Review on the development of Vietnamese Traditional Medicine

Vietnam is a multi-ethnic group nation (54 groups) in South-East Asia with the area of 331,211.6 km² and the population of 85,155,900.

Vietnam has the 4000 years old traditional system of pharmacology which was found since Hung King era (2879-257 BC). The Vietnamese TM includes the academic TM based on the ancient Asia philosophy and a rich popular medicine from 54 groups of people living in Vietnam, which brought to a long-standing traditional medicine (TM) and pharmacy with a number of experiences in health protection and treatment.

Under the feudal regime, the Vietnamese royal dynasty had set up the Royal health department, the royal health institute, the health education sector in order to protect the health or provide treatment for the Kings, mandarins, soldiers and people with a focus on developing acupuncture, pressing body points, growing, collecting and picking medical plants, promulgating medical practise regulations, forensic regulations, opening medical training courses, compiling medical books, organizing examinations for traditional medical healers. It appeared a number of famous physicians of TM in this period such as Tue Tinh (Vietnamese Traditional Herbal Saint), Hai Thuong Lan Ong (Great scholar of traditional medicine); Nguyen Dai Nang (Acupuncturist); Hoang Don Hoa (Pharmacist). Those persons had bequeathed a number of methods of treatments and valuable medical works for the country’s medicine.
During the French colonialism, the modern medicine entered and was encouraged to develop in Vietnam while the TM was being boycotted or limited. The modern medicine was used to serve the French colonialists and a part of local officials. However, most of poor people in both rural and urban area still used Vietnamese TM as the main method for their health care.

After the success of August Revolution, the consistent policy of Vietnam is to inherit and develop the Vietnamese Traditional Medicine, promoting to conduct and apply the new technology in doing the research of traditional medicine, combining the Vietnamese TM and the Modern Medicine (MM) in order to create a Vietnamese Medicine having characteristics of scientific, traditional and popular one, become one of ASEAN countries having developed traditional medicine, and also pay attention to advocating Vietnamese TM to abroad.

**Vietnamese Traditional Medicine System.**

The Vietnamese Traditional Medical System has been integrated closely and comprehensively into the national medicine system.

1. **Traditional Medical Management System:**
   - Central level: there is the Department of Traditional Pharmacomedicine under the Ministry of Health which is responsible for traditional pharmacomedicine management nation-wide.
   - Locality:
     - Provincial level: there is a management unit of traditional pharmacomedicine or specialists of pharmacomedicine in Provincial Medical Department.
     - District level: there is district medical division and full-time officer or part-time officer on traditional pharmacomedicine. 80% of provinces/cities have established Management Committees to implement the national policies on TM and pharmacy and have had plans of traditional medical and pharmacy development.

2. **National system of health examination and treatment by TM**
   - Central level: there are 05 traditional medical hospitals and some traditional medical departments under the other general hospitals. Moreover, there is a Pharmacognosis Institute studying herbal plants. This
Institute has 05 centres to study and cultivate the herbal plants in different ecological areas in Vietnam.

- Provincial level: There are 52 traditional medical hospitals in 63 provinces and cities of Vietnam and 91.3% of general hospitals have traditional medical departments.
- District level: there is 93.8% of general hospitals have traditional medical departments under the district general hospital.
- Commune level: there is 76.2% of commune health stations using TM and 79.4% of those have herbal garden to provide for community health care.

3. Private system of Traditional Medical Services.
Besides the national system of traditional medical examinations and treatments, there exits the private-sector system including:

- There are 03 private provincial traditional medical hospitals.
- A system of traditional medical treatment places (including 10,873 official).  
- A system of Orientation Medicine Association from central to commune level (province/cities, district, commune).

National Policies on traditional pharmaco-medicine:

The Vietnamese Government's policies always encourage the development of TM and pharmacy, for example: the Oriental Medical Board was established in 1946; The Traditional Medical Department, Oriental Association and Institute of Research for Traditional Medical were established in 1957 respectively; The Academy of Vietnamese Traditional -Pharmacy Medicine was established in 2005.

