

**Integration in Family Planning Program Structure:
Examining the Evidence**

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September 1995

INTRODUCTION

Should family planning programs be vertical or integrated? This question has generated debate since the 1960s, when population activities first became widespread. Over the ensuing years integration appears to have emerged as the preferred structure for family planning programs. As early as 1979, Ness commented, "probably no statement on family planning programming...enjoys as much agreement that family planning must be *integrated* with other development and welfare programmes in order to be successful." More recently, the ICPD Programme of Action adopted at the close of the International Conference on Population and Development in September 1994 endorses family planning as one element in an array of services grouped under the rubric of reproductive health services (ICPD, 1994). The current programmatic trend is clearly toward the integration of family planning with other health services. Integration has become widely accepted as the desired format for family planning programs.

Yet, it is not clear that the preference for integration grew out of lessons learned from programmatic experience. Have experiences with integrated projects and programs provided evidence that integration is indeed more effective in lowering fertility, meeting clients needs and solving problems of administrative efficiency? A number of sources suggest that, despite the widespread popularity of the concept, the reasons why development organizations and ministries of health call for integration of family planning often are merely ideological and may lack a rational empirical basis (Ness, 1978; Seward and Fong, 1983; Gillespie, 1987; Simmons and Phillips, 1987; Population Council, 1991).

Closely examining the value of integrated family planning program structure is particularly significant at this time. In some nations of Sub-Saharan Africa, governments are establishing family planning programs for the first time. The past experiences of other developing regions in establishing family planning service delivery systems could help inform the development of these nascent family planning programs. Program planners in many African countries may benefit from the identification and evaluation of particular components of family planning program structure. Thus, a review and examination of the issue of integration is in order.

This paper reviews the debate over integrated versus vertical family planning program structure. First, we define the terms integrated and vertical. Second, we review the rationale for each program structure. We then examine attempts that have been made to disaggregate the term integration. We next explore the purposes of integrating program structure. Finally, we present an overview of experimental and quasi-experimental research projects that tested integration and large-scale country experiences with integration. Table 1 summarizes the experimental studies, and appendices I and II contain a discussion of selected research studies and country experiences.

DEFINING THE TERMS

The descriptive term "vertical" has multiple meanings. It may refer to management or service delivery, or both. Most often, a vertical program is autonomous, characterized by an institutional structure with the single purpose of providing family planning services. These services are provided at a single-purpose site and/or by single-purpose providers. Vertical

program are also referred to as categorical or disintegrated.

Multiple definitions of the word integration have been offered. Phillips et al (1984) refer to integration as the process or outcome of merging service or administrative components with each other. Ness (1978) defines integration as a "multidimensional variable, in which the underlying idea is the linkage of specialized tasks, which can be accomplished by a wide variety of structural arrangements."

Defining integration is difficult, because the term is broadly applied in the field of family planning, encompassing an array of administrative and service delivery approaches. Simmons and Phillips (1987) note this tendency:

Integration has been used in reference to the dynamic interaction between health and population variables; the incorporation of demographic factors into development planning; the implementation of family planning activities by multiple sectors; the creation of interministerial committees or boards for purposes of overseeing the program; the addition of family planning functions to agricultural, social work, or health personnel; the merger of previously independent family planning agencies into the public health services; the addition of health components to a vertical family planning program; and the combined delivery of family planning, health, family, or related services.

In sum, there is no agreed-upon definition of integration. Despite its nebulous definition, however, integration's appeal is so widespread that program planners worldwide avoid calling a program vertical, due to the negative associations attached to the term. Simmons and Phillips (1987) refer to the term's implication rather than definition by noting that integration represents "the positive values associated with desired outcomes of programmatic action: health and welfare for all."

THE RATIONALE FOR VERTICAL AND INTEGRATED FAMILY PLANNING PROGRAMS

Vertical Programs

In the 1960s and early 1970s, the majority of family planning programs were vertical. International donors and lending agencies gave funding priority to population programs, earmarking large amounts of financial assistance for family planning activities. As a result, in most developing countries the ample funding available for family planning stood in contrast to the insufficient monies designated for other health and development activities. Where these funding inequities have been created, donors and in-country administrators express preference for vertical programs to ensure that family planning funds are not diverted into other programs.

