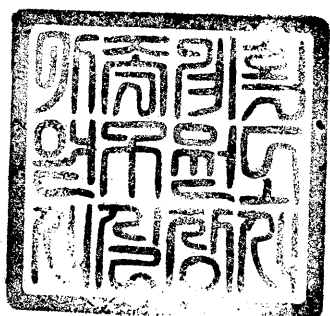


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Korean Institute for Family Planning
Republic of Korea

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NATIONAL FAMILY PLANNING PROGRAM

by

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POLICY

In 1961, the government of the Republic of Korea issued a statement indicating the importance of a strong family planning program to the achievement of national goals, and in the following year the establishment and operation of a national program under the direction of the Ministry of Health and Social Affairs was included as a component of the First Five Year Economic Development Plan (1962-1966). In 1963, the Prime Minister issued the "Family Planning Encouragement Plan" to promote the program as a priority government project, specifying actions to be taken by the various Ministries and requiring the formulation of long range plans in collaboration with the family planning program. As a result, laws barring the import of contraceptives were repealed and local manufacture of foam tablets, condoms, and later, loops was made possible. Since that time the government has taken policy action on many occasions to stimulate the family planning, most recently through an executive order in 1973 directing all Ministries to cooperate in family planning promotion and through the enactment of the MCH law legalizing induced abortion in the same year.

The family planning program is thus a government program, an integral part of the development plan. While the program involves non-governmental agencies in its implementation, their activities are coordinated by the Ministry of Health and Social Affairs, where overall planning is also carried out. There is no legal provision specifying the limits and operation of the program. Official policy is expressed through executive decrees, cabinet decisions and budget allocations to the program.

GOALS AND ACHIEVEMENTS

According to census figures, the Korean population in 1960 was about 25.0 million, and had been growing at a rate of 2.9% per year during the 1955-60 period. Reduction of this high rate of increase was made an integral part of the economic development plan. The ten year plan for the family planning program formulated in 1963 set targets of reductions in the annual population growth rate to 2.5% in 1966 and 2.0% in 1971. The program was relatively successful in achieving these goals. Census data and other studies indicate that population growth had in fact fallen to around 2.0% by 1971, and targets have been established for further reduction to 1.5% by 1976 and 1.3% by 1981.

The family planning program is not of course the only factor affecting fertility and population growth. Higher age at marriage and the increased incidence of induced abortion have also played an important part. It is not possible to measure the relative impact of these factors in reducing fertility with any real precision, but some studies have been conducted which give us a rough idea of the relative demographic effect of the program and other factors. It appears that of the 30% decline in fertility registered over the first ten years of program activity, about 12% was due to the rise in age at marriage, around 7% to the increase in the use of induced abortion, and the remaining 11% to family planning. While these estimates are crude, they do serve to indicate that the family planning program has played a significant role in fertility decline in Korea. The indirect influence of broad social forces has undoubtedly contributed,

to the drop in fertility. Development and modernization have had a strong, though difficult to analyze, influence. The rising status of women and their greater participation in the labor force presumably help to account for the rising age at marriage and reduced fertility within marriage. The system of required military service for men probably also has an effect in this direction.

PROGRAM OPERATION

The Korean national family planning program has been implemented primarily by three organizations; the Ministry of Health and Social Affairs, the Planned Parenthood Federation of Korea and the Korean Institute for Family Planning. The Ministry is in charge of overall planning and coordination and for the maintenance of the national service network. Until 1970, program evaluation was also carried out by the Ministry. The PPFK, a private, voluntary association established in 1961, has responsibility for the information education and communications support component of the national program, including support of the nationwide system of family planning Mothers' Clubs set up in 1968. It also operates a system of 14 urban family planning clinics originally established as demonstration sites, and conducts pilot projects of various descriptions. In the early part of the program, it played an important role in the training of field program staff and medical professionals. KIFP, a semi-governmental agency, was founded in 1970 and was delegated responsibility for the training of program staff, which had previously been carried out by PPFK, and for research and evaluation.

These three organizations work together closely in the implementation of the program under the direction of the Ministry. This arrangement enables the delegation of responsibility to the participating agencies, taking advantage of their particular strengths and minimizing overlapping and duplication while maintaining program integration.

The program has also benefitted by the activities of universities and research organizations in pilot and research projects.

Services

Most services are provided through the government network of health centers and designated private practitioners. This system was established at the beginning of the program by adding family planning fieldworkers to the staffs of the already existing county level health centers. The network is operated by the Ministry of Health and Social Affairs in cooperation with the Ministry of Home Affairs, which has authority over provincial and local governments. This Ministry acts through nine provincial and two metropolitan governments, each of which has a family planning unit within its public health-social affairs bureau. Targets for contraceptive acceptors are given to the provinces. From there they are passed on to the counties, and then to the towns and townships, where they finally reach the fieldworkers stationed in the county health centers and township-level subcenters throughout the country. From the beginning this organization provided an automatic network for routine administration, a channel for reporting and definite chain of command from the national to the local level. The existence of this structure enabled the program to get off to

a fast start without having to build a new organizational structure.

This system has concentrated on the delivery of family planning services in rural areas. Because of the explosive urbanization of the last decade, however, the facilities in the cities are no longer adequate to fill the growing needs there, and plans have been made to expand the urban service network in the cities.

The implementation of the program depends on the family planning fieldworkers. During the initial stage of the program in 1962-63 the government hired and trained about 380 nurse-midwives to work in the existing county and city health centers as family planning workers. In 1964 it was decided that this number was insufficient to meet the goals of the program, and lay workers were recruited to work on the town and township level as assistants to the health center workers. These personnel, who totalled 1,473, were for the most part high school graduates. There is currently a total of about 2,500 family planning fieldworkers throughout the country working under the 196 county health centers, an average of one worker for every 1,200 eligible couples in rural areas and one for every 4,000 in urban areas.

The fieldworkers receive targets based on the population of the administrative area in which they serve, which they fill by recruiting acceptors of the program methods through home visits, and group meetings. The target system ensure that strong administrative pressure is brought to bear to encourage achievement, so that targets tend to act as a floor below which performance does not fall, but the targets have also often

tended to act as ceilings above which achievement does not rise. The fieldworkers distribute oral pills and condoms themselves, and refer IUD and sterilization acceptors to the designated physicians, who have been trained and authorized by the government. These physicians provide the services at their own facilities and are reimbursed by the government on per case basis. For each IUD and sterilization referral, the fieldworker also receives a small incentive. IUDs, vasectomies, tubal ligations and condoms are provided to the clients free of charge. Pills are sold at a modest price. Mobile units were introduced in 1966 to help deliver services in the remote areas, which it was difficult for fieldworkers to cover adequately.

Services are also offered at the fourteen urban clinics of the PPFK. Originally established in 1968-68 as sites for demonstration projects and medical training, this system was augmented in the early 70s to help meet the growing need for services in urban areas. The full range of family planning services is offered at these clinics, which are reimbursed through the program for IUDs and sterilizations.

Some contraceptives are available through commercial channels as well. Pills, condoms, jellies and foams are manufactured locally and sold at pharmacies. In early 1968 legislation was passed to make the import of contraceptive materials tax exempt, thus stimulating the commercial firms. In recent years non-program practice of contraception has shown significant gains, particularly condoms and rhythm.

Acceptors experienceing side effects as a **result** of contraceptive use are given free medical treatment. Minor complications are dealt with by the private physicians, while cases of major complications are referred to provincial or university hospitals.

Current users of contraceptives increased very rapidly from the start of the program through 1966 and slowly thereafter, with a drop in 1968. It is estimated that about 32% of married couples from 20-44 are now-using some form of contraception, about 1.4 million users.

a) IUD Program

Since the initiation of the IUD program in May 1964, it has been the principal method of the family planning program. The cumulative number of IUD acceptors reached about 2.8 million by the end of 1973.

Acceptance of the IUD is greatest among women in their thirties, reflecting a growing desire by still fecund women of the middle parity groups to avoid further pregnancies. The acceptance rates for the IUD increase as the level of education decreases; over 50% of all acceptors are women with little formal education, although women in this group comprise less than 45% of the total women in the country.

The level of IUD discontinuation continues to be a serious problem, however. It is estimated that the 2.8 million IUDs inserted to date have yielded only about 500,000 current users. This reflects the fairly high IUD termination rate -- roughly 43% after one year. Urban women show a higher termination rate after one year (54%) than rural women (38%). However the fertility rate is low after IUD termination because

most women resort to other methods of contraception and to induced abortion.

b) Oral Pill Program

The national oral pill program began in 1968. During the first year of the program, the pill was intended only to compensate for IUD discontinuation, but the following year this restriction was dropped and pills were made available to all women who desired them.

According to government service statistics there were 26,300 average monthly users of oral pills in 1968, 91,200 in 1969, 170,500 in 1970, 199,000 in 1971, 218,800 in 1972 and 234,600 in 1973. The large increase in 1972 is largely attributable to the discontinuation of the preliminary medical examination that year.

The failure to achieve more widespread acceptance of the pill is due in part to the fact that the IUD program is older and better known and receives more emphasis. It probably also reflects a lack of interest among younger couples to practice family planning. There is also some indication that the pill suffers from the effects of rumors which exaggerate the frequency and seriousness of side effects.

c) Condom Program

There are roughly 150,000 regular monthly users of condoms. In the early days of the program, tablets and jellies were distributed as well as condoms, but for effectiveness and simplicity, the other methods were dropped from the program. They are made locally and bought with govern-

ment funds. They are supplied free to couples through the program, usually a dozen a month.

d) Sterilization Program

Vasectomy has been offered through the national program since it was first established. It has not been used as much as the other methods. Some fieldworkers complained that vasectomy was the hardest method for them to recruit and that there were many negative rumors circulating about adverse side effects. The method has been the subject of increased interest in recent years, however, and has begun to receive more program attention as acceptor totals have increased. Payments to designated physicians and recruitment incentives for fieldworkers were tripled in 1972, and tubal ligation, which had sporadically been done in the context of the vasectomy program, began to receive stronger program support. Tubal ligations in 1973 accounted for 17% of all sterilization achievement.

New evaluation findings show that about 75% of vasectomized men were under age 40. Most important, their wives were not much older than IUD acceptors, the mean ages in 1968 being 34.5 for the wives of vasectomized men and 32.5 for IUD acceptors. Moreover, vasectomy and IUD couples differ little in number of living children (4.4 and 4.0 respectively). These figures suggest that the vasectomy may be an extremely worthwhile area of program development, in view of its potential in terms of birth averted.

Information, Education and Communications

The national program has been supported by a wide variety of information,

education and communication activities, including mass media, inter-personal and organizational approaches. These are the main responsibility of the PPFK.

An extensive public information campaign began in 1961 as the program was being initiated aimed at spreading awareness of the need for a family planning program among social leaders. As the program began to function it was supported by massive information and education activities conducted as a part of the National Reconstruction Movement. Several government agencies, including the Ministry of Defense and the Ministry of Culture and Public Information also made important contributions in this initial period. As the program became established, responsibility for most of the information and education activities was delegated to the PPFK. These included the production and distribution of posters, calendars, leaflets and contraceptive methods, counter-cards for restaurants, fans and other promotional items. Government fieldworkers were provided with leaflets for distribution and flip charts and pelvic models for use as educational devices. In addition to support for the government fieldworkers, IEC activities have involved the extensive use of mass communication channels, approaches to existing organizations, and inter-personal approaches, including the maintenance of a nationwide system of village level family planning Mothers' Clubs. In the 1970s the IEC effort became a focus of increasing interest on the part of program planners and a comprehensive program was formulated. In a related program, population education curricula are being developed by the Ministry of Education.

a) Home Visits and Group Meetings

One of the main channels of inter-personal communication used by the program is the government fieldworker. Through home visits and group meetings, they carry the informational and motivational effort to their clients. In their lectures they use flip charts and other educational devices. Family planning literature is also distributed during these activities.

Lectures and meetings are also sponsored by the PPFK for particular groups, primarily in the urban areas. Representative programs of this type are special lectures for college students and presentation for PTA meetings.

b) Mothers' Clubs

Another important inter-personal channel of communication is represented by the village level family planning Mothers' Clubs. Women's clubs devoted to community development date back several years to the National Reconstruction Movement of the early 1960s. In view of the success enjoyed by these groups, program authorities decided that similar clubs to promote family planning should be established, and in 1968 16,868 family planning Mothers' Clubs were established throughout the country, with responsibility for their support and maintenance delegated to the PPFK. These grass-root organizations were intended to stimulate demand for contraceptives and serve as additional distribution points for oral pills and condoms. Family planning is stressed as a normal part of responsible parenthood and in its connection with general life improvement and community development. A total of 140 county level supervisors

was employed, and publication of the monthly magazine "Happy Home" was started to provide text material for club meetings.

To help improve the leadership skills of the voluntary Mothers' Club leaders, a program of training was initiated by the PPFK in 1970. "Mothers' Banks", similar in nature to credit unions, have also been promoted in recent years to develop the clubs as autonomous, self-supporting organizations. The clubs have been further strengthened in recent years in connection with the Saemaul (New Community) Movement conducted by the government to stimulate rural community development. The number of Mothers' Clubs has increased to a current total of about 25,500. The clubs have been found to play a role of considerable importance in family planning IEC, supplementing the role of the fieldworker.

c) Organizational Approaches

Another major area of IEC effort is represented by the organizational approaches. These are aimed at utilizing the organizational structures of existing agencies to spread family planning, and have been growing in scale and importance in the last several years. Projects of this type range from regular lecture series conducted by program personnel to larger scale programs conducted by the organizations themselves with integrated IEC activities and services. Many of these are carried out with the cooperation of other government ministries, as is the case for example with the Homeland Reserve Force Project and the project carried out at the Civil Service Training Institutes. Other organizations involved are professional associations or private factories.

d) Mass Media

Mass media have been used extensively since the beginning of the program. Radio coverage of family planning has been almost continuous since 1962, and a wide range of programs has carried messages, including serial dramas, one-act plays, discussion programs and comedy skits. Campaigns of family planning spot announcements have also been conducted at times. TV has also been used, although not as extensively with a similar broad range of programming.

Magazines and newspapers have also been used to carry new, feature stories and in depth articles on various aspects of family planning. News releases are prepared and press conferences are occasionally held to keep them in touch with current developments. Family planning counselling columns have also appeared in some newspapers and magazines, and newspaper advertising has been utilized.

Printed materials produced for distribution by fieldworkers, clinics and drug stores and in special programs include a wide variety of informational and motivational leaflets and pamphlets, describing the contraceptive methods and the benefits of family planning. A monthly magazine is also published for distribution to the village level Mothers' Clubs and to PPFK membership.

e) Population Education

Related to this programs is the development of population education materials by the Ministry of Education. Textbooks in use in secondary schools have been examined to determine the extent of coverage

of population and related issues. Textbooks are currently undergoing revision and updating, and population materials is being carefully integrated at relevant points in these texts.

The importance of population as an area of instruction is recognized and courses are being offered in it on the primary and secondary school levels.

Training

Training has had a prominent place among the activities of the national program since its inception. In the early period, training programs were conducted primarily by the PPFK in cooperation with the Ministry of Health and Social Affairs. Responsibility for these activities passed in 1970 to the KIFP (then known as the NFPC).

When the national program was established the Ministry called upon the PPFK to implement the training of personnel assigned to the program by the government, in view of the greater flexibility with which this private organization could operate. Between 1961 and 1970, the training of nearly all family planning personnel with the exception of some nurses and nurse-aides trained by the National Institute of Health received instruction in these cooperative PPFK-Ministry courses. The designated doctors, who had to be ready to perform operations before the fieldworkers started to recruit clients, were among the first to be trained, along with the health center nurses. Another major early training task was posed when the government decided to post fieldworkers in

every township starting in 1964. The training program that was developed for these lay workers, consisted of a four day orientation, a period of on-the-job training and a twenty day refresher course later on. In 1967, it was decided that the family planning fieldworkers along with the other township level health personnel had to qualify as general purpose health workers. This meant that most of those who were already serving on the job needed extensive additional training if they were to qualify for their positions. A nine-month program was developed and implemented to meet this need. Training materials for fieldworkers were designed from the beginning to be simple, practical and directly relevant to the job. Charts models and other visual aids were developed and courses included small work groups which provided opportunities for practice.

Responsibility for training was assigned to the KIFP by the Ministry as one of its major areas of activity, along with evaluation and research, on its establishment. It was felt that by setting up this new agency the program would be able to provide more intensive training for a wider variety of personnel. The fulfillment of this function involves the provision of courses for program personnel, excluding those involved with the Mothers' Clubs, and occasional assistance in programs directed at national policy makers, social leaders or professional groups conducted by the PPFK as a part of its IEC effort.

Shortly after its establishment the KIFP instituted changes in its training program, setting up regular courses suited to the needs of the evolving program. Courses currently offered are classified into

workshop and seminar programs. Workshops offered are basic and refresher training courses for township fieldworkers, basic and refresher training for health center workers, refresher workshops for senior workers, basic training for administrators and basic training for designated physicians. Seminars are provided for provincial staff, family planning lecturers, township chiefs, county administrators, provincial administrators, health center directors, student volunteers, and auxiliary nursing school teachers.

Program restructuring also involved the adoption and refinement of new curricula, new materials and new methods. The workshops in particular are being redesigned to provide adequate coverage of IEC topics to complement the material offered on reproductive physiology, contraceptive technology, administration and general background on population and population programs. Lectures have been reemphasized in favor of field practice, small work groups and discussion sessions, and topical presentations by trainees.

Selection procedures for trainees to participate in the programs have also been regularized. In addition, the training budget has been increased and is now more secure.

Evaluation and Research

Established in early 1965, the Family Planning Evaluation Unit within the Ministry of Health and Social Affairs was until 1970 the primary organization through which program evaluation was conducted. This unit carried out three national KAP surveys, the first of them

in 1965, three IUD follow-up studies, two surveys dealing with working conditions of program personnel at various levels, and one oral pill use-effectiveness study. In 1968 it conducted a major national fertility survey. In addition to these research activities, the unit had responsibility for processing service statistics in order to observe monthly program achievement.

The evaluation and research function was absorbed by KIFP in 1970 (then known as the NFPC). The KIFP continued the collection of service statistics, with publication first in a quarterly and later in a monthly report, and evaluation and research activities diversified. A major fertility survey was conducted in 1971, along with a variety of other studies, including evaluations of particular projects, surveys of field personnel, and studies of special areas of program interest. The research and evaluation capability of the KIFP was also fully utilized in the formulation of the Third Five Year Plan for Family Planning (1972-76).

Numerous studies and survey relevant to family planning have also been conducted at universities and colleges, most notably at various departments in Seoul National University and Yonsei University. Research by individuals at other universities has also been important. The literature that this research activity has produced is quite extensive ranging from basic research to reports of action-research carried out in connection with specific pilot projects. It covers a wide range of topics, including contraceptive technology, acceptor characteristics, follow-up

of various methods, abortion, and demographic, sociological, economic, educational and health aspects of family planning. PPFK has stimulated and coordinated both field and clinical research in the past and has participated in the administration of funds for research. Independent research organizations, such as the Korean Institute for Research in the Behavioral Sciences, have also made notable contributions in recent years. Studies of population trends and fertility have continuously been supplied by the Bureau of Statistics of the Economic Planning Board. The research capability of the KIFP has expanded since its establishment, and current studies cover a wide range of topics, but the universities continue to play an important role in the provision of research related to the family planning program.

