

Planning for Service Delivery at Health Centres: An Experiment *

The institutionalisation of an internal planning system could improve India's delivery of maternal and child health, and family planning services

By G. Giridhar and J.K. Satia

India's primary health care and family planning programme has been receiving increasing attention owing to the country's commitment to achieving "health for all" and to reaching the national goal of a net reproduction rate of unity by the year 2000. These time-bound twin objectives call for substantial improvements in the performance of the programme at all levels and particularly at the operating level where direct interface with clients occurs.

The Government has taken many steps to achieve the higher level of performance implied in the national goals. Some of these are expanding the

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network of service centres; integrating complementary services, particularly maternal and child health (MCH) and family planning at the point of delivery; introducing changes in the delivery system; improving the supply of medicines, vaccines and contraceptives; and generating community participation.

The need for strengthening in-service training programmes to improve workers' skills for providing health and family planning services and to stimulate demand for their use has also been recognized by the programme managers.

Some progress towards these objectives has been made. However, insufficient planning for the systematic provision of services continues to affect adversely the delivery of services.

An experiment was conducted by the authors in 1983-1984 in a district of Rajasthan State to verify the feasibility of developing and institutionalising a planning system at the primary health centre (PHC) level as a means of improving the performance of MCH and family planning service delivery. This paper highlights aspects of the experiment.^{1/}

Programme structure

Rural health services in India were developed on the basis of the recommendations of the Committee on Health Services and Development set up in 1946, which is popularly known as the Bhore Committee.^{2/} The Committee proposed an extensive network of primary health centres and subcentres to deliver health and family welfare services. It was suggested that the primary units should be supported by a series of "appropriate organizations in an ascending scale of technical efficiency", so that the necessary range of health services could be provided.

Each PHC covers 80,000-100,000 people living in eight to ten subcentre areas. Each subcentre is staffed by a team of one male and one female paramedic who deliver primary health services. In each PHC, three medical officers are posted along with the team of paramedics. For many years, these staff members were working as single-purpose workers because various health and family planning programmes were designed to run vertically and independently, each having its own separate staff. However, in 1974 a multi-purpose mode

^{1/} The findings of this experiment were reported to the Government in G. Giridhar and J.K. Satia, "An Experiment in Planning for Service Delivery at the Primary Health Center". (Indian Institute of Management, June 1984).

^{2/} Government of India, *Report of the Health Services and Development Committee*. (New Delhi, 1946).

of service delivery was adopted in which the range of services provided by each worker increased but the area of coverage for each decreased.^{3/} The logic was that complementary services are better provided as a package. In addition, for a population of 1,000 at the village level, one trained village health guide (VHG), a voluntary worker chosen by the community, was posted.^{4/}

Two important categories of staff at the PHC level are supervisors and block extension educators. Their roles in ensuring the systematic delivery of services in adequate quantity and quality and in carrying out information, education and communication (IEC) activities are crucial to the success of the programme. They also provide important links in the system of monitoring the progress of work at the field level. For this purpose, monthly meetings are held between the medical officers and all the staff of the health centres.

Considerable emphasis is placed on achieving annual targets set for the provision of specific services. These targets are determined at the national level based on overall programme goals and are allotted sequentially to each lower level, i.e. State, district, PHC and subcentre workers, largely based on population size but with some adjustment for past performance.

Experience indicates that such heavy target orientation is not very conducive for systematic programme operations. Moreover, the cycle of programme operations is such that the last quarter of the programme year accounts for over 50 per cent of the annual performance in family planning. The reason for this pattern is related to climatic conditions. The summer months are too hot for travel and the ensuing monsoon rains cut off certain areas from access and make travel very difficult. During the last quarter of the year, however, a large number of service campaigns are organised, incentives are announced, monitoring is improved and a sense of competition is nurtured with the aim of reaching the targets. During this period of hectic action, the emphasis is generally on reaching sterilization targets. The monitoring of programme performance is based on the proportion of a target achieved by workers.

Evolved over 10 years ago, this system of functioning has many weak-

3/ Government of India, *Report of the Committee on Multipurpose Workers*. (New Delhi, Ministry of Health and Family Planning, 1973).

