

REPORT ON WHO-IUSMP 2ND INTERNATIONAL SEMINAR ON PUBLIC HEALTH ASPECTS OF NON COMMUNICABLE DISEASES, 11-18 AUGUST 2010

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Introduction

I was fortunate to be invited to attend the WHO-IUSMP 2nd International Seminar on Public Health Aspects of Non Communicable Diseases (NCDs) in Lausanne, Switzerland as a representative of Samoa. There were 22 countries represented in the seminar with Samoa the only country from the South Pacific. The participants were selected based on their backgrounds and their involvement with issues related to NCDs in their respective countries.

The seminar provided a golden opportunity for the participants to hear first hand experiences from experts in various fields including Public Health, clinical medicine and academics. A variety of lectures were given by experts representing a wide range of organizations including the World Health Organization (WHO), University Institute of Social and Preventive Medicine, Lausanne (IUSMP), International Agency for Research on Cancer (IARC) and the Swiss Tropical and Public Health Institute (STPHI). The seminar was sponsored and co-funded by the WHO and IUSMP.

Aims and Objectives

The main aims of the seminar were to provide participants representing their countries with an update on the current status of public health aspects of Non Communicable Diseases (NCDs) in the world and to enable participants to share experiences and NCD data from their own countries.

The key objectives of this seminar were:

Defining the NCD problem

- Global, Regional and Local
- “Epidemiologic transition”
- Update on Global NCD situation/
- Global strategy

Basics of the response

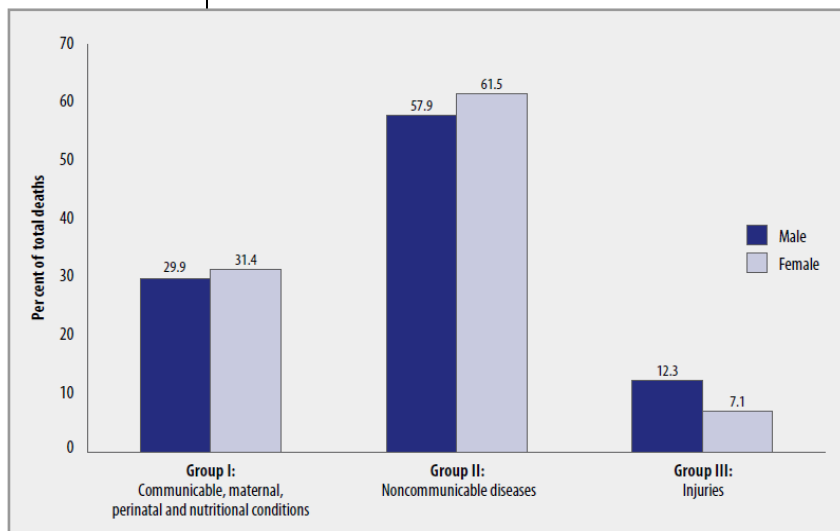
- Primary prevention of NCDs: population and high-risk strategies
- Lessons learnt: Finland Experience

Effective Interventions: Cost Effective

- Strengthening health systems
- “Sharing” of country experiences-Samoa

The picture painted from WHO worldwide NCD data was startling and gave a huge cause for concern. NCDs, mainly cardiovascular diseases, cancers, diabetes and chronic respiratory diseases, were responsible for roughly 60% of all deaths globally in 2004 with 80% occurring in the low and middle-income countries (LMIC)¹, see Fig 1.

Figure 1: Distribution of Deaths in the World By Sex, 2004¹



In regards to all causes of death, cardiovascular diseases and cerebrovascular diseases were shown to be highest, representing around 20% of all deaths compared to all the other causes of death globally. See Table 1.

