SUB-REGIONAL MEETING OF EPI PROGRAM MANAGERS

KINGSTON, JAMAICA

14 - 18 September, 1981

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1. Dr. Ken Antrobus - Family Health Advisor, Barbados
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EXPANDED PROGRAM ON IMMUNIZATION

SUBREGIONAL MEETING OF NATIONAL EPI MANAGERS

KINGSTON, JAMAICA
14-18 September, 1981

INSTRUCTIONS FOR PARTICIPANTS
A. Introduction:

As an introduction to this Sub-Regional Meeting of National EPI Managers, it is important to recall the purposes of the program which have been stated in different documents on the subject:

1. To reduce morbidity and mortality from diphtheria, whooping cough, tetanus, measles, poliomyelitis and tuberculosis by providing immunization against these diseases for every child in the world until 1990.

2. To promote self-sufficiency in the provision of immunization services in the context of comprehensive health care services.

3. To promote regional self-sufficiency in the production and quality control of the vaccines needed for the program.

The proceedings will be conducted in what are referred to as nominal groups in which the several members first do individual work, and then come together for interacting as a group, and arrive at a final consensus on their results.

B. Purposes and Objectives of the Meeting:

1. Purposes:
   
   1.1 To evaluate the progress being made in the EPI
   1.2 To identify the principal impediments to progress of activities
   1.3 To propose alternatives for implementation of the program in primary health care strategy

2. General Objectives:

   2.1 To analyze the concepts of articulation among primary health care components
   2.2 To transmit and analyze methodology for multidisciplinary evaluation of the EPI
   2.3 To identify the common problems that are impeding the implementation of this program
   2.4 To identify the most appropriate solutions for the problems stated
   2.5 To prepare a list of EPI problems with alternative solutions for each
   2.6 To draw a timetable of activities for each country for the next two years
   2.7 To analyze possibilities and areas for technical cooperation between the various countries and the PASB.
3. Specific Objectives:

By the end of the Meeting, the participants will have:

3.1 Draw up a list of EPI problems in the region, in order of priority
3.2 Established alternative solutions for each of these problems
3.3 Worked out a timetable of activities in 1981-1983 defining
   a. Priority problems (established during the Meeting)
   b. Proposed solutions (established during the Meeting)
   c. Quantifiable objectives
   d. Activities to be implemented, with target completion dates
   e. Financing sources and alternatives
   f. Needs for coordination and support between national and international institutions

4. Techniques:

   The techniques to be used in the meeting are:

   a. Exhibits
   b. Individual work
   c. Group work

   The last techniques will be used in the so-called nominal group arrangement. The stages of nominal group work may be summarized as follows:

1. Written List of Problems (individual work)

   Each participant will compile a written list of the problems he regards as important in the following areas:

   a. Immunization and primary care
   b. Programming
   c. Strategy for increasing coverage
   d. Supervision and continuing education
   e. Cold chain
   f. Community promotion and participation
   g. Coordination
   h. Staff training
   i. Epidemiological surveillance and reporting system
   j. Administration of resources and financing

   An explanation of these topics appears at the end of the instructions. A criterion should be established for each problem that will serve to gauge its importance.
A criterion is a concept or standard for measuring results:

Examples: Morbidity
Mortality
Lack of human resources
Lack of staff training, etc.

A maximum of three problems should be listed in each area. At this stage, the work is performed on an entirely individual basis.

2. Compiling the List:

Each participant in turn will mention one of the problems on his list. By the end of the last round, the participants will have stated all of the problems presented by area.

3. Group Discussion:

The group will discuss each of the problems on the list in order to state, clarify, defend and expand them. This will be done for each problem on the list. Problems may be added to the list in the course of the discussion.

4. Ranking and Scoring Problems in Order of Importance:
   (individual work)

For each area, the participant will select 3 of the problems listed which he considers most important and rating them in order of:

   a. Priority
   b. Scoring from 1 to 3

Each score may be used only once, in increasing order of importance. (A score of 3 designates the most important problem).

5. Compiling the List

The list of priority problems will be drawn up again with a score for each. This score will be obtained by adding up the points awarded by all participants. When this stage is done, a list will have been compiled of priority problems by area, with point scoring to indicate the relative importance of each.

6. Group Discussion:

Similar to stage 3.
7. Preparation of the Group's Final List Presentation to Drafting Committee:

The final list will be based on the individual lists prepared by the several participants. Up to this point, the group will have drawn up a list of problems by area and a list of those problems in the order of their importance on the basis of their point scores.

In the second stage, solutions will be devised for each of the problems presented. Each participant's solutions must be feasible, workable and capable of being implemented.

At least two alternative solutions must be established for each problem, following the same stages as in the previous step. The hourly schedules for each period are included in the attached activities program. In accordance with the attached instructions, it is important to note that each participant should work out a timetable for the EPI in his country on the basis of the problems and solutions presented.

Achievement of the desired results depends on active participation in both the individual and the group work and in drawing up the timetable.

Remember that the success of this Meeting depends on you.
INSTRUCTIONS FOR PREPARING TIMETABLE OF ACTIVITIES

After the problems and solutions are identified, each individual participant should draw up a timetable for his country based on the problems and solutions developed at the meeting. When there are two or more participants from the same country, they may collaborate on the timetable which should cover the following points:

- Problems identified
- Quantifiable objectives
- Activities to achieve those objectives
- Determination of time frame (months and years)
  Reminder: timetable should refer to the years 1981-1983.
- Those responsible for conducting the activities
  (Examples: maternal and child care, planning, etc.)
- Financing sources and alternatives (national bilateral and multilateral)

The timetable must be feasible and workable. Multidisciplinary PASB staff and agency representatives may assist in drawing up and in answering any questions.

GUIDELINES FOR PREPARATION OF TIMETABLE

A. Defining the Problem

- Are we defining the problem correctly?
- Have we considered, identified and analyzed all aspects of the problem? Examples: economic, social, managerial, financing, legal, institutional, technological and personnel aspects?
- Have we sufficient data for a rational approach to the problem?
- Can we assess such data, quantitatively and qualitatively?
- Have we consulted all major pertinent published works, studies and sources of information?
B. **Statement of Objectives**

- Are the objectives clearly defined? Examples: specific conditions of the population/environment must be improved; a specific population group or environmental aspect must be improved; geographic location; time frame scope of coverage.
- Are the objectives adequate vis-a-vis the duration of the project?
- Can the stated objectives be quantified?