1. National Policies on traditional pharmaco-medicine:
In 2003, the Vietnamese Government has promulgated Decision number 222/2003/QD-TTg to approve the National Policies on TM and pharmacy with the following key issues:

- Concrete objectives till 2010: The traditional pharmaco-medicine of Vietnam needs to achieve:
- Complete management system of TM and pharmacy including Provincial Health Departments which belong to Central level, and District Health Centres which belong to provinces in order to ensure the
effective implementation of the duty of scientific study; capacity building; health examination and treatment, herbal planting and medication production.

- Treatment places:

There are provincial traditional medical hospitals and traditional medical departments in the provincial general hospitals, district health centre; at commune level, there are traditional sectors in the commune health stations which is in-charged by a traditional medical doctor (traditional nurse or healer). Encouraging organizations or individuals to establish facilities of health examination and treatment, which using TM based on legal regulations. There is a traditional herbal plant garden in traditional medical hospitals, medical universities, and commune health stations.

- Annual target of health examination and treatment by traditional medicine: Central level: 10%; provincial level: 20%; district level: 25%; commune level: 40%.

- Target of using TM drugs at all levels: there will be 30% of TM drugs of the total medicine produced in country; of which 10% will be used at the central level, 20% at the provincial level, 25% at the district level and 40% at the commune level.

• Key solutions and policies for implementation:
  - Solutions on organization and management
  - Solutions on human resource development
  - Solutions on policy and mechanism
  - Ensuring TM quality improvement
  - Financial security

The Ministry of Health will be the focal point and cooperate with the other Ministries such as Ministry of Interior, Ministry of Education, Ministry of Information, Technology and Science, Ministry of Agriculture and Rural Development etc. and Provincial People’s Committees to provide guidance for local health departments for their implementation.

2. Regulations for private practice in Traditional pharmacomedicine

The Vietnamese Government promulgated the normative act which defined clearly the traditional medical practitioners with various
forms: Private traditional medical hospitals, treatment places, inheritance and application centers, TM production firms and the practitioner of family’s remedy.

The traditional medical practitioners in Vietnam have to meet the following requirements:

- Private traditional medical hospitals: The Director of the hospital must be traditional medical doctor, he/she must have traditional medical certificate which allows him/her to open/register hospital. The other specialists in the hospital (heads of departments) must have appropriate certificates and at least 5 years of experience in practice. The private traditional medical hospital will be allowed to open by Ministry of Health if it meets all requirements of human resource, facilities and materials. The scale of practice for private hospitals will be applied as the public traditional medical hospitals.

- Traditional medical treatment places, traditional medical inheritance and application centers:
  - Must have certificate of traditional medical university or traditional medical intermediate school, traditional medical healer’s certificate, practitioner of family remedy.
  - Must have at least 5 years practising in traditional medical area and meet all Government’s requirements of materials, facilities for health examination and treatment.
  - The practitioners of family remedy have been provided family remedy certificate by provincial health service and they get permission to use only their own family remedies for treatment.

- The manufacturing firms and sellers of TM must have certificate on traditional pharmacy.

Integration of Traditional medicine and Modern Medicine

The Vietnamese Government has guideline to combine the TM and MM, the TM should be modernized but still keep its own nature.

1. **Combination of TM and MM in national healthcare system:**

   TM has been integrated closely in the whole medical system of Vietnam, which is described clearly in part II.
2. **Combination in health examination and treatment:**

- Using the modern medical facilities to support the diagnosis and treatment by using traditional medicine:

  Base on the diagnosis of TM and MM, TM is used for treatment. During monitoring and evaluation of treatment process, it should be applied both indicators and methods of TM and MM, by doing this, it is more objective and accurate than using TM only.

- Combination in each treatment period:

  TM has its treatment rules according to “symptom, caution, acute and chronic”; TM and MM methods have its own specific characteristics. It is very effective to use TM in some acute periods, especially in infectious and fever diseases, using TM shows the positive results, less complication and side-effects. However, if the disease becomes serious and complicated, it is necessary to use modern medicine for on-time treatment, especially in surgery area. TM could also give good effectives in treatment of chronic periods and for functional recovering.
Simultaneous combination:

Each method of diagnosis and treatment has its advantages, so it is important to exploit the advantages of each method in order to reach the effectiveness in treatment process. For each patient, it can be applied both TM and MM for diagnosis and treatment. It is important to apply the appropriate and reasonable method for each patient. For example, if we use acupuncture for aesthetic in operation, we still can use supplementary medicine then start acupuncture, after the operation, continue the acupuncture in order to reduce the pain after operation; acupuncture can be used to improve some functions or TM can be used to apply, cover, clean the incision or improve health status for patient’s quick recovery.

