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REPORT OF THE INTERHEALTH PROGRAMME DIRECTORS' MEETING WHO/DBO/IPD/93.1 5 - 8 APRIL 1993, BEIJING, PEOPLE'S REPUBLIC OF CHINA English only

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1. INTRODUCTION

The meeting was opened by Dr Hu Ching-Li, Assistant Director-General of the World Health Organization, representatives of the Ministry of Public Health of China were present.

Welcoming speakers noted that the morbidity and mortality from cardiovascular diseases (CVD) has increased dramatically in developing countries and that by the year 2000, deaths from noncommunicable diseases (NCD) will surpass those from infectious diseases in most of the countries participating in the INTERHEALTH demonstration programmes.

It was announced that Dr Pekka Puska from the North Karelia Project in Finland would chair the meeting and that Dr Marilyn Winkleby from the Stanford Five-City Project, USA, and Dr Hassam Gareeboo from Mauritius would serve as rapporteurs.

2. DEMONSTRATION PROJECTS DEVELOPMENTS

2.1 Background

There are 16 community-based NCD projects from 12 countries that comprise the INTERHEALTH demonstration projects. All programmes target multiple NCD risk factors, including smoking, alcohol abuse, sedentarity and diet.

The centres are:

AFRO: Mauritius, Tanzania; EMRO: Cyprus; EURO: Finland, Lithuania, Malta, Russia; PAHO: Chile, Cuba, USA (Florida, Stanford, Texas); SEARO: Thailand, Sri Lanka; WPRO: China (Beijing, Tianjin).

2.2 Centre's reports

Following is a summary of each INTERHEALTH Project's progress.

Chile: Dr Ximena Berrios

This project began in 1986 with a baseline survey measuring the prevalences of risk factors in a random sample of the adult population from the metropolitan region of Chile, where the state capital, Santiago is located and 40% of the population lives. Risk factors assessed included: smoking, alcohol consumption, physical inactivity, obesity, high blood pressure, total serum cholesterol, HDL cholesterol, triglycerides, and blood glucose.

Results show a high prevalence of all risk factors, with the highest levels being physical inactivity and smoking in both sexes, plus alcohol consumption in men and obesity in women.

It is expected that the incidence of NCD in adults will increase rapidly in Chile in the near future due to the high prevalences of related risk factors and its special situation as a country in transition. Various activities (reported previously) have been developed to facilitate the second phase of the study.

During 1991-1992, the following activities were developed to meet the objectives of INTERHEALTH:

- i) A new survey was undertaken to assess risk factors in a cohort sample of the original population examined in 1986, with the main aim of comparing trends with a non-intervened population. Preliminary results show the continuation of high prevalence levels of risk factors, with the exception of smoking in females. Also it shows a fatality rate of 1.03% per year attributable to NCD. The following possible causes for this situation include: a) the lack of information about risk factors, b) a passive attitude of people with respect to their own health, and c) negative experiences with the health sector.
- ii) An intervention programme to be offered in the schools is being prepared. Schools (5th and 6th grades) in five municipalities in the metropolitan region will act as intervention and reference areas. The programme is called: MIRAME (LOOK AT ME) and is based on a psychosocial approach for obtaining behavioural change. The programme is an adaptation of a similar programme in South Texas, by Dr Espinoza.

A baseline programme of the intervention will begin in July, 1993. The impact of the programme on risk factors will be evaluated with a final survey after three years of intervention.

CUBA: Dr I. Macias

The study is being carried out in the urban area of the "Havana Vieja" municipality in Havana City. The baseline survey was performed in 1990 in a random sample of 1106 persons. The intervention started in January 1991. Another screening of a new sample of 1098 persons, randomly chosen in December 1992, was conducted after two years of intervention.

We have improved the control of hypertension, diabetes, obesity and hypercholesterolemia (e.g. hypertension control increased from 18.3% in 1990 to 32.3% in 1992,, control of diabetes increased from 42.8% to 63.4%). The number of smokers decreased for both men and women, and more people report that they are eating a healthy diet and are engaged in physical activity. There was no change in CHD or stroke mortality from 1990 to 1991, but the time period was very short.

Intervention Activities: Health education has been provided to the population about high blood pressure, the danger of high cholesterol and the diseases produced by smoking. How to maintain an ideal weight, the need for regular physical exercise, and how to prepare a healthy diet have also been included. Special recommendations are given to diabetics stressing the importance of blood sugar control. Particular importance is given to the control of high blood pressure, the control of diabetes, and the maintenance of blood cholesterol at 5.2 or less.

At the end of each year, a general meeting takes place where every physician and nurse present the health situation of their population. This includes the morbidity and mortality.

We use the TV, local radio stations, the press, meetings, conferences, films, distribution of written materials, phone calls, videos and home visits for the achievements of our objectives. Schools, colleges and other educational sites participate as well as worksites and factories.

CYPRUS: Dr C.H. Komodici

The baseline survey, carried out in 1989, revealed the need to take immediate preventive measures so as to reduce the chief risk factors for NCD. The main activities carried out are:

- i) Improvements in the data collection/analysis system (i.e. cancer registration, deaths registration hospital statistics analysis).
- ii) Education developments:
 - health education including lifestyle and behavioural risk factors included in school curricula;
 - b. in-service training of the primary health care team.
- iii) Preparation of an anti-smoking nutritional campaign protocol which includes surveys, training courses for general practitioners, public information/educational activities (through the hiring of the services of an advising office). Main goals of the campaign to be achieved by the year 2000 are to:
 - a. reduce smokers from 34% to 20%;
 - b. strengthen the tobacco law;
 - establish a national committee on nutrition (approved last January by the Ministerial Council);
 - d. reduce the energy from fat to 30%;
 - e. increase the energy from carbohydrates to 55%;
 - f. reduce the daily salt intake to 5 grams;
 - g. reduce the energy percentage from protein to 12%.