C. **Activities**

- Do the activities reflect optimal strategy for accomplishing the objectives? Have we considered alternative strategies?
- Are the sequence and timing of the activities realistic?
- Has a clear-cut relationship been established among the various components? Examples: problems, activities, objectives.
- Have mechanisms been established for continuous monitoring and evaluation of activities?
- Do the activities represent the support needed by other organizational levels within the ministry or ministries cooperating in the conduct thereof? Examples: main office, local government ministry, medical supply center, etc.

D. **Financing**

- What source of financing, materials or supplies is needed to complete the activity?
- What source will provide funding?

E. **Person Responsible for Coordination and Support**

- Who is responsible for the scope of each activity?
- What constraints might affect implementation of the activities?
SUBREGIONAL MEETING OF NATIONAL EPI MANAGERS
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SUBJECT GUIDE FOR COMPILING THE LIST OF PROBLEMS AND SOLUTIONS

1. Immunization and Primary Care

   The group should arrive at a conclusion regarding this topic. Unlike the other areas (where problems and solutions are established for each one), here it is useful to issue a group statement on the importance of immunization in primary care, determining whether an immunization program is an essential and basic component.

   What should be the role of the EPI in primary health care strategy? The answer should be given in ten lines or less.

2. Programming and Evaluation

   The various EPI documents have established the necessary series of parameters for the programming and evaluation of activities.

   There is an obvious need to:

   - Establish priorities
   - Ascertain the numbers and structure of population to whom the programming is directed
   - Provide for a supply of data on the programs, not only sporadically but in a continuous flow throughout all of the programming
   - Ensure participation at the local level, not only in implementing the process but in its programming as well
   - Learn the various vaccination tactics for application in accordance with conditions in each country
   - Evaluate the Program on a continuous and permanent basis as a fundamental step toward making the changes and adjustments necessary for attainment of the objectives

   The group of concepts on which the programming and evaluation of the EPI are based should establish:

   What are the problems that, in your opinion, affect the programming and evaluation of the EPI in your country?

   The proper solutions to these problems should be established in the second part of the Meeting.
3. **Strategy for Increasing Coverage**

The data published by the various countries and PAHO indicate that vaccination coverage in many of these countries is not only inadequate, but is being extended very slowly.

While several alternative strategies for increasing coverage are available, only a few of longest standing are in use and producing the results described above. Priorities in programming and coordination have not been properly established: the consequent fragmented use of resources has made it difficult to extend coverage.

Everyone should be asked: Which problems he/she feels pose the greatest impediments to the extension of coverage?

Solutions to the problems presented should be established in the second part of the Meeting.

4. **Supervision and Continuing Education**

Supervision of program execution is a fundamental and essential activity. It should however be stressed that this supervision should not be viewed solely as a monitoring, but should be part of the continuous evaluation of the health care personnel employed in the different areas of the program. This means that a supervision program (guidelines, visiting schedules, written reports) must be designed for the use of the field staff, to enable them to work with the supervisor in appraising activities in progress, their effectiveness and quality, the advancement of the program, problems, etc. This supervision in conjunction with staff members should establish any corrections, revisions or changes that emerge from this joint analysis.

What, in your opinion, are the problems encountered in supervision of the EPI?

In the second part of the Meeting the solutions proposed to problems raised by the group should be established.

5. **Cold Chain**

The varied documentation that provides the EPI framework emphasizes the fundamental importance of the cold chain to the advancement of the project. As currently defined, the term "cold chain" designates the preservation, handling and distribution of vaccines.
An essential part of this process is the equipment needed to keep vaccines at temperatures between +4°C and +8°C or frozen (-15°C to -25°C) the daily logging of temperatures. An adequate number of insulated containers and cold-storage rooms in proper working order is a highly important factor in transportation and preservation, particularly in the field. Special attention must be given to the movement of vaccines among health care centers as a salient feature of the cold chain.

What do you consider to be the problems of the cold chain in your country?

Solutions to the problems presented by the group should be established in the second part of the Meeting.

6. Community Promotion and Participation

Community promotion and participation have long been used in the area of health care and are both considered to be of paramount importance to the success of the EPI. In promotion work it must be taken into account that the community must be made aware of the usefulness of the vaccines and of the danger of failing to be immunized against the six EPI diseases. The necessary implication of this is that there must be mechanisms for making the programs relevant to the target population, including such varied devices as: lectures, meetings, visits, and the like. The lack of demand for immunization should be scrutinized and the findings used to design promotion campaigns. Community participation must be understood as more than just attendance at meetings: it should endeavor to involve community representatives not only as recipients or a part of program implementation, but as participants in the programming of activities.

What do you consider to be the important problems affecting community promotion and participation in the EPI in your country?

Discussion of solutions will start in the second part of the Meeting.

7. Coordination

EPI experience in different countries points to inadequate coordination or none at all among the various areas of the health care sector that engage in EPI activities.

Resources are wasted, efforts are duplicated, and different vaccination schemes are followed in the same administrative unit.
Sectorial coordination is vitally important if we are to attain the EPI's objectives. The different departments and divisions (e.g., epidemiology, maternal and child care, health care, etc.) must coordinate their activities and resources to achieve proper coverage of the population. Lack of this coordination, will impede the attainment of the established goals.

What problems do you see confronting the EPI in this respect?

Solutions will be discussed in the second part of the Meeting.

8. Staff Training

One of the basic functions of the EPI is to train the health care personnel whose work relates to the program. To this end, the EPI has set up workshops on planning, administration and evaluation at the regional and national levels, on the premise that a lack of adequate staff training might jeopardize achievement of the program's target goals. As stated at the workshop, its purposes are:

- To prepare a Manual of Operations for the local level
- To assess problems, resources and results as a basis for designing coverage extension measures
- To multiply workshops at the local level

In practice, although some countries have held national-level workshops, most of them have not continued their programming at the local level, thus interrupting the logical sequence that had been established, leaving most of the local level staff untrained, and producing the adverse results that could have been expected. Moreover, the preparation of Manuals of Operations for local EPI's has not progressed as expected: several of the countries have not even made a beginning. Moreover, some of them have not conducted training for national-level personnel.

What problems do you see in implementing EPI instructions and training in your country?

Solutions to the problems identified by the group will be worked out in the second part of the Meeting.