4/ The pattern of rural health infrastructure before the fifth five-year plan (i.e. before 1979) consisted of a subcentre covering 10,000 people; a primary health centre covering 80,000 to 100,000 people and a community health centre covering 400,000 people. However, the pattern was to undergo some change during the sixth five-year plan (i.e. from 1980). According to the new plan, a village health guide (VHG) would be posted at the village level for a population of 1,000. One subcentre was to cover a population of 5,000 and a primary health centre was to cover a population of 30,000. This expansion in infrastructure is being carried out in phases and is not yet completely operational.

nesses. First, it reflects the limited nature of the supply-oriented strategies without systematic demand-creation efforts. Second, it implies a rigid and almost uniform pattern of inputs and activities in the implementation strategy without regard to special conditions that may exist in different areas. Third, if the targets are handed down from above and are not within the capacity and willingness of those responsible for achieving them, the programme operations may be adversely affected. Fourth, programme planning should focus on activities and tasks and not simply on objectives and targets. In the earlier years, emphasis on sterilization might have been useful, but at the current stage of development, this strategy is likely to be a hurdle to increasing the contraceptive prevalence rates. Fifth, the target setting system needs to be reoriented with the changing levels of these rates. PHC performance variations should be reflected in their targets and the target setting system should be made more participative.^{5/}

Need for planning

The number of activities conducted and the range of operational responsibilities at the PHC call for a systematic approach in service delivery. For example, an understanding of the client composition can help in placing differential degrees of emphasis on different contraceptives, in estimating the supply of contraceptives and in scheduling field visits. Motivational activities can also be fine-tuned to suit a particular client composition. Planning is particularly useful because of the nature of the services, such as ante-natal, intra-natal, post-natal, immunisation and family planning, all of which are different segments of the same continuum.

The performance of a health centre depends on workers' attributes, area characteristics, client composition, logistics and supply, administrative problems, organisational climate and systems support. All of these factors are important in planning and improving the congruence between client demand and programme supply.

Broadly, three levels of management are involved in such planning. The top level develops strategies, negotiates goals, allocates resources and generally plans for the outcome. The middle level provides support to the lower level

^{5/} A review in 1982 of the Indian Family Welfare Programme by the Population Council suggested the following in this context: "If State Governments could be induced to play a more active role in redesigning their own family welfare programmes, they might take greater efforts to ensure their success. This same principle is probably applicable at all levels; district managers will be more committed to successful implementation of plans that they have had a part in designing as will the personnel of PHCs and subcentres and village leaders".

in achieving programme output. The operating level plans for activities such as home visits, follow-up, supervision, record keeping etc.

This paper describes our experiences in suggesting a planning system for the operating level. Some emphasis is placed also on the middle level, without the support of which no planning system at the lower level could function. That level is responsible for ensuring the availability of physicians and other staff, basic facilities to run a health centre, an environment conducive to work and adequate administrative and technical support. All of these factors are essential preconditions for an effective planning system at the health centre level.

The objective of this experiment was to evolve a design for an operational planning system at the PHC level and to gain experience in its implementation. Therefore, the methodology used is not that of a classic experiment-control design. As a first step, an analysis of PHC performance was carried out in the selected district with the help of responses by medical officers to a questionnaire prepared to assess the PHC's status. Since the questionnaire did not seek detailed quantitative responses, it was filled out by the physicians in the somewhat formal setting of a workshop.^{6/} Based on this analysis, three PHCs were selected for experimentation in consultation with district- and state-level administrators. They were chosen because they offered sufficient contrast and, taken together, represented the spectrum of PHCs in the district. Those with good performance were designated as PHC-A; with average performance, PHC-B; and with poor performance, PHC-C.