In Vietnam, the number of people coming to medical institutions to receive examination and treatment by TM has increased every year. In 2008, the rate of patients using traditional medical treatments was 8.54% in comparison to the total of general patients.

3. Combination in medication productions:

TM has natural originals: botanies, animals and minerals. Vietnam has rich abundant and diversified botany sources. At present, Vietnam has 3,948 types of plants and fungus, 75 types of mineral, 408 types of animal and 52 types of seaweed. The herbs identified as medicinal plants are increasing yearly and up to 2008, there are 4000 herbal plants recorded in the list. Among 3,948 herbal plants, it has 80% herbs have discovered by the local community’s experiences. Due to diversified characteristics of demographic and climate, Vietnam has many valuable herbal plants.

TM has been processed according to theory of TM and then applied for treatment. One side, the classical prescriptions have still been used in the treatment. But on the other side, the new technologies have been applied in manufacturing traditional medicine: extract herbal plants, diversified forms of TM drug such as tablet, capsule, and granulated medicine in order to use effectively and conveniently.
4. Combination of Traditional and Modern Medicine in Training and Studying

TM and MM systems based on the different philosophies and cultural backgrounds. Both of them have own strong points and limitations. The integration of both medical systems is the advanced inheritance in which each one has to preserve its selected specialities and eliminate its superstitious, unscientific and harmful aspects. This is basic theoretical concept that researcher and lecturer applied in doing research and lecturing on traditional medicine.

Training system for Traditional medicine

Vietnam has a rather comprehensive traditional medical training system including universities, institutions and medical colleges (provide training for modern medical and traditional medical doctors). Besides, the private training system on TM also contributes considerably to the traditional medical training. At the moment, Vietnam has:

- University system: an Academy of Vietnamese traditional pharmacy-medicine, 06 medical universities with traditional medical departments: training system for specific traditional medical doctors, masters, intern doctors, level I and II specialized doctors and PhD students. Besides, the pharmacy universities also have traditional medical departments to provide training for specialist pharmacists on traditional medicine.
The current training programme in medical universities takes 6 years which including 4-year modern medical studying period and 2-year traditional medical studying period. The objective of this kind of training is to provide knowledge on the TM and modern medicine in order to help students have a sound knowledge on modern medical pathology as well as traditional medical theories, method of giving treatment according to symptoms, principle of formulating TM components in a prescription based on carefully considering their interaction in it. The post-graduate programme helps the students have additional knowledge on traditional medicine, deeper understanding of medical theory, scientific studies on theory, diagnosis and treatment in health examination and TM processing.

- The system of Medical Colleges and High schools has traditional medical department to provide training for traditional medical nurses, caring staff and assistant doctors. Duration of studying time is 3 years.
- Besides, there are training courses organized by Traditional Medical Association to improve its members’ professional skills.

Up to 2008, Vietnam have a strong health staff working in TM with 9 professors, 29 associated professors, 45 doctors, 230 masters, 289 specialized level 2 doctors, 789 specialized level 1 doctors, over 2000 medical doctors and 2500 assistant doctors of traditional medicine. Moreover, training courses on traditional medical orientation have been provided for medical officers of other departments.

**Research on Traditional medicine:**

Vietnam has a lot of scientific studies on medical plants, active elements in herbal plants, application studies, combination of traditional and modern medicine in medial examination and treatment, medicine production as well as study for facility improvement in diagnosis and treatment:

- Pharmacy Institute and Herbal Medical Centres have carried out surveys and studied thousands medical plants in order to supplement to the list of medical plants and animals in Vietnam. At the same time, there are selected chemical and pharmacological studies on traditional herbal plants as well as traditional remedies as the foundation for the development of new TM and modernization of traditional pharmacy.
In parallel with the training for traditional medical officers, ineritable studies and studies of combination of traditional and modern medicine in the universities and traditional medical institutes/ pharmacy academy are also implemented.

