Leprosy situation in Vietnam - reduced burden of stigma

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[Received/ Accepted: 28 May, 2007]

Key words: elimination, leprosy, stigma, Vietnam, WHO

1. Background

a. Country profile

Vietnam, officially the Socialist Republic of Vietnam, is the easternmost nation on the Indochina Peninsula. It borders China to the north, Laos to the northwest, and Cambodia to the southwest. On the country's east coast lies the South China Sea. The capital of Vietnam is Hanoi and the largest and most populous city is Ho Chi Minh City. Vietnam, with its 4-level administrative system, is divided into 59 provinces and 5 province-level cities, which are further subdivided into districts and municipalities. Each district or municipality consists of 10-20 communes. Often, the Vietnamese government groups the various provinces into eight regions: Northwest, Northeast, Red River Delta, North Central Coast, South Central Coast, Central Highland, Southeast and Mekong River Delta. Vietnam extends approximately 331,688 square km in area. With a population of over 85 million, Vietnam is the 13th most populous country in the world.

b. Leprosy control system

Vietnam's National Leprosy Control Programme was established in 1982. The Leprosy control system had been integrated into the Health care system which follows the Administrative system (Figure 1). The National Institute of Dermato-Venereology (NIDV) is leading institute responsible to the Ministry of Health (MOH) for skin diseases, sexually transmitted infections (STIs) and leprosy control in the whole country. In each province, there is a Dermato-Venereology Clinic, vertically under the NIDV, covering these three fields at provincial level. Dermato-Venereological activities including leprology work are integrated into general health system at district level. At the district's Social Diseases Unit in endemic zones, several practitioners are specially trained to work exclusively in leprosy field whereas in less endemic district, they are in charge of some contagious diseases such as leprosy, tuberculosis, malaria, HIV/AIDS, etc. In each commune that includes 2-5
villages with 1,000-3,000 people, leprosy as well as other social diseases are managed by one or two health workers. Because of poor infrastructure at Communal Health Stations, their main work is to refer suspect cases for diagnosis confirmation, to treat and follow up confirmed cases. Antileprosy drugs are stored at any levels, from central to local.

2. Leprosy control activities in the period 1975 - 2006

Dermato-Venereology profession network was established in 1975, immediately after the country's reunion and antileprosy was one of its main responsibilities. A patchy strategy was initially adopted for leprosy elimination activities due to lack of human and financial resources. A total of 21 special projects such as Leprosy Elimination Campaigns (LEC) and Special Action Projects for Elimination of Leprosy (SAPEL) were implemented from 1975, covering more than 2.1 million inhabitants. The projects led to the detection of 1920 new cases and helped clear some leprosy epidemicity pockets, mainly in the central highland and some southern provinces. Because leprosy activities did not cover the whole country, no exact data (prevalence, incidence, etc) was recorded at national level before 1982 but estimated prevalence rate of lep-

Figure 1. Leprosy control system according to health care and administrative system
Leprosy was 6 - 7/10,000 population in 1975. Most of patients moved into leprosaria and leprosy villages despite of the fact that there was no segregation law. MDT implementation started in 1983 resulting in dramatic reduction of prevalence rate with nearly 30,000 patients had completed treatment by the year 1995. In early 1990s, leprosy control system was reformed and strengthened with effective supports from international bodies. Thank to effective antileprosy activities, WHO’s elimination goal (prevalence rate < 1/10,000 population) was achieved at national level in 1995 (Figure 2) and Vietnam launched its own elimination target of leprosy which are stricter that those were brought out by WHO, including 4 criteria:  
- Prevalence rate is less than 0.2/10,000 population in 3 consecutive years  
- Case detection rate is less than 1/100,000 population at the time of surveillance  
- Grade 2 disability proportion among new cases is less than 15%  
- 20% of community leaders, health workers and high school pupils are randomly chosen for an interview; all of them have basic knowledge on leprosy.