FINLAND, NORTH KARELIA: Dr Pekka Puska

The North Karelia Project was launched in 1972 in response to a public petition to reduce the high cardiovascular disease CVD rates in this province of Eastern Finland. Previous epidemiological studies and growing public awareness were important backgrounds. The Project has carried out coordinated, theory-based community intervention to reduce the population levels of the well-established CVD risk factors (smoking, serum cholesterol and blood pressure), and its careful evaluation.

Since 1977 the project has actively been involved with national preventive work. In 1982, when Finland joined the WHO programme for Integrated Control of Major NCD (WHO/EURO: CINDI, WHO/HQ, INTERHEALTH), the Project was expanded to include broader objectives: i.e. a more integrated prevention of major chronic diseases and promotion of health. North Karelia has served as a demonstration area;

the experiences are continuously applied for national use. The evaluation has used standardized cross sectional population surveys at five-year intervals, mortality and incidence registers, annual health behaviour monitoring, etc., in North Karelia, in another monitoring area, and in all Finland.

The population survey that served the 20-year evaluation of the North Karelia Project (INTERHEALTH in Finland) was carried out in Spring 1992. The results show that from 1972 to 1992, among men aged 30-59 years in North Karelia, the prevalence of smoking decreased from 52% to 32%, the mean serum cholesterol from 7.1 mmol/l to 5.8 mmol/l and the mean blood pressure from 145/92 mmHg to 143/84 mmHg. These declines were in 1972-77 significantly greater than in the original reference area. Thereafter, the risk factors declined much in the same way. From 1987 to 1992 large changes took place in dietary habits and serum cholesterol levels of the population. This was clearly related to the active programme to lower the still high population cholesterol levels both in North Karelia and in all of Finland.

In 20 years, the age-adjusted mortality rate among men aged 35-64 years in North Karelia has reduced for all CVD 46%, for IHD 46%, for cancer 45%, and for all causes 37% (linear model based change 1969-1991). The decline in CVD mortality in North Karelia was in the 1970's significantly greater in North Karelia than in all of Finland.

In 1992, these favourable results were widely publicized in Finland, and plans were made for the objectives and activities in the next five years of the programme.

LITHUANIA: Dr A.L. Miseviciene

Within the last two years, after restoration of Lithuanian independence, many political, economic, and social changes occurred. The ten year experience which was gained from Lithuanian INTERHEALTH supports the development of new health policy. Analysis of mortality data showed that 9 out of 10 deaths are caused by NCD which are covered by Lithuanian INTERHEALTH.

A survey of the risk profile of the Lithuanian population revealed that major NCD risk factors (smoking, obesity, hypertension, physical inactivity, unhealthy diet) are widespread, with 90% of the adult population having at least one risk factor. Thus, a public health approach is the most appropriate for new health policy. As the previous health care system was too medicalized, the new national health policy should be active and should combine the three sectors, health promotion, health care and environmental protection. If any realistic change in health status of the population is to be expected, changes in NCD morbidity and mortality should be sought.

The new health policy based on the "Health for All 2000" strategy was approved at the National Health Conference which was held in March 1993, in Vilnius and was organized by the Lithuanian Ministry of Health with the support of the WHO Regional Office for Europe.

The activities which were carried out in 1981-1992 within Lithuanian INTERHEALTH are described in detail in the progress report entitled "INTERHEALTH Annual Report, 1981-1992".

The following main activities were carried out:

- 1) The Kaunas Medical Academy was designated as the CINDI children component coordinator management centre;
- 2) After the visit of the WHO/HQ mission on smoking control, the law on tobacco control in Lithuania was prepared and it will be confirmed at the Supreme Court in the near future;
- 3) The third survey of the children and adult populations is being finished and the data will be sent to the INTERHEALTH data management data centre in Finland;
- 4) Such intervention projects as healthy schools, breast feeding programmes, and smoking control programmes among school children have spread from the demonstration area to the national level.

MALTA: Dr Mary Bellizzi

The prevention of NCD continued to progress in Malta in the intervention programmes both as implemented and evaluated. A comprehensive study of food and health in Malta was carried out in 1991-1992 and a report was published. The study aims were to:

- a. Provide an analysis of the diet-related health aspects of the Maltese people;
- Analyze changes in eating habits;
- Present an overview of education measures;
- d. Assess food availability;
- e. Present an economic impact analysis of food resources.

Conclusions emerging were the improvement in health of the Maltese people, including decreased infarct mortality and decreased mortality from circulatory diseases and some cancers.

Positive dietary changes, also observed, have been an increase in the consumption of fruit, vegetables, fish, cereal products and pulses. A decrease in egg and beef consumption has also been noted. Smoking appears to be falling in men.

Intervention programmes that are multisectional are gaining more support and extensive networks have been established. Overseas training of personnel in nutrition, food technology, health educational and health promotion has increased many fold. A division of health promotion is soon to be set up within a reformed Department of Health.

MAURITIUS: Drs Hassam Gareeboo and Anil Purran

Mauritius launched its NCD programme with the baseline data survey carried out in 1987 on a random sample of Mauritians. High prevalence rates of diabetes (12%), hypertension (14%) and Ischaemic heart disease were noted as well as their risk factors. Five years intensive intervention ensued in the whole country which is too small to divide into intervention and control areas. In 1992 a first five year follow up survey was carried out. Encouraging results were noted in the decreasing

prevalence of smoking, abusing drinking, dislipidaemias and sedentarity. However, overweight/obesity had gone up fairly substantially in males from 22% to 35% and in females from 38% to 45%. Diabetes had gone up the percentage slightly but hypertension had decreased. The most important change was the marked decrease of the population with high cholesterol from 56% to 33% in five years intervention. The control of diabetes had gone worse but that of hypertension had improved. Case ascertainment of both diabetes and hypertension had increased. These results which are on the whole positive has encouraged the government of Mauritius to continue to support the NCD programme as laid out in the INTERHEALTH protocol.

