

### Japan Medical Association Journal



### Special Feature: The 30th CMAAO General Assembly and 51st Council Meeting

Yangon, Myanmar, September 23-25, 2015

### **Conferences and Lectures**

The 30th CMAAO General Assembly and 51st Council Meeting Inaugural Address

Takemi Memorial Oration

Symposium "Ensuring Food Safety: An Important Challenge Today"

Country Report

**CMAAO** Policy

### **International Medical Community**

Japan Medical Association Junior Doctors Network Report on the 30th CMAAO General Assembly in Myanmar

From the Editor's Desk





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### Special Feature: The 30th CMAAO General Assembly & 51st Council Meeting

Yangon, Myanmar, September 23-25, 2015

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### The 30th CMAAO General Assembly and 51st Council Meeting



Yangon, Myanmar September 23-25, 2015

The present issue of the JMAJ features the 30th General Assembly and 51st Council Meeting of the Confederation of Medical Associations in Asia and Oceania (CMAAO) held on September 23-25, 2015, in Yangon, Myanmar hosted by the Myanmar Medical Association.

Of the 18 National Medical Associations (NMAs) of the CMAAO, 14 medical associations, Australia, Bangladesh, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, Myanmar, Nepal, Philippines, Singapore, Taiwan, and Thailand took part in the meetings. The total number of participants in the General Assembly was about 60. Dr. Ardis Hoven, Chair of Council of the World Medical Association (WMA) and Dr. Otmar Kloiber, Secretary General of WMA were invited as international guests to deliver greetings. At the 13th Taro Takemi Memorial Oration, Professor Pe Thet Khin, former Union Minister of Health of Myanmar (2011 to 2014) and current Chairman of the National Health committee gave a speech under the theme of "Ensuring Food Safety: An important challenge today". In a symposium which followed the Takemi Oration, each NMA delivered a presentation under the same theme. All of the participating NMAs gave their annual Country Report which followed the symposium.

At this General Assembly, there was no application for a new member to join the CMAAO.



### **New CMAAO President and Officers**

Professor Rai Mra, President of the Myanmar Medical Association was installed as the 33rd President of CMAAO and received a Presidential medal from his predecessor, Dr. Jose Asa Sabili, former President of the Philippine Medical Association. Dr. Prasert Sarnvivad, President of the Medical Association of Thailand was

elected as President-Elect, and Dr. Yoshitake Yokokura, President of the Japan Medical Association was elected as the 1st Vice President. Dr. Dong Chun Shin (Korean Medical Association), Dr. Yeh Woei Chong (Singapore Medical Association) and Dr. Masami Ishii retained the posts of Chair, Vice-Chair of Council and Secretary General, respectively.

JMAJ, December 2015—Vol.58, No.4

### Officers, Councilors, Secretary General and Advisors of CMAAO (2015-2016/7)

President:

Rai Mra (Myanmar)

**President-Elect:** 

Prasert Sarnvivad (Thailand)

**Immediate Past President:** 

Jose Asa Sabili (Philippines)

1st Vice President:

Yoshitake Yokokura (Japan)

2nd Vice President:

- ( <del>-</del> )

**Chair of Council:** 

Dong Chun Shin (Korea)

Vice-Chair of Council:

Yeh Woei Chong (Singapore)

Treasurer:

Yee Shing Chan (Hong Kong)

Secretary General:

Masami Ishii (Japan)

**Assistant Secretary General:** 

Hisashi Tsuruoka (Japan)

Councilors:

Brian Owler (Australia)

Jamal Uddhin Chowdhurry (Bangladesh)

Saint Saly (Cambodia)

Yee Shing Chan (Hong Kong)

Vinay Aggarwal (India)

Ihsan Oetama (Indonesia)

Yoshitake Yokokura (Japan)

Dong Chun Shin (Korea)

Nai Chi Chan (Macau)

Ashok Philip (Malaysia)

Rai Mra (Myanmar)

Mukti Ram Shrestha (Nepal)

Mark Peterson (New Zealand)

Maria Minerva P. Calimag (Philippines)

Yng Yng Bertha Woon (Singapore)

— (Sri Lanka)

Ching-Chuan Su (Taiwan)

Prasert Sarnvivad (Thailand)

Advisors:

Tai Joon Moon (Korea)

Yung Tung Wu (Taiwan)

Wonchat Subhachaturas (Thailand)

Shinichi Murata (Japan)

Vijaya Kumar (India)



### **Program**

### DAY 1: Wednesday, September 23, 2015

Grand Ballroom II & III

### 13:30-14:00 Opening Ceremony chaired by Dr. Saw Win

Opening Speech read on behalf of H.E. Dr. Than Aung, Minister of Health

### 14:00-14:30 Inauguration of the new President of CMAAO by Chair

- 1. Opening: Chair—Dr. Dong Chun Shin
- 2. Roll Call: Secretary General-Dr. Masami Ishii
- 3. Welcome and Opening Addresses:
  - 3-1. President of MMA, Prof. Rai Mra
  - 3-2. President of CMAAO, Dr. Jose Asa Sabili
- 4. Address by Chair of Council of the WMA, Dr. Ardis Hoven
- 5. Congratulatory Remarks by Secretary General of the WMA, Dr. Otmar Kloiber
- 6. Installation of the 33rd President of CMAAO for 2015-2016
- 7. Inaugural Address by New President, Prof. Rai Mra
- 8. Presidential Award to the Outgoing President, Dr. Jose Asa Sabili by Prof. Rai Mra
- 9. Group Photo
- 10. Adjournment

### 14:30-15:00 Tea Break

### 15:00-17:30 The 51st Council Meeting: Chairman—by Dr. Dong Chun Shin, Chair

- 1. Roll Call by Secretary General-Dr. Masami Ishii
- 2. Opening Remarks
- 3. Elections (Chair and Vice-chair) for the term of 2015-2017
- 4. Report of Secretary General
- 5. Approval of Minutes of the 50th CMAAO Midterm Council Meeting held in Manila
- 6. Report of the Treasurer-Dr. Chan Yee Shing
- 7. Venue and Dates of the 31st CMAAO General Assembly and 52nd Council Meeting (2016)
- 8. Venue and Dates of the 32nd CMAAO General Assembly and 53rd Council Meeting (2017)
- 9. Membership Applications (if any)
- 10. Report of the Committees (by the committee chairs)
- 11. Guest Lecture: Health Care in Danger in Asia by Mr. Joerg Montani, ICRC
- 12. Adjournment

### 19:00 Welcome Reception

### DAY 2: Thursday, September 24, 2015

Grand Ballroom II & III

### 09:00-10:00 The 13th Taro Takemi Memorial Oration: Chaired by JMA Officer

### Orator: Prof. Pe Thet Khin

- 1. Introduction of Orator
- 2. Memorial Oration titled "Safer Food for a Safer World"
- 3. Presentation of a Plaque to Orator from JMA officer
- 4. Adjournment

### 10:00-10:30 Tea Break

| 10:30-12:30 | Symposium: Ensuring Food Safety: An important challenge today: NMAs 10 minutes each     |
|-------------|---|
| 12:30-14:00 | Lunch Break   |
| 14:00-15:00 | Round-table Discussion on Ensuring Food Safety: An important challenge today            |
| 15:00-15:30 | Tea Break  Develop a draft of the Resolution on Food Safety by the resolution committee |
| 15:30-17:30 | Country Report: NMAs 10 minutes each  |
| 19:00       | Dinner hosted by the Myanmar Medical Association  |

### DAY 3: Friday, September 25, 2015

-The 30th CMAAO General Assembly-

Grand Ballroom II & III

### 09:00-12:00 Plenary Session: Chaired by President

- 1. Approval of Minutes of the 29th CMAAO General Assembly held in Manila
- 2. Report of the Council Meeting by Chair
- 3. Approval of the Report of the Treasurer
- 4. Discussion and adoption of the proposed CMAAO Resolution on Ensuring Food Safety.
- 5. Approval of the Report of the Committees
- 6. Appointment of the CMAAO officers for 2015-2016
  - 6.1 President-elect . . . From the host NMA in 2016
  - 6.2 Two Vice-Presidents . . . 1st Vice-president from the host NMA in 2017 2nd Vice-president, optional
  - 6.3 Treasurer for 2015-2017
- 7. Appointment of Standing Committees 2015-2017
  - 7.1 Articles and By-Laws
  - 7.2 Nomination (Ad-hoc)
  - 7.3 Resolution
  - 7.4 Finance
  - 7.5 Membership
- 8. Venue and Dates of the 31st CMAAO General Assembly and 52nd Council Meeting (2016)
- 9. Venue and Dates of the 32nd CMAAO General Assembly and 53rd Council Meeting (2017)
- 10. Membership Applications (if any)
- 11. Other Business . . . Theme of the symposium for the CMAAO General Assembly in 2016 and others
- 12. Closing Remarks

### 12:00 Adjournment

### 14:00-18:00 City Tour hosted by the Myanmar Medical Association



### The Confederation of Medical Associations in Asia and Oceania (Established in 1956)

Official Website http://www.cmaao.org/

### Current membership: 18 national medical associations

(As of December, 2015)

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### Inaugural Address\*1

First of all please let me express my deep appreciation and immense pride to be elected as President of CMAAO which is a highly esteemed organization. Myanmar Medical Association attended the first CMAAO congress in Tokyo in 1959 as one of the original eleven countries but did not have the opportunity to participate in its activities for a long time. Now after many years Myanmar Medical Association is not only an active member but is also the host to the 30th CMAAO General Assembly and 51st Council Meeting. Now that the President of the Myanmar Medical Association to be given the task of becoming CMAAO president is a great honor indeed.



CMAAO has been in existence since 1956 and has played a major role in promoting friendship and professional partnership among its member countries. Asia-Oceania is a big region which has an important role in global health.

This is also because of the strong connections of CMAAO with WMA. Countries in this region have many common patterns in the health of its people and as such we all look forward to CMAAO for its leading role in formulating and advocating many important health issues as well as promoting information exchange.

Myanmar Medical Association is very fortunate to be part of this confederation of medical associations. Myanmar Medical Association finds that many of its objectives and aspirations are those of CMAAO and this is to our great benefit and we look forward to our future collaboration.

As the new President of CMAAO I can assure you that I will be committed to withhold the dignity and honour of the organization and do my utmost to fulfill its mission and objectives. I shall of course be looking for advice and assistance from all the member medical associations, as I am sure they will be most willing to oblige and I will continue to seek the help from the Secretariat which has been hosted by the Japan Medical Association. The hard work they have done has been most commendable. I would especially like to express our gratitude to Secretary General Dr. Masami Ishii and his team for advising and helping us throughout these months so that we can most efficiently hold this congress today. Also to Council Chair Prof. Dr. Dong Chun Shin, Treasurer Dr. Alvin Chan and my predecessor Dr. Jose Asa Sabili for providing a very good leadership. And of course to Chair of the Council of WMA Dr. Ardis Hoven for honoring us with her presence and for her continued support. Last but not least to the Executive Committee and organizing committee of the Myanmar Medical Association for all the hard work, and Past President of Myanmar Medical Association Professor Kyaw Myint Naing who laid the groundwork for what we are able to do today. A major share of the credit should go to him.

Thank you all very much.

My deep respect and warmest regards to all of you.

Rai MRA President of CMAAO (2015-2016)

<sup>\*1</sup> This inaugural address was made at the 30th CMAAO General Assembly in Yangon, Myanmar, on September 23, 2015.

### Safer Food for a Safer World

Professor Pe Thet KHIN1

It is indeed an honor and a pleasure for me to be invited to deliver the Taro Takemi Oration on this auspicious occasion. First of all, I would like to take this opportunity to welcome you all to Myanmar. This may not be the best time to visit our country because of the Monsoon and heavy rains, and of course Yangon traffic, but nevertheless we may find some time and space for you to visit memorable places in and around Yangon.

"There is no sincerer love than the love of food."—George Bernard Shaw

Forty years ago, as second year medical students of the Institute of Medicine 1, we were asked by our Biochemistry teacher whether we eat to live or rather we live to eat.

I have deep respect for Moliere who proposed that "one must eat to live and not live to eat," but my hero is Snoopy who maintained "All you need is love. But a little chocolate now and then doesn't hurt."

As you can imagine, we were divided and did not get the consensus. Forty years later, we still don't really have the consensus on what to eat, how much to eat, and how frequent we should eat in health and disease or for different age groups, or as members of medical profession, what advice we should give to the individual or the community as a whole, about healthy and nutritious diet in a plain language easily understandable and unequivocal.

### What we know is this...

Access to sufficient amounts of safe and nutritious food is fundamental to human health and development, as it sustains life and promotes good health. Food safety encompasses actions aimed at ensuring that all food is as safe as possible. The policies and actions need to cover the entire food chain, from production to consumption. Food safety is distinct from food and nutrition security, but they are inextricably linked.

Myanmar people traditionally believe that "Food is also Medicine, and Medicine is also

Food." Safe, nutritious, and healthy diet is very important in a Myanmar family especially for the vulnerable ones such as infants and young children, pregnant women, the elderly, the diseased and the infirmed. One common Myanmar parlance clearly describes the importance of unsafe food—a single wrong step you take or one mouthful of wrong food you eat may cause irreparable damage!

"The food you eat can be either the safest and most powerful form of medicine or the slowest form of poison"—Ann Wigmore

The risks of unsafe food are substantial, but can be difficult to quantify. Unsafe food containing harmful bacteria, viruses, parasites or chemical substances, causes more than 200 diseases ranging from diarrhea to cancers. According to WHO, food borne and waterborne diseases kill an estimated 2 million people annually.

Here, I would like to elaborate a little bit more on this.

Food borne illnesses are usually infectious or toxic in nature and caused by bacteria, viruses, parasites or chemical substances entering the body through contaminated food or water. According to WHO, Food borne pathogens can cause severe diarrhoea or debilitating infections including meningitis.

Chemical contamination can lead to acute poisoning or long-term diseases, such as cancer. Food borne diseases may lead to long-lasting disability and death. Examples of unsafe food include uncooked or undercooked foods of animal origin, fruits and vegetables contaminated with faeces, and raw shellfish containing marine biotoxins.

Bacteria such as Salmonella, Campylobacter, and Enterohaemorrhagic Escherichia coli are among the most common food borne pathogens that affect millions of people annually—sometimes with severe and fatal outcomes. Examples of foods involved in outbreaks of salmonellosis are eggs, poultry and other products of animal

<sup>&</sup>lt;sup>1</sup> Former Union Minister of Health of Myanmar, Chairman of the National Health Committee, Myanmar.

origin. Food borne cases with *Campylobacter* are mainly caused by raw milk, raw or undercooked poultry and drinking water. Enterohaemorrhagic *Escherichia coli* is associated with unpasteurized milk, undercooked meat and fresh fruits and vegetables.

Listeria infection leads to unplanned abortions in pregnant women or death of newborn babies. Listeria is found in unpasteurised dairy products and various ready-to-eat foods and can grow at refrigeration temperatures.

Vibrio cholerae infects people through contaminated water or food. Rice, vegetables, millet gruel and various types of seafood have been implicated in cholera outbreaks.

Viral infections such as Norovirus infections and Hepatitis viruses A and E infections typically spreads through raw or undercooked seafood or contaminated raw produce and water. Infected food handlers are often the source of food contamination.

Some parasites, such as fish-borne *trematodes*, are only transmitted through food. Others, for example *Echinococcus spp*, may infect people through food or direct contact with animals. Other parasites, such as *Ascaris, Cryptosporidium, Entamoeba histolytica* or *Giardia*, enter the food chain via water or soil and can contaminate fresh produce.

Bovine spongiform encephalopathy (BSE, or "mad cow disease") is a prion disease in cattle, associated with the variant Creutzfeldt-Jakob Disease (vCJD) in humans. Consuming bovine products containing specified risk material, e.g. brain tissue, is the most likely route of transmission of the prion agent to humans.

Now, please let me turn your attention to chemical substances that cause food unsafe. Chemicals that cause most concern for health are naturally occurring toxins and environmental pollutants.

Naturally occurring toxins include mycotoxins, marine biotoxins, cyanogenic glycosides and toxins occurring in poisonous mushrooms. Staple foods like corn or cereals can contain high levels of mycotoxins, such as aflatoxin and ochratoxin. A long-term exposure can affect the immune system and normal development, or cause cancer.

Persistent organic pollutants (POPs) are compounds that accumulate in the environment and human body. Known examples are dioxins and polychlorinated biphenyls (PCBs), which are unwanted byproducts of industrial processes and waste incineration. They are found worldwide in the environment and accumulate in animal food chains. Dioxins are highly toxic and can cause reproductive and developmental problems, damage the immune system, interfere with hormones and cause cancer.

Heavy metals such as lead, cadmium, and mercury can cause neurological and kidney damage. Contamination by heavy metal in food occurs mainly through pollution of air, water and soil

Many waters contain some arsenic and excessive concentrations are known to naturally occur in some areas. Drinking water rich in arsenic over a long period lead to arsenic poisoning or arsenicosis. The health effects are generally delayed, which include skin problems (such as color changes on the skin, and hard patches on the palms and soles of the feet), skin cancer, cancers of the bladder, kidney and lung, and diseases of the blood vessels of the legs and feet, and possibly also diabetes, high blood pressure and reproductive disorders.

"Every time you eat or drink, you are either feeding disease or fighting it"—Heather Morgan

### So, what are the implications?

Safe food supplies support national economies, trade and tourism, contributes to food and nutrition security, and underpins sustainable development.

Urbanization and changes in consumer habits, including travel, have increased the number of people buying and eating food prepared in public places. Globalization has triggered growing consumer demand for a wider variety of foods, resulting in an increasingly complex and longer global food chain.

As the world's population grows, the intensification and industrialization of agriculture and animal production to meet increasing demand for food creates both opportunities and challenges for food safety. Climate change is also predicted to impact food safety, where temperature changes modify food safety risks associated with food production, storage and distribution.

These challenges put greater responsibility on food producers and handlers to ensure food safety. Local incidents can quickly evolve into international emergencies due to the speed and range of product distribution. Serious food borne disease outbreaks have occurred on every continent in the past decade, often amplified by globalized trade and tourism.

Examples include the contamination of infant formula with melamine in 2008 (affecting 300 000 infants and young children, 6 of whom died, in China alone), and the 2011 Enterohaemorrhagic *Escherichia coli* outbreak in Germany linked to contaminated fenugreek sprouts, where cases were reported in 8 countries in Europe and North America, leading to 53 deaths. The 2011 *E.coli* outbreak in Germany caused US\$ 1.3 billion in losses for farmers and industries and US\$ 236 million in emergency aid payments to 22 European Union Member States.

Food safety is a significant public health priority. Unsafe food poses global health threats, endangering everyone. Infants, young children, pregnant women, the elderly, and those with underlying illnesses are particularly vulnerable.

Food borne and waterborne diarrhoeal disease kill an estimated 2 million people annually, including many children and particularly in developing countries. Unsafe food creates a vicious cycle of diarrhoea and malnutrition, threatening the nutritional status of the most vulnerable. Where food supplies are insecure, people tend to shift to less healthy diets and consume more "unsafe foods"—in which chemical, microbiological and other hazards pose health risks.

Food can become contaminated at any point of production and distribution, and the primary responsibility lies with food producers. Yet a large proportion of food borne disease incidents are caused by foods improperly prepared or mishandled at home, in food service establishments or markets. Not all food handlers and consumers understand the roles they must play, such as adopting basic hygienic practices when buying, selling and preparing food to protect their health and that of the wider community.

### **Disease Outbreaks**

Occurrence of disease outbreaks due to unsafe food can easily escalate to a food safety emergency situation, which can adversely impact national economies and livelihoods through reduced availability of food for national consumption, closure of export markets, and/or the high cost of addressing the effects of the threat.

### **Antimicrobial Resistance**

Antimicrobial resistance is one of the main

threats to modern medicine. Antimicrobials, such as antibiotics, are essential to treat infections caused by bacteria. However, their overuse and misuse in veterinary and human medicine has been linked to the emergence and spread of resistant bacteria, rendering the treatment of infectious diseases ineffective in animals and humans. Resistant bacteria enter the food chain through the animals (e.g. *Salmonella* through chickens).

### Measures already taken by UN Agencies and other International Organizations

The WHO, recognizing the importance of food safety, introduced "Five Keys to Safer Food" as early as 2001, and again promoted the efforts to improve food safety on World Health Day 2015 with a theme "How safe is your food? From farm to plate, make food safe." The WHO works closely with FAO, the World Organization for Animal Health (OIE), and other international organizations to ensure food safety along the entire food chain from production to consumption.

The FAO has also published guidelines for strengthening national food control systems in a technical paper—"Assuring food safety and quality." Guidance and manuals for governments, travelers, and food markets have also been published by the FAO and WHO.

To tackle the important issue of Antimicrobial resistance, WHO, FAO and OIE have established a formal tripartite alliance to enhance global coordination and to promote intersectoral collaboration between the public health and animal health sectors, as well as in food safety.

Food borne diseases impede socioeconomic development by straining health care systems, and harming national economies, tourism and trade. Food supply chains now cross multiple national borders. Good collaboration among governments, food industry, consumers and consumer protection societies, academia and professional associations, will ensure food safety.

### What should we do now?

"If you wish to make an apple pie truly from scratch, you must first invent the Universe."—Carl Sagan

According to the WHO, Everyone can contribute to making food safe. Here are some examples of effective actions:

### Governments

Governments should make food safety a public health priority, as they play a pivotal role. By developing policies and regulatory frameworks, and by establishing and implementing effective food safety systems, Governments must ensure food producers and suppliers along the whole food chain operate responsibly and supply safe food to consumers.

### Policy-makers can:

- build and maintain adequate food systems and infrastructures (e.g. laboratories) to respond to and manage food safety risks along the entire food chain, including during emergencies;
- foster multi-sectoral collaboration among public health, animal health, agriculture and other sectors for better communication and joint action;
- integrate food safety into broader food policies and programmes (e.g. nutrition and food security);
- think globally and act locally to ensure the food produce domestically be safe internationally

### Food handlers and consumers can:

- know the food they use (read labels on food package, make an informed choice, become familiar with common food hazards);
- handle and prepare food safely, practicing the WHO Five Keys to Safer Food at home, or when selling at restaurants or at local markets;
- grow fruits and vegetables using the WHO Five Keys to Growing Safer Fruits and Vegetables to decrease microbial contamination

### **Professional associations**

 Professional Associations like Medical Associations and Veterinary Medical Associations should take an active and leading role in educating the public and advocating the governments for a well-balanced regulatory and educational action, including a coordinated, integrated, unified food safety regulatory program that is effectively enforced and that cooperates closely with state and municipal food control programs.

### **Response of UN Agencies**

Pay the farmer now (FAO) or pay the doctor later (WHO)!

### **WHO**

WHO aims to facilitate global prevention, detection and response to public health threats associated with unsafe food. Ensuring consumer trust in their authorities, and confidence in the safe food supply, is an outcome that WHO works to achieve

To do this, the WHO helps Member States build capacity to prevent, detect and manage food borne risks by:

- providing independent scientific assessments on microbiological and chemical hazards that form the basis for international food standards, guidelines and recommendations, known as the Codex Alimentarius, to ensure food is safe wherever it originates;
- assessing the safety of new technologies used in food production, such as genetic modification and nanotechnology;
- helping improve national food systems and legal frameworks, and implement adequate infrastructure to manage food safety risks. The International Food Safety Authorities Network (INFOSAN) was developed by WHO and the UN Food and Agriculture Organization (FAO) to rapidly share information during food safety emergencies;
- promoting safe food handling through systematic disease prevention and awareness programmes, through the WHO Five Keys to Safer Food message and training materials; and
- advocating for food safety as an important component of health security and for integrating food safety into national policies and programmes in line with the International Health Regulations (IHR-2005).

### **FAO**

Through the Food Chain Crisis Management Framework (FCC), FAO addresses the risks to the human food chain through a comprehensive, multidisciplinary and institution-wide collaborative approach.

Occurrence of disease outbreaks due to unsafe food can easily escalate to a food safety emergency situation, which can adversely impact national economies and livelihoods through reduced availability of food for national consumption, closure of export markets, and/or the high cost of addressing the effects of the threat.

To contribute to the efforts to reduce this adverse impact of food safety emergencies on global food security and public health, and at the request of its members, The Food and Agriculture Organization of the United Nations (FAO) has established an Emergency Prevention System for Food Safety (EMPRES Food Safety). EMPRES Food Safety will complement and enhance FAO's ongoing work in food safety, as well as in animal health and plant health emergencies.

The main aim of EMPRES Food Safety is to prevent and control food safety risks. As a key international system to assist in the prevention and management of global food safety emergencies EMPRES Food Safety serves FAO members with the three pillars of early warning, emergency prevention and rapid response.

In this regard, and as the first step toward the development and implementation of EMPRES Food Safety, the Nutrition and Consumer Protection Division (AGN) of FAO, in collaboration with other concerned technical divisions and units, has prepared the Strategic Plan, which aims at making full use of relevant available expertise along the food chain within FAO.

The plan reflects FAO's comparative advantages of having a mandate covering the entire food chain, its status as a neutral international forum and its linkages with national governments, regional bodies, other international agencies, universities, research centres and the donor community. The Plan will be regularly updated to reflect the ever-changing nature of food safety emergencies.

### Recent news on Medical Associations and Food Safety

In June 2014, The American Medical Association (AMA) called for federal action to ban antibiotic use in food animals for growth promotion purposes so as to slow the development of antibiotic-resistant bacteria. The American Medical Association, along with a coalition of 18 mayors, came out against the eligibility for sugary drinks to be purchased under the Supplemental

Nutrition Assistance Program (SNAP) in 2013. AMA maintained that food stamps should not buy soft drinks. It also promotes tax on sugar-sweetened drinks.

Following nationwide ban on Nestle's Maggi Noodles over concerns of lead contamination, the Indian Medical Association has announced plans recently to form a safe food consortium to create awareness in the country about what constitutes safe food. The organization plans to prepare a set of guidelines to widely disseminate to the Indian public.

A report by the British Medical Association concluded that with regard to the long-term effects of genetically modified (GM) foods on human health and the environment, "many unanswered questions remain" and that "safety concerns cannot, as yet, be dismissed completely on the basis of information currently available."

Before I conclude, I would like to present some "quotable quotes" on food safety.

"An ounce of prevention is worth a pound of cure"—Benjamin Franklin

"Food safety involves everybody in the food chain"—Mike Johann

"The goal should be food safety culture, not food safety programme"—Frank Yiannas

"We may find in the long run that tinned food is a deadlier weapon than the machine gun."—George Orwell

"He was a bold man that first ate an oyster."—Jonathan Swift

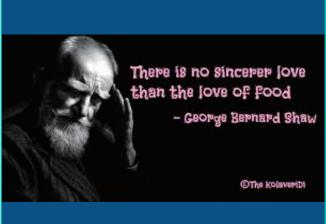
"Man seeks to change the foods available in nature to suit his tastes, thereby putting an end to the very essence of life contained in them."—Sai Baba

I would now conclude my presentation with Luciano Pavarotti's comment:

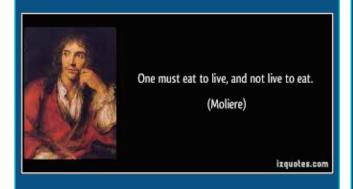
"One of the very nicest things about life is the way we must regularly stop whatever it is we are doing and devote our attention to eating."

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### We eat to live or we live to eat?



### 40 years later

We still don't really have the consensus on

- what to eat
- how much to eat
- how frequent we should eat in health and disease or for different age groups
- what advice we should give to the public, about healthy and nutritious diet in a language easily understandable and unequivocal

### What we know now

 Access to sufficient amounts of safe and nutritious food is fundamental to human health and development, as it sustains life and promotes good health

### Food Safety

- Food safety encompasses actions aimed at ensuring that all food is as safe as possible
- The policies and actions need to cover the entire food chain, from production to consumption.
- Food safety is distinct from food and nutrition security, but they are inextricably linked.

### Food Safety

- Myanmar people traditionally believe that "Food is also Medicine, and Medicine is also Food"
- Myanmar common parlance clearly describes the importance of unsafe food – a single wrong step you take or one mouthful of wrong food you eat may cause irreparable damage!

The food you eat can be either
the safest and most powerful
form of medicine or
the slowest form of poison.

-Ann Wigmore

### Risks of Unsafe food

- The risks of unsafe food are substantial, but can be difficult to quantify.
- Unsafe food containing harmful bacteria, viruses, parasites or chemical substances, causes more than 200 diseases ranging from diarrhea to cancers.
- According to WHO, food borne and waterborne diseases kill an estimated 2 million people annually.

### Risks of unsafe food

- Food borne illnesses are usually infectious or toxic in nature caused by bacteria, viruses, parasites or chemical substances entering the body through contaminated food or water
- Examples of unsafe food include uncooked or undercooked foods of animal origin, fruits and vegetables contaminated with faeces, and raw shellfish containing marine biotoxins

# He was a **bold** man that first ate an oyster. - Jonathan Swift

### Bacteria

- Salmonella, Campylobacter, and Enterohaemorrhagic Escherichia coli are among the most common food borne pathogens that affect millions of people annually – sometimes with severe and fatal outcomes
- Foods involved in outbreaks of salmonellosis are eggs, poultry and other products of animal origin

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### Bacteria

- Food borne cases with Campylobacter are mainly caused by raw milk, raw or undercooked poultry and drinking water.
- Enterohaemorrhagic Escherichia coli is associated with unpasteurized milk, undercooked meat and fresh fruits and vegetables

### Bacteria

- Listeria infection leads to unplanned abortions in pregnant women or death of newborn babies.
- Listeria is found in unpasteurized dairy products and various ready-to-eat foods and can grow at refrigeration temperatures.

### Bacteria

- Vibrio cholerae infects people through contaminated water or food.
- Rice, vegetables, millet gruel and various types of seafood have been implicated in cholera outbreaks.

