

EAR MEETING ON THE PREVENTION OF
NEONATAL TETANUS

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Report of Group 2

Question No. 1: What level of incidence of neonatal tetanus would constitute control of this disease to a level where it was no longer a problem?

The group considered that the long-term goal of the EPI should be to reduce the neonatal tetanus incidence/mortality to zero level. However, the experience of developed countries showed that before introducing active immunization programmes it took decades to eliminate neonatal tetanus. In some of these countries the reduction of neonatal tetanus mortality rate, due to the improvement of socio-economic conditions, personal hygiene, sanitation, urbanization, improvement of general medical services and particularly obstetric services has been clear but slow - in a range of 3-8 fold reduction in the time span of 25-40 years.

Tetanus mortality rates in the most countries of our regions are still high, although great variations exist between individual countries and between various ecological areas of particular countries.

The group believes that after implementing more integrated approaches combining specific and non-specific measures, the neonatal tetanus incidence can be reduced to the level of not more than one per 1000 live births, in any single area served by most peripheral health unit.

From one operational reason it would be better perhaps to use the mortality rate rather than morbidity rate when setting a level at which the disease can be considered to be under the control. In any case we would also propose the mortality rate no more than one death per 1000 live births.

The achieving of this goal should be confirmed by the specific seroprevalence survey on neonatal tetanus or through a reliable reporting

Question No. 2: What alternative (or synergistic) strategies could this level be attained in the member states of the two regions?

2.1 The group considers that only active, integrated strategy combining various elements of non-specific and specific, mutually interrelated measures could lead to the achievement of this goal. These elements involve measures related to:

- Monitoring the progress of the programme by reliable information system on the disease,
- Improvement of delivery conditions,
- Immunization of the target groups against tetanus,
- Health staff motivation,
- Community participation and health education,
- Involvement of institutions and international agencies,
- Research.

2.1.1 Information system on the disease

In the most countries of the two regions the existing reporting system is inadequate and official notifications represent only a small, sometimes very small, fraction of the actual number of cases or deaths from tetanus.

In order to determine the real magnitude of the neonatal tetanus problem, and to provide a baseline which can be used for planning and evaluation of tetanus control programmes, each country should conduct special survey on the mortality rates from neonatal tetanus.

Each country should establish or improve its reporting system by taking the following steps:

- 2.1.1.1 Making the disease notifiable.
- 2.1.1.2 Establishing birth and cause of death registration.
- 2.1.1.3 Establishing a network of sentinel centres for reporting purpose. Such a network should be expanded gradually to cover all health institutions.

- 2.1.1.4 Involving TBA and community leaders in reporting cases and deaths from neonatal tetanus.
- 2.1.1.5 Organizing an effective feed-back system to inform and further motivate the staff involved in providing information.

2.1.2 Improvement of delivery conditions

Official policy of government should aim to increase the percentage of deliveries attended by trained persons, with an ultimate goal to achieve 100% coverage. Consequently, enough number of persons should be trained to be able to attend one delivery. It involves formally trained midwives as well as village traditional birth attendants (TBAs). In the last case the system for identification, training and licensing village TBAs should be established.

To obtain these goals, the following steps are recommended:

- 2.1.2.1 Training, supervision and evaluation
 - (a) Evaluation of the efficiency of training given to already acting midwives should be performed.
 - (b) Setting training objectives, evolving suitable strategy of training and preparing relevant training materials for midwives and TBAs including technical manual.
 - (c) Establishing a regular system of supervision and evaluation of the staff and organizing refresher courses for midwives and TBAs.
- 2.1.2.2 Tools

Steps should be taken to develop the simple standardized delivery kit involving cord pack and register to be supplied in adequate quantity to each midwife and TBA.
- 2.1.2.3 Site of delivery

The majority of deliveries are conducted at homes in unhygienic conditions. The reason for this depends on factors related to shortage.

or unaccessibility of health facilities where delivery can be conducted and to fears, beliefs and customs of population. In order to diminish the risk connected with deliveries conducted in unhygienic conditions, steps should be undertaken to counteract those factors:

- more facilities for normal (not only pathological) deliveries should be provided in health units, health education of women should be established to increase their confidence to health services and to inform them how to perform the delivery in more hygienic way.

2.1.3 Immunization against tetanus

2.1.3.1 Target groups for immunization

The group identified two main target groups: pregnant women and women of child bearing age attending health centres for any reason.

