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~~7-11-63~~



**Office of International Health**

PN-AAN - 979 / 63  
ISN-32674



**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**  
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ISSUES IN THE DEVELOPMENT OF  
HEALTH MANPOWER PROJECTS

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August 1978

## ISSUES IN THE DEVELOPMENT OF HEALTH MANPOWER PROJECTS

### Background

This Report is intended to provide AID with a summary of the issues which should be recognized in the development of projects in the field of health manpower, especially auxiliary personnel. These issues are extracted from an extensive investigation of numerous past and current AID health manpower projects. (See Scott Loomis and Karen Cox, Comparative Analysis of Health Manpower Issues in Latin America, OIH, April 1977). Some 27 relevant issues are identified, and are placed within an overall framework for manpower planning and evaluation.

While these manpower issues are particularly applicable to the development of programs for the introduction of low cost health auxiliaries, most of them, particularly supply, demand, and efficiency, are equally applicable to the development of other human resource needs in the health sector. It is further believed that these manpower issues are applicable not only to health sector program development, but for other social sectors as well.

AID project design calls for specific project analyses in each of four categories - technical, financial, social, and economic. The project designer, by addressing the health manpower issues identified herein, should be able to provide a substantial amount of evidence for these analyses. (Illustrative examples of how these issues relate to the four categories of project analysis are offered in the Matrix attached as Annex A).

In any given country several national and Mission policy and planning directions may guide or determine specific program development. The existence of a global manpower plan for the country, with goals, strategies, and resource requirements should be used as a reference point when planning a new manpower element. Whether manpower development planning in the sector is coordinated with or divorced from education sector planning is another important factor that may shape national policy in the area. Equally fundamental is the policy issue of whether manpower planning is to be based on the population's

need, or on (providers) supply considerations, e.g. doctors per 10,000 people. The acceptability of instituting new cadres of health manpower for the existing providers, the community and the educational institutions is almost always a thorny question, and on balance, is more of a policy decision based on competing interests groups than a technical consideration. Finally, the concern for community participation in planning for health manpower should be kept at the forefront. This may refer to almost any level of input below the national central planners, when devising programs on assessing needs. While all these policy questions may influence the responses to the technical issues, they should not alter the substance of the issues themselves.

### Discussion of the Issues of Manpower Planning

The manpower issues described in this Report are organized under several generic manpower planning elements, such as Task analysis, Staffing Patterns, Recruitment Mechanisms and Training. If each of these issues is dealt with in a substantive way before and during project formulation, a more effective, cohesive program should result.

#### Task Analysis and Definition

Task analysis deals with the types and number of tasks different health workers are performing, and the relevance of these tasks to health problems and health demand.

#### 1. Can the tasks performed by community-based auxiliary workers have a positive impact on the health of the target population.

This is a key question that is basic to the potential success of any primary care health project. The assumption is that if the appropriate tasks are performed properly, health status will improve. As a result, health problems must not only be identified, but also be of such a nature that they can be either effectively treated or prevented. Unfortunately, the current state of the art for certain health problems, i.e. schistosomiasis, does not present a clear-cut case for either prevention, control, or treatment. Therefore, careful analysis of the health situation, and the tasks assigned to workers must be carried-out.

2. Who or what kind of a health worker can perform these simple preventive and curative tasks.

The range and magnitude of tasks that a single worker should perform remains an open question. There is a tendency to concentrate a large array of diffuse tasks in one worker who has a limited amount of training and supervision. There is no "right" answer to the question of which tasks should be performed. However, it is important to emphasize that when a division of tasks exists, they must be adequately coordinated and integrated within the total health program.

3. What are the differing task roles of auxiliaries and professionals when they are both integrated into the same delivery system?

Most new projects will include a mix of professionals and auxiliaries in their design. The respective roles of each should be well-defined. An assumption found in many projects is that there is no duplication of tasks, but that they have complementary functions which result in a synergistic effect of health.

4. Are tasks static or do they change as the worker's role or interest changes?

Most projects assume that problems will essentially remain the same, that few workers will want role changes, and that therefore, for the most part, tasks will remain unchanged. Project planning and design should however consider the need to provide for continuing education and possible role changes.

5. Are the tasks performed relevant to the health demand of the community?

This particular issue is directly linked to the questions of the distinction between "demand" and "need" for health services and appropriate role of the community in defining health tasks. It is possible that the community will "demand" a type of health care which does not relate directly to professionally determined "need". For example, a community may perceive a hospital as a symbol of proper health care, when, in fact, an immunization program might be regarded as more necessary given the epidemiological patterns of the area.

Nevertheless, the services to be provided must have the community's acquiescence at the very least.

6. What is the distinction between health "needs" and "demand", and should they be considered equally in planning rates and types of manpower production?

The question of the difference between "needs" vs. "demand", if resolved, should be applied to the planning of future manpower production. As in the previous issue, the community's perceptions of its own health "needs" should play some role in planning.

7. Will health needs (or demand) remain constant or will it vary from area to area, or vary over time?

To assume that a static situation will continue to exist through the life of a project is not plausible. It is likely that health needs will change from one locality to another, and over time, especially if the delivery of health services has a positive impact.