Supporters of vertical programs also assert that they ensure sufficient priority is given to family planning at all levels. Korten (1979) offers that, at the service delivery point, clients at a vertical family planning program are less likely to be crowded out of the busy clinic schedules. At the policymaking level, the family planning program might receive little priority if it is integrated with health sector. It may even be excluded, for example, if the Minister of Health or Agriculture considered family planning less important than diarrheal diseases or irrigation. In a vertical program, resources for family planning are administered through an independent delivery system that exists alongside the established health care system (Ickis, 1987). As the only service within such a program, family planning is guaranteed priority.

Vertical programs may also be advantageous in countries where the health care system is not firmly institutionalized. Integration of family planning with the health care system (or any other sector) can overburden or encumber a weak delivery system (Gillespie, 1985; Population Council, 1991). A vertical program can be more effective in reaching populations in need in developing regions, because it avoids working through a cumbersome or ineffective health care system.

Supporters of vertical programming maintain that single-purpose programs are simply more efficient, because they have a single objective. Gillespie (1985) comments that "by itself, family planning is easier to deliver than is a complex integrated family planning and health system." A specialized program highlights a particular problem and makes it easier to promptly amass the expertise and resources required to confront the problem in a timely fashion (Gillespie, 1985). Ickis (1987) offers the success of vertical programs to combat smallpox and malaria as examples of the efficiency of single-purpose programs. Ness (1978) points out that specialization "permits the development of high levels of skill and the concentration of skills on limited targets or activities, thus leading to higher levels of human performance." Ness acknowledges the need for linkages between specialized activities, but notes that excessive integration can "imply a reversion to more generalized activities, which reduce capacities for action."

Integrated Programs

The rationale for integration is based on both the nature of the demand for family planning services and the organizational requirements of supplying the services (Simmons and Phillips, 1987). A demand-side argument points out that reproduction cannot be isolated from other facets of human existence. Fertility is related to income, educational status, agricultural production and particularly health status. The intertwined relationships between these sectors make it logical for family planning to be integrated with other health and development activities.

Another demand-side argument asserts that family planning is more culturally and socially acceptable to clients and communities when it is offered in concert with other services, particularly health care (Gillespie, 1985; Simmons and Phillips, 1987). This may be particularly true in societies that place a high value on large families, such as in much of Sub-Saharan Africa. By making family planning available in the context of other valued services, such as maternal and child health care, providers can gain credibility, and their advice on family planning may be accepted more readily (Korten, 1979). It may also be more convenient for clients to receive multiple services at one site or from one provider.

On the supply side, the organization and delivery of family planning in an integrated structure has been touted as more efficient than vertical programming. Supporters of integrated programs maintain that using existing infrastructures and personnel is more rational than constructing a parallel system (Simmons and Phillips, 1987). Avoiding the problem of duplication of efforts, integrated programs take advantage of existing structures that usually

already have organized management systems, trained personnel, and established contacts with community members.

Proponents of integrated family planning also claim that supplying family planning services in a integrated program is more economical than vertical programming (Johnson and Meyer, 1977). Gillespie (1985) cites the rationale that, "integrated approaches provide not only the desired effect, but cost less to attain it." Vertical programs may be cost-effective in densely populated urban areas where high demand compensates for the program's expense, but in areas of more dispersed population and lower demand integration is cited as more cost-effective (Ickis, 1987; Sadik, 1991).

The fact that some contraceptive methods require the involvement of medical personnel has been cited as further support for supplying family planning integrated with other health services. A woman who desires an IUD or surgical sterilization must visit a health facility; she cannot be served by a community-based distribution program, for example, which is usually vertical. In the same vein, family planning clients are usually also clients of maternal and child health services. Under integration, these women could ostensibly be targeted for family planning through the health care system (Files, 1982; Simmons and Phillips, 1987).

A final rationale for supporting integrated programs is political. As early as 1977, Johnson and Meyer pointed out that the political and financial support required for a program capable of having a widespread impact on a country's...population will be greater if the program is

aimed at multiple objectives..." Local leaders will be more likely to support a "family health" program than one focused exclusively on family planning. This final rationale for may be key to understanding the prevailing endorsement of integration, given the often sensitive nature of family planning.