Preliminary analysis

A visit to PHC-C indicated that it did not meet certain preconditions needed for the implementation of the planning system. There was no medical officer in charge of that PHC; instead a physician posted at a dispensary about 20 km away was discharging that duty. In the opinion of that physician, the performance of PHC-C was poor because the community resisted family planning. Moreover, the PHC's newly constructed facilities were located in a very

^{6/} The questionnaire obtained some basic information about each PHC, such as number of institutions, staff strength (fractional and actually posted), locational factors and PHC facilities. About 10 programme-related factors were listed and the medical officers were asked to indicate how each one of them influenced PHC activities. Some of these factors are receptivity of the community, involvement of other agencies, supplies, supervision and monitoring. Similarly, a set of performance-related factors was listed (such factors included workers' skills, motivation, community characteristics, client contacts, co-operation with other workers) and the officers were asked to indicate the factors in terms of their importance in influencing the achievement of targets in MCH and family planning.

small village; consequently, medical officers were not willing to be posted there. Most of the staff lived in towns or large villages and commuted to the PHC. Our discussions with the staff members there revealed that, because medical officers had not been posted at PHC-C for quite some time, the work routine was not established and records were incomplete. Although it was difficult to establish whether the poor performance of this PHC was due to supply- or demand-related factors, it would be necessary first to provide required inputs before institutionalising a planning system. Therefore, action was needed at the district and state level to provide such inputs. In the absence of proper staff, it was not possible to experiment with the development of a planning system at PHC-C and, therefore, further work was not pursued there.

PHC-A and PHC-B differed in terms of environment- and organization-related factors, both of which affect performance. PHC-A had better infrastructural facilities compared with PHC-B. PHC-A had 44 health institutions (family welfare centres, subcentres and dispensaries) compared with 26 institutions under PHC-B, although their population coverage was nearly the same. PHC-A had very few vacancies for staff whereas PHC-B had far more vacancies. The selection of VHGs had been stopped in PHC-B owing to conflicts in the selection process. Consequently, it had only 40 VHGs in place compared with 106 at PHC-A. PHC-B also experienced some conflicts among the staff while PHC-A reported an environment conducive to work.

Another important difference was that PHC-A rated none of its 20 subcentres as poor with respect to performance, accessibility to the community and level of supervision. PHC-B rated 10 subcentres as poor on each one of the three aforementioned dimensions. Supervision at PHC-B was weak since positions for female supervisors had remained vacant for a long time. In addition, its vehicle was out of commission. Thus, PHC-B faced difficulties related to its physical and organisational environment. However, the medical officers of the PHCs felt that performance improvement was possible, but it would be somewhat difficult.

The perceived constraints on performance by the medical officers in charge of these PHCs also seemed to differ. In PHC-A only three factors, namely, inadequate budgets for fuel, the posting of local staff and a shortage of medicine, seemed to influence performance. PHC-B also perceived these factors as constraints, but identified several additional ones such as the unavailability of a vehicle ; lack of support and guidance from the district; lack of co-operation from other agencies'; and lack of sincerity, motivation and skill among all workers and health guides. Thus, two PHCs provide examples of a fairly distinct set of PHCs and, consequently, the focus of their operational planning system would differ.

The workers from both PHCs were involved in developing village profiles. For each village, data were collected on the number of eligible couples and current contraceptive users by age and number of living children, and village amenities such as water supply, electricity, road, bus-stand, and distance from the nearest health institution.

The effect of some of the key physical attributes of a village on the rate of contraceptive usage among couples was also analysed for 81 villages covered by PHC-B. Except for electricity supply, none of the other physical attributes (size, water supply etc.) accounted for differential contraceptive usage and, thus, did not call for different programme activities in the villages covered by PHC-B. Therefore, similar analysis was not carried out for PHC-A. However, it was clear from the previously described distinctions between PHC-A and PHC-B that different planning strategies were required. For example, PHC-B would first have to concentrate on providing required inputs for improving the performance of workers, but PHC-A, which already had a higher level of contraceptive usage, should plan for improving performance with more direct emphasis on demand generation.

Target setting

For a planning system to be effective, the targets set should be clearly understood by everyone, should be believed to be achievable and should be backed up by a commitment to achieve them. However, the current target setting process is weak with regard to these attributes. Therefore, the monthly PHC staff meeting was used for conducting a target setting exercise to test whether workers' participation in target setting was feasible and to determine the resultant size of targets.

It was suggested that the workers should review their performance in the previous and current years and then given their expected achievement for the succeeding year.

They were concerned that the results should not be conveyed to higher level officials. This assurance was given by the PHC medical officers and the workers were urged to be quite realistic in estimating what they could achieve, keeping in mind their client population, past performance and future potential.