In order to achieve these criteria, following solutions have been carried out:

a. Strengthening the leprosy control network from central to local levels
- extending antileprosy network to all provinces, including provinces with low prevalence rate  
- building one referral center for each province or several nearing provinces  
- building 3 leprosy and dermatology regional hospitals which are responsible for confirming difficult cases, managing persistent leprosy reactions, doing reconstructive surgery…
- holding retraining courses for leprosy control staff including practitioners, technicians, nurses and village volunteers  
- promulgating legislative documents to encourage people working in leprosy field

b. Improving community awareness with IEC (Information, Education and Communication) activities
IEC, as experiences of some countries, plays a

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence rate (1/10,000)</th>
</tr>
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<tbody>
<tr>
<td>1995</td>
<td>0.70</td>
</tr>
<tr>
<td>1996</td>
<td>0.68</td>
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<td>1997</td>
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<tr>
<td>2002</td>
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<tr>
<td>2003</td>
<td>0.15</td>
</tr>
<tr>
<td>2004</td>
<td>0.10</td>
</tr>
<tr>
<td>2005</td>
<td>0.08</td>
</tr>
<tr>
<td>2006</td>
<td>0.07</td>
</tr>
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</table>

Figure 2. Prevalence rate of leprosy (1995 - 2006)
key role on stigma reduction in the community. Therefore, reasonable proportion of resources has been used for these activities. Priority population of IEC activities included community leaders and young people.

c. Strengthening case detection and management
- New case detection is always an important indicator of the programme. Good community awareness encouraged people with suspect signs and symptoms to go to the specialist for diagnosis confirmation. Other kinds of examinations are also carried out including contact examination, integrated examination, group examination...

In addition, SAPEL and LEC are also implemented in high endemic zones.
- All detected patients were treated with MDT free of charge. The duration of treatment for PB patients was 6 month with observed monthly dose of rifampicin and daily dose dapsone. For MB patient observed monthly dose of rifampicin and clofazimine was combined with daily dose of clofazimin and dapsone. The duration of treatment for MB patients used to be 24 months and then shortened to 12 months from 2005. The MDT storage was available at all communal health stations, even to all the village in the endemic zones.
- Handbooks were distributed to the patients, giving them useful guides to early detect the complications including, drug eruption, neuritis and other sign effects. All patients with these problems were referred to leprosy specialists for diagnosis.

d. Disabilities prevention and rehabilitation
Due to lack of financial resources, these activities were only under attention from 2000. Patients were taught to prevent themselves from deformities through handbooks and training courses. 80% of patients were provided with special shoes to prevent foot injury. 50% of the patients with eye closure problem were provided with special glasses. More than 1,000 patients received reconstructive surgery annually.

e. Conducting post-elimination surveillance project
A pilot post-elimination surveillance project based on protocol developed by WPRO has been operating in selected 40 provinces since 2002. The project has proven to be very effective for the leprosy control programme. Many training courses on leprosy field have been held for the health care workers at various levels. Provincial referral centers have been established, where many suspected cases have been to referred to confirm the diagnosis

f. Receiving national and international aids
The national leprosy control programme gained active support of national and international organizations, i.e. DFB, GLRA, NLR, AIFO, SMHF and Unilever Vietnam. Each year, national leprosy control programme received about 15 billions VND from the government including medicine, medical equipments and training fees.

3. Major achievements of the programme from 1995 - 2006

The significant achievements in reducing the burden of leprosy over twelve years were the result of success in implementing the mentioned solutions.
- Between 1995 and the end of 2006, about 100 millions participations were examined for leprosy detection
- Social stigma was removed, patients were treated at their home and they could work together with other community members. Their children can go
- WHO's elimination goal was reached at all provinces at the end of 2000.
- 19,429 new cases detected (of whom 12,099 were MB and 7,330 were PB) (Figure 5)
- Prevalence rate dropped from 0.70/10,000 population in 1995 to 0.07/10,000 population in 2006 (Figure 2)
- Child proportion among new cases reduced from 8.57% in 1995 to 5.56% in 2006 (Figure 6)

### Table 1: Detection rate of leprosy (1995-2006)

<table>
<thead>
<tr>
<th>Year</th>
<th>No of new cases</th>
<th>Rate (1/100,000)</th>
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<tbody>
<tr>
<td>1995</td>
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<tr>
<td>2005</td>
<td>746</td>
<td>0.90</td>
</tr>
<tr>
<td>2006</td>
<td>666</td>
<td>0.79</td>
</tr>
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</table>