Budgets

The program is financed primarily through annual budget appropriations and estimated cost for the twelve years (1962-1973) of program operation is approximately 6.9 billion won, or 23.0 million dollars. The central government provided an average of W400 million per year and provincial and local governments provided an average of W160 million. This amounts to about W20 per person per year. This is a modest national investment to have produced such real impact on the fertility rate, thus helping many families and the nation to be better prepared for the future.

Foreign assistance has helped in research, training of personnel, information programs, and commodities. In the early days of the program

voluntary agencies such as IPPF and the Population Council provided support directly related to the program or to research. Beginning with 1968 governments, particularly SIDA and USAID started to assist, mostly with commodities. SIDA has provided all of the oral pills used by the program. USAID has promised enough pills for the next two years as SIDA is phazing out its supply in 1974. Bilateral government assistance is now being largely replaced by UNFPA projects totaling \$6,000,000 over the coming five years.

The national expenditure on the family planning program totalled \$766 million in 1973. Of this amount 24.8% was spent on contraceptive services, 42.7% on worker salaries, 9.3% for mobile units and demonstration clinics, 4.6% for office expenses, and 12.5% for other activities. Local governments have given matching funds for salaries and have provided operating costs for vehicles assigned to health centers.

PROSPECTS

Despite the relative success of the program to date in meeting its goals, there is no room for complacency, meeting the goal of a further reduction in the population growth rate to 1.3% by 1981 is inherently a much more difficult task than any faced in the past, not only must fertility be lowered, further, but the size of the target population itself will expand tremendously in the late seventies as the post Korean war baby boom generation begins to enter the reproductive age ranges and the numbers of eligible women start to grow. Furthermore, it is doubtful

the age at marriage will continue to rise as in the past or that the incidence of induced abortion will continue to increase. Consequently future reductions in fertility will be more dependent on the performance of the national family planning program, with less assistance from these non-program factors.

There are numerous problems which impede the program in its efforts to recruit more acceptors. The lack of a contraceptive method which is more convenient and acceptable than the ones currently available makes progress in recruiting acceptors difficult and contributes to high discontinuation rates. The main target of the program is also shifting from older couples with many children to younger couples and from the spontaneous acceptors recruited in the first ten years of the program to family planning resisters. The family planning IEC program is thus being **expanded** in scope to go beyond information and education efforts to approach the difficult task of motivation. The persistent traditional attitudes of male preference that still prevail in Korea constitute a strong barrier to this program.

These, then, are the major problems which the national program confronts in its effort to contribute to the achievement of population policy in Korea during the remaining years of the seventies. Whether the effort will succeed is not certain but with the continuing improvements in the organization and operation of the program, it seems confident that a reasonable degree of success can be achieved.

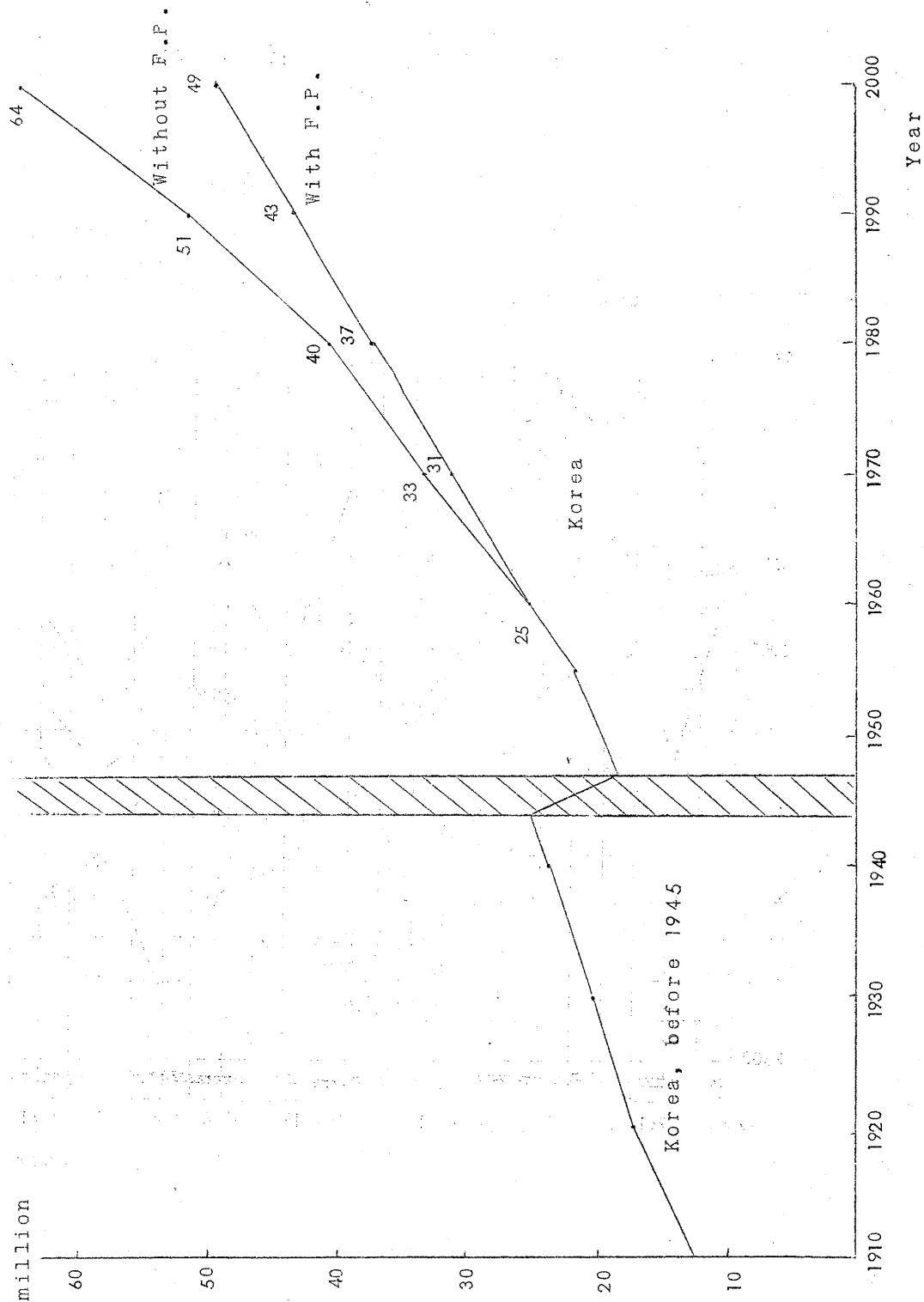
Program Achievement by Year

Unit: 1,000

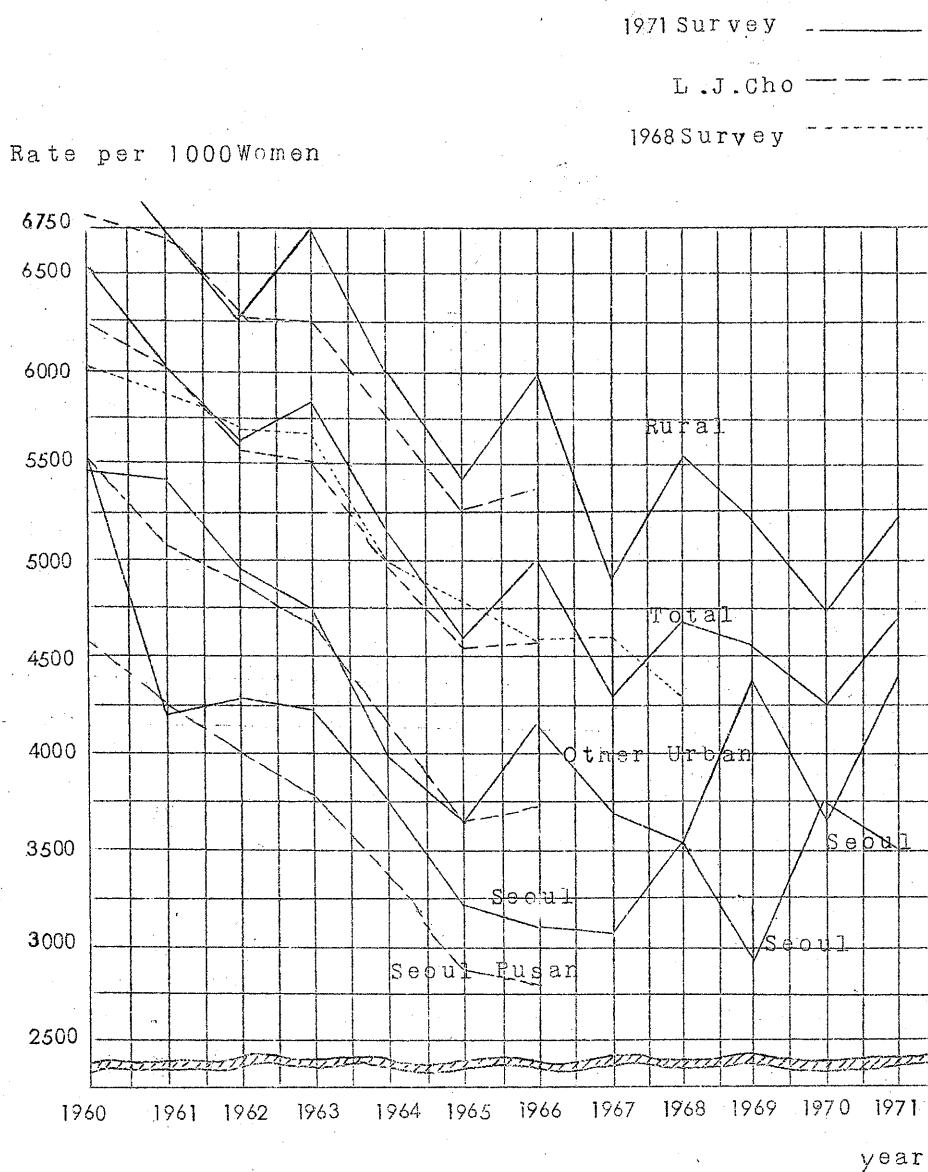
Year	I U D	Oral Pill (Monthly)	Sterilization	Condom (Monthly)
1962	-	-	3.4	59.4
1963	1.5	-	19.9	129.8
1964	106.4	-	26.2	156.3
1965	225.9	-	12.9	191.7
1966	391.7	-	20.0	168.9
1967	323.4	-	19.6	152.7
1968	263.1	26.3	16.0	135.2
1969	285.5	91.2	15.5	147.8
1970	295.1	170.5	17.3	163.0
1971	292.2	199.0	19.5	161.0
1972	299.9	218.8	19.7	154.4
1973	325.9	234.7	24.5	176.0
1974*	380.0	250.0	37.7	150.0

