PSR 27 (1979):45-50

EVALUATION OF A HEALTH PROGRAM: SOME LESSONS FROM EXPERIENCE

ANTONIO A. HIDALGO*

The evaluation of the City of Manila's Maternal and Child Health Services Program encountered several constraints and problems but certain modifications and adjustments were made to achieve the study's objectives. Foremost of these problems was the lack of objectively verifiable goals and objectives and well-defined target groups. The absence of data on program finances was another major problem but this was resolved by estimating budget appropriations for the program as well as direct benefits (in terms of monetary savings) accruing to program users. These were used to arrive at a simple cost-benefit ratio. Time constraints (four months) also provided limits on the research design. Among the major findings of the evaluation is that despite continuous expansion through the years, the program has not been directed largely towards its target population.

Philippine social action programs, as a means of attaining certain development values, have been accorded increasing importance in recent years. In turn, this trend has generated the need to evaluate the effectiveness of these programs. The presumption is that evaluation will establish a rational basis for improving or expanding effective programs and for modifying or abandoning those that are not.

The realities of evaluating action programs, however, preclude the easy attainment of this goal. Evaluation of action programs is always done in the face of constraints. The type of client commissioning the study, the nature of the program being evaluated, and the purposes which the evaluation is expected to achieve may become important factors in determining the extent of the study and even the methods to be used. The type of organization undertaking the study and the level in the program structure with which the evaluators collaborate may influence the types of questions which the study will answer. The availability of time and skilled researchers may limit the depth of the study. The utilizaton of evaluation results by decision-makers may hinge on factors beyond the evaluator's control.

It is with this framework that I propose to share with you the experience of evaluating the City of Manila's Maternal and Child Health Services Program. The program and the action setting under which the evaluation took place will be described. The study design will be presented and its relationship to the nature of the program and the action setting will be analyzed. The problems that were encountered in implementing the study design, the adjustments that were made in the process, and the major findings of the study will be presented. Finally, some conclusions drawn from hindsight will be discussed.

The Manila MCH Program

The City of Manila's Maternal and Child Health Services Program was established in 1913 and has existed in various forms since then. When the program was evaluated in 1973, it covered all four health and political districts of Manila through a network of 40 health centers. Approximately 237,572 client-families

*Vice President, Development Academy of the Philippines.

used the health services of the program in the period 1970-73.

Widespread concern over the high infant mortality rate (350 deaths for every 1,000 live births in 1911) led to the establishment of the program by the national government. In its early stages, the program established puericulture centers through which milk, "tiki-tiki,"[1] and health services based on immunization and maternal and child hygiene were provided for free to needy families. In 1940, responsibility for the program devolved to the city government. Continuous expansion through the years increased not only the number of health centers and program staff, but also the spectrum of services. At the time of the study, the centers were delivering eleven types of services ranging from prenatal and postnatal care to day-care nurseries and family planning.

The goals and objectives of the program were formally articulated when it was transferred to the city government. Despite significant changes in program strategies and activities, the goals had not been restated from 1940 up to the time of the evaluation. The manner in which the goals and objectives were stated made this possible. The goals and objectives are listed below.

1. Goals
   - A. To ensure that all expectant and nursing mothers are in good health, know the art of child care, have a normal delivery, bear healthy children, and are informed on the ways of building a healthful family life and on the appropriate methods of responsible parenthood.
   - B. To ensure that every child, whenever possible, lives and grows up in a healthy family unit with love and security and healthful surroundings, receives adequate health supervision and efficient medical attention, and is given instruction on the elements of healthy living.
2. Objectives
   - A. To provide services and carry out programs, taking into consideration the family as a unit, designed to promote and protect the health of the mother and of the child.
   - B. To undertake programs of activities and services aimed at prolonging the lifespan of every individual.