9. Epidemiological Surveillance and Reporting System

EPI epidemiological surveillance is the monitoring of the trends and distribution of cases and deaths from the diseases covered by the program as a basis for timely implementation of the requisite control measures. While the different operating levels of health care agencies do have resources of varying complexity, and not all of them are capable
of diagnosing the causes of cases and deaths with the same degree of accuracy, an epidemiological surveillance system that can detect and identify every case of the Program's six diseases is an indispensable requisite for the EPI. Without the right epidemiological data, events at the local level cannot be reported to the central level.

Every level of the health system must be able to analyze the case data for its decision making purposes in a minimum of time. For this end, an epidemiological surveillance and reporting system that can provide the necessary support is essential.

Despite the progress made thus far, there are still countries and parts of countries that have neither the reporting nor the surveillance facilities needed to establish the accomplishments of the Program in terms of morbidity, mortality, population, numbers of vaccinations, etc.

What do you consider to be your country's EPI problems in the area of epidemiological surveillance and reporting systems?

The solutions to the problems raised by the group will be considered in the second part of the Meeting.

10. Administration of Resources and Financing

Many of the shortcomings observed in the EPI stem from problems in the administration of resources and financing. As noted in the section on Coordination, failure to achieve proper coordination means that resources are wasted which impairs the conduct of the Programs. The same is true of the administration of resources.

In regard to this administration the correct apportionment of personnel, a running inventory of financial, physical and material resources, thorough knowledge of administrative mechanisms, the application of basic health administration principles, cost studies and similar measures would help achieve the desired level of coverage. An optimal distribution of resources is a necessary step toward reaching the EPI target population.

In the face of the very real financing problem now confronting our countries, it is imperative to examine priorities in the health sector so that financial resources can be channeled to top-priority programs such as the EPI. In many cases countries have felt that adequate financing for the Program was lacking, but have failed to seek alternative sources
that could solve some of the problems. Such sources could be found within the country or to be tapped under bilateral or multilateral agreements.

What problems does your country's EPI have in the area of financial resources and administration?

Solutions will be discussed in the second part of the Meeting.
What Should Be Role Of The EPI In Primary Health Care Strategy

The expanded programme for immunization (EPI) could serve as a measure of the advances being brought to the communities health status by the PHC Strategy. This statement is meant to convey the idea that it is one programme area in the PHC Strategy that if well executed can severely diminish mortality and morbidity. The service is easily measured, it is action oriented or as one speaker said earlier - 'tangible' -.
GROUP I

ITEM 2  Programming & Evaluation

Problem 1  DATA FOR DETERMINING OF POPULATION SIZE AVAILABLE. THEREFORE DIFFICULT TO ARRIVE AT COMMON DENOMINATION.

Solution  a) Introduce legislation for notification of births for each catchment area in the Country.

b) Utilize PHC and community data as a source and vehicle for obtaining EPI population data for each catchment area in the Country.

Problem 2  LACK OF INFORMATION ON IMMUNIZATION ACTIVITIES BY THE PRIVATE SECTOR LEADING TO DIFFICULTY IN EVALUATING THE TOTAL NATIONAL PROGRAMME.

Solution  a) Persuade the Private Sector to submit immunization returns by:

- supplying free vaccines
- paying a fee for the returns
- approach professional medical and nursing associations to stress importance of immunization returns.

b) Provide appropriate immunization reporting forms to private practitioners and develop system for easy and free return.

Problem 3  PRIMARY HEALTH CARE WORKERS NOT SUFFICIENTLY SENSITIZED TO USE AND PURPOSE OF DATA. THEREFORE USE OF DATA NOT MAXIMISED IN PLANNING, MONITORING AND EVALUATING IMMUNIZATION PROGRAMMES.

cont'd
Strategy For Increasing Coverage

Problem 1
INADEQUATE HEALTH EDUCATION CAUSING LACK OF AWARENESS OF PARENTS AND THE GENERAL PUBLIC OF THE NEED FOR IMMUNIZATION.

Solution
a) Organize / intensify Family Education Programmes by making use of health resources, e.g. Health Educators, Public Health Nurses, P.H. Inspectors, Press, Radio Media.

b) Organize local Health Education Committees involving community leaders and arrange house to house visits by Community Health Workers at all levels. Use pamphlets at all Clinics.

c) Health Workers must make more use of informal opportunities that arise to provide Health Education.

Problem 2
INADEQUATE RESOURCES FOR THE TRANSPORTATION AND STORAGE OF VACCINES.

Solution
a) Persuade Ministry of Finance to allocate more funds to EPI programme.

cont'd
b) Secure non-governmental financial assistance from international donor agencies, service clubs and private donors.

**Problem 3**

POOR SOCIO-ECONOMIC CONDITIONS TOGETHER WITH TRANSPORTATION COSTS AND INABILITY TO TAKE OFF TIME FROM WORK ALL LEAD TO INABILITY OF SOME FAMILIES TO PARTICIPATE IN IMMUNIZATION PROGRAMMES.

**Solution**

a) Arrange for Vaccine administration to be taken to the people at local meeting points, villages, community centres or homes at times convenient to the people.

b) Health Workers should be more flexible in the time and place of services offered.

**ITEM 4**

**Supervision and Continuing Education Problems**

**Problem 1**

LACK OF TRAINING OF MIDDLE MANAGERS IN SUPERVISORY CONCEPTS AND TECHNIQUES.

**Solution**

a) Involve middle Management Personnel in in-service training programme in immunization to stimulate their interest in Management of the EPI Programme.

b) Arrange Training Programmes in Supervisory Techniques for middle Management in immunization programmes.

**Problem 2**

LACK OF CONTINUING EDUCATION PROGRAMMES IN EPI TECHNIQUES FOR STAFF NURSES AND OTHERS WHO FUNCTION IN THE HEALTH CENTRES.

**Solution**

a) Strengthen National Training Units and arrange Training Courses on a regularly repeated basis in EPI Techniques for Nurses and others working in Primary Care and in Hospitals.

cont'd
b) Staff Nurses should receive orientation in field health districts first before functioning on their own.

Problem 3  LACK OF AWARENESS OF THE NEED FOR SUPERVISION ON THE PART OF DESIGNATED SUPERVISORY STAFF.

Solution  a) Careful selection of Supervisors not using seniority as the only yardstick for promotion to Supervisory level.

b) Proper training of Supervisory Staff including refresher courses to update their skills.