* The target in 1974

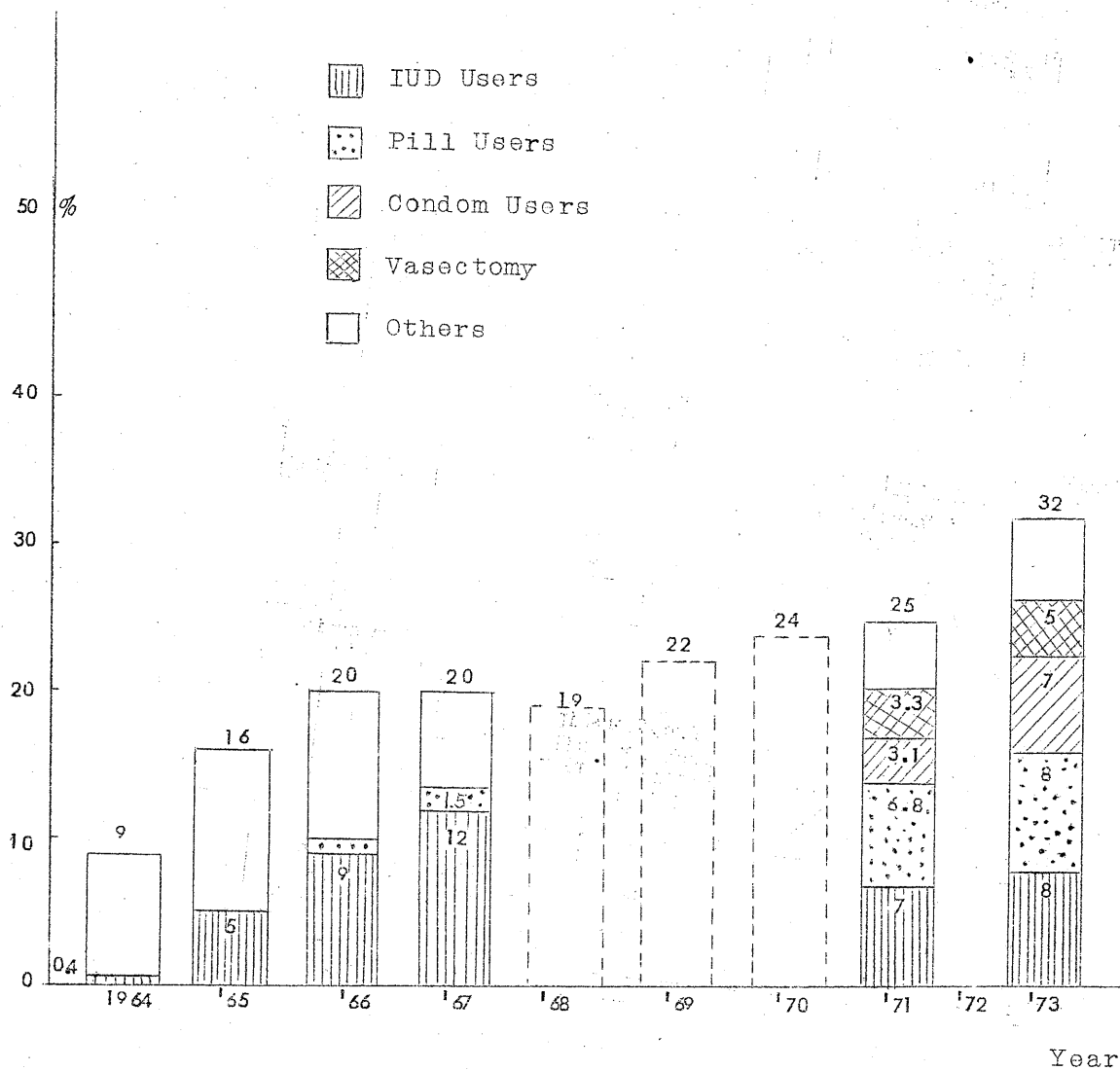
Population Growth



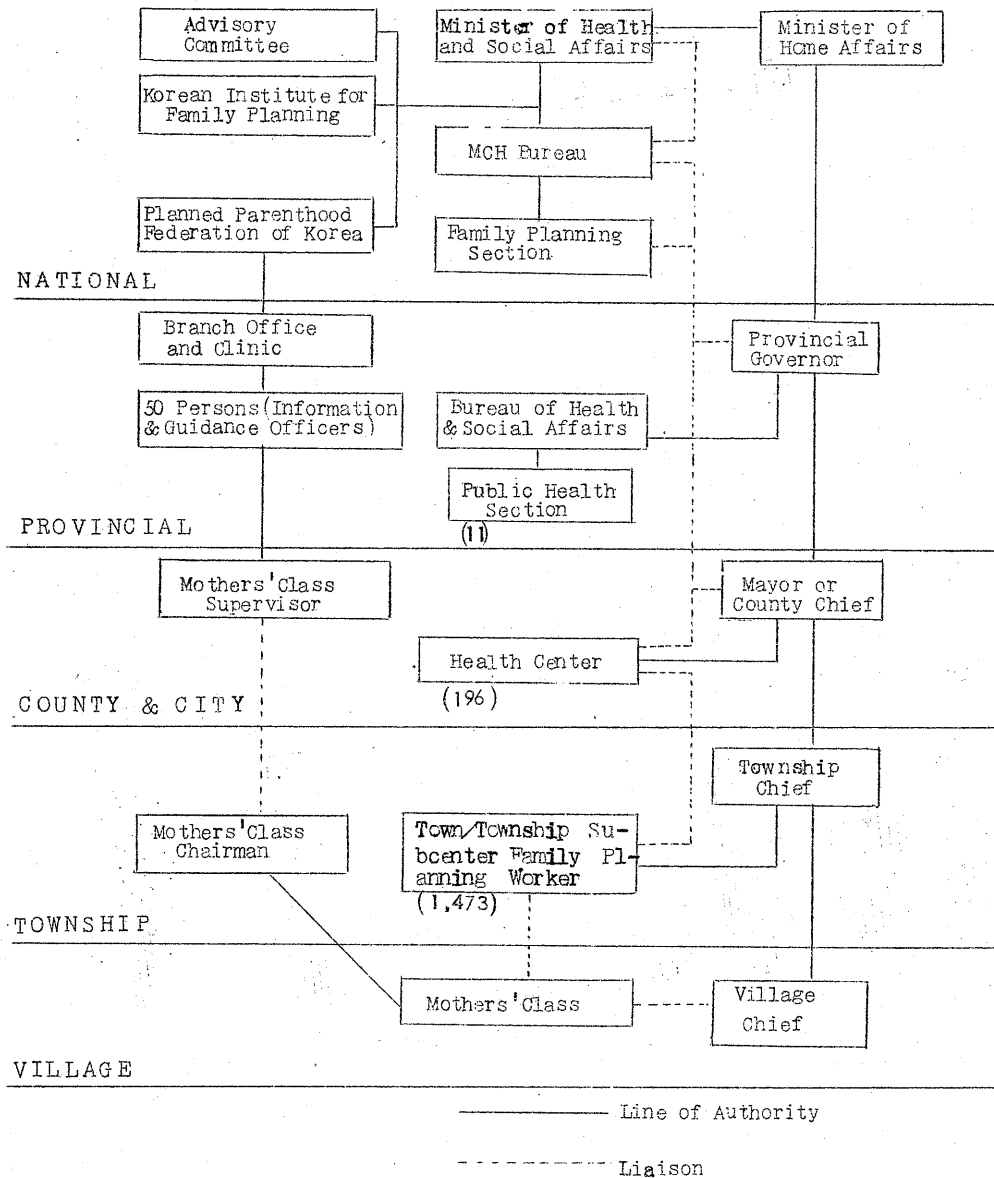
Total Fertility Rates 1960-1971



Trends of Current Contraceptive Use

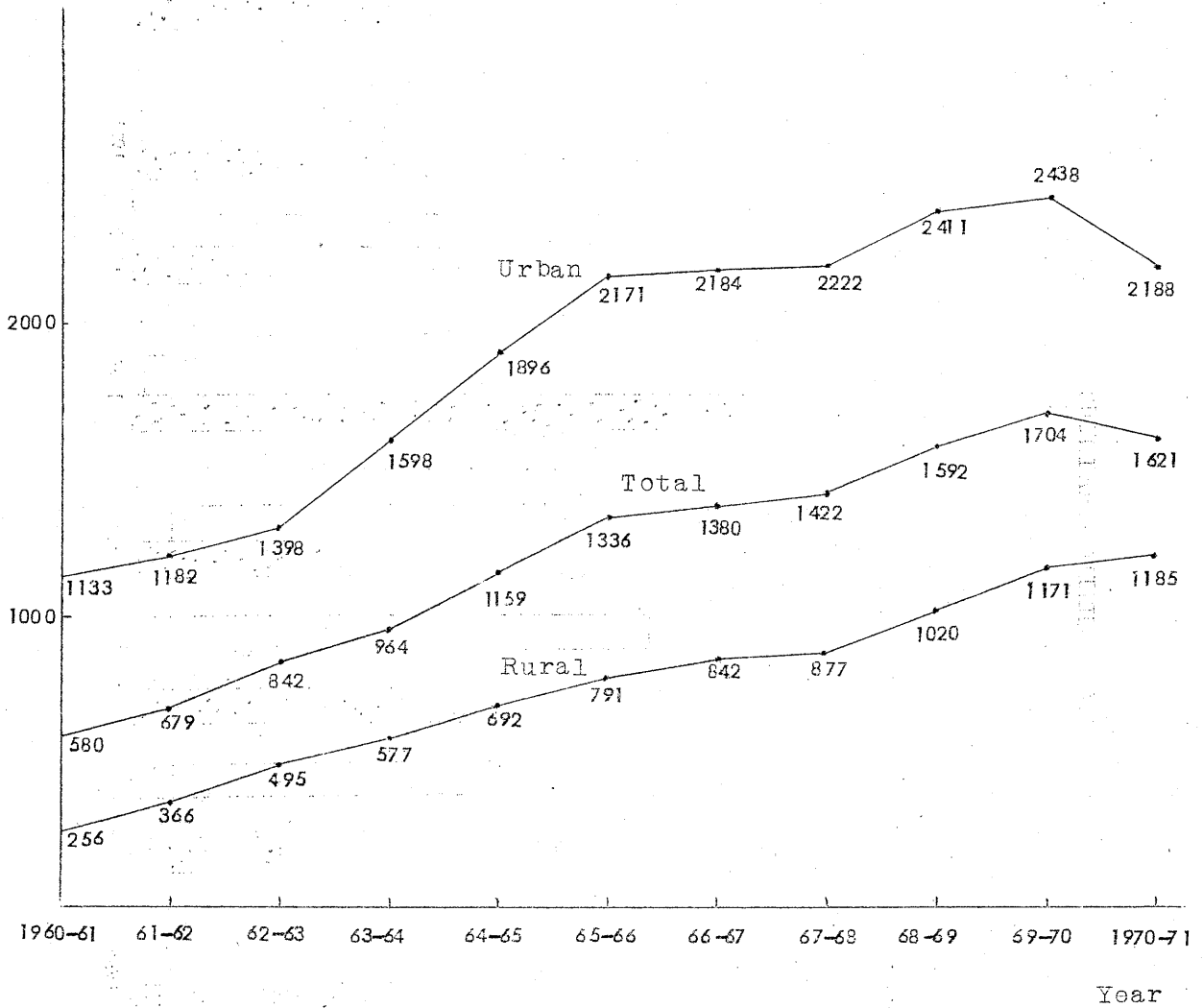


ORGANIZATION

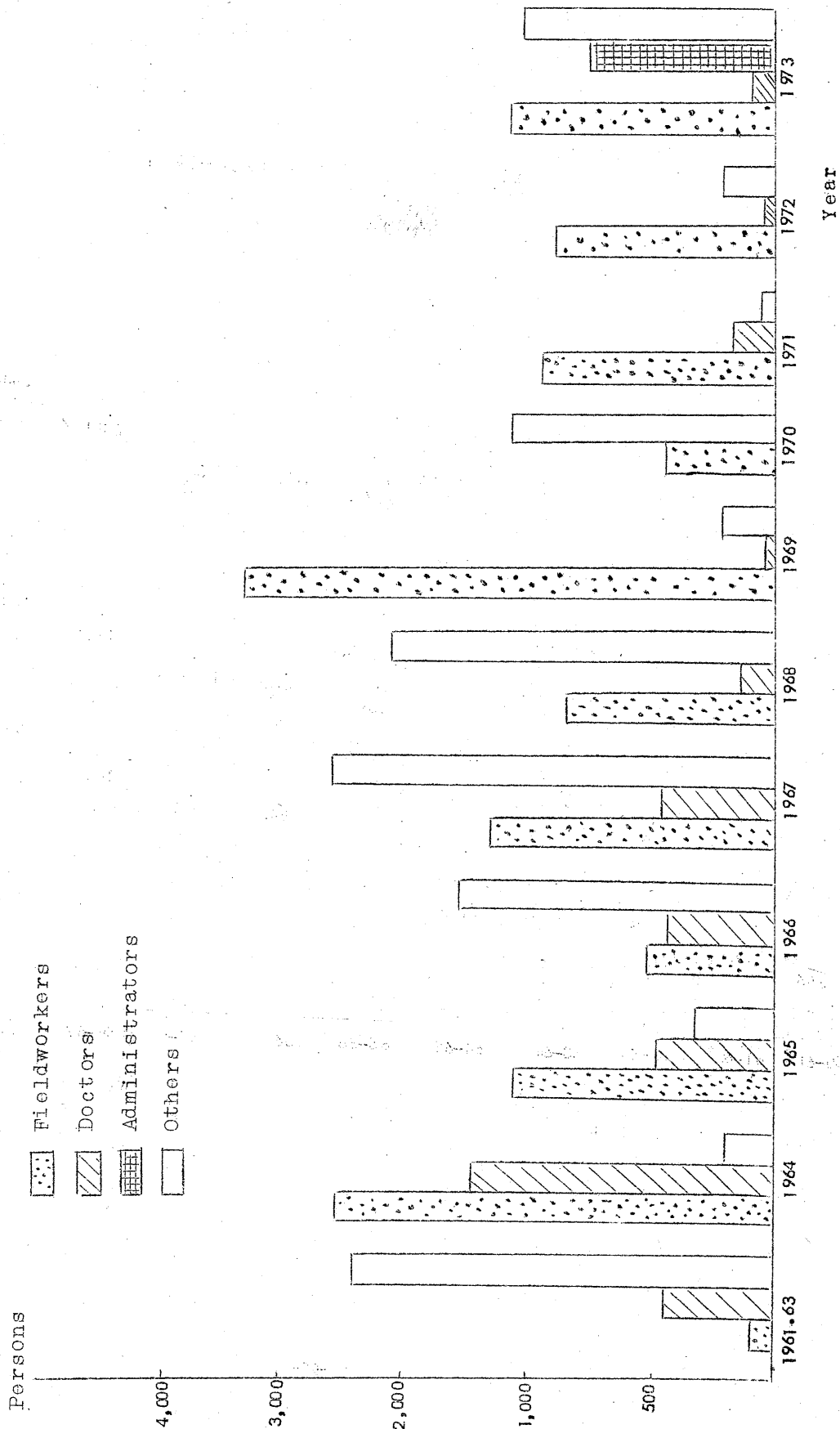


Total Abortion Rates 1960-1971

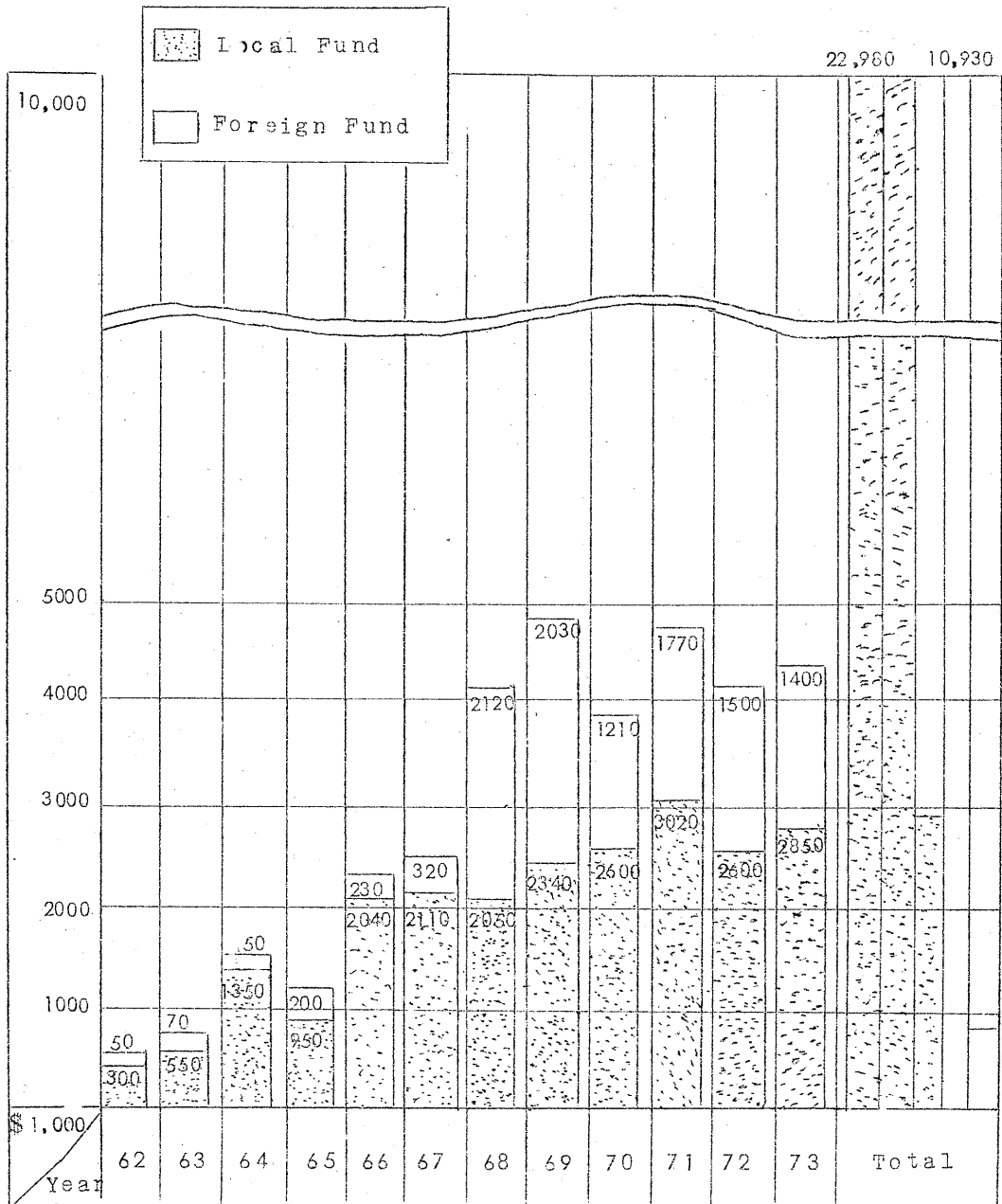
Rate per 1,000 Women



FAMILY PLANNING TRAINING



BUDGET (1962-1973)



POPULATION AND THE KOREAN ECONOMY

by

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This paper attempts to describe interrelated problems of population and economics in Korea and to assist you in your orientation of though to population problems in the world as a whole.

Although Korea has performed rather well in both her economic development and population control during the decade of the 1960s, the Korean economy is now in distress in solving many problems of economics, mostly attributed to the past population increase. The economy will suffer more from the consequences of the present population policy, which is not strong enough to tackle squarely the rising population problems in the country. This paper aims to present some of these problematic economic problems related with excessive population growth.

Some Indicators of Overpopulation

During the last decade of the 1960s South Korea has experienced a major demographic transition from a rapidly growing population to a moderately growing one. The intercensal growth rate of 2.9 percent for the period 1955-60 was reduced to 2.0 percent for the period of 1966-70. The crude birth rate was accordingly reduced from 43 to 29 per thousand and the mortality rate from 14 to 8 deaths per thousand.

The recent census reports the population of 31.5 million in 1970, thus ranking 20th in the world. The density per square kilometer recorded as 320 is the second highest in the world, following Taiwan at 390 persons per square kilometer.

Seoul today accommodates 6.2 million inhabitants, being the seventh largest city in the world. Seoul's proportion of the entire population marked 19 percent of the national total, leading London's 15 percent and

Cairo's 17 percent. Population density in Seoul was already 9,014 persons per square kilometer in 1970, perhaps the highest among the world's major cities, including Shanghai, Tokyo and New York.

Thus, the decade of 1960-70 experienced an unprecedented shift in distribution of population to urban from rural. During the period, urban cities including towns, or "eup" (more than 20,000 inhabitants), absorbed about 96 percent of the migration, while rural areas only the remaining 4 percent. In a demographic sense, Korea has developed into an urban nation. Under the assumption that the recent urbanization trend will continue, more than 75 percent of the total population will live in urban regions in the year 2000, compared with approximately 50 percent in 1970. In other words out of 50 to 54 million population projected for the year 2000, 37.5 to 40.5 million would be living in the cities.

All of these imply serious social, economic and environmental problems which the South Korean economy has to face currently and moreso in the future.

Nation's Food Supply and Demand Situation

It is gratifying to note that government officials have become aware of the grave consequences of overpopulation in supplying the nation's food requirements, which are ever increasing. Despite the fact that self-sufficiency in food grain requirements was proclaimed as one of major plan targets in both the First and Second Five Year Plans and in the current Third Five Year Plan, Korea has been suffering from a chronic food shortage. During the period from 1960 to 1970, population growth outstripped the increases in cultivated land area and food output; the population increase

was 25 percent, whereas the cultivated land increase was 12 percent and the food production increase was slightly over 13 percent. Food, especially grain, has become one of the most scarce commodities in Korea.

Contrary to the government's intended policy of assigning high priority to food production, the sizable food grain deficits in South Korea have persisted in the past several years and will continue in the future. Taking the example of rice, the Korean economy has been importing more than half a million M/T per annum without exception for the past five years, starting from 755 thousand M/T in 1969 to 800 thousand M/T (planned) in 1973. Besides rice the planned imports of wheat and corn for 1973 are 1,800 thousand M/T and 797 thousand M/T.

For the last two years, the government made strenuous efforts to substitute relatively cheap grains such as wheat and barley for rice. However the recent sharp price hikes in the international grain market since the latter half of 1973 forced a reformulation of the government's agricultural policies in production and pricing. Now the Korean consumers are, whether they like or not, bound to consume more domestically produced inferior foods such as potatoes and barley.

Labor Supply and Employment

As of 1973, the Korean government reports 11 million economically active population, out of which about 474 thousand are completely unemployed, revealing an unemployment rate of 3.9 percent. This survey statistic is, however, based on the Labor Force Approach Method, in which respondents who worked more than an hour pursuing pecuniary reward during the survey week are considered as 'employed'. Therefore, the foregoing unemployment rate of 3.9 percent would reflect a substantial underestimate.

Instead, if one defines employment as working more than 18 hours per week, which is equivalent to 3 hours per work day, then the unemployment rate increase to 7.6 percent, totalling 920 thousand persons unemployed. As for the Korean economy it took nearly a decade to reduce unemployment rate to the present level of 7.6 percent from 23 percent in the early 1960s. It will take another decade to reduce it to one-half with the past high growth rate performance and with the present labor force intact.

The prospects of future employment in the Korean economy loom large. A plausible labor force projection reveals that approximately 2 million persons will be added to the existing labor force by 1976 and that another 2 million more will be seeking jobs by 1981, altogether there will be at least four million persons to be absorbed within the decade of 1970s. This is incomparable with the past record in which about two million jobs were absorbed along with the strategy of industrialization oriented with highly labor intensive industries during the decade of 1960s. Indeed, labor absorption in Korea will cause very serious problems during the coming decade, when the development strategy is scheduled to shift drastically toward development of heavy and petrochemical industries.

Housing and Environment

As rapid industrialization and concomitant rural-to-urban population movement proceeds, formation of nuclear families prevails widely. This was exactly what happened in the past decade of 1960s in Korea. The number of households was increased to 5,690 thousand households in 1971 from 4,287 thousand in 1961, revealing the annual growth rate of 2.97 percent, which is slightly higher than the average annual population growth rate,

2.48 percent during the same period. On the other hand, the number of houses increased at an annual average growth rate of 2.28 percent, which is 0.69 percentage points lower than the growth rate of households in the country. In 1971, there are 4,428 thousand houses are available for accommodating 5,690 thousand households. That is, supply fell 1,262 thousand houses short of the housing need of the country. This amounts to a 22.2 percent housing deficit rate. The similar rate in 1960 was 17.5 percent, implying a 750 thousand house deficit. Thus, housing conditions in Korea were aggravated over the period from 1961 to 1971, although there were significant improvements in nearly all aspects of nation's life.

Moreover, there are considerable numbers of existing houses in the country which are subject to removal or renovation. As the end of 1972, in Seoul alone, 168 thousand houses, accounting for about 26.7 percent of the total number of houses, are estimated to have been removed or rebuilt.

To cope with the current housing situation, the government plans to build approximately one million housing units during the Third Five Year Plan period. Even with this plan, it will be still 1,220 thousand houses short of the growing demand for housing.

In order to prevent the further enlargement of urban districts, the Korean Government revised the Urban Planning Act in 1972, by which "green belt" areas surrounding major cities such as Seoul, Pusan, and Taegu were promulgated. Also, 38 more towns were newly added to the existing 151 urban cities and towns, which are subject to the regulations specified in the Urban Planning Act. Despite these efforts, most of cities in Korea, especially Seoul, are reportedly suffering from the lack of adequate sanitary and recreational facilities such as parks, playgrounds, and other environmental requirements.

The development of the urban industrial sector requires large expenditures in provision of infrastructural facilities such as transport, education, power, communication. Some of these infrastructural facilities have been already overstrained and must be improved to meet the increasing demand for such services.

POPULATION & FAMILY PLANNING EDUCATION IN UNIVERSITIES

by

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Many countries today face the challenge of problems of changing trends in education. Korea is one of the countries where these changes can be considered a historical necessity. Each country has its identity, and education should be directed and based on this identity and need.

The population problem is one of the most urgent issues not only in Korea but also in many other countries. As one of the measures to solve the population problem, family planning was adopted as a national program in Korea in 1962. Since then there have been remarkable activities in this field. Substantial progress in population and family planning teaching at various levels of the schools has been slow with a few exceptions. Since I am engaged with medical education, I would like to give some idea of population and family planning teaching as it is carried out at the College of Medicine of Seoul National University.

Methodology in Education

In the present day it is well understood that education involves the cooperation and teamwork of persons from many fields. Under the feudal system in Korea classical education could not be improved. This was particularly true of medical education. In order to promote modern education in the universities various methods are employed. For example, the epidemiological approach is one of the ways used in medical education.

The initial object of epidemiology was limited to study of acute communicable diseases. Recently however epidemiology covers not only communicable disease but also non-infections diseases and even social pathogenic phenomena. In the epidemiological approach the object of study is not individual case but the group or mass. In order to employ the epidemiological approach, statistical management, analysis of environmental

and social factors, and socio-economic or political considerations are needed. The epidemiological approach has a close connection with community medicine which is now a great concern in modern medicine.

Integrated Teaching Program and Family Planning

Integrated teaching is one of the recent teaching methods used in medical education. A detailed plan and cooperation from experts in various fields are basic requirements for an integrated teaching program. The Seoul National University College of Medicine revised its medical curriculum and intends to adopt such a program. However it is very hard to start this kind of teaching program on many subjects, but family planning has been accepted as a sample subject for such a teaching program. A special subcommittee was organized for this purpose. Table 1 shows an integrated lecture schedule on reproduction and family planning scheduled to be introduced to the freshmen for one week.

Family planning is considered a comprehensive science, including anatomy, physiology, endocrinology, genetics, and behavioral science, as well as preventive medicine, obstetrics and gynecology or urology all of which should be involved in the teaching program.

A seminar program is scheduled for graduate course, and following are some subjects with which the course is concerned.

