Community Participation in The Control of Dengue Fever

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Abstract: There is no specific UNICEF global programme for control of dengue fever. UNICEF responds to emergency outbreaks, providing abate and chemicals for spraying. During normal times, according to the needs of the country, regular preventive measures - community mobilization for vector control, creating awareness of the cause and preventive measures using media and other visual aids, and reading materials have been provided. Popularize the use of mosquito nets through health education and even through social marketing.

Ultimately, prevention of epidemic dengue and DHF/DSS will depend upon effective, long-term mosquito control. To be cost-effective and sustainable; such control must be achieved through integrated community-based action. A program planned, directed, and financed by the community will be truly community-based and sustainable.

The technology needs to be available, but what really counts is how the technical intervention is integrated into the social structure of the community. The emphasis is on social cohesion, the strength and wholeness of all cultures, the use of appropriate technology, and changing behavior of the people. The community must realize that it is the responsibility of the people and not the government to prevent epidemics. The public must be educated to a point where it accepts its responsibility for playing the principle role in prevention and control of epidemic dengue and DHF/DSS. Most governments do not have the resources to maintain effective control.

The first case of dengue fever in Lao PDR was recorded at Mahosot hospital, Vientiane, in 1979. The first outbreak occurred in 1985, and in 1986 campaign for control of DHF/DSS started. There was another major outbreak in 1987. Majority of cases were seen in Vientiane Municipality, but it was also reported in four other provinces. Since 1988, the number of cases has decreased and few severe cases are seen. Aedes control unit formed in 1985 has been able to effectively plan and implement control measures involving community participation in 68 urban villages in Vientiane Municipality, where there were the highest incidence.

UNICEF role

There is no specific UNICEF global programme for control of dengue fever. Although UNICEF is supportive of efforts initiated by activities at country level given the
extremely virulent nature of the disease and its very high case fatality rate in young children, UNICEF had responded to emergency outbreaks, providing abate and chemicals for spraying. During normal times, according to the needs of the country, regular preventive measures such as:

- Community mobilization for vector control
- Creating awareness of the cause
- Preventive measures using media and other visual aids
- Reading materials has been provided. The use of mosquito nets has been popularized through;
- Health education
- Social marketing

There are 3 aspects in management of dengue fever:

1. Curative
2. Preventive
3. Promotive

UNICEF is involved in the preventive and promotive activities.

**Experience in Yangon, Myanmar**

It was in 1971, when I worked at Rangoon Children hospital intensive unit, that I first encountered dengue fever. Dengue fever was so unfamiliar to us all that the Ministry of health, malaria control unit and public health unit were using different names to describe the mosquito found to be involved none of which corresponded with ordinary people's name for it. And at the hospital all children admitted to the intensive unit had either hemorrhage or shock or both. It was all shocking for the medical staff at the hospital, for all of us had never experienced dengue hemorrhagic fever nor dengue shock syndrome.

The parents and relatives of the admitted children were also very petrified by the disease. The Ministry of Health, public health services and malaria control division took immediate action. All households were alerted and were requested to participate in a mass community campaign.

The community did not need much persuasion, since they were horrified with the number of deaths, which were sudden in majority of cases. The community participated in destroying potential *Aedes* larval breeding habitats, keeping water storage areas covered. The community felt that they were capable of helping to prevent further spread of DHF/DSS. The case management was left in the hands of the medical professionals. It was a well organized mass movement of the community with very little assistance from the Ministry of Health, once the community were clear about the role they can play in the epidemic.

Meanwhile, medical professionals were learning from experience for proper case management. The community were actively involved and were able to educate each other by word of mouth. They were more effective in social mobilization than the actual health education materials those were prepared in the later part of the outbreak.

Although community participation was new to the Burmese people, during the
dengue epidemic the community rallied together to support and terminate the outbreak. They realized their role in the overall picture was to effectively decrease the spread of the outbreak.

**Dengue fever in Lao PDR**

Dengue fever was first reported in 1979. Since then the Lao government has recognized dengue transmission as a serious problem. Before 1985, case records are fragmentary and estimates vary according to the source of the records. It was only in 1981 and also in 1983 that patients were admitted to Mahosot hospital. The first outbreak was in 1985 (1795 cases with 11 deaths). In the second outbreak in 1987 (5263 cases with 91 deaths). Incidence was highest among 5-9 years and it was only in 1987 that an adult case was reported. The ratio of cases was equal for both male and female. Starting from 1988, incidence has decreased, cases are less severe and there are no fatality. It is possible that in 1989 an epidemic was offset by good mosquito control in Vientiane. Face to face health education has been given since 1988 in paediatric ward of Mahosot hospital. In 1992, there were 31 and in 1993 (end of June) there were 4 cases of dengue fever admitted to paediatric ward, Mahosot hospital.

In 1985, *Aedes Control Unit* was formed in Vientiane Municipality. This was for 68 villages in urban districts. Health staff visits 50 houses a day to a village for visual larvae survey. Water containers and water storage areas are checked for the larvae. The community are given penalty twice only. On the third occasion if larvae are found in their household, they have to pay approximately 40 cents, following that 85 cents and thereafter 1.40 US$. They follow a strict system of collecting fines. During the larvae survey, health workers give health education to the household members. The monthly results of cases seen or larvae detected in villages are used to give health education. Health education is also given at market places in April to remind people of dengue fever. Big slogans and posters are erected and messages given over loudspeakers which are installed in cars to move around. Every year before the peak season (April), secondary school children and village leaders undergo training around January or February for environmental sanitation campaign.

In 1989, at the request of the Ministry of Health, UNICEF Vientiane country office supported the printing of health education materials for dengue control. Since then there has been no support to the Aedes control unit.

**Community participation**

The concept of community participation began in the late 1970s, in an attempt to reapply the principles of the experiments in community development that were fashionable in the 1950s and 1960s.

Participation is not a single phenomenon. Community participation is the educational and empowering process in which people, in partnership with those able to assist them, identify problems and needs and increasingly assume responsibility themselves to
plan, manage, control and assess the collective actions that are proved necessary.

Full community participation has four main elements; the involvement of the community in deciding what should be done and how it should be carried out: a mass contribution to the development effort: a sharing of benefits a given programme may bring, and involvment of the community in the evaluation process.

This concept of participation, although now widely accepted, lacks a universal definition. Disagreements and controversies resurface with each attempt to define it. The primary goal of participation is to uplift the quality of life in rural communities through a more equitable distribution in development. But, participation may lead to conflicts. The very idea that people should participate in the planning and implementation of development programmes touches the very core of power relationships. We must determine techniques of applying communication principles in the management of conflicts in such a way that they produce the desired results.

Conclusion “the challenge”

The challenge is to narrow the gap between the government, health authorities and the community.

The community once they are clear about their roles and responsibilities, what they can do for themselves, their family and their environment are able to effectively bring about changes.

There are just as many problems for community participation as there are possible positive outcomes.

The government, health authorities and others concerned must understand and accept the strengths of their partners in this case, “the community”, to be able to have a sustained dengue control program.

REFERENCES

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