A total of 38 workers from PHC-A and 23 workers from PHC-B participated in this exercise. They set targets for themselves in terms of acceptors of sterilisation, IUDs condoms, oral pills and immunisation. An aggregate comparison between their recent achievement and their estimated target in the ensuing year indicated that for all the aforementioned services (except for

oral pills) the targets set were higher than what had been achieved. The following observations particularly stood out in this comparison:

- Both PHCs indicated a very large potential for IUD insertions. They also felt that the distribution of condoms could be doubled.
- PHC-B indicated a lower potential for performing sterilisations than PHC-A, where the results were already good.
- PHC-B also showed greater potential for improving immunisation coverage than PHC-A.
- Overall, PHC-B workers indicated that there was scope for better performance, but also pointed out that lack of inputs, supervision and leadership were major impediments to improved performance.

Two problems were experienced in the process of negotiated target setting. First, the level of mutual trust and confidence between the higher authorities and the staff was not high enough to make this process useful. Second, the programme must have some level of managerial capability to implement suggestions made by workers. A plan of action to resolve the administrative irritants inhibiting worker performance would have to be devised to supplement this exercise. In this regard, the role of the district would be of crucial importance. However, this exercise suggests that workers' commitment, motivation and performance may be improved through a process of formally negotiated targets for performance levels.

Planning to improve worker performance

As previously stated, the two PHCs facing different types of constraints and environments require different planning strategies appropriate to the particular configuration of factors affecting their performance.

PHC-B, which was fairly far behind in terms of target achievement, would need to increase workers' performance and reduce the variation in their level of performance. Supervision would have to be improved by filling up the vacant positions for female supervisors and by improving mobility. The medical officer felt that unless this was done and some of the administrative bottlenecks were removed, planning on his part would not be useful. In fact, he asserted that by just improving mobility, the performance of that PHC could be improved substantially. The organisational climate was not very harmonious since there were some conflicts among the PHC staff. This feedback was made known to district level officials who were able to resolve some of the difficulties.

Simultaneously, an analysis and a review of workers' performance were

carried out with the active involvement of the medical officer. With regard to family planning, the overall results of PHC-B in the previous year were poor as it achieved only about 30 per cent of the target even though it gave special attention to female sterilisation. Also, there was considerable variation in the performance of individual workers as shown below:

PHC-B: Per cent target achievement in female sterilisation	No. of workers
Less than 10	4
11-20	6
21-30	4
31-40	3
More than 41	5

The lowest level of individual performance was 8 per cent of the target for one worker. Another worker reached 63 per cent of his target and yet another achieved 100 per cent. Prior to the analysis, this variation did not attract the particular attention of the medical officer or the extension educator. The average performance of PHC-B in achieving immunisation targets was also less than 35 per cent.

Record keeping was also found to be weak in that PHC. The workers did not know how client information could be useful to them in planning their routine activities. Assistance was provided to the medical officer in reviewing the workers' performance, in relating family planning performance with MCH services and for identifying corrective action aimed at increasing the average performance and decreasing the variation in performance among workers. Monthly meetings of the medical officer with the PHC staff provided an opportunity for such assistance. However, this could be done for only two monthly meetings as the medical officer, who had been seeking a transfer for some time, succeeded in obtaining a posting at another PHC. As the replacement was not in place, this process, although beginning to yield results, could not be carried out further.

Planning activities to match client needs

As previously described, PHC-A had performed well in providing MCH and family planning services. With the exception of one or two workers, the performance of the staff did not vary much. To improve immunisation services, the medical officer had started a system of focusing on one cluster of villages at a time and providing concentrated services in these selected clusters

by slightly modifying the area responsibilities and visit patterns of the workers. Teamwork in the provision of MCH services was seen as having a close relationship with performance in family planning.

In PHC-A, the intervention was to move beyond the stage of performance analysis by worker and to concentrate on planning to match programme activities with the needs of clients belonging to different segments of the adoption process. Some client data for such segmentation were already available in eligible couple registers at the PHCs, but they did not enable assessment of future potential and the derivation of specific actions aimed at improving performance. To make the required demographic impact, it would also be necessary to have acceptors with lower parities and to place emphasis on providing a contraceptive mix through the delivery system.