1. Family planning and Maternal & Child Health

In order to improve the quality of family planning, it is desirable to integrate family planning and maternal and child health. This collaboration should be secured on academic basis.

2. Study of Human Reproduction

One of the drawbacks in family planning teaching and research has been lack

of study in reproduction. There are many qualified persons in this field at our medical school but no laboratory facility is available for research. Without a study of reproductive biology, family planning teaching and research can not be expected to advance.

3. Family Planning and Eugenics

It can be said that the ultimate purpose of family planning is family limitation for a healthy nation with happy families. Family planning can therefore devote itself to the improvement of the quality of the population; this means that family planning has to have a close connection with eugenics.

4. Sterility Problem

Family planning aims not only at limitation of family size or regulating of birth interval but also solving many other problems. Sterility is one of our major problems. Some women can not have their ideal size of family because of sterility, and family planning should cover this problem as well.

5. Economics

Up to date medicine, biology, and demography have played important roles in family planning. It is however very urgent to make economics and social psychology an integral part of family planning.

6. Family Planning and Environmental Pollution

Environmental pollution is a major social problem in many countries, and Korea is no exception to this. Environmental pollution is an inevitable side-product of industrialization and urbanization of the population.

In every sense environmental pollution is caused by population, and family planning can be considered as one of the basic countermeasures to take towards reducing environmental pollution.

Out of many characteristics in recent medical education, the outstanding one is the effort for comprehension and integration of highly specialized fields. Family planning teaching is an adequate example of integrated teaching program as well community medicine. On the other hand it must be recognized that the direction of medical education is based on the policies of medical care and education in each country. In addition to the family planning teaching, the human ecology course is given to medical students as a integrated teaching program. The time schedule for this course in human ecology is shown in Table 2. This course focuses on the relationship between man and environment including population problems. Following are highlights of population problems taught to students.

1) Economic Consequences

Rates of population growth in many less developed countries are at least half the rates of economic growth and in some cases almost equal. Chiefly because of the high fertility of these countries, the ratios of children to adults are very high when compared with these ratios in developed countries; and the numbers of young people reaching the age of labor force participation are rapidly increasing. Both of these factors produce serious economics consequences.

Rapid population growth slows down the growth of per capita incomes in less developed countries and tends to perpetuate inequalities of income distribution. It holds down the level of savings and capital investment in the means of production and thereby limits the rate of growth of gross national product. Food supplies and agricultural production must be greatly increased to meet the needs of rapidly growing populations, and this restrains the allocation of resources to other economic and social sectors.

2) Social Effects

Large-scale internal migration and rapid urbanization are among the most important social effects of rapid population growth. The growing numbers of children who survive their parents place new strains on intergenerational relationships. Social mobility is impeded by continuing widespread poverty. Because only a fraction of the growing population can be absorbed into the modern sector, the number of people in the traditional sector rapidly increases, and the gap between the two continually widens. Thus two "nations", one relatively well off and the other backward and poor, exist side by side in the same country.

3) Consequences for Education

Because the numbers of children grow even more rapidly than the total population, the need for education of ever larger numbers inhibits the raising of enrollment ratios and improvement in the quality of education. High proportions of children reduce the amount out of any given educational budget that can be spent for the education of each child. Because each cohort or age group of the population is larger than its predecessor, it is difficult to recruit sufficient numbers of teachers from among the adult population.

4) Health, Welfare, and Child Development

The cost, adequacy, and nature of health and welfare services are affected by rapid population growth in much the same way as those of educational services. In the individual family, maternal death and illness are increased by high fertility, early and frequent pregnancies, and the necessity of caring for excessive numbers of children.

The physical and mental development of children is often retarded in large families because of inadequate nutrition and the diseases associated with poverty and because the children are deprived of sufficient adult contact. Poor and crowded housing in the urban slums of rapidly growing cities produces further illness and retardation.

Table 1. TIME SCHEDULE FOR REPRODUCTION AND FAMILY PLANNING

Monday		Tuesday	Wednesday	Thursday	Friday	Saturday
9:00 AM	Introduction Dr. E.H. Kwon	Statistical Model of Reproduction Dr. J.K. Kim	Steroid Hormone Dr. H.K. Min	Female Contraception I Dr. S.W. Kim	Induced Abortion Dr. K.Y. Rha	Genetic Implications of Family Planning Dr. K.W. Choi
10:00 AM	Population problems Dr. H.J. Park	Hypothalamic-Pituitary-Ovarian Axis I Dr. D.H. Shin			Female Contraception II Dr. S.W. Kim	Postpartum Contraception Dr. C.M. Park
11:00 AM	Family Planning in Korea Dr. T.R. Kim	Hypothalamic Pituitary-Ovarian Axis II Dr. D.H. Shin	Placental Hormones Dr. M.W. Shin	Medical Termination of Pregnancy Dr. J.Y. Lee	Laparoscopic Sterilization Dr. Y.S. Chang	Examination
1:00 PM	Field Trip to KIFP (Gp. A & E)	MCH Law & Family Planning Dr. K.S. Chang	R E A D I N G P E R I O D	Semen and Sperm Dr. Y.K. Kim	Culdoscopic Sterilization Dr. S.W. Kim	
2:00 PM		Laboratory (Gp. A & B) Statistical Model Dr. J.K. Kim		Male Contraception Dr. H.Y. Lee	Family Planning Dr. K.W. Kang	
3:00 PM				"Stop at Two" Dr. C.C. Lee	PPFK Activity Mr. J.H. Lee	
4:00 PM						

Table 2. TIME SCHEDULE FOR HUMAN ECOLOGY

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9:00 AM	Introduction to Human Ecology Dr. K.W. Choi	Man in Natural Environments Dr. K.B. Uhm	Social and Cultural Ecology Dr. K.K. Chung	Population Problems Dr. D.H. Kwon	Education in Human Ecology Dr. K.S. Kim	Free
10:00 AM	Historical Background of Ecology and Concept of Ecosystem Dr. J.H. Kim	Human Ecology as a Relationship between and Place Dr. Y.H. Park	Ecology of Malnutrition Dr. J.Y. Yoo	Population Explosion and Man's Future Dr. G.C. Worth	Changing Patterns of Human Diseases Dr. J.H. Kim	E X A M I N A T I O N
11:00 AM	Physical Environment & Health Dr. S.P. Kwon	Man in Microbial Environments Dr. R.S. Kee	Environmental Problems in Human Society Dr. R.H. Rho	Mechanism of Adaptation to Environments Dr. S.B. Han	Survival of Human Beings Dr. K.W. Choi	
12:00						
1:00 PM			Food and Nutrition Problems Dr. Y.S. Kim	Panel Discussion Dr. R.S. Kee Dr. D.H. Shin Dr. Y.I. Kim Dr. J.K. Kim Dr. K.W. Choi		
2:00 PM	Film	Film	Biological Rhythm & Regulation Dr. D.H. Shin		Reading period	Free
3:00 PM			Mutagenesis & Teratogenesis Dr. K.W. Choi			

MOTHERS' CLUB IN KOREA

by

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Yonsei University

Dr. G. C. Worth
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A network of over 26,600 married women's groups with over 580,000 members scattered through out every village in rural Korea - that is a very important asset for the family planning program of this country. These persons meet to discuss family planning among themselves and with the government field workers. They recruit acceptors, counter rumors, and act as liaison for the fieldworkers among the women of the village.

This unique asset has become well known and was the subject of a movie made by International Planned Parenthood Federation. Numerous reports and studies have also been done. These show women gathered together in the village for a number of goals and purposes, including family planning. They are involved in community development projects, social events, cooperative stores, and credit unions. Family planning plays an important part in their activities and enables the government program to have an easy access to rural people.

Background

The development of the Mothers' Clubs comes from two background influences. One is the past organization of women in the villages, and the other is action research to test out the effectiveness of such an organization in family planning.

Historically, women in Korean villages had organizations for various purposes of friendship and social affairs. These were further developed during the period of colonialism through organizations for patriotic purposes. When freedom came, all women over eighteen years of age were gathered into a national network of womens clubs. This was interrupted by the Korean War, but continued to function as a semi-government movement until 1961.

When the National Reconstruction Movement was set up by the Government in 1961 they reorganized all local village womens groups into this national organization. Frequent meetings were held in order to promote a better way of life. Prominent among the topics covered by their meetings, with lecture leaders, was family planning. Women were trained in leadership and given a role in developing the new village life.

These early efforts were so success in generally informing the public that the 1964 KAP Survey, just two years later, found that rural women were more familiar with family planning than were urban ones. These clubs had not been very active in the urban areas.

In 1964 the Government shifted the emphasis of this movement to the organization of village banks, largely run by men and some non-formal education programs. They had, in the meantime, expanded the womens activities of the Office of Rural Development to give education for better family life with a larger staff and budget. These workers continued to assist villages to develop their clubs and meetings with programs for better nutrition, clothing, housing, etc.

This was the setting into which the family planning movement introduced the Mothers' Classes in 1968, as will be described below.

In 1962 Yonsei University began an intensive action research program in Koyang County to test ways of carrying out a family planning program. It was shown that acceptance was directly related to that the women felt about the IUD and rumors they heard about it. A test was carried out to see whether special education through organized mothers' classes would be of some assistance in improving acceptance. The results of this test were favorable, specially in raising the level of acceptance in villages where

it had lagged behind the average.

This research team reported their findings to the Government. It was felt important to use these findings by organizing a national network of these family planning oriented Mothers' Clubs both to try to improve the acceptance of the IUD and to be a means of educating and informing women about the oral pill which was just being introduced to the total program.

Studies completed in the mid 1960's indicated that even though the targets for IUD insertion were being met by the fieldworkers, the dropout rate of acceptors was more than 50% after two years. Clearly, another alternative method was desirable. Hence, the beginning of the Mothers' Classes was accompanied by the addition of the oral pill program. SIDA agreed to provide the oral pills needed.

Purpose

The goals sought by the organization of Mothers' Classes were comprehensive in nature seeking to improve the overall family planning program:

1. To expand the family planning program directly into the Korean village level and encourage family planning as a spontaneous activity by the people rather than as an imposed government program.
2. To aid the fieldworkers and other family planning organizations by acting as channels for transmitting information and education about family planning to the villages.
3. To bring village leaders, especially female leaders, into activities favorable to the family planning program.
4. To provide some additional (unofficial) distribution points for pills and condoms, thus easing the load on the over-burdened fieldworkers.

5. To enlarge the demand for family planning and to bring younger mothers into the family planning program.
6. To encourage continuation of family planning practice as well as acceptance of a method, and give social and psychological support to both acceptors and the local fieldworkers.
7. To aid in the introduction of a new method (the pill) to the family planning program and study the continuation rates of this contraceptive.

Procedures

A request by the Ministry of Health and Social Affairs resulted in a grant established through the Population Council (using USAID funds) and administered by the PPFK. The program was initiated across the country in the spring of 1968.

In terms of personnel the plan called for an input of 139 (male) Pill Administrators and Community Organizers (PACO) to be selected, trained, and then placed in county health offices. They were responsible for: maintaining, distributing, and supervising the supplies of oral pills in the family planning program; keeping records of acceptors' screening, use and follow-up; collecting all fees from pill sales and paying honoraria to voluntary leaders for their travel expenses; supervising the training of the village Mothers' Club leaders, assisted by the local fieldworkers; assisting the work of the evaluation program; and publicizing the promoting family planning. 9 supervisors were placed in each provincial level. In addition, a Mothers' Club leader in each legal village (16,800) designated by the plan (about 10 per township) was recruited to organize the Club in her village and hold at least 4 meetings a year which the family planning

worker and perhaps a guest speaker would attend. She was also to determine the family planning status of women in the villages and refer them for proper service and to attend one meeting a month with the PACO at the township office to report on progress, obtain information, and receive any additional training. Also elected were volunteer township and county Mothers' Club chairmen to assist in liaison activities.

Mothers' Club leaders and members were appointed by village chiefs from among influential women in the village. There were 12 to 15 members initially selected in this way. Each class was supposed to hold their four meetings a year supported each time by a \$500 stipend provided by the grant and later from the sale of pills. Salaries for the PACOs and Supervisors were also to be paid initially with funds from the grant and then, after the first year, with funds collected from the sale of the pills. Finally, under the plan a pill evaluation unit was added to the Ministry of Health and Social Affairs family planning evaluation team.

Since July 1968 "Happy Home" has been issued every month as a guide to the Mothers' Clubs and contains articles and stories relevant to all phases of home life besides family planning information. Originally published in a quantity of 20,000 volumes a month it has increased gradually in quantity to 56,000 a month by July 1974. The paper used in this publication is donated by SIDA and editorial and printing costs are covered by funds from IPPF.

After the initial meetings it was apparent that some clubs seldom met again, due to poor organization, lack of money, problems of remoteness and supervision, and lack of enthusiastic local leadership.

Other clubs, perhaps two thirds, if an estimate must be made, have continued to meet periodically. Among these, many outstanding Clubs have developed which have been able to give valuable assistance to fieldworkers, organize self-help activities in their villages, start their own cooperative funds (Mothers' Clubs Banks), and in general expand their organization to incorporate more than just family planning activities. However, family planning is still the main focus for the Mothers' Clubs and as such both the government and the PPFK have continued to seek for better and improved methods of organization and supervision.

In April 1972, after joint discussions between the Ministry of Health and Social Affairs and the PPFK, some changes in personnel and financial procedures surrounding the Mothers' Clubs were made. Formerly, 140 Pill Administrator and Community Organizers (PACO) had been assigned to each county health center with a varied set of responsibilities outlined previously. The number of these PACO was reduced to fifty and responsibility for pill administration transferred to the senior family planning worker at the county health center. Each PACO, renamed Information and Guidance Officer (IGO), has now been given responsibility for Mothers' Class activities only in two or three counties rather than one, and is directly responsible to the PPFK provincial branch office rather than the county health center. Salary has been increased and a motorcycle, donated by Japan, was added for him in 1973.

To assist the classes themselves, which had ceased to receive funds for their meetings when inflation and necessary salary increases used up all pill receipts, a small W500 supplement is now given monthly to each

township meeting, ₩5,000 a month is given to each county federation, and the senior family planning worker receives an additional ₩1,000 per month to assist her in coordinating Mothers' Class activities. These funds are dispersed as before from the pill receipts. No money is given directly to local clubs now.

Training

The basic training of these Mothers' Club leaders occurs during the frequent meetings held at township and county levels. The trainers are the family planning supervisors from the health centers, the PPFK staff, and the county and township officers. To train these officers, PPFK has held a series of conferences in Seoul over the past three years.

Hundreds have been to these five day sessions where they had lectures on the following:

Family Planning	14 hrs.
Mothers' Club Management	4 "
Health	3 "
General Education	11 "
Recreation	4 "

New Directions

Of particular interest are the Mothers' Class Banks which are actually miniature credit unions established by the mothers. These build on the Korean tradition of money clubs. The PPFK has made special efforts in the last four years to use the Mothers' Bank idea as a means of giving the Clubs a self-sustaining base for their activities. In many cases these

funds have been very successful handled and have contributed to creating a feeling of cooperation for the general development of the villages. At present there are 800 clubs which operate banks and they have assets of ₩150,000,000 approximately (\$400,000).

Beginning in early 1972, the government has launched a major campaign to improve the living conditions of the average Korea. This is called the "New Village Movement". In rural areas the emphasis has been on community development projects carried out by the people with some government assistance in supplies of construction materials. Village organizations have been called on to participate and support these projects, from planning stages all the way through their completion. Much labor has been contributed by the villagers, both men and woman, to these activities.

Such a wide-spread and important undertaking has had an important impact on the Mothers' Clubs and the other womens groups in the villages. Their members have been very busy on New Village Movement activities, usually construction projects on roads, wells, housing improvements, etc. Although family planning is listed as one of the Movement's objectives, it has been of low priority so far. So the Classes have been less active in discussing family planning and more concerned about community development.

To further facilitate this New Village Movement, two provinces have combined all womens groups, with one club in every natural village. One result of the combination of all womens groups in one, has been the great increase in members and the organization becoming nearer the level of a natural indigenous organization. Rural Korea has many of these small

natural indigenous organizations in the natural villages, about 40,000 in number. These have from twenty to fifty families living in them and have many of the characteristics of the clan structure left.

Village elders are important and women frequently gather. Communication is good within this natural village and often not very good with other neighboring clusters of houses. Differences in clans and traditional rivalries often cut these villages off from each other.

When the Mothers Classes combined with other groups, the organization moved from the legal village level, a larger unit, to that the natural village. Now every group of women has its officially recognized club where normal communication is good. It also means many more women are members and many more are receiving instruction as leaders. In one province this has meant increasing the number of clubs from 1,667 to 5,198 and members from 38,933 to 150,807. Participation levels are much higher. Supervision is now not primarily the responsibility of the health center, but many other government officials at the township and village level are involved.

While communication and participation are improved, there has also been dilution of content. Family planning has moved from primary importance to one of twenty or thirty topics which must be considered from time to time.

In other provinces Mothers' Clubs exist along with other village womens groups. Since leadership is scarce, it tends to be the same people functioning together, solving problems of overlapping in their own way. These different responses were investigated in one province by PPFK

personnel who reported the following:

Number of Clubs	3,477
Villages where the two organizations are combined and operate as one	43%
Villages where the Mothers' Club is the dominant organization	41%
Villages where the Women's Club is the dominant organization	7%
Villages where the two organizations are separate and competing	9%

Evaluation

Since the Mothers' Clubs were founded there has been much debate as to their effectiveness in promoting family planning and their contribution to the reduction of population growth in Korea. One large study was done by the Yonsei University Center for Population and Family Planning but with hard to define results.

There were no significant differences between the control and experimental areas for Mothers' Classes influence on acceptance and continuation of contraception. But they remain popular with family planning workers. In many informal talks with observers, fieldworkers throughout the country report that the majority of Mothers' Classes are helpful to them in their work. The reasons are straightforward. During a period of general program difficulties and high fieldworker turnover the Mothers' Classes have provided stable contact at the village level. To new, untrained workers the Mothers' Class members are often valuable first contacts; to both new and old workers they are a source of information on births and potential acceptors. In some areas Mothers' Class leaders

assist fieldworkers by distributing oral pills. Whether these functions are necessary to family planning success is not answerable. Very clearly they are practical.

This report by Yonsei includes several ideas in regard to Mothers'

Class management:

1. In those areas where monthly meetings were held consistently, there had previously been many women's activities. Women not already familiar with group activities apparently need training prior to the organization of meetings, as the use of incentives cannot by itself substantially overcome any basic lack of understanding that exists about the role and function of organizations such as the Mothers' Classes.

2. Successful Mothers' Classes had leaders who combined both ability and community standing. Most of leaders were chosen by the local government and were officially nominated. Many problems arise if the woman chosen is not a popular natural leader.

3. The classes were more successful in those areas where the leaders were friendly, generous, and even-tempered. In addition, leader enthusiasm toward the classes was central to successful class management. Aside from this, leaders should be satisfied contraceptive users, about the average age of eligible women in the area, and well educated.

4. In classes that recruited new members after the first 12 were designated, communications were more effective than in those classes which did not recruit new members.

5. Precise discussions in a meeting help to promote contraceptive practice more than vague and general comments.

6. Where the regularly paid incentives are applied to a continuous project rather than spent as received, member solidarity is better.

7. Where a member or the class leader herself helps in the distribution of contraceptives, it adds to the classes' effectiveness.