- Ineritable studies: collected 39,381 experienced traditional remedies contributed by 12,513 traditional healers and people; collected 497 traditional medical works in Chinese-transcribed Vietnamese and 202 works in national language.

- Study of combination of traditional and modern medicine: started to improve some TM methods such as methods of qigong and vital preservation, acupuncture, using TM for treatment of broken bones, burning treatment, treatment of wounds, haemorrhoids and processing traditional medicine, applied theoretical knowledge and experience of TM in treatment of some diseases which belong specialities of internal, surgical, paediatric, gynaecological, ear-nose-throat and dermatological, study and develop effectively acupuncture anaesthesia in operations in country and abroad.

- Many herbal remedies, herbal plants are studied and produced by using modern methods.

- The medical facilities/equipment have been studied or improving for serving treatment such as acupuncture needle, electrical machine for acupuncture, machine for laser acupuncture, machines for processing traditional medicine.
Standardization of Traditional medicine, the quality assurance system of Traditional medicine.

1. The situation of supply and manufacturing traditional medicine:

There were 170 pharmaceutical factories in the whole country in 2008, in which it has 78 factories and about 300 private individual facilities focused only producing traditional medicine. Up to May of 2009, there were 92 pharmaceutical facilities and 5 pharmaceutical production line achieved criteria of GMP-WHO.

Vietnam Ministry of Health gives grant a permits of drug circulation to all drugs which fit with all criteria in the drug regulations. At present, there are about 2000 TM drugs having licenced. Up to June of 2009, MoH has licenced for 1965 traditional medical drugs which were produced in country (occupied about 20% of total pharmaceutical drug licenced) and 92 traditional medical products imported from China, Korea, Germany and France.

Herbal materials come from two main sources: 1) one is collected from indigenous natural forest and people’s plantings; 2) one is imported from other foreign countries, mainly from China.

Among imported herbal materials, only small part is imported formally with regular receipts/vouchers. However, they still have no audit papers from suppliers. Herbal materials have been used not only in pharmacy but also in many other areas such as food, supplementary food, domestic or essential oil industries, so the pharmaceutical management has been complicated and faced a lot of difficulties.

2. The audit system of traditional medicine.

Vietnam has system of TM audit centers in 63 provinces. Moreover, there are 02 central audit institutes in Hanoi and Ho Chi Minh city. The Vietnam pharmacopoeia IV has been used as legal documents in whole country for standardizing quality of traditional materials and TM drugs. In the Vietnam pharmacopoeia IV, it has over 300 special subjects of oriental medicine and TM productions.

The International Cooperation

The Vietnamese Government always develops the international co-
operation in traditional medical area based on mutual benefits of the two parties.

In the past years, the Vietnamese Government and Ministry of Health signed agreements on medicine with a number of countries in the world which include traditional medical area such as Rwanda, Mozambique; signed MOUs and MOAs on traditional medicine. Vietnam sent a number of delegations of specialists to Angola, Mozambique or Ukraine to work on health examination and treatment in these countries' hospitals.

Every year, Vietnam sent medical delegations to participate in scientific workshops, seminars, international forums on traditional medicine and in short-term training courses in China, Korea. Vietnam also hosted international workshops on TM with the participation of Asian countries and other countries concerning this matter.

Academy of Vietnamese Traditional Pharmacy - Medicine has associated with other medical universities in Thien Tan, China, Hai Phong Medical College associated with Chinese medical academy to provide training courses (4 years in Vietnam and 2 years in China) for doctors on traditional medicine.
Challenges and Opportunities for Traditional Medical Development in Vietnam

Vietnamese Government always appreciates TM in the mission of health care and protection for community. However, there still exits obstacles and challenges in management and development process, Vietnamese TM is facing with a lot of challenges as well as opportunities.