As a first step in developing a planning system, the workers were assisted in carrying out an analysis of their client data on the number of living children, age of last child, immunisation status and practice of contraceptive methods so that certain direct action implications could be derived. For example, identification of certain attributes of the client population would help the workers in deciding the nature of their interaction with clients. To get additional information not normally available in the records, a sample survey was conducted in the selected cluster of 16 villages served by PHC-A; assistance in conducting the survey was provided by field workers, supervisors and the extension educator. As a part of this survey, the field workers contacted 1,195 women who had three or more living children.^{7/} Of these, 487 (40.8 per cent of the total) were currently practising contraception; 354 (72.7 per cent of the latter) had been sterilised and the rest were using temporary methods of contraception. The rate of contraceptive practice for women with four or five living children was lower than what would be expected. The rate for women with three living children was 36 per cent, which was lower than for those with a larger number of living children. This preliminary information was quite revealing to the field workers and some of them gave possible reasons for this phenomenon. The sample respondents were also asked to give reasons for not practising contraception and their responses were analysed.

^{7/} The involvement of field workers, the extension educator and the medical officer of PHCs was ensured at all stages of this survey. All 16 villages in which the medical officer initiated team work for immunisation have been included in the survey. The respondents were chosen at random but the sample size in each village was roughly proportional to the size of the village. The sample was drawn from all eligible women with three or more living children residing in those villages, since those families were more likely (than those with two or fewer children) to accept permanent methods of contraception. While this is an illustration, such an understanding is required for women with two or fewer children as well for developing a proper contraceptive mix.



Wide-spread awareness of family planning is achieved through a variety of means suitable to a country's culture. In India, the national symbol for family planning provides an attractive backdrop for a traditional dance show.

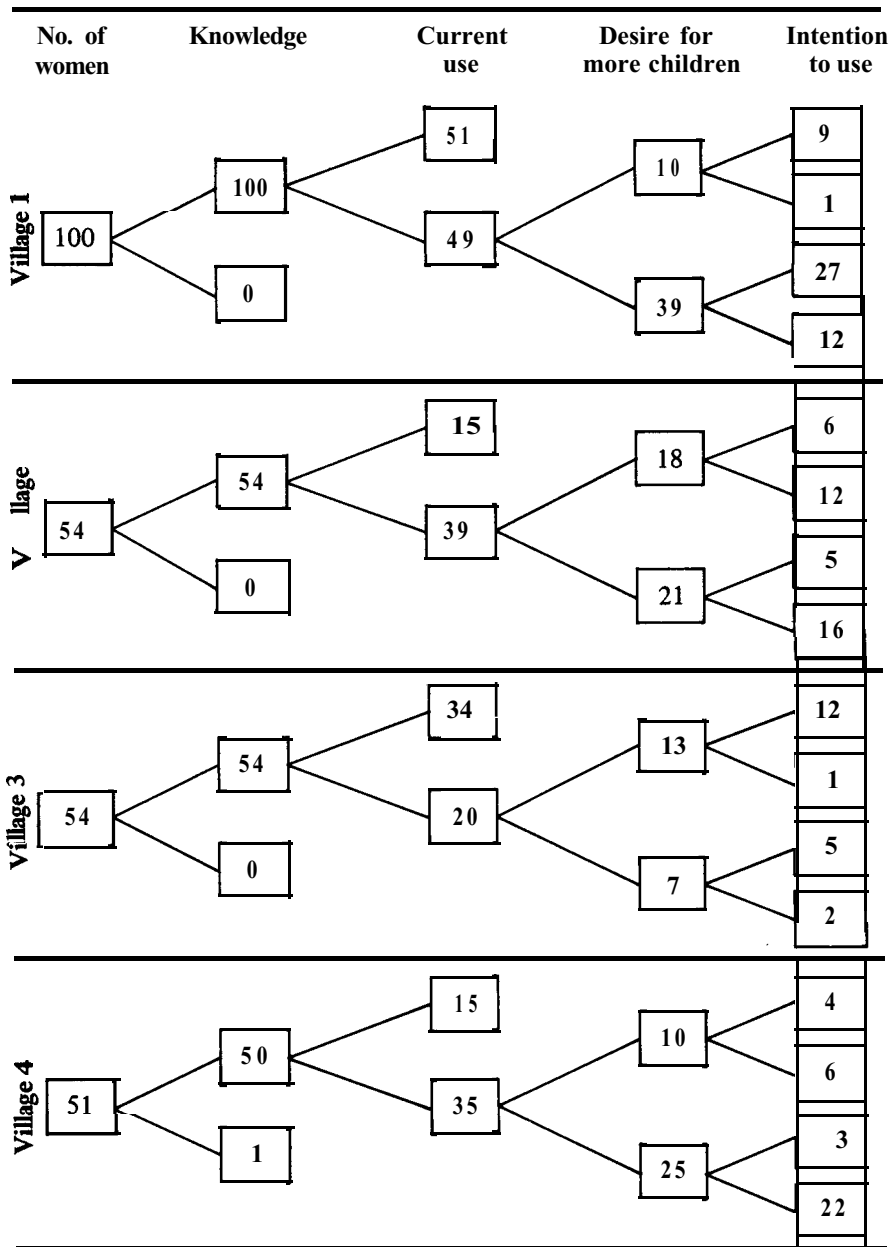
Increasing the acceptance of family planning through IEC activities requires some details about those who are not using any contraceptive method. In this survey, information was obtained on three status variables, namely, knowledge of family planning, desire for more children, intention to practise contraception in the future.^{8/} Based on this information, the women were divided into four groups:

- Group 1: Women with no desire to have more children and who intend to practise contraception in the future;
- Group 2: Women with no desire to have more children and no intention to practise contraception in the future;
- Group 3: Women who desire to have more children but intend to practise contraception in the future; and
- Group 4: Women who desire to have more children and who do not intend to practise contraception in the future.

The workers felt that such a segmentation of the client population would help a great deal in fine-tuning their motivational efforts and other inputs to

^{8/} Bhatnagar and Gupta, "An Experiment in Activity Planning in Singhpur"; PSG Monograph No. 24, (Ahmedabad, Indian Institute of Management, April 1980).

Figure 1: Segmentation of sample data on village women



Village 2

A large number of women have no intention of practising contraception in the future. IEC activities should be intensified to improve motivation and dispel fears that contraception will have adverse effects on health. The role of the PHC medical officer, in co-operation with other private physicians in the area, is crucial.

Village 3

IEC activities should be concentrated on promoting contraceptive use and the adoption of spacing methods.

Village 4

Low immediate potential mainly because of religious reasons. Efforts should be concentrated on improving MCH services and the follow-up of current contraceptive users. Also, the services of more experienced female workers are needed.

In addition to these action implications, attention would be needed for some organisational factors related to supervision, mobility and supplies. The health centre staff felt that a simple planning system of this type would be very useful to them in improving the efficiency and effectiveness of their work. Most of the information used to develop this system was already available in the client registers. Information on reasons for non-use, desire for more children and intention to use contraception in the future could be added to those registers in the course of gathering routine information during field visits.

Lessons learned

The objective of this experiment was to evolve a design for an operational planning system at the PHC level and to gain experience in implementing it. This experiment led to a broad design for an operational planning system, but also revealed many implementation difficulties which may be common to programmes at a comparable level of performance. Several lessons were learned as discussed below.

Planning at the health centre level requires certain basic preconditions such as staff, supplies, a conducive working environment, an appropriate information base and willingness to encourage workers' participation in setting standards of service delivery. Also, different PHCs require different kinds of planning, largely based upon their performance; for PHCs performing poorly, the availability of key inputs must be planned first. For PHCs with average

performance, plans need to be made with the aim of improving workers' performance. For high-performance PHCs, activity plans need to be based upon village-level data. Beyond a certain level of contraceptive prevalence, community action becomes both feasible and desirable. In our experimental areas, these levels were not reached. However, in programmes which have a high degree of community participation, the community itself may generate necessary data and develop activity plans.