### **Viruses**

- Viral infections such as Norovirus infections and Hepatitis viruses A and E infections typically spreads through raw or undercooked food or contaminated raw produce and water.
- Infected food handlers are often the source of food contamination.

### **Parasites**

- Some parasites, such as fish-borne trematodes, are only transmitted through food.
- Echinococcus spp, may infect people through food or direct contact with animals.
- Other parasites, such as Ascaris, Cryptosporidium, Entamoeba histolytica or Giardia, enter the food chain via water or soil and can contaminate fresh produce.

### **Prions**

- Bovine spongiform encephalopathy (BSE, or "mad cow disease") is a prion disease in cattle, associated with the variant Creutzfeldt-Jakob Disease (vCJD) in humans.
- Consuming bovine products containing specified risk material, e.g. brain tissue, is the most likely route of transmission of the prion agent to humans.

### Chemicals

- Naturally occurring toxins include mycotoxins, marine biotoxins, cyanogenic glycosides and toxins occurring in poisonous mushrooms.
- Staple foods like corn or cereals can contain high levels of mycotoxins, such as aflatoxin and ochratoxin.
- A long-term exposure can affect the immune system and normal development, or cause cancer.

### Chemicals

- Persistent organic pollutants (POPs) are compounds that accumulate in the environment and human body.
- Known examples include Dioxins and polychlorinated biphenyls (PCBs), which are unwanted byproducts of industrial processes and waste incineration.

### Chemicals

- They are found worldwide in the environment and accumulate in animal food chains.
- Dioxins are highly toxic and can cause reproductive and developmental problems, damage the immune system, interfere with hormones and cause cancer.

### **Heavy Metals**

- lead, cadmium, and mercury can cause neurological and kidney damage.
- Contamination by heavy metal in food occurs mainly through pollution of air, water and soil.
- Natural waters contain some arsenic and excessive concentrations are known to occur in some areas.
- Drinking water rich in arsenic over a long period lead to arsenic poisoning or arsenicosis.

### So, what are the implications?

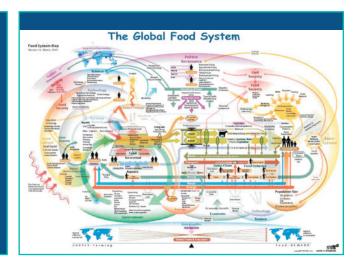
"Every time you eat or drink, you are either feeding disease or fighting it."



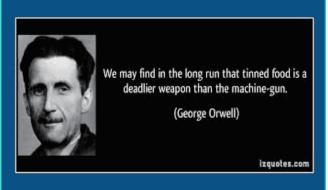
Heather Morgan

- Safe food supplies support national economies, trade and tourism, contributes to food and nutrition security, and underpins sustainable development.
- Urbanization and changes in consumer habits, including travel, have increased the number of people buying and eating food prepared in public places.

- As the world's population grows, the intensification and industrialization of agriculture and animal production to meet increasing demand for food creates both opportunities and challenges
- Globalization has triggered growing consumer demand for a wider variety of foods, resulting in an increasingly complex and longer global food chain.



- Climate change is also predicted to impact food safety, where temperature changes modify food safety risks associated with food production, storage and distribution.
- These challenges put greater responsibility on food producers and handlers to ensure food safety
- Local incidents can quickly evolve into international emergencies due to the speed and range of product distribution
- Serious food borne disease outbreaks have occurred on every continent in the past decade, often amplified by globalized trade and tourism.



- Contamination of infant formula with melamine 300,000 affected, 6 deaths in China alone (2008)
- Esch. coli outbreak in Germany (2011) cases were reported in 8 countries in Europe and North America, leading to 53 deaths.
- US\$ 1.3 billion in losses for farmers and industries and US\$ 236 million in emergency aid payments to 22 European Union Member States.

### **Public Health Priority**

- Food safety is a significant public health priority.
- Unsafe food poses global health threats, endangering everyone.
- Infants, young children, pregnant women, the elderly, and those with underlying illnesses are particularly vulnerable.
- Food can become contaminated at any point of production and distribution, and the primary responsibility lies with food producers.
- Yet, a large proportion of food borne disease incidents are caused by foods improperly prepared or mishandled at home, in food service establishments or markets

### Disease Outbreaks

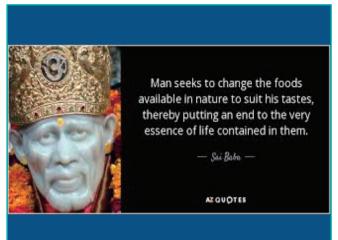
- Occurrence of disease outbreaks due to unsafe food can easily escalate to a food safety emergency situation
- Disease Outbreaks have adverse impact on national economies and livelihoods through reduced availability of food for national consumption, closure of export markets, and/or the high cost of addressing the effects of the threat.
- Where food supplies are insecure, for various reasons, people tend to shift to less healthy diets and consume more "unsafe foods" – in which chemical, microbiological and other hazards pose health risks.

### Antimicrobial Resistance (AMR)

- AMR is one of the main threats to modern medicine
- Antimicrobials are essential to treat infections
- Their overuse and misuse in veterinary and human medicine has been linked to the emergence and spread of resistant bacteria, rendering the treatment of infectious diseases ineffective
- Resistant bacteria enter the food chain through the animals (e.g. Salmonella through chickens)

### Genetically Modified (GM) Food

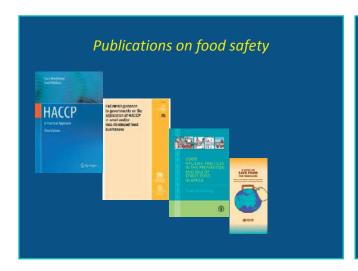
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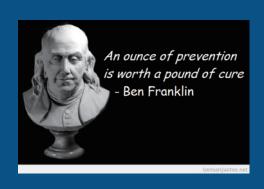




### What should we do now?



 "If you wish to make an apple pie truly from scratch, you must first invent the universe." - Carl Sagan





 "Food safety involves everybody in the food chain" – Mike Johann

### **Governments**

- Governments should make food safety a public health priority, as they play a pivotal role.
- By developing policies and regulatory frameworks, and by establishing and implementing effective food safety systems and structures, Governments must ensure food producers and suppliers along the whole food chain operate responsibly and supply safe food to consumers.

### **Policy-makers**

- build and maintain adequate food systems and infrastructures
- foster multi-sectoral collaboration among public health, animal health, agriculture and other sectors
- integrate food safety into broader food policies and programmes (e.g., food and nutrition security)
- think globally and act locally to ensure the food produce domestically be safe internationally



"The goal should be food safety culture, not food safety programme" – Frank Yiannas

### Food handlers and consumers

- know the food they use (read labels, make an informed choice, be familiar with common food hazards)
- handle and prepare food safely, practicing the WHO
   Five Keys to Safer Food at home, or when selling at restaurants or at local markets
- grow fruits and vegetables using the WHO Five Keys to Growing Safer Fruits and Vegetables

### **Professional associations**

 Professional Associations like Medical Associations and Veterinary Medical Associations should take an active and leading role in educating the public and advocating the governments for a well-balanced regulatory and educational action, including a coordinated, integrated, unified food safety regulatory program that is effectively enforced and that cooperates closely with food control programs at all levels. (WHO)

### Conclusion

- Food borne diseases impede socioeconomic development by straining health care systems, and harming national economies, tourism and trade.
- Food supply chains now cross multiple national borders.

### Conclusion

 Good collaboration among governments, food industry, consumers and consumer protection societies, academia and professional associations, will ensure food safety.





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### [Australia]

### Food Safety\*

Brian OWLER<sup>1</sup>

Australia faces some serious challenges if we are to ensure the safety and supply of quality food and water.

When it comes to food and food safety, one of the problems for the vast majority of Australians is knowing which foods and drinks, and in what amounts, are appropriate and which are not. This is especially so in today's world of myriad food choices and confusing messages and marketing.

That this is why simple, informative food labelling, such as the Health Star Rating, is crucially important to people's health. The HSR system provides simple but prominent, information about how healthy the product is. It allows for quick and easy comparisons, and ideally assist people to make healthier choices. Food labelling is about promoting health and health awareness, as well as protecting public safety.

Despite having a fairly robust system in place, Australia has experienced problems with food safety.

Following an outbreak of hepatitis A that was linked to frozen berries imported from China, the Australian Government announced plans for clearer food country of origin labelling. Previous attempts to tighten food labelling standards had met with strong resistance from Australian food manufacturers, who complained that making changes would add significantly to production costs. Despite this apparent burden on food manufacturers, Australian consumers have come to expect strong food safety measures.

Food labelling and country of origin labelling will make it easier for people to make healthy and informed choices about their food and drink consumption.

The AMA has also been outspoken about the health impacts of climate change and in particular, the consequences on Australia's food and water resources.

There is considerable evidence that governments must plan for the major impacts of climate change, especially for extreme weather events, the spread of diseases and the possible disruption to supplies of food and water.

The health effects of climate change will include increased heat-related illness and deaths, increased food and water borne diseases, and changing patterns of diseases. The incidence of conditions such as malaria, diarrhea, and cardiorespiratory problems is likely to rise.

We also know that local changes in temperature and rainfall have altered distribution of some water-borne illnesses and disease vectors, and reduced food production for some vulnerable populations.

Food insecurity and the threat to water supply must be addressed as a changing climate in Australia is likely to reduce local food yields and quality and increase food prices. This could lead to major health issue, especially for lower-income families and remote communities where food choices are often limited.

Dietary insufficiencies, nutritional imbalances and health impairments, especially in young children, is a possible consequence of reduced food yields and increased prices.

The AMA has called on our government to show leadership in addressing climate change and the effects it is having, and will have, on human health. This must include waste management plans and water conservation.

Australia's food and water sustainability are also at risk from fracking and the mining on prime agricultural land. There is mounting concern in Australia that fracking and coal seam gas mining will erode agricultural land production and potentially contaminate some water suppliers.

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> President, Australian Medical Association (ama@ama.com.au).

### [Bangladesh]

### Ensuring Food Safety: An Important Challenge Today\*

Jamal Uddin CHOWDHURY<sup>1</sup>



## INTRODUCTION • Food safety is a scientific discipline describing handling, preparation and storage of food in ways that prevent food borne illnesses • It includes a number of procedures that should be followed to avoid potentially severe health hazards • It includes the origins of food including the practices related to food labeling, food hygiene, food additives, pesticide residues as well as policies on biotechnology and food and guidelines for the management of governmental import and export inspection and certification systems for foods • Food can transmit disease from person to person as well as serve as a growth medium for bacteria that can cause food poisoning

## Prevent contaminating food with pathogens spreading from people, pets and pests Separate raw and cooked foods to prevent contaminating the cooked foods Cook foods for the appropriate length of time and at the appropriate temperature to kill pathogens Store food at the proper temperature Do use safe water and raw materials

## FOOD DEFENSE • Food defense: It is the protection of food products from intentional contamination or adulteration by biological, chemical, physical or radiological agents. It addresses additional concerns including physical, personnel and operational security. The events may be industrial sabotage or terrorism • Food protection is the umbrella term encompassing both food safety and food defense

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

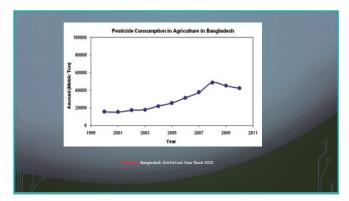
<sup>&</sup>lt;sup>1</sup> Central Executive Committee, Bangladesh Medical Association (info@bma.org.bd).





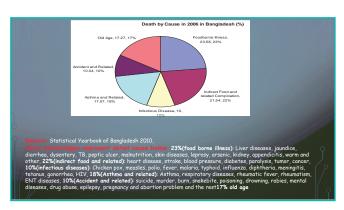






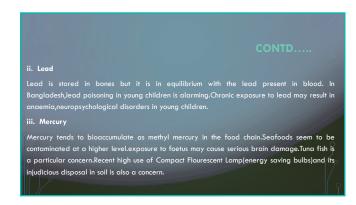


## Unsafe Food Creating Burden On Public Health Diarrhea • About 3 million cases reported/Year (Health Bulletin 2013 : 2.6 million) • Responsible for 15% of mortality in children under 5 years (Health Bulletin 2013 : 45/1000 live birth) • Among the Top 10 diseases in Upazilla and District Hospital ,No. 1 is diarrhea (Health Bulletin 2013) Typhoid 17.74% and 12.24% of top 10 diseases in Upazilla Health Complex and District Hospital (Health Bulletin 2013) Hepatitis A and E Long term health effects • Renal failure, Liver damage, Cancer



## BRIEF OVERVIEW OF THE CONTAMINANTS Environmental contaminants – industrial processes emit several thousand of inorganic and organic chemicals. Due to this emission, agricultural commodities and thus also our food may become contaminated 1. Organic – most important is dioxin and dioxin like compounds(DLC). People are exposed to these although at low levels, particularly by eating animal fat in meat, diary products and fish. Now a days it is said that plastic water container emits dioxin if kept in heated or chilled environment. Dioxin or DLCs cause skin damage, cancer, NIDD in adults, neurological and immune system impairments in infants and endocrine system disruption

## 2. Inorganic i. Arsenic Arsenic an enter into plants from soil. The terrestrial plants can accumulate a large amount of arsenic. On the other hand, marine plants and animals have arsenic detoxification system In Bangladesh, water is contaminated by arsenic widely. Almost one in five tubewells is not providing safe drinking water. About 20 million people in Bangladesh are using tubewells with more than 50 ppb of arsenic. Arsenic is found in rice also in endemic areas. There are now almost 66000 patients with Arsenicosis in Bangladesh. Long term exposure to arsenic can cause cancer of skin, lungs, bladder and kidney and in children impaired cognitive development. It also causes disfigurement which ultimately creates social problem especially for women

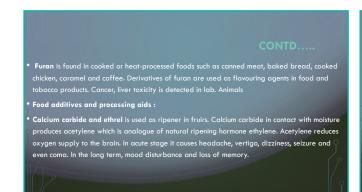


Process contaminants:

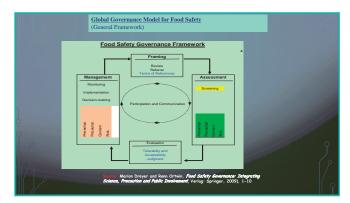
• During heating or fermentation nitrosamines, polycyclic amines, histomine, acrylamide, furan, benzene trans fat, monochloropropanediol, semicarbazide, 4-hydrxynineal (4-HNE), ethyl carbamate etc are produced. Heating processes that induce a surface dehydration of the food such as frying or oven baking processe gives rise to appreciable acrylamide production.

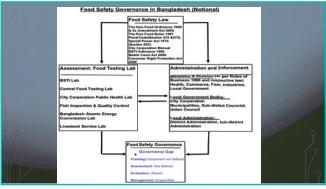
• Acrylamide also occurs in many cooked starchy foods such as potato chips, French fries and bread that has been heated.

• Acrylamide is indicted for its cardinogenecity, neurotoxicity and reproductive toxicity.









| Governance<br>Stage   | Purpose and procedures   | Implementation Status<br>in the<br>UK and EU   | Implementation Status in<br>Bangladesh  |
|---|--|--|---|
| Framing:Gover<br>nance design as<br>per laws,<br>regulation,<br>Institution,<br>resources   | Setting terms of<br>reference, procedure and<br>focus using, e. g., law,<br>institution, regulators  | Full implementation<br>undertaken using, for<br>example, up to date<br>law,coordination by<br>regulators, guidelines,<br>and resources | Partially exercised without<br>defining goals as governance<br>model<br><u>Gaps:</u> No governance design<br>backdated law, no single<br>regulator, coordination gaps,<br>resources gaps  |
| Assessment Step 1:Screening Step 2:Prevention, precaution, concern or risk based assessment | Gathering knowledge by<br>identifying risks using, e.<br>g. sound science, or by<br>social scientists or<br>economists   | Implementation undertaken except concern based assessment to be undertaken by social scientists or economists.                         | Partial implementationprove<br>to be non-effective<br><u>Gaps:</u> Science based<br>screening, and Testing labs<br>non-functional, precaution,<br>concern and risk based<br>assessment gaps                                       |
| Evaluation<br>(Assessment<br>decisions are<br>evaluated)                                    | Value-based judgment e.<br>g. on tolerability or<br>acceptability prior to<br>management decision  | Moderate<br>implementation and full<br>implementation is in<br>experimental stage  | Absent and not exercised as governance process  Gaps: Evaluation gaps   |
| Management Stage 1:decision making Stage 2 Implementation Stage 3 Monitoring                | Selection of appropriate<br>food safety risk decision<br>by Management Board or<br>regulator and decisions<br>are based on prevention,<br>precaution, concern or<br>risk analysis. | Full implementation<br>undertaken  | Partially undertaken without<br>setting proper goals and thus<br>non-effective<br>Gaps: No single<br>management body or<br>regulator, hence decisions ar<br>taken by different agencies<br>piecemeal basis and no<br>coordination |





|  | rt,2010 On<br>nt System in Bangladesh   |
|--|---|
| Areas                                    | Status  |
| Food laws and regulations                | -New Food Safety Act enacted -Rules and regulation need formulation                       |
| Food safety management system            | -Complex but now trying to make simple  |
| Analytical facilities                    | -Insufficient   |
| Inspection and enforcement               | -considerable gaps and overlapping responsibilities, Food safety authority will take care |
| Coordination, communication and exchange | -Limited among ministries -Inefficient use of resources                                   |
| Knowledge and awareness                  | -Limited  |









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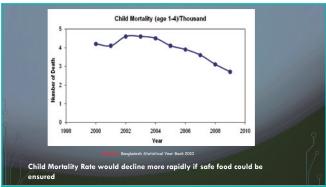


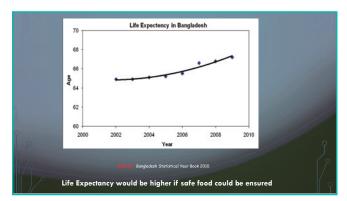




## The consumers can play an important role in contributing towards food safety by Respecting refrigerating temperature during storage Respecting shelf-life of the product Preventing cross contamination during preparation of food No undercooking of raw fish, meat or vegetables Role of Medical Associations As unsafe food is causing much harm to public health, Medical Associations should act as pressure groups to motivate the policy makers, beurocrates and administrators to be active in executing the law and increasing effective surveillance As doctors' advice is expected to be heard by all the stakeholders particularly the consumers than anyone else, Medical Associations both national and international should take active part in the campaign for safe and healthy food









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### [Hong Kong]

### Ensuring Food Safety: An Important Challenge Today\*

Alvin Yee Shing CHAN¹

Food Safety Hazards

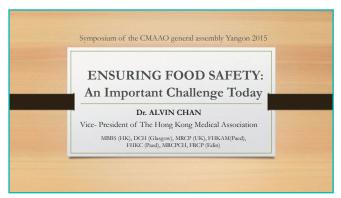
- a. Excessive Metals
  - i. Lead
  - ii. Mercury
  - iii. Cadmium
- b. Bacteria Contamination
  - i. Bacillus cereus
  - ii. Coliform
  - iii. Salmonella
  - iv. Listeria monocytogenes
- c. Radiation Pollution
- d. Illegal Sales of Banned Carcinogen
- e. Chemicals
  - i. Preservative
  - ii. Pesticide

Policies Enhancing Food Safety

- a. Centre for Food Safety-police
  - i. Code of Practice on Food Safety Orders
- b. Report to Department of Health
- c. Regulatory Framework on Nutrition and Health Claims on Infant Formula, Follow-up Formula, and Prepackaged Foods for Infants and Young Children Under the Age of 36 Months in Hong Kong
- d. Vetting of the Food and Drugs (Composition and Labelling) Regulation

Role of the Hong Kong Medical Association

- a. Submissions of response and advice to consultations
- b. Task Force on Nutrition Labelling
  - i. joined hands with 24 other organizations to
    - 1. hold a press conference
    - 2. stage a demonstration
    - 3. put up an advertorial on MingPao to counter the commercial forces
- c. Task Force on Hong Kong Code on Formula Milk
  - Legislative Proposals Relating to Formula Products and Foods intended for Infants and Young Children under the age of 36 months in Hong Kong
- d. Ad Hoc Committee on Toxic Effects of Lead Contaminated Water
  - i. Co-working with the government of departments to respond to the crisis
  - ii. Education and recommendations to doctors through Rapid communication system
  - iii. Public education through mass media and, doctors community networks





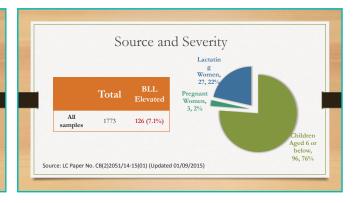
<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

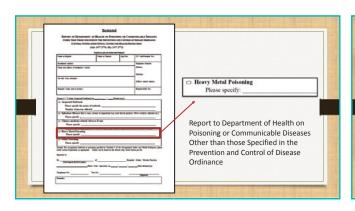
<sup>1</sup> Vice-President, Hong Kong Medical Association (hkma@hkma.org).





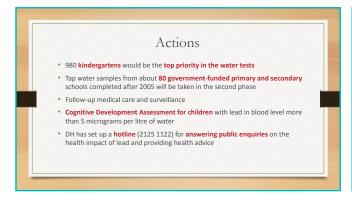








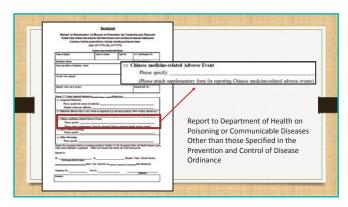
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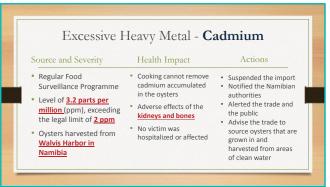






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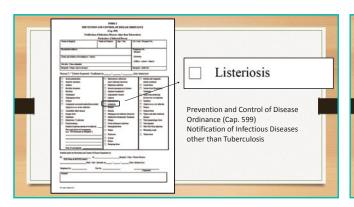












Microbial Contamination of Ingredients
When Making Homemade Ice-cream

Raw eggs: Salmonella infection

U.S. Food and Drug Administration

10 to 80°C in a water bath
10 to 30 minutes

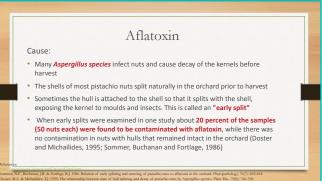
Kill pathogenic bacteria without affecting the texture and flavor of the ice-cream

Microbial Contamination of Ingredients
When Making Homemade Ice-cream

• Dairy products: Listeria monocytogenes
• Able to survive and reproduce below 0°C
• Incompletely sterilized milk are classified as high risk food
• The mortality rate could be as high as 30%
• Homemade ice-creams are free from stabilizers and additives
→ Consume as soon as possible

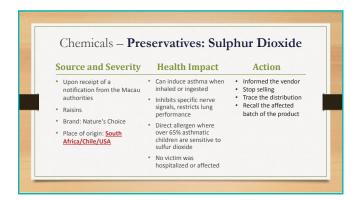
### Radiation Pollution **Health Impact** Actions Source and Severity • Radioactive caesium, Received a complaint Not to import any restricted fresh produce caesium-134 and Importing 10 boxes of restricted fresh produce from the five Japanese prefectures Maximum fine of caesium-137, can be carrots from Chiba, released Japan Internal exposure allows the radioactive \$100,000 Imprisonment for 12 Import documents did months The importer was not state that the consignment was material to be distributed in muscle tissue, increasing originated from the cancer risk prefecture concerned





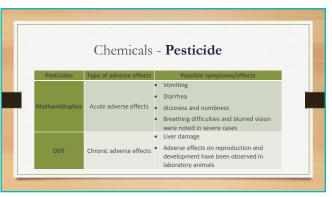
| Group | Description  | Food-related Examples  |
|-------|--|--|
| 1     | Carcinogenic to humans:  • Evidence is sufficient in humans  | Aflatoxins, alcoholic beverages, inorganic arsenic compounds, benzo[a]pyrene (B[a]P), chromium (VI)compounds, dioxins, polychlorinated biphenols (PCBs), Chinese-style salted fish |
|       | Probably carcinogenic to humans:  • Evidence is limited in humans; and is sufficient in experimental animals.  | Acrylamide, inorganic lead compounds, certain nitroso compounds resulted from ingested nitrate / nitrite   |
| 28    | Possibly carcinogenic to humans:  • Evidence is limited in humans; and is less than sufficient in experimental in experimental animals; or  • Evidence is inadequate in humans; but is sufficient in experimental animals. | Bracken fern, fumonisin B1, ochratoxin A   |
|       | Not classifiable as to its carcinogenicity to humans:  • Evidence is inadequate in humans; and is inadequate or limited in animals.  | Chromium (III) compounds, metallic chromium, citrinin, patulin   |
| 4     | Probably not carcinogenic to humans  |  |

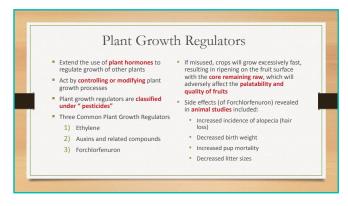








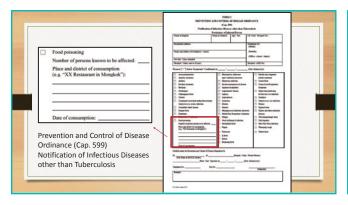




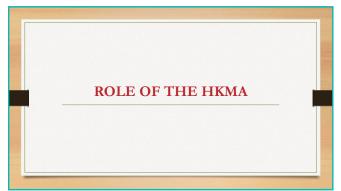




























### [India]

### Food Safety—A Global Public Health Concern\*

A. Marthanda PILLAI<sup>1</sup>



### Food Safety-A global public health concern

Prof Dr A Marthanda Pillai MS, FRCS
President, Indian Medical Association

Food safety is an area of public health action to protect consumers from the risks of food poisoning and foodborne diseases, acute or chronic.



Safe food underpins but is distinct from food security.

Unsafe food can lead to a range of health problems: diarrhoeal disease, viral disease; reproductive and developmental problems, cancers.

Food safety is thus a pre-requisite for food security.



### World health day, 2015

- Food safety was the theme for World Health Day, 2015
- Making food safe- From farm to plate was the slogan for this as advocated by World Health Organisation





### Background

- Changes in food production, distribution and consumption; changes to the environment; new and emerging pathogens; antimicrobial resistance - all pose challenges to food safety systems.
- Increases in travel and trade enhance the likelihood that contamination can spread internationally



<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> President, Indian Medical Association (inmedici@gmail.com).

### Huge human & financial loss- globally

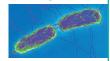
 Contamination of infant formula with melamine in 2008 affected 300 000 infants and young children in various countries



The 2011 E.coli outbreak in Germany caused US\$ 1.3 billion in losses for farmers and industries and US\$ 236 million in emergency aid payments to 22 European Union Member:

### WHO's Foodborne Disease Burden Epidemiology Reference Group (FERG)-Initial findings

There were an estimated 582 million cases of 22 different foodborne enteric diseases and 351 000 associated deaths, (2010)



- Most deaths were due to Salmonella Typhi (52 000 deaths), enteropathogenic E. coli (37 000) and norovirus (35 000)
- The African region recorded the highest disease burden for enteric foodborne disease, followed by South-East
- Over 40% people suffering from enteric diseases caused by contaminated food were children aged under 5 years

# children aged under 5 years

### Major illnesses

- · Bacteria:
  - Salmonella, Campylobacter, and Enterohaemorrhagic
     Escherichia coli-affect millions of people annually sometimes with severe and fatal outcomes.
  - Vibrio cholerae- Rice, vegetables, millet gruel and various types of seafood have been implicated in cholera outbreaks.
- Viruses: Infected food handlers are often the source of food contamination, noro viruses, Hepatitis A
- Parasites
- Prions
  - infectious agents composed of protein
  - neurodegenerative disease.
  - Bovine spongiform encephalopathy (BSE, or "mad cow disease") associated with the variant Creutzfeldt-Jakob Disease (vCJD) in humans.

### Chemicals

- · Naturally occurring toxins
  - mycotoxins, marine biotoxins, cyanogenic glycosides and toxins occurring in poisonous mushrooms.
  - Cereals can contain high levels of mycotoxins, such as aflatoxin and ochratoxin.
  - A long-term exposure can affect the immune system and normal development, or cause cancer.
- Persistent organic pollutants (POPs) are compounds that accumulate in the environment and human body
  - Dioxins are highly toxic and can cause reproductive and developmental problems, damage the immune system, interfere with hormones and cause cancer.
- Heavy metals such as lead, cadmium and mercury cause neurological and kidney damage.



# Food Safety Counts! WHO's 5 keys

- Clean: Wash hands, cutting boards, utensils and countertops.
- **Separate:** Keep raw meat, seafood, and poultry away from ready-to-eat foods.
- Cook: Cook food to the right temperature.
- Chill: Refrigerate promptly.
- Safe: Use water and raw materials





### Role of government

- Governments should make food safety a public health priority & develop policies and regulatory frameworks
- Build and maintain adequate infrastructures including food testing labs to respond to manage food safety risks along the entire food chain, including during emergencies
- Foster multi-sectoral collaboration among public health, animal health, agriculture and other sectors for better communication and joint action
- · Introduce food and label literacy campaigns



### Role of food handlers and consumers

Know the food they use

- √ read labels on food package
- ✓ make an informed choice.
- √ become familiar with common food hazards

Handle and prepare food safely

Grow fruits and vegetables safely, locally

Take up homestead and small group farming



### Role of professional associations

- Form technical groups to work on food safety
- Undertake research works specific to food safety issues
- Prepare and popularize safe food guidelines for the public
- Undertake campaigns to educate people on packed food label literacy
- Promote use of locally grown seasonal fruits and vegetables for consumption

### Indian context

भारतीय खाद्य संरक्षा एवं मानक प्राधिकरण

### Food Safety and Standards Authority of India

- India has a double burden of under nutrition and over
- Food safety in terms of Chemical, biological and nutrient content has attained attention only recently in India.
- Food Safety and Standards Authority of India has been established under the Food Safety and Standards Act, 2006
  - for laying down science based standards
  - regulating manufacturing, processing, distribution, sale and import of food
  - to ensure safe and wholesome food for human consumption



### Indian Medical Association

- Indian Medical Association has come up with a guidelinesfirst of it's kind in India- for the public in this year
- Access the guidelines at www.imakerala.com

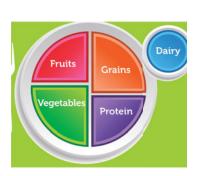


### Key messages from IMA Guidelines

- · Prefer steaming to deep frying
- Do not re-heat food as far as possible.
- Reduce carbohydrate rich food like rice and wheat.
  - Rice yields approximately 70% and wheat yields approximately 60% of carbohydrate.
  - Any excess carbohydrate is converted to fat by the liver and is stored within itself or as fat primarily in the abdominal wall.