8. A reliable family planning worker, who has a good relationship with the Mothers' Class leader and attends the Classes is particularly important for successful class operation.

More recent studies by the Korean Institute for Research in the Behavioral Sciences and the School of Public Health of Seoul National University have tended to confirm these earlier reports. The value of the Clubs for communication is affirmed. The importance of the leader to the effectiveness of the Club is specially emphasized by the University report. If she is a natural leader in the village, then the club has good communications and is more effective, from their findings.

Conclusions

The Mothers' Clubs of Korea have mobilized a large number of village women to be of assistance to the work of the rural fieldworkers and strengthen the motivation and recruitment for family planning. Urban clubs have not been as successful, perhaps due to the lack of a tradition of government sponsored womens activities and organizations in the cities.

The government and PPFK are continuing to work together to support this activity with personnel and budget on the strong belief that these groups of women should be encouraged to become even more active in their support of the family planning program.

The applicability of such a program in other parts of the world would depend on the experience of the village women in managing on organization and with their willingness to cooperate on government programs.

MALE STERILIZATION IN KOREA

by

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INTRODUCTION

Vasectomy has been increasingly popular as one of the accepted contraceptive methods in many countries including Korea, since the operation is safe, accurate and semi-reversible procedure and it is nearly 80 years old.

This is a report of the author's study on surgical techniques of vasectomy and results of the surgery.

MATERIALS

The study is based on the author's experiences of having performed nearly 7,000 vasectomies during the 20-year period from 1954 to 1973, and 170 vasovasostomies during the 10-year period from 1964 to 1973 in Korea. (Table 1)

Table 1. Author's Experience

	Vasectomy			Vasovasostomy
	Paid cases	Free cases	Total cases	
1954-1960	58	-	-	-
1961-1965	238	1,671	1,909	15
1966-1970	293	2,331	2,624	70
1971-1973	354	1,597	1,951	83
Total	943	5,599	6,542	168

MOTIVATION AND PREOPERATIVE INTERVIEW

Before performing the vasectomy some informations about the operation and a psychiatric screening interview should be given to all new

clients to prevent future sterilization neurosis.

Now here is an example!

THE IDEA OF VASECTOMY: The male reproductive organs may be compared with two kinds of factories: one is the factory of "testis" which produces male hormone and spermatozoa, and the other is the factory of "accessory sex glands" which produce semen. These products are carried through different routes. The male hormone is circulated through the blood vessels to the body. Sperm are carried through the vas deferens to a depot (ampulla). Finally the semen is excreted through the seminal tract to the baby factory (vagina) accompanied by sperm. If we block all these three routes it will result in a "castration", but when we only block the sperm passage it will be a "vasectomy". So that there are big differences between castration and vasectomy.

THE TECHNIQUES OF VASECTOMY: The length of the incision is about the width of the small fingernail (0.5 cm). It takes about the time needed to smoke a cigarette (10 minutes) to complete the operation. The acceptor should be allowed to do only a limited amount of work for 2 days after the operation. Intercourse must be undertaken with an adequate protection until at least 6 ejaculations have been experienced after the operation because conception can occur by the residual sperm in the depots. 33, 36)

THE EFFECTS OF VASECTOMY: Semen of the non-vasectomized man is like an ordinary watermelon with seed, but that of the vasectomized man is like a seedless watermelon. These two watermelons are quite similar

to each other with respect to size, color, shape, smell, and sweetness. The only difference is the presence or absence of the seed. A seedless watermelon is very convenient to eat. Likewise, a vasectomized man is not inconvenienced in sexual relations.

TOTAL NUMBER OF VASECTOMIES IN KOREA

About 210,000 vasectomies were performed in Korea under the government subsidy program during the period from the end of 1962 to the end of 1973 (free group). Besides these, rough estimate indicates that more than 90,000 men were voluntarily sterilized by private doctors during the same period and that at least 60,000 men were vasectomized before 1962 in this country (paid group). Therefore the total number of vasectomized men in Korea is roughly estimated to be more than 360,000 at the end of 1973. The proportion of 360,000 vasectomized men to the total population comprises 1.1 per cent.

Table 2. Total Vasectomies in Korea

Free	210,237	1962-1973	92% of target
Paid	150,000	By 1973	Rough estimation
Total	360,237	By 1973	1.1% of population

Rough Estimation in the World by 1972

15 million in the world	3 million in U.S.A.
0.5% of population	1.5% of population
9 million in India	
1.6% of population	

Both in Korea and abroad, vasectomy continues to increase in popularity.

In the United States, probably 3 million living Americans might have already obtained vasectomies by 1973. The ratio to the population represents 1.5 per cent.

In India, more than 9 million males have been sterilized by 1972. The ratio to the population reveals 1.6 per cent.

Authorities estimate that as many as 15 million men have already obtained vasectomies in the world.³⁴⁾ (Table 2)

TENDENCIES OF EARLY VASECTOMY

According to the author's own series, the ages of the acceptors tend to become younger every year.

AVERAGE AGE: An average age of the acceptors at the time of vasectomy was 41, and that of their wives, 37 in 1961, but an average age of the acceptors is 35, and that of their wives, 31 in 1973.

DURATION OF MARITAL LIFE: An average span of marital life of the acceptors was 17 years in 1961, but that of marital life is 9 years in 1973.

NUMBER OF CHILDREN: An average number of children alive was 5.3 (male to female=3.1:2.2) in 1961, but that of living children is 2.9 (male to female=1.7:1.2) in 1973.

USE-EFFECTIVENESS

As to the effectiveness of the sterilization, it is estimated that

each vasectomy offers 7.5 couple years of protection compared to 2.5 couple years of protection with each IUD.

The author's serial study of 1969 shows that each vasectomized man has a mean of 4 births, so that the vasectomy is estimated to have averted 3 births. Accordingly more than 1 million unwanted births have been prevented by means of practicing the vasectomy in Korea.²³⁾

ANESTHESIA AND SCROTAL INCISION

INCISION LEVEL: Following a meticulous preoperative preparation at a warm operating room, both vasa are palpated and examined carefully to judge the ideal site of operative level. For the convenience in successful vasovasostomies if indicated at a later date, this ideal level should be the vas of the same diameter. This same diameter vas is the midportion between the external inguinal ring and the vasoepididymal junction internally and a little below that angle of penoscrotal junction externally.¹⁸⁾

LOCAL ANESTHESIA: The vas manipulated to a position just beneath the scrotal skin of the median raphe and is held with three fingers of left hand. About 5 c.c. of 1 per cent of warm xylocaine (without adrenalin) are infiltrated into the skin and also into the sheath of the vas which contains pain nerves originated from the inferior spermatic nerve (sympathetic fibers).¹⁾

No general anesthesia has been used in the author's series.

SINGLE SCROTAL INCISION: A longitudinal or transverse incision depending upon the course of the superficial blood vessels of the scrotum is made on the median raphe of the scrotum, 0.5 cm long, until pale white

wall of the vas is exposed.

The single incision technique has been found to be more convenient, time saving, preventive for infection, and popular with the acceptors compared with the ordinary bilateral technique.⁴⁴⁾

But for the beginner, the ordinary bilateral incision technique is easily the best course.

NO VASECTOMY BY GENERAL PRACTITIONER

Any general practitioner wanting to be authorized vasectomy doctor of the government program should be trained by a special program including more than 10 vasectomy operations.

No paramedical personnel is allowed to perform vasectomy operation in Korea.

IMMOBILIZATION OF THE VAS

For immobilizing the vas in the author's series, the following techniques have been tested: 1) a syringe needle (23 gauge) is passed through the scrotal skin under the vas and out through the skin again and the tip of it is now nipped in a pair of mosquito forceps, 2) a towel clip (3 inch in size) is applied to secure the vas through the skin, 3) a pair of Allis tissue forceps (3x4 fine teeth, 5 $\frac{1}{2}$ inch) grasps the whole vas so as to hold it in the blades through the median incision of scrotal skin, or 4) Lee's vasectomy hook hooks the vas up through the scrotal incision which has been made over the vas. Among these, the most convenient technique will be adopted, depending on the conditions of the scrotal skin.⁴⁴⁾

IMMEDIATE SPERM CLEARANCE TECHNIQUE (IMMEDIATE STERILITY TECHNIQUE)

Among the various spermicidal solutions such as tap water; distilled water; potassium permanganate, 0.01%; acetic acid, 0.2%; lactic acid 0.2%; rivanol, 0.2%; alcohol, 10%; xylocaine, 0.1%; demerol, 0.3%; potassium permanganate has been proved to be the most suitable solution as for the safe, accurate, and inexpensive spermicidal solution through biochemical and animal studies. (Table 3)

A pair of mosquito forceps is applied to the middle part of the separated vas. Just before the ligation of distal vas, the vas is lifted and about 10 c.c. of 0.05% potassium permanganate solution mixed with weak anesthetics is injected by a syringe toward the seminal vesicular direction through the distal vas. By this, the residual sperm in the distal seminal tracts were found to be killed and washed partly into the bladder. Disappearance rate of the 1st ejaculate after this technic corresponds with that of the 3rd ejaculate following the ordinary vasectomy.

This technique will permit a vasectomized man to become a "seedless watermelon" immediately after his vasectomy, and may reduce markedly the postoperative residual sperm count. This will eliminate the need for postoperative contraception, and also for postoperative semen testing. ^{3,4,22,36)}

However, this very limited number of the author's clinical experience cannot prove to be a fully approved method at this time. But I am confident that further deep study into this direction will bring about more satisfactory clinical results as well as its widespread practice as an immediate sterility method.⁴¹⁾ (Table 3)

Table 3. Spermicidal Effects of Various Solutions

Groups, Solutions Mixed with Semen	1 Minute Motility (%)	2 Hours Motility (%)	8 Hours Motility (%)	24 Hours Motility (HPF)
Raw Semen	65	63	28	10
Locke's Solution	68	64	26	8
Normal Saline	62	60	19	3
Tap Water	0.1	0	0	0
Distilled Water	0.1	0	0	0
KMn 0.4, 0.01%	0	0	0	0
Acetic Acid, 0.2%	0	0	0	0
Lactic Acid, 0.2%	0	0	0	0
Rivanol, 0.2%	0	0	0	0
Alcohol, 50%	0	0	0	0
Xylocaine, 0.1%	0	0	0	0
Demerol, 30mg/cc	0	0	0	0

SPONTANEOUS RECANALIZATION FOLLOWING VASECTOMY

FREQUENCIES: Eight cases out of the 1,875 acceptors vasectomized by the author were proved to have spontaneously restored their sperm passage (0.4%).

SUSPECTIVE CAUSES: The accurate mechanism of the spontaneous recanalization is not known but suggestive causes are as follows:

- A) The third vas is missed at the operation.
- B) Sperm leakage occurs → sperm granuloma develops → recanalization takes place.
 - 1) The tie is too loose and fails to occlude the vas lumen.
 - 2) The tie is too tight and cuts through the vas wall.
 - 3) The tie necroses

the wall of the vas. 4) The proximal vas wall is ruptured and epithelial cells are liberated due to increased intraluminal pressure.^{31, 32)}

C) Distal vas becomes open.

D) Fascial sheath confines the sperm and directs them to the distal vas.

E) Vas epithelium proliferates into the granulomata.²⁾ (Table 4)

Table 4. Frequencies and Suspective Causes of Spontaneous Recanalization

	Others	Author	Total
Vasectomized cases	1,990	1,875	3,865
Recanalized cases	22	8	30
Recanalization (%)	1.1	0.4	0.8

1. THIRD VAS IS MISSED AT OPERATION

2. SPERM LEAK — SPERM GRANULOMA — RECANALIZATION

1) THE TIE IS TOO LOOSE

2) THE TIE CUTS THROUGH THE VAS

3) THE TIE NECROSES THE VAS

4) PROXIMAL VAS WALL IS RUPTURED

3. DISTAL VAS BECOMES OPEN

4. FASCIAL SHEATH CONFINES SPERM TO DISTAL VAS

5. VAS EPITHELIUM PROLIFERATES INTO GRANULOMA

PREVENTIVE MEASURES: A single tie of the 2-0 black silk is applied to the distal vas, and an additional tie with the same silk is then applied to the same vas so as to fold the vas end back on itself. The long ends of the silk tie are not cut but kept long, and held in a pair of mosquito forceps. A tie of the same material is applied to the proximal vas 0.5 cm below the previous distal tie and long ends held in the same mosquito forceps applied to the distal tie. The vas is now cut between the two ties but no section of the vas is removed.^{21, 38, 39, 40)}

When the original vasectomy is performed too much preventive for the spontaneous recanalization subsequent vasovasostomy will be difficult to be performed properly. Too excessive measures for prevention may serve to strain regeneration and restoration of the sympathetic nerve which innervates the vas and epididymis.

TIE MATERIAL: Nonabsorbable tie material of silk, black or dark blue in color, and 2-0 or 1-0 in size, has been used without any particular tissue reactions. Colored tie material has proved to be convenient for easy identification of previously vasectomized scars when a reanastomosis operation is attempted. Since the vas is very frail, the thick non-absorbable tie may prevent the cutting into the vas wall, and may prevent the liberation of epithelial cells into sperm granulomata.⁴²⁾

PREVENTION OF HEMATOMA FORMATION

Both divided ends of the vas are now allowed to drop back into the scrotum temporarily but the long ends of the silk are held outside the

scrotum. Next, the right vas is dealt with through the same scrotal incision of the median raphe. The previously ligated and divided vas is brought out from the ~~incision~~ by pulling the long ends of the silk in order to search for oozers and bleeders again. If there is none, the redundant silks are cut and both ends of the vas are now released by a pull on the scrotum. The right vas ends are then examined again for bleeding points as on the left side.

This procedure is also important to confirm the risk of ligating the same vas twice, and also to prevent the ends of the vasa from slipping back into scrotum.⁴⁴⁾

Finally it is an important step to determine whether or not both cut ends of vasa returned to their original position in the scrotum.

DISAPPEARANCE RATE OF RESIDUAL SPERM

Results of the author's study on the effects of preoperative and postoperative semen tests on disappearance rate of residual sperm after vasectomy are as follows:

- A) The rate of sperm disappearance following vasectomy related directly to the number of ejaculation.
- B) In the group of 1 preoperative semen test and 10 postoperative semen tests (50 subjects), all the subjects were less than 1 million per ml. after the 6th ejaculation, and 88 per cent of the subjects were sperm-free (nullispermia) after the 10th ejaculation postoperatively.
- C) In the group of only 10 postoperative semen tests (50 subjects), all the subjects were less than 1 million per ml. after the 7th ejaculation,

and 86 per cent of the subjects were nullispermia after the 10th ejaculation postoperatively.

D) More than 6 ejaculations should have been experienced before the free intercourse might be allowed in case of Korean male.

E) Preoperative semen tests technic may reduce postoperative residual sperm count and may prevent any unnecessary vasectomies due to secondary infertility.^{10,16,26,27} (Table 5)

CRITERION FOR STERILITY: The criteria of the procedure which have been used after the vasectomy to determine when the ejaculate becomes sperm-free are quite variable from a minimum of 1 ejaculation to a maximum of 32 ejaculations with 2 consecutive sperm-free specimens one month apart. Even after 32 ejaculations were experienced postoperatively, an occasional nonmotile sperm could be found in some cases.

NO PREGNANCY BY MARKED OLIGOSPERMIA: It is still not known if a man who has only a few nonmotile sperm in his ejaculate is fertile or not. However, I have never seen any patients who could impregnate their wives with a few live sperm through my over 20-years of clinical experience on male infertility. Now here is a clinical example of my cases. Both 540 oligospermias of less than 18 million per ml. with less than 23 per cent of motility and 14 necrospermias of 83 million per ml. failed to impregnate their eligible wives. These subjects were followed-up for more than 2 years. (Table 6)

Table 5. Sperm Disappearance Rate

Group of Semen Analysis	Less than 1 Million per cc	Nullispermia
1 Pre - Op. and 10 Post-Op.	6-th Ejaculation	88% by 10-th ejaculation
10 Post-Op.	7-th Ejaculation	86% by 10-th ejaculation

Table 6. Spermogram of Sterility

Sterility Group	Cases	Count (mill./ml.)	Motility (%)
Necrospermias	14	83	0
Oligospermias	443	18	23
Vasovasostomy	71	17	18
Epididymovasostomy	16	15	30
Total	544		

CLOSURE OF SCROTAL INCISION AND POSTOPERATIVE CARE

Bleeding points in the subcutaneous tissues of the scrotal wound, if any, are clamped and tied. Following a small amount of antiseptic power is applied to the scrotal wound to prevent any local infection, the scrotal wound is then closed with a single suture of chromic catgut, 3-0, which avoids the necessity for removal.^{1,11)}

A simple dressing is applied and the scrotum is elevated with a suspensory or T-bandage. Each patient is given antibiotics for 2 days

postoperatively to prevent local infection, since the scrotum is moist and is prone to infection.

COMPLICATIONS FOLLOWING VASECTOMY

Complications of the author's own series of Paid Group (200 cases of Paid Group operated by the author, and 880 cases of Free Group operated by others were interviewed) are listed as follows:

DURING THE OPERATION: There were complaints of lower abdominal dragging pain by 12 per cent of the subjects usually when the vas was grasped and tracted (the pain was more exaggerated on the right vas than on the left). Three per cent complained of stick pain when an anesthetic injection. Unpleasant feeling and apprehensive sense were noted in 3 per cent.

IMMEDIATELY AFTER THE OPERATION: Dragging sensation on the lower abdomen was experienced by 10 per cent of the subjects. Inflammations of vas, epididymis, or scrotum were noted in 3 per cent. Bruising of scrotal skin due to the anesthetic injection and/or rough handling of the tissues was found in 1.2 per cent. One per cent complained of tenderness on the vasectomized scar. Major hematomas requiring surgical manipulation have not been encountered. Minor hematomas treated conservatively, however, were found in 0.8 per cent of the subjects. 9,15,17)

LATE AFTER THE OPERATION: Persistent nodule was palpated on 2 per cent of the subjects. These nodules might be diagnosed clinically as spermatic granulomata.^{39,44} (Table 7)

Table 7. Complications of Vasectomy

Complications	Others	Author	Average
DURING THE OPERATION			
Stick pain (on anesthetics injection)	21.0%	3.0	17.7
Dragging pain on anchoring vas(rt > lt)	3.0	12.0	4.7
Unpleasant feeling	0	3.0	0.5
IMMEDIATELY AFTER THE OPERATION			
Dragging pain on lower abdomen	10.0	10.0	10.0
Tenderness on the vasectomized scar	7.0	1.0	5.9
Ecchymosis on the scrotum	2.3	1.2	2.1
Wound infection	4.6	3.0	4.3
Hematoma requiring surgery	1.8	0	1.5
LATE AFTER THE OPERATION			
Diminished sexual health	9.0	5.0	8.0
Diminished general health	8.0	6.0	7.7
Persistent fibrous nodule (sperm granuloma)	5.6	2.0	4.9%

CHANGES OF SEXUAL AND GENERAL HEALTH AFTER VASECTOMY

Postoperative changes in sexual life such as feeling of freedom and decreased inhibition, degree of libido, strength of erection, control over ejaculation, degree of orgasm, volume of ejaculate, satisfaction with coitus, discomfort during coitus, extramarital coitus of the 1,080 vasectomized (Free Group: 880 cases + Paid Group: 200 cases) were personally asked and their responses were summarized as follows: An average data of these various sexual patterns showed that increase was noted in 12 per cent, decrease in 9 per cent, and no change in 79 per cent of Free Group of the

others and increase in 14 per cent, decrease in 5 per cent, and no change in 81 per cent of Paid Group of the author's series. An average data of both Groups indicated that increase was noted in 12 per cent, decrease in 8 per cent, and no change in 80 per cent.^{29,43)}

Postoperative changes in personal habits and general health were summarized as follows: Increase was noted in 10 per cent, decrease in 8 per cent, and no change in 82 per cent of Free Group of the others and increase in 10 per cent, decrease in 6 per cent, and no change in 84 per cent of Paid Group of the author's series. An average figure of both Groups showed that increase in 10 per cent, decrease in 8 per cent, and no change in 82 per cent.^{9,15,16,17)}

EXPERIENCES OF VASOVASOSTOMY

A total of 168 vasovasostomies were carried out by the author during the period from 1964 to 1973, but 12 cases were not properly followed-up yet. Various factors which are of importance in influencing the successful outcome of the vasovasostomy are analysed and presented as follows:

- A) One vasovasostomy has been requested once in 1,000 vasectomies at this time.
- B) An average age of the subjects is 39, and that of their wives, 32.
- C) An average interval between vasectomy and vasovasostomy is 4 years.
- D) The most common reasons for requesting the vasovasostomy are remarriage and deaths of children.
- E) Success rates are proved to be higher in 1) younger age group(84%)

2) the shorter interval group (84%), 3) the bilateral vasovasostomy group (84%), 4) the bilateral oozes group (86%), 5) the solid splint group (83%), 6) the 7-days hospitalization group (81%), 7) the end-to-end anastomosis group (80%), and 8) the folded side-to-side anastomosis group (82%), respectively.