Cold Chain (Problems Identified in Order of Priority)

Problem 1  OCCASIONAL POWER FAILURES WHICH LEADS TO SPOILAGE OF VACCINES.

Solution  a) Ensure proper training of appropriate staff in such areas as:

- shelf life of Vaccine at different temperatures

- proper storage of Vaccine in Freezer / Refrigerator

- avoidance of too frequent opening of Freezer / Refrigerator.

b) Develop and implement contingency plans for refrigeration of Vaccine during power failures.

cont'd
ITEM 6 Community Promotion and Participation

Problem 1 LACK OF SUFFICIENT HEALTH EDUCATION PERSONNEL FOR INITIATING COMMUNITY HEALTH EDUCATION SERVICES.

Solution a) If it is not possible to get additional health education staff, get more existing health staff (e.g. nurses & PHI's etc.) as well as non-health professional groups involved in health education after giving them some training in health education techniques.

b) Ensure that health educators function in the field of their training.

Problem 2 SHORTAGE OF COLD CHAIN EQUIPMENT - (THRM / REFRIG / VACCINES CARRIER / GENERATORS) AT THE FIELD LEVEL.

Solution a) Persuade Ministry of Finance to provide more funds for EPI.

b) Secure non-governmental financial assistance for EPI including local services and private sector.

Problem 3 SHORTAGE OF PROPERLY TRAINED STAFF AT THE PERIPHERAL LEVEL IN COLD CHAIN MANAGEMENT.

Solution a) Arrange regular training programmes for peripheral staff in Cold Chain Management drawing on overseas expertise only when necessary.

b) Arrange on the job training by Supervisory Personnel in Cold Chain Management as a routine part of their supervisory function.

cont'd
Problem 2  APATHY OF THE COMMUNITY BECAUSE OF IGNORANCE OF THE POTENTIAL DANGER OF THE EPI DISEASES.

Solution  a) Organize on-going health education programmes in the danger of EPI diseases and the benefits of immunization through film shows, posters, person-to-person communication and mass media and including this information in school curricula.

b) Arrange for periodic publication of mortality and morbidity information on EPI diseases including extra regional information.

Problem 3  RELUCTANCE OF HEALTH WORKERS TO INVOLVE THE COMMUNITY IN DECISION MAKING IN RELATION TO IMMUNIZATION PROGRAMMES.

Solution  a) Education of health workers at all levels in the benefits of community participation in the implementation of EPI, including utilizing successful experiences of community participation in immunization programmes to stimulate other health workers to utilize this strategy.

b) Establish closer relationship between health workers and their community in the planning of immunization programmes.

cont'd
ITEM 7  Co-ordination - Problems

Problem 1  LACK OF INTEREST IN IMMUNIZATION SHOWN BY MANY PRIVATE PRACTITIONERS BOTH FOR INFANTS AND PREGNANT MOTHERS, INCREASING NUMBERS OF WHICH ARE ATTENDING PRIVATE PRACTITIONERS FOR A. N. CARE.

Solution  a) Attempt to organize or to have organized continuing medical education programmes for medical practitioners through university groups and / or local medical associations.

b) Arrange for regular circulation of regional and extra-regional information on the EPI diseases to sensitize and stimulate interest.

Problem 2  DIFFICULTY IN OBTAINING CO-OPERATION FROM THE OB / GY UNITS OF PUBLIC HOSPITALS IN PROVIDING TETANUS IMMUNIZATION FOR PREGNANT WOMEN.

Solution  a) Arrange for Public Health Nurses to be present at the ante-natal clinics for the purpose of giving Tetanus immunization and keeping records. This will hopefully lead to the hospital ante-natal clinic nurses assuming this responsibility.

b) Provide hospital OB / GY units with Tetanus Toxoid for immunization of pregnant women where this expense cannot / will not be met out of the hospital budget.

cont'd
Failure of curative services to identify and refer patients for immunization.

**Solution**

a) Provide and put up posters in curative consulting rooms, in private and public medical clinics indicating the need for immunization and where and when these are available.

b) Circulation of immunization schedules and referral slips to all medical clinics to stimulate medical personnel in curative services to refer patients.

Staff Training

**Problem 1**

Lack of clearly defined national immunization schedules, norms, standards and management systems which leads to inconsistency and inadequacy in staff training.

**Solution**

a) Prepare national immunization schedules, norms, standards and management systems and use these in staff training for all immunization workers.

b) Update field manuals on schedules, norms, standards and management systems in EPI.

**Problem 2**

Training is restricted to a small group of senior health personnel leading to an imbalance in the development of personnel for immunization programmes.

**Solution**

a) Broaden the base for selection of national personnel to attend training programmes in immunization and place increasing emphasis on middle management training.
Problem 3  TRAINING CONDUCTED AT NATIONAL LEVEL HAS NOT COMPLETELY FILTERED DOWN TO THE LOCAL LEVEL.

Solution  

a) Provide training programmes for workers at the local level by utilizing middle and senior management already trained as resource personnel and obtaining international funds for the support of these programmes.

b) Encourage EPI Managers to share the knowledge gained from Training Programmes, meetings, discussions, reports, etc. through field visits.

ITEM 9  Epidemiological Surveillance & Reporting Systems

Problem 1  FAILURE TO MAINTAIN LEVELS OF INTEREST AMONG HEALTH PROFESSIONALS IN REPORTING DISEASES, DEATHS AND IMMUNIZATION STATUS FOR EPI DISEASES WITHOUT CONSTANT PRESSURE.

Solution  

a) State clearly the objectives and advantages of reporting EPI Diseases, Deaths and Immunization Status to create sensitivity among health workers and develop a continuous reporting system for these items and areas affected.

b) Ensure adequate feedback to reporting personnel.
Problem 2  ABSENCE OF AN ORGANIZED EPIDE­MIOLOGICAL UNIT.

Solution  a) Establish and maintain an epidemiological unit utilizing whatever health personnel available with close links to the management of EPI and supported by laboratory services within or outside the country.

b) Selected field staff should be trained (e.g. CAREC Course) to perform epidemiological functions at field level.

Problem 3  LACK OF PROPER COMMUNICATION BETWEEN HOSPITAL AND PUBLIC HEALTH SERVICE IN REPORTING OF EPI DISEASES.