Action Setting of the Study

The study was commissioned by the United Nations Children's Fund in connection with its global study of the young child. The primary objective of the global study was to improve the situation of the young child, from birth to six years of age, through the discovery of practical and feasible measures for the development of long-range planning and comprehensive program development. The objectives of UNICEF for commissioning the evaluation of the Manila MCH program were derived from the larger objectives of the global study. They were also linked to UNICEF's interest, as a past contributor to the Manila program, in determining the effectiveness of the program in meeting the needs of young children in the slum and squatter areas of Manila. The UNICEF objectives for the study, therefore, had both prospective and retrospective elements.

Contact between the study team (from a newly-organized private research entity) and the program took place most frequently at the level of program managers. These were the Division Chief, Maternal and Child Health Services, District Office personnel and Health Center personnel.

Because of the level of contact between the study team and the program, the interest of the program in the study was almost exclusively limited to the prospective side. The program managers were interested in obtaining UNICEF funding for additional supplies and equipment for the health centers and showed little enthusiasm for summative evaluation of program policies, strategies and activities to differentiate between those that had worked and those that had not worked in the past. They were also less interested in policy questions than in program ones – they were hardly interested in decisions on whether to expand, contract or change the program and were more interested in decisions on which methods, techniques or staffing patterns to use in the program.

The study was completed in four months with a staff of 14. The fact that sufficient funding for only four months' operation was provided for the study placed some limits on the study design.

The Study Design

The study explored three research areas: the clients of the program, the program's history, organizational structure, objectives and services, and the program's funding and expenditures.

A structured questionnaire was administered to a random sample of 255 client-families of the program. The questionnaire gathered information on the following topics:

1. Age
2. Geographical Origin and Mobility Patterns
3. Socio-Economic Status
4. Family Size
5. Health Conditions and Practices
6. Information on the Program
7. Use of Program Services

Another structured questionnaire was administered to the heads of the program's 40 health centers. The following topics were covered by the questionnaire:

1. Distribution of the centers among the districts of Manila
2. Location of the centers in terms of convenience to its clientele
3. The length of time during which the centers had been in operation
4. Services
5. Size of clientele
6. Staffing patterns
7. Management practices
8. Supplies and equipment

Information gathered through the surveys was tabulated and many of the conclusions of the study were directly from the tabulated data. A few variables were subjected to the chi-square test of association to determine which independent variables were associated with the dependent variable of satisfaction of a client with the services of the health center which he uses.

Data on program funding and expenditures were gathered from program and city government records. This information was used in a cost-benefit analysis of the program to determine how much the whole program cost, how much in benefits it rendered to its clients, and how the benefits compared with costs at the program's level of activity during the evaluation period.

The study design departs in several important respects from the experimental and quasi-experimental designs favored in the literature on evaluation (Weiss, 1972). For example, there are no before and after comparisons of experimental and control groups to isolate the effects on clients which could be attributed to the program with some degree of certainty. The absence of such comparisons in the study lessens its verifiability — that is, the probability that another trained, independent observer going over the same data would arrive at the same conclusions as the study did.

The non-experimental nature of the design reflects the biases and limitations of the study team as well as certain factors in the action setting of the study and the nature of the program. The time limits of the study precluded the use of any kind of control group in design. The fuzzy delineation of intended beneficiaries by the program, the fact that the program had muddled along quite successfully for 60 years and was under no pressure to undergo a summative evaluation prior to drastic modification, and the interests of the program administrators in information for management decisions rather than for larger policy decisions made the study design, with its emphasis on management analysis of the program, seem more practical and feasible than an experimental or a quasi-experimental design.

Problems in Implementation

Even this study design, however, encountered several problems in the course of implementation.

The problem which bothered the evaluators throughout the study was the absence of realistic and objectively verifiable goals and objectives for the program. Although the program had expanded through the years and was serving a large number of clients, it was not geared for evaluation; in fact, the study was the first evaluation of the program in its 60 years of existence.