PEOPLE'S REPUBLIC OF CHINA, BEIJING: Dr Chen Chunming

The INTERHEALTH China-Beijing was launched in 1989. Four sub-districts of the East City District of Beijing Municipality were selected, with 45,017 and 41,860 people in the demonstration and reference areas respectively.

The baseline survey was carried out in 1989, which consisted of a epidemiologic survey of chronic diseases and nutrition habits of 867 subjects, aged 35-74.

The proportion of total mortality of NCD in residents aged ≥15 was 69.8% and total prevalence of NCD was 33.2%. Prevalences of coronary heart disease and stroke were significantly higher in hypertensives, smokers and alcohol drinkers. Dietary fat intake was around 30% of caloric intake, cholesterol 400-500 mg, but serum total cholesterol ranged from 160-190 mg/dl. Salt intake was 12.5 g daily.

Based on this baseline survey, hypertension, stroke and coronary heart disease were targeted focusing on community management of hypertensives; and reduction of salt intake, dietary fat, smoking alcohol consumption. Our two year progress evaluation showed significant improvements in blood pressure control, salt intake, smoking rate and alcohol drinking rate in the demonstration area while in the reference area, no change or little changes occurred. The project is operating through the existing health care framework collaborating with community network.

PEOPLE'S REPUBLIC OF CHINA, TIANJIN: Dr Tian Huigang

The INTERTHEALTH Tianjin project began in 1984, and represents the first major chronic disease programme in China. The project focused on the four leading chronic diseases in China--stroke, cancer, CHD and hypertension.

The focus of the intervention activities are to stop smoking, reduce salt and fat intake, increase physical activity and control blood pressure. The project is implemented in selected NCD sites by a cooperative team under the leadership of the Tianjin Public Health Bureau. The population in NCD sites is 400,000. There are nine intervention and three reference sites.

After identifying some risk factors by a health and nutrition survey, comprehensive integrated intervention activities have been started in the Tianjin

project and surveillance and a monitoring system have been set up and improved. A three year observation (1990-1992) shown that decreases in hypertension and smoking have been shown in the nine intervention NCD sites.

RUSSIAN FEDERATION, MOSCOW: Dr R. Oganov

The INTERHEALTH project is carried out in one of Moscow's districts. Today the implementation of the programme faces certain challenges which are closely related with the economic and political situation in Russia as well as with changes in the administrative and territorial structure of Moscow.

Experience gained from the INTERHEALTH project helped to: 1) make recommendations on noncommunicable disease prevention (NCD) to be included in the new Russian health legislation; 2) develop and start the programme directed at the NCD prevention in one of the Russian regions (Brianskai region), which suffered from the Chernobyl accident; and 3) start working on the document entitled, "Towards a Healthy Russia -- Policy for Health Promotion and Disease Prevention, Focus on NCD".

The following activities are under way in the demonstration area: estimation of the prognostic value of common risk factors relating to major NCD; detection of prevalence of diabetes and its relationship with major risk factors; development and implementation of asthma self-management programme among children; study of different approached to quit smoking; and improvement of detection and treatment (secondary prevention) of major NCD.

SRI LANKA: Dr S.A.P. Gnanissara

The INTERHEALTH Programme was initiated in Sri Lanka in 1982/83. The data were collected in the baseline survey to make them comparable to those from other surveys.

Intervention activities: Educational material such as posters, billboards, booklets and newsletters on the hazards of smoking have been prepared and used to educate the community, schools, and health workers. A ten minute programme on the hazards of smoking, as related by an ex-smoker, was broadcast over the radio every other week for three months.

Service activities: Screening of individuals over the age of 40 for hypertensions and glycosuria is carried out by public health midwives and those with high recordings are referred to hospitals for further management. This is an ongoing activity.

Evaluation and research activities: The findings from a follow-up survey (connected in late 1992 to determine the knowledge, attitudes and practices to smoking in the demonstration area) shows a reduction in the prevalence of smoking compared to the baseline survey. It also shows that the educational strategies had a positive impact on smokers to either quit or reduce smoking.

Another study conducted in the demonstration area to determine the prevalence of diabetes mellitus shows a slight increase as compared to the baseline study. This may be due to an increase in detection and better reporting undertaken as a part of INTERHEALTH activities.

The survey conducted among 60,000 school children in 90 schools in the demonstration areas under the sponsorship of WHO, to determine the prevalence of rheumatic fever and rheumatic heart disease reveals a prevalence rate of 1.5/1000 school children.

TANZANIA: Dr H. Kitange

Baseline studies were carried out in two control and intervention districts according to the INTERHEALTH protocol.

These surveys were carried out in 1987-1989 to determine the prevalence of diabetes mellitus, cardiovascular diseases and associated risk factors in people over 14 years of age. The risk factors included smoking, alcohol consumption, serum total cholesterol and triglycerides, E.C.G. abnormalities and body mass index.

The overall response rate was 94% for Kilimanjaro region and 84% for Morogoro region with more than 7500 subjects being screened.

Diabetes was uncommon (0.7%) but impaired glucose tolerance (IGT) was approaching 8%. Hypertension was found in 4-10% while hyperlipidaemia was more.

