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CARDIOVASCULAR DISEASE STEERING COMMITTEE

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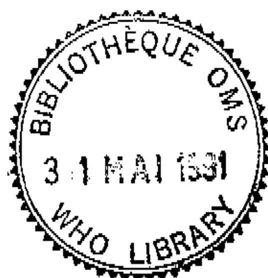

THE WHO CARDIOVASCULAR DISEASES PROGRAMME

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SECTION I. INTRODUCTION

1. BACKGROUND

The objectives of the CVD global programme, like those of the other technical programme areas, are derived from the Organization's General Programmes of Work. These general programmes of work are formulated for a stated period and on the basis of policies and strategies established and approved by the World Health Assembly (WHA).

In recent years, the General Programme of Work covering a specific period has been used as an appropriate policy framework for programming the medium-term activities proposed for the corresponding period. The policies and strategies defined in the General Programme of Work are translated into detailed Medium-Term Programmes (MTPs); the approved MTPs are subsequently operated through biennial programme budgets, and the implementation of the activities is monitored and evaluated to assess the efficiency and effectiveness of the programme, with a view to improving it, if necessary.

The first formal CVD/MTP was prepared in connection with the Sixth General Programme of Work (1978-83) and the progress review of its implementation was carried out by the Steering Committee which met in 1982. At that meeting, recommendations for the next MTP (1984-89) and the supporting budgetary proposals for the 1984/85 biennium were also considered. The Steering Committee's report is attached as Annex 1.

The goal of health for all by the year 2000 (HFA/2000) was defined after the adoption of the Sixth General Programme of Work. Later, the International Conference on Primary Health Care (PHC) and the ensuing Declaration of Alma Ata (1978)[1] identified PHC as the key to attaining the target of HFA/2000.

The current or Seventh General Programme of Work focuses on WHO's response to the global strategy for achieving the goal of HFA/2000 and is therefore "structured in such a way as to support the strengthening of health systems that are based on PHC, for the delivery of health programmes that make use of appropriate technology and that have a high degree of community involvement"[2]. It places particular emphasis on supporting developing countries, but also takes into account the needs of developed countries.

As far as the global CVD programme is concerned, the trends that began to evolve during the period of the Sixth General Programme of Work are broadly consistent with strategies for attaining the goal of HFA/2000 and only slight changes in emphasis have been necessary to bring the programme activities fully in line with the requirements of the Seventh General Programme of Work. The elaboration of the global CVD/MTP (1984-89) was undertaken jointly with the Regional Offices and therefore reflects the collective priority needs of the countries themselves. The CVD/MTP (1984-89) is attached as Annex 2 and the supporting budgetary allocations for the 1984/85 biennium are presented in para. 5.1.

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1 Alma Ata Declaration.
2 Seventh General Programme of Work covering the period 1984-89. pp.9. WHO, Geneva (1982).

2. TERMS OF REFERENCE

The present Steering Committee has been convened to:

(i) make a progress review or interim evaluation of the implementation of the CVD/MTP (1984-89) for the 1984/85 biennial budget period;

(ii) consider the activities planned in relation to the 1986/87 programme budget and those proposed for 1988/89 and advise accordingly;

(iii) examine plans and proposals for subsequent CVD programme activities and make general recommendations for the elaboration of the next MTP (1990-95) within the context of the Eighth General Programme of Work and the global target of HFA/2000.

SECTION II. PROGRAMME PROFILE (1984-1985)

This section summarizes the salient features of the CVD global programme and provides the information base for the Steering Committee's progress review. The profile as a whole is to be read together with corresponding sections of the CVD/MTP (1984-85) which is attached as Annex 2. Frequent references to the MTP are also given in the text to highlight important relationships.

1. POLICY BASIS

The importance of cardiovascular diseases as a cause of morbidity and premature mortality in industrialized countries and also their emergence as a public health problem in developing countries has been well recognized (WHA 29.49, 1976). This resolution provided the policy basis for the major global programme activities, which were initiated and developed during the period of the Sixth General Programme of Work (1978-83) and have continued into the Seventh General Programme of Work.