1. Challenges:
   - The medical materials have not developed in domestic;
   - The number of standardized materials is not high;
   - The investment in scientific studies is not high, capacity and knowledge of the officials on TM (both experiment and clinical) are still weak and not enough, facilities are not well equiped for studies, especially in experimental studies.
   - The traditional medical industry is still limited, for example, the number of factories producing traditional pharmacy that reach GMP is very low.
   - The rate of human resource of TM is still low in comparison to modern medicine. Up to 2008, the rate of traditional medical officials is only 7.2% in the total of medical staff; Education levels: post-graduate: 3.2%; university: 4.7%; high school: 36.2% and traditional healer: 55.9%.
   - The traditional medical system at the community level is not satisfied the needs of community health care.
   - The international cooperation is expended but not really effective, especially with ASEAN countries.

2. Opportunities:

   Vietnam is an ASEAN member, so this is a good opportunity for Vietnam to develop the medical area in general and traditional medical area in particular. Vietnam has participated in workshops, seminars, traditional medical forums in order to strengthen the cooperation among ASEAN countries and other countries in the world.

   Vietnam wishes to promote international cooperative activities, especially traditional medical cooperation in ASEAN frameworks, each country will promote their advantage on TM for general development.

   In this workshop, the Vietnamese Ministry of Health proposes the specific areas of cooperation to promote the traditional medical
development in ASEAN area. On the other hand, the Vietnamese Ministry of Health also request the financial and technical support from organizations, individuals in order to promote the TM in each country including Vietnam. In this workshop, the Vietnamese Ministry of Health would like to propose two projects implemented in Vietnam.

**Recommendations for cooperation with ASEAN Countries.**

1. **Cooperation with ASEAN Countries in TM management:**
   - To establish network to provide technical support on traditional medical system management of ASEAN countries.
   - To set up a management office in each country on ASEAN traditional medical activities in order to update/inform on time of activities concerning traditional medicine.
   - To organize annual regional workshops, seminars to exchange information and cooperate in key issues concerning TM such as: building model of promoting TM in primary health care, models of combining traditional medicine and modern medicine, using TM in treatment several difficult diseases.
   - To organize study visits to share and learn the experience in management system in ASEAN countries or to some of the countries having developed TM.

2. **Cooperation with ASEAN Countries in TM training**
   - To establish the network to provide technical support on traditional medical training of ASEAN countries.
   - To organize annual regional workshops, seminars to exchange information and cooperate in key issues concerning TM training such as: developed appropriate training methods, training contents, training material to different kinds of training (short and long training, study visit, distant learning) and trainees (university and post graduate, high school and additional training).
   - To organize study visits to share and learn the experience in management system in ASEAN countries or to some of the countries having developed TM.
   - To organize some cooperation models in training TM between ASEAN countries: exchange students for TM field training, Advanced
trainings in some TM subjects.

3. Cooperation with ASEAN Countries in TM research areas
   - To establish network to provide technical support on traditional medical research of ASEAN countries
   - To organize annual regional workshops, seminars to exchange information and cooperate in key issues concerning TM research such as:
     - Standardization of TM research (TM drug, acupuncture, pressing point), TM research in experimental study (building experimental models for TM studies) and TM clinical trials.
     - Sharing research results between ASEAN countries (studying on herbal medicine, using TM in treatment of common diseases or several difficult diseases.
     - Studying on indigenous medicine and preserving natural herbal medicine.
   - To organize study visits to learn and share in doing research in ASEAN countries or to some the countries having developed TM.
   - To co-ordinate together in design and implementation of research for some common problems on traditional medicine among ASEAN countries.

4. Cooperation with ASEAN countries in quality assurance of TM.
   - To standarlize and harmonize medical materials in medical systems in ASEAN countries.
   - To establish network system to verify and circulate TM in ASEAN area.
   - To grow pharmacy materials and ensure the quality for pharmacy industry and traditional medicine.
   - To build TM medication productions system which meet GMP standard (according to WHO).
   - To produce essential TM drugs which use for primary health care at grassroot level with high effectiveness, safety and low cost.
Руководитель школы массажа Dr. Дмитрий БОРИС во время стажировки во Вьетнаме, г. Ханой, 2011 год (на фото - второй слева).