Prevalence of smoking ranged from 9-42% in males and less than 5% in females. Alcohol drinking habit was found in 12-78% in males and 4-76% in females.

Those examined have been followed up and NCD now appear to be among the top ten causes of death. A detailed analysis of the relationship of deaths with risk factors is under way.

Health education was given to primary health care workers and leaders in the project. Later this year we intend to reevaluation of those examined in 1987/1989 as well as an independent sample. Dietary evaluation questionnaire will also be included.

A demographic data base updated every 4-6 months in the project area has also been established. This is funded by the British Government. Its main aim is to determine the causes of ill health and deaths in adults, to determine appropriate interventions and to provide information which will be useful for planning within the Ministry of Health and other government, Ministries and departments.

The project is being conducted in three areas - Dar-es-Salaam (city), Har and Morogoro districts.

THAILAND: Dr C. Supornsilaphachai

Although Thailand had no representative attending the meeting, a special report, detailing progress from March 1991-December 1992, is available in Geneva, upon request.

TEXAS, USA: Drs Alfred McAlister and Amelie Ramirez

Results from pilot studies in Eagle Pass are being published. Baseline data from women in the urban study areas (selected census tracts in Houston and San Antonio with a high proportion of Spanish speaking residents) were collected during the first half of 1992. Intervention for women began in San Antonio in September 1992, emphasizing increasing appropriate cancer screening, improved nutrition (moderate reduction in fat consumption), and prevention of onset of smoking and heavy alcohol consumption. Baseline data collection from men in Houston and San Antonio and from both men and women in two new urban and rural sites on the Mexican border (Brownsville intervention area and Laredo reference area) is being collected during June-August of 1993. The intervention will begin in September 1993.

In addition, funds have been received by Dr Ramirez to establish INTERHEALTH research and intervention in four additional sites (San Francisco--immigrants from Central America; San Diego--Mexican Americans; Miami--Cuban Americans; New York--Puerto Rican Americans). These projects will address primary INTERHEALTH concerns and include attention to sexual behaviour, violence and injury.

Support for all INTERHEALTH activity originating in Texas comes from competitive, peer-reviewed grants awarded by the National Cancer Institute and funds have been received to support our work through 1998. Because of the structure of funding from the National Institute of Health and the Centres for Disease Control, the integrated approach has been difficult to implement in the USA. Efforts are being made to overcome this problem.

USA, FLORIDA: Drs Nancy Boyack and Larry Deeb

The Long Term Integrated Noncommunicable Disease Activity (LINDA) project was conducted in Leon County, Tallahassee, Florida from 1987-1992. Key components of the LINDA model are community health coalition, community surveillance, media, public health education, professional education and environmental modification.

Community assessment of 1548 adults was conducted through a random sample telephone survey. Other surveys were developed and conducted with physicians, grocery store managers, and one-to-one interviews were conducted with directors of various community agencies for developing a resource inventory. A sample of grocery stores was selected to measure the product area of selected food items.

A community task force determined the priority areas which were nutrition and diet, alcohol and tobacco, exercise, preventive medical care and stress.

Intervention activities included a mass media campaign, development of promotional items to promote community awareness, a worksite wellness programme which utilized a health risk appraisal, professional education activities, participation in major community promotions, wellness seminars, exhibits, collaboration with health agencies for promotion of their programmes, and development of a community health coalition. The health coalition has become the conduit for institutionalization of the project and will continue as a community resource. The local county public until will also carry out many activities.

The LINDA model is a positive and effective approach to community based preventive programme with health promotion and wellness activities. This model seems especially useful when the community already has diverse programmes in place which can benefit from more effective coordination.

USA, STANFORD: Drs Marilyn Winkleby and John Farquhar

The Stanford Five-City Project is an experimental field study of community health education for the prevention of cardiovascular disease, conducted throughout the 1980's. It involved two treatment and three reference communities in Northern California, USA, ranging in size from 36,000 to 162,000 residents. A five-year community organization and health education intervention programme was conducted from 1980-1986 in the two treatment cities and involved a multiple risk factor strategy delivered through multiple educational channels. The main risk factors targeted were blood pressure, cholesterol, smoking and physical inactivity.

Five separate cross-sectional surveys of randomly selected households and five repeated surveys of a cohort sample (person 12-74 years of age) were conducted to assess change in cardiovascular disease risk factors. Approximately 2,400 adults and children participated in each cross-sectional survey and 1,300 in the follow-up cohort surveys.

Epidemiological surveillance of cardiovascular disease mortality, fatal and nonfatal myocardial infarction, and fatal and nonfatal stroke (persons 30-74 years of age) is on-going to assess change in coronary heart disease and stroke.

After 30-64 months of education, significant net reductions in community averages, favouring treatment communities occurred in plasma cholestrol (2%), blood pressure (4%), resting pulse rate (3%) and smoking rate (13%) in the cohort sample. These risk factor changes resulted in important decreases in composite total mortality risk scores (15%) and coronary heart disease risk scores (16%).

The pattern of change in the cohort resembles that of the cross-sectional samples, with the exception of smoking (where the cohort change was stronger) and body mass index (where the cross-sectional change was stronger).

Widespread application of the five-City Project methods have been adopted by the treatment communities. In addition, Five-City methods have been applied to a broader arena through the Stanford Health Promotion Resource Centre that provides technical assistance to local, state, national, and international groups. Health promotion and disease prevention materials developed for the Five-City Project are available through the Stanford Distribution Centre, which has distributed over 780,000 of these materials. New grants have adapted education concepts and materials from the Five-City Project and are targeting low-income, multi-ethnic populations. The Five-City Project has been adopted internationally, as exemplified through a recent grant to the Czechoslovakian Republic.