The pregnant women's immunization can be effective measure in controlling neonatal tetanus in areas where large part of pregnant women seek prenatal care and report to health service centres reasonably early in the pregnancy to be given two spaced doses of tetanus toxoid and to acquire protective antitoxin levels. Such policy should be considered as a long-term programme of routine immunization.

However, it is known that in many countries the coverage of pregnant women's immunization is very low. The group considers therefore that females in child-bearing age visiting any governmental or non-governmental health setting, bringing their children for immunization, attending with them to MCH clinics, or seeking health care in hospitals or out-patient clinics for any reason should be offered to be immunized with tetanus toxoid.

The group considered also that whenever it is feasible and necessary, immunization with tetanus toxoid could be performed through outreach clinic for women attending big congregations like markets, or festivals. This approach the group considered of the second priority, however.

2.1.3.2 Schedule of immunization

Immunization of pregnant women should involve two initial doses of tetanus toxoid spaced at least 4 weeks apart and preferably with 4 weeks interval between the second dose and delivery. Intervals shorter than those will lead to lower protection, but should be used if necessary.

The first dose should be given at the first contact with the pregnant women.

The women of child-bearing age should be immunized also at her first contact with the health setting and efforts should be made to encourage her for coming back 2 to 3 months later for the second dose.

2.1.3.3 Provision of tetanus toxoid to all health settings.

The involvement of all women of child-bearing age attending any health setting with immunization against tetanus, will result in the necessity for providing all those health settings with adequate amount of tetanus toxoid and immunization equipment.

2.1.3.4 Quality of tetanus toxoid

Steps should be taken to ensure that only vaccines fulfilling WHO requirements are used in the programme.

WHO should monitor and help in strengthening region's capacity in vaccine quality control.

2.1.4 Health staff motivation

The group consider that it is very important for the progress of the programme to undertake continuous efforts in motivating the health staff on every level.

2.1.5 Community participation

- 2.1.5.1 After identification of traditions, beliefs and customs of the community which may interact with the control of neonatal tetanus, the health education system should be developed through all available media.
- 2.1.5.2 Steps should be taken to involve community leaders in maximal participation in various aspects of the programme and specially in supporting local midwives and TBAs and encouraging women for immunization.
- 2.1.5.3 It should be ensured that local TBA to be a member of health committee or team.

2.1.6 Role of institution and international agencies

- 2.1.6.1 Whenever possible the community health departments and statistic units should be established in hospitals.
- 2.1.6.2 All health institutions should participate in the programme of control of neonatal tetanus by delivering immunization and providing training for the staff.
- 2.1.6.3 Undergraduates of midwife, medical and para-medical schools should perform their practical training in rural settings. All these schools should incorporate in their programme the basic information on the control of neonatal tetanus.
- 2.1.6.4 Efforts should be taken to widespread information on the disease through public schools.
- 2.1.6.5 The international agencies and organizations should participate in the programme by providing technical assistance, training in vaccine quality control, and generating funds for vaccines, immunization equipment and training materials.

2.1.7 Research

The research is needed in

- 2.1.7.1 Development of safe adjuvants, and more potent tetanus toxoid.
- 2.1.7.2 Factors influencing the acceptance of tetanus toxoid by the community.
- 2.1.7.3 Epidemiology of neonatal tetanus (role of circumcision for example).

Question No. 2 B : Can it be done with existing resources and within the context of existing programmes?

The implementing of more active approach in control of neonatal tetanus depends on conditions in a given country and includes the degree of development of general health services and particularly their MCH and EPI components. The group considers that the goal could not be achieved within existing programmes unless managerial process is streamlined and better utilization of existing manpower and resources is used.

The expansion of the immunization to all child-bearing age women will certainly create demand for higher amount of tetanus toxoid, immunization and cold chain equipment. To fulfil these demands extra funds will be necessary.

Question No. 2 C : Constraints and obstacles to be overcome

It can be anticipated that constraints and obstacles similar to those in other health programmes will be found:

- (a) Poor management of the programme
- (b) Lack of coordination between other health programmes
- (c) Lack of staff motivation
- (d) Poor community participation

Question No. 2 D : Within what period could this be achieved?

Reaching the goal is possible within 18 years to come. The group consider that tetanus mortality should be used as an indicator of the goal "Health for All by the year 2000".

Question No. 3 : To what extent is the identification of immunized women necessary and how this could be done effectively?

The group consider that identification of immunized women is important and necessary for the following reasons:

- (1) To monitor immunization coverage
- (2) To avoid hyper-immunization
- (3) To motivate women

The optimal resolution would be the individual immunization card issued for an immunized woman. However, in countries which developed adequate vital registration and family health systems, the family card could be utilized.