F) One hundred and twenty-six cases out of the 156 cases whose semen were repeatedly examined were found to have viable sperm in their ejaculates (success rates: -81%). Pregnancies after the operation have been reported by 55 cases out of the 126 (pregnancy rate: -35%).

G) The most common causes of failures are 1) sperm granuloma, 2) infection, 3) fibrosis, 4) injuries of blood vessels, 5) avascular necrosis due to extensive mobilization, 6) inadequate approximation of both ends, and 7) early ambulation. 24,25)

H) Over-all results reported by other workers after 1961 are a success rate of 77 per cent and a pregnancy rate of 29 per cent. 5,6,7,13,28,30,41)
(Table 8-11)

Table 8. Case Histories of Vasovasostomy

TOTAL OPERATIONS = 168 (1964 - 1973) Cases	
AVERAGE AGES = ♂ : 39 (19 - 58); ♀ : 31 (21 - 49)	
DURATION FROM ♂ TO ♂ = 10 (1 - 28) years	
DURATION FROM ♂ TO ♀ = 4 (1 - 16) years	
CHILDREN = 2.7 at vasectomy; 2.2 at vasovasostomy	
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> M F (1.5:1.2) </div>	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> M F (1.1:1.1) </div>

Table 9. Materials for Vasovasostomy

MAGNIFYING LOUPE : - magnification is 3 x 7 cm

INCISION : -single scrotal incision, 5 cm long

SUTURE MATERIAL : -7 -zero dermalon, blue color

SPLITTING MATERIAL : -solid dermalon, blue color
solid dermalon group: -142 cases (sperm(+)-83%)
hollow splint group:-10 cases (sperm(+)-67%)
no splint group: -16 cases (sperm (+)-71%)

HOSPITALIZATION: -7 (+) days group: -151 cases (sperm (+)-81%)
2 (-) days group: -17 cases (sperm (+)-75%)

Table 10. Ananstomosis Technics of Vasovasostomy

ANASTOMOSIS LEVEL:

End-to-end group: - 108 cases (sperm (+)-80%)

Side-to-side group: - 60 cases (sperm (+)-81%)

Vas-to-vas+vas-to-vas group: -124 cases (sperm (+)-84%)

Vas-to-vas+vas-to-epi. group: -35 cases (sperm (+)-75%)

Vas-to-epi.+vas-to-epi. group: -9 cases (sperm (+)-56%)

OOZES OF SPERMATIC FLUID:

Bilateral oozes group: -75 cases (sperm (+)-86%)

Unilateral oozes group: -33 cases (sperm (+)-80%)

No ooze group: -60 cases (sperm (+)-73%)

Table 11. Results of Vasovasostomies

	Author		All Reported Cases					
	(1964-1973)		(1960-)		(1961 +)		(Total)	
	Cases	%	Cases	%	Cases	%	Cases	%
Semen Examined	156		588		641		1,229	
Sperm Positive	126	81	285	48	495	77	780	63
Pregnancy	55	35	17/63	27	178/609	29	195/672	29

* Out of a total of 168 vasovasostomies done by the author, 12 cases are to be followed-up. 156 cases are analysed here.

CONCLUSION

Vasectomy was first described by Hunter in 1775, but bilateral partial vasectomy was first attempted in human by Proust in 1896. In the past 10 years, vasectomy has been widely practiced for family limitation in many countries because the operation 1) has had nearly 80 years of clinical experience, 2) is accurate, 3) is safe, 4) is simple procedure, 5) can be restored in more than 3/4 of the reanastomosed cases, 6) prevents 3 unwanted children, 7) is effective for more than 40 years from age of 35 to 75, 8) is convenient for further 3,000 coitions, 9) is inexpensive in Korea, and 10) has very low complications. (Table 12)

Table 12. Advantages of Vasectomy

-
1. CLINICAL HISTORY : LONG - SINCE 1896 (1775)
 2. ACCURACY : LOW FAILURE RATES
 3. SAFETY : SLIGHT MORBIDITY, NO MORTALITY
 4. SIMPLICITY: OFFICE PROCEDURE
 5. RESTORATION : SUCCESS IN 75% (81%)
 6. BIRTH PROTECTION : 3 UNWANTED CHILDREN AVERTED
 7. EFFECTIVENESS : FOR MORE THAN 40 YEARS
 8. CONVENIENCE : FOR FURTHER 3,000 COITIONS
 9. INEXPENSIVE : WO-5,000 (\$12.00)
 10. COMPLICATIONS : VERY LOW
- EQUAL OPPORTUNITY : CONCEPTION BY WOMEN,
CONTRACEPTION BY MEN.
-

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INDUCED ABORTION IN KOREA

by

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Many countries have accepted contraceptives and have moved toward antinatalistic policies including the launching of large scale family planning programs.

In view of numerous shortcomings of various contraceptive method, consideration has been given in many countries to induced abortion for terminating unwanted pregnancies and as a backstop for contraceptive failure. In recent years the United Kingdom, United States and some Asian countries have reformed antiquated abortion laws, and legalization of induced abortion has been in progress. It is clear that where induced abortion has been legalized for social indication as well as for economic ones it has affected remarkable reduction in population growth, as evidenced, for example, by the fact that the national increase rate in Japan in post World War period since the Eugenic Protective Law was enacted caused the growth rate to below one percent. And additional evidence is that in Rumania in October 1966 revision of the abortion law aiming at the strengthening prohibitive policy produced a sudden increase in birth rate to 27.3 from 14.3. It is obvious that induced abortion in the face of lack of widespread contraceptive practice plays a major antinatalistic role.

Induced abortion in Korea has been prevailed by the people's own decisions, notwithstanding the illegal status of induced abortion, which is contrasted with the practice of family planning supported by the government and foreign countries since 1962.

Trends of induced abortion in Korea

With regard to induced abortion, Korea present a different situation. In articles 269 and 270 of the penal code abortion was defined as an illegal

procedure, on the other hand, it was widely practiced in the large cities particularly in Seoul. There was little difficulty in obtaining information about abortion or in gaining access to qualified medical personnel. Performing abortion was an accepted part of obstetric and gynecological practice. Essentially abortion is an open market rather than black market service.

In early 1973 enactment of Maternal and Child Health Law repealed pertinent articles of the penal code with resultant legalization of induced abortion in Korea.

It is probable that in 1950s abortion practice was negligible in urban area, for example, during the early part of 1950s in Seoul only 6% of all pregnancies was terminated by abortion among wives in their early 30s and in later part of 1950s corresponding figure rose to 14%. Of wives aged 20-44 in Seoul proportion of aborters was about one-fourth in 1964, 30% in 1966, one-thirds in 1968 and two-fifth in 1970.

Incidence of induced abortion in rural area in 1964 was about 5% and doubled in 1968 to 10% and rose to 19% in 1971.

Incidence in other urban areas in 1964 was 15%, 27% in 1968, one-thirds in 1971. Trend shows direct association with the degree of urbanization.

Nationwide trend is steadily in upward direction, whereas in Seoul the trend became decelerated or rather decreasing since the later part of 1960's, which would be probably attributed to the in-migration of rural labor forces to Seoul or the improvement of contraceptive practice in Seoul with the resultant reduction in abortion practice.

In rural areas the total induced abortion rates was negligible in early 1969s but steadily have taken upward trend as in other urban areas.

Prospectives of total induced abortion rate in rural and other urban areas shows continuous uprising in foreseeable future.

Estimates of induced abortion

The estimate of induced abortion for 1960 is 86,000 and for 1964 four years later, estimate become doubled to 180,000 abortions, in 1966 number trippled reaching 251,600 abortions and quadrupled in 1970 estimated at 332,000 abortions.

Background of aborters

In Korea the main reason for induced abortion are family size limitation for 60%, child spacing for 15%. Accordingly it may be assumed that induced abortion in Korea is likely to be performed after age over 30's. Proportion of abortions performed among wives beyond age of 30 is 58% in Seoul, 63% in other urban and 73% in rural areas. In other word the degree of urbanization shows direct association with the proportion of induced abortion terminated before age of thirties. Abortion performed other than family size limitation increase along with the urbanization.

Since principal reason for induced abortion is for limitation of family size, earlier marriage or the prolonged duration of marriage will maintain direct association with incidence of induced abortion. It is said that age at marriage is associated reversely with the incidence of induced abortion. On the same token, wives married for less than 10 years had an experience of induced abortion for 15% and those married for 10-14 years for 33% in Seoul. In urban areas corresponding figures are 11% and

26%, in rural areas 6% and 13% respectively.

The more closely associated variables are number of pregnancies, child birth and living children; in Seoul the average number of pregnancies of wives with experience of induced abortion is 6.2 times whereas of those in general population 4.2 times, with the differential of 2.0. Average number of living children are 3.1 and 2.5 children with differential of 0.6 child.

In other urban area average number of pregnancies among both groups are 6.7 and 4.4 pregnancies respectively, and living children are 3.5 and 2.9.

In rural area average number of pregnancies are 6.9 and 4.8 and living children 4.1 and 3.6 respectively.

In Korea proportion of aborters has maintained direct association with wife's educational levels. Differential of abortion rate by educational levels is much more prominent in rural area than in urban areas. In Seoul educational levels and incidence of abortion has direct association up until high school level. However, among college graduate mothers in recent years show rather decreasing rate compared to the previous survey, which would be due to the shift in fertility control patterns from induced abortion practice to the efficient contraception. In urban area similar relationship between educational attainment of wives and induced abortion is observed. In rural area wives in late thirties completing high school level experienced induced abortion for 82% which is most highest rate regardless of age and locality.

Abortion rate is higher among wives of white collar workers than blue collar workers in Seoul. In recent years some decreased induced abortion

rate is observed. This finding can be explained on the basis of more efficient and constant contraceptive practice might have lead this changes among the upper white collar worker's wives.

It still remains true that the living standard is in direct association with the induced abortion rate. However, among the top economic group shows rather decreased induced abortion rate in recent years compared to the previous rate observed in early 1960.

In summing up, induced abortion practice in Korea maintains direct association with educational attainment socio-economic background.

In one word induced abortion in Korea is more likely found among modern women, however, more closely associated with the demographic pressure encountered in the individual family life.

Impact of induced abortion on fertility

It is well known fact that in countries where induced abortion has been prevailed induced abortion has affected the birth rate. Estimate of yearly induced abortion performed in Korea is shown table 1. Estimated number of birth averted by induced abortion in 1960 is 36,989, and is gradually increased and almost doubled in 1964, 77,321. Number are trippled in 1967 and the quadrupled in 1970, 142,754 birth averted.

Impact of induced abortion can be expressed in terms of decrease in crude birth rate; induced abortion would have lowered crude birth rate by 1.5 per 1,000 population in 1960, 2.8 in 1964 and 4.5 in 1971. In other words if induced abortion would have been non-existent in Korea, crude birth rate 29 per 1,000 population would have been 33.5 in 1971 instead.

Table 1. Impact of Induced Abortion on Birth Rates in 1960-70

<u>Year</u>	<u>Estimated No. of Induced Abortion</u>	<u>No. of Birth Averted by Induced Abortion</u>	<u>Impact of Induced Abortion on CBR per 1000 Population</u>
1960	86,021	36,989	1.5
1961	104,568	44,964	1.8
1962	119,949	51,578	2.0
1963	161,819	69,582	2.6
1964	179,818	77,321	2.8
1965	240,725	103,512	3.6
1966	251,656	108,212	3.7
1967	272,173	117,034	4.0
1968	273,871	117,765	3.9
1969	299,941	128,974	4.2
1970	331,985	142,754	4.5

WORLD FERTILITY SURVEY IN KOREA

by

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I. INTRODUCTION

The World Fertility Survey Programme is a major international research programme dealing with human fertility behaviour. Its basic aim are two fold: to provide the scientific information which will enable countries throughout the world to describe and interpret population's fertility, and so far as possible to make analytical comparisons of fertility and the factors which affect it in different countries and regions of the world. Improved data on human fertility would clearly facilitate national efforts in economic, social and health planning for development, and would provide a much sounder basis than has, in many cases, previously been available for the study of population growth.

The sources of information available in Korea at present do provide some extent but not fully satisfactorily. The series of quinquennial population censuses are the most complete and probably the most useful source of information, but even they have several short comings. Vital statistics are generally incomplete, but direct compilation of demographic data by means of sample surveys such as the Special Demographic Survey by the Bureau of Statistics of the Economic Planning Board and series of Fertility & KAP Survey by the Korean Institute for Family Planning offered promise possibilities that have been explored in recent years.

Through the discussions of concerned government ministries and agencies decided to participate the World Fertility Survey, in observance of World Population Year 1974. Working group proposed the use of fertility surveys both to provide data for computing rates by conventional methods and for estimating the specific rates by new methods, because once a decision has

been made to take costs in effort and money to obtain the little specific additional data required is quite not much. The general demographic measures are so important for most developing societies that it would be unfortunate if the small additional effort were not made. It would be ironic if fertility survey yielded good data on such matters as family planning or birth spacing or fecundability, although the specific demographic rates were unreliable. The materials on family planning, if accurate, have independent value of their own, but their usefulness would be greatly enhanced if the detailed fertility measures were available as a frame work for interpretation. In any case, the summary demographic measures from appropriately bigger size of sample well have independent value regardless of the knowledge of details about the reproductive cycle. It is highly important that recent fertility data suggest at least very steady status of fertility trends rather than declining trends in previous decade. We presume that provocative issue of recent fertility trends could be proved through the world fertility survey programme in 1974.

2. CONTENT AND METHOD OF SURVEY

Sampling

The National Fertility Survey under WFS programme will be carried out on the probability sample basis. The survey will made use of an area cluster sampling with stratification, because of the technical and practical considerations.

In the case of follow-up surveys after the Fertility Survey, the advantages are even more overriding; in Korea of high mobility and inadequate address system, there is almost no way of defining for enumerator

the sample that he must cover than to instruct him to interview all households within his area. When households change their composition between rounds, problems of identity and sampling become almost intractable unless the coverage can be defined by reference to a criterion that is independent of the households themselves.

For the efficient conduct of the survey, it will be indispensable to have maps prepared showing the location and limits of each sample unit (in case of single stage area sample) or of the ultimate sample unit in which certain households are selected (in case of a multistage sample). Fortunately, a Population Census has recently been taken in 1970, adequate detailed maps down to enumeration area level are available, however, it will be necessary to bring such maps up-to-date before conducting the survey.

Since the crude birth rate do not constitute satisfactory basis for Korean situation, it would be desirable to estimate age-specific fertility rates by say five year age groups. For this purpose, substantially large sample would be required, and provisional estimate of the sample size was suggested approximately 20,000 households which means random sample of more than 100,000 persons in order to provide national estimate of less than 10 percent of standard errors of estimates for childbearing age groups of women except in the case of the one youngest age group and two oldest age groups. It was also suggested that the sample of approximately 5,000 childbearing women will provides information for analytical comparisons of fertility and the factors which affect it. In addition, when separate estimates are required by urban and rural, with a somewhat high precision, this leads to a further increase of the sample size with all the difficulties

entailed. Taking cognizance of not only the sampling errors, but also non-sampling errors, therefore, it was decided that the sample size will be a range of 15,000-20,000 households.

Two phase sampling scheme was also considered. Total of approximately 20,000 sample households by selecting 300 Enumeration Areas used in the 1970 Population Census which consists of 70 households on the average can be used to estimate fertility level by using the Household Questionnaire. From all of childbearing women enumerated in the sample areas, one third of sample women can be subsampled to obtain more detailed information by using the Individual Questionnaire.

An adequate sampling scheme can be made for reducing a minimum sampling errors and non-sampling errors as well under given cost, or vice versa by the cooperative efforts of sampling statistician and survey statistician on the basis of concrete data requirements and the practical problems attending the survey.

Considerations were also made to arrange a final independent check of a subsample by special interviewer, in addition to better field supervision through a Post Enumeration Check Survey following the main survey.

3. QUESTIONNAIRE DESIGN

The questionnaire is an investigatory tool and much depends on how its shaped and used.

Households questionnaire recommended in the WFS third draft are generally acceptable, but for the Korean situation it may be better to enquire mortality items such as mortality of parents or direct question of death occurred in certain period of time. As for Korean people is quite

homogeneous race, religion and ethnicity does not play important role in social context, it is considered replace those questions with mortality. Items considered in household schedule are divided into following 9 items.

- 1) Name
- 2) Relationship
- 3) Residence
- 4) Sex
- 5) Age
- 6) Fertility
- 7) Marital status
- 8) Education
- 9) Mortality

Further discussions by the working committee will continue to study core items for individual questionnaire based on the core questionnaire items given in the WFS third draft and the previous survey items in Korea, so that both can secure proper informations provide for international comparability and for the comparison with previous survey results.

We propose the use of fertility survey both to provide data for computing rates by conventional methods and for estimating the vital rates by some of new indirect methods, because once a decision has been made to take such a fertility survey with a good probability sample, the marginal costs in effort and money to obtain the little additional data required is quite small. The general and some specific demographic measures are so important for most developing societies that it would be unfortunate if the small additional effort were not made. In case like Korea, it would be ironic if fertility survey yielded good data on such matters as

family planning or birth spacing or fecundability, although relatively accurate age specific fertility rates and other fertility indices were not very much reliable. The materials on family planning, if accurate, have independent value of their own, but their usefulness would be greatly enhanced if the general fertility measures were more reliable as a framework for interpretation.

The key fertility and abortion data derive from fertility histories more than from household schedules. Brass type questions on children even born are good and should be used, but real value may be less in case of Korea where age reporting is relatively better than Africa and better accumulated survey experiences. Therefore, the greater depth of analysis possible with pregnancy history obtained from the subsample of ever married women in the household.