2.3 Common Themes from Centre Reports

- a) There is a consistency of programme goals (e.g., targeting multiple risk factors; intervening at both the individual and population levels) across INTERHEALTH programmes, despite large differences in the stages of economic development and the compositions of study populations.
- b) There are often large differences in levels of CVD risk factors by sex, with women having lower levels than men for some risk factors (e.g., cigarette smoking) and higher levels for other (e.g., physical inactivity). Investigators expressed concern that women are at high risk for large increases in some risk factors, especially cigarette smoking.
 - c) Dietary change is one of the most difficult changes to achieve.
- d) Regulatory changes to promote healthy lifestyle behaviours and modify the environments in which people live (e.g., cigarette taxation, advertising bans) are often very effective and especially feasible to implement in small countries that do not have powerful tobacco, alcohol, or meat and dairy lobby groups.
- e) Detecting treatment/control differences in community-based CVD intervention programmes is particularly difficult because of concurrent secular declines that often occur in control cities.
- 3. INTERHEALTH COORDINATING CENTRE REPORT: Dr A. Nissinen

3.1 Up-date

The concept of INTERHEALTH includes three main components: demonstration projects, resources centres, and advocacy. The strategy of the projects is community involvement using existing resources. The theoretical framework that guides the projects is that a common set of behavioural risk factors (e.g., alcohol, diet, smoking, sedentary lifestyle, stress) impact a variety of NCD (e.g., CVD, cancers, diabetes, arthritis, injuries).

The INTERHEALTH demonstration projects are a restricted group of projects whose investigators have agreed to follow the INTERHEALTH protocol. In general, studies use quasi-experimental designs to assess net differences in risk factor change between intervention and references areas. Both process and summative evaluation are included.

To date, all 16 centres have completed their baseline surveys (the first in 1979, the last in 1989). All sites include both men and women.

Activities of the coordinating centre since 1992 have involved:

- a) Site visits to participating countries;
- Meeting at the Centres for disease control, USA;
- scientific and student exchange programmes.

3.2 Absence of Thailand

The Coordinating Centre and Steering Committee are concerned about the lack of attendance and progress report from Thailand. Dr Puska recommended that the Steering Committee, Coordinating Centre and WHO Geneva contact Thailand to express their concern and if there is no progress report by the next meeting, the site will no longer be a part of INTERHEALTH.

3.3 INTERHEALTH Newsletter

The first INTERHEALTH newsletter (February 1993), which was prepared by the Coordinating Centre and WHO Geneva, was distributed. The newsletter provides a forum for the exchange of information between INTERHEALTH centres, countries and associated parties. Those attending the meeting were encouraged to submit brief news items for inclusion in future issues.

It was suggested that the newsletter include several components, such as :

- Recent activities or publications from the demonstration centres;
- Upcoming conferences and meetings;
- c. Methodologic and analytic issues.

It was recommended that the newsletter be circulated to CINDI members.

4. POTENTIAL NEW INTERHEALTH SITES

Investigators from Kazakhstan, Singapore, South Africa, Australia and Japan have expressed interest in joining INTERHEALTH. The first four sites reviewed CVD activities in their countries and their experience with community-based CVD intervention programmes.

4.1 Report from potential new sites

KAZAKHSTAN: Dr T.S. Sharmanov

Kazakhstan is currently collaborating with Dr McAlister in Texas, USA and wishes to participate as a demonstration project.

Epidemiological studies of Kazakhstani researchers shows that some regions of Kazakhstan were endemic for cancer of esophagus and stomach and among the reasons of it there were not only carcinogenic substances (such as nitrosocompounds) but also such additional factors as insufficient consumption of protein of vegetable origin, raw fruits and vegetables.

Epidemiological data obtained by Kazakhstani researchers showed the relationship between nutrition patterns and distribution of ischaemic heart disease (IHC) in one of the regions of Kazakhstan.

In addition to epidemiological studies in determining the influence of nutrition and different nutrients on the development of different diseases it is important to pay more attention to investigation of the mechanisms of development of diseases and possibility to use alimentary factors for their prevention and treatment.

SOUTH AFRICA: Dr Krisela Steyn

South Africa wishes to participate as a demonstration project.

South Africa's multi-ethnic population is undergoing rapid urbanization and development and has large poor settlements around the cities. NCD in 1988 accounted for 24.5% of all deaths and 28.5% of deaths reported for the 35-64 age group. From cross-sectional studies undertaken in different groups it was estimated that 51.1% of the population aged 15-64 years needed lifestyle modification and 16.5% needed medical care.

These findings prompted a number of intervention studies and activities. The first was the CORIS study initiated in 1979 which consisted of a 4-year multifactorial risk factor intervention programme. The hypertension intervention model illustrated significant reductions in blood pressure for both men and women. Dr Steyn has been involved with the CORIS study that has now been adapted to a low-income African community.

The tobacco industry is very strong in South Africa. The first anti-tobacco law has been tabled in parliament. The baseline study of a survey to evaluate the impact of this law found that about 60% of South Africans supported the law. Consensus guidelines for a healthy diet, the diagnoses and management of hypercholesterolaemia are currently being done for hypertension. South Africa's health services are being restructured and efforts are being made to ensure that NCD will be recognized as a major cause of death.

SINGAPORE: Dr Oon Chon Hau

Singapore has experience with several Lifestyle Risk Factor Surveys as well as dietary and physical activity interventions in schools, workplace, national service programmes and the community.

A major Healthy Lifestyle Campaign was launched in 1992 involving the nation and all Ministries to enhance population quality and performance and will be an annual event for the next decade.