- Detection rate declined from 3.45/100,000 population in 1995 to 0.79/100,000 population in 2006 (Figure 3)
- Grade 2 disability rate among new cases decreased from 30.50% in 1995 to 17.27% in 2006 (Figure 4)
- Nearly 24,000 patients completed MDT with the completion rate was 99% (Figure 7)
- About 16,000 patients received rehabilitation activities
4. Reduced stigma of leprosy in Vietnam

Leprosy has affected people in Vietnam at least hundreds of years ago. There were scattered writings on leprosy and leprosy affected patients in old documents. In the past, stigma towards leprosy patients and their families had adversely affected their quality of life due to its impacts on their mobility, interpersonal relationships, marriage, job finding, leisure and other social activities. All of these occurred in the community despite the fact that no segregation or discrimination laws has been promulgated to date.

At that time, people believed that leprosy had bad origin and was the punishment for sins the patients committed in the previous incarnation. In some communities, there is a belief that leprosy was hereditary so leprosy patients were forced to be infertile.

Since National leprosy control programme was established, many activities have been done to re-
duce the stigma in the community. The implementation of MDT, which effectively treated leprosy patients, itself eased the stigma burden by reducing visible deformity rate. The old words indicating leprosy such as "củr" in the south part or "hũr" in the north part of the country have no longer been used because they imply something evil, degrading or immoral. Instead, the more scientific and natural term "phong" has been used to call the disease. In addition, higher knowledge of the curability and difficult-to-contamination of leprosy has been popularized and lead to more positive attitudes towards person affected with leprosy. The main features of leprosy are taught in the elementary school in the endemic areas.

Misconceptions about the causes of leprosy, that could have perpetuated stigma, were also prevalent among health care workers in the past. But the misconceptions have been gradually reduced due to the retraining courses held by the National Programme which provided health care workers with more accurate knowledge of leprosy. Moreover, the antileprosy work, since last decade, has been integrated into the general health care system, so that people recognized that leprosy is actually an infectious disease and deformed persons by leprosy are just like other handicapped person.

As a result of intensive activities, leprosy patients are now hardly affected by stigma from the society. Patients are treated free of charge with MDT at their own home and they can have a job suitable to their health. Marriage is accepted for leprosy patients and many patients have children after diagnosis. Public and private schools allow children born to leprosy patients to attend, and these children can study with other children in the community.

5. Post-elimination challenges

Even WHO's elimination goal was reached at all provinces at the end of 2000, relatively high case detection rate was still found in some area particularly in the central highland and some southern provinces. In 2006, there were 20 provinces reporting detection rate more than 1/100,000 population. The patients were not distributed equally but there were many pockets of patients that need more attention from the programme.

At the end of 2006, only 32 provinces reached
the Vietnam's 4 elimination criteria and 5 prov-
inces still had prevalence rate more than 0.2/10,000
population. MB and child proportion were high,
61.71% and 5.56% respectively, indicating high
infectiveness.

In the areas where prevalence rate is low, the
health staffs in charge of leprosy have to do many
other activities with different topics and there are
few chances for them to see the lesions of active
leprosy. As the result, their knowledge and prac-
tices regarding leprosy may be lost gradually.

6. Post-elimination activities

Based on the effectiveness of the post-elimi-
nation leprosy surveillance, the rest 24 provinces
need to be covered by activities of the project. In
the next period, the objects of the project are:
- sustaining the network of leprosy control pro-
gramme despite the fact that low prevalence and
detection rates in selected provinces
- conducting retraining courses on leprosy for the
health staff at provincial, district and communal
levels
- detecting all hidden cases of leprosy in the com-

munity
- sustaining and strengthening the awareness of
leprosy in the community with IEC activities

7. Future requiremental aids

In the future, community directed activities must
be carried out to maintain the achievements. In
addition, high technologies on leprology are to be
developed in central and regional institutes such as
sequencing to detect drug resistance of mycobac-
teria; serology and other tests to make prognosis
in high risk groups. Aids from developed countries
are the important part of this plan.

Acknowledgement

This work was supported in part by a Grant-in-
Aid for Research on Emerging and Reemerging
Infectious Diseases from The Ministry of Health,
Labor, and Welfare of Japan and an International
Cooperation Research Grant, Bureau of Interna-
tional Cooperation, International Medical Center of
Japan (IMCJ) to N.I.