Solution  a) Improve communications between the hospital and public health services by arranging:

   - for the hospital laboratory to report directly and promptly to the Epidemiological Unit on positive findings of communicable diseases

cont'd
- the hospital infection control committee (where it exists) to report directly to the Epidemiological Unit

- the hospital records department to report directly to the Epidemiological Unit

- a Public Health Nurse to visit the hospital to obtain the required information

- information on EPI diseases to be communicated from the Epidemiological Unit to EPI management.

b) Establish, maintain and monitor an organized refined system between Public Health and Hospital Services and provide training for all staff involved so that the system is understood by all. There should also be frequent meetings by all staff involved to plan and evaluate the system. Hospital staff should become involved with Public Health Staff in EPI activities, investigation of diseases and in-service education.

### ITEM 10  Administration Of Resources & Financing

**Problem 1**  PRIMARY HEALTH CARE ENCOMPASSES MANY PROGRAMME AREAS AND THE ADMINISTRATION WITH OVERALL RESPONSIBILITY MAY NOT CONSIDER THE EPI OF HIGH PRIORITY, RESULTING IN NEGLECT OF SPECIAL NEEDS.

**Solution**  a) Ensure the budget for EPI has its own identity in the overall health expenditure by:

- making it a separate item in the estimates of expenditure

- including it as a special item in the breakdown of a block vote, e.g. MCH Services or Control of Communicable Diseases.

cont'd
b) Personnel at Senior Health Administrative levels should be sensitized to the danger of EPI diseases thus giving the EPI high priority.

Problem 2
THE ADMINISTRATORS WHO PROMOTE EPI ARE NOT NECESSARILY CONTROLLING FUNDS FOR THESE PROGRAMMES.

Solution
a) The Managers of EPI should be given formal authority to control funds for EPI in keeping with programme needs.

Problem 3
TRANSPORTATION COSTS OF SMALL ORDERS OF VACCINE ARE EXCESSIVE IN RELATION TO THE COST OF THE QUANTITIES ORDERED RESULTING IN SHORTAGES AND WASTAGE OF FINANCIAL RESOURCES.

Solution
a) Accurate estimates of requirements must be made to avoid shortages and excesses and the cost benefit of ordering vaccines on a yearly or six monthly basis can be made clear to the financial authorities so that:

- funds will be provided for purchases of equipment for storage of larger quantities of vaccine

- vaccines can be purchased on a yearly or six monthly basis.

b) Establish a uniform CIF price for Vaccines in the Caribbean.
GROUP II

PROBLEMS AND ALTERNATIVE SOLUTIONS

ITEM: 2 Programming and Evaluation

Problem 1: DETERMINING NUMBERS AND STRUCTURE OF TARGET POPULATION.

Solutions: a) Define boundaries of each health unit and use of existing health personnel e.g. C.H.A., Vector Control Workers to conduct house to house survey of target population.

b) Estimate target population based on last census and birth rate.

Problem 2: LACK OF INVOLVEMENT OF COMMUNITY MEMBERS AND MULTI-DISCIPLINARY COORDINATION.

Solutions: a) Development of leadership programmes for Community Members and establish and work with Health Committees and other Community Groups where these exist.

b) Training and motivation of health workers in techniques and promoting community participation.

Problem 3: AVAILABLE DATA ARE NOT UTILIZED FOR PROGRAM EVALUATION NOR IS THERE A CONTINUOUS FLOW OF INFORMATION BETWEEN DIFFERENT LEVELS OF THE HEALTH CARE DELIVERY SYSTEM.

Solutions: a) Training of Statisticians where they exist and other personnel in the collection, analysis, interpretation and use of data.

b) Development of a proper health information system.
ITEM: 3  Strategies for Increasing Coverage

Problem 1: INFLEXIBILITY AND LACK OF RECEPTIVENESS OF STAFF TO CHANGE ATTITUDES, SERVICE HOURS AND LOCATION OF FACILITIES TO MEET COMMUNITY NEEDS.

Solutions: a) Adopt period of extended hours or revising existing hours of Child Health Clinics to fit in with community needs, utilizing outreach facilities e.g. schools and churches.

b) Orientation of all health workers in basic, post-basic, continuing education programmes and on the job training to:
   - the change process
   - concept of providing services to meet community needs.

Problem 2: LACK OF CRITICAL AND REALISTIC REVIEW OF AVAILABLE RESOURCES ESPECIALLY MANPOWER TO ENSURE MAXIMUM UTILIZATION.

Solutions: a) Critical review and revision of job description of all health personnel to ensure maximum utilization and retraining of health personnel as indicated.

b) Health resources inventory and projections to meet community needs, should be available at all health facilities to ensure maximum utilization of staff.

Problem 3: LACK OF AN ADEQUATE FOLLOW-UP SYSTEM FOR PERSONS WHO FAIL TO RETURN FOR SUBSEQUENT DOSES.

Solutions: a) Formulation and implementation of a standardized follow-up system in collaboration with staff at local level.

b) Utilization of C.H.A. and other health workers e.g. Public Health Inspectors, also Community Group and volunteers for follow-up.
Supervision and Continuing Education

Problem 1: NEED FOR SUPERVISORS TO UNDERSTAND THEIR ROLE IN SUPERVISION AND CONTINUING EDUCATION.

Solutions: a) Definition of the role of supervision by Supervisors with a view to identification and clarification of their expected role and function.

b) Training and continuous education for Supervisors to assume their role. Theory must be related to function and conducted on a practical level.

Problem 2: NEED FOR CONTINUING EDUCATION FOR STAFF AT THE LOCAL LEVEL.

Solutions: a) Immunization education built into existing inservice, on the job education programmes and frequent distribution of relevant literature.

b) Training and appointment of a person responsible for planning, implementing and evaluating continuing education programmes.

Problem 3: NO WRITTEN GUIDELINES FOR SUPERVISION OF FIELD STAFF.


b) Develop monitoring system to ensure utilization of guidelines.
ITEM: 5  Cold Chain

Problem 1:  POWER CUTS IN ELECTRICITY SUPPLY.

Solutions: a) Bring to attention of relevant authority the need for a stand-by generator at Central Store or where stand-by generators exist connect electricity supply to Central Store.

b) Ensure that staff follow instructions to deal with power cut.

Problem 2:  SHORTAGE OF NECESSARY EQUIPMENT.