Lifestyle interventions (smoking cessation, corporate fitness programmes, appropriate food consumption) with the support of the healthy family are being linked with personnel development, anthropometric markers, job structure, organizational restructuring, financing systems as part of national development.

National targets have been set for smoking prevalence, obesity, hypertension reduction, cholesterol, exercise levels, and dental health to be achieved by the year 2000.

AUSTRALIA: Ms Rhonda Galbally

Australia would prefer to be an INTERHEALTH resource site.

Ms Galbally reported that smoking in Australia has increased in women so that rates are now similar to those in men. About 30% of young men and women smoke. The Victorian Health Promotion Foundation is encouraging the creation of healthy

environments (e.g. alcohol companies being socially responsible, banning smoking advertisement on billboards) and is focusing on subgroups who are at highest risk (e.g. low socio-economic status, Koories).

The VHPR was established in 1987 with legislation - the Victorian Tobacco Act.

This legislation:

- 1. Increases the tax on tobacco, thereby increasing the price of cigarettes. This is the single most effective intervention for reducing consumption of cigarettes especially by the young.
- 2. The VHPR receives a 4% dedicated levy from the tobacco tax which is 75%. This 4% levy generates approximately US\$ 12 million. It is used to fund: tobacco control programme quit campaign and tobacco replacement of sports and art sponsorship with health, develop health promotion programmes.

Exercise diabetes Food and nutrition cancer

Low alcohol heart/CVD - stroke

Smoke free accidents

Accident free muscular skeletal
Sexual health communicable disease

Safe sex

Reproductive health

Mental health depression - post partum, schizophrenia, psychosis

Environmental health

JAPAN: Dr S. Baba

The representative from Japan was unable to attend.

4.2 Questions concerning potential new INTERHEALTH demonstration projects

INTERHEALTH was established with the purpose of having several programmes from each WHO region. Drs McAlister and Winkleby suggested that new programmes be representative of different geographic areas and noted that such countries may have the most limited financial resources. The criteria for adding new sites may need to be different from the original criteria.

It is understood that each country must finance their own programmes. As in the past, Geneva will try to obtain funding for meetings.

It was agreed that those wishing to be new INTERHEALTH sites submit a written request to Dr N.G. Khaltaev, describing their programmes. The Steering Committee will evaluate how the programmes fit with the INTERHEALTH protocol and will decide at its next meeting about membership. If a site currently has data that fit the protocol, admission could be sooner.

Dr Berrios noted that some countries will have a more difficult time beginning demonstration projects because of limited resources. She cautioned that adding new sites could compromise data form existing sites if it meant that limited resources be further subdivided.

Dr Steyn requested that INTERHEALTH give support "in principal" to new sites requesting admission so that investigators can return to their countries and secure financial backing.

WORKING GROUP ON CHRONIC RHEUMATIC DISEASES

Drs Edmonds and Muirden, Australia, International League Against Rheumatism (ILAR). Musculoskeletal diseases are common worldwide and contribute a significant amount of morbidity. The lifestyle factor interventions are similar to those targeted by CVD programmes (e.g. weight control, exercise, diet, alcohol, smoking).

Drs Kitange and Gareeboo noted that gout is an important problem in Tanzania and Mauritius. Dr Khaltaev noted that chronic rheumatic diseases have a large impact on ability to work and that little is known about how prevalences vary internationally.

The presenters requested that INTERHEALTH consider adding about 10 questions on rheumatic disease to its survey. INTERHEALTH could incorporate a musculoskeletal component by adding COPCORD questions to its baseline survey and then could work with ILAR to identify common interventions that would target both CVD and musculoskeletal problems.

The group consensus was that this is an important area for INTERHEALTH. A copy of the core musculoskeletal questions will be circulated to all INTERHEALTH programme directors.

WORKING GROUP ON SOCIAL/BEHAVIOURAL TECHNOLOGY EXCHANGE

Dr McAlister gave a presentation on the theoretical basis for population-based behaviour change. He reviewed the types of social influence (education, persuasion, motivation and facilitation) and stressed the importance of using the above framework when designing an intervention programme. He proposed that behavioural journalism, which shows "real people" encountering "real problems" when making "real changes" is an effective method for reaching high risk groups. This model offers a flexible approach that can fit any culture and, in contrast to some other models, is less likely to use manipulation when encouraging people to make lifestyle changes.

Beginning in September 1993, video tapes and text materials for a 12-hour course in social/behavioural training will be available.

7. WORKING GROUP ON DIETARY ASSESSMENT AND INTERVENTION.
Dr Posner, Boston University, USA.

This working group evaluated global trends in population food and nutrient intake and related chronic disease risk and mortality. From 1950 to the mid-1980s no country in the world has experienced a decrease in fat intake. In most INTERHEALTH countries, the predominant dietary source of fat is animal fat. The USA, Finland and Australia have the highest intake of fat; China, Thailand and Tanzania have the lowest intake. When countries increase their fat intake, it is at the expense of carbohydrate intake.

Dr Posner will continue working on nutrition issues for the next INTERHEALTH Programme Directors' meeting. Sites should continue to send her nutrition data from their surveys. She will also prepare a final report that will be circulated to programme directors before its publication.

8. MODELLING AND FORECASTING OF RISK ASSESSMENT EFFECTIVENESS OF INTERVENTION PROGRAMMES. Mr Dowd, WHO, Geneva.

For the assessment of intervention programmes, the main outcome/dependent variables are changes in risk factors. Possible co-variables to include in multivariate models include, age, time, city and baseline levels of the risk factors being assessed. Sex should be included in the model or, if interactions are present, separate models should be run for men and women.

Mr Dowd noted that the working group in Geneva would like to have an INTERHEALTH representative.