### Food plate

- Follow the Food plate
- Have plenty of fruits and vegetables
- Have less grains/cerea ls





### Safe and healthy food at schools

- Avoid serving junk foods at school canteens- through awareness; bring in legislations if required
- Use stainless steel/glass/high quality plastic water bottles for carrying drinking water
- · Avoid HFSS (High Fat, high Salt, high Sugar)



Reduce Salt intake

- Processed and restaurant food is major source of salt
- Salt content in sauces and other additives are very
- Please note that Sodium is present in many forms in food items; and not just as salt (sodium chloride)
- You should check the labels of foods to find out which ones are high and low in salt content.
  - If the label has more than 1.5g of salt (or 0.6g of sodium) per 100g it is a high salt content food.
  - If it has 0.3g of salt (0.1g of sodium) per 100g then it is a low salt content food.
  - Anything in between is a medium salt content food.



### Limit Sugar intake

- · Sugar is not an essential nutrient and hence can be avoided
- · If consumed, total sugar intake including those in sweets and sweetened items
  - Less than 9 teaspoons (36 gm) in males
  - Less than 5 teaspoons (20 grams) for
  - Less than 3 teaspoons (12 gms) for children



### Fat and oil

- · Choose healthy fats in small amounts
- · Restrict and rotate oil
- · Do not re-use oil
- Avoid trans-fats

### Meat

- Increased fat in white meat (chicken) is a big concern
- Removing skin before preparing poultry reduces fat content
- Any meat should be consumed only in moderation



### Fruits and Vegetables

- · Local and seasonal fruits and vegetables with minimum preservation should be preferred
- Fruits from distant destination cannot be recommended
- · Locally grown vegetables are recommended than those coming from distant locations



### Safe farming

- Homestead farming and group farming should be promoted by governments and institutions
- Ensure clean cultivation
- Crops are to be rotated through the fields to replace nutrients in the soil.
- Maximize water infiltration; manage ground and soil water by proper use
- Indiscriminate use of agro-chemicals are toxic and hazardous
- Prefer food with minimum preservatives and chemical contaminants (local and seasonal food with minimum preservation should be preferred)
- Food colors, stabilizers preservatives etc. lead to extra contamination



### [Indonesia]

# **Ensuring Food Safety Throughout** the Life-course in Indonesia\*

Rina AGUSTINA<sup>1</sup>





# Food safety Problem in Indonesia

- Unsafe foods comprising pathogens or chemicals
- Can cause diarrhea to cancer
- Triggered a disease and malnutrition vicious cycle affecting infants, young children, elderly, pregnant mother, and the sick,
- Largely under-reported

## Food safety concern: Malnutrition versus food-borne illness

| Indicators               | Indonesia | SEA <sup>3</sup> | Africa <sup>3</sup> | World-wide |
|--------------------------|-----------|------------------|---------------------|------------|
|                          |           |                  |                     |            |
| Stunting <sup>1</sup>    | 37.2      | 29.4             | 54                  | 25         |
| Underweight <sup>1</sup> | 19.6      | 18.3             | 25                  | 15         |
| Wasting <sup>1</sup>     | 12.1      | 9.4              | 14.8                | 7.7        |
| Overweight <sup>1</sup>  | 14        | 17               | 10.4                | 6.3        |

archipelago
±40% of ASEAN
population; ±37%
of ASEAN GDPIncrease in GDP
per-capita,

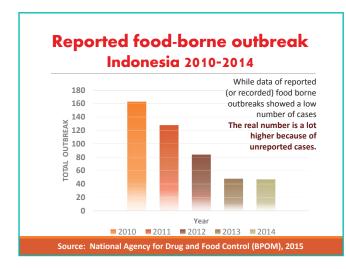
- Chronic Malnutrition:
- Child stunting remains persistently high (37.2%).
- Foodbornes-illness-diarrhea:
   Mainly concentrated in 15 countries, including Indonesia, 75 % of worldwide diarrhea deaths;
   3rd leading cause of child death;

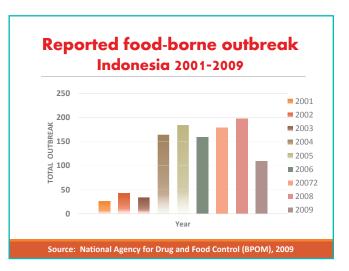
14% with at least 10%; most common among the poorest wealth quintiles, reflecting disparities in sanitation, hygiene, health services and food safety

Sources: (National Health Survey, 2013, IDHS, 2012, UNICEF, 2012

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>&</sup>lt;sup>1</sup> Faculty of Medicine, University of Indonesia, Indonesian Medical Association (dr.ihsanoetama@idionline.org).

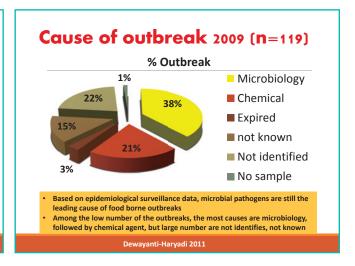


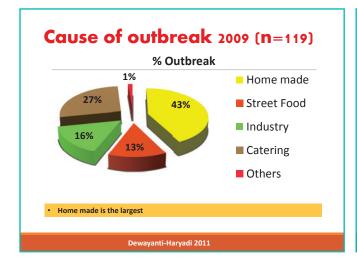


# Reported Food-borne outbreak in Indonesia 1995-2000 YEAR TOTAL OUTBREAK TOTAL OLEATH TOTAL DEATH 1995 58 1,919 24 1996 42 3,123 35

| YEAR | TOTAL<br>OUTBREAK | TOTAL CASES | NO. OF<br>DEATH |
|------|-------------------|-------------|-----------------|
| 1995 | 58                | 1,919       | 24              |
| 1996 | 42                | 3,123       | 35              |
| 1997 | 31                | 3,671       | 6               |
| 1998 | 13                | 1,078       | 8               |
| 1999 | 19                | 1,267       | 1               |
| 2000 | 2                 | 1,051       | 0               |
|      |                   |             |                 |

Source: Suklan, 2000





# Etiologic Pathogen for diarrhea patient

- 4 most frequently isolated pathogens
  - V. cholera O1 (37.1%)
  - Shigella flexneri (27.3%)
  - Salmonella (17.7%)
  - ETEC (18%)
- Others: V. parahaemolyticus (7.3%), S.Typhi (3.9%), C. jejuni (3.6%), V cholera non O1 (2.4%), EHEC 1%, Clostridiumdifficil e1%, S. Paratyphi (0.7%)
- Protozoa and parasites: Blastocystis hominis 5.7%, Trichuris trichuria 2.1%, Ascaris lumbricoides 1.5%, Giardia lamblia 0.8% and Endolimax nana

(Oyofo et al., 2002;Tjaniadi et al., 2005; Dewayanti-Haryadi, 2011)

# Resistancies to various antibiotics

- 75-95%: Shigella resistant to ampicillin, trimethoprim-sulfamethoxazole, chloramphenicol, tetracyclin, sensitive to nalidixic acid, ciprofloxacine and cefriaxone
- E. coli resistant to ampicillin, gentamicin, cefotaxine, ciprofloxacine, and trimethroprimsulfamethoxazole (hospital and community)

(Oyofo et al., 2002;Tjaniadi et al., 2005; Dewayanti-Haryadi, 2011)

### Alfatoxin vs liver cancer

- Mould, particularly its mycotoxin production.
- Aflatoxin was frequently found in large amounts (> 30 ppb) Most maize samples collected from different places in Indonesia contained aflatoxin (10-several thousands ppb).
- Peanuts: Frequently found in peanuts (rainy season), 80% in West Java (>30 ppb aflatoxin). Storage and slow drying processes of the grain were thought to be the main cause of the problem
- Beans: not inconsistent data (suspected to be low-high concentration of alfatoxin)
- Incidence of liver cancer is increasing, unknownn relation with alfatoxin

(Dharmaputra 2000)

# Increasing industrial processed food

Fulfill the safety standard preparing ASEAN community 2015

The safety for microbial pollutant

Problem is magnified by

- Excessive food grade additives, such as artificial sweeteners, saccharine andcyclamate, are sometimes used in concentrations exceeding the recommended ones.
- Use of illegal non-food color additives such as methanyl yellow and rhomdamine B (in syrup and street food sold in school areas).
- Misuse of dangerous materials chemicals such as boric acid and formaldehyde (used as food preservative.
- Safety of novel foods

### **Food Hygiene Practices**

- Many of the reported food safety problems in Indonesia are due to:
  - mishandling of food, during the course food continuum "from farm to table".
  - Caused by basic errors in preparing foods, due to lack of knowledge of basic food safety
  - Associated with lack of knowledge and poor practice, including poor sanitation and hygiene.

Agustina et al 2013

Preventable

# Association between food-hygiene practices and diarrhea among children aged 12 - 59 months (n = 274)

| Determinants            | Food-hygiene | :  | Diarrhea                  |                                      |  |  |  |  |
|-------------------------|--------------|----|---------------------------|--------------------------------------|--|--|--|--|
|                         | practice     | %  | Unadjusted OR<br>(95% CI) | Adjusted <sup>a</sup> OR<br>(95% CI) |  |  |  |  |
| All children            | Poor         | 11 | 1.15 (0.51-2.60)          | 1.33 (0.57-3.14)                     |  |  |  |  |
| Better 9                |              | 9  | 1.00                      | 1.00                                 |  |  |  |  |
|                         | p-value      | 9  | 0.73                      | 0.51                                 |  |  |  |  |
| Stratified by age group |              |    |                           |                                      |  |  |  |  |
| ≤ 2 y (n = 93)          | Poor         | 23 | 2.63 (0.78-8.89)          | 4.55 (1.08-19.10)*                   |  |  |  |  |
|                         | Better       | 10 | 1.00                      | 1.00                                 |  |  |  |  |
|                         | p-value      | 9  | 0.12                      | 0.04*                                |  |  |  |  |
| > 2 y (n = 181) Poor    |              | 5  | 0.55 (0.17-1.78)          | 0.62 (0.18-2.14)                     |  |  |  |  |
|                         | Better       | 9  | 1.00                      | 1.00                                 |  |  |  |  |
|                         | p-value      |    | 0.32                      | 0.38                                 |  |  |  |  |

Agustina et al, 2013

### Association between Maternal factors and child morbidity due to diarrhoea and respiratory infections

|   | Diarrhoea (n=18,865) |      |                         | Respiratory infections (n=5,994) |      |                      |  |
|---|----------------------|------|-------------------------|----------------------------------|------|----------------------|--|
| Variables                               | Case<br>s            | %    | Adjusted OR (95%<br>CI) | Cases                            | %    | Adjusted OR (95% CI) |  |
| Mother's access to<br>health care index |                      |      |                         |                                  |      |                      |  |
| Lowest (reference)                      | 645                  | 13.2 | 1.00                    | 557                              | 36.8 | 1.00                 |  |
| Low                                     | 487                  | 11.2 | 0.90 (0.79-1.02)        | 419                              | 33.3 | 0.93 (0.79-1.09)     |  |
| Moderate                                | 568                  | 12.1 | 1.04 (0.91-1.18)        | 497                              | 32.9 | 0.97 (0.82-1.14)     |  |
| High                                    | 622                  | 12.6 | 1.11 (0.98-1.27)        | 506                              | 29.5 | 0.84 (0.72-0.99)*    |  |
| Maternal practices and experience index |                      |      |                         |                                  |      |                      |  |
| Lowest (reference)                      | 694                  | 13.3 | 1.00                    | 549                              | 32.7 | 1.00                 |  |
| Low                                     | 575                  | 12.3 | 0.92 (0.81-1.04)        | 509                              | 33.6 | 1.07 (0.92-1.10)     |  |
| Moderate                                | 550                  | 11.5 | 0.86 (0.75-0.98)*       | 483                              | 32.1 | 1.02 (0.87-1.04)     |  |
| High                                    | 503                  | 12   | 0.91 (0.79-1.05)        | 438                              | 33.8 | 1.14 (0.95-1.02)     |  |
| Maternal agency<br>index                |                      |      |                         |                                  |      |                      |  |
| Lowest (reference)                      | 696                  | 15.4 | 1.00                    | 613                              | 35.6 | 1.00                 |  |
| Low                                     | 630                  | 13.5 | 0.87 (0.77-0.98)*       | 556                              | 35.5 | 1.02 (0.88-1.18)     |  |
| Moderate                                | 519                  | 10.8 | 0.73 (0.64-0.83)**      | 443                              | 31.7 | 0.91 (0.78-1.06)     |  |
| High                                    | 477                  | 9.8  | 0.68 (0.60-0.77)**      | 367                              | 28.0 | 0.77 (0.66-0.91)*    |  |
|   |                      |      |                         |                                  |      |                      |  |

Agustina et al, 2015

## Indonesian Action Plans for Food and Nutrition 2010-2015

- World Health Day 2015 highlights the importance of food safety which impacts both food and nutrition security and the global health agenda
- Gov released guidelines to avoid excessively used food additives of sweetener, and conducted the hazards material assessment in dietary intake.
- the Indonesian Action Plans for Food and Nutrition to improve nutritional status especially mothers and children by strengthening multi-sectoral and interprograms coordination and partnerships.

# Indonesian Integrated Food Safety System (IFSS)



- Food Safety in Indonesia
- Importantly, the Indonesian National Agency for Drugs and Food Control (NADFC)
- Introduced the integrated food safety system in 2003
- covering food intelligence, control and promotion

### Indonesian Rapid Alert System for food and feed –INRASFF (Badan POM)



## Strategy Food Safety programs initiatives by NADFC/Badan POM

- Ensure the implementation of food safety standards based on risk analysis (risk assessment expert committee on salmonella, infant formula and aflatoxin)
- food safety at school
- Food safety in the traditional market
- Food safety go to villages
- encourage innovative-appropriate technologies for processed food industry
- empower local governments in improving food control
- Increase quantity and quality of food inspectors.

### **Food Hygiene Practices**

- FOOD-BORNE DISEASES IS PREVENTABLE
- This can be done by regular FOOD SAFETY education or training.
- Cost-effective and sustainable
- Food safety education should be specifically targeted to this age group and designed to promote maternal empowerment on good foodhygiene practices and environment sanitation to improve child health.

### SEAMEO RECFON: Training Modul Food Safety for health professionals

- Training modules on Food safety for nutrition and health professionals
- WHO/ICD/SEAMEO cooperation.
- Translated and rolled out in 10 countries in SEA



## Way forward for Medical Association

- To share responsibility in these movements,
- Medical association, medical doctor and other health professionals should play critical roles in preventive food safety program/culture
- Promotive and preventive program:
  - Focus Food Safety education and control of foodrelated disease and outbreaks.
  - Specifically targeted to Med Education System, Primary doctor, Pediatrician, nurse, midwife, caregivers of young child age and food handlers
  - Guidelines for food safety practices

JMAJ, December 2015—Vol.58, No.4

### [Japan]

### Food Safety Measures in Japan\*1

Hideo KASAI1

The widespread outbreak of enterohemorrhagic E. coli O157 food poisoning that occurred in 1996 saw some 9,451 people infected with the bacteria and took the precious lives of 12.

Furthermore, the accident at the Fukushima Daiichi Nuclear Power Plant that occurred in March 2011 following the Great East Japan Earthquake led to increasing concerns about the impact of radioactive materials on food, due also to the influence of media reports.

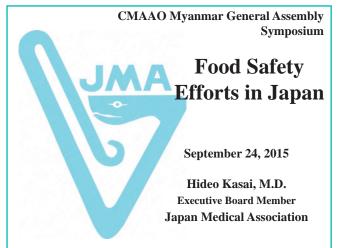
In addition, Japan still retains its traditional food culture of consuming raw meat, and in recent years there has been a string of food poisoning incidents due to this practice.

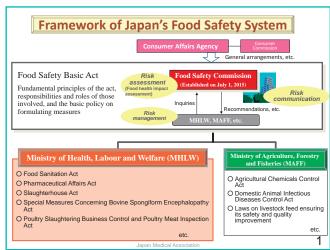
Against this background, the general public's concerns regarding food safety have been gradu-

ally increasing, and the Japanese Government has implemented various measures, including the enactment of the Food Safety Basic Act, launch of the Food Safety Commission, and establishment of the Consumer Affairs Agency.

Moreover, Japan's food self-sufficiency rate in FY 2014 was 39% based on calories (64% based on production value), and so the reality of the situation is that Japan's food supply is sustained by imports from various other countries; thus, safety management of imported foods (food-stuffs) is also an issue.

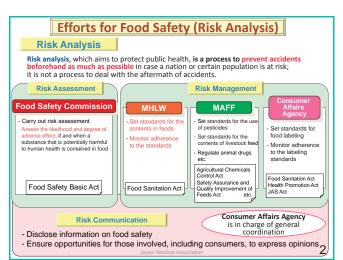
In this symposium, we will provide an outline of Japan's food safety measures as well as introduce some of the activities of the Japan Medical Association with regard to food safety.



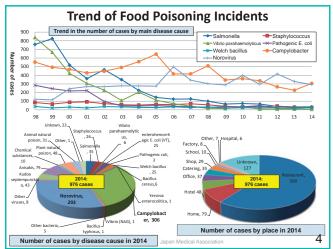


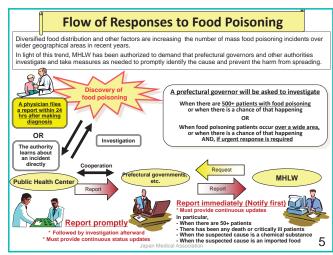
<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

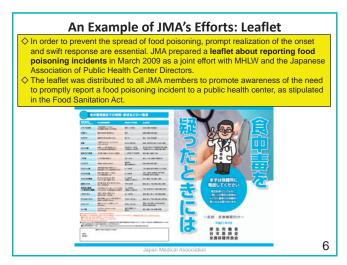
<sup>1</sup> Executive Board Member, Japan Medical Association (jmaintl@po.med.or.jp).

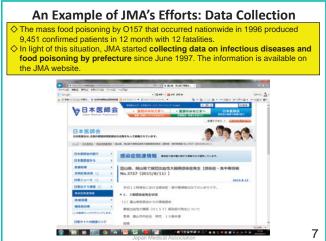


| Year/N | /lonth | Description   |
|--------|--------|---|
| 2008   | Jan    | Organic phosphate poisoning from frozen dumplings made in China   |
| 2009   | Sep    | Birth of Consumer Affairs Agency  |
| 2010   | May    | First ministerial conference for Japan–China Food Safety Promotion Initiative   |
|        | Mar    | In response to the TEPCO Fukushima Daiichi Nuclear Power Plant's accident, provisional regulation values for radioactive materials in food were established.  |
| 2011   | May    | Food poisoning by enterohemorrhagic E. coli O111 at a BBQ chain store   |
|        | Oct    | Establishment of a regulation standard for raw beef consumption (The consumption of raw beef liver was banned in July 2012.)  |
| 2012   | Apr    | Establishment of a new standard for radioactive materials in food (old: ≤5 mSv ⇒ new: ≤1 mSv)   |
| 2012   | Aug    | Mass food poisoning by O157 in pickled Chinese cabbage<br>(The health code for pickled food was revised in October of the same year.)   |
| 2013   | Feb    | Re-examination of import requirements (e.g., age in months, SRM) for imported beef (from USA, Canada, France, and Netherlands).   |
|        | Jul    | The inspection target age in months for BSE, which previously was a blanket testing, was set to 48-month old and older.   |
|        | Dec    | A pesticide (malathion) was found in frozen food.   |
| 2014   | Jul    | Discovery that a food processing company in Shanghai had been using expired chicken meat in their production lines. Discovery of suspected rodenticide in imported frozen smelt processed in Vietnam. |









### An Example of JMA's Efforts: Information System The market size for health food and supplements in Japan is estimated to be 1.5 trillion yen (124 hundred Million USD, FY 2012), indicating a strong interest in health among people. On the other hand, some cases of damage to health due to health food intake have been reported. JMA is trying to prevent damage from health food from spreading through its *Health Food Safety Information System project*. The project involves collecting relevant information from physicians that they learn through their daily practice, developing ways to address the issue at the JMA'S Safety Management for People's Living Committee, and giving feedback to clinical practice. Health Food Safety Information System Project Patients Self-evaluation for the activity Give feedback Assessment

### Outcome of JMA's Health Food Safety **Information System Project**

### Problems revealed:

- Health food itself may not have caused damage to health; excessive consumption is also likely to be the cause.
- Patients often do not inform their physicians that they are eating health food.
  - May interfere with identifying the cause of a disease, and could lead to a risk of interaction with medication.



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Rather than blaming specific products and/or suppliers, it is important to raise awareness among the public and physicians about the ingredients that damage health and how to use health food in one's diet in order to prevent damage from occurring.

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### **Problems with Health Food** from Healthcare Providers' Viewpoint

- Side effects, allergies, etc.
  - May contain ingredients effective for maintaining health (incl. unidentified ones) in condensed form
  - May contain active ingredients that are the same as those contained in pharmaceuticals (incl. those that are approved only by prescription or those that are not domestically approved yet).
- Interaction with medication
- It may reduce the efficacy of medication or cause side effects.
- It may cause a delay in ascertaining an interaction or identifying a cause when a patient is concealing his/her consumption of health food.
- Multiple and/or excessive consumption among the general public and patients
- A patient may be consuming various health foods at once.
- A patient may be consuming an excessive amount of health food.
- Over-advertising
  - A patient who believes the advertisement and publicity about the therapeutic effects of health food may miss a chance to seek medical attention
- · Physicians' lack of information about the hazardous effects of health food
- Physicians are not aware of the patients' status of health food consumption 10

Janan Medical Association

### JMA's Measures to Ensure Health Food Safety

### Alert the customers

- Make sure to eat 3 well-balanced meals a day
- Make sure to obtain necessary daily nutrients from your daily diet
- Be aware that health food is NOT a substitute for medication
- Be aware that the consumption of health food also has risks
- · Many health food items contain pharmaceutically active ingredients.
  - The more you consume for increased effect, the more the risk grows. • The medication you are taking could interact with health food ingredients.
- People often mistakenly believe that "food products are safe" or "natural ingredients are safe." Even the health food items derived from natural ingredients can still cause allergic reactions or interact with medications.
- In particular, the sick, children, pregnant women, the elderly, and people with allergies must be extremely cautious.
- If you feel that something is wrong, immediately consult your physician!
- Inform your physician that you are consuming health food.

Janan Medical Association

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### **Efforts in Environmental Health** relating to Pollution in Japan

- The period of high economic growth from the mid-1950s to 1970s produced severe environmental pollution, resulting in serious health issues. The socalled 4 Major Pollution-caused Diseases (Minamata disease, Niigata Minamata disease, Itai-Itai disease, Yokkaichi asthma) developed into a major social problem.
- The water quality in public zones of rivers and oceans were deteriorating all over Japan, and the government promoted legislation with various pollution prevention measures to address the pollution occurring nationwide
- The Basic Act for Environmental Pollution Control, aimed at implementing pollution management comprehensively and systematically, was established in 1967. Additional regulations and a penalty system with no probation were also introduced through new legislation or revision of existing laws in the 1970s. The foundation of the environmental policy of the government administration we have today was established during those years.

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### Legislations relating to **Pollution and Environmental Health**

• Water Pollution Control Act (1971)

The act aims to prevent polluting public water zones and ground water, protect and secure public health as well as their living environment, and safeguard the victims by stipulating the liability of business owners in the event that the sewage and liquid waste drain from their factories or workplaces negatively affect human health.

Basic Environment Act (1993)

The act stipulates basic ideas about environmental conservation and clarifies the responsibilities of the national and local governments, business owners, and the public for environmental conservation. Its aim is to promote environmental protection policy and contribute to ensure healthy and cultured living for the present and future generations.

Japan Medical Association

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### Demand that the Government Develops Proper Disposal Methods of Mercury Manometers and Thermometers

With the upcoming implementation of additional measures of the Minamata Convention on Mercury

### **Current Status**

- The Minamata Convention was adopted during the diplomatic conference of October 2013 to protect human health and environment from mercury and its compounds. Nations worldwide are currently making preparations toward the enforcement of the treaty.
- After its enforcement in 2020, the manufacturing, as well as import and export of mercury-containing products, will be banned, in principle.
- Mercury manometers and thermometers are still being used at many medical and healthcare facilities including nursing schools as well as in private homes. Confusion is likely to occur when the Minamata Convention on Mercury goes into effect

### JMA demand that the government...

- Provides a subsidy for proper disposal of mercury wastes, such as mercury manometers and thermometers, at medical and healthcare facilities including schools.
- 2. Expands the *Collect Mercury Manometers and Thermometers* Promotion Project that is currently carried out locally to a nationwide campaign.

Japan Medical Association

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### Thank you for your attention!



Japan Medical Association

anan Medical Association

JMAJ, December 2015—Vol.58, No.4

[Korea]

# Food Safety; How to Assess Chemical Risk? —With a Case Study of Mercury in Fish\*

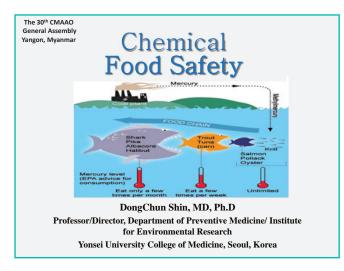
Dong Chun SHIN<sup>1</sup>

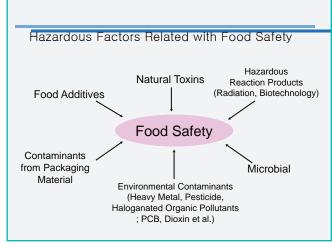
With the development of modern society, the issue of food safety has also become more complex and sophisticated from traditional microbial food poisoning to contamination from chemicals and food additives.

The chemical industry has developed in line with the development of human civilization from the second half of the 20th century, and as a result, chemicals have become ubiquitous to human life globally and are entering the human body through marine life food chain, and via air and water. The increase in trans-border export and import of food has also increased opportunities for exposure to contaminated food.

The chemical contaminants found in food that are most harmful would be heavy metals and endocrine disruptors, which may cause chronic toxicity in various organs as well as cancer and hormone disruptions through long-term exposure. However, in today's modern society, people are exposed to chemicals even from the fetal period, and cannot be free of chemicals throughout their lifetimes. Therefore, the question posed to medical science is what would be the acceptable level of contamination for humanbeings. To answer this question, an understanding of the relationship between exposure to contaminants and health effect would be necessary as well as a quantitative assessment based on a dose-response relations.

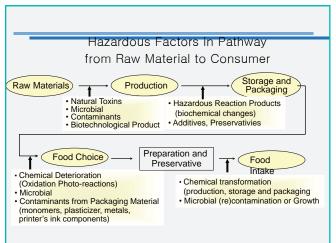
Unfortunately, it is rare to have enough data to conduct a quantitative assessment regarding the various chemicals we are exposed to. Given this reality, this paper introduces a case study on an assessment process using mercury, with the aim of discussing the role of medicine in the area of food safety and control, which is critical to public health. Also, this paper explores what are necessary for the government and society to develop and implement effective policies.

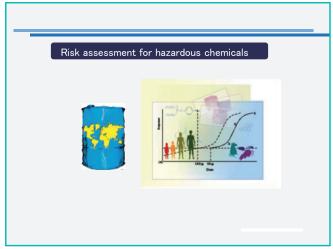


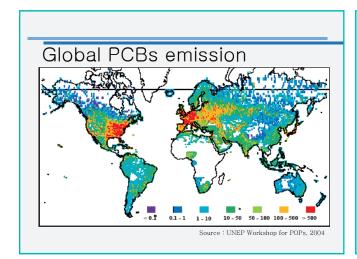


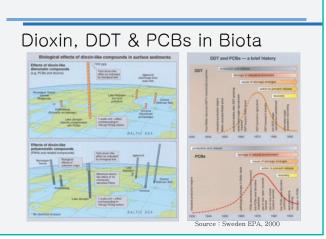
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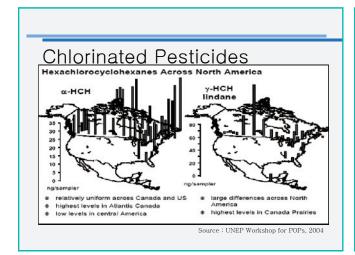
<sup>1</sup> Professor, Department of Preventive Medicine, Yonsei University Medical College; Chair, Executive Committee of International Relations, Korean Medical Association (intl@kma.org).