DISAGGREGATING INTEGRATION

As integration gained acceptance, the term grew to be applied to a wide spectrum of family planning program. Myriad family planning program structures are now labeled integrated. As a result, the debate over integrated versus vertical has evolved into a question of the degree or level of integration. Discussions of integration have expanded beyond arguments about integrated versus vertical programs to an attempt to specify the nature and exact location of integrated activities within an organization.

A number of authors have attempted to disaggregate the term integration or indicate where integration is taking place. Ickis (1987) defines the principal characteristics of integrated program structure as "the involvement of multiple institutions, intersectoral coordination by committee, and joint use of such resources as field personnel." Files (1982) asserts that the term integration is usually improperly used. She claims that what is called integration generally falls under the rubric of one or more of these "integrative activities": interministerial policymaking; intersectoral implementation planning; or integrated service delivery.

Ness (1978) notes that the public administration and human services fields commonly

distinguish administrative integration from service integration. Administrative integration proposals structural changes and speaks to issues of administrative authority, responsibility, jurisdiction and accountability. Service integration refers to linkages at the point of service delivery.

Ness (1978) further disaggregates integration by identifying four levels at which integration, or linkages between specialized activities, can occur: role, agency, sector and national.

Different degrees of integration can occur at each of these four levels. Role-level integration occurs when a single provider, a multi-purpose worker, performs several specialized tasks. Integration may also take place when specialized roles are linked together across different agencies. Sector-level integration refers to the linkage of specialized agencies across public and private sectors, i.e. governmental agencies and nongovernmental or for-profit organizations working together to supply family planning services. National-level integration refers to the linkage of different specialized sectors through national level planning. Ness notes that most proposals for integrated programs in health actually concern only role integration.

PURPOSE OF INTEGRATED PROGRAMS

Family planning program structures are usually chosen for a particular purpose. A program is designed to stimulate demand for family planning in the population or to respond to an already present demand. This relationship between family planning program structure and the level of demand in the population prior at the time a program is initiated is overlooked in

most of the integration literature. Evaluation of an integrated program structure must acknowledge the original intent of the integration effort.

Where contraceptive use is low a vertical family planning program may be designed to create demand; its single purpose makes it very prominent in the community. The hope is that couples who formerly did not use family planning services will be more likely to accept a method when there is a highly visible program in their community. A vertical program is visible because it has only one purpose; all available resources go into family planning, rather than being shared with other services.

On the other hand, a family planning program might be integrated with health services in response to low demand in the community. Some program planners feel that family planning is more appealing or acceptable when it is made available in the context of already familiar services. Women may obtain family planning services more discreetly from a vertical program, and potential family planning users can be recruited from the population of women presenting at a clinic for MCH services.

In communities where there is a high demand for family planning, the appropriate response could be either a vertical or an integrated program. A vertical program can respond quickly and efficiently to need. Where demand is high, a provider offering both MCH and family planning services may not have time to respond to a great number of couples seeking family planning without devoting insufficient time to MCH. At the same time, integration may also

be an appropriate response to a high demand for family planning. Preexisting established organizations and providers can be quickly mobilized to offer family planning services, whereas a vertical program may take more time to set up.

EXPERIMENTAL PROJECTS

We reviewed the literature to locate reports of experimental and quasi-experimental studies that tested an integration hypothesis. The results of this review are presented in Table 1. To qualify for inclusion, the study had to: 1) test a hypothesis regarding the effect of integrating family planning with health (in almost all cases, this turned out to be maternal and child health); 2) be disseminated in the form of a published report or a presentation at a conference; 3) use a control or comparison group (other than national averages); 4) report quantitative results.

Relatively few family planning research projects have attempted to actually test the impact of vertical versus integrated program structure. Eight studies meet the criteria we outlined above. These studies all focused on the impact of integration on the client rather than on administrative performance. They all also were implemented to increase demand for family planning, not in response to an already present demand. Largely, they test the effect of different service mixes on clients' acceptance and continuance of contraceptive methods. In Appendix I we briefly discuss four of the most well known projects that have tested an integration hypothesis: Narangwal, Danfa, Matlab FPHSP and Lampang.