Dr Galbally mentioned the need for cost/effectiveness analyses.

Dr Winkleby, who has been directing the analyses of the Stanford Five-City Project, suggested that a protocol offering biostatistical guidance to INTERHEALTH centres would be useful. This protocol could include design and methodologic issues (e.g. lack of reference groups, missing data at different time points), logical progressions in analysing data (e.g. stratified analyses followed by modeling), appropriate statistical models and their components (e.g. logistic or multiple regression models, co-variables, interaction terms); evaluation of organizational and regulatory change; and cost-effectiveness analyses. If developed, this protocol could be presented and discussed at the next programme director's meeting.

9. INTERHEALTH AND DIABETES. Dr S. Baba

Dr Baba from Japan was unable to attend the meeting. However, he would like the INTERHEALTH programmes to add a diabetes control component. His proposal will be distributed to INTERHEALTH Programme Directors.

10. INTERHEALTH AND THE PREVENTION OF CHRONIC PULMONARY DISEASES Dr S. Hurd, NHLBI, USA.

Dr Hurd encouraged INTERHEALTH programmes to consider assessing changes in Chronic Obstructive Pulmonary Diseases (COPD) because of the similar risk factors that are shared with CHD. She emphasized the need to target asthma that is present in all countries and in all age groups, and has lifestyle causative components (e.g. cigarette smoking, air pollution).

11. INTERHEALTH AND OSTEOPOROSIS. Dr Allander, Sweden.

Dr Allander emphasized the need to consider morbidity and mortality from osteoporosis (especially hip fractures) that are predicted to reach epidemic proportions in developing countries. Shared risk factors with other NCD are physical inactivity, diet and alcohol. Dr Allander asked that INTERHEALTH consider osteoporosis as a future partner because of these common lifestyle risk factors.

There was a consensus that this is an important problem and that INTERHEALTH programmes should be encouraged to include osteoporosis measures in their activities.

12. VICTORIA DECLARATION ON HEART HEALTH

At the request of Dr John Farquhar from the Stanford Five-City Project, USA, Dr Winkleby asked that The Victorian Declaration on Heart Health be distributed to all Programme Directors. This report delivers the message that cardiovascular disease is largely preventable via the promotion of health lifestyle behaviours. The report was issued from the International Health Heart Conference in Victoria, Canada, 28 May 1992. It is available in English, Spanish, French and several other languages and has been widely accepted by international agencies including the WHO. The declaration provides a clear agenda for governments, international health agencies, social and economic development organizations, the scientific community, health coalitions, and the private sector by bridging gaps between theory and practice. Sixty-four specific recommendations for preventing and controlling NCD are given.

13. INTERHEALTH PUBLICATIONS: Dr Nissinen

Presentations, posters or publications using collective INTERHEALTH data must be cleared through the Steering Committee. Such publications require the consent of each participating centre. No approval is needed, however, when principal investigators present or publish data only from their one site.

There is a publication being prepared that compares baseline risk factors in INTERHEALTH demonstration projects. It was agreed that the Coordinating Centre will proceed with this manuscript and that authorship will be listed as INTERHEALTH, with the project directors being acknowledge.

Dr Posner will also proceed with the nutritional analysis that has been mentioned earlier.

Dr Khaltaev would appreciate knowing about all publications that use INTERHEALTH data.

14. FINANCIAL SUPPORT: Dr Khaltaev

Dr Khaltaev stated that funding is needed for secretarial support for INTERHEALTH since the position has been frozen at WHO. He stressed the need to promote and publicize INTERHEALTH to attract potential sponsors. Any visibility given to INTERHEALTH, such as through the Ministers of Health, is very valuable. For example, countries are encouraged to contact their Ministers of Health and ask them to support INTERHEALTH in the World Health Assembly. Dr Hau from Singapore suggested that the Ministers of Finance might also be able to effectively approach the Ministers of Health.

15. CORRECT SPELLING OF INTERHEALTH: Dr Puska

It was agreed that when the word INTERHEALTH is used in presentations or publications, that is to be presented as one word, all in capital letters, with no hyphen.

16. ELECTION OF STEERING COMMITTEE MEMBERS

Ms Galbally from Australia was elected for the first time to serve as the Resource Centre Representative.

The following three Programme Directors were nominated to serve on the Steering Committee: Dr Chen from Beijing, Dr Kitange from Tanzania and Dr Oganov from Moscow. A vote was taken and Dr Kitange was elected as the next Steering Committee member.

17. SITE OF NEXT PROGRAMME DIRECTORS' MEETING

The following sites were discussed as the meeting place for the Fifth INTERHEALTH Programme Directors' Meeting in 1994: Alma Alta, Kazakhstan; Yugoslavia; Tanzania; and Melbourne, Australia. Ms Galbally from Australia volunteered to host the meeting.

The group expressed appreciation to Dr Khaltaev for securing funding for the present meeting.

The format of the next meeting was discussed. The following recommendations were made:

- a) Allow an additional day for the meeting;
- b) Shorten the time spent on Centre reports;
- c) Offer special workshops for Programme Directors on topics such as methods of organizing and implementing CVD intervention programmes; successful approaches in changing risk factors such as diet; consideration of population subgroups in community interventions; and statistical analyses of community based surveys (including both process and summative evaluation).

18. TELECONFERENCE

The 2nd Teleconference on "INTERHEALTH - Fighting the Diseases of Lifestyles" took place on Wednesday, 7 April 1993 from Beijing Broadcasting House. It was broadcast to Brest, Geneva, Helsinki, Milan, Tokyo and St Petersburg. After the opening remarks from Dr Hu Ching-Li, Assistant Director-General of WHO and Dr Nikolai Khaltaev on the INTERHEALTH concept, the subject of faulty nutrition contributing to the high prevalence of NCD around the world was discussed by Dr Barbara Posner.

Dr Pekka Puska talked about the successful experience of Finland in reducing CVD by an enthusiastic and intensive intervention programme. Osteoporosis as a public health issue was dealt with by Dr Christiansen and this has become more pertinent as industrialization is increasing in most developing countries.

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Dr Susan Hurd dealt with the importance of Asthma as an important chronic disease which is likely to go up with increasing industrialization due to exposure of workers to chemicals, dust and fumes.

Prevention through climatotherapy and hydrotherapy was discussed by Dr Guy Ebrard. Dr Alfred McAlister then gave a good expose on the use of specific technique in bringing about behaviour modifications and he dwelt on the subject of behaviour journalism as an important tool for NCD programme directors. Dr Cheng of China and Dr Purran of Mauritius talked on their respective NCD Intervention Programmes. The final words were declared by Dr Hiroshi Nakajima, Director-General of WHO, on the occasion of the World Health Day.

INTERHEALTH PROGRAMME DIRECTOR'S MEETING

5-8 April 1993, Beijing, China

PROVISIONAL LIST OF PARTICIPANTS

Dr S. Baba, Hyogo Institute for Research in Adult Diseases, 13-70 Kitaoji-cho Akashi 673, Japon

Dr Berrios, Departmento de Salud Publica. Escuela de Medicine de la Universidad Catolica, Santiago de Chile

Dr E. Chazov, Director, Research Centre for Cardiology, Moscow, Fédération de Russie

Dr Christiansen, Department of Clinical Chemistry, University of Copenhagen, Glostrup, Danemark

Dr Chen Chunming, President, Chinese Academy of Preventive Medicine, Beijing, People's Republic of China

Dr L.C. Deeb, Chairman, Council on Education, Health Care Delivery & Public Health, 2307 Trescott Drive, Tallahassee, Florida 32312-3429, USA

Dr J.W. Farquhar, Stanford Centre for Research in Diasease Prevention, Stanford, University School of Medicine, 1000 Welch Road, Palo Alto CA 94304-1885, USA

Dr H. Gareeboo, Ministry of Health, Port Louis, Mauritius

Dr S.A.P. Gnanissara, National Institute of Health Sciences, Kalutara, Sri Lanka

Dr V. Grabauskas, Research Centre for Human Ecology, Health Promotion and Disease Prevention, Kaunas Medical Centre, Kaunas, Lituanie

Dr Suzanne S. Hurd, Director, Division of Lung Diseases, Department of Health and Human Services, National Institute of Health, Bethesda, Maryland 20892, USA

Dr John A. Kanis, The University of Sheffield, Sheffield Metabolic Bone Unit, Beech Hill Road, Sheffield, UK

Dr H.M. Kitange, Regional Commissioner's Office, Ministry of Health, Government Regional Hospital, Morogoro, Tanzania

Dr C. Lenfant, Director, National Heart, Lung and Blood Institute, National Institute of Health, Bethesda, Maryland 20892, USA

Dr A.L. McAlister, The University of Texas Health Science Centre at Houston, Centre for Health Promotion, Research and Development, Houston, Texas, USA

Dr K.D. Muirden, President ILAR, Melbourne, Australia

Dr Oon Chon Hau, Academy of Medicine, Singapore

Dr B.M. Posner, Director of Nutrition Research, The Farmingham Heart Study, Boston University School of Medicine, Boston, Mass., USA

Dr Pekka Puska, Director, Division of Health and Chronic Diseases, National Public Health Institute, Helsinki, Finlande

Dr C. Kommodiki, Department of Medicine and Public Health Services, Ministry of Health, Government of Cyprus, Nicosia, Cyprus

Dr J.P. Koplan, Department of Health and Human Svcs, Centres for Disease Control, Atlanta, GA, USA

Dr I. Macias, Coordinator, Comision Programa de Adulto, Ministerio de Salud Publica,

Havana, Cuba

Dr A. Nissinen, Department of Community Health, University of Kuopio, Kuopio, Finlande

Dr R.G. Oganov, Institute of Noncommunicable Disease Prevention, 10 Petroverigsky str., Moscow, Fédération de Russie

Dr C. Suporrsilaphachai, Ministry of Health, Thailande

Dr T.S. Sharmanov, Institute of Regional Problems of Nutrition, Alma-Alta, Kazakhstan

Dr A. Vassallo, Department of Health, Palazzo Castellania, 15 Merchants Street, Valletta, Malte

Dr P. Youinou, Laboratoire d'Immunologie, Brest, France

Dr Guo Zeyu, Bureau of Public Health, Tianjing, People's Republic of China

Dr P. Zimmet, International Diabetes Institute, Caulfield General Medical Centre, 260 Kooyong Road, P.O. Box 185, Caulfield South 3162, Australia

WHO Secretariat

Dr Hu Ching-Li, Assistant Director-General

Dr E.N. Chigan, Director, NHT

Dr M.S. Tsechkovski, Director, Systems of Health Care, EURO

Dr I.S. Glasunov, CINDI Programme Manager, EURO

Dr Alwan, Regional Adviser, NCD, EMRO

Dr N.G. Khaltaev, Acting Chief, DBO, NHT (Secretary)

Mr P. Ozorio, STP, CVD/NHT

Dr A. Shatchkute, Regional Officer, Chronic Diseases, EURO

Miss M.J. Watson, Administrative Assistant, CVD/NHT

Miss L. Ciaffei, Secretary, DBO/NHT

Dr Kean, WR, Beijing, China