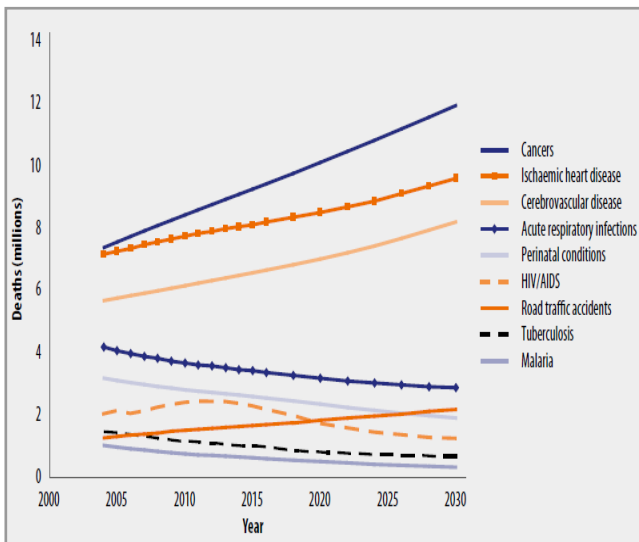
The message given to participants was loud and clear. NCDs are the biggest killers globally and unfortunately this devastating trend will continue to increase unless all countries are committed to facing this reality and actively promoting health at all levels and in all walks of life¹. See Fig 2.

A huge body of knowledge supported by worldwide data indicates the size of the problem of NCDs but the seminar also placed an emphasis

Table 1: Leading causes of death, all ages, 2004

	Disease or injury	Deaths (millions)	Per cent of total deaths
1	Ischaemic heart disease	7.2	12.2
2	Cerebrovascular disease	5.7	9.7
3	Lower respiratory infections	4.2	7.1
4	COPD	3.0	5.1
5	Diarrhoeal diseases	2.2	3.7
6	HIV/AIDS	2.0	3.5
7	Tuberculosis	1.5	2.5
8	Trachea, bronchus, lung cancers	1.3	2.3
9	Road traffic accidents	1.3	2.2
10	Prematurity and low birth weight	1.2	2.0
11	Neonatal infections ^a	1.1	1.9
12	Diabetes mellitus	1.1	1.9
13	Hypertensive heart disease	1.0	1.7
14	Malaria	0.9	1.5
15	Birth asphyxia and birth trauma	0.9	1.5
16	Self-inflicted injuries ^b	0.8	1.4
17	Stomach cancer	0.8	1.4
18	Cirrhosis of the liver	0.8	1.3
19	Nephritis and nephrosis	0.7	1.3
20	Colon and rectum cancers	0.6	1.1

Figure 2. Projected Global Deaths from Selected Causes, 2004 – 2030¹



on the “HOW” issue, how to tackle this problem. Experts from WHO, led by Dr Alan Alwan, the Assistant Director General, provided informative and evidence-based sessions on this particular issue.

The 6 objectives of the 2008-2013 Action Plan (see Table 2) was a useful tool provided by the WHO. This was discussed in depth throughout the seminar culminating with a practical group activity to translate the 6 objectives into workable action plans compatible to the needs of each country.

Table 2: Six objectives of the 2008-2013 Action Plan

1. Raising the priority accorded to non-communicable diseases in development work at global and national levels, and integrating prevention and control of non-communicable diseases into policies across all government departments
2. Establishing and strengthening national policies and programs
3. Reducing and preventing risk factors
4. Prioritizing research on prevention and health care
5. Strengthening partnerships
6. Monitoring NCD trends and assessing progress made at country level

The issues discussed in the Seminar were the following:

- Overview of NCD with a focus on Low and Middle Income Countries (LMIC)
- The Epidemiologic transition from Communicable Diseases to NCD
- Outline of NCD global and implementation plan
- Presentation of the 6 objectives of the 2008-2013 Action Plan
- Global Burden of Disease
- Primary prevention of NCD: population and high-risk strategies
- Experiences and lessons from Finland
- International experience of NCD
- Prevention and control strategies of NCD risk factors
- Chronic respiratory diseases: Burden, population and clinical interventions, focus on LMIC
- Genetics of NCD: relevance to LMIC
- Behavioral change models and their use for interventions for NCD
- Strengthening Health systems for NCD
- NCD surveillance: Principles and risk factors
- Cardiovascular diseases:
 - Epidemiology, burden and primary prevention
 - Early detection and management in LMIC
- Research agenda for NCD with focus on LMIC
- Urbanization and NCD