Solutions: a) Encourage district councils and community members to be self-reliant and raise funds for supplying equipment.

b) Ensure equitable distribution, proper maintenance and maximum utilization of available equipment; project cost of needed additional equipment and submit with necessary justification to secure funds.

Problem 3:  STAFF NOT CONSCIOUS ENOUGH IN MAINTAINING VACCINE POTENCY INCLUDING TEMPERATURE MONITORING.

Solutions: a) Need for Inservice Education and constant re-inforcement on the maintenance of the Cold Chain.

b) Regular supervisory visits to ensure that the cold chain is maintained and temperature monitored and recorded in standardized format.
ITEM: 6

Community Promotion and Participation

Problem 1: TRADITIONAL ROLE OF HEALTH PERSONNEL AND
FAILURE OF THE HEALTH CARE DELIVERY SYSTEM
TO MEANINGFULLY PROMOTE COMMUNITY PARTICIPATION,
INVOLVEMENT IN THE PLANNING, IMPLEMENTING AND
EVALUATION OF THE EPI PROGRAM.

Solutions: a) Education/training of all Health Personnel as
the need for, and the techniques required to
ensure Community Participation, so that the
health care needs of the community can be
adequately met.

b) The role of the community in Primary Health
Care should be defined and discussed with
community leaders and at least one health
personnel should live in the community he or
she serves.

Problem 2: LACK OF AWARENESS AMONG THE COMMUNITY OF THE
IMPORTANCE OF IMMUNIZATIONS AND ITS CONTRA-
INDICATIONS.

Solutions: a) Education of community through the mass on
Immunization Information, its contra-indica-
tions and how to deal with them.

Problem 3: LACK OF AN EDUCATION PROGRAM ON IMMUNIZATION
DIRECTED PRIMARILY TO SCHOOL CHILDREN FROM
NURSERY THROUGH UNIVERSITY.

Solutions: a) Inclusion of the objectives of the EPI
programmes in the Family Life Education programme
in Primary and Secondary Schools.
ITEM: 7  Co-ordination

Problem 1: LACK OF COORDINATION AND POOR COMMUNICATION AMONG THE VARIOUS DISCIPLINES IN THE HEALTH SECTOR AT VARIOUS LEVELS, AND BETWEEN THE PUBLIC AND PRIVATE SECTORS, RESULTING IN WASTAGE OF VACCINES, UNDER-UTILIZATION OF RESOURCES AND DUPLICATION OF SERVICES.

Solutions: a) Establish a system of feed-back which encourages a free flow of immunization information between private practitioner and the Health Services.

b) Establish a multi-disciplinary Committee comprising health personnel and personnel from other sectors - public and private in the Community.

Problem 2: LACK OF COORDINATION AND RESPONSE AT CENTRAL LEVEL TO THE NEEDS OF THE FIELD RESULTING IN DIFFICULTIES IN PROGRAM IMPLEMENTATION.

Solutions: a) Regular meetings with Central Level and Field Workers.

b) To enlist the support of the policy makers in the execution of the EPI Programme and recommend educational activities as appropriate.

Problem 3: LACK OF INTERSECTORAL COORDINATION RESULTING IN EFFICIENT USE OF RESOURCES.

Solutions: a) Establishment of an intersectoral Committee at the National Level for Policy Making and Coordination of activities.

b) Regular meetings at local level of intersectoral personnel.
ITEM: 8  Training

Problem 1:

DISSEMINATION OF KNOWLEDGE AND SKILLS ACQUIRED BY MID LEVEL PERSONNEL TO HEALTH WORKERS AT THE PERIPHERY RESULT IN INADEQUATE TRAINING OPPORTUNITIES OF DISTRICT NURSES, PUBLIC HEALTH INSPECTORS AND COMMUNITY HEALTH WORKERS.

Solutions: a) It should be mandatory for personnel who attended course to disseminate the information through staff meetings, lectures, relevant literature and practical demonstration.

b) There should be an organized in-service education programme specially directed to staff at the local level: information on training and Refresher courses be made available to all health staff.

Problem 2:

LIMITED KNOWLEDGE OF TOP MANAGEMENT PERSONNEL BOTH TECHNICAL AND ADMINISTRATIVE.

Solutions: a) Information from Courses/Seminars should be shared with Managers and vice versa i.e. Managers attending Courses should share information with other levels of staff.

b) Formal preparation and continuing education for Administrative Staff e.g. Permanent Secretary, Chief Medical Officer and others in Management skills.

Problem 3:

INADEQUATE FINANCIAL RESOURCES FOR IN-SERVICE TRAINING.

Solutions: a) Utilize existing resources, human and material to the fullest for purposes of in-service education.

b) Estimate cost of In-service Education Programme with justification so that funds could be allocated either by Government, Service Clubs or other Donor Agencies.
ITEM: 9

Surveillance and Reporting System

Problem 1:

REPORTS FROM THE LOCAL LEVELS ARE LATE, INACCURATE AND INCOMPLETE. THIS INCLUDES REPORTS FROM DISTRICT MEDICAL OFFICERS AND PRIVATE PRACTITIONERS.

Solutions:

a) Orient health personnel to use of reporting system emphasizing accuracy, and promptness of reporting.

b) Review and revise existing reporting system to include deadline for submitting reports.

Problem 2:

LACK OF STAFF TRAINED TO ANALYZE THE DATA AT LOCAL LEVEL.

Solutions:

a) Include health statistics in the basic, post-basic and continuing education programme of all Health Workers.

b) Program Managers in collaboration with Statistical Officer develop training programmes for personnel at local level to collect, summarize, analyze, interpret and submit reports to other levels in a standard format.

Problem 3:

INADEQUATE FEED BACK.

Solutions:

a) The Programme Manager working along with the Statistician should provide information to the Supervisor who is responsible for providing feed-back on data analysis to personnel at local level.

b) Information on E.P.I. status should be shared between areas at local level and also between higher levels of care.
ITEM: 10 Administration of Resources and Financing

Problem 1: INEFFECTIVE AND INEFFECTIVE MANAGEMENT PRACTICES RESULTING IN INAPPROPRIATE IDENTIFICATION OF PRIORITIES AND DISTRIBUTION OF RESOURCES.


b) Critical analysis of existing situation and development of specific programme planning.

Problem 2: LOW PRIORITY GIVEN TO HEALTH IN BUDGET.