Abortion has relative importance in Korea. It is also known that Korean experiences are far better than American to obtain accurate data on abortion through pregnancy history. And it is very important to obtain good data on abortion because large number of abortion takes place as a method of birth control in Korea, and has played a major role in fertility decline. Long interpregnancy intervals should be proved specifically for abortion. A listing of the dates and pregnancy duration of all abortions should be obtained as an integral part of the pregnancy histories. Induced abortion should be added to all lists of birth control methods about which respondents are asked knowledge, attitude or practice questions. We also presume that the random response technique be used as a check on the quality of abortion data, at least in World Fertility Survey programme.

Particular attention will also pay for getting accurate age data, where we found that no formular and no demographic analysis will be as good as the proper coding to begin with. The optimum way to convert all important ages and dates is by detailed age conversion tables. While this involves somewhat more time than shorcut formulars or procedures, it avoids the errors which the latter introduce, and pay off in the long run in better age data, which of course are of central importance for almost all demographic analysis.

Accordingly, brief review of core items suggested in the third draft of International Statistical Institute are divided into following 8 sections (Individual questionnaire). Korean version of final draft questionnaire may be expected by the end of June this year.

- 1) Respondents background
- 2) Maternity history
- 3) Marriage history
- 4) Contraceptive knowledge and use
- 5) Family planning service
- 6) Fertility planning
- 7) Work history and opportunity
- 8) Current (last) husband's background

4. TRAINING

Interviewers must given explicit training. Through the experience of previous surveys is that training course should be at least three weeks in duration and that perhaps where the good pretests has identified the major problems. Training will be contralized one rather than deputized

in numerous centers. Training course are made up of a) classroom instruction and background reading, b) laboratory-type experience c) experience in the field and group discussion d) procedures for the house listing, map reading.

Supervisors training may be treated as a briefing course prior to interviewer's training, but should be included during the training courses given for interviewers.

While survey should be avoid excessive bureaucratization, it is important that all general instructions be put on the manual based on clearly established definition alone with efficient record systems.

5. FIELD OPERATION

The survey will be carried out by using the canvasser method, i.e., interviewers should visit every sample household to record the data.

The respondent will be the household head (or the house-wife) and eligible women concerned. As concerns retrospective information on fertility, the questions will be addressed directly to the women concerned.

In case of temporary absence of the best and/or eligible informant from the premises, efforts will be made to arrange a call-backs and only as a least resort will outside information be relied upon.

Adequate supervision of the interviewers would be essential in this survey. The working committee suggested that the field supervisors must be active in this respect, and the interviewers must know that their work is controlled.

Field supervisors will be selected among the KIFP and the BOS staff who has good qualification and administrative experiences. It is suggested

to recruit female interviewers, probably with unmarried. Persons who have high school graduate and above level will be recruited through competent examination.

There is no unanimity on whether the defacto population or the dejure population should be considered in this survey. It has been observed that migration undoubtedly created difficulties in respect of both more stable and better known in the sample area and their vital events are easier to record. Whenever the dejure concept is followed, however, one of the problems to be solved is the difficult of obtaining retrospective information on fertility of eligible women who usually resident but absent. Further discussions on this matter will continue at preparatory stage.

KOREAN VALUES AND FAMILY PLANNING

by

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Korean Values and Family Planning

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I

It has been widely claimed that Korea is one of the most successful cases in family planning during the past decade or so. During the period 1955-1960, the average annual birth rate was 2.9%, and during 1960-1966, it was 2.7%. Since the Government initiated, in 1961, the nation-wide family planning program as an integral part of long-range economic development plans, the Government planned to reduce the population growth rate from 2.9 percent to 2.0 percent per annum. In 1970, it reached 1.9 percent. Having successfully reached the goal, a new target of 1.5 percent has been set up for 1976. And we are striving toward this goal.

These happy statistics, however, do not throw a happy shadow only. Many pill users are complaining about side-effects, many IUD users terminate in a year (43%) or two (62%). Continuous efforts have been made to identify the background reasons and militate against these reasons. A series of KAP surveys have been conducted in the hope of obtaining relevant data. However, the main purpose of the KAP surveys are to evaluate the effectiveness of the national family planning program. They included knowledge about and attitudes toward family planning, expression of ideal family size, desire to adopt family planning practices, etc. There have also been several other studies dealing with specific social groups, such as family planning personnel, school teachers, military personnel, and elementary and secondary school students.

Most of these typical KAP survey revealed that educational attainment, socio-economic status, residential area, place of growth, family structure, age at marriage, member of living children, and the like are all related to family planning adoption. Woman who are young and more educated, belong to higher socio-economic status groups, live in urban areas, and have been married longer are repeatedly found to have more knowledge of family planning and being more favorable of it.

However, the socio-demographic studies of fertility regulating behavior have failed to provide why, for example, the higher the educational level, the more favorable towards family planning and the higher the practice rate. Some of the attitudinal items in the KAP surveys and the results are of the descriptive nature and intended, at best, to indicate the present psychological state of individuals rather than explanatory research in the sense of exploring psychological variables as correlated to fertility and family planning behavior.

In late 1960, we began to ask question of "why," and felt that, in order to better explain the family planning behavior and to provide fundamental information, it is important to dig the psychology of individual deeper than we have done thus far. Our assumption was basically simple: It is the value system of the individual, rather than surface verbal agreement of an individual with family planning, that make him truly agree with, adopt, and continue family planning. With this as our point of departure, we began to "theorize" phenomenon of fertility regulating behavior with the value system as the core. This discussion will focus on the value orientation of Korean and its relationship with

family planning, using empirical data where possible.

II

In our 1970 nation-wide survey, we assumed that human behavior is an end-product of dynamic interaction of an individual's internal psychological processes and social forces in the individual's environment. In the context of family planning behavior, we identified five general domains of psychological and socio-psychological attributes: Value orientations, modernity attitudes, family planning attitudes, family planning knowledge, and perception of environment. Of these, the first three were regarded as attitudinal variables and assumed that each occupied different layers in psychological structure. Since value-orientations are the most generalized, organized, and enduring of psychological attributes, it may be supposed that this domain is most deeply located in psychological space. On the other hand, attitudes toward family planning are the most specific, least organized, and least enduring of attitudes in the psychological domain. Thus, they may be located somewhere in the outermost part of the psychological space. Since modernity attitudes or attitudes towards social institutions are intermediate between the two former domains in terms of generality, organization, and endurance, this psychological domain was placed in the middle of the psychological space.

All three attitudinal domains have a direct bearing on individual modernity characterizing persons typical in industrialized and urbanized societies, although the term modernity was used to designate only the

intermediate attitudinal domain, attitudes toward social institutions. Smith and Inkeles define individual modernity as "a set of attitudes, values, and ways of feeling and acting, presumably of the sort either generated by or required for effective participation in a modern society." This definition implies that individual modernity is composed of overt and covert behavioral components. In this study, however, the concept was delimited to indicate the covert or internal psychological attributes rather than the outwardly manifested behavior or action.

Specifically, then, what types of attitudes or values could be presumed to be "modern?" In the literature on social change, the concept of individual modernity has been defined in various ways. But there is no consensus on the psychological components of individual modernity. Illustrating only a few examples, the psychological characteristics of a modernized person described by social scientists are: openness to new experience, the Protestant ethic, need for achievement, will to economize, belief in rational control of the world, universalism, sense of self-efficacy, active citizenship, wish to have a small family size, etc. Taking into account these characteristics, we conceptualized the dimensions of each attitudinal domain.

Just as a culture has basic patterns of norms, so does an individual have basic cognitive and normative orientations toward some fundamental problems of human experience. We called such psychological attributes value-orientations. According to Kluckhohn and Strodtbeck, five fundamental problems of human experience were singled out: orientation toward human nature; orientation toward man-nature relation;

orientation toward time focus; orientation toward activity modality; and orientation toward human relation. How members of each culture approach these fundamental value orientations should reflect the prescriptions of that particular culture. Thus, it can be easily assumed that the ways of solving problems in these five orientations would vary from culture to culture.

Studies on individual modernity have implied that mastery, achievement (or doing), individualism, and future orientations would more appropriately characterize modern or developed societies. So we called those four value-orientations "developmental orientations." Our general hypothesis was that those four developmental value-orientations are conducive to the adoption of family planning. Since it appeared to us that value-orientations with respect to human nature are not so relevant to the modernity concept as are other orientations, we eliminated that dimension from the analysis. As value-orientations vary cross-culturally, they would do so among subcultures and among individuals in a particular culture. The study mainly concerned individual variations in value-orientations.

Next, attitudinal domain involved attitudes toward social institutions, such as the family, the economy, the polity, and social structure in general. In contrast to the higher-order general attitudes which subsumed value-orientations prescribed by the basic patterns of a culture, attitudes toward social institutions are relatively more time- and situation-bound with emphasis on the role expectations of members of the society. It was our assumption that attitudes toward social institutions

are derived from general attitudes. Yet we should also assume that these intermediate attitudes are acquired through the specific experience of the individual in that society but, unlike the general attitudes, the objects to which psychological dispositions are directed are the issues and events in the social institutions of a particular time period. It is, therefore, conceivable that people will differ in their attitudes on the modern-traditional continuum. The modernity or traditionalness of each item was decided from the standpoint of contemporary Korean culture.

Finally, specific attitudes toward family planning were defined as psychological orientations toward the objects and situations directly related to fertility limitation. People may have similar modernity attitude and value-orientations but may still differ widely in regard to their specific attitudes. Those who maintain a "modern" developmental value-orientation and modern attitudes toward social institutions may still claim that for them a large family is preferable, that abortion is unacceptable, and that contraceptive methods should not be taught to their children. It is a general tendency that people in industrialized societies are likely to prefer a small family and to accept the ideas and means of family limitation. In the context of our conceptualization, the conception of a small family size and attitudes favorable to family planning were regarded as being modern. It can be hypothesized that these specific attitudes would affect birth control practice and fertility.

The results in general confirmed our general hypothesis that value-orientations are significantly related to fertility behavior. More specifically, the development value-orientation (including mastery,

individual, achievement, and future orientation), modernity attitudes (toward familial, economic, political, and social affairs), and favorable family planning attitudes were all positively related with fertility behavior.

We recall that there are five major psychological factors: value-orientation, modernity attitudes, family planning attitudes, knowledge of contraception and environment-perception. We examined the multiple correlations of the combinations of psychological variables. First we combined all the variables in value-orientations, modernity attitudes and family planning attitudes, and then all these and the variables in environment perception. It was found that the multiple correlations of value-orientations, modernity attitudes and family planning attitudes against different fertility behavior indices ranged from .169 to .386.

When all the psychological factors hypothesized in this study were combined, their multiple correlations were .619 with the degree of involvement in birth control information seeking and in birth control persuasion, .483 with past or current contraceptive practice, .310 with having an induced abortion, .328 with current contraceptive practice, and .393 with knowledge of contraception. This meant that the hypothesized psychological factors, when combined, explain 10 to 38 percent of variances in the different family planning indices. We felt that we have shown that the basic assumptions and the hypotheses we started with were tenable.

We concluded that (1) The psychological factors are one of the mechanisms through which the social background factors operate to affect

fertility behavior. In other words, the psychological variables are one of the underlying reasons for the recurrent findings that social background variables are correlated with fertility and family planning behavior. (2) The psychological factors are independently important beyond being operational mechanisms of social background factors. The measurement of psychological variables adds new dimensions that have not been included in the previous primarily sociological, economic and demographic variables. The psychological factors may be fostered not only by formal education or by living in the urban community but also by a host of other determinants. (3) The psychological factors interact with the social background factors in influencing fertility behavior. In some socio-demographic conditions, the psychological variables are more important determinants of fertility behavior than in some other conditions.

Having proved that psychological approach to the understanding of fertility behavior had been fruitful, we became further interested in asking more fundamental questions. We posed two questions which we felt important; What are the basic reasons for the people to want children at all and what the correlates of boy preference attitude which is such a pervasive factor related to fertility decision in Korea.

III

The first question was framed in the project, Value of Children to Parents, a cross-national comparative study. The study was the first attempt to answer a simple but important question, "why do people want children?" The conceptual framework focused on the individual parent's

perception of satisfaction and costs associated with having children.

The basic assumption was that parent's desire for children can be translated into the motives to childbearing by which individual's childbearing behavior is better predicted. Presumably there are two distinct motives to childbearing, namely, approach motives to childbearing which leads to desire for having children and avoidance motives from childbearing which lead to family planning behavior. Our objectives were (1) to describe satisfactions and costs of having children and then (2) to relate the value of children to other attitudinal and behavioral aspects of parents such as family size, family planning, and fertility behavior.

Results obtained from the study showed an integrative picture on the parent's perception of satisfaction and costs of having children.

The table 1 & 2 shows the pattern of the value of children perceived by the Korean parents. Though some categories of the value and disvalue of children seem somewhat overlapping, it is apparent that the various satisfactions and costs with regard to having children are adequately identified. The Koreans were found to emphasize happiness for the family, play/fun with children/avoidance of boredom as positive value of children and financial and emotional strains as negative value of children.

Three social status groups differed in their perception of children.

Urban middle respondents stressed the happiness for the family, stimulation to achievement, and satisfaction in one's childbearing ability in that order while urban low and rural respondents emphasized in the order of play/fun with children/avoidance of boredom, happiness for the family,

Table 1 Categories of Value of Children

Category	Value of Children
1. Social-instrumental value	1. Support and care in parent's old age 2. Help in household chores and other practical help 3. Continuity of family name
2. Personal-familial value (reward in parent-child and husband-wife relationship)	4. Companionship for siblings and for parents/avoidance of loneliness 5. Happiness for the family 6. Stronger bond between husband and wife 7. Parenthood satisfaction 8. Learning from experience of child-rearing 9. Play/fun from children/avoidance of boredom 10. Stimulation to achievement
3. Child proper value	11. Love and affection 12. Pleasure from growth and development of children

Table 2 Categories of Disvalue of Children

Category	Disvalue of Children
1. Economic cost	1. Financial problems in childrearing and education
2. Physical cost	2. Physical works and tiredness
3. Time cost	3. Restriction on job/career 4. Restriction on travel 5. Restriction on time 6. Restriction on familial life
4. Psychological costs demanded in childrearing	7. Disciplinary problems 8. Noise, disorder, nuisance 9. General emotional strains 10. Children's health, worry over sickness 11. General rearing problems

continuity of family name, and stimulation to achievement.

Also, respondents in general differed in their perception of the value of girl and value of boy. Girls are valued for their behavior/personality qualities of girls, companionship/closeness to mother, and happiness for the family, whereas boys were valued for the continuity of family name, comfort and care (old age not mentioned), and companionship and care in old age. Also boys were regarded as having more economic utility, especially in parent's old age. As anticipated, expectation of financial contribution was greater from sons than from daughters. This is quite notable among rural respondents and slightly among urban low respondents, though majority of the total respondents did not expect economic help either from sons or from daughters. Thus, girls are valued more in terms of their affective roles in the family life while boys are valued more in terms of their instrumental roles in the family.

The second major aim of this study was to examine the effects of parent's value of children on their various attitudinal and behavioral aspects. Multiple regression analysis was done and we found: (1) The VOC variables alone explained between 10% to 32% of the variance in the dependent variables such as number of children wanted, ideal number of children, number of contraceptive methods know, and attitude toward birth control, while socio-demographic variable such as income, age, urban experience, and education explained between 4% to 40% of variance. Moreover, when dependent variables were ideal number of children and attitude toward birth control, the VOC variables explained the variance

much better than the socio-demographic variables did; (2) In the VOC variable proper, continuity/security stood out as the strongest and most salient predictor of dependent variables such as number of children wanted, ideal number of children, and number of contraceptive methods known; (3) Among other VOC variables, roles and happiness for the family were effective in explaining the number of children wanted; and (4) When dependent variable was the current use of contraceptive methods, parenthood satisfaction and cost of child emerged as important predictors.

IV

Another project was the Boy Preference and Family Planning in Korea. This study is quite a comprehensive one in that the study included an intensive survey study, an anthropological study, a case study of sonless couples, a study of youngsters consisting of students at each school level and a group of working youths, and a study of opinion leaders on their attitude toward various legal statutes that are discriminatory against the females and their opinions concerning ways to reduce boy preference attitude in Korea. Besides these empirical studies, there were three nonempirical studies: A history of boy preference in Korea, a study of anthropological evidence of boy preference, and a review of legal statutes that are sex discriminatory.

The results generally confirmed the predictions as far as the data on desire for more children are concerned. As anticipated, boy preference attitude or need for sons was most predictive of desire to have more children when couples had no sons and least predictive when couples

had sons only. Again, as expected, need for sons was most predictive when the parity was intermediate in size, i.e., three or four children but not when the parity was too small or too large. Press for sons from elders in the family acted as though it were an incentive variable, that is, it interacted multiplicatively with need for sons to affect desire for more children. As long as the wife's need for sons is low, press from others to bear sons does not affect the level of desire for more children. But when the wife's need for sons is high, press from others is highly influential in determining the level of wives' desire for more children.

As expected a higher percentage of the wives of the boy only group were currently practicing family planning (50%) than wives of the mixed sex and girl only groups (38% and 27%, respectively). Likewise, need for sons was effective in differentiating the level of family planning practice. Need for sons did not interact with parity either in predicting family planning practice of wives. One puzzling finding was that the rate of current practice of family planning was not different between the three parity groups (2 children, 3-4 children, and 5 or more children). It must, however, be remembered that here we did not have a representative sample of Korean wives. Since wives in three sex composition groups were pooled to form parity groups and since wives in the all-girl group tend to have a large number of children, it is likely that the largest size parity group was overrepresented by these all-girl mothers, who want to have more children. The percentage of current practice of family planning in all-boy, mixed sex, and all-girl groups was 37%, 46% and 33%, respectively.

Place of residence, place of growth, education, income, family structure, number of elders in the family, and to a lesser extent religion, all affected the level of need for sons in individuals. Adults who were raised in and are living in rural areas, who did not attend school at all or received a minimum level of education, whose income is low, who have a stem family (family in which the husband's one or both parents live together with the couple), who have elders living in the same house, and who have no religion, tended to have high need for sons. Of these factors, the most important seem to be place of residence, place of growth, and education. There is evidence that adults who moved from a rural to an urban area carry their high need for sons with them into their new urban environment. Also, of the adults who grew up in the rural areas, only those whose level of need for sons is low tend to migrate out to urban areas. In other words, the rural villages serve as the source point from which boy preference attitude is exported to other areas.

Authoritarianism was positively correlated to need for sons. ($r=.16$ in wife; $r=.30$ in husband) and negatively to locus of control ($r=-.35$ in wife; $r=-.29$ in husband). A scale for abasement of women attitude was positively correlated to need for sons ($r=.64$ in wife; $r=.50$ in husband). Adults who are high in need for sons tend to be high in authoritarianism, external-control in personality, and abasing of women in attitude. Need for sons was negatively related to a measure of striving for money and also to a measure of striving for education of children.

As far as adults are concerned, previous studies have shown that wives' boy preference attitude is stronger than that of husbands. The present survey confirmed this finding. Interestingly, the study also revealed that wives are as much women-abasing in attitude than husbands.

Furthermore, students were sampled at each school level from primary school to college. It was found that their level of need for sons was far below that of the adults in their thirties and forties. One striking finding had to do with sex difference. In contrast with adults, the youths showed a sex difference in the level of need for sons in the opposite direction. That is, it was the male rather than the female who showed a higher level of need for sons. Other measures of boy preference used in the study such as ideal number of sons and daughters, indicate that boy preference attitude is almost totally absent in the teen age females. Though much lower than that of their adult counterparts, need for sons scores and other measures from the males definitely indicate that boy preference attitude is formed in males as early as primary school years or even earlier and does not undergo much change all the way up to college. The question is: what after the college years? This rift in boy preference attitude that divides the adult population and the younger generation may or may not be a real one. Further study is indicated.