COUNTRY-LEVEL EXPERIENCES WITH INTEGRATION

Experimental and quasi-experimental studies are based on the assumption that conditions other than those associated with the experimental condition (i.e. service mixes) are held constant. In such studies, services are provided to a limited population, and adequate financial and human resources are generally available. Public sector programs that provide services to entire countries, on the other hand, do not have the resources of pilot experimental projects, and they function in a bureaucratic environment. Public sector programs must also assess the effectiveness of integration from an administrative, as well as client, point of view.

Appendix II outlines several examples of country-level experiences with integration that have been evaluated. While there are many examples of large-scale public sector integration of family planning, few such programs have been rigorously studied. Where resources are limited they are focused on implementation of a program, not the study of it. The country-level experiences that have been evaluated have not used a comparison or control group, and they therefore could not actually test the impact of evaluation. However, these "real life" attempts at integration may offer insight as to the effectiveness of integrated program structure, because they consider aspects of program effectiveness such as administrative feasibility.

CONCLUSION

A number of conclusions can be drawn from a review of research on integrated family planning program structure over the past few decades. The first is that few studies have

actually tested a hypothesis regarding the effectiveness of integrated versus vertical program structure. We located only eight such studies. Moreover, their findings are often inconclusive. Not all found integrated programs preferable to nonintegrated ones. And those that pronounced integration a success were sometimes challenged by subsequent analyses.

All the studies we reviewed were designed to test the effect of integration on family planning use. Rarely did the studies endeavor to increase administrative efficiency or measure client satisfaction.

The purpose of the experimental and quasi-experimental studies was to increase family planning demand. None were responding to a demand already present in the target population. Some also aimed to improve health status, although this goal was generally secondary to raising contraceptive prevalence. Additionally, none of the studies primary focus was the reduction of costs, although cost benefit analyses were performed on a number of the studies.

Integration was very broadly defined in the studies in Table 1 and generally limited to the service delivery level. Clients received multiple services, but it was not always clear in what fashion these services were delivered. Some of the studies did not specify if these services were delivered by a single worker or a multipurpose worker. Sometimes, the mode of delivery was not constant throughout the study period. Most often, the study reports did not even discuss the administrative structure; we do not know if multiple ministries or agencies cooperated or if a unitary administrative structure oversaw the delivery of multiple services.

In any case, no tests of administrative integration were performed.

Interestingly, integration itself was not actually measured. None of the studies incorporated and/or evaluated factors such the extent of integration present in the national network for delivering services, the level of coordination between Ministries, or the level of political commitment to integration. Seward and Fong (1983) note that experimental studies of integration consider these factors "exogenous variables." The extent to which integration was actually implemented and how implementation varied from site to site was also not measured. Given the inadequate manner in which integration was defined and subsequently measured, it is not possible to say whether integration or some other programmatic element that was present in the integrated, but not the vertical, program accounted for a project's success.

The conclusions that can be drawn from Table 1 shed light on what is needed in the current research agenda. Most importantly, there is a clear need for studies that define integration more specifically. We must define the level and type of integration and monitor program elements in order to pinpoint to integration as the key factor in a program's success. Table 1 also suggests the need to study integration at the administrative, as well as service delivery, level. There is a need to test more thoroughly the effect of a particular type or level of integration on administrative ease or costs. For research to be applicable to public sector agencies, it must study the impact of large-scale public sector service structures, in addition to pilot projects with high levels of inputs that cannot be replicated in a real life situation.

Table 1. Research studies testing integration.