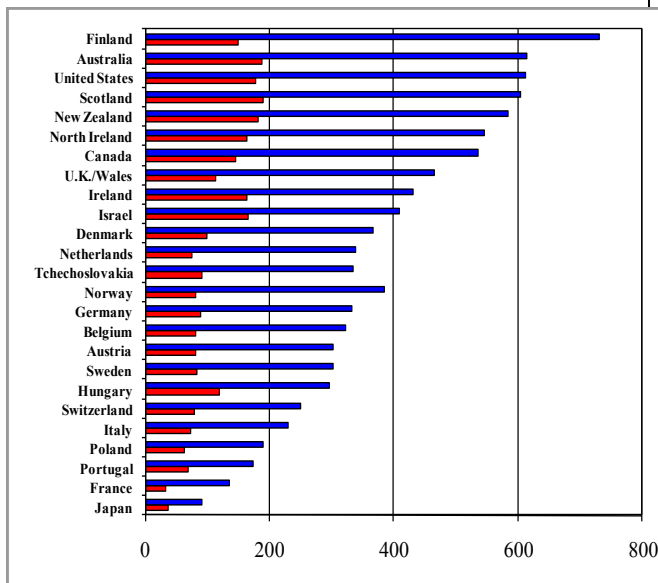
- Principles of social marketing and how to use it to move the NCD agenda
- Leadership and partnership to advance NCD policy/programs
- Economic burden of NCD and cost effective clinical and public health interventions for NCD
- Social determinants of health and NCD

Lessons Learned from International Experience: Finland

One of the highlights of the seminar was a presentation “The Finland Experience - North Karelia Project”² which was delivered by Dr Pekka Jousilahti, a research professor at the National Institute of Health and Welfare, Helsinki. The project was an initiative by the Finnish government and other private agencies as a response to the NCD problem, which was developed from a study of mortality rates on Coronary Heart Diseases in the late 1960s. (See Figure 3.)

Figure 3. CHD mortality in 25 countries in the late 60s - men and women aged 35 to 64 years

The Finnish study reinforced the well-known message that appropriate measures countering risk factors such as smoking, poor nutrition and physical inactivity will decrease mortality rates from



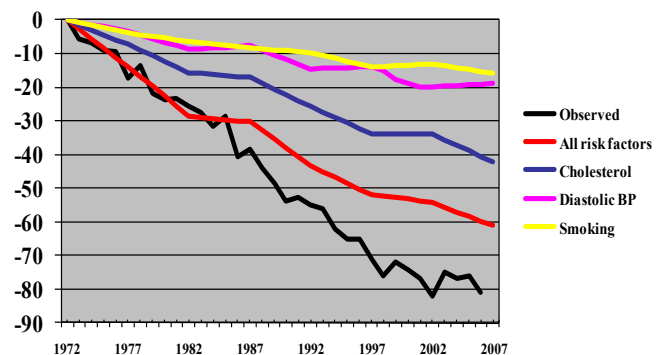
NCDs. It also provided evidence that primary prevention works. In Dr Jousilahti’s presentation, the key implication was that population-based prevention is the most cost-effective and the only affordable option for major public health improvement in Cardiovascular Diseases rates. The Finnish study was successful in combining population strategies and high-risk strategies, placing heavy emphasis and efforts on three main risk factors: smoking, cholesterol levels and blood pressure levels. Simple but effective national health policies such as the Tobacco Law, salt reduction in goods and pro-

motion of alternatives over the use of butter were found to help reduce the targeted risk factors. The Finnish study clearly revealed that addressing and targeting risk factors and lifestyle factors leads to improvements in mortality rates. (See Figure 4.)