#### Staffing Patterns

Patterns of staffing questions which need to be addressed include: the absolute number of different types of workers involved in a health project; the relationship of worker-types to one another; comparative ratios to the target population; geographic and institutional distribution of staff; and placement.

8. What is an adequate number of auxiliary workers for a given target population?

Most of AID projects have staffing ratios for auxiliary workers somewhere around one worker per 2,500-5,000 population. For the minimally trained basic health worker, the ratio is probably dependent on task definition of the individual worker, the availability of auxiliary manpower, the overall geographic and institutional distribution of manpower, and the ability of the system to support field personnel.

9. Should auxiliary workers be linked directly to health

facilities such as health posts and health clinics?

Most health programs link their auxiliary health personnel to facilities. The assumption seems to be that without a direct link to a physical structure, the effectiveness of the worker would be seriously impaired. This implies that a health facility must exist before a health worker can begin operating in a given area. However, the ramifications for both operating and capital costs are not factored into most AID proposals. The entire relationship between facilities use and auxiliaries should be examined, taking account of the need for outreach programs given the low utilization, inaccessibility, etc. often found in many rural clinics.

Recruitment Mechanisms and Selection Requirements

Program planning and project design must carefully address several criteria related to recruitment requirements, among which are the following: how requirements and criteria are determined; the relevance of requirements to eventual tasks; and the effect of the community on the selection process. Specific issues to be faced include:

10. Are selection requirements for auxiliaries (and professionals) based on their potential ability to perform certain tasks?

Many projects seem to assume that selection criteria are directly related to tasks to be performed. The relation between tasks and recruitment must be explicit and logical, beginning with a clear definition of tasks. For example, if a health worker will be expected to submit reports or to utilize a manual then that worker must obviously be able to read and write.

11. Is there a manpower pool available which not only meets the selection criteria, but also has a willingness to participate in training and become a part of the health system?

In designing a program one cannot simply assume that the numbers and quality of manpower resources required for its implementation are available. If analysis shows that an insufficient number of individuals would be willing and able to

enter the health system, steps for correcting the shortfall must be built into the program.

12. Is there a provision for an ongoing recruitment system which will continue after the life of the initial AID assisted project?

Few current AID projects discuss the recruitment process; even fewer address the institutionalization of that process. Provisions should be made to insure a continuous recruitment campaign after the life of the project.

13. How important a factor is community acceptability within the selection process?

Most all projects state directly the belief that it is desirable to recruit health workers from the locality where they will eventually be working, or failing that, to at least select individuals with a willingness to work in these areas, which are usually rural. This is directly linked to the proposition that a member of a community recruited as a basic health worker would be more acceptable to that community than would an outsider. In turn, the question is generated of whether there is a distinction between acceptability of the individual versus acceptability of the services offered. Perhaps this particular issue should be expanded to question the whole role of community participation in the selection and recruitment process.

#### Training and Continuing Education

In this section, the issues involve the duration, methodology, content and quality of training, and continuing education. In addition, the need for and use of licensure is discussed.

14. What determines duration of training?

Not only do the tasks that auxiliaries and professionals are expected to execute vary by project, but also the training time varies. The determinants for the length of training for specific categories of workers should be identified and linked to role function. In the past many project have designated

health auxiliaries to perform a large variety of curative and preventive health tasks, but have only provided a short period of training. ~~Either~~ the length of training should be modified to correspond to the number and complexity of tasks, or the tasks themselves should be reduced.

15. What is the appropriate mix of theory and practice in the training of auxiliaries?

For auxiliaries, most past programs have called for an equal mix of classroom instruction and field training. The assumption is that the classroom work will provide a needed theoretical base on which the practical experience can be built. The approach to be used in any given project should be justified on the basis of previous experience in-country and on the expected product of training, i.e. ability to perform specified tasks.

16. What is the quality of training for auxiliaries?

Many projects assume, or hope for a high quality of training. Provision should be made for ensuring that qualified teachers are available or that appropriate curriculum materials are developed. One method of establishing quality control of training is to have licensing requirements that are tied to minimum work standards. Beyond that, licensure can also provide recognition and constraints to the health worker.

17. Are adequate training facilities available?

Project planning which incorporates training inputs or outputs should include a description of existing training facilities, and an evaluation of their staffing, equipment, and financial status.

18. Given a choice, where should the training be located?

It is frequently important to conduct training in an environment similar to the expected work situation. Other situations may call for training in urban centers, where material support and supervision is more readily assessable. Even overseas locations may be required to train certain specialized professionals. Projects should carefully consider the optimal training site for each manpower component.

19. What is the rôle of continuing education in the development of manpower?

Although some current AID projects provide for continuing education, the process is often not clearly elucidated. In thinking through the process of continuing education, there should be a clear relationship to initial or expanded task assignments. Additional training can either improve existing skills or provide new knowledge and abilities. Of course, it can serve both ends.