PROJECT & LOCATION SOURCE	DATES & DESCRIPTION	PURPOSE	DEMAND LEVEL AT ONSET	TYPE OF INTEGRATION	RESULTS
Narangwal Population Project. Narangwal, India Faruqee; Taylor et al; Simmons and Phillips; Reinke	1969-1974. Study population of 30,000. Groups of villages provided with 4 different combinations of health, FP & nutrition services. Group 1: FP and MCH; Group 2: FP and maternal health; Group 3: FP and child health; Group 4: FP and FP education. A 5th group, the control, received no services.	Increase FP demand	Use of modern methods: 11.7% in Group 1 19.1% in Group 2 11.9% in Group 3 26.0% in Group 4	Clients receive multiple services	Results disputed. Faruqee and Taylor et al. claim FP use increased least in FP only area. Simmons & Phillips claim that FP only and FP with child health areas showed greatest increase in FP use.
FP/MCH Integration, Togo Huntington and Aplogan	1992. Sample of 16 urban and rural MOH clinics randomly assigned to experimental and control. Immunization clients at exp. clinics given referral message for FP services available at same time in same clinic.	Increase awareness and use of FP services	200 new FP acceptors/month in experimentals, 144/month in controls. 40% clients aware of FP services in exp clinics.	Multiple services available from different workers in same site.	54% increase in ave. monthly number of new FP users (to 307) at experimental clinics (significantly higher than increase to 167 at controls). 18% increase in awareness of FP services at exp. clinics, no change in awareness at controls.
The Danfa Rural Health and Family Planning Project. Danfa, Ghana Ampofo; Blumenfield; Reinke	1970-78. Four different service packages delivered to 4 areas comprising a total population of over 60,000. Area 1 received primary health care, FP, and health education. In Area 2 PHC was omitted. Area 3 received only contraceptive services, and Area 4 was control.	Increase FP use in most cost effective manner	Multiple services available to clients in clinics and home visitation. Both multi and single purpose workers used.	Multiple services provided. Some workers single purpose, others multipurpose (worker roles not clearly defined).	CPR highest where FP was most integrated (w/ health education and primary health care). Area 1, fully integrated services, was most cost-effective.

Table 1 continued.

PROJECT & LOCATION SOURCE	DATES & DESCRIPTION	PROJECT PURPOSE	DEMAND LEVEL AT ONSET	TYPE OF INTEGRATION	RESULTS
The Lampang Project. Lampang, Thailand Reinke	1974-1979. Project was designed to demonstrate feasibility of large-scale implementation of integrated services. A single pattern of interventions was implemented - integrated FP, health & nutrition services were delivered to a province of 650,000 people.	Achieve cost effective service delivery & increase FP use	CPR was 50% in 1974.	Multiple services delivered to clients.	Results not definitive. CPR rose to 60% Replication of project termed "incomplete," mngmnt system never achieved, field worker supervision inadequate.
The Soesan Project, Korea Bang	1981-1984. FP and MCH integrated in one county. Services also expanded and improved in treatment area.	Increase FP use	CPR in 1981 was 58% in both treatment and control areas.	Nurse-midwife introduced to coordinate multiple activities. Details of her role not described.	FP acceptance increased to 78% in both treatment and control areas (attributed to government FP campaign.) Continuation rates for IUDs and pills were higher in treatment area than in control. Modern methods accounted for greater proportion of FP use in treatment areas.
FP/MCH integration. West Bengal, India Mukhopadhyay	1985-1987. FP/MCH integration tested in 3 subcenters. Subcenter A had FP only; B had FP w/ prenatal services only; and C had FP with comprehensive MCH.	Increase FP use	1985-86: CPR was 3.6% in A, 7.8% in B and 22.7% in C. Prevalence of permanent methods was .05% in A, 1.01% in B and 7.26% in C.	FP and MCH services provided by multi-purpose worker.	1986-87: CPR was 7.25% in A, 11.12% and 33.68 in C. Prevalence of permanent methods was .95% in A, 2.3% in B and 11.25% in C (increase in C significant at .05 level).

Table 1 continued.