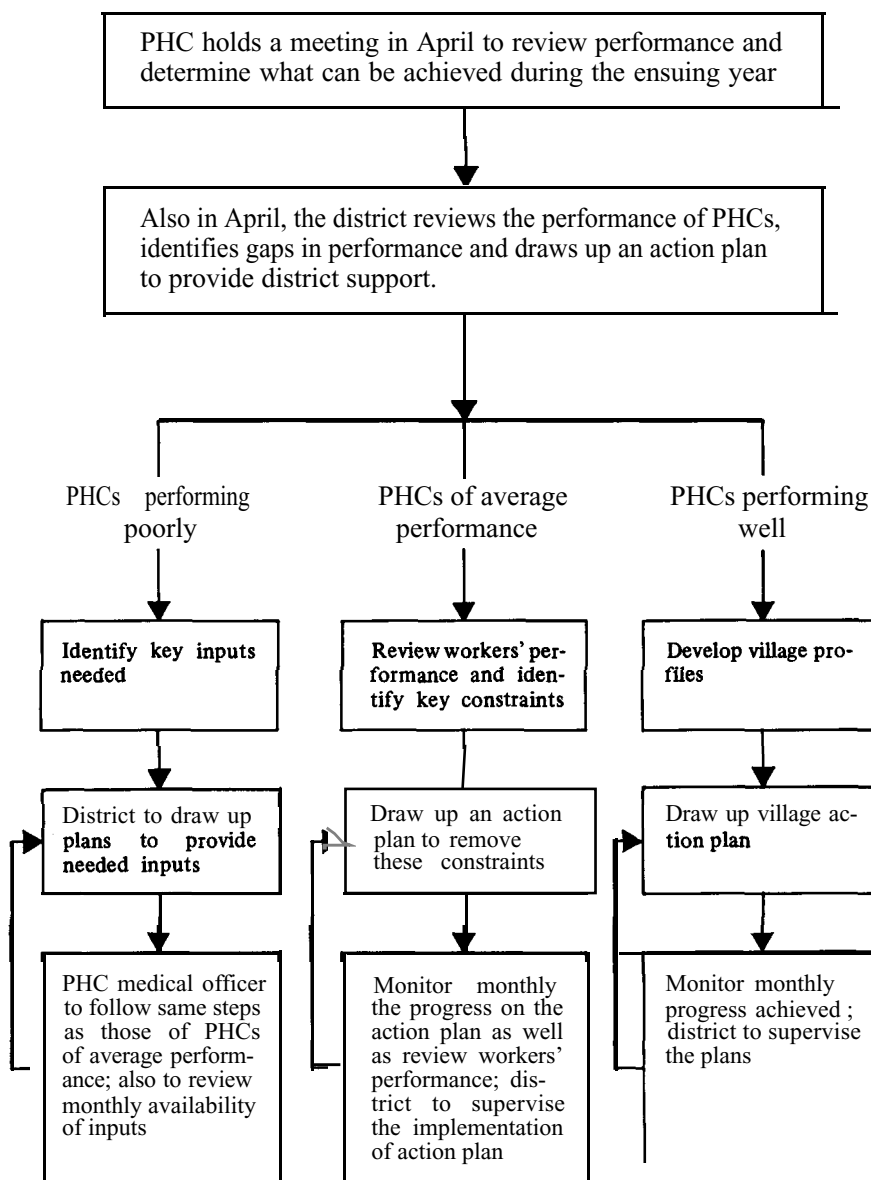
Workers generally felt that they could achieve targets if suitable facilities were made available and administrative problems were resolved. But a process involving negotiated targets could not yet be an element of a planning system given the current degree of mutual mistrust between officials and workers and the overall organisational climate. However, workers' perceptions of what they might achieve provide a useful input for planning the activities necessary to make such achievement possible. Therefore, a system of top-down and bottom-up planning processes would be necessary to institutionalise the negotiated target-setting process.^{9/}

Many of the problems faced by workers in PHCs of average performance could be resolved by the medical officer; however, district officials would have to play an active role in assisting the medical officer of the PHC in this regard. Such assistance may take the form of clearing administrative problems at the district level, clarifying the procedures to be used, and providing key inputs needed to improve performance. Figure 2 represents a schematic description of the planning cycle.