In addition, the project design should address the questions of who will be the recipients of further training (selection), how frequently should a single individual receive supplemental courses, who should provide this training, and where and how should it be provided. Ideally, the process of continuing education should be linked to an individual initial training and his ability to form a constructive career in health.

Acceptability of Staff Types by Other Professionals

20. Are both the consumers and providers of health services prepared to accept the concept of the community-oriented multi-disciplinary health team?

The "team" approach to health is fairly recent, and there may be difficulties in getting everyone concerned to accept it. If there are problems, then there may be real conflict between the health professionals and the auxiliaries. Project designers should explore this potential zone of tension very carefully before proceeding with implementation, since it is the one area which can quickly neutralize an otherwise effective program.

Support Systems

There are supervisory, technical, and material support systems required to back-up field operations of health workers. Issues which new projects should consider in these areas include the following:

21. How important is the role of supervision in the delivery of health services by auxiliary workers and professionals, and who should provide it?

An important assumption throughout past AID projects is that there is a structured hierarchy of supervisory roles. Such an assumption needs to be accompanied by answers to the questions of how supervisors are selected, what their role should be vis-a-vis the workers, and how many workers can be effectively supervised by one individual. The critical part that supervision plays in the successful delivery of services can not be under emphasized. Every manpower project should examine the process by which supervisory personnel are developed and supported.

22. Will there be a continuous uninterrupted supply of logistical and material support to all segments of the health system?

Most projects assume there is an effective logistical support system in place, when in reality such systems very rarely exist in the developing world. Such a support system should include storage and maintenance facilities and properly trained support personnel. The concept of the "cold chain" - the ability to provide a continuous link of refrigeration for vaccines and drugs - is one example of a supply system question vital to program success that is frequently overlooked.

23. Will technical support be provided to all levels of the health system?

Newly developed cadres of manpower at all levels should have adequate technical support. Technical back-stopping can be integrated into the supervisory system or it can be kept separate, depending on the resources available and the existing organizational structure. Though donor assistance can play a very useful role by contributing technical expertise to host governments, it should be carefully designed to avoid inter-donor duplication and undue LDC dependency.

## Efficiency of Manpower

This section addresses the issues of health manpower efficiency, productivity, and effectiveness in relation to development and maintenance costs.

24. Is it more cost-effective to train and utilize auxiliaries to do simple curative and preventive tasks than to train and utilize professionals to do the same tasks?

Because of limited and/or maldistributed resources, countries have chosen to accept the hypothesis that auxiliary health workers are more cost-effective than professionals. The presumption is that the potential benefits and financial savings stemming from the use of auxiliaries outweigh the risk of malpractice and the consequent possibility of loss of community acceptance. Designers should attempt to build into their projects the high probability that significant numbers of worker's will remain on their designated jobs long enough to compensate for training costs and to provide an element of continuity in the delivery of services.

25. Will sufficiently high salaries and appropriately attractive incentives be offered to health workers in order to attract and retain quality individuals?

A reward system should be considered an integral part of manpower development. This should include attractive financial inducements, professional rewards, and/or career security. As such vital factors to the success of a program, the potential direct and indirect costs of increased salaries, a dynamic career ladder, or other incentives should be overlooked in the total economic assessment of a project.

26. How is staff mobility, migration, and attrition projected and will it remain fairly constant?

Provision should be indicated in the project to deal with manpower attrition contingencies. If these factors are not considered, areas may be left without coverage.

27. Can the national government financially afford the implicit operating and capital costs incurred by supporting new

manpower development?

The Project Paper format requires a comprehensive economic and financial analysis which details the explicit direct and implicit indirect costs of a project. Because many previous PP's failed to consider many technical assumptions of a project, a good deal of the financial constraints were omitted. There is no worse folly than to initiate a large social service program with donor assistance and to have it flounder economically after that assistance terminates.

Annex A

Matrix of Health Manpower Issues and  
AID Project Analysis Requirements

Health Manpower Issues	Project Analysis Categories	Technical	Financial	Social	Economic
1. Auxiliary Impact		X			
2. Type Worker		X			X
3. Integrated Roles		X			
4. Task Changes		X			
5. Task Relevance				X	
6. Needs Defined		X		X	
7. Needs Variation		X		X	
8. Worker Ratio		X	X		X
9. Worker Linkages		X	X		X
10. Selection Criteria		X			
11. Manpower Pool		X			
12. Recruitment System		X			
13. Community Acceptability				X	
14. Training Duration		X	X		
15. Curriculum Mix		X			
16. Training Quality		X			
17. Facility Availability			X		
18. Training Location		X	X	X	X
19. Continuing Education		X			
20. Team Accessibility				X	
21. Supervisory Rules		X			
22. Logistical Support		X			
23. Technical Support		X			
24. Auxiliaries' Cost-Effectiveness		X	X		X
25. Incentives Offered			X		
26. Staff Attrition		X	X	X	X
27. Financial Affordability			X		

1 = Technical soundness of project. AID to Circular A-241 4-23-75  
 2 = Financial viability of project. " " " " "  
 3 = Social impact of project. " " " " "  
 4 = Economic effects of project. " " " " "