The goals were stated in absolute terms and were expressed as if the program intended to provide all expectant and nursing mothers and all the children in Manila with an ideal health situation. Had the team used these as the measure for program performance, a study would not have been necessary to establish the failure of the program. On the other hand, the program objectives were statements of intent to carry out activities and deliver services. They did not specify target groups or expected program outputs and outcomes within a time framework and, therefore, they were useless as yardsticks for program performance.

The team held several discussions with the program administrators in an attempt to get them to specify their goals and objectives in more detail. This did not work. However, an informal consensus emerged during the discussions that the lower-income groups in Manila constitute the target population groups of the program. As defined by the program managers, these groups include the medically indigent (i.e., those who can afford the other necessities of life, apart from adequate medical attention) as well as the indigent. This clarification was useful to the extent that it could be matched with findings from the client survey to see if the program was actually reaching its intended target groups.

The second major problem of the study was the absence of data on program finances. We had intended to use actual program expenditures over a five-year period for the cost-benefit analysis. Since this information was not available, we decided to content ourselves with the budget appropriations for the latest fiscal year as substitute measures of program costs. Then we found out that this was not available in a single document either, as no separate financial records were maintained for the program because of the budgeting system used by the city government at that time. Consequently, we had to undertake the laborious process of estimating the budget appropriations for program activities and the overhead expenses of the program from the total budget of the city health department.

The third problem the team faced was the difficulty of estimating the benefits which accrued to clients as a result of using the program's health services. The problems evaluators face in estimating benefits from social programs are discussed extensively in the literature (Glennan in Rossi, 1972: 187-218; Weiss, 1972: 84-88). In this case, for want of reliable data on tangible benefits to program clients, we decided to radically simplify the analysis by measuring benefits in the most direct manner possible: as the monetary savings reaped by clients from using free program services instead of paying for them in other government health institutions in Manila.

Data on the frequency of use of particular program services by the clients were available from the sample survey. These were extrapolated to the entire client population and were multiplied by the average costs of each service based on the rates set for government hospitals by the Department of Health. The resulting amount was then adjusted for client tax payments which went to the program. The latter figure was estimated by using figures from the Tax Commission.

The simplification of the cost-benefit analysis departs from the more standard approaches in that it does not seek to measure nonmonetary benefits nor does it compare costs and benefits over a period of time by using an appropriate discounting method. Considering, however, that it was necessary to use rough estimates for the financial portion of the study for lack of more precise figures, the simplicity of this approach acted as a safeguard against inducing too much through inappropriate elegance in analytical techniques.

Major Findings

The focus of this paper has been on the problems and constraints encountered in the process of evaluating a health program and on the modifications and adjustments the evaluators had to devise to complete the study. However, the analysis of this experience would not be complete without the presentation of at least some of the major findings of the study.

Research on the history of the program and on its evolution through the years revealed that it had existed continuously for 60 years and had expanded its budget appropriations, its staff and network of health centers, its spectrum of services, and its clientele during this period. While this is not necessarily an indicator of the program's effectiveness in meeting the health needs of children and mothers in the underserved communities of Manila, it does show the program's viability, at least among the decision-makers in the city government.

Based on the data on socio-economic status from a sample survey of the clients, the program was not reaching the neediest groups in the slum and squatter areas. Only a little more than half of the clients could be classified as indigent or medically-indigent, the target groups defined by the program administrators. Nearly one-third of the clients were clearly neither indigent nor medically-indigent. Yet the program was providing them with free health services.

Nearly three-fourths of the female respondents in the client survey were in the child-bearing years, but four out of five of them had never used the family planning services of the program. A related finding in the management survey of center personnel showed that family planning motivators were the lowest-paid and had the highest turnover rates among center personnel.

About nine out of ten respondents in the client survey cited the free services and the accessibility of the program's health centers as their reasons for using program services. A related finding in the management survey was that 35 out of the 40 health centers were well-located in terms of client accessibility.