The effectiveness of the planning system will depend on the degree to which it is institutionalised. The process should be simple to follow in order to ensure the participation of all those responsible for PHC performance. The ability of field workers to use client data has to be improved through training and better supervision. At the same time, organisational support is needed for providing the required inputs, removing minor administrative irritants and developing an environment conducive to work. Monthly meetings would have to concentrate more on problem solving.

^{9/} For instance, the Indonesian family planning programme uses a three-way mechanism for this purpose. The first mechanism is from top to bottom. Each year the head office formulates guidelines which are discussed and interpreted by the provinces and are then forwarded to local implementing units. The second mechanism, as a follow-up, is from bottom to top. After receiving the guidelines, each operating unit formulates its programmes and budgets. They are discussed at each level of the hierarchy and a consolidated operational programme emerges. The third mechanism is a horizontal one, in which programme planning is integrated with other regional programmes in order to avoid overlaps while coordinating action. The whole process is carried out according to a welldefined schedule. (See National Family Planning Co-ordinating Board, Basic Information on Population and Family Planning Program, (Jakarta, 1982) pp. 74-75.)

Figure 2: Schematic representation of a typical planning cycle



Overall programme strategy is another important factor in the development of a planning system. Targets for workers are given from above; heavy emphasis is given to the achievement of sterilisation targets.

The cycle of programme operations, combined with this emphasis, creates an environment where a planning system is seen as being not helpful. This is because the programme currently operates from forces of "supply-push" rather than "demand-pull".

Conclusion

Our visit to project districts revealed several problems involving programme operations which resulted in suboptimal performance and inefficient use of resources:

- A considerable amount of staff time was being wasted as routines were disturbed and activities were not planned in advance;
- The targets set were sometimes not realistic;
- Staff commitment varied with regard to achieving those targets;
- Constraints were not anticipated sufficiently in advance;
- Programme activities did not exactly match client needs;
- Community participation was low; and
- Innovative ways to solve problems and increase performance were not sought.

How can India's primary health care and family planning programme institutionalise a strengthened planning system?

The focus of the planning system for PHCs at different levels will differ and consequently the planning system should incorporate flexibility into the system. In this context at least three different foci were indicated: ensuring needed inputs, planning for workers' performance and activity planning based upon clients' needs. They represent a continuum in the evolution of PHCs' planning systems as their performance improves.

The institutionalisation of client-oriented planning systems in PHCS performing well would require the following. First, because the ability to use data on a client system is not up to par, it needs to be improved.

Second, PHC medical officers should have some flexibility in providing required inputs as dictated by client needs. Organisational support from higher levels is also needed both for identifying innovative ways to overcome barriers to acceptance and in implementing such innovations.

The involvement of district officials in the planning cycle is critical to its chances of success. Specifically, their tasks would be as follows:

- Review the performance of the PHCs and assist them in developing action plans;
- Provide support to PHCs in implementation and review;
- Resolve administrative problems; and
- Work towards removing the constraints of staffing, training, improving the planning skills of supervisors and medical officers, and instituting or modifying the recording system.

Medical officers of PHCs have a key role to play in implementing the planning system. They have to develop the skill of planning PHC operations, develop the skills of supervisors in planning, review the plans at monthly meetings and be able to revise plans on that basis. Only to the extent that PHC medical officers are oriented towards and are convinced of the utility of the planning system will the planning system succeed.

Overall programme planning systems also would have to be strengthened. Gradually the programme should move towards increasing the participation of implementation units in the planning process. Implementing units should have more flexibility with regard to their budgets, targets and programmes.

In conclusion, systematising PHC operations would increase the efficiency and effectiveness of PHCs by avoiding wastage, identifying in advance possible short-falls in performance, increasing staff commitment towards achieving targets, matching programme activities with clients' needs, increasing the involvement of peripheral health services staff and helping to identify innovative ways to solve problems and increase performance. However, implementation of a planning system to systematise PHC operations would require commitment on the part of State, district and PHC officials and their continuing involvement during implementation.

Correction

A typographical error on page 75 of this *Journal*, vol. 1, No. 1: The year in which the Policy Workshop on International Migration in Asia and the Pacific was held should have been printed as 1985 instead of 1986.