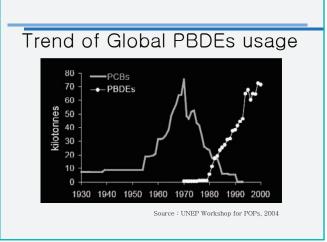


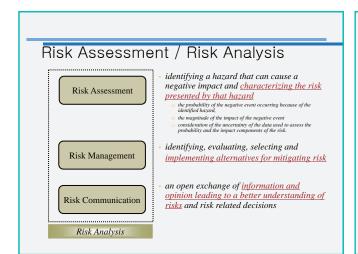






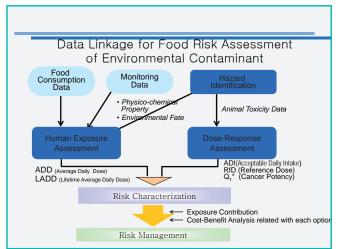


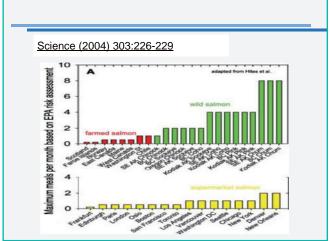




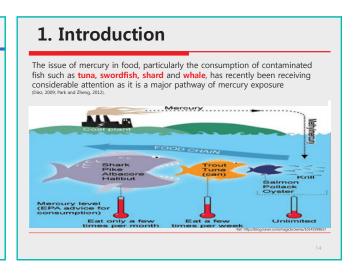
### Risk Management (US EPA, 1991)

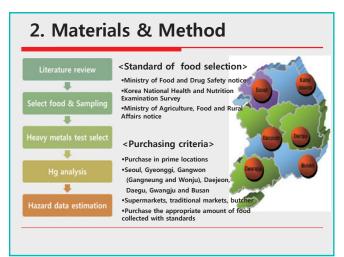
- Magnitude of the risk
  - The magnitude, or size, of the risk has a direct bearing on how rapidly the risk will be managed. Lifetime cancer risks greater than one in a hundred thousand (10<sup>-5</sup>), or one in ten thousand (10<sup>-4</sup>) are generally unacceptable. In most cases, when risks exceed these levels, EPA will take action to reduce these risks unless severe technical or economic constraints are present.

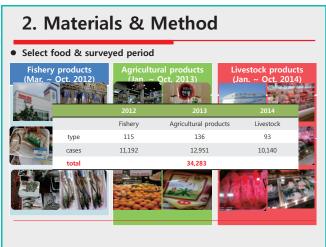


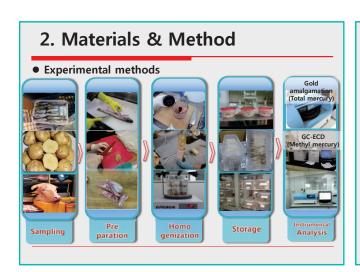


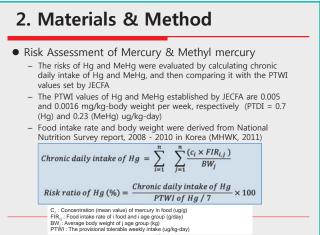
CASE STUDY for MERCURY(Hg): Korea

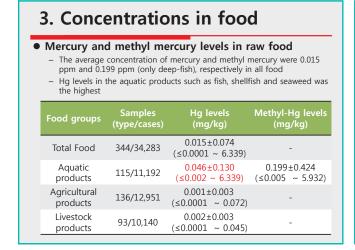


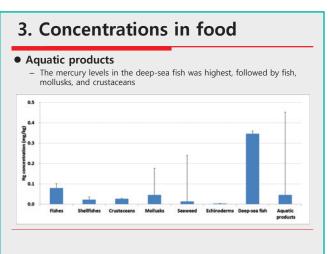






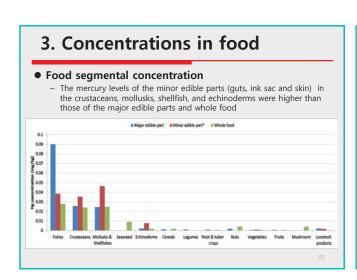






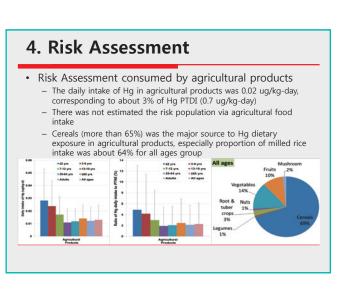
# Oncentrations in food Agricultural products The mercury levels in agricultural products was as follow; mushroom, nuts, cereals, and legumes But, Hg level in the mushroom was 10 times lower than the levels in the aquatic products OOO Cereals Legumes Root & tuber Nuts Vegetables Fruits Mushroom Agricultural Products OCCETERATE TO SET TO

# Concentrations in food Livestock products The mercury levels in the eggs of poultry except hen was highest and levels in the meat was less than 0.005 ppm But, Hg level in the poultry's egg was 100 times lower than the levels in the aquatic products



### 4. Risk Assessment Daily food intake rates Food intake rates based on National Nutrition Survey report during the survey period, 2008 - 2010 arget food (g/day) Total Food 26,041 1423.7 747.5 (53%) Aquatic 26,041 76.9 76.7 (99%) products Agricultural 26 041 837 9 574 0 (67%) products Livestock 26,041 100.6 96.8 (96%) products

# Risk Assessment consumed by aquatic products (1) The daily intake of Hg in aquatic products was 0.05 ug/kg-day, corresponding to about 10% of Hg PTDI (0.7 ug/kg-day) Risk population who intake more than PTWI was estimated as low as 1.5% Fish (more than 55%) and deep-sea fish (more than 25%) constituted the major contribution to total aquatic dietary exposure for all age groups | Deep-sea | Malaks | Mal



# Risk Assessment consumed by livestock products The daily intake of Hg in meat and eggs products was 0.003 ug/kg-day, corresponding to about 0.5% of Hg PTDI (0.7 ug/kg-day) The order of contributed food to the meat and eggs dietary exposure was beef (32%), hen's egg (30%), pork (28%) for adults and hen's egg (50%), beef (25%), pork (15%) for infant and child Made and a light of the light

### 4. Risk Assessment

- Risk Assessment consumed by all food products
  - In all aquatic, agricultural, meat and eggs products, Hg total daily intake and relative risk to the PTWI were less than 0.1 ug/kg-day and 14%, respectively. Thus Korean foods are believed to be safe from Hg
  - Aquatic products (76%) were major contribution to total dietary exposure of Hg

|                                     |           | Chronic daily intake<br>(ug/kg-day) |                  |                       |                       | Ratio of Hg daily intake to PTWI (%) |                  |                       |                       |
|-------------------------------------|-----------|-------------------------------------|------------------|-----------------------|-----------------------|--------------------------------------|------------------|-----------------------|-----------------------|
|                                     | Age group | All food                            | Aquatic products | Agricultural products | Livestock<br>products | All food                             | Aquatic products | Agricultural products | Livestock<br>products |
| Food<br>daily<br>intake             | All ages  | 1251.2                              | 52.8             | 572.8                 | 625.6                 | -                                    | -                | -                     | -                     |
| Chromic<br>daily<br>intake<br>of Hg | ≤2 yrs    | 0.096                               | 0.062            | 0.028                 | 0.006                 | 13.7                                 | 8.9              | 4.0                   | 0.8                   |
|                                     | 3-6 yrs   | 0.085                               | 0.056            | 0.024                 | 0.006                 | 12.2                                 | 8.0              | 3.4                   | 0.8                   |
|                                     | 7-12 yrs  | 0.080                               | 0.058            | 0.017                 | 0.004                 | 11.4                                 | 8.3              | 2.5                   | 0.6                   |
|                                     | 13-19 yrs | 0.054                               | 0.040            | 0.011                 | 0.003                 | 7.7                                  | 5.7              | 1.6                   | 0.5                   |
|                                     | 20-64 yrs | 0.070                               | 0.055            | 0.012                 | 0.003                 | 10.0                                 | 7.9              | 1.7                   | 0.4                   |
|                                     | ≥65 yrs   | 0.050                               | 0.035            | 0.014                 | 0.001                 | 7.1                                  | 4.9              | 2.0                   | 0.2                   |
|                                     | Adults    | 0.066                               | 0.051            | 0.012                 | 0.003                 | 9.5                                  | 7.3              | 1.7                   | 0.4                   |
|                                     | All ages  | 0.067                               | 0.051            | 0.013                 | 0.003                 | 9.6                                  | 7.3              | 1.9                   | 0.4                   |
|                                     |           | (100%)                              | (76.2%)          | (19.4%)               | (4.4%)                |                                      |                  |                       |                       |

[Malaysia]

### Food Safety in Malaysia\*1

Ashok PHILIP<sup>1</sup>

Malaysians take food very seriously, but are less concerned about food safety. This is not because of lack of incidents. In 1988 several children died from a combination of boric acid and aflatoxin poisoning. As late as 2008, boric acid could still be detected in many noodle samples.

As food safety has to be maintained from production to consumption, many ministries and agencies are involved in the process. Among them are the Ministry of Health, the Ministry of Agriculture, local authorities and Customs (for import and export of food. Religious authorities are involved, but more for ritual purposes than safety *per se*.

The main legislation regulating food safety is the Food Act 1983. This, with its attendant Food Regulations, came into force in October 1985. It aims to protect the public against food related hazards and frauds, as well as to promote and motivate the preparation, handling, distribution, sale and consumption of safe, high quality food.

Among the strategies for ensuring food safety are the following:

- Review and update legislation and strengthen infrastructure
- •Enhance collaboration between government agencies, consumer bodies, academia, industry and international organizations
- •Develop and train manpower resources
- •Educate consumers to raise their awareness of food safety issues.

Enforcement involves inspection and sam-

pling. A Core Prosecution Team ensures effective court action, while a Crisis Alert Team deals with acute situations. Premises handling, processing and serving food are inspected regularly and food samples are taken for microbiological, chemical and physical tests. Laboratories for these tests have been established nationwide and are expected to conform to standards as outlined in ISO 17025.

Consumer education is recognized as being a cornerstone of food safety, because educated consumers function as food safety inspectors in their own right. Measures at present rely heavily on schools and the mass media, but it can safely be said that the effect has not been very marked.

Attempts are being made to use IT to educate consumers, but a cursory examination of the Food Safety Information of Malaysia website shows it to be dated, not user-friendly and not really an effective educational resource.

In 2001 a Food Safety and Nutrition Council was set up that functions as the highest advisory body to the government on food safety. It is made up of government agencies and non-governmental organizations. This indicates that the government both understands the importance of food safety and recognizes the gap that still exists in achieving it. For a nation that exports seafood and fruits all over the world, while also being dependent on imported basic foodstuff, food safety is a matter of national security as well as public health.

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> President, Malaysian Medical Association (info@mma.org.my).





- Besides internal consumption, food safety issues also arise from the export and import of food
- Certificates for exported food are issued by the Health Ministry or Fishery Dept. (for live fish)
- For imports, the Health Ministry, Veterinary Dept. and Fishery Dept. are involved

### Food Safety In Malaysia

Malaysians love to eat!

Malaysians live to eat!

Food hygiene and safety have been low on the list of priorities

### Food Safety In Malaysia

- Malaysians prioritise taste over safety
- Food is sold in the most unlikely places
- · Little attention is paid by the public to food hygiene

### Food Safety in Malaysia

- Occasional dramatic episodes prompt transient concern
- In 1988, 13 children died after consuming noodles from the same manufacturer. Post-mortem studies eventually implicated excessive boric acid and aflatoxins.

- Boric acid is mainly used as an insecticide / pesticide, and also acts as a disinfectant.
- Its use in food is not permitted but even as late as 2008 a study carried out in Malaysia showed that it continued to be used



### Food Safety in Malaysia

- The main regulators and enforcers in food safety are:
  - Ministry of Health EU recognized Competent Authority for HACCP Certification (fish / fish products)
  - Ministry of Agriculture
  - Local Authorities
  - Customs (for import/export activities)
- · Religious authorities also get involved in making sure about halal status, but this is not strictly a food safety issue



### Food Safety in Malaysia

- The main legislation concerning food safety is the Food Act
- This Act, together with the Food Regulations 1985, came into force on 1st October 1985



### Food Safety in Malaysia

• The main aims of this legislation are to protect the public against food related hazards and fraud, as well as to promote and motivate the preparation, handling, distribution, sale and consumption of safe, high quality food



### Food Safety in Malaysia

- · In enforcing the Act and improving food safety, the strategies are
  - Review and update legislation and strengthen infrastructure
  - Enhance collaboration between government agencies, consumer bodies, academia, industry and international organisations
  - Develop and train manpower resources
  - Educate consumers to raise their awareness of food safety issues



### Food Safety in Malaysia

- · Enforcement is critical to ensuring efficacy of legislation
- · This includes inspection and sampling, licensing and interagency collaboration
- A Core Prosecution Team ensures effective prosecution.
- · A Crisis Alert Team exists to handle acute problems



- · Inspection of premises is done regularly, and cleanliness is graded on a standardized system. Premises which get Grade A are likely to display their certification, but as it is not mandatory, those with less stellar grades choose to remain
- · Food is sampled for microbiological, chemical and physical

### Food Safety in Malaysia

- Laboratories for testing food samples have been established nationwide.
- The labs are expected to conform to quality systems as outlined in ISO 17025



### Food Safety in Malaysia

- · Consumer education is a cornerstone of food safety.
- · Enforcement alone does not suffice.
- · If consumers do not know what to look for in food safety, unsafe outlets and products will continue to flourish.



### Food Safety in Malaysia

- Consumer education relies heavily on schools and on the mass media
- The importance of Information Technology is recognized in theory



### Food Safety in Malaysia

• Though IT's importance is recognized, going to the website of FoSIM (Food Safety Information of Malaysia) shows that updates are few and far between, and the site itself is not very user-friendly.



### Food Safety in Malaysia

- In 2001 the Food Safety and Nutrition Council was set up.
- It is the highest advisory body to the Government on Food Safety Issues.
- It is composed of Government Agencies and NGOs



- The Ministry of Health is taking steps to
  - Strengthen food legislation
  - Strengthen laboratory services
  - Increase research activities
  - Improve Quality Assurance program
  - Increase international collaboration



- In conclusion, legislative measures and technical resources for ensuring food safety are reasonably adequate, and measures are being taken to strengthen them
- $\, \bullet \,$  Public education is lacking, and a pathy towards food hygiene is the rule

Symposium "Ensuring Food Safety: An Important Challenge Today"

### [Myanmar]

### Food Safety in Myanmar\*1

Tun ZAW1

### Food Safety in Myanmar

Dr. Tun Zaw Director (Food Safety) Food and Drug Administration

### **Background**

- Legislations;
- The National Food Law (1997)
- The Amendment of the National Food Law (2013)
- Currently drafting new Food Law
- Standard of reference;
- Codex standards (and others).

### Food Safety Control Mechanism

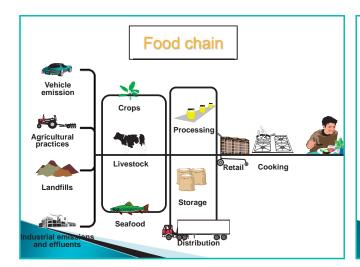
- Myanmar Food and Drug Board of Authority chaired by minister for health
- Central Food and Drug Supervisory
   Committee chaired by Director General, FDA
- The Department of Food and Drug Administration is the regulatory/implementing agency for food and drug safety, guided by above-mentioned steering bodies.

### Food Safety Control Mechanism

- Food safety control system in Myanmar is multiagency approach along the food-chain.
- In collaboration with other stakeholder departments and agencies;
- Department of Agriculture
- Livestock Breeding and Veterinary Department
- Department of Fisheries
- Department of Consumers Affairs
- Municipal Health Departments
- Custom Department
- · Disease Control Unit, Dept. of Public Health
- Consumers Organizations and etc.

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>&</sup>lt;sup>1</sup> Director (Food Safety), Food and Drug Administration (mmacorg@googlemail.com).



### Food Safety Control works

- GMP Inspection and Certification of domestic manufacturing facilities
- Food Import and Export Inspection and Certification
- Post-market Surveillance
- Switching to Risk-based approach

### Food Safety Control works

- Certified food manufacturing plants;
  - Bottled drinking water 816
  - Others 504
- Import Health Certificates
  - · Year 2014 8644
- Post-market surveillance
  - Year 2014-15 7469 market samples

### **Food Safety Hazards**

- Microbiological;
  - Staphylococcus
  - · Salmonella Shigella
  - Vibrio cholerae
  - E. coli

### Food Safety Hazards

- Chemicals;
  - Dyes
  - · Rhodamine B
  - Auramin O
  - Orange II
  - · Sudan
  - Non-permitted additivesBorax
    - · Salicylic acid
    - Formalin

### **Food Safety Hazards**

- Chemicals (contd.)
  - Contaminants;
  - · Pesticide residues
  - Toxins
  - Heavy metals

# Information, Education, Communication

- Public announcements
- Information networks
- Education/awareness program
- Education materials











# Information, Education, Communication



### **Needs and Gaps**

- Budget
- Institutional capacity
- Analytical capacity
- ▶ To strengthen risk analysis
- Concerted action among stakeholders

### Recent development

- Drafting new food law, expecting to submit upcoming parliament
- Just launch FDA website; www.fdamyanmar.gov.mm

### Way forward

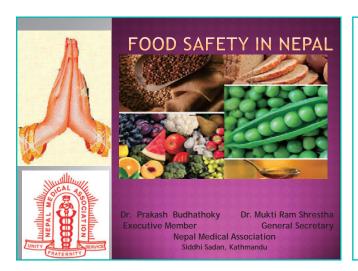
- Switching to risk-based food control system
- Strengthen capacity building for food control officials
- Develop food safety regulations
- Develop stakeholders network
- Decentralization of food safety control works to provincial FDAs

Thank you all!

### [Nepal]

### Food Safety in Nepal\*

Prakash BUDHATHOKY,1 Mukti Ram SHRESTHA2



### **FOOD SAFETY**

- defined as assurance that food will not cause harm to consumer when it is prepared and/eaten according to it's intended use (FAO/WHO,1997).
- Governance: Act of governing Food hygiene is important aspect of food safety.
- Five major principles of food hygiene as per WHO:
- Prevent contaminating food with pathogens spreading from people, pets, and pests.
- Separate raw and cooked foods to prevent contaminating the cooked foods.
- Cook foods for the appropriate length of time and at the appropriate temperature to kill pathogens.
- Store food at the proper temperature.
- Do use safe water and cooked materials.



### Knowing the truth,



- Over 200 diseases are caused by unsafe food containing harmful bacteria, parasites, viruses, chemical substances.
- 2 million deaths occur every year from contaminated food or drinking water.
- At least 56 million people globally suffer from one or more foodborne trematodiases.
- Access to sufficient amounts of safe and nutritious food is key to sustaining life and promoting good health.

### MAJOR ISSUES IN FOOD SAFETY ISSUES IN NEPAL

- Microbiological hazards
- Chemical hazards
- Surveillance of foodborne disease
- New technologies
- Capacity building

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> Exective Member, Nepal Medical Association (mail@nma.org.np).

<sup>&</sup>lt;sup>2</sup> General Secretary, Nepal Medical Association (mail@nma.org.np).

- Microbiological hazards
- significant increase have been reported over the past few decades.
- Salmonella spp., Campylobacter spp, enterohaemorrhagic Escherichia coli
- · bovine spongiform encephalopathy

### 2. Chemical hazards

- Chemicals are significant source of foodborne illness associated with immune, endocrine and developing nervous systems in the human system.
- natural toxicants such as mycotoxins
- environmental contaminants such as mercury, lead, radionuclides and dioxins
- naturally occurring chemicals in plants, such as glycoalkaloids
- pesticide and veterinary drug residues

### 3. Surveillance of foodborne disease

- Most of foodborn disease cases are not reportedimplementation of effective solutions often fail.
- Effective control of food-borne disease must be based on evaluated information.

### 4. New technologies

- potential public health effects of new technologies have raised concern.
- New technologies such as genetic engineering, irradiation of food, ohmic heating and modified atmosphere packaging.

### 5. Capacity building

- developing countries are poorly equipped to respond to existing and emerging food safety problems.
- lack technical and financial resources, an effective institutional framework, trained manpower
- sufficient information about the hazards and risks

### In Nepal

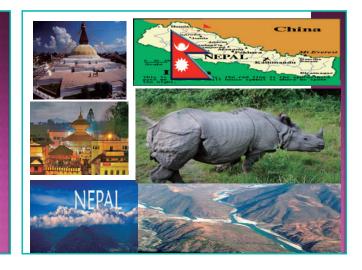
- system based on a multiple agencies executing different legislations related to food safety.
- the government agency for execution of food legislation (Food Act 1967) is Department of Food Technology and Quality Control.
- existing food legislation is not adequate to address the present day realities of food safety issues, because.
- not directed by the risk assessment principles.
- human resource in food control inadequate.
- food contaminants analysis facility is poor.
- food adulteration rate in Nepal is 15.6% for the fiscal year 2011, increasing with years and reached 25.
- . 80 percent packed food items imported.

### FOOD SAFETY-ACT/RULES AGENCIES/INSTITUTES

- Food Act 1966 DFTQC, MoAC
- Food Regulation 1970 DFTQC, MoAC
- Consumer protection Act 1998 DoC, MoCS Consumer protection Rules 2000 DoC, MoCS
- Slaughterhouse and Meat Inspection Act 1998 DLS, MoAC
- Slaughterhouse and Meat Inspection Rules 2000 DLS, MoAC Local self-governance Act 1999 Local Govts, MoLD
- Local self-government Rules 2000 Local Govts, Mol D
- Nepal Standards (Certification mark) Act 1980 NBSM, Mol Nepal Standards (Certification mark) Rules 1983 NBSM, Mol
- Standard weights and Measures Act 1968 NBSM, Mol
- Standard weights and Measure Rules 1978 NBSM, Mol Animal health and livestock service act 1998 DLS, MoAC
- Animal health and Livestock service Rules 2000 DLS, MoAC Breast feeding substances (Sales & Distribution control) Act 1992 DH/DFTQC, MoHP/MoAC
- Breast feeding substances (Sales & Distribution control) Rules 1994 DH/DFTQC,  $\mathtt{MOHP/MOAC}$
- lodized Salt (Production, Sale and Distribution) Act 1999 DH/DFTQC, MoHP/MoAC
- Feed Act 1976 DFTQC, MoAC
  Pesticide Regulation Act 1991 DoA, MoAC

### **GAPS - NEPAL**

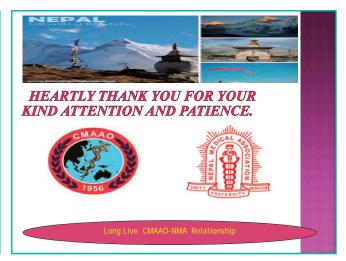
- Awareness to consumers and producers.
- Food safety policy.
- Surveillance systems of food-borne diseases.
- Risk assessments.
- Risk communication and advocacy.
- Capacity building.
- International and national cooperation.



#### CASTE, RELIGION AND TRADITIONS

- . Nepal has a great and rich variation in languages, religions, ethnic groups, culture and traditions.
- . but has a strong unity among these variations.
- ▶123 languages and▶ 128 ethnic groups
- . Hence, we can find unity in diversity in Nepal.

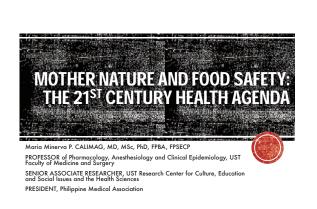




#### [Philippines]

# Mother Nature and Food Safety: The 21st Century Health Agenda\*

Maria Minerva P. CALIMAG<sup>1</sup>



# SAFETY HAZARDS IN FOOD PRODUCTS

#### GENERAL HAZARDS FROM FOODS

A variety of safety hazards are associated with foods produced by any method. These can be categorized from greatest to least hazardous by their probability to cause an adverse health effect as:

- pathogenic microorganisms,
- nutrient imbalances,
- naturally occurring toxicants,
- environmental and industrial chemicals, including pesticides,
- food and feed additives,
- food alterations associated with genetic modification.

This categorization was first proposed by Wodicka (1982).

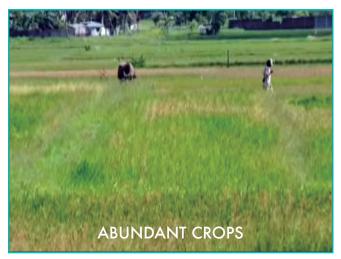






<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

¹ Professor of Pharmacology, Anesthesiology and Clinical Epidemiology, UST Faculty of Medicine and Surgery; Senior Associate Researcher, UST Research Center for Culture, Education and Social Issues and Health Sciences; President, Philippine Medical Association (philmedas@yahoo.com).





#### PATHOGENIC MICROORGANISMS

- The need to focus more heavily on pathogenic microorganisms, and to implement preventive approaches such as HACCP, was established and supported by studies conducted over the past 15 years by the National Academy of Sciences, the Government Accounting Office, and the USDA.
- In 1994, the Council for Agricultural Science and Technology estimated that 6.5 to 33 million cases of food-borne illness and up to 9,000 deaths occur each year because of food-borne illness and related problems. However, public support for change in the food safety system did not truly begin to emerge until the 1993 outbreak of food-borne illness associated with Escherichia coli O157:H7 in undercooked hamburgers.
- ■Thus, a comprehensive strategy for change was developed with HACCP and pathogen reduction as the centerpiece.



#### HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) REQUIREMENTS

- all slaughter plants should have standard operating procedures for sanitation;
- slaughter plants must test carcasses for generic Escherichia coli, an indicator of fecal contamination;
- all meat and poultry plants must implement HACCP systems as a means of preventing or controlling contamination from pathogens, as well as other hazards. Under HACCP, slaughter plants identify and evaluate the hazards that could affect the safety of their products and institute controls necessary to prevent those hazards from occurring or at a minimum, keep them within the acceptable limits;
- mandates performance standards for salmonella at slaughter and grinding plants.





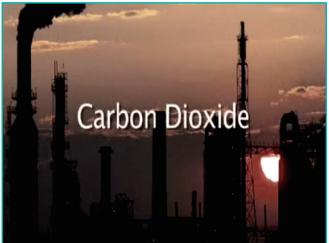


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#### **INCREASED POLLUTION**

- An undesirable consequence of the industrialization of agriculture and manufacturing is the release of chemicals to the environment. Not all food pollutants come from industrial processes, however. For example, dioxins and furans are contaminants released unintentionally into the environment as a result of both preindustrial combustion processes (e.g., the combustion of forests or brush) and modern combustion processes (e.g., industrial burning, landfill fires, structural fires) (IOM/NRC, 2003). Whether exposure to these pollutants has increased over the years depends on the pollutant, and the data needed to assess trends are often lacking (IOM, 2007).
- The bioaccumulation of pollutants in the food chain (e.g., methylmercury in seafood) has received a great deal of attention. The pollutants of concern may change over time as manufacturing processes evolve, but those that are persistent in the environment can be a chronic issue for public health and environmental agencies.











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# WATER AND WASTE MANAGEMENT

■ From a processing standpoint, water quality is an extremely important issue. Water is obviously a key input into all food production processes, and water is a critical ingredient and should be evaluated in the same way as any other product ingredient. We should assume responsibility to demonstrate that the water we use during food production meets drinking water standards





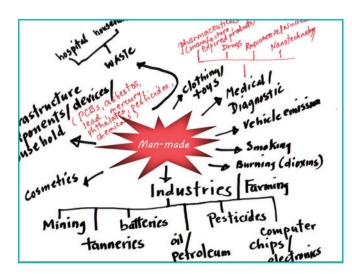




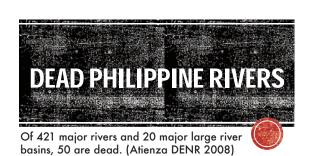
# CLIMATE CHANGE AND THE FOOD CHAIN

- Climate change is doubly relevant to the food enterprise: not only may climate change affect food yields, but food production may contribute to climate change by releasing a substantial amount of greenhouse gases, such as carbon monoxide and nitrogen monoxide (Stern, 2007). Stern (2007), among others, has highlighted serious concerns regarding the effects of climate change on future food security, especially for populations in low-income countries that are already at risk of food insecurity.
- Climate change can affect food systems directly, by affecting crop production (e.g., because of changes in rainfall or warmer or cooler temperatures), or indirectly, by changing markets, food prices, and the supply chain infrastructure—although the relative importance of climate change for food security and safety is expected to differ among regions (Gregory et al., 2005).









#### **DEAD RIVERS**

- Metro Manila (5): the Marikina River, the San Juan River, the Navotas-Malabon-Tenejeros-Tullahan (NMTT) River, Parañaque River and the Pasig River
- ■The DENR also classified 10 rivers outside of the metropolis as biologically dead. These are the Bocaue and Meycauayan rivers in Central Luzon; the Imus, Ylang-Ylang and Mogpog rivers in Southern Tagalog; the Malaguit and Paniqui rivers in the Bicol region; the Balili River in the Cordillera Administrative Region (CAR); and two rivers in Central Visayas namely the Butuanon and Guadalupe rivers

#### **DEAD RIVERS**

- ■Gozun said the biochemical oxygen demand (BOD) for Class C water should not exceed seven milligrams per liter. BOD refers to the amount of oxygen that is consumed by micro-organisms present in wastewater when discharged into a body of water.
- ■In addition, the dissolved oxygen (DO) present in Class C water should not be lower than five milligrams per liter to sustain aquatic life. According to the DENR, San Juan River has the highest BOD loading at 68 mg/l to a low of 54.8 mg/l against the DENR's standard of 7 mg/l. Its average DO level was at 2.4 mg/l.

#### **DEAD RIVERS**

■The Average DO level (ADL) of the Marikina River was pegged at 3.1 mg/l and its average BOD loading (ABL) was at 18.2 mg/l. The NMTT's ADL was at 3.6 mg/l and its ABL was at 22.3 mg/l; Parañaque River registered a 2.5 mg/l ADL and a 42 mg/l ABL; and the Pasig River posted a 3.1 mg/l ADL and a 10.7 mg/l.

## The Regulatory Climate for Mining in the Philippines \*

Philippine laws on natural resources are based on the Regalian Doctrine. Under this principle, the Constitution states: "All lands of the public domain, waters, minerals, coal, petroleum, and other mineral oils, all forces of potential energy, fisheries, forests or timber, wildlife, flora and fauna, and other natural resources are owned by the State." It follows that the exploration, development and utilization of mineral resources fall under the supervision and control of the State.