Solutions: a) Sensitize political directorate on the impact health can make on the economy.

b) Sensitization of personnel in other sectors by health workers on the importance of Primary Health Care and its impact on the Community.

Problem 3: COST OF PROGRAM NOT USUALLY DONE TO JUSTIFY ALLOCATION OF FUNDS.

Solutions: a) Develop a realistic health plan and cost estimate for delivery of services.

b) Cost effective Studies.
GROUP III

PROBLEMS AND ALTERNATIVE SOLUTIONS

ITEM: 2

Programming & Evaluation

Problem 1: INADEQUATE TRANSPORTATION (ALL TYPES) FOR CONDUCTING THE PROGRAM.

Solution: a) Special budgeting allocation for purchase of appropriate vehicles which would be available for use in EPI Program.

b) Extension of loan facilities to more health personnel for purchase and maintenance of vehicles.

Problem 2: INADEQUATE REPORTING BY PRIVATE HOSPITALS AND DOCTORS.

Solution: a) Design a simple "EPI Form" for use by private sector and assign responsibility for regular, periodic collection to a staff member.

b) Arrange educational sessions for private sector personnel on E.P.I., and develop/strengthen liaison between public and private health sector, e.g. joint discussions, information, meetings with relevant professional associations - medical, pharmaceutical, etc.

Problem 3: MOST PUBLIC HEALTH STAFF DO NOT KNOW THEIR TARGET AREA (POPULATION - CHARACTERISTICS).

Solution: a) Carry out carefully monitored survey of households by area (including age group classification) using staff from health and other agencies.

b) Make greater use of available census data and vital statistics from Registry.

/.........2
ITEM 3: Strategies for Increasing Coverage

Problem 1: LOGISTIC PROBLEMS RE VACCINE AVAILABILITY AND DISTRIBUTION.

Solution: a) Establish/ refine mechanisms for adequate and timely orders of vaccines.

b) Designate officer with responsibility for distribution, including, where necessary, inter-island transport in order to expedite deliveries.

Problem 2: LACK OF KNOWLEDGE OF TARGET POPULATION.

Solution: a) Carry out survey of households by area (including age group classifications) using staff from health and other agencies.

b) Make greater use of available census data and vital statistics from Registry.

Problem 3: INADEQUATE FOLLOW-UP OF DEFAULTERS (DUE TO STAFF SHORTAGE AND SIZE AREA)

Solution: a) Determine staff needs on a population basis and make necessary staff adjustments, e.g. increase or redeploy staff, reduce areas served, use new category of workers.

b) Develop/reinforce system of follow-up for all levels of health personnel.
ITEM 4 : Supervision and Continuing Education

Problem 1 : SHORTAGE OF SUPERVISORY LEVEL STAFF.

Solution : a) Strengthen intermediate level of community nursing service so as to enable senior level to pay more attention to their supervisory functions.

b) Provide appropriate training for health personnel to fill existing vacancies.

Problem 2 : INADEQUATE PERFORMANCE IN EDUCATIONAL ROLE OF SOME STAFF.

Solution : a) Develop on-going in-service training programmes to meet the educational needs of staff, and evaluate staff performance on a regular basis.

b) Ensure that all aspects of work performance should be taken into account for purposes of promotion.

Problem 3 : LOW LEVELS OF MOTIVATION AMONG SOME STAFF.

Solution : a) Determine reasons for low level of motivation and, where possible, take remedial action.

b) Regular information to all staff on status of E.P.I. programme.
ITEM 5: Cold Chain

Problem 1: INADEQUACY OF STORAGE EQUIPMENT PRIMARILY AT DISTRICT.

Solution: a) The Ministry of Health should assume responsibility for the supply of all necessary equipment at central and district levels.

b) Special attention should be paid to the training of all staff in the use of equipment and in the maintenance of the cold chain.

Problem 2: DELAYS IN PROJECTED ARRIVAL TIME OF SUPPLIES FROM MANUFACTURING TO COUNTRY

Solution: a) Develop/strengthen co-operation between E.P.I, personnel and airline or other agencies concerned with transport of vaccines.

b) Periodic review of routing of vaccines should take place between purchasing agent, shipping agent and Ministry of Health.

Problem 3: INTERRUPTION IN POWER/ENERGY SUPPLY TO STORAGE EQUIPMENT.

Solution: a) Stand-by generators and adequate supplies of fuel should be provided at the central and district level where they do not exist.

b) Ensure practice of recommended procedures to be followed in the event of power failure.
ITEM 6: Community Promotion and Participation

Problem 1: PUBLIC COMPLACENCY DUE TO ABSENCE OF EPIDEMICS OR SIGNIFICANT INCIDENCE OF "EPI" DISEASES.

Solution: a) Stimulate public awareness of E.P.I. through more intense and better focused programmes of Health Education via the various media available.

b) Promote the formation/strengthening of community health committees with a view to greater public involvement in all aspects of development and implementation of E.P.I.

Problem 2: INADEQUATE PUBLIC EDUCATION ON IMMUNIZATION.

Solution: a) Stimulate public awareness of E.P.I. through more intense and better focused programmes of Health Education via the various media available.

b) Promote the formation/strengthening of community health committees with a view to greater public involvement in all aspects of development and implementation of E.P.I.

Problem 3: INSUFFICIENT COOPERATION AND SUPPORT FROM OUR PROFESSIONAL GROUPS, E.G. - TEACHERS, AGRICULTURAL OFFICERS, ETC.

Solution: a) Encourage participation of other professional groups in district health committees.

b) Develop inter-professional relationships with other groups to provide mutual support for each other's programs.
ITEM 7 : Coordination

Problem 1 : LACK OF COMMUNICATION BETWEEN HOSPITAL AND PUBLIC HEALTH STAFF.

Solution : a) Organize periodic meetings and joint educational activities (e.g. seminars) for public health staff and relevant hospital staff.

b) Designate an individual to act as liaison officer between hospital and districts to enhance the quality and flow of information regarding births, referrals, follow-ups, EPI reports, etc.

Problem 2 : INSUFFICIENT LIAISON BETWEEN MINISTRY OF HEALTH AND PRIVATE SECTOR (DOCTORS, HOSPITALS).

Solution : a) Organize periodic meetings and joint educational activities (e.g. seminars) for public health staff and relevant hospital staff.

b) Designate an individual to act as liaison officer between hospital and districts to enhance the quality and flow of information regarding births, referrals, follow-ups, EPI reports, etc.