Project & LOCATION SOURCE	DATES & DESCRIPTION	PURPOSE	DEMAND LEVEL AT ONSET	TYPE INTEGRATION	RESULTS
Boyaca CBD Project. Boyaca state, Mexico Gomez	1978-81. Village health worker role expanded to include delivery of antiparasite drugs and contraceptives. Workers offered both antiparasite drugs and contraceptives to Group 1, only antiparasite drugs to Group 2, and only contraceptives to Group 3. Group 4 was the control.	Increase FP use.	Contraceptive prevalence (pill, IUD and sterilization only) in 1979 was 6.7% in Group 1, 9.3% in Group 2, 5.5% in Group 3, and 9.0% in Group 4.	Single worker delivering multiple services during home visits.	Data did not support hypothesis that FP use will increase more when FP is delivered in concert with other service. FP use increased 9.5% in Group 1, 5.5% in Group 2, 8.3% in Group 3 and 6.2% in Group 4. The increase in Group 1 was not significantly higher than in Group 3.
The Matlab Family Planning and Health Services Project. Matlab, Bangladesh Phillips et al.; DeGraff et al.	1977-1983. Various MCH services added incrementally over 69 months to a service area comprised of 4 areas of 20 villages each. All areas had comprehensive FP service; differing MCH components were added over time. No services were provided in a comparison area.	Increase FP use.	See Phillips et al. for graphic representation.	Multiple services offered to clients.	FP with limited MCH can be as effective in raising CPR as a package with comprehensive MCH services. The major increase in CPR occurred prior to adding MCH. CPR changed little with addition of MCH services.

Appendix 1. Review of research studies testing integration.

The Narangwal Project

The Narangwal project was implemented between 1969 and 1974 in Punjab, India. Four groups of villages were given different combinations of family planning, women's services, child care and family planning education; one group received only family planning services and education. A fifth village group served as a control (Taylor et al, 1983). Services were delivered by a trained family health worker who performed multiple tasks (Reinke, 1985)

The question under research at Narangwal was whether contraceptive use increased significantly when family planning services were combined with health services to women and children, rather than being provided separately. The authors of the study argue that the Narangwal project offers evidence in support of integration. At the project's start, ever-use rates (of modern methods) ranged from 12 percent in the group with family planning, women's services and child care to 26 percent in the group with only family planning services and education. A little over four years later, ever-use rates had risen to 51 percent and 37 percent respectively. The study team claimed success for integration, asserting that family planning use increased the least in the area with only family planning services (Taylor et al., 1983; Faruquee, 1982).

These results have been challenged by other researchers, who claim that the Narangwal results are not a valid test of the hypothesis that integrated services are more effective in raising

contraceptive prevalence rates. Simmons and Phillips (1987) note that the family planning-only area began receiving services 33 months after the project began. When adjustments for differences in duration are made in user rates, the family planning-only and family planning-and-child care treatment areas reveal higher rates than the other two areas with more integration of services. While the study authors claim these differences in duration are unimportant, Simmons and Phillips point out that after services had been available for 27 months in the family planning-only area, the proportion of users there was as high, or higher, than in any of the integrated areas.

Thus, the Narangwal project not does provide clear evidence in support of integration. Simmons and Phillips comment that what the Narangwal data demonstrate most clearly is that "the four service packages, when implemented, produced results irrespective of whether they were integrated or categorical in nature."

The Danfa Project

The Danfa Project, conducted from 1970 to 1978, was designed to compare the cost-effectiveness of integrated FP/MCH service delivery to other service delivery approaches (Blumenfield, 1983). Its service area included a population of over 60,000 (Reinke, 1985). Different service packages were delivered to four study areas. Area 1 received primary health care (PHC), family planning and health education; in Area 2, PHC was omitted; Area 3 received only contraceptive services; and Area 4 was the control. No general health services were available in either Area 3 or 4 (Blumenfield, 1983). Integrated services were offered at

family health centers, satellite clinics and in home visitation. Both multi and single-purpose workers were used. Service delivery strategies were modified throughout the project, in response to continuous feedback (Ampofo, 1976). This implies that the precise meaning of integration was not constant throughout the project.

The experiment in relative cost effectiveness was abandoned in 1975, when the government adopted an integrated service delivery plan for all areas of the country. The subsequent protocol focused on effectiveness of service delivery (Blumenfield, 1983).

From 1972 to 1977, ever-use of contraception increased most in Area 1, second-most in Area 2, and very little in Area 3. Almost no change occurred in the control area. The cost per acceptor, when aggregated for the 4-year period 1973-76, was somewhat lower for Area 1 than for the less integrated areas, Areas 2 and 3. Subsequent to 1976, when a more intensive and costly effort was put into Area 1, the difference in cost per acceptor between Area 1 and Areas 2 and 3 became more pronounced. Thus, the more integrated approach was the most cost-effective (Blumenfield, 1983).