V

We have shiftly run down three empirical studies specifically addressed to understanding relationships between value orientations and

family planning in Korea. Our social-psychological approach has proven its usefulness in empirically grasping the relationships. It was found that the individual modernity, conceptualized in terms of developmental value orientations, modernity attitudes towards social institutions, and perceptions of environments offering positive stimuli for change are positively correlated with family planning. Value factors affect fertility and family planning behavior, which, in turn, are affected by socio-demographic characteristics. Although more rigorous tests are required, it was suggested that individual modernity factors, which reflect the changing socio-cultural context, are more relevant for explaining fertility regulating behavior than are relatively culture-free or situation-free basic personality variables.

Consistent with socio-cultural conceptualization is the wide spread preference of son, which also reflects traditional, Confucian value orientation. Son, not the daughter, will carry the family name, will support the family economically, will transmit family tradition. Social, legal, historical analysis reveals that son preference is a deeply-ingrained, culturally conditioned disposition of most Koreans. The results from the value of children study suggest that girls are valued because of the values associated with childrearing, while boys are valued because of the values associated with childbearing -- which is presumably more fundamental in terms of fertility decision. In the process of boy-preference study also, we felt that study was not only a study of son preference but a study of childbearing -- adding up to population growth in the aggregate.

A big question remains: Having found the relationships between values and fertility behavior, what are the next steps to effect the values to change.

INFORMATION, EDUCATION AND COMMUNICATION ACTIVITIES
OF THE KOREAN FAMILY PLANNING PROGRAM

by

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Introduction

The Planned Parenthood Federation of Korea (PPFK) serves, among its other functions, as the sole agency responsible for the implementation of information, education and communication projects in support of the Korean national family planning program. At the beginning of the 1970s, it became apparent that comprehensive, well-planned and well-executed Information, Education and Communication (IEC) activities are essential to the success of the program.

Evaluation indicated that program performance had levelled off since 1968 and the numbers of new acceptors had barely compensated for family planning drop-outs.

Recent survey results suggest that this is related to the stubbornness of traditional attitudes. The ideal number of children among Koreans has fallen, but is still high, about 3.6 among urban families and 4.1 in rural areas. The traditional attitude of male preference appears to be one of the major obstacles to further reduction in the ideal family size. Most Koreans still consider a family with at least two sons as ideal. These facts demonstrated that there was a need to develop new approaches and approach new target groups if the program was to make significant progress.

The program could no longer rely on activities which merely provided information to stimulate spontaneous acceptors to come to the family planning clinics, but had to begin to address the difficult task of attitude change.

It was also clear that approaches to new target groups had to be explored. The program had previously concentrated heavily on married couples in their thirties, but family planners began to see the need for projects directed at younger audiences as well. This is particularly urgent in view of the fact that the post-Korean War baby boom generation will be entering the fertile age cohorts in the mid-1970s, swelling the number of eligible women to about five and a half million. If these young people are not reached with the ideas of family planning in the near future, the national program will have lost a great opportunity to capitalize on the relatively small number of women in the fertile age ranges in the last decade due to the effects of the Korean War.

Effective youth oriented projects may ultimately prove to contribute more to reducing the fertility rate in Korea than previous activities directed at older people, in consideration of the high drop-out rates that have characterized these efforts.

Results of the 1970 census also indicated that more attention to urban areas was required for program success. Rapid urbanization in recent years has brought tremendous numbers of people into the cities and has resulted in the growth of large slum areas that tended to be left out of family planning program during the 1960s.

The census showed, however, that these areas have the highest fertility rates in the nation. They generally are serviced by inadequate family planning facilities, and their residents are relatively conservative and particularly hard to reach through standard IEC channels. Unless way is found to effectively reach the population of these lower

income urban districts, the national program will be unable to reach its goals.

There is some evidence that greater emphasis on vasectomy could also help to improve program performance. The program up to now has stressed contraceptive methods for women, and vasectomy has remained the least utilized of government program methods. Its convenience and reliability, however, justify its application on a wider scale, and more an intensive vasectomy promotion has been undertaken.

In order to cope with these conditions, the PPFK has redirected and intensified its IEC activities in the last few years. The PPFK is in a particularly good position to implement an IEC program. Its status as a private, voluntary organization gives it a flexibility that most governmental organizations don't have because of budgetary and administrative constraints, enabling it to conduct pilot projects with a minimum of difficulty. On the other hand, its close working relationship with the government means that there is no duplication and that the activities of the PPFK directly support the national program.

Major shifts in emphasis involve the development of a long-range motivational campaign to combat traditional attitudes, particularly attitudes of male preference, the promotion of campaigns directed at youth audiences, and the exploration of approaches to urban residents, particularly urban slum-dwellers.

In carrying out these activities, the PPFK uses interpersonal channels of communication, exemplified by the family planning Mothers' Club system, organizational approaches in which non-family planning

social organizations are used to promote family planning, and the utilization of channels of mass communications.

IEC Approaches

Interpersonal Communication

Interpersonal communications activities, needless to say, are indispensable for any family planning program, and constitute the most effective way of recruiting new acceptors. Among the most important of the agents of interpersonal communications that the national program has at its disposal are the government family planning field workers. The PPFK provides support for the activities of these personnel through the provision of information and motivational material, including leaflets, pamphlets and audio-visual aids.

Supplementing the work of the government fieldworkers in rural areas is the PPFK's system of Mothers' Clubs. These voluntary grass root organizations stress family planning as an aspect of responsible parenthood and of its connection with community development, and are supported and maintained by the PPFK. First established in 1968, the network of rural clubs is still growing, and now includes around 26,000 clubs with a total around 600,000 of members.

PPFK annually holds training courses for the voluntary leaders of these clubs to develop their leadership capabilities and to prepare them to serve as family planning agents.

Training is also held for the individuals responsible for the management of the Mothers' Banks, which are being stimulated to develop the clubs as autonomous, cooperative organizations. Training is held

for Mothers' Club leaders and treasurers. Training is also given to Mothers' Club Supervisors, who are each responsible for the administration and management of Mothers' Clubs in two to three counties. The latter training session, stresses IEC techniques and administration.

Efforts have been made to adapt the Mothers' Clubs to the urban context, but this project has necessarily been modest in scale because of the differences between urban and rural community structure. The program has thus had to rely on other ways of supplementing the activities of the urban government fieldworkers.

The PPFK operates a system of 14 urban family planning clinics staffed by both medical personnel and fieldworkers. The clinics are in general located in areas with poor access to the government health centers, and the clinic-centered IEC activities carried out by the PPFK staff contribute to reaching the lower income urban population. The situation should be alleviated somewhat in Seoul when the Seoul City Government develops its plan of establishing additional family planning clinics in twelve strategic areas and conducting clinic-centered IEC activities.

Another interpersonal channel of communication in urban areas developed by the PPFK is represented by the Two Child Family Clubs. Started in December of 1971, the club is composed of couples who have decided to limit their families to two children or less. It now has branches in 25 cities, with a total membership of about 750 couples, primarily middle class urbanites, it is planned to use these individuals as resource people in the implementation of information and motivational projects.

Organizational Approaches

IEC programs utilizing a variety of non-family planning organizations have been developed over the last few years by the PPFK in an effort to reach people in specific professional and social groups with family planning information and motivational messages. The ultimate objective of many of these projects is to initiate a regular family planning informational program using existing organizations, often run by the organization itself. This kind of program helps to compensate to some extent for the difficulty of identifying and utilizing residentially based interpersonal communication networks in the cities.

One of the most promising of the organizational approaches is the Homeland Reserve Force Project. There are about 2.5 million men between the ages of 25 and 35 in the reserve forces, who must attend regular training sessions. This program is a particularly good vehicle for a motivational campaign stressing vasectomy. This year it is expected that 700,000 reservists will receive the lectures, which reached 450,000 men last year. A program on similar lines was recently begun for regular army personnel as well.

The Enterprise Project similarly aims at providing family planning services for laborers at their factory sites and conducting factory-centered motivational programs. The project makes use of the members of the Two Child Family Club, who promote family planning practice at the places where they work, with emphasis on vasectomy. The program will be expanded next year to provide regular family planning services at factory dispensaries as a project of the Korean Federation of Trade

Unions. PPFK will provide personnel and materials for IEC projects centered around these clinics, as well as some technical support for the service component.

The government has recently announced a plan to include family planning lectures in all training programs for civil servants. This program will reach not only new government employees, but also those currently employed, who must attend retraining courses in order to be promoted. PPFK has been given responsibility for designing curricula and for providing lecturers to implement this plan. Reaching a predominantly male audience, the lecture programs for the Homeland Reserve Forces, regular army, enterprise workers, and civil service employees seem to have caused a vasectomy boom because of their emphasis on male sterilization. Recent PPFK clinic statistics for vasectomy operations performed show that more than twice as many occurred in the period from January through May of this year than in the same period in 1973. Many of the men said that they had learned about vasectomy at their reserve training meeting.

In support of this and similar projects, the PPFK has conducted training for 99 professors, writers, journalists and other community and social leaders to enable them to serve as lecturers on family planning themes. They are now actively engaged in lecturers for reservists and in other lecture programs.

In addition to projects which involve the initiation of regular family planning educational programs, the PPFK also provides support for lectures and seminars conducted by other organizations for more specific purposes.

Many of these meetings have the added benefit of providing material for mass media coverage of family planning and related issues.

PPFK provided support for a public lecture meeting on the need for revisions in the civil code to abolish legal discrimination against women sponsored by the YWCA and the Legal Aid Center for Family Relations. Apparently in response to favorable coverage by the mass media, the government party established an ad hoc committee to study the issue. Though actual revision of the legal code may be expected to take a long time, the press coverage has succeeded in drawing attention to problems created by attitudes of male preference.

Another seminar sponsored by the PPFK for the editors of college newspapers resulted in a number of special lectures on population, sex education and family planning at several campuses in Seoul. PPFK has expanded the college program to universities including all of the nation's 100 colleges, junior colleges and teachers colleges this year.

Other seminars have been held for writers to encourage them to deal with population and family planning issues in their literary work, and for high school principals to provide them with an opportunity to discuss the implications of the revision of high school textbooks to include population and family planning information. Meetings have also been held for women pharmacists, nurses and midwives with assistance from the PPFK.

A very significant program, the "No Pregnancy Year" Campaign, was devised and implemented this year by the Korean Federation of Housewives' Clubs with the support of the PPFK. The club members have

pledged themselves and urge others not to have unwanted children during World Population Year.

Some other voluntary organizations have begun to conduct programs of their own, with the technical assistance of the PPFK, including the Korean Federation of Cultural Centers, the Korean Federation of Education Associations, and the Korean National Council of Women.

Mass Media

The interpersonal and organizational approaches described above are reinforced by a comprehensive program of mass media utilization. While these channels of communications are somewhat less effective in actually recruiting family planning acceptors, they perform a necessary function in drawing public attention to the problem and in promoting a climate of opinion favorable to the practice of contraception. In terms of available media, Korea is relatively fortunate. There are over one million TV sets and about four million radios throughout the country. Illiteracy is almost nil, and the press is relatively well developed.

A variety of programs have been broadcast over radio and TV, including month-long serial dramas, one-act plays, comedies, discussion programs and interviews. In addition, short spot announcements have been broadcast over both radio and TV advertising the Stop at Two Campaign.

Press coverage has been stimulated by occasional press conferences and press releases in addition to the spontaneous coverage of events of great public interest, such as the college campus lecture programs and

the seminar on the abolition of legal discrimination against women. Newspaper ads have also been used to publicize the PPFK telephone counseling service in Seoul. PPFK also holds an annual family planning writing contest in co-sponsorship with a popular women's monthly magazine which publishes the winning articles. One popular weekly now includes a family planning consultation page as a regular feature.

For the past two years, the PPFK has sponsored a public family planning exhibition or street campaigns. The events have gained the attention of the mass media and are supported by PPFK-prepared hand-out material. In last year's street campaign in Seoul, consultation and contraceptive services were provided at special sites throughout the city and intensive home visiting and special lecture programs were also implemented.

Mass mailing campaigns are conducted each year to enlist the support of policy makers and social leaders for the national program. This year, letters will be sent to 26,000 Mothers' Club leaders and 1,500 doctors throughout the country emphasizing the necessity of a strong family planning program for the success of the Korea's economic development plan and informing them of new developments in family planning.

Looking Ahead

These IEC programs in support of the national family planning program are proceeding relatively well.

Much of the credit for this is due to the wholehearted support of the Ministry of Health and Social Affairs, and to the generous assistance

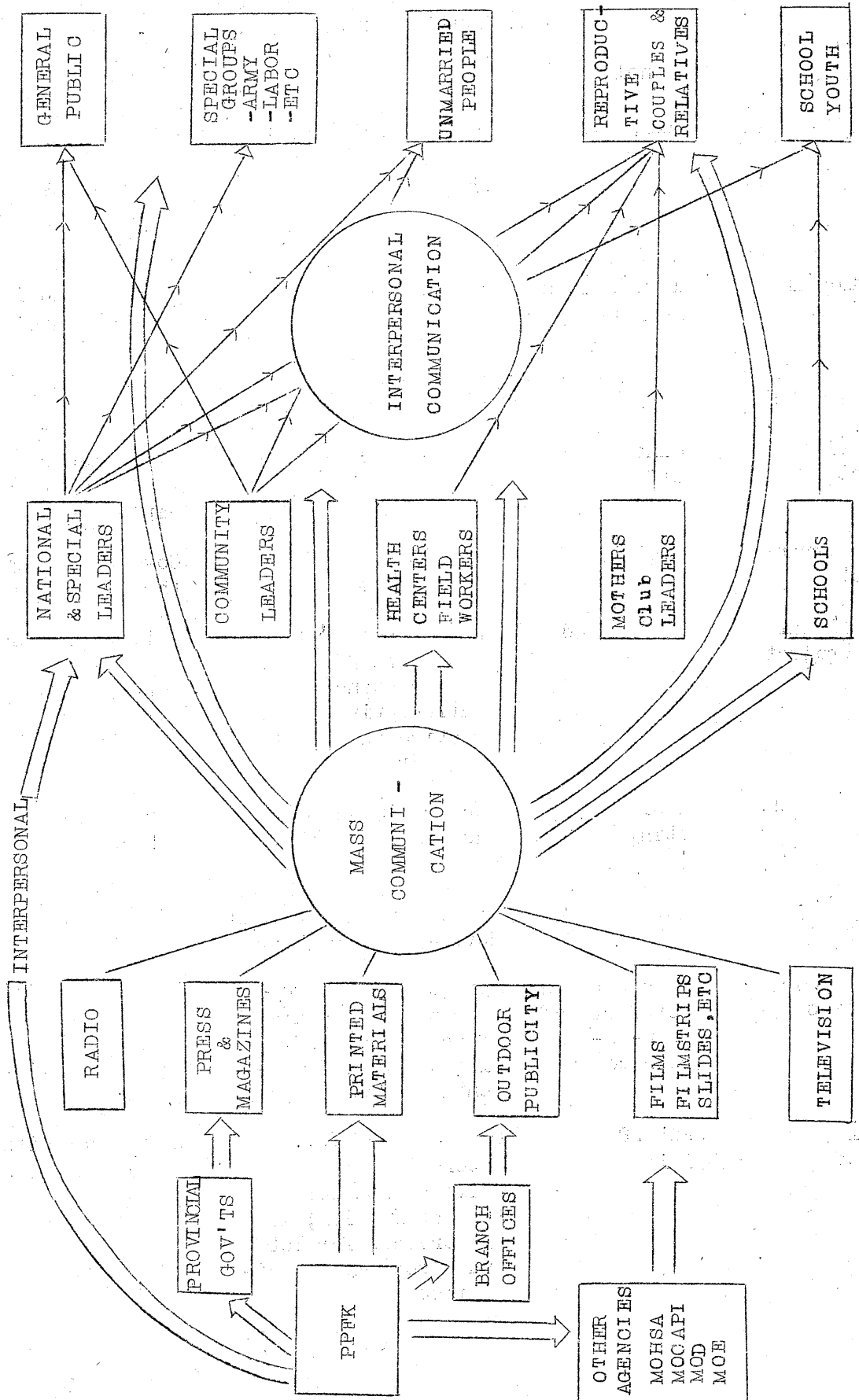
of the Population Council, as well as the International Planned Parenthood Federation, USAID, and SIDA.

Much remains to be done, however, and a comprehensive, long-range (1974-1977) IEC proposal has been approved by the United Nations Fund for Population Activities. With this grant the PPFK has already expanded its programs with particular emphasis on mass media utilization, production of materials for IEC programs and government fieldworkers and organizational approaches.

In particular, more programs will be carried out to keep policy makers and social leaders aware of the need for family planning and insure their involvement in the program, and to encourage the participation of youth and selected occupational groups in supporting activities. The proposal also provides for project evaluation, which remains one of the most important needs at present, and for more thorough pre- and post-testing of materials by the new Planning and Evaluation Division.

With the development of these expanded programs, we feel confident that we can move forward to the day when family planning is a normal part of the life of every Korean.

FLOW OF INFORMATION, EDUCATION, & COMMUNICATION



Main Activities of the PPEK.

Program	Channel	Emphasis	Target
Mass Media Program	Radio, TV, newspapers Magazines Journals	Stop at Two Campaign Stop at Two Campaign Specialized aspects of FP	General public General public (emphasis on youth and women) Opinion leaders
Educational Materials	Films, slides, pamphlets	FP information	Lecture, audiences, general public
Homeland Reserve Force Project	Training Lectures	FP methods, especially vasectomy	Males 25-35
Enterprise Project	Seminars, group meetings	Benefits of FP services, methods	Urban labor (male and female), employers
Civil Servant Project	Training Lectures	Benefits of FP services, methods	Government employees throughout the nation,
Professional Group Project	Seminars and meetings	Understanding of population problems and acceptance of contraceptive practice as normal behavior	Opinion leaders such as pharmacists, college students, Buddhist leaders, New Village Community leaders, etc.
Mothers' Clubs	Monthly meetings	Encouraging members, husbands, and village neighbors to accept parental responsibility and undertake community development projects	Rural villagers, particularly members
IEC Fieldworker Activities	Home visits and other forms of person-to-person contact	Spread of FP information, encouragement of acceptor continuation of FP, recruitment of public support	General public
Medical Services	PPEK ¹ FP Clinics	Provision of FP, maternal health and child health services; FP consultation; follow-up services for IUD and vasectomy complications	Urban poor without any other medical provision

Program	Channel	Emphasis	Target
Training Programs	Training courses	Leadership, management, population and FP instruction; new medical techniques	PPFK staff, Mothers' Club leaders, field-workers, clinic personnel
Medical Trials	Hospitals and clinics	Testing of new contraceptive methods	

New Programs

Project Planning and Evaluation	Planning and Evaluation Division	PPFK project proposals and project evaluation, long and short-term planning	
Regular Korean Army Project	Training Lectures	FP methods, especially vasectomy	Males 21 and above
Expansion of Medical Services	PPFK FP Clinics	Provision of cancer and pregnancy testing improved distribution of contraceptives, utilization of Menstrual Regulation Kits.	Urban poor