The Constitution grants the State the option to directly undertake mining activities or to enter into the different modes of mining agreements with Filipinos or 60% Filipino-owned corporations. This provision is interpreted as giving preference to Filipinos in the grant of mineral rights, privileges and concessions. For large-scale mining, the Constitution grants the government the option to enter into an agreement for either financial or for technical assistance from a foreign corporation.

#### The Mining Act of 1995

Under the Mining Act, all public and private lands are open to mining operations. It states: "all mineral resources in public or private lands, including timber or forestlands... shall be open to mineral agreements or financial or technical assistance agreement applications."

This provision has led to critics' contention that the law has virtually opened up the entire country to mining operations. The law declares areas covered by existing mining claims or that are deemed ecologically crucial as closed to mining operations. The latter includes old growth forests, watershed forest reserves, mangrove and mossy forests, national parks, bird sanctuaries and marine reserves



Saturday, February 2, 2008

#### Marinduque Mining Project: The Worst Mining Disaster in the Philippines



#### Background

In 1969, Marcopper Mining Corporation (MMC) began the mining copper operation in Marinduque, Philippines. With a US\$40-million loan from the Asian Development Bank (ADB), Placer Dome, Inc. managed and controlled MMC, promising 30,000 tons of run-of-mine output per day. Placer Dome, which is 40 percent owner of MMC, secured and guaranteed the loans from the ADB.

However, Marinduqueños experienced a series of environmental mining-related disasters in the last 30 years. From 1975 to 1991, Calancan Bay became the dumpsite for millions of tons of

nine tailings by Placer Dome's operation. MMC-built Mogpog river dam burst in 1993.



#### Mining in Negros: A Story of Plunder, Destruction and Dislocations

As in the rest of the country, mining has stripped bare Negros island's forest lands and scraped the bottom of the earth in search of precious minerals. Along with logging, it has been responsible for what Negros is today – an island threatened by constant flashfloods and other calamities that have killed thousands of people and inundated countless rural villages.

BY KARL G. OMBION and EDGAR A. CADAGAT



### Misery Mountain

In Diwalwal, Davao del Norte, gold is more precious than human lives.

by Sheila S. Coronel

THE MAIN street of Diwalwal, on the foggy slopes of Mt. Diwata in Davao del Norte, is a gushing stream of mine waste, discarded plastic and assorted filth. It stinks of piss and human

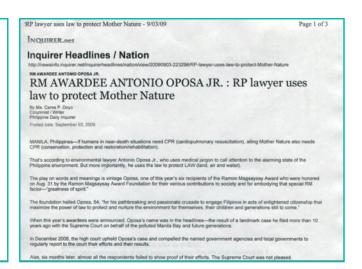


OUT OF THE DEPTHS. Teen-age miner

#### Manila Bay is identified as a pollution hotspot

The Manila Bay is the country's major hub and international gateway to its political, economic and social center. It is to the Filipino people, a natural heritage and a silent witness to the millennia of Philippine history and the venue of many historical events that helped shaped the Filipino culture and values. The Bay, with its semi-enclosed estuary facing the South China Sea, represents a vital national asset, providing a source of food, livelihood, employment, recreation, to an estimated 23 million Filipinos and a major source of economic benefit for the country. Along with its surrounding provinces, the Bay contributes an estimated 55% of the country's GDP and account for almost one third of the country's agriculture, fisheries and forestry production and 64 percent of the contribution of industrial and services sector to the GDP, respectively. It supports

fisheries and aquaculture as among the major sources of livelihood as well as activities in the following development areas: a) manufacturing industry; b) shipping and ports; c) agriculture;



#### Associations between Cognitive Function, Blood Lead Concentration, and Nutrition among Children in the Central Philippines

ORVILLE SOLON, PHD, TRAVIS J. RODELL, MD, MPH, STELLA A. QUMBO, PHD, ELIZABETH BUTRICK, MS, MPH, GLEN P. AYLWARD, PHD, MARFE LOU BACATE, MA, AND JOHN W. PEABODY, MD, PHD

Objective Because little is known about its effects on cognitive function among children in less-developed countries, we determined the impact of lead exposure from other nutritional determinants of cognitive ability.

Study design Data were from a cross-sectional population-based stratified random sample of 877 children (age 6 months-5 years) participating in the Quality Improvement Demonstration Study we are conducting in the Philippines. With data from validated psychometric instruments, venous blood samples, and comprehensive survey instruments, we developed multi-stage models to account for endogenous determinants of blood lead levels (BLLs) and exogenous confounders of the association between BLLs and cognitive function.

Results A 1 μg/dL increase in BLL was associated with a 3.32 point decline in cognitive functioning in children aged 6 months to 3 years and a 2.47 point decline in children aged 3 to 5 years olds. BLL was inversely associated with hemoglobin and folate levels. Higher folate levels mitigated the negative association between BLL and cognitive function.

Conclusions These population-based data suggest greater lead toxicity on cognitive function than previously reported. Our findings also suggest that folate and iron deficient children are more susceptible to the negative cognitive effects of lead. Folate supplementation may offer some protective effects against lead exposure. (J Pediatr 2008;152:237-43)

...roughly one-third of our randomly sampled children had elevated blood lead levels. using levels defined by the US Center for Disease Control, the maximum allowable cut off is 10ug/ml. we also found that variations across regions and provinces were wide.

Biliran and Leyte province in region 8 had the highest incidence of elevated blood levels (over 40 percent) while Siquijor and Negros Occidental had the lowest (less than 20 percent).

| PROVINCE             | Number of<br>Children | % of<br>Children<10<br>(Normal) |  |  |
|----------------------|-----------------------|---------------------------------|--|--|
| Capiz                | 143                   | 61.54                           |  |  |
| Iloilo               | 142                   | 76.06                           |  |  |
| Negros<br>Occidental | 150                   | 82                              |  |  |
| Bohol                | 134                   | 59.7                            |  |  |
| Cebu                 | 151                   | 68.21                           |  |  |
| Negros<br>Oriental   | 140                   | 58.57                           |  |  |
| Siquijor             | 47                    | 85.11                           |  |  |
| Camiguin             | 49                    | 75.51                           |  |  |
| Biliran              | 49                    | 53.06                           |  |  |
| Leyte                | 264                   | 57.2                            |  |  |
| Eastern Samar        | 151                   | 65                              |  |  |
| ALL                  | 1,389                 | 65.95                           |  |  |

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#### A Disaster Waiting to Happen

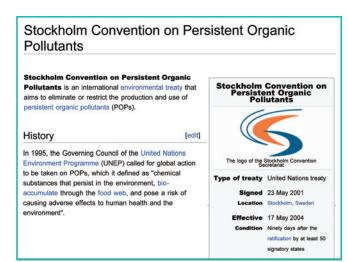
A Disaster Watting to Happen
Pandacan is a residential reighbourhood of the
city of Manila in the Philippines where Shell
owns a massive oil and gas depot. Shell
refuses to relocate its depot. Shell refuses to
relocate its depot, despite legislation requiring
them to do so. Over the past year, Pandacan
has been the site of an ongoing battle between
residents and Shell (and two other oil
companies, Caltex and Petron) regarding the
companies' refusal to remove the oil and gas
depots located on 33-hectares of land.

Philippines'activist exposes truth about Shell's oil depot at 2003 Shell AGM Hope Esquillo Tura, a member of the United Front to Oust the Oil Depots (UFO-OD), travelled to the 2003 Shell AGM in London where she presented community concerns for the continued presence of Shell's oil depot was circumventing a city ordinance that requires its removal. She explained that Shell had used its significant influence to secure a special permit to negretar entire then respect and comple with significant influence to secure a special permit to operate, rather than respect and comply with the local ordinance. At the AGM, Sir Philip Watts announced that Shell would protect the local community by creating a "buffer zone" between the oil depots and nearby residents. However Hope exposed the misleading nature of this announcement, pointing out that the so-called "buffer zone" was only going to be a few meters wide.

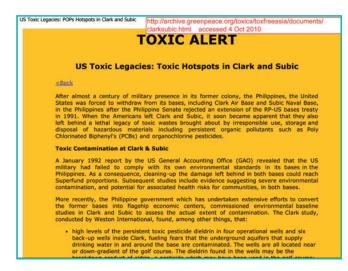
























| Country      | Annual<br>Internal<br>Renewable<br>(km3) | Annual<br>Withdrawal<br>(km3) | % of<br>Water<br>Resources | Sectoral Withdrawal (%) |            |             |  |
|--------------|--|-------------------------------|----------------------------|-------------------------|------------|-------------|--|
|              |  |                               |                            | Domestic                | Industry   | Agriculture |  |
| Bangladesh   | 2,357.0                                  | 22.50                         | 1                          | 3                       | 1          | 96          |  |
| Bhutan       | 95.5                                     | 0.02                          | 0                          | 36                      | 10         | 54          |  |
| Cambodia     | 496.1                                    | 0.52                          | 0                          | 5                       | 1          | 94          |  |
| India        | 2,085.0                                  | 380.00                        | 18                         | 3                       | 4          | 93          |  |
| Indonesia    | 2,530.0                                  | 16.59                         | 1                          | 13                      | 11         | 76          |  |
| Laos         | 270.0                                    | 0.99                          | 0                          | 8                       | 10         | 82          |  |
| Malaysia     | 456.0                                    | 9.42                          | 2                          | 23                      | 30         | 47          |  |
| Myanmar      | 1,082.0                                  | 3.96                          | 0                          | 7                       | 3          | 90          |  |
| Nepal        | 170.0                                    | 2.68                          | 2                          | 4                       | 1          | 96          |  |
| Philippines  | 323.0*                                   | 29.50                         | 9                          | 18                      | 21         | 61          |  |
| Singapore    | 0.6                                      | 0.19                          | 32                         | 45                      | 51         | 4           |  |
| Sri Lanka    | 43.2                                     | 6.30                          | 15                         | 2                       | 2          | 96          |  |
| Thailand     | 179.0                                    | 31.90                         | 18                         | 4                       | 6          | 90          |  |
| Viet Nam     | 376.0                                    | 28.90                         | 8                          | 13                      | 9          | 78          |  |
| Source: WRI, | 1996-Data Table                          | 13.1.                         | -                          | = *479 km               | 3 (AQUASTA | T, 2007.)   |  |

#### TABLE 2 - SUMMARY OF OBSERVED IMPACTS OF CLIMATE CHANGE ON THE WATER RESOURCES SECTOR IN SOUTHEAST ASIA

(ADB, Economics of Climate Change, April 2009)

| Increasing temperature  | Increased evapo-transpiration in rivers, dams, and other water<br>reservoirs leading to decreased water availability for human<br>consumption, agricultural irrigation, and hydropower generation  |
|---|--|
| Variability in precipitation<br>(including El Niño Southern<br>Oscillation) | Decreased river flows and water level in many dams and water reservoirs, particularly during El Niño years, leading to decreased water availability; increased populations under water stress - Increased stream flow particularly during La Niña years leading to increased water availability in some parts of the region - Increased runoff, soil erosion, and flooding, which affected the quality of surface water and groundwater. |
| Sea level rise  | - Advancing saltwater intrusion into aquifer and groundwater resources leading to decreased freshwater availability  |
| Sources: Boer and Dewi (2008)   | , Cuong (2008), Ho (2008), Jesdapipat (2008), Perez (2008).  |

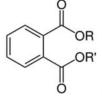
#### TABLE 3 - TOTAL RENEWABLE WATER **RESOURCE PER CAPITA/DAY**

| Year | Population | Per capita<br>withdrawal     |             |  |  |  |  |
|------|------------|------------------------------|-------------|--|--|--|--|
| 1975 | 42,070,660 | 31,191 liters/<br>person/day |             |  |  |  |  |
| 1990 | 60,703,206 | 21,616 liters/<br>person/day |             |  |  |  |  |
| 1995 | 68,616,536 | 19,125 liters/<br>person/day | 1,106 l/p/d |  |  |  |  |
| 2000 | 76,506,928 | 17,154 liters/<br>person/day | 1,020 l/p/d |  |  |  |  |
| 2005 | 85,261,000 | 15,800 liters/<br>person/day | 1,102 l/p/d |  |  |  |  |
| 2007 | 88,574,614 | 14,816 liters/<br>person/day |             |  |  |  |  |



#### PHTHALATES

- · Esters of phthalic acid and are mainly used as plasticizers (substances added to plastics to increase their flexibility, transparency, durability, and longevity).
- Personal-care items containing phthalates include perfume, eye shadow, moisturizer, nail polish, liquid soap, and hair spray.



Article \*\*\*

Identification of Phthalate Esters in the Serum of Young Puerto Rican Girls with Premature Breast Development

Premature breast development (thelarche) is the growth of mammary tissue in girls younger than 8 years of age without other manifestations of puberty. Puerto Rico has the highest known incidence of premature thelarche ever reported. In the last two decades since this serious public health anomaly has been observed, no explanation for this phenomenon has been found. Some organic pollutants, including pesticides and some plasticizers, can disrupt normal sexual development in wildlife, and many of these have been widely used in Puerto Rico. This investigation was designed to identify pollutants in the serum of Puerto Rican girls with premature thelarche. A method for blood serum analysis was optimized and validated using pesticides and phthalate exters as model compounds of endocrine-disrupting chemicals. Recovery was > 80% for all compounds. We performed final detection by gas chromatography/mass spectrometry. We analyzed 41 serum samples from thelarche patients and 35 control samples. No pesticides or their metabolite residues were detected in the serum of the study or control subjects. Significantly high levels of phthalates (dimethyl, diethyl, dibutyl, and di-(2-ethylhexyl)) and its major metabolite mono-(2-ethylhexyl) phthalate were identified in 28 (68%) samples from thelarche patients. Of the control samples analyzed, only one showed significant levels of di-isoocyl phthalates. The phthalates that we identified have been classified as endocrine disruptors. This study suggests a possible association between plasticizers with known estrogenic and antiandrogenic activity and the cause of premature breast development in a human female population. Key words endocrine-disrupting chemicals, phthalate esters, premature thelarche. Environ Hadhe Perper (188895-900 (2000). [Online 8 August 2000] bestellebaset nides with multiple and properties and properties than the security and the cause of premature breast development in a human female population. Key words endocrine-disrupting chemicals, phthalate esters, prematur

#### Altered Semen Quality in Relation to **Urinary Concentrations of Phthalate Monoester and Oxidative Metabolites**

Hauser, Russ; Meeker, John D.; Duty, Susan; Silva, Manori J.; Calafat, Antonia M.

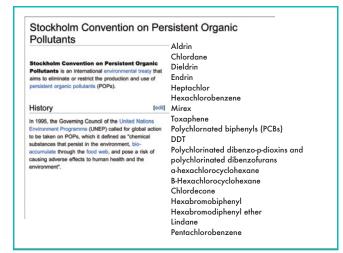
#### Abstract

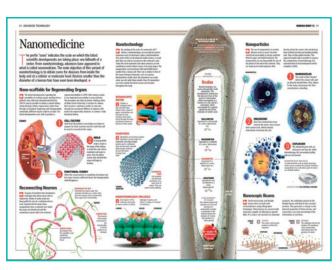
Epidemiology:
November 2006 - Volume 17 - Issue 6 - pp 682-691
doi: 10.1097/01.ede.0000235996.89953.d7
Original Article

Background: Phthalates are multifunctional chemicals used in a variety of consumer, medical, and personal care products. Previously, we reported dose-response associations of decreased semen quality with urinary concentrations of monobutyl phthalate (MBP) and monobenzyl (MBzP) phthalate, which are metabolites of dibutyl phthalate and butylbenzyl phthalate, respectively. The present study extends our work in a larger sample of men and includes measurements of di(2-ethylhexyl) phthalate (DEHP) oxidative metabolites.

Conclusion: The present study confirms previous results on the relationship of altered semen quality with exposure to MBP at general population levels. We did not find associations between semen parameters and 3 DEHP metabolites.

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# NANOTECHNOLOGY: HOW SAFE/DANGEROUS?

- Present in consumer products:
  - ■In Cosmetics creams & sunscreens
  - Appliances
  - Clothes
  - Supplements
- Unlabeled
- Unregulated
- Lack of adequate assessment tools

http://www.nanotechproject.org/ inventories/consumer/



#### NANOTOXICITY

- Exceptionally large relative surface area creates increased surface reactivity and enhanced intrinsic toxicity [See, e.g., Andre Nel et al., Toxic Potential of Materials at the Nanolevel, Science 311, 622-623 (2006)]
- Many types of nanoparticles have proven to be toxic to human tissue and cell cultures, resulting in oxidative stress, inflammatory cytokine production, DNA mutation, and even cell death [See, e.g., Friends of the Earth, Nanomaterials, Sunscreens and Cosmetics: Small Ingredients, Big Risks (May 2006); R. Dunford et al., "Chemical Oxidation and DNA Damage Catalysed by Inorganic Sunscreen Ingredients," FEBS Letters , 418, 87-90 (1997)]

# CHANGES IN CONSUMER BEHAVIOR

- With an increasingly global food market, consumer expectations and behaviors with regard to food have changed dramatically over the past hundred years.
- Consumers have grown to expect a wide variety of foods, including exotic and out-of-season foods. As a result, the consumption of fresh fruits and vegetables has increased (IOM/NRC, 1998) and is expected to continue to do so: per capita fruit consumption is predicted to grow in the United States by 5-8 percent by 2020, with a smaller increase predicted for vegetables (Lin, 2004).
- Additionally, consumers are spending more money on food away from home, which accounted for 48.5 percent of total food dollars, or approximately \$565 billion, in 2008 (ERS, 2010).







[Singapore]

# Ensuring Food Safety: An Important Challenge Today\*

Bertha WOON<sup>1</sup>

Recently in July 2015, a message regarding Group B Streptococcus (GBS) in raw fish started spreading. The Ministry of Health (MOH), National Environment Agency (NEA), and Agri-Food & Veterinary Authority (AVA) acknowledged the message, and started investigating.

MOH sought help from doctors, asking them to report cases of GBS infection, to help the authorities investigate a possible link between the bacterial infection and consumption of raw fish.

After investigating, GBS bacteria was found in 2 types of fish; Song fish, also known as Asian Bighead Carp; and Toman fish, also known as Snakehead fish.

Foodstall holders were asked to temporarily stop selling raw fish dishes using fish which have been found with traces of GBS bacteria. 238 cases of GBS infections were detected during the first 6 months of 2015, compared with an average of 150 cases per year in the past 4 years.

GBS is a common bacterium found in the human gut and urinary tract of about 15-30% of adults without causing disease. However, GBS may occasionally cause infections of the skin, joints, heart and brain. The bacteria can also be found in fish, but this does not pose an issue if the fish is well cooked before consumption.

A check of the list of circulars, food alerts, forum replies, and press releases on the AVA website provides a "taste" of the global challenge of food safety.

- •Circular to Supermarket Retailers (engaging local food processors to carry out re-packing of food and labelling requirements)
- AVA ensures safety of disposable utensils
- •Voluntary recall of wine products from South Africa by Distell Limited

- •Lifting of Restriction on Imports of Poultry and Poultry Products from Hungary
- •Import of Frozen Pork from Malaysia
- •Lifting of Restriction on Import of Frozen Pork from AVA-approved Establishments in Poland
- •Outbreak of Avian Influenza (AI) in Nebraska, USA
- •Outbreak of Highly Pathogenic Avian Influenza (H5N8) in Indiana
- •Plastic packaging for food tested for food safety
- •Outbreak of Avian Influenza (AI) in North Dakota, USA

How can doctors help? They can alert the food safety authority if they discover trends of multiple cases of food poisoning with similar characteristics. Doctors can also provide opportunistic education on food safety, when patients report related symptoms, e.g. stomach upset. They can also consider creating or supporting campaigns or advocacy efforts [e.g. writing to the press] to lobby government about improving food safety.

In the international arena, the Codex Alimentarius, setup by the Food and Agriculture Organization and World Health Organization, compiles standards, codes of practice, guidelines and recommendations relating to food safety. For example,

- •Codex standards on Maximum residue limits (MRLs) for residues of pesticides or veterinary drugs in foods
- •Codex codes of practice on hygienic practice, e.g. Hazard Analysis and Critical Control Point (HACCP) food safety management system

Some of the issues over the horizon include genetically modified food & safety. At the moment, there are no internationally-agreed recommendations on the food labelling of GM

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> Board Member, Singapore Medical Association (sma@sma.org.sg).

foods. Governments are therefore applying their own regulations.









#### After investigating (2)...

- $\bullet$  GBS is a common bacterium found in the human gut and urinary tract of about 15-30% of adults without causing disease. However, GBS may occasionally cause infections of the skin, joints, heart and
- The bacteria can also be found in fish, but this does not pose an issue if the fish is well cooked before consumption
- http://www.straitstimes.com/singapore/health/gbs-bacteria-found-in-two-types-of-fish-what-you-need-to-know-about-them-0

#### Food Safety in Singapore

- - Agri-Food & Veterinary Authority of Singapore [under the Ministry of National Development]
- Partners

  - National Environment Agency [under the Ministry of the Environment & Water Resources]

## A "taste" of the global challenge Circular to Supermarket Ratellers (engaging local food processors to carry out or pucking of food and labelling sequences). APRIL PAR Among A response er ( 1 2 ) ))

#### How can doctors help?

- Surveillance
  - alert food safety authority if one discovers trend of multiple cases of food poisoning with similar characteristics
- Education
  - opportunistic education on food safety, when patients report related symptoms, e.g. stomach upset
- Advocacy
  - consider creating/supporting campaigns or advocacy efforts [e.g. writing to the press] to lobby government about improving food safety

# How can doctors (and science) help? (2)

- The case of the raw fish again
- The case of the raw hish again
   Scientists from A\*STAR's Genome Institute of Singapore (GIS), together with Tan Tock Seng Hospital and the Singapore Infectious Diseases Initiative have sequenced the strain of Group B Streptococcus (GBS) responsible for the increase in severe infections observed in Singapore this year
- With the sequence, the team of scientists are now working to develop new tests for the detection of this bacteria strain

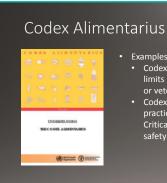


#### How can doctors (and science) help? (3)

sequence will assist in the development of a simpler test that would enable detect the bacteria faster and more cost effectively

#### The international arena

- Codex Alimentarius
- setup by Food and Agriculture Organization and World Health Organization
- compiles standards, codes of practice, guidelines and recommendations
- http://www.codexalimentarius.org



- Codex standards on Maximum residue limits (MRLs) for residues of pesticides
- or veterinary drugs in foods

  Codex codes of practice on hygienic practice, e.g. Hazard Analysis and Critical Control Point (HACCP) food safety management system

#### Issues over the horizon

- Genetically modified food & safety
- "At the moment, there are no internationally-agreed recommendations on the food labelling of GM foods. Governments are therefore applying their own regulations."

#### [Taiwan]

# **Ensuring Food Safety: An Important Challenge Today**

#### —Food safety management in Taiwan—\*1

Ching-Chuan SU,1 Da-Chen CHU2

World Health Day was celebrated on 7 April 2015, with World Health Organization (WHO) highlighting the challenges and opportunities associated with food safety under the slogan "From farm to plate, make food safe." As the WHO puts it so succinctly-food safety is a shared responsibility. Like any other country, food safety is highly concerned in Taiwan. By collecting the information of different stages of the food chain and following the from-farm-totable principle, it allows Taiwan Food and Drug Administration (TFDA) to have a better understanding of the food chain as the quality and safety of food depend on the efforts of everyone involved in the complex chain of food production, processing, transport, preparation and consumption.

TFDA manages food safety in the following aspects. First, optimize food safety laws and regulation. The latest amendment was published on 4 February 2015, some key points including the establishment of a dedicated interagency food safety commission, strengthened management measures on food industries and increased fines and criminal charges. Second, enforce source management. Certain designated products need to make a registration before putting on the market, such as food additive, special dietary

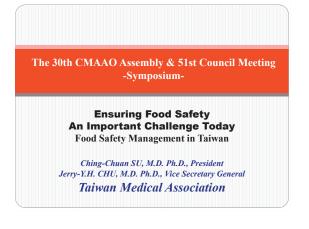
food for people having certain disease. Furthermore, promote food safety global cooperation, enhance supervision and control over food products from farm to table, reinforce ability of risk assessment, and enhance consumer protection and risk communication.

For rapid exchange information, we establish Taiwan international food safety authority network (TIFSAN) to combine and handle all the food safety information from pre-market control, international incidents, border control, postmarket control and information from business or consumer. We hope we will be able to connect with other food safety information rapid alert systems in the world. Considering the food safety management is more complex these days, our challenges and focus would be the emerging food safety issues, gaps between the management and general public's expectation, increasing amount of imported food, the need of capacity building, and short of resources. Meanwhile, our prospects is to establish an integrated, accountable and science-based regulatory system to ensure safety and quality of food products, and also build up the official communication and collaboration channel with relevant international agencies.

<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> President, Taiwan Medical Association (intl@tma.tw).

<sup>&</sup>lt;sup>2</sup> Superviser, Taiwan Medical Association (intl@tma.tw).



#### **Outline**

- Food Safety Management in Taiwan
- Challenges and Future Prospect
- Organization of TFDA

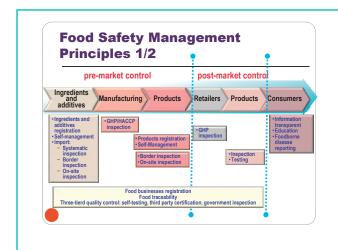


# Food Safety Management in Taiwan

#### **Food industry in Taiwan**

- Over these years, the number of Taiwan's food factories is around 5,000 to 6,000 establishments. At the end of 2012, there are 5,235 establishments.
- According to the information from Taiwan's Ministry of Economic Affairs and Statistics Department, the output value of Taiwan's food industry is 6,412 billion(NT\$) in 2013, which is one of the important manufacturing industries in Taiwan.
- Food imports reached 2,080 billion(NT\$) in 2013, representing a slight growth of 1.5% in 2012. Key growth items include slaughtering meat, dairy products, baked cereal products, animal and vegetable oils, and non-alcoholic beverages.

(ITIS Food Industry 2014)





#### **Food Safety Laws and Regulations**

- Act Governing Food Safety and Sanitation
- Food safety and sanitation
- Food quality
- Regulations were developed according to this Act.
- Principles for establishing food safety regulations : Follow the SPS Agreement
- Scientific evidence: result of risk assessment, regulatory reference of other countries, case of practical condition, analytical method, etc.
- International standards are adopted if assessed to be satisfactory
- ✓ Codex standards
- ✓ Major trading partners

#### **Interagency Coordination**

- Board of MOHW(TFDA), COA and EPA
  - TFDA: Food products.
  - COA: Raw agriculture materials on farms and slaughterhouses.
  - EPA: Contaminants in water, soil.

#### • Food Safety Committee under Executive Yuan

- Established in June 2009(Food and Drug Safety Committee),
   Premier of the Executive Yuan is the chair to negotiate the related policies among agencies.
- Food Safety Office under Executive Yuan
  - Established in October 2014, responsible for supervising and coordinating the promotion of inter-ministerial food safety management.





#### **Challenges and Focus**

- The emerging food safety issues
- \*Gaps between the management and general public's expectation
- Increasing amount of imported food
- \*The complexity for food safety management
- \*Ability of food industry
- **Short of resources**
- &Capacity buildings are required



#### **Future Prospect**

Eight action plans for Act Governing Food Safety and Sanitation:

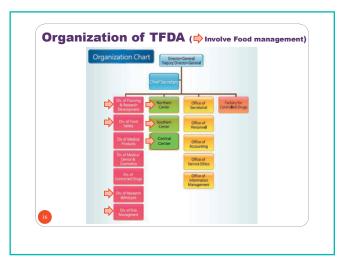
- Strengthen registration system in food business.
- Improve food tracking and tracing system.
- Control the source of food additives.
- Establish a self-management mechanism for food businesses.
- Complete genetically modified food ingredients management.
- Encourage to report illegal activities.
- Significantly increase the penalties.
- Establish a food safety protection fund.





## Food Safety Management Organizations

- TFDA streamlines the food safety, pharmaceutical, medical devices & cosmetics, and analysis affairs and operates on January 1, 2010.
- TFDA develops the policies and regulations for food safety management, and takes charge of border inspection on imported food.
- Local health bureaus conduct the post-market inspection and testing, TFDA coordinates health authorities' food safety measures.
- Interagency network for food safety is developed.



#### **Responsibilities of Divisions Centers**

- Division of Food Safety
- > Food safety and sanitation policies, laws and regulations.
- \* Centers for Regional Administration
  - > The inspection at ports-of entry for food importing; coordination of post-market inspection and testing for local health bureaus.
- Division of Risk Management
  - Organizational risk management, preparedness and response to emergency events; the accreditation of food laboratories.
- \* Division of Research and Analysis
  - > Development of testing methods for food safety and sanitation



#### [Thailand]

# Ensuring Food Safety: An Important Challenge Today\*

Kidaphol WADHANAKUL<sup>1</sup>









<sup>\*1</sup> This article is based on a presentation made at the Symposium "Ensuring Food Safety: An Important Challenge Today" held at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> International Relations, Medical Association of Thailand (math@loxinfo.co.th).



The Ministry of Public Health Thailand, and related 12 agencies in food safety and quality control system ("Good Health Start Here" project) set a national food safety emergency response plan for incidents of food safety, either accidental or Farmers Produces intentional, and caused by

- \*biological
- \*chemical
- \*radio nuclear or food hazards

contaminated in water and raw materials.





