General Principles for Planning

Rabies Control Programmes

WHO/OIE Intercountry Expert Workshop on "Protecting Humans from Domestic and Wildlife Rabies in the Middle East"

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General Principles for Planning Rabies Control Programmes

- Domestic and wild animals maintain and transmit rabies;
- Rabid dogs most common transmitters to humans;
- Canine rabies control: *first-place objective and cost effective means*;
- Stray dog capture and destruction: **INEFFECTIVE**
  - No impact on rapid multiplication or rabies spread;
- **MASS VACCINATION** of main hosts: *the only effective strategy.*
Objectives of Rabies Control Programmes

To consist of:

- Coordination-strengthening of existing control activities;
- **Establishment effective national surveillance programme**;
- Rabies spread control by animals;
- Detection, prevention, PET in humans;
- Divided in: IMMEDIATE-MEDIUM TERM-LONG TERM.
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Rabies Control Programme Formulation

- Formulation (and implementation) of the programme with consensus by decision-makers, technical experts, community representatives, international organizations

THEREFORE, the programme to be:

- Comprehensive project document
- Easy to read and understand
- Part of the national development plan
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Components of Planning Process

- Application of all available tools;
- Adaptation of tools to prevailing conditions;

- Description of INPUTS, OUTPUTS, RESPONSIBILITIES;

- NEED for CLOSE COLLABORATION with:
  - Authorities;
  - Institutions;
  - Community;
  - Experts (physicians, vets, ecologists, sanitary engineers, public health education, etc.);
  - Mass Media.
Essential Principles for Rabies Control Programmes (I)

- **Notification of canine rabies suspected cases**
  - To be made regularly and timely;

- **Reduction of contact rates between susceptible dogs:**
  - Surveillance: movement restriction of owned animals into and out of infected areas, etc.
Stray dog control: different side-activities;

Dog registration (fees, taxes): depends on different local factors;

Mass vaccination: usually annual
  ✓ Supervised and (possibly) stray dogs;
  ✓ Marking of vaccinated dogs: permanent (tag, tattoo) – temporary (paint, plastic collar);

Rabies surveillance and diagnosis
  ✓ Important tools for effective control programmes.
Essential Principles for Rabies Control Programmes (III)

- Mobilization of community participation
  - Sustainable Information & Education Programme (hazards, prevention, early PET, etc.);

- Close collaboration with other sectors:
  - Public health-agriculture-vet. services-education-local administration-home affaires-police-tourism, etc.
Essential Principles for Rabies Control Programmes (IV)

- Regulations usually not fully observed;
- **Compliance with regulations**
  - Essential tool for target achievement;
  - **All norms are INTERELATED and to be RESPECTED**;
- **Human PET versus animal rabies control**
  - PET alone: **NOT REDUCE** human exposure to rabies;
  - PET alone: is a high cost policy;
  - PET alone: evaluate if cost-effective;
  - Animal rabies control should NEVER BE NEGLECTED.
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Personnel Capacity Building:

- **Training of ALL personnel:** among the priorities;

- **Education and Responsibilities definition:** high significance on rabies control;

- **Training:** on duties and field practice
  - Information to the community;
  - Motivation of the community.
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- **Realistic Planning/Implementation**

- Decide on the **SIZE** of the INITIAL **AREA** for mass vaccination;
- Decide on the **LOCATION** as per **PRIORITIES**;
- Planning the **EXPANSION** in other areas of the country;
- **LOCATION and SIZE** of areas according to REALISTIC **POSSIBILITIES** of vet services.
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Measures within Infected Countries:

- **Standard Methods of Veterinary Control**
  - Dogs licensing;
  - Rabid and stray dog destruction;
  - Dogs movements restriction: leashing muzzling;
  - Dogs quarantine and/or veterinary observation.

- **Modern Methods: coordination of**
  - Classical measures-Mass vaccination-Community cooperation. – Professional training;
  - Collaboration with neighbouring countries

- **Canine Rabies control effective ONLY if reintroduction from abroad is prevented.**
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- Regulations for international transfer of animals to be RESPECTED;
- Comprehensive National Plan for Rabies control to provide:

Coordination of control operations:

- INSIDE the country and WITHIN countries;
- Animals import control;
- Import regulations enforcement;
- Community education (awareness);
- Personnel training.
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International Technical Collaboration

It is important for:

- Development of effective surveillance system;
- National programme planning;
- Training and technical expertise;
- Coordinated activities in bordering areas;
- Educational programmes planning;
- Funds raising, material supply, evaluation;
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**Indicators to PLAN and ASSESS rabies control programmes:**

**Health Indicators:** rabies incidence or prevalence rate/per animal case frequency/km² of animal rabies;

**Service Indicators:** animals examined, vaccinated, destroyed, persons treated, places-villages visited, information and material distributed;
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Indicators to PLAN and ASSESS rabies control programme:

- **Ecological Indicators**: wildlife species density;
- **Combined Indicators**: Ratio of human rabies cases/persons with PET - Ratio of animal rabies cases/percentage of animals vaccinated.
Evaluation of the Programme
(During implementation and on completion)

- To be linked to cost/benefit assessment;
- To verify up to what level objectives have been reached;
- Evaluate failures and proceed to corrections;
- Reports to be submitted regularly to the Director of the Programme and then to upper levels.
Cost-Effectiveness of Rabies Control Programme

To include the cost-effectiveness of individual measures:

- Analysis of public health significance, social and economic consequences of rabies;
- Analysis of economic savings in dog-bite surveillance and human PET;
- PET expenses increased tremendously;
- Cost-effectiveness analysis of rabies and its control:
  - Reduced national expenses;
  - Savings in dog bite surveillance and PET;
  - Increased public health; - Improved infrastructures.
ETHICAL QUESTION:

- There is EXPLOSIVE INCREASE of costs with NEW GENERATION human vaccines: safer, potent but MUCH MORE EXPENSIVE;
- Immunoglobulines cost should ALSO BE ADDED.

ANIMAL HEALTH SERVICES PROBLEMS

- Other major livestock diseases absorbing resources for mass vaccinations;

RESULT: Never sufficient funds for animal rabies control & PET in humans.
Conclusions

Human and Canine rabies not yet under control;

Measures inadequate due to:

- Limited resources;
- Rabies is a low priority;
- Strong structural weaknesses;
- Surveillance and reporting: POOR;
- Public awareness: VERY LOW;
- Vet Services face problems by major livestock diseases;

Need for STIMULATION of INTEREST of all levels decision-makers, community, mass media, etc.
Thank you for your attention.

Source: www.google.com