Problem 3 : INADEQUATE PROMOTION AND IMPLEMENTATION OF MECHANISMS FOR COORDINATION AMONG HEALTH STAFF (E.G. PERIODIC MEETINGS, JOINT ACTIVITIES, EXCHANGE OF INFORMATION).

Solution : a) Conduct periodic meetings and educational activities to be attended by various sectors of the health Ministry personnel. Such meetings should, from time to time, be of a social nature.

b) There should be more frequent morale boosting visits "to the field" by Senior Ministry Personnel - including the Minister of Health.
ITEM 8 : Staff Training

Problem 1 : LACK OF PLANNED (LOCAL) TRAINING PROGRAMME FOR HEALTH PERSONNEL.

Solution : a) Plans should be made for the implementation of training programmes on a regular basis:

i) at central/national level

ii) at district level, where it would be the prime responsibility of the supervisor.

Problem 2 : FAILURE OF SOME SUPERVISORY STAFF TO IMPLEMENT PLANNED TEACHING PROGRAMMES.

Solution : a) Role of supervisor as an educator should be explicitly stated in job description, and training activities should be routinely planned in work schedule, and reported on at prescribed intervals.

Problem 3 : INADEQUATE FOLLOW-UP BY SUPERVISORY STAFF TO IDENTIFY ADDITIONAL TRAINING NEEDS.

Solution : a) Supervisory staff should evaluate all aspects of programme (including training), in order to identify further training needs, and provision should be made for assisting them in the planning, implementation, and evaluation of their training programmes.

b) Schedules of field visits by supervisors should be carefully planned on a periodic basis.
ITEM 9 : Epidemiological Surveillance/Reporting System

Problem 1 : INADEQUACIES IN MECHANISM FOR GATHERING REPORTS, COLLATING AND FEEDING BACK INFORMATION.

Solution : a) The respective roles of Units or Agencies concerned with the processing of health information and data should be clearly defined.

b) There should be further training of health personnel at the local level in data collection, use of forms, and other aspects of processing reports, according to established national procedures, reinforcing the importance of these activities.

Problem 2 : LACK OF DESIGNATED RESPONSIBLE OFFICER.

Solution : a) Every country which has not yet designated an individual responsible for epidemiological surveillance, should do so as a matter of urgency.

b) Provisions should be made for the appropriate training, if necessary, of the person thus designated.

Problem 3 : FAILURE OF PRIVATE HOSPITALS AND DOCTORS TO REPORT.

Solution : a) Ensure that private doctors and hospitals at all times have an adequate supply of the necessary forms.

b) Arrange educational sessions for private sector personnel on E.P.I., and develop/strengthen liaison between public and private health sector, e.g. joint discussions, information, meetings with relevant professional associations - medical, pharmaceutical, etc.
ITEM 10 : Administration : Resources & Financing

Problem 1 : INADEQUATE PROVISION OF TRANSPORTATION AND EQUIPMENT FOR SUPPORT OF VARIOUS PROGRAM AREAS.

Solution : a) The Ministry of Health should make strenuous efforts to ensure that there is a greater allocation of funds for the purchase and maintenance of vehicles, and for travelling allowances.

b) The Ministry of Health should establish/review policy on transportation with emphasis on the use of government owned vehicles, so as to facilitate the smooth implementation of programmes.

Problem 2 : LACK OF MOH WITH RESPONSIBILITY FOR PHC/MCH PROGRAM.

Solution : a) Provision should be made for the appointment of an M.O.H. (with responsibility for PHC/MCH), in countries that do not now have one.

Problem 3 : POTENTIAL RISK TO EQUIPMENT, SUPPLIES AND PROGRAM EXECUTION DUE TO BREAKDOWNS AND INADEQUATE MAINTENANCE.

Solution : a) Each ministry of health should establish/strengthen its own maintenance unit which should provide adequate coverage for district as well as central facilities.

b) There should be sufficient suitable equipment on hand for emergency/replacement purposes.
### EXPANDED PROGRAM ON IMMUNIZATION (E.P.I.)

**TIMETABLE FOR ACTION 1981-1983**

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<tr>
<th>PROBLEM</th>
<th>QUANTIFIABLE OBJECTIVE</th>
<th>ACTIVITIES</th>
<th>QUARTERS</th>
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| From Maternal and Child Health reports submitted and analysed by health staff, approx. 40% of infants and young children 0-23 mths. are immunized against Diphtheria, Pertussis, Tetanus and Polio. No data for B.C.G. vaccinations were available. Coverage of pregnant women against tetanus was 20%. No specific individual or section has responsibility for co-ordinating the immunization program. There is inadequate planning, implementing and evaluation of the programme. | To increase immunization coverage of infants 0-23 mths. to 70% by September 1983. | 1. Identify target population to be immunized by use of census data. X 1.2 Develop and implement referral system between hospital and public health services to obtain a more realistic estimate of the number of new births. X X 1.3 Ensure continuous censusing of parishes/districts by Community Health Aids and PHI's to maintain accurate data on new births. X X X X X X 1.4 Utilize data from the local registrar of births and to cross check data obtained from above. X X X 1.5 Provide staff at the health centre level with regular data on number of new births in their catchment area. X X X X X X | 1981 1982 1983 | Min.of Hlth. Senior Med. Officer of Health (PHC) Medical Officer of Health. | Min.of Hlth. Min.of Local Government Medical Officer of Health. Medical Officer of Health. Medical Officer of Health (PHC) Epidemiologist Medical Officer of Health.
There is an insufficient supply of vaccines and interruption of the cold chain, as well as a shortage of equipment.

1.6 Analyse monthly the data submitted by clinics on immunization programs.

2.3 Develop jointly with an EPI team for the impact of immunization program.

3.7 Conduct joint evaluation sessions with clinic staff on impact of the clinic, as well as on the immunization program.

To increase tetanus immunization coverage of pregnant women:

- Increase tetanus immunization coverage of pregnant women to 50% by September 1981.

The Expanded Program on Immunization (EPI)

Country: CARIBA

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Page 2
### EXPANDED PROGRAM ON IMMUNIZATION (E.P.I.)
#### TIMETABLE FOR ACTION 1981-1983

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<td>2.5 Ensure continuous monitoring of tetanus immunization programme and adjustment of program based on continuous evaluation.</td>
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