#### **Medical Association of Thailand**

| บระเทศ      | ระดับการพัฒนา  | MAN FSER                            | SOP/éjile   | ระบบการสื่อสารร้อมูล |      |   | แนวพาะการ   |
|-------------|--|-------------------------------------|---|----------------------|------|---|---|
|             | TERMINI FSER   |                                     |   |                      |      | อื่นๆ                                   | พิคค่อสื่อสาร   |
| บังคลาเพศ   | ฉบับร่าง   | g                                   | มีแผนการจัดการ<br>ที่ใกล้เคียง                              | ũ                    | ū    |   | มีการสื่อสารไปยัง<br>ประชาชน                          |
| บรูใน       | มีในระดับท้องถิ่น<br>และประเทศ   | ไม่มี                               | SOP ของการเรียก<br>สินสินค้า                                | bis                  | g    | IHR, AFSN,<br>IPPC, OIE                 | มีกรณีกาวะจุกเฉิบความ<br>ปลอดภัยด้านสุขภาพ<br>ประชาชน |
| กับทูขา     | biil   | الاندا                              | laisi   | laid                 | bis  |   | biil  |
| อินโคนีเซีย | ระดับท้องถิ่นและ<br>ประเทศ   | มีร่วมมือกับ<br>Indonesia-<br>RASFF | g   | g                    | g    | IHR, AFSN,<br>IPPC, OIE                 | g   |
| สาว         | ในประเทศ   | 3                                   | laisi   | biil                 | biii |   | (*)   |
| มาเลเจีย    | ฉบับร่างครั้งที่ 2   | g                                   | >20 ฉบับ  | ũ                    | ū    |   | เว็บไซต์ FOSIM  |
| lns         | <ul> <li>มี ระดับประเทศ</li> <li>กำลังร่าง ระดับ</li> <li>จังหวัด</li> </ul> | ā                                   | -ใช้รูปแบบของ<br>แต่ละหน่วยงาน<br>-ยังไม่มีของ<br>ระดับขาติ | ถ                    | ā    | FAST,<br>ARASFF,<br>AFSN<br>Thai- RASFF | เว็บไซด์ ของแต่ละระบบ                                 |

หมายเหตุรายละเฉียด ลำย่อ

1) ARASF: ASEAN Rapid Hart System for Food and Feed

(ราบบนจึงเดือนตำนายารปล่อลดีขอาหารและอาหารตัดร้องอาเรียบ

คิดสามความปล่อลดีขอเละแก้ไขปัญหาสินคำเกษตรีให้กับประเทศสมาชิก

ให้สอดคลังสาร์บรายราชความปล่อดภัยที่ทำหนด)

2) ASSN: ASEAN Food Safety Net

3) FAST: Food Hart System of Thailand

4) FOSIM: Foundation Open Society Institute Macedonia

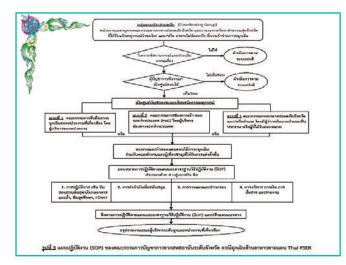
5) FSER: Food Safety Emergency Response Plan

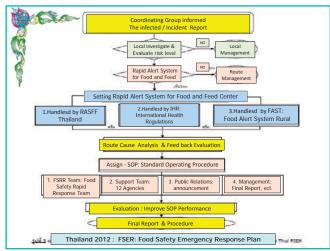
- หมายเหตุรายละเฉียล ค่าน้อ
  6) IRR: International Health Regulations
  7) INFOSAN: International Fealth Regulations
  7) INFOSAN: International Food Safety Authorities Network
  8) IPPC: International Fant Protection Convention
  9) OIE: World Organization of Animal Health
  10) RASFF: Rapid Alert System for Food and Feed (ระบบภารนจัง
  เดือนเก็บที่สะตอนคลุยความปลอดกับของสินค้อกามารในประเทศที่สาม
  และการส่วงสอกระหลัด การร่างนายการประเทศที่สาม
  และการส่วงสอกระหลัด การร่างนายการประเทศที่สาม
  11) SOP: Standard Operating Procedure

| ประเทศ         | ระดับการพัฒนา<br>ของแผน FSER   |                                     | SOP/elle  | ระบบการสื่อสารข้อมูล |       |   | แนวพางการ   |
|----------------|--|-------------------------------------|---|----------------------|-------|---|---|
|                |  | MAIN FSER                           |   |                      |       | อื่นๆ                                   | ศิคค่อสื่อสาร   |
| Bangla<br>desh | ฉบับร่าง   | - S                                 | มีแผนการจัดการ<br>ที่ใกล้เคียง                              | 1                    | 9     |   | มีการสื่อสารใปยัง<br>ประชาชน                          |
| Brunei         | มีในระดับห้องถิ่น<br>และประเทศ   | Taisti                              | SOP ของการเรียก<br>ทีนสินค้า                                | 1sid                 | 9     | IHR, AFSN,<br>IPPC, OIE                 | มีกรณีกาวะจุกเฉิบความ<br>ปลอดภัยด้านสุขภาพ<br>ประชาชน |
| Cambodia       | Print  | laid                                | laisi   | laid                 | lsisi |   | laisi   |
| Indonesia      | ระดับท้องถิ่นและ<br>ประเทศ   | มีช่วมมือกับ<br>Indonesia-<br>RASFF | 9   | 1                    | 9     | IHR, AFSN,<br>IPPC, OIE                 | 1   |
| Laos           | ในประเทศ   | 1 V                                 | laisī   | bill                 | biii  |   |   |
| Malaysia       | ฉบับร่างครั้งที่ 2   | 9                                   | >20 ฉบับ  | SV.                  | g 🗸   |   | เว็บไซต์ FOSIM  |
| Thailand       | <ul> <li>มี วะดับประเทศ</li> <li>กำลังร่าง ระดับ</li> <li>จังหวัด</li> </ul> | 3                                   | -ใช้รูปแบบของ<br>แต่ละหน่วยงาน<br>-ยังไม่มีของ<br>ระดับขาติ | ı                    | Ĩ,    | FAST,<br>ARASFF,<br>AFSN<br>Thai- RASFF | เว็บไซด์ ของแต่ละระบบ                                 |

- พมายเหตุราและเมียด คำปล

  1) ARASFF: ASEAN Rapid Alert System for Food and Feed
  (5) IHR: International Health Regulations
  (6) IHR: International Feod Safety Authorities Network
  สัดตรามการแล้วสกับและเก็บสัญหาสินค้าแกษตรับที่เป็นประเทศสนาที่
  (8) IPRCSIM: International Feod Safety Authorities Network
  (7) IPRCSAM: International Feod Safety Net
  (8) IPRC: International Feod Safety Net
  (9) IPRC: International



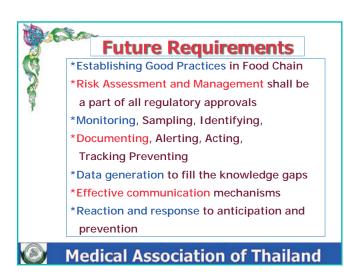


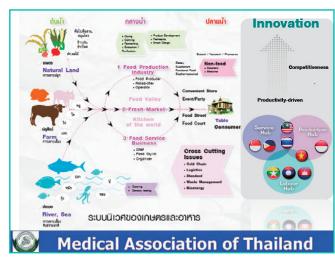














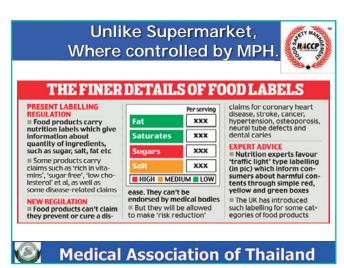
























#### AUSTRALIAN MEDICAL ASSOCIATION\*1

Brian OWLER<sup>1</sup>

#### Major health issues in Australia

Since my election as AMA President in May 2014, the AMA has been extremely busy shaping the health policy debate in Australia.

The first Budget of the new Coalition Government was also delivered in May 2014, and there has been no shortage of issues for the medical profession to run with in that time.

Here is a summary of the highlights.

#### **GP Co-payment**

In the 2014 Federal Budget, the Government announced plans for a \$7 co-payment for GP, radiology, and pathology services, and a freeze on the indexation of Medicare patients. The AMA immediately announced its opposition to this proposal because it would hurt the most vulnerable patients in the community—the elderly, the chronically ill, children, the poor, and Indigenous Australians.

Over the next six months, the Government tried to sell this proposal to the Australian public and the Parliament, with the AMA being the highest profile opponent of the policy in the community, in the media, and within the medical profession.

In December 2014, the Government altered the policy to promote a \$5 co-payment, maintain the freeze on rebates, and changes to the rules around short consults, a move that infuriated GPs. While the Government appointed a new Health Minister to sell the new package, the AMA labelled the changes worse than the original policy and set about campaigning against them.

In the face of a huge backlash from the profession and the community, led by the AMA, the Government caved in and scrapped its plans for a GP co-payment in any form, with the Prime Minister at the time saying the policy was "dead,

buried, and cremated."

However, the freeze of the Medicare patient rebate was maintained. The AMA will campaign against this measure in the 2016 election year.

#### **Ebola outbreak in West Africa**

In November 2014, the Australian Government contracted Aspen Medical to provide practical on-ground assistance to the victims of the Ebola Virus outbreak in West Africa. This decision was a direct result of months of high-profile lobbying and advocacy by the AMA. Until then, the Government had been content to contribute funding to aid programs, without making the effort to assist Australian doctors and nurses who wanted to travel to Africa to help.

#### **Public Hospital Funding**

Another bad decision by the Government in the 2014 Federal Budget was to cut a promised \$57 billion over 10 years in Commonwealth funding for the States and Territories to run their public hospitals.

The AMA again ran hard on this issue, which resulted in the former Prime Minister calling a special Leaders' Summit to discuss long-term planning and responsibility for health and education funding and services. However, this matter his yet to be resolved.

The AMA will again highlight the public hospital funding crisis when nit releases its latest Public Hospital Report card in January 2016.

## Medibank Private and Private Health Insurance

Last year, I warned about the potential for the Australian health care system to slide towards a U.S. style managed care system.

We have seen Medibank Private, the largest

<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> President, Australian Medical Association (ama@ama.com.au).

private health insurer, behave in a manner that is inappropriate. It pays amongst the lowest fees in its 'known gap' schedule and has been guilty of pushing 'junk policies' to members. Unlike other funds it has refused to index its 'known gap' schedule since the introduction of the Medicare rebate freeze. It has actively sought to downgrade the policies of its members, including 'cold calling' members and asking them to switch policies to a cheaper policy with more exclusions. More recently it moved to downgrade its basic hospital and standard policies by excluding bariatric surgery and spinal fusion surgery. Essentially these are now only included in the top cover policies.

Other funds, such as NIB, have acted in a similar fashion. NIB has downgraded policies through email notifications leaving a number of patients to discover a lack of coverage at the time when they need it most.

These moves are based on two aims. The first is to reduce premiums particularly in the high cost procedures such as spinal surgery where the implant costs can be high. The second is to reduce out of pocket expenses to patients by doctors, while at the same time tightening the arrangements with providers and increasing the restrictions under which individual doctors practice.

Meanwhile, the funds applied to the Government for significant premium increases from 2016. This caused outrage in the media.

So, following long campaigning by the AMA and community unrest, the Government announced a review of the private health insurance sector in Australia.

#### **MBS Review and Primary Health Review**

In order to 'modernise' the Medicare Benefits Schedule (MBS), the Government announced a high-level MBS Review and a Primary Care Review.

While the AMA supports the Reviews, we have made it clear that the exercises must not be simply about cost cutting. The AMA view is that the MBS must reflect modern medical practice, which means that new items should be added to the MBS, just as redundant items could be removed—but only with clinical evidence.

The AMA hosted a Roundtable, which was attended by all the medical specialties and their respective Colleges, Societies, and Associations to ensure there was unity in the profession.

These Reviews will continue into 2016. The AMA will remain vigilant.

#### **Indigenous Health**

The AMA takes its commitment to Close the Gap in Indigenous health outcomes seriously. The Garma Festival held in Arnhem Land each year was an opportunity to engage with Australia's Indigenous leaders and to hear from Indigenous peoples, in their own words, about what is needed to improve the health and lives of the Australia's First people.

One of the most important features of the program was the Key Forum. Held at the Gulkula site, a traditional meeting place high on an escarpment looking out to the Arafura Sea, it seemed a long way from Canberra. However, topics of constitutional recognition and racism towards Indigenous people in our society were among those topics most discussed.

The Aboriginal concept of health centres on social and emotional wellbeing—a concept that applies to anyone. Indigenous people face racism on a daily basis.

The AMA is a supporter of Recognise—the campaign for constitutional recognition of Australia's First People. This is about much more than symbolism. It is an important part of reconciliation and about the value that this nation places on its Indigenous members of the community. While there is bipartisan support for this process, the next step is for Indigenous people to agree on what form the change and subsequently the question for any referendum should take.

Many of the most important legal battles for Aboriginal land rights centre on Arnhem Land and the clans of this region. With a connection to land spanning more than 50,000 years, the existence of local Aboriginal culture and society is directly connected to their land.

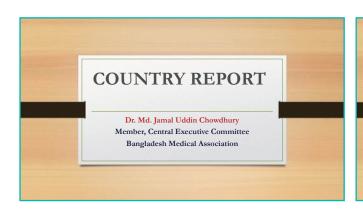
There was time to discuss some of the more concrete health issues. I sat with Professor Alan Cass, Dr. Paul Laughton and Senator Nova Peris discussing the high rates of renal failure in the Territory, the role of prevention in chronic kidney disease, the impacts of dialysis on patients and their families along with the need to increase the rate of kidney transplantation.

As most chronic kidney disease is preventable, our discussion again highlighted the need for good primary care, particularly in Indigenous health.



#### BANGLADESH MEDICAL ASSOCIATION\*1

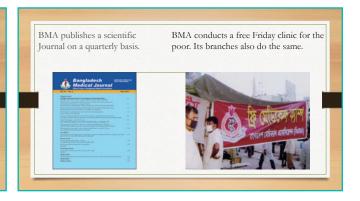
#### Jamal Uddin CHOWDHURY<sup>1</sup>



#### Introduction

- Bangladesh Medical Association (BMA) engages itself in the welfare activities for its members as well as for the development of health sector of Bangladesh in order to ensure good health for the citizens of Bangladesh
- From the very inception of Bangladesh BMA had to struggle hard to ensure equal rights for its members that is enjoyed by other employees of the state
- Doctors of Bangladesh were denied of their legitimate rights in terms of remuneration, promotion, housing and other facilities by the beurocratic impediment
- in 1996, after sworning in as the Prime Minister, Ms. Sheikh Hasina could realize the grievances of the doctors' community and materialize the genuine demands of BMA

# Introduction Cont..... • Although the misery of the doctors in terms of remuneration, position etc. have been overcome, doctors of Bangladesh are facing new challenges in discharging their duties because of the undue interference by the hooligans in the name of aggrieved relatives of the patients • The law enforcing agencies take the side of the miscreants in most of the cases due to so called 'sympathy' • BMA is trying to inspire the government to enact a law forbidding such sort of illegal activities and protecting the healthcare professionals from such untoward situation



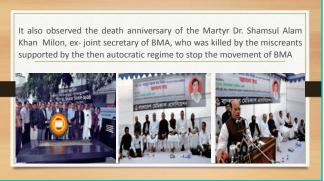
<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> Member, Central Executive Committee, Bangladesh Medical Association, Dhaka-1000, Bangladesh (info@bma.org.bd).



In Bangladesh, Speciality based societies organize clinical seminar, symposium and other social activities regularly-BMA as national organization cooperates with those societies.











- BMA is working closely with the government to update the health workforce strategy.
- BMA inspires the government to take up a systematic programme to improve the quality of healthcare. Recently the government has set up a Quality Improvement Secretariat for this purpose
- · Likewise it is working with the government to introduce the accreditation system in medical education and hospital care

#### Brief presentation on ongoing activities in Health Sector

- Government has taken strong initiative to improve the life pattern of autistic children. Child Development Center has been set up in 22 hospitals
- Institute of Paediatric Neuro disorders and Autism in Children is established in Bangabandhu Sheikh Mujib Medical University



- Community Clinic
  Community clinics each serving 6000 population have expanded its services in the field of health, family planning, nutrition, health education, healthy living, minimal curative care, screening of non-communicable diseases etc
- These clinics are run by a non-doctor staff-CHCP(community healthcareprovider)
- In some clinics, doctors visit once week. The patients are referred to higher center if needed



#### Community Clinic

Cont.....

- 30 types of medicines are given free of cost.
- Almost 85% patients are female and children
- Normal deliveries are conducted by the trained skilled birth attendant in nearly 1000 centers
- WHO in its World Health Report termed Community Clinics as effective
- The activities of Community Clinics were applauded in the side meetings conducted during WHA in 2013, 2014 and 2015 having the theme Community based healthcare

#### Extension of immunization programme:

- In 2008, 7 types of vaccines were given to protect from Diptheria, Pertussis, Tetanus, TB, Polio, Measles and Hepatitis B
- In 2009, Haem. Influenza was included
- In 2012, Measles 2<sup>nd</sup> dose and Rubella vaccines were included
- In 2015, Intramuscular Polio Vaccine and Pneumococcal conjugate vaccine were included
- In 2014, Bangladesh was awarded with the polio-free certification by WHO

#### Extension of immunization programme:

Cont.....

- Leprosy has been eradicated almost
- Neonatal tetanus is no more in Bangladesh
- Due protection against Ebola disease was built- Thermal scanners were posted in the entry ports for screening
- TB, Anthrax, Nipah Virus, SARS, MERS Corona virus and Dengue are in full control
- To eradicate Rabies-Tissue culture vaccine for the victims and vaccine for the dogs to keep Rabies virus free have been procured and provided
- In case of reduction of under-5 mortality rate, Bangladesh Has reached the set target well ahead
- National Food Safety Laboratory has been set up
- Bone Marrow Transplantation has been stared
- Liver Transplantation has been experimented
- Medical Biotechnology centers have been established

THANK YOU FOR YOUR KIND ATTENTION!



#### HONG KONG MEDICAL ASSOCIATION\*1

Alvin Y.S. CHAN1

- ♦ 2014-2015: 95th year of the HKMA
- ♦ Over 10,000 members
- ♦28 Standing Committees
- ♦ 15 Ad Hoc Committees
- ♦10 Representatives in Statutory Boards or Councils
- ♦26 Representatives in Non-statutory Boards, Councils and other Professional Organization
- ♦ New:

#### •Community Services Committee

- Provided free vaccination services and donated technological devices to the disabled, aged and ethnic minorities

#### •Medical Students Subcommittee

- Career Seminar
- Night Networking Party
- •Health Policy Committee

## •Ad Hoc Committee on Toxic Effects of Lead Contaminated Water

-Formulated professional medical advices in response to the Hong Kong public housing estates lead amid contamination scare

#### ♦ Charity:

- •Annual Charity Concert for Asian Foundation for the Prevention of Blindness
- •Nepal Earthquake via Hong Kong Red Cross

- •Ebola Epidemic via Médecins Sans Frontières
- ♦ Press Conferences:
  - •Review of the Operation of the Hospital Authority
  - •Survey on Voluntary Health Insurance Scheme
  - •Survey on Elderly Health Care Voucher Scheme
  - •Proposal to Increase Subsidy for influenza vaccination

#### **♦** Publications:

- •CME Bulletin
  - Organized 333 CME events
  - -Accredited 473 CME events
- •HKMA News
  - Council Section
  - -Legislative Councilor's Monthly Report
- •The Hong Kong Medical journal
  - -Co-published by the HKMA and the Hong Kong Academy of Medicine

#### ♦ Fraternity:

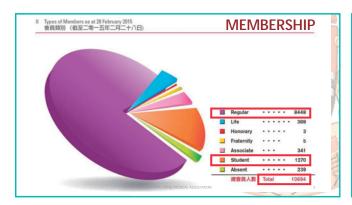
- •Annual Ball Committee
- •Choir Committee
- Orchestra Committee
- •Recreational and Cultural Committee
- Sports Committee

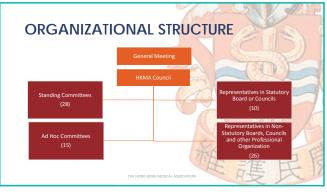
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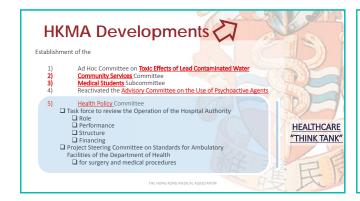
<sup>&</sup>lt;sup>1</sup> Vice-President, Hong Kong Medical Association, Hong Kong, China (hkma@hkma.org).







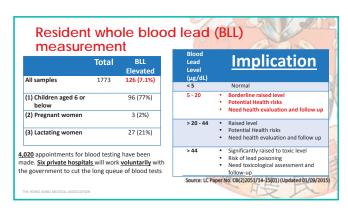


















instant photos







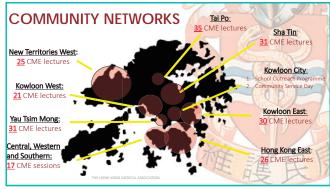






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# INDIAN MEDICAL ASSOCIATION\*1

K. K. AGGARWAL<sup>1</sup>







Dr A Marthanda Pillai
National President
&
Dr K K Aggarwal
Honorary Secretary General

**Indian Medical Association** 

# **CMAAO**

IMA structure: IMA has a membership of 2,48,954 doctors spread over 30 State branches and 1691 Local Branches.

 $\ensuremath{\mathsf{IMA}}$  communicates to all its membership through eIMA News, SMSes on daily basis.

Leadership of all IMA consists of Office-bearers of State & Local Branches, Working Committee and Central Council. The total strength comes to 6010. IMA leadership communicates to each and every member through virtual Team IMA on daily basis.

IMA communicates to the public through IMA PR Deptt. on daily basis. The following is the statistics:

| Months   | Clippings | Ad value    | PR value INR |
|----------|-----------|-------------|--------------|
| January  | 297       | 1,65,64,717 | 4,96,93,551  |
| February | 281       | 77,01,814   | 2,31,05,442  |
| March    | 124       | 70,09,797   | 2,10,29,391  |
| April    | 129       | 68,73,371   | 2.06.26.113  |
| May      | 156       | 78,87,114   | 2,36,61,342  |
| June     | 105       | 78,87,114   | 2,36,61,342  |
| July     | 80        | 54,04,120   | 1,62,12,360  |

IMA organizes on regular basis simultaneous Press Conference in every state .IMA organizes Press Release simultaneous in over 100 braches at a time on the same day.

IMA has trained 100% operational PCR staff of Delhi Police in a record time. The same is now being replicated at a national level.

<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>&</sup>lt;sup>1</sup> Honorary Secretary General, Indian Medical Association, New Delhi (inmedici@gmail.com).

IMA projects includes awareness regarding Child Sexual Abuse, Standards of TB Care, violence against medical establishments, sealing of charges during national calamity, availability to emergent medical care to everybody in time.

IMA's Swacch Bharat Swastha Bharat Initiative spreads awareness about safe water and food hygiene.

Under Aao Gaon Chalen IMA has adopted more than 100 villages and provides them free treatment. Over 10,000 free surgeries have been done through this Project.

In Nepal Earth quack IMA team was sent to Nepal and donated medicines worth Rs.40 lakhs to Nepal Medical Association. IMA also conducted surgeries and OPDs  $\,$ 

IMA regularity releases social advertisements in various News Papers on water safety and promotion of breast feeding

IMA has trained 566 (TOT + Workshop) doctors in Child Sexual Abuse

IMA has sensitized 81508 & 14114 Trained doctors in TB Care

IMA has its regular Journal which is being circulated to over 2.5 lakhs members

With Nepal Medical Association IMA addressed a Press Conference in Nepal.

 $\rm IMA$  has a Jan Aushdhi Kendra in its premises and supplies medicines to the people at low cost.

IMA provide eLearning to all its members

 $\ensuremath{\mathsf{IMA}}$  is running a special campaign on heat it, boil it , cook it, peel it and forget it.

 $\ensuremath{\mathsf{IMA}}$  has developed standard  $\ensuremath{\mathsf{IMA}}$  TB protocol with co-signatories of all the medical associations.

IMA has started special campaign on prevention of dengue deaths

IMA has started special campaign where every doctor is sensitized to look after his own health

India is now Polio free and Neonatal tetanus free

In every national calamity IMA comes out with a White paper

Online virtual Central Council

•UNESCO Chair on Bio Ethics

Digital CME at 23 Locations of the Country

•Weekly Web Cast

•JIMA re-started

•Interactive Website

·liwa ili social ilieula

•IMA has a Mediation, Conciliation and Grievances Redressal

•Emblem of medical profession

Branch President and Branch Secretaries Meet

•New IMA Days - 24th March and 14th November

Swachh Bharat Abhiyan

•Sun Shine CME

•IMA White paper

Social Advertisement on 8th August and 1st July

•New State Telangana

•IMA Tirupati Building

·Six new Branches

•NOTA Protest

# **Initiatives**

•IMA Rare Blood Group Online Blood Bank Directory

•IMA Online TB Notification initiative

•IMA Online Events Reporting initiative

•Online Proforma for Hypertension Screening

•IMA Online Sentinel Events Reporting Initiative

•IMA Disease Notification

•IMA RISE and SHINE

# Thank you



# INDONESIAN MEDICAL ASSOCIATION\*1

Ihsan OETAMA<sup>1</sup>









<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> International Relations, Indonesian Medical Association, Jakarta, Indonesia (dr.ihsanoetama@idionline.org).



# SMOKE FREE MALLS



Lately, almost in every shopping malls in the country there are signs or announcement which say: "You are in a non-smoking area".

The IMA district level regularly meet with the Malls' management to remind them of the hazzards of smoking.

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### **GRATIFICATION**



Indonesia now has a special commission, called the Corruption Eradication Commission, a very powerfull body, against corruption. They work according to report from the public, allegation of bribery etc. In the medical world, it is common knowledge that doctors receive gratification from pharmaceutical companies for prescribing a certain product, or using a certain new instrument.

Other mean of corruption that is very common in the medical world is mark up of cost or price in for instance purchasing new equipments, or building a new medical facility, or even only for renovation.

So we have to be sure that there is no hint of foul play in a gratification that we receive.

The Indonesia Medical Association has worked together with the Commission to define what is true gratification, and what is 'gratification' in the medical sector

.



# ASEAN ECONOMIC COMMUNITY



For the coming Asean Economic Community, which will begin at the end of this year, or beginning next year, some conditions in the health sector has been formulated by the government and the Indonesian Medical Association. For instance ability to communicate using the Indonesian language, willing to work in remote areas and has a minimum of five years working experience.

But most appreciated are those who come to Indonesia to do a transfer of technology

.



# INTERNATIONAL



- Attended the 28<sup>th</sup> CMAAO 2014 congress in Manila
- Attended the Malaysian Medical Association 2015 Assembly Dinner in Kota Bharu, Kelantan, Malaysia.







# THANK YOU





# JAPAN MEDICAL ASSOCIATION\*1

Yoshitake YOKOKURA¹

Japan attained the goal of establishing the universal health insurance system in 1961. In recent years, the Long-term Care Insurance System and Medical Insurance System for the Elderly aged 75 or over were established in 2000 and 2008, respectively to maintain national health in the aging society.

Seeing the historical changes of the population ratio of those over 65 years old in Japan, we can estimate that the ratio will be rising from 23% in 2010 to 39.9% in 2060. Thus, Japan will be aging at an unprecedentedly rapid pace.

As Japan approaches a super-aged society, what is required is to establish the stronger community health provision system focusing care of the elderly, to improve and strengthen the roles of family physicians in the comprehensive community health care system, and to build a sustainable health care system which meets the needs of the people in communities.

To achieve this goal, the JMA requested the national government to bear the financial burden, which led to the General Security Fund for Community Medicine and Long-term Care with 7.5 billion US\$ for medicine and 60 billion US\$ for long-term care in 2014. Using this fund, we will do our best in supporting any effort by local medical associations that aim to realize effective and quality medical and long-term care.

In Japan, we have health check-up systems which totally provide us with a health check-up covering a whole life from infant to the old-old stage of elderly. However, these systems are provided individually and there is no integrated system to manage the personal life-long health

information by connecting these individual systems. The JMA proposes the government to incorporate these in to the plan of "Life-long Health Services." To manage the personal whole-life health information in an integrated way helps to reduce the gaps between average life expectancy and healthy life expectancy. Having many more healthy elderly in a society may also keep the medical costs lower.

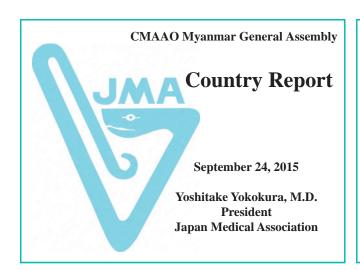
The JMA is also endeavoring to increase healthy longevity by incorporating the health check-up programduring the period from child-hood, working years to old age in the plan of "Life-long Health Services."

For disaster preparedness by the medical profession, the JMA was appointed as a designated public organization in August 2014 which reviews the government's Basic Disaster Provision Plan. Dr. Yoshitake Yokokura, President of the JMA was also appointed a member of the Central Disaster Prevention Council in June 2015 which consists of the cabinet ministers with Prime Minister as chair.

In the areas of overseas medical assistance, the JMA extended medical support to Nepal which was severely damaged by the great earth-quake in April 2015. As requested mainly by the Taiwan Medical Association, the JMA also dispatched six Japanese specialists to Taiwan to provide medical assistance to many patients with a severe burn injury by the accident of dust explosion which occurred in June of this year. The case of Taiwan was carried out based on the iJMAT program which the JMA has been promoting.

<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> President, Japan Medical Association, Tokyo, Japan (jmaintl@po.med.or.jp).



### Social Security System of Japan

Oct 1950 Social Security Advisory Council presented Social Security System Recommendations

> Recommended that all citizens should be eligible for national health insurance policy

Mar 1956 Eligibility status of public health insurance

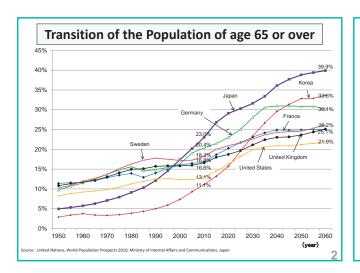
Approx. 30 million people were still NOT eligible
 → About 30% of the population were NOT insured

Apr 1961 Universal Health Insurance System was established

Apr 2000 Long-term Care Insurance System was implemented

Apr 2008 Medical Insurance System For the Elderly Aged 75 Or Over was implemented

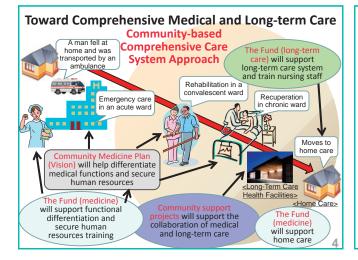
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# Ageing speed: International Comparison

| Country  | % of population ≧ 65 y/o |      | doubling period<br>(years) |  |
|----------|--------------------------|------|----------------------------|--|
| •        | 7%                       | 14%  | 7%→14%                     |  |
| Japan    | 1970                     | 1994 | 24                         |  |
| Germany  | 1932                     | 1972 | 40                         |  |
| U.K.     | 1929                     | 1976 | 47                         |  |
| U.S.     | 1942                     | 2015 | 73                         |  |
| Sweden   | 1887                     | 1972 | 85                         |  |
| France   | 1864                     | 1979 | 115                        |  |
| Korea    | 1999                     | 2017 | 18                         |  |
| Brazil   | 2011                     | 2032 | 21                         |  |
| Thailand | 2003                     | 2025 | 22                         |  |
| Tunisia  | 2009                     | 2032 | 23                         |  |
| China    | 2001                     | 2026 | 25                         |  |

3



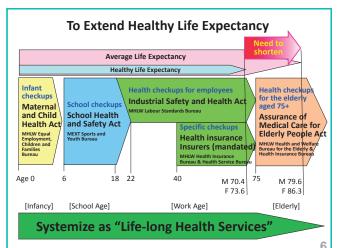
# Promotion of Community-based Comprehensive Care System

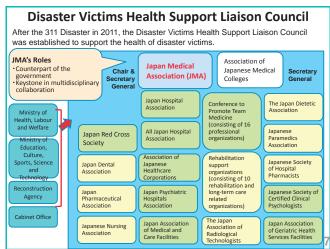
- The General Security Fund for Community Medicine and Long-term Care was established by request from JMA.
- In 2014.
  - ♦752 million USD or 90.4 billion yen for medicine
  - ♦602 million USD or 72.4 billion yen for long-term care

\*JPY-USD exchange rate is as of Sept. 11, 2015.

Japan Medical Association

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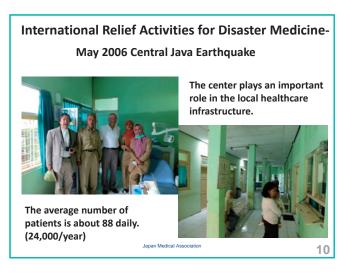
# JMA's Position in the National Disaster Management JMA dispatched 1393 teams of 6054 JMAT (Japan Medical Association Team) staff in total in the 311 Disaster. Additional medical teams were also continually sent for months. (Aug. 1, 2014) Prime Minister Abe appointed JMA as a Designated Public Organization according to the Basic Act on Disaster Control Measures (June 9, 2015) Prime Minister Abe appointed the JMA

President as a member of the Central Disaster Prevention

8

Council







# International Relief Activities for Disaster Medicine-Nov. 2013 Philippines Typhoon Yolanda

The state of the s

Leyte Medical Society (LMs) Opening ceremony, March 8<sup>th</sup> 2015



Maternity Day Event, March 2015

or appreciation

12

14

# International Relief Activities for Disaster Medicine-April 2015 Nepal Earthquake

After a major earthquake hit Nepal on April 25, 2015, the JMA assisted in disaster relief through AMDA and started a mental health project for schools and communities by the donations from the JMA and its members.



Dr. Suganami, Representative of AMDA visited the Nepal Medical Association requested by the JMA on May 3. Dr. Ojha is a Vice President of the Nepal Medical Association and also the representative of AMDA Nepal.

Dr. Saroj Prasad Ojha, Dr. Anjani Kumar Jha, Dr. Shigeru Suganami (AMDA) Vice President of NMA, President of NMA

Japan Medical Association

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# Conclusion of iJMAT Agreement

The Agreement between the Japan Medical Association and the Taiwan Medical Association concerning Mutual Consent on Dispatching Physicians and Assistance Systems for Medical Relief Assistance in Disaster Situations (iJMAT Agreement).



Dr. Yoshitake Yokokura (JMA) Dr. Chung-Chuan Su (TMA)



Dr. Yoshitake Yokokura (JMA) Dr. Chi-Chun Liu (Taiwan Root Medical Peace Corps)

oan Medical Association

# Dispatching of the JMA Burn Care Support Team to Taiwan

June 2015 Dust Explosion Accident

When the dust explosion accident occurred in Taiwan in June of this year, many suffered severe burns. Under the concept of the iJMAT agreement, JMA accepted the request for emergency medical support and sent 6 burn specialists.



Japan Medical Association

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# Demonstration Experiment simulating the Great Nankai Trough Earthquake -Disaster prevention training Kizuna Internet connection Information sharing by Cloud Type Web conference system JAXA Tsukuba Space Center JMA Shizuoka MA Other Prefectural Medical Associations

# Thank you for your attention!



Japan Medical Association

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# K NA 대한의사협회 Korean Medical Association

# KOREAN MEDICAL ASSOCIATION\*1

Cheong Hee KANG¹

# Responses to Outbreak of Middle East Respiratory Syndrome (MERS-CoV)

Following the confirmed diagnosis of Korea's first MERS patient on May 20, 2015, the disease rapidly spread in Korea, resulting in a total of 186 confirmed cases and 36 deaths. The alarmingly rapid spread of MERS in Korea is attributed to several factors including absence of a government plan against contagious diseases; the government's failure at early response; lack of communication with expert organizations and limitations in the current health and medical system.

From the very start of the outbreak, KMA performed its role as an expert organization in the national effort to resolve the situation, and contributed to addressing public concern and preventing the further spread of the disease. KMA also organized and operated the "KMA MERS Response Headquarters" in order to appropriately respond to protecting members' rights and proposing policies to the government.

In order to resolve the MERS outbreak and to protect medical professionals, KMA engaged in various activities including distribution of various guidelines including guidelines on selfquarantine for people potentially exposed to MERS; announcement of 7 major recommendations to the public to overcome MERS; request to quickly supply protective gear to medical professionals caring for MERS patients and to fully disclose the name of hospitals with confirmed MERS cases; demand of measures to protect medical professionals and their families; proposal to operate a selective care center under the public health clinics; recommendations to the government in order to prepare support and compensation plans for all medical institutions.

Also, in order to prevent another national crisis due to the outbreak of new contagious diseases such as the MERS in the future, KMA submitted a proposal to the government calling for improvement in medical care systems and medical culture with the aim of preventing and controlling infectious diseases by establishing a mid-to-long-term national contagious disease prevention and control plan; improvement in emergency room systems; support for autonomous activities by the medical sector to prevent and control contagious diseases for public safety; stronger support for contagious disease prevention and control by medical institutions; establishment of a crisis control and communication system through coordination with the medical sector; change in government organization including the establishment of a separate ministry dedicated to public health and the upgrading of the Korea Center for Disease Control; establishment of a research and development system for cutting-edge research in the area of contagious disease prevention and control and expansion of human resources. KMA also strongly called for enactment and amendment of related laws and regulations to the National Assembly and related government departments.

The outbreak has currently been contained with no additional new cases for over 70 days. The government declared a de facto end to the MERS outbreak on July 28, after no additional cases had been reported for more than three weeks. An official declaration of end to the outbreak will be made 28 days after the last remaining patient is completely cured.

# Korean Government's Policy against Medical Professionalism

On December 28, 2014, the Korean government

<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> Vice President, Korean Medical Association, Seoul, Korea (intl@kma.org).

announced a list of policy plans based on the recommendations by business-related organizations with the aim of economic vitalization and job creation. The problem is that as a part of such policy drives, the government plans to allow traditional oriental medicine doctors licensed only for traditional oriental medicine to use modern medical equipment and to expand health insurance coverage for such practices as well as to legalize licensing for chiropractic and tattoo performers and to create a separate standard for esthetic care equipment apart from those for medical equipment.

In Korea, the professional practices of modern medicine (western medicine) and traditional medicine are maintained separately. The current Medical Service Act defines the physician's medical license as covering modern medical activities, while the traditional medical doctor's license covers traditional medicine. Each type of doctor is strictly prohibited from practicing the other type of medicine by law. The two medical practices also differ in the educational curricula taught in each respective medical college and use completely different training programs to foster professionals. Moreover, the curriculum of traditional oriental medical colleges feature significantly less hours devoted to basic medical science or clinical subjects.

The government's policy proposes to open up physicians' proprietary areas to those who have not been medically trained properly, with a disregard for the lives, health and safety of the people. It not only challenges medical professionalism and the physician's right to practice medical care but also undermines the entire medical system and is likely to bring confusion and unnecessary conflict to medical practice in Korea.

When traditional oriental medicine doctors with insufficient clinical experience are allowed to use modern medical devices, the danger of such recklessness will be completely borne by the patients. In substance, the Korean government is basically promoting unlicensed medical practices.

For such reasons, KMA is adamantly against any government policy attempting to destroy the medical licensing system for the sake of expanding the professional scope for traditional oriental medicine doctors while completely ignoring the safety of patients who deserve to be guaranteed access to quality care.

KMA has continued to deliver its firm opposition to the government and urge its policy changes. It also has made policy proposals to the government for improved practice conditions and guarantee of professional autonomy by easing unreasonable regulations and control. KMA has conducted active public campaigns to raise awareness of the public on the issue.



Response to Outbreak of Middle East Respiratory Syndrome (MERS-CoV)

K₩A 대한의사협회

# **MERS-CoV** in General

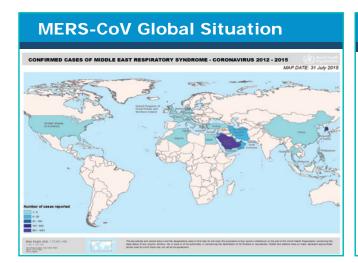
- Middle East Respiratory Syndrome (MERS) is an illness caused by a virus called Middle East Respiratory Syndrome Coronavirus (MERS-CoV).
- Although camels are suspected to be the primary source of MERS infection in humans, the exact transmission routes remain unknown.

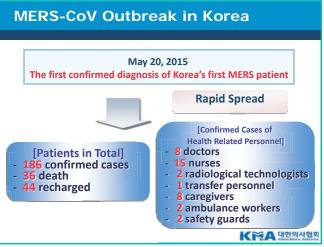
K₩A 대한의사협회

# **MERS-CoV** in General

- Most MERS patients developed severe acute respiratory illness with symptoms of fever, cough, and shortness of breath.
- It has been shown to spread between people who are in close contact.
- There is no known curative agents and no vaccine to prevent the viral infection.

KRA 대한의사업회





# MERS-CoV Outbreak in Korea Number of MERS-CoV Confirmed Cases on a Daily Basis 메르스(중동호흡기증후군) 환자 발생 현황 : 일자별 KRA 대학의사업회

# - Lack of knowledge and experience about the unknown infectious disease - Not fully functioning of control and coordination authority at the early stage - Failure at information sharing at the initial stage

# **KMA's Responses**

- Operation of 'KMA MERS Response Headquarters'
- Operation of 'MERS Hotline' to support the public including family members of MERS patients
- Distribution of various guidelines including guidelines on self-quarantine for people potentially exposed to MERS
- Announcement of 7 major recommendations to the public to overcome MERS
- Recommendations to the government in order to prepare support and compensation plans for medical institutions

K₩A 대한의사협회

# Suggestions for Advancement of the National Disease Control and Prevention System

- 1. Improvement on the health care service and medical culture
- 2. Improvement on the emergency room (ER) system
- 3. Voluntary reinforcement of the infectious disease control and prevention activities
- 4. Strengthened government support on infectious disease controls of medical institutions
- 5. Thorough controls and prevention of infectious diseases on the national watchlist

KRA 대한의사협회

# Suggestions for Advancement of the National Disease Control and Prevention System

- 6. Crisis management communication system
- 7. Independence of Ministry of Health and raising the status of Center for Disease Control
- 8. Strengthened R&D for disease control
- 9. Securing human resources for infection prevention
- 10. Globalization in the prevention and control of national infectious diseases

**长**灣魚 대한의사협회

# Korean Government's policy against Medical Professionalism

KRA 대한의사협회

### Korean Government's Policy against Medical Professionalism

#### [Korean Government's Announcement of Policy Plan]

- Allowing traditional oriental medical doctors to use modern medical equipment
- Legalizing licensing for chiropractic and tatoo performers
- Creating for a separate standard for esthetic care equipment from those of medical equipment

KMA 대한의사업회

#### Problems of the Government's Plan

- In Korea, the professional practices of modern medicine and traditional medicine are maintained separately.
- Each type of doctor is strictly prohibited from practicing the other type of medicine by law.
- The two medical practices differ in the educational curricula taught in each respective medical college
- The curriculum of traditional oriental medical colleges feature significantly less hours for basic medical science or clinical subjects.

KMA 대한의사업회

# **Problems of the Government's Plan**

- Government's plan challenges medical professionalism
- It is basically promoting unlicensed medical practice for the sake of expanding professional scope for traditional oriental medical doctors.
- Focusing only on the economic perspective
- Disregard for the lives, health and safety of the people



# KMA's firm Oppositions and Campaigns

# KMA's firm Oppositions and Campaigns \*\*PRINT VIOLENTIAL TO BE A PRINT OF THE PRINT



# **Plans Ahead**

- Plan of a rally to deliver firm opposition to the Government and urge its policy change
- Policy proposals to the Government for improved practice conditions and guarantee of professional autonomy by easing unreasonable regulations and control
- Active public campaigns to raise awareness of the public on the issue and make KMA's stances crossed.

KRA 대한의사협회





# MALAYSIAN MEDICAL ASSOCIATION\*1

Ravindran NAIDU<sup>1</sup>









<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>&</sup>lt;sup>1</sup> Honorary General Secretary, Malaysian Medical Association, Kuala Lumpur, Malaysia (info@mma.org.my).

# **OBJECTIVES**

- To promote and maintain the honour and interest of the profession of medicine in all its branches and in every one of its segments and help to sustain the professional standards of medical ethics.
- To serve as the vehicle of the integrated voice of the whole profession and all or each of its segments both in relation to its own special problems and in relation to educating and directing public opinion on the problems of public health as affecting the community at large.
- To participate in the conduct of medical education, as may be appropriate.
- To promote social, cultural and charitable activities in building a united Malaysian nation.
- To carry on any business, trade, joint venture, commercial arrangement, transaction or any enterprise whatsoever which may in the option of the Association be advantageous to the Association or calculated directly or indirectly to enhance any of the Association's assets, properties or rights.

# Sections

Section Concerning House Officers, Medical Officers & Specialists (SCHOMOS)
Private Practitioners Section (PPS)

Societies
Society of Occupational & Environmental Medicine (SOEM)
Society of Medical Students (SMMAMS)
Society of Public Health
Society of Sports Medicine

20 MMA Committees 29 MMA Representatives in various committees in External Organizations, GOVT & NGO SECTION CONCERNING HOUSE OFFICERS, MEDICAL OFFICERS & SPECIALISTS (SCHOMOS)

- Its objective is to identify, address and seek the cooperation of the government to resolve issues relating to the welfare, pay, and allowances and working conditions of all grades of doctors in government service.
- SCHOMOS over the years has evolved into a powerful Section of the MMA which conducts periodic meetings with the Director General and other top Ministry of Health officers and has achieved many notable successes in its ventures.
- The issues discussed periodically includes: clinical allowance for medical officers, review of specialist allowance, overtime pay, promotion prospects for Medical Officers and Specialists, House Officers issues and better working conditions.



# THE PRIVATE PRACTITIONERS SECTION (PPS)

- Private Practitioners Section of MMA was established to look after the needs and challenges of the private practitioners
- PPS continues to be the negotiating arm of the Association in all matters relating to private practitioners. Currently, the PPS is concerned on issues related to:
  - o Pharmacy Bill-
  - o FOMEMA
  - Third Party Administrators (TPA) / Managed Care Organizations (MCO)
  - National Health Financing Scheme
  - o TPPA

# **MEMBERSHIP**

- Currently there are 41,715 registered medical practitioners in Malaysia.
- Approximately 20 percent of them are members of MMA.
- MMA has established a separate wing for student members.

# IN MALAYSIA IN MALAYSIA

### 1) GST (Good and Services Tax)

- \*Effective 1st April 2015, the Ministry of Finance, Malaysia has implemented GST in the country which includes health care services.
- \*The MMA had several meetings with the Ministry of Finance and the Customs Department to discuss the impact of GST on Healthcare and the people of Malaysia. However, there was no consideration given.
- \*The MMA believes the implementation of GST will have a major effect on the people of the nation. We are continuously engaging with the Government.

# 2) Dispensing Separation and the Pharmacy Bill

- \*Recently The Pharmacy Division of Ministry of Health Malaysia had a few meetings with MMA to discuss the new bill, the Pharmacy Bill whereby Dispensing Separation was included.
- \*The Pharmacy Bill is a transformation of the Pharmacy Legislation. This BILL is to replace The Registration of Pharmacists Act 1951, Poisons Act 1952, Sale of Drugs Act 1952 and Medicines (Advertisements and Sale) Act 1956.

- \* MMA concern in this new bill is mainly about the PHARMACISTS ONLY MEDICINAL PRODUCTS. An assurance was given that doctors will continue to be able to dispense these medicines. There was no proper engagement with the various providers when this Bill was prepared. When we were called for engagement, this Bill was with the Attorney General's Chambers and therefore classified under the Official Secrets Act before being presented to Parliament.
- There was much dissatisfaction from all the General Practitioners in the country that this Bill is back to the drawing board after which there will be proper engagement with all the stake holders and only when the general consensus has been achieved will it be forwarded to the AGs chambers and then presented to the Parliament.

### 3) <u>Trans - Pacific Partnership Agreement (TPPA)</u>

A round table conference on TPPA was held in MMA to discuss the matter on TPPA on 20<sup>th</sup> July 2014.

12 Countries are participating in this issue. They are United States of America, Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam.

#### Our concerns were:-

- \*Extension of patent periods for existing drugs even in the absence of improved therapeutic efficacy - Usually a patent is granted 20 years but the TPPA proposal will allow further extension.
- \*The extensions can lead to increase in the cost of drugs.
- \*Patenting of diagnostic, therapeutic and surgical methods and techniques.
- \*Doctors may have to pay royalty for using the methods or end up liable for performing patented procedures.
- Data exclusivity If data exclusivity is imposed, generic companies will have to repeat costly clinical trials on drugs or wait till the expiry of data exclusivity before registering the product.
- Patent linkage the process of patenting a drug and obtaining approval are independent.
- \* TPPA requires countries to link these two processes and prohibits the National Drug regulatory authorities from evaluating drug safety and efficacy, and approving generic medicines until the patents expired.

- This will delay the process of generics which will increase the price of the drugs.
- \* The Investor-State Dispute Settlement (ISDS) System which allows the Private foreign investors to sue the government.
- Tobacco plain packaging with warnings of cancer are now present.

- \* There is an expropriation clause where the Government is brought before the International Arbitration Tribunal and may be asked to pay the losses due to these warnings on cigarette packaging which deprive companies of future profits.
- In conclusion MMA is of the opinion that TPPA will increase cost of Healthcare in Malaysia
- 4) New Proposed Fees By MMC
- \*On 11<sup>th</sup> August 2015, MMA had a meeting with MMC and discussed issues relating to increase in Annual Practicing Certificate Fees.
- \*Below is the proposal by MMC and counter proposal by MMA

# New Proposed Fee Table (1/2)

| NO. | DESCRIPTION  | EXISTING RATE<br>(RM)    | PROPOSED RATE<br>(RM) | MMA PROPOSED<br>RATE (RM) |
|-----|--|--------------------------|-----------------------|---------------------------|
| 1.  | Application for Provisional Registration   | 20                       | 100                   | 50                        |
| 2.  | Application for Full Registration  | 100                      | 500                   | 150                       |
| 3.  | Application for Annual Practising Certificate  | 50                       | 200                   | 100                       |
| 4.  | Application for Annual Practising Certificate<br>(Late Penalty)  | 50                       | 100                   | 100                       |
| 5.  | Application for Temporary Practising Certificate   | 50                       | 500                   | 500<br>(foreigners only)  |
| 6.  | Application for Restoration of Name in the<br>Register   |                          | 500                   | 100                       |
| 7.  | Application for Examination for Provisional<br>Registration (EPR) or Medical Qualifying<br>Examination (MQE) | 200                      | 1,000                 | 400                       |
| 8.  | Application for Specialist Registration  | 1,000<br>(every 5 years) | 1,500                 | 1,200<br>(every 5 years)  |

# New Proposed Fee Table (2/2)

| NO. | DESCRIPTION  | PROPOSED RATE<br>(RM) | MMA PROPOSED RATE<br>(RM)  |
|-----|--|-----------------------|--|
| 9.  | Search and verification of information:                              |                       |  |
|     | a. Two (2) names or less   | 100                   | 25   |
|     | b. Three (3) to five (5) names                                       | 125                   | 50   |
|     | c. More than five (5) names  | 150                   | 75   |
| 10. | Application of Issuance of Certification of LOGS                     | 500                   | 250  |
| 11. | Application of translated certificate                                | 200                   | 50   |
| 12. | Application of copy of document/certificate                          | 200                   | 20<br>(Though perhaps<br>repeated applications<br>may attract higher fees) |
| 13. | Cancellation of Condition for Registration 14 (3)                    | 1,500                 | Should be not more than<br>500   |
| 14. | Delivery of documents by registered postal services/courier services | 50                    | 10   |
| 15. | Application of Copy of Proceeding Records                            | 250                   | 50   |
| 16. | Application of response/feedback through facsimile :                 |                       |  |
|     | a. Less than 5 pages   | 25                    | 5  |
|     | b. Six (6) to ten (10) pages   | 35                    | 10   |

# NEW MEDICAL ACT 2012

- The amendments in the New Medical Act 2012, requires every doctor who renews the APC must have:
- . CPD Points
- II. Indemnity Insurance Cover



# MYANMAR MEDICAL ASSOCIATION\*1

Saw WIN1

Myanmar Medical Association (MMA) was established in 1949. It is the leading professional organization of Myanmar doctors with life-long members of more than 11,000 and pro-members of nearly 2,000. All registered medical doctors can be members of MMA either working in the government sector or private sector. There are 38 specialty societies and special interest groups under the umbrella of MMA and over 90 branches in States/Divisions, Districts and townships in different parts of the country. The head quarter is located in Yangon. Myanmar Medical Association became member of MASEAN since 1997, CMAAO since 2009 and WMA since 2012.

#### Goals

- a. to promote continue professional development of medical doctors to keep up with advances in medical sciences.
- b. to improve quality of health care of the nation.
- c. to maintain and promote high ethical standard of medical profession.
- d. to encourage and implement medical research activities.
- e. to build unity, friendship and co-operation among fellow medical professionals.
- f. to nurture newer generation of medical profession.
- g. to participate and complement ministry of health in public health activities.
- h. to correlate and co-operate with regional and international medical professional communities.

### **Activities**

#### **CPD** activities

As in every year MMA hold the 61st Medical Conference in January 2015 at Taunggyi, Shan State. It was attended by 800 medical profession-

als and we are planning to conduct 62nd Myanmar Medical Conference in coming January 15th to 20th, 2016 in Yangon. Many medical specialties under the umbrella of MMA had held their annual medical conferences during the last one year period.

MMA has conducted regular certificate courses of CME for general practitioners which included 4 different modules in two year period, among which "common clinical problems" and "Emergency medicine for GP" modules were done in this year. The same modules are available as on-line course called Distance Learning Medical Education Programme.

Various workshops, seminars, hands-on trainings, clinical meetings, were conducted during last one year by different medical specialty societies.

Myanmar Medical Journal (MMJ) (ISSN 0007-6295) is the official publication of MMA published since 1953. We are regularly publishing this journal every three monthly.

### **Social activities**

Support Group for Elderly Doctors (SGED) was a very active and peculiar branch of MMA founded since 2006. SGED takes care of social, financial and health needs of elderly doctors of Myanmar. Day Care center for elderly doctors is serving as a place where elderly doctors can come and rest and meet old friends.

The "Lady Doctor Group" of MMA conduct various social activities including paying homage to the elderly doctors above 70 years every year since 1982.

#### **Public health activities**

MMA is conducting 10 public health projects in the areas of Malaria, TB, Reproductive Health, Primary Health Care in border and conflict areas

<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> Myanmar Medical Association, Yangon, Myanmar (mmacorg@googlemail.com).

like Karen and Rakhine State, in collaboration with different partners namely Global Fund, UNFPA, USAID, 3 MDG, UNESCO and Maryland Hospital USA.

#### Disaster relief activities

Myanmar suffered serious flood during the last two weeks of July and early weeks of September, up to now in some areas. MMA started its "Flood Relief Activities" since last week of July. MMA had collected donations of cash and medicines. MMA donated 300 lakh kyats (25,000 US\$) worth units of hygiene kit and rice bags to people throughout the country via Myanmar Red Cross Society. Though its local branches in disaster affected areas, Chin, Magway, Rakhine and Sagaing division MMA teams had visited affected areas, given medical treatment, conducted health education talks and preventive measures and donated food, clothing, medicines, water purification solution drums, blankets and electric lamps. MMA Central had done six mobile team visits to Ayarwaddy Division and

done similar activities. MMA is planning to send volunteer doctors to Chin and Rakhine States to support local teams in rehabilitation activities.

### Advocacy and advisory activities

MMA worked closely with Ministry of Health, Allied Professional Societies, Academic Bodies, NGOs and INGOs. MMA is giving advises to Ministry of Health in various national health issues. MMA advocates for medical profession concerning ethical issues, responsibility and opportunities, continuing education, accreditation and registration.

#### Conclusion

MMA is trying to improve the health station of the whole nation by improving the educational and ethical standard of Myanmar medical doctors. MMA is also actively participation in international activities and trying constantly to strengthen international collaboration and cooperations with fellow professionals and societies and communities.

# Myanmar Medical Association

Country Report 2014 - 2015

# MMA

- established in 1949
- Iife-long members of more than 11,000 and pro-members of nearly 2,000
- Both government & non-government sectors
- 38 specialty societies and special interest groups
- over 90 branches
- head quarter is located in Yangon

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# International Memberships

MASEAN since 1997

▶ CMAAO since 2009

WMA since 2012.

# Goals

- a. promote CPD of medical doctors
- b. improve quality of health care of the nation
- c. maintain and promote high ethical standard
- d. encourage and implement research activities
- e. build unity, friendship and co-operation
- f. nurture newer generation of medical profession.
- g. Participate in public health activities
- h. correlate and co-operate with regional and international medical professional communities

# **Activities**

- Educational Activities
- Social Activities
- Public Health Activities
- Disaster Relief Activities
- Advocacy and Advisory Activities

# **Educational Activities**

- Annual Medical Conference
- Certificate courses of CME for GPs
- Distance Learning Medical Education Programme
- workshops, seminars, hands-on trainings, clinical meetings - different medical specialty societies.











# 62<sup>nd</sup> Myanmar Medical Conference



15<sup>th</sup> to 20<sup>th</sup> January 2016

Yangon

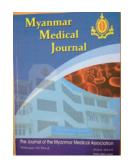




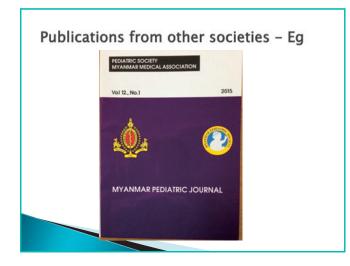
# **Educational Activities**

- Myanmar Medical Journal (MMJ)
- (ISSN 0007-6295) is the official publication of MMA
- published since 1953
- regularly publishing this journal every three monthly.

# Myanmar Medical Journal



- First issue on 1953
- Quarterly
- (ISSN 0007-6295)





# Social Activities

- Support Group for Elderly Doctors (SGED)
- a very active and peculiar branch of MMA
- founded since 2006
- takes care of social, financial and health needs of elderly doctors of Myanmar
- Day Care center for elderly doctors is serving as a place where elderly doctors can come and rest and meet old friends.

•



# **Social Activities**

- Lady Doctor Group
- paying homage to the elderly doctors above 70 years every year since 1982.



# **Public Health Activities**

- ▶ 10 public health projects
- Malaria, TB, Reproductive Health, Primary Health Care in border and conflict areas
- different partners namely Global Fund, UNFPA, USAID, 3 MDG, UNESCO and Maryland Hospital USA.





Home based care in remote area

# **Disaster Relief Activities**

- flood during the last two weeks of July and early weeks of September
- 300 lakh kyats (25,000 US\$) worth units of hygiene kit and rice bags
- given medical treatment, conducted health education talks and preventive measures and donated food, clothing, medicines, water purification solution drums, blankets and electric lamps
- Continuing the rehabilitation activities.

# Flood & Landslide in Myanmar





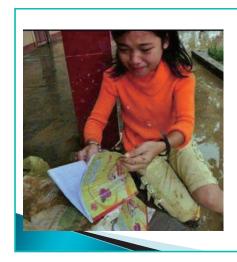








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# **Advocacy and Advisory Activities**

- advises to Ministry of Health in various national health issues
  - PG training of GPs
  - Child Rights and ECI
  - Social security services
  - Medical Protection Society
  - Maternal and Child Health
- advocates for medical profession
  - ethical issues
  - responsibility and opportunities
  - continuing education, accreditation and registration.

# Appointment of Military Officials to MOH



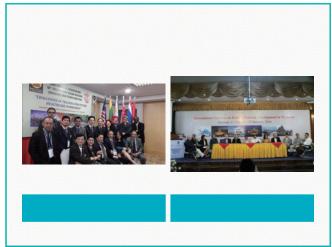
We do not agree mass movement of military doctor to MOH

We welcome decision of MOH- no further appointment of Mili Official to MOH

We encourage our doctor to serve for the country with their utmost ability

# Conclusions

- improve the health station of the whole nation by improving the educational and ethical standard of Myanmar medical doctors.
- strengthen international collaboration and co-operations with fellow professionals and societies and communities.





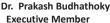


# NEPAL MEDICAL ASSOCIATION\*1

Prakash BUDHATHOKY<sup>1</sup>, Mukti Ram SHRESTHA<sup>2</sup>

# Country Profile of Nepal Medical Association -NMA







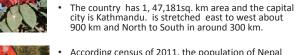
Dr. Mukti Ram Shrestha General Secretary

Nepal Medical Association Siddhi Sadan, Kathmandu



# Nepal at a Glance

- Known as the Land of Everest and birth place of Lord Buddha,
- Also one of the world's best natural beauties, Archeologically very important temples, and best walking trails on the Earth.





- According census of 2011, the population of Nepal was 2, 66,20,809 and calculated population now is 2.8 million.
- Nepal is a landlocked country with India in the southern, eastern, western sides and China in northern sides.







- The elevation of the country ranges from 60 meters above sea level to the highest point on earth, Mt. Everest at 8,848 meters, all within a distance of 150 kilometers resulting in climatic conditions from Sub-tropical to Arctic.
- Nepal is one of the richest countries in the world in terms of bio-diversity due to its unique geographical position and altitude variation.
- Nepal has long exerted a pull on the Western imagination and it's a difficult place to dislodge from your memory once you visit Nepal and return.



<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

 $<sup>{\</sup>it 1} \ {\it Exective Member, Nepal Medical Association, Kathmandu, Nepal (mail@nma.org.np)}.$ 

<sup>&</sup>lt;sup>2</sup> General Secretary, Nepal Medical Association, Kathmandu, Nepal.









- . Mount Everest (also known in  $\underline{\text{Nepal}}$  as Sagarmatha and in  $\underline{\text{Tibet}}$  as Qomolangma) .
- . is the Earth's highest mountain.
- . is located in the Mahalangur section of the Himalayas.
- .Peak is 8,848 metres (29,029 ft) above sea level and
- . is the 5th furthest point from the center of the Earth.

Mount Everest





Lumbini- The birthplace of Buddha, Nepal.

# Few Natural Scenery of Nepal













# **Nepal Medical Association- NMA**

- is the oldest professional organization of Nepal.
- was established on 3<sup>rd</sup> March 1951.
- · was started only by 20 doctors.
- There are 32 Speciality Societies affiliated with Nepal Medical Association Constitution such as
  - ➤ Society of Surgeons of Nepal
  - Society of Internal Medicine of Nepal and so on.

### Objectives of the NMA

- Committed for the unrestrained enjoyment and protection of democracy and human rights derived for the historical democratic movement 1951.
- Protect the justifiable rights, interest and respect of profession.
- Support and extent encourage various training related to medical field conducted by the association as required by the nation.
- Provide service to the nation by enhancing the competence of medical professional.
- Encourage members to maintain professional standard, ethics and independence.
- Maintain affiliation with national and international medical association as per necessity.

# Implementation of Health Professional Protection ACT 2066 - 2009

- As in Other Third world countries, Nepalese doctors and the health institutuons have been facing difficult and unpleasant situations.
- The moral of the doctors and their health service terms has been degraded because of the growing number of attacks by patient and their party, have been encountering.
- NMA had been trying to draw the attention of the concerned authorities about the trend of rising violence against the health-care providers and to the overall negative impact to the health service.
- Therefore, recently health professional protect Act 2066 is implemented by making regulation .



# Eartquake-2015









- Date- 25 April 2015
- Origin time- 11:56:26 NST
- Magnitude-  $7.8 \underline{M}_w$  or  $8.1 \underline{M}_s$
- Depth- 8.2 km (5.1 mi)
- Epicenter- 28.147°N 84.708° ECoordinates: 28.147°N 84.708°E<sup>[1]</sup>
- Type Thrust Areas affected – Nepal,India,China,Bangladesh Total damage- ≈\$5 billion (about 25% of GDP)

Max. intensity IX (Violent) Aftershocks

7.3M<sub>w</sub> on 12 May at 12:51 6.7M<sub>w</sub> on 26 April at 12:54 No. of aftershocks( >=4ML









# Post-Earthquake Psychosocial **Support Program in Nepal**

- Since 25th April 2015, Nepal has been facing huge consequences of earthquake.
- This unfortunate disaster has caused utmost loss to the people of the country especially to the central and western development region where it had its epicenter.
- NMA immediately responded the crisis and started activities and conducted medical camps in affected region simultaneously .
- Firstly rescue and relief distribution with first aid then General and specialist Medical camp and then Psychosocial support.



#### PSYCHOSOCIAL SUPPORT & COUNSELLING TRAINING FOR **EARTHQUAKE VOLUNTEERS**

- Nepal Medical association, in partnership with AMDA International, has been conducted 2-days 'Psychosocial Support & Counselling Training' programme for local volunteers.
- A follow up mechanism is going on for the training outcomes in the affected areas.
- Community based assessment may be more fruitful and give the direct evaluation of the training program and its effectiveness.





# Other Activities of NMA

 Journal of Nepal Medical Association is an official publication of NMA since 1963 and indexed in PubMed/MedLine since 2005. JNMA has met the international standard and uplifting academic medicine in Nepal.



Picture 1. NMA President address the health professionals gathering during the 5th Staging indefinite hunger strike by NMA life Member Prof. Dr. Govinda K.C. in 2015



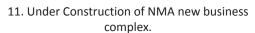
Picture 2. The agitating NMA Life Member, Prof Dr Govinda KC, who had been staging indefinite hunger strike (6th time) since Aug 24, 2015 broke his 14 days hunger strike after an 11-point deal with the government of Nepal.

# **Proposed activities of NMA**

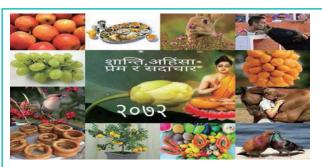
- Conduct the survey to find out existing situation of medical doctors all over the Nepal.
- Conduct National Consultative Meeting on Undergraduate and Postgraduate's Seats: Rationale, Challenges and Future Prospective in Nepal.
- 3. To create NMA Mobile Application for all Doctors in Nepal.
- 4. Training for Medical Journal Editors, Author and Peer Reviewer.
- 5. Workshop for the proper implement of Health Professional Protection Act in the country.

# Cont...

- 6. Conduct the seminar on the Health Insurance Act proposed by Government of Nepal.
- 7. Conduct a All Nepal Medical Conference (ANEMECON-27) in 2016. All are welcomed.
- 8. Conduct a Medical Conference entitled "The Importance of District Coverage and Primary Health Care Services".
- Consultative meeting with concerned authorities for formation of Medical University in Nepal.







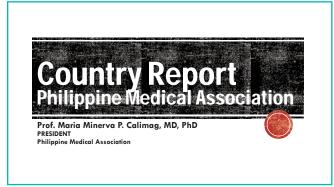
 Constitution -2072, Food related and Consumer right as Basic /Fundamental right to all citizen.





#### PHILIPPINE MEDICAL ASSOCIATION\*1

Maria Minerva P. CALIMAG<sup>1</sup>









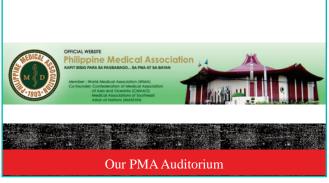
<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>&</sup>lt;sup>1</sup> President, Philippine Medical Association, Quezon City, the Philippines (philmedas@yahoo.com).

















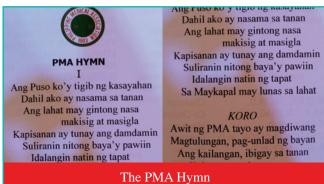




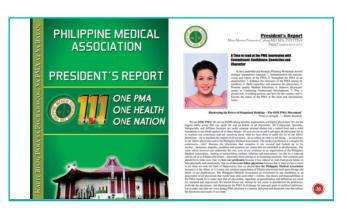






























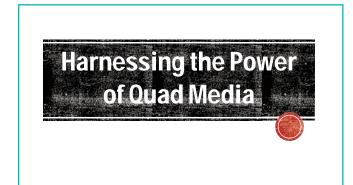
















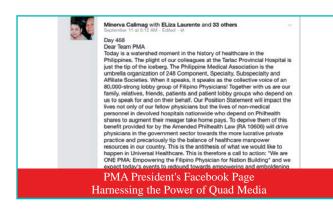














































































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@The 16<sup>th</sup> Midterm Meeting of the Medical Associations of South East Asian Nations was held last May 1-3, 2015 in Brunei Darussalam. I delivered the Country Report and essayed the topic: "Meeting the Challenges of Training our Future Healthcare Workforce: The 21<sup>th</sup> Century Agenda "I essayed the role of technology as the great equalizer in the delivery of and in the assessment process during training for the multiliteracies that we ought to train our future healthcare workforce in. Interestingly, our trainees now and in the future belong to Generations Y and Z.,.digital natives, mobile and unwired, multitaskers and

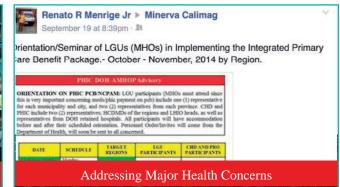
MASEAN 16th Midterm Meeting in Brunei Darussalam

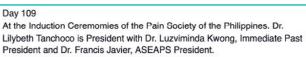




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Promoting the Relevance of the PMA among its members

















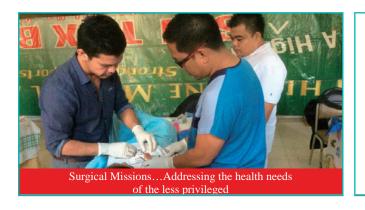


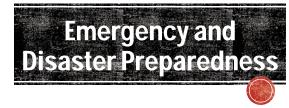


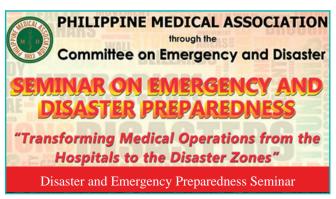
























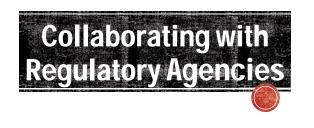






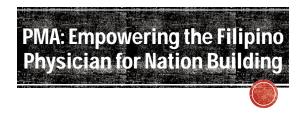














#### SINGAPORE MEDICAL ASSOCIATION\*1

Bertha WOON<sup>1</sup>









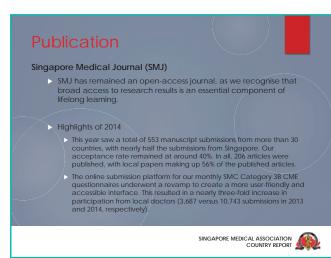
<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> Council Member, Singapore Medical Association, Singapore (sma@sma.org.sg).











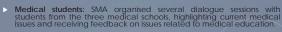


#### SMA's Key Engagement in 2014

- National Telemedicine Guidelines: SMA provided feedback to the Ministry of Health (MOH) on aspects pertaining to the practicality and the possible implications of telemedicine. SMA raised concerns about a human resource-related policy and its impact on doctors in training. Concerns about the policy's negative impact on staff were conveyed to the relevant policy-making body.
- Personal Data Protection Act Advisory Guidelines for the Healthcare Sector: SMA met with MOH to discuss data protection scenarios faced by the healthcare sector. We subsequently submitted feedback during the public consultation period, and organised a seminar for members in August and November 2014.
- Medical records: In light of the submission of queries to SMA by members unsure of how long medical records should be kept, SMA wrote to MOH to enquire about the ideal retention period of medical records. MOH's reply was published in SMA News' April 2014 issue. New MOH guidelines were subsequently published in January 2015.



#### SMA's Key Engagement in 2014



- Collegiality: SMA had regular meetings with representatives from the Academy of Medicine, Singapore (AMS) and the College of Family Physicians Singapore (CFPS). These dialogues assist greatly in the exchange of information and discussion of issues that affect the medical profession
- Regulation of liposuction: SMA provided feedback on the proposed changes to the regulation of liposuction. The finalised licensing conditions were published by MOH in October 2014.
- National Ethics Capability Committee: SMA was invited to be a member of the new committee, which is currently planning a national framework of ethics education for doctors, dentists, nurses and pharmacists in Singapore.
- Member assistance: SMA provided advice and assistance to a member with employment issues, and the issue was subsequently resolved.



#### SMA's Key Engagement in 2014

> Draft 2014 SMC Ethical Code and Professional Standards: SMA alerted members to the consultation exercise, and asked for feedback from members. We requested for a time extension, to allow members more time to review the long document. SMA subsequently drafted a position statement and asked for feedback from members, so as to better reflect the views of the medical profession. In all, 535 votes were received, of which 526 voted in support of our position statement. Feedback, including anonymised comments by individual SMA members, were submitted to Singapore Medical Council (SMC). SMA's feedback to SMC was shared with our members in full via e-mail on December 3, 2014. SMA also facilitated a joint AMS-CFPS-SMA letter to SMC, highlighting the concerns of the three professional bodies.









#### TAIWAN MEDICAL ASSOCIATION\*1

Ching-Chuan SU<sup>1</sup>, Jerry-Y.H. CHU<sup>2</sup>

- •By the end of 2014, the number of member physicians, physician-patient ratio and distribution of practicing physicians at all levels of institutions are shown below:
- Jobs and responsibilities of Taiwan Medical Association are divided into five categories:

#### I. Government sponsored projects

- Recognition of credits of continuing medical education in medical ethics, medical regulations and healthcare quality
- 2. 2015 primary care physician services review; Renewal of physician's license in Taipei
- 3. A research on the impact of sleep on health, the case of sleep apnea; Establishment of system resilience model for emergency and critical care using the resilience engineering theory
- 4. A research project on improving quality of integrated post-acute care payment system
- Campaigning for hosting international conferences in Taiwan, including the World Medical Association General Assembly 2016 in Taipei
- 6. Promoting and facilitating international exchange and cooperation on health
- 7. Continuing education for long-term care professionals

# II. Legislative advocacy and policy formulation

- 1. Advocacy for patients' rights while ensuring equitable financing of the national health insurance
- Colon cancer screening volume doubled with 10% detection rate—achievements jointly made by TMA, Health Promotion Administration, experts and attractive rewards.
- 3. Participating in the planning of long-term care system & long-term care insurance.

4. Physicians' consensus meeting suggested discontinuation of legislation of Medical Malpractice Resolution and Compensation Act (draft).

#### III. Promoting member and public welfare

- 1. Demanding an increase in physician fee (inpatient and outpatient)
- 2. Proposing the Ministry of Health and Welfare to publish a multilingual patient guide.
- 3. Coordinating emergency care after the water park explosion incident.

#### **IV. Honors**

- 1. Being awarded the highest honor as an excellent professional organization after a nationwide accreditation process
- Being publicly acknowledged by the Center for Disease Control for supporting the pneumococcal conjugate vaccine policy.

#### V. International relations

- 1. Japanese medical delegation arrived in Taiwan to provide medical assistance
- Signing "The Agreement between the Japan Medical Association and Taiwan Medical Association concerning Dispatching Physicians and Assistance Systems for Medical Relief Assistance in Disaster Situations"
- 3. Western Pacific Regional Meeting of the Medical Women's International Association took place in Taipei
- 4. Donating US\$10,000 for the earthquake-affected Nepal and providing medical assistance
- 5. Delegation of Beijing Medical Association visited TMA
- 6. Health Minister of The Gulf Cooperation Council (GCC) visited TMA.

<sup>\*1</sup> This article is base on a presentation made as the Report of Activities by each NMA at the 30th CMAAO General Assembly and 51st Council Meeting, Yangon, Myanmar, on September 23-25, 2015.

<sup>1</sup> President, Taiwan Medical Association, Taipei, Taiwan ROC (intl@tma.tw).

<sup>&</sup>lt;sup>2</sup> Vice Secretary General, Taiwan Medical Association, Taipei, Taiwan ROC.







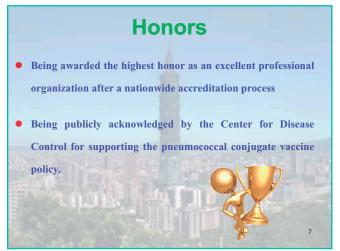
# Government Sponsored Projects Recognition of credits of continuing medical education in medical ethics, medical regulations and healthcare quality 2015 primary care physician services review; Renewal of physician's license in Taipei. A research on the impact of sleep on health, the case of sleep apnea; Establishment of system resilience model for emergency and critical care using the resilience engineering theory. A research project on improving quality of integrated post-acute care payment system Campaigning for hosting international conferences in Taiwan, including the World Medical Association General Assembly 2016 in Taipei. Promoting and facilitating international exchange and cooperation on health Continuing education for long-term care professionals

#### **Legislative Advocacy & Policy Formulation**

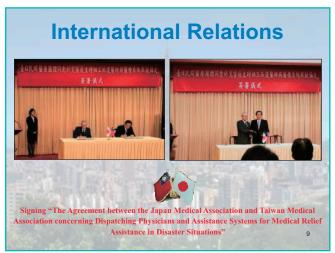
- Advocacy for patients' rights while ensuring equitable financing of the national health insurance.
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- Coordinating emergency care after the water park explosion incident.



















#### THE MEDICAL ASSOCIATION OF THAILAND\*1

Kidaphol WADHANAKUL<sup>1</sup>







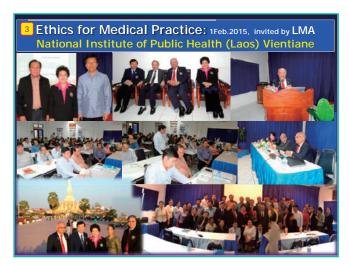


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<sup>1</sup> International Relations, The Medical Association of Thailand, Bangkok, Thailand (math@loxinfo.co.th).





















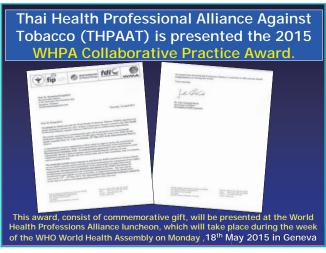






























#### **Confederation of Medical Associations in Asia and Oceania**

# **CMAAO Resolution on Ensuring Food Safety**

Adopted by the CMAAO General Assembly, Yangon, Myanmar, September 2015

In today's modern society characterized by industrial development, the issue of food safety faces serious new threats such as contamination by heavy metals or harmful chemicals such as endocrine disrupters in addition to the traditional threat of microbial diseases (food poisoning). Furthermore, as consumption of processed food or preferrd foods increase with social change, the use of various food additives to enhance preservation and taste has become a topic of heated controversy.

In addition, environment issues are important areas to consider in discussion on food safety as it affects the whole food chain and climate change can pose a serious threat on ensuring food safety.

On the other hand, the supreme proposition that must be dealt with before addressing these threats is securing safe water. In a society without safe water supply, the people will be forced to live unhealthy life in extremely poor public health settings. Directly or indirectly, people consume water throughout their life, and securing safe water leads to ensuring food safety that further leads to national health.

Furthermore, greater public awareness on food safety has resulted in increased public anxiety and distrust regarding food consumption. Physicians and the medical field are in a critical position to provide accurate and objective information regarding standards for safe food intake.

Based on its study on the role and responsibility of the medical community regarding food safety and health, CMAAO hereby adopts the following principles and recommends all individual physicians, NMAs and governments to consider and practice these principles.

#### Recommendations to Physicians and Medical Professionals

- 1. Upon observing microbial diseases caused by food sanitation or other food safety incidents during patient care, physicians and medical professionals shall report this to the health authorities in order to contribute to statistical data creation, devising of response strategies and sharing of related information.
- 2. Physicians shall be aware of their professional role regarding food safety and shall continuously show interest and acquire expert knowledge in order to prevent food safety related incidents and the treatment of related diseases.

#### **Recommendation to Each Government**

1. Governments shall create an integrated management system for the food processing and distribution process to prevent soiling and contamination of food, and shall create a foundation

to secure food safety by improving related systems regarding the reporting, inspection, verification and monitoring of diseases caused by food sanitation issues and by enacting related laws and regulations.

- 2. Food adulteration is imposing a constant threat to the public health and ensuring food safety, governments shall establish a strong control system to prevent food adulteration.
- 3. Governments shall cooperate with expert groups based on academic knowledge in order to develop various guidelines ranging from food handling to consumption and shall communicate this to the public and related parties.
- 4. Governments should also consider the issues of antimicrobial resistance due to indiscriminate use of antimicrobials in animals, safety of genetically modified foods, health supplements, etc. in its policies for ensuring food safety.
- 5. Governments shall encourage research on safety of microbial diseases, chemicals and food additives and shall develop policies capable of guaranteeing food safety by collecting case examples, collecting and creating various statistics and using related academic data.
- 6. Because food is actively moved across borders through trade, inter-governmental and even global cooperation is essential for safety management. Therefore, governments shall create a cooperative system for constant sharing of information regarding food safety and to prevent any harm caused by food.
- 7. Because the entire process from food manufacturing to consumption has to be managed in an integrated and organic manner in order to secure food safety, governments shall provide support to enable the creation of a close cooperation system among the government, industry, medicine and academia.

#### Recommendation to NMAs

- 1. NMAs shall develop and operate training programs for physicians to enable physicians to acquire professional knowledge regarding food safety and to better understand the role of physicians and the medical community with regards to food safety management.
- 2. NMAs shall conduct public campaigns to raise public awareness on environment sanitation, food safety and health. Development of education programs targeting young children would be important as people can raise consciousness on environment and food safety early on in their lives.
- 3. NMAs shall encourage academic research regarding classification of substances such as food additives whose harmfulness needs to be appropriately managed and regarding humanly acceptable standards for such substances. Also, NMAs shall provide objective and accurate information regarding such topics in a form that is easily understandable by consumers.
- 4. NMAs shall develop an academic foundation regarding exposure to contaminants and health by encouraging continuous research on chronic health damage due to not only microbial diseases but also chemicals in order to understand the current situation and to accumulate data.
- 5. By accumulating research and statistics regarding microbial diseases, chemicals and food additives, NMAs shall actively advise development of government policies on food management as an expert group.
- 6. NMAs should collaborate with other professional organizations such as national veterinarian associations and agricultural experts and etc.

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## Japan Medical Association Junior Doctors Network Report on the 30th CMAAO General Assembly in Myanmar

Kazuhiro ABE1

#### Introduction

The 30th General Assembly of the Confederation of Medical Associations in Asia and Oceania (CMAAO) was held from September 23 to 25, 2015 in Myanmar. This report is an overview of the event as I had the honor of attending the meeting on behalf of the Japan Medical Association Junior Doctors Network (JMA-JDN).

The meeting took place in the Republic of the Union of Myanmar, a Southeast Asian country with a population of about 51.41 million people (Myanmar Ministry of Immigration and Population, Sept. 2014). About 70% of the population belongs to the Bamar ethnic group, the official language is Burmese, and about 85% of

the population is Buddhist. The word Myanmar brings to my mind the Nobel Peace Prize winner Aung San Suu Kyi and the nation's 2010 general election. Despite the politically turbulent images I had about the country, I received a warm welcome by my JDN friends when I arrived at the Yangon airport.

#### **Food Safety**

At the symposium, each National Medical Associations (NMAs) reported the current domestic status about "Food Safety," which was the main theme of the meeting. The World Health Organization (WHO) held a campaign on Food Safety on World Health Day 2015,² and shocking facts were reported—various food con-



CMAAO participants' group photo

<sup>&</sup>lt;sup>1</sup> Chair, Japan Medical Association Junior Doctors Network, Tokyo, Japan (Kazuhiro\_abe\_1215@ybb.ne.jp).

tamination has caused more than 200 diseases in the world and 2 million deaths occur every year because of contamination. Even the hygiene of drinking water is a problem in some parts of the world. At the hotel I stayed in Myanmar, the water in the tub was brownish and cloudy. Many nations also have problems with bacteria, parasites, and chemicals such as lead, mercury, arsenic, and dioxin in food and water. In Bangladesh, reportedly, rice made of plastic was sold and engine oil was used for cooking. Nations are busy addressing these issues by developing guidelines and legislation. While listening to the presentations of the CMAAO nations, I thought that the most important thing in addition to those national measures is awareness among people-each person should practice handwashing and gargling and learn about heatcooking and food storing. Awareness of such practices should grow and take root in the domestic culture of each nation. The WHO advocates the Five Keys to Safer Food.3 In my daily practice as a family physician in Japan, fortunately, I rarely encounter an occasion to teach patients about cooking with heat or methods to store food. This is likely due to the high hygiene consciousness among the Japanese people that has taken root in child upbringing and education.

#### **Country Report**

In the country report session, the NMAs provided updates on their activities. One thing that I found particularly interesting was the problems that Australia faces; the gap in life expectancy between the indigenous Aborigines and other people and the poor accessibility to healthcare for refugees are apparently drawing public attention. Japan cannot be an uninvolved bystander on these issues. In addressing these issues, it appears that Australia is shifting from their previous approach of promoting organ-specific specialization to promoting primary care, and aiming for equal healthcare access and universal health coverage. This is indeed a complicated problem within which social determinants of health are intertwined. The report from Indonesia had interesting news. They have launched a television channel and are carrying out a project to promote protein intake among small children called the "One Million Eggs Movement," and cam-



With fellow JDN members

paigns for non-smoking and eradication of political corruption. Taking advantage of the power of mass media to guide behavioral change in national population or improve national health literacy is quite an intriguing approach. In Japan, it will become necessary for an individual to proactively select which healthcare services to receive in the future,<sup>4</sup> and cooperating with the media may be a good approach. Other nations also had many topics to share, for example, Korea reported about MERS and Malaysia raised a concern about the TPP agreement.

#### **Health Care in Danger**

There was a lecture about Health Care in Danger<sup>5</sup> by Juerg Montani, head of the committee of the International Red Cross in Myanmar. According to the 2-year global survey on health-care workers who became involved in armed conflicts from 2011 in 20 countries, there are three such cases a day on average. Montani stated that once a healthcare worker's life is lost, co-workers are often forced to abandon their duties from anger and anxiety, and it negatively affects a few thousands patients. Asian countries are also at risk. Once chaos strikes, the safety of healthcare workers is put in danger.

#### JDN in Asia and the Oceania

Fourteen nations participated in the meeting as the CMAAO members; however, only three JDN nations—Myanmar, the Philippines, and Japan—joined the meeting. Despite the small

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size of the JDN participants, we exchanged our latest news over lunches and had indepth discussions about developing our future collaboration.

#### **Impressions**

It felt that our amity naturally deepened over the meeting, perhaps because we all shared the sense of fellowship and high affinity as the same Asian and Oceanian members. The Myanmar Medical Association hosted a dinner in the evening of the second day, and representatives of NMAs sang karaoke and danced together. We also exchanged souvenirs and took many group photos—this may be a unique feature of the people of this region.

I think that the CMAAO has a value that is different from that of an academic society or a government. An academic society is a place for high-level scientific discussions, and a government is a place for discussions from macrocosmic viewpoints. The CMAAO meeting, on the other hand, seems to be unique as it often involves more practical and realistic reports, because domestic healthcare leaders from various nations gather here. I believe that the CMAAO is playing an important role by apply-

ing both up-to-date academic findings and macrocosmic findings on healthcare systems and other issues in the real world.

#### Acknowledgments

I would like to express my deep gratitude to the JMA President Yokokura, JMA Executive Board Members Ishii and Kasai, CMAAO Legal Advisor Murata, and the staff of the JMA International Affairs Division for providing me with this valuable opportunity.

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#### CMAAO General Assembly in Yangon/ Myanmar 2015

The CMAAO General Assembly was held in Yangon this year. It was my first visit to Myanmar, and many people welcomed us cheerfully. Yangon is a huge city, and seemed like the center of Buddhism, retaining its ancient style with the beautiful Shwedagon Pagoda plated entirely in gold, which was especially impressive when it glowed with reflections of the deep orange sunset.

I was also welcomed with warm and gentle hospitality everywhere I went in the city.

Against this background, the CMAAO General Assembly was held with the participation of 14 member NMAs as well as two executives from the WMA, Dr. Ardis Hoven, Chair of Council and Dr. Otmar Kloiber, Secretary General.

The main topic of the Takemi Oration and the Symposium was food safety, which has become a very important issue in our region. It is important because the region has the world's largest population, and we physicians are obliged to work to promote people's healthy longevity. In this context, the issue of food safety included discussions about environmental health, including alerts concerning air and water pollution. These issues were sincerely discussed, and we were able to eventually reach an agreement on a resolution concerning such challenges.

After the successful meeting in Yangon, we visited the Japanese cemetery, which is located one-hour from Yangon by car. Many of the graves seemed to be the graves of Japanese people and their families who decided to remain in this heart-warming country after World War II. It was a chance to deeply reflect on past history.

After this journey, I sincerely hope that the wellbeing of the people and their health system will be further promoted in Myanmar.

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Shwedagon Pagoda at sunset

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### **Principles of Medical Ethics**

#### Japan Medical Association

The mission of medical science and health care is to cure diseases, to maintain and promote the health of the people; and based on an awareness of the importance of this mission, the physician should serve society with a basic love for humanity.

- The physician should strive to achieve a lifelong dedication to continuing education, to keep abreast of medical knowledge and technology, and to support its progress and development.
  - The physician should be aware of the dignity and responsibility of his/her occupation and strive to enhance his/her cultural refinement, education, and integrity.
  - 3. The physician should respect the individuality of his/her patients, treat them with compassion, provide full explanations of all medical treatment, and endeavor to earn the trust of the patient.
- 4. The physician should maintain respect for his/her fellow physician, cooperate with medical care personnel and serve the cause of medical care to the best of his/her abilities.
  - 5. The physician should respect the spirit of public service that characterizes health care, contribute to the development of society while abiding by legal standards and establishing legal order.
  - 6. The physician will not engage in medical activities for profit-making motives.