A substantial majority of respondents expressed satisfaction with program services, personnel and facilities. Nearly four out of ten respondents had stopped using the services.

Almost half of the personnel of the health centers were professionals, a third were para-professionals, and the rest were support staff. A corollary finding was that all of the services were center-based, with clients having no participation in the program. The support staff tended to stay in their jobs much longer than the professional staff. This was not true for the professional staff at the district and city levels, who had the longest tenure among program personnel.

The cost-benefit analysis yielded a ratio of 1:5.72, meaning that each ₱1.00 of investment in the program at the time it was evaluated generated ₱5.72 worth of health services based on the prices of other government clinics and hospitals in Manila.

The chi-square test of association was performed on the dependent variable of client satisfaction and eleven independent variables comprised of client and health center characteristics. Only the educational attainment of the clients appeared to be associated with satisfaction over health services, based on the chi-square values. Clients who had at least a semester of college tended to be more satisfied with program services than those who had less formal education.

The rest of the findings, and the conclusions and recommendations derived from them, would be too voluminous to include in this paper. They would also detract from the main subject of the paper, which is the constraints that evaluators face in the real world.

Conclusions from Hindsight

Thus far, the problems and constraints the study team had to face in evaluating a health program, and the modifications and adjustments it devised to achieve its aims, have been presented as a particularized experience. It may be fruitful, however, to analyze this experience in more general terms.

James Coleman (in Dolbeare, 1975) distinguishes between what he calls "discipline research" and "policy research." The former uses a methodology which seeks to test and develop theories while the latter uses a methodology which seeks to establish guides in action. Stated in another way, the outputs of the former are conclusions which explicate areas of reality, while the output of the latter is an information basis for social action.

Although the methods used in "discipline research" may be useful for "policy research," fundamental differences exist in the philosophical bases of the two types of research.

This distinction is useful for our purposes and is applicable to a discussion of social science research and evaluation research. If we accept that a distinction exists between the former and the latter, then it would be profitable to explore further Coleman's line of thinking on some characteristics attendant to the methods of evaluation research which distinguish these methods from those of social science research.

The importance of time is one such characteristic. Because evaluation research seeks to guide social action, the timing of the decision on that action becomes an overriding consideration for this type of research. One implication of this is that evaluation research based on partial information may be more valuable than one with more complete information if the former is available at the time a decision must be made while the latter is available after the decision has been made. As they say: *"Aanhin pa ang damo kung patay na ang kabayo?"*[2]

Another distinguishing characteristic is the level of accuracy required by evaluation research. Rarely does a decision on social action require the precise knowledge attained by, say, experiments in behavioral psychology under laboratory conditions. On the other hand, it is often extremely difficult, and sometimes impossible, to reverse the direction of a decision on social action once it has been made and implemented. An implication of this characteristic is that research results which have a high probability of guiding action in approximately the right directions are preferable for evaluation research to results which are derived from more elegant designs but could be either precisely accurate or way off the mark because of their extreme sensitivity to errors in data collection.

Both of these properties which Coleman ascribes to methods in policy research are applicable to the evaluation study discussed in this paper. They were implicit criteria which guided the progress of the study and, in retrospect, they provide a framework for structuring experience.

Notes

[1]"Tiki-tiki is a local Vitamin B preparation.

[2]A Tagalog proverb which translates to: What is the grass for if the horse is already dead?

References

Dolbeare, Kenneth M., ed.
1975 Public policy evaluation. Beverly Hills and London, Sage Publications.

Hidalgo, Antonio, *et al.*
1973 An evaluation study of the City of Manila's maternal and child health services program. Report prepared for the United Nations Children's Fund. Manila, Institute on Development Studies, October.

Rossi, Peter H. and Walter Williams, eds.
1972 Evaluating social programs: Theory, practice, and politics. New York, Seminar Press, Inc.

Weiss, Carol H.
1972 Evaluation research. Englewood Cliffs, New Jersey, Prentice-Hall, Inc.