Figure 4. Observed Decline in CHD mortality in Finland - 35-64 year old men

Country Experiences: Samoa

The country presentations from all the participants



consolidated the Global NCD data, with mortality rates and the burden of diseases from NCDs consistently being shown to be the highest in all the participating countries. In my presentation named the “NCD situation in Samoa”, I presented NCD statistics that were in-line with the global NCD situation. A surveillance tool adapted from the WHO called STEPS (STEPwise approach) was utilized in collecting data in 2002 and later collated and analyzed to give important statistics on risk factors for NCDs in Samoa³. A snapshot of the Samoa STEPS in 2002 revealed the important NCD risk factors and their respective prevalence rates:

Men
Women

STEPS in 2002 revealed the important NCD risk factors and their respective prevalence rates:

- Smoking - 40.3% were smokers
- Nutrition - 35.6% consumed less than the recommended 5 servings of fruits a day
- Alcohol - 29.4 % were current alcohol consumers
- Physical Activity - 50.3% were physically inactive
- Obesity - 85.2% were classified as overweight
- Hypertension - 21.2% were found to have above normal Blood pressure readings
- Diabetes - 21.5 % were found to be Diabetics
- Blood Cholesterol - 13.7% - levels > 5.2 mmol/L

One of most concerning figures revealed from the studied population was that 33.8% of the adult population had at least 3 of the risk factors studied. In simplest terms, that means that 1 in every 3 adults are at high risk of mortality and morbidity with the consequential financial and social burden this places on Samoa.

The data from 2002 – 2007 mortality rates in Samoa indicate that the top 4 causes of death in the country are all non-communicable diseases⁹. (See Table 3.)

*Table 3. Ten Leading Causes of Mortality for deaths reported to All Public Health Facilities for Financial Year 2007/2008 in Samoa
Adapted from the Annual Report
July 2007 – June 2008. Ministry of Health, Samoa.
PATIS (2007-2008)⁹*

As a required part of the country presentations, participants were tasked to provide a summary of

	Description of Underlying Cause	Sex		
		Male	Female	Total
1	Diabetes Mellitus	33	20	53
2	Cancers (All sites)	24	22	46
3	Cerebrovascular Diseases	20	22	42
4	Ischaemic Heart Diseases	20	15	35
5	Pneumonia	17	12	29
6	Septicaemia	12	13	25
7	Injuries & Poisoning	18	6	24
8	Other Heart Diseases	13	3	16
9	Hypertension Diseases	4	10	14
10	Liver Diseases	8	4	12

the local action plans (if any) that are specifically geared towards the fight against NCDs. One notable constant from all the country presentations was that NCD is a priority and at the least, work is being carried out to counter the increasing concern.

Conclusions

The NCD 'epidemic' is a huge concern from global, regional and local perspectives. It is a problem that affects the poorest and the richest countries and people, knows no boundaries or cultures and without proper targeted control and effort at national policy level as well as at local

levels, it will continue to adversely affect more lives, more families and more countries. One of the major global challenges faced by NCDs is the lack of wider recognition of developmental strategies and goals set by international bodies such as the United Nations (UN). Health is included in the Millennium Development Goals (MDGs). However, NCDs are not on the agenda. The WHO together with other major organizations dealing with NCDs is in the forefront of advocating the inclusion of NCDs in the MDGs.

In Samoa, tackling the NCD problem is now officially a top health priority as reflected in the inclusion of NCDs in the Health Sector plan 2008 - 2015 and the set up of the National NCD policy¹¹ spearheaded by the MOH. Samoa has shown commitment as evident in its population strategies involving legislation such as the Prohibition Order on the Importation of Turkey Tails in 2007 and the Tobacco Control Act 2008. But still a lot more work needs to be done.

Health related media and physical activity campaigns have also been put in place targeting the general population. Primary Health care has also received renewed attention and it is re-emerging slowly with selected general practitioners visiting peripheral health centers throughout the week. There is in addition a notable increase in NCD screening programs carried out by the private sector and the public sector around the country.

These developments are moving in the right direction. However, there is still a need for maximal integration within the health sector and other governmental and nongovernmental bodies. Health surveillance is also considered a weak area and this needs strengthening in order to plan, advocate, monitor and evaluate NCD programs in Samoa.

From international experiences, the Finnish project has shown that proper, organized and inter-sectoral methods do work in countering NCDs. The experience in Finland has shown that lifestyles can change and risk factors can be addressed. If Samoa can learn from these experiences reduction in morbidity and mortality rates from NCDs will inevitably follow.

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