The Danfa findings provide strong support for the belief that it is not effective to provide family planning services unaccompanied by education. As contraceptive use was highest in Area 1, the study also suggests that family planning is more effective when integrated with a broader range of health care services, at least in this setting (Blumenfield, 1983).

The Matlab Family Planning and Health Services Project (FPHSP)

The FPHSP Project was conducted in Matlab, Bangladesh from 1977-1983 by the International Centre for Diarrhoeal Disease Research as a field experiment in family planning and MCH. It addressed the question of whether adding health services contributes to the effectiveness of family planning services in a project initiated with minimal MCH services. Over a period of 5½ years, different study areas received various components of MCH (Phillips et al, 1984). Clients received a variety of services from multi-purpose workers in home visits, and other services were available at an integrated clinic. No study area received family planning alone; all received at least minimal MCH services. Therefore, the FPHSP Project tested the hypothesis that enriching MCH services would increase the efficacy of family planning use.

The FPHSP was associated with a sustained and continuing increase in the level of contraceptive prevalence (Simmons et al., 1991) Contraceptive use in all four study areas increased over time; contraceptive prevalence rose to 25 percent in the first six months and to 32 percent within a year. There were initial differences in contraceptive use, but prevalence gradually converged to 36 percent by mid-1983 and rose to 43 percent by mid-1984 (Phillips et al, 1984).

The FPHSP study did not produce evidence that the expansion of health services is essential to family planning. Major increases in contraceptive prevalence took place prior to the addition of incremental MCH services. Thus, much of the success of the FPHSP in increasing

prevalence was attributed to the approach of offering "comprehensive FP and limited MCH" (Phillips et al, 1984). This combination of family planning and minimal MCH services is the package delivered from the project's start; family planning was never offered in isolation.

FPHSP findings indicate that disruptions to the delivery of family planning services were related to disturbances in contraceptive use patterns. When additional MCH services were introduced, upward trends in prevalence were interrupted, and in 1979 prevalence even declined with the introduction of oral rehydration therapy.

However, overall contraceptive trends showed little change with the addition of services. However, the addition of ORT slightly detracted from prevalence, and child health services had a slightly positive effect. In the Matlab FPHSP Project therefore, the hypothesis that family planning cannot succeed unless MCH services are introduced first is not supported; the incremental addition of MCH services made no significant contribution to contraceptive use (Phillips et al, 1984).

Simmons et al. (1991) examined the costs of the FPHSP and assessed its cost-effectiveness. They found that, although the FPHSP is more expensive than the government's family planning program, it is also considerable more effective. The FPHSP delivers about three times more services per eligible woman than does the government program. (The government program was not monitored, but is widely considered to be vertical.) By operating more intensively, the FPHSP generates enough output to offset the extra costs of the more comprehensive delivery system.

The FPHSP Project suggests that a basic package of clinical services and basic MCH lends credibility to family planning services. In addition, an integrated package of family planning and MCH can be cost-effective. However, the project did not provide evidence that adding further MCH services, beyond the basic package, leads to greater contraceptive usage. This does not indicate that MCH is irrelevant to FP. Rather, the basic MCH services available appeared to have been important to the success of increasing contraceptive use.

The Lampang Project

The Lampang (Thailand) Project extended services to 650,000 people in an entire province from 1974 to 1979. Accepting the hypothesis that integration was preferable to vertical programming, the project sought to demonstrate the feasibility of large-scale implementation of integrated family planning/health/nutrition services. Volunteer village health workers promoted family planning and provided simple curative care. Further services were offered in an integrated setting at health centers by multipurpose workers. The project aimed to demonstrate the cost-effectiveness of such an effort to policymakers in order to persuade them to replicate the project on a wider scale (Reinke, 1985).

The results of the Lampang project are not definitive. Contraceptive prevalence was high (50 percent) prior to the project's inception; the project claims responsibility for raising this rate to about 60 percent. However, replication of the Lampang experience has been termed "incomplete at best"; the vision of an improved, streamlined management system was not realized. In addition, supervision of field workers was inadequate (Reinke, 1985).

Appendix 2. Evaluated country-level experiences with integration.

Korea

In Korea in 1977, family planning was integrated into a broad community development program known as *Saemaul Undong* (SU). This move brought family planning under the administration of the Ministry of Home Affairs. Integration was also present in the SU at the role level, where family planning workers were responsible for other activities, such as MCH and tuberculosis treatment (Fong et al, 1982).

A study of Korea's integrated family planning program found a mild negative impact of the integration on family planning and community development performance. Performance was indicated by weighted measures of acceptors and clinic inputs. Integration was measured by interactive linkages with other staff in family planning and in other positions. Fong et al (1982) reported that the integration was poorly planned and inappropriate, given the different orientations of family planning and community development. Integration in the SU detracted from program performance. However, it must be noted that the evaluation did not compare SU program performance to performance in an unintegrated area.

Malaysia

Malaysia's National Family Planning Board, in coordination with the Ministry of Health, initiated a project in 1970 to provide family planning services integrated with health services in rural areas. By 1977 the project brought services to over half of Malaysia's rural

population. Family planning and MCH were delivered by multi-purpose MCH workers in a clinic setting. The clinics were under the general responsibility of the Ministry, but the National Family Planning Board oversaw family planning activities (Fong et al., 1982)

ESCAP evaluated Malaysia's integrated FP/MCH program in the late 1970s. The study is noteworthy among efforts to evaluate country-wide programs in that it measured organizational and integration indicators and related them to program performance (Seward and Fong, 1983). The study team measured the process of integration in terms of "integrative linkages," or the quantity and quality of interactions between clinic staff and specialized agencies. These linkages were posited to be influenced by organizational factors in the clinic, such as clinic goals, leadership style and personal characteristics of staff. Integration, measured by the intensity of linkages, was in turn presumed to influence program performance. Program performance was measured in terms of FP and MCH service utilization.

Seward and Fong (1983) reported a relationship between organizational factors, acting through the intervening variable of integration, and program performance in the Malaysia study. Organizational factors accounted for 10-20 percent of the variance in each of the integrative linkage indicators, and the linkage indicators accounted for approximately 20 percent of the variance in program performance. Seward and Fong also noted that although the clinics were characterized by a similar structure of integration, the actual process of integration was inconstant; the quantity and quality of integrative linkages between clinic staff and other

agencies varied considerably.

In a separate report on the study, Fong et al. (1982) concluded that integration in Malaysia had a "positive impact." They report that the program was "well and rationally administered" and "brought greater service delivery to rural areas and greatly increased the overall number of acceptors in the programme." However, they add that there was no spill-over effect; that is effort given to family planning increased family planning service, and effort focused on MCH increased MCH services. Seward and Fong (1983) note that this was not an experimental study with a control group. They also caution the reader that "measurement of integration was limited to integrative linkages between clinic staff and concerned agencies."

India

Until the late 1970s, family planning in India was the responsibility of the Ministry of Health. Simmons and Ashraf (1978) analyzed the organizational implications of administrative integration at the state and district level in India's most populous state, Uttar Pradesh. They assert that organizational problems were critical factors in explaining the massive program failures encountered at the service-delivery level. In sum, the addition of family planning to public health care services had detrimental effects on family planning program performance. Family planning was given low priority by senior Ministry officials, and family planning administrators held a low position in the organizational structure. Simmons and Ashraf conclude that "administrative integration left family planning weakly legitimated and vulnerable in the Ministry of Health in Uttar Pradesh."

In the late 1970s, the family planning delivery system was reorganized and integrated with maternal and child health activities and nutrition programs in the Ministry of Family Welfare (Klitsch and Walsh, 1988). However, tensions between family planning and health services persisted. Two integration schemes, the multipurpose worker and community health worker programs, were implemented in an attempt to assign a range of responsibilities to workers whose roles were previously vertical. There is little evidence that either of these innovations influenced the effectiveness of family planning (Simmons and Phillips, 1987). Family planning continued to be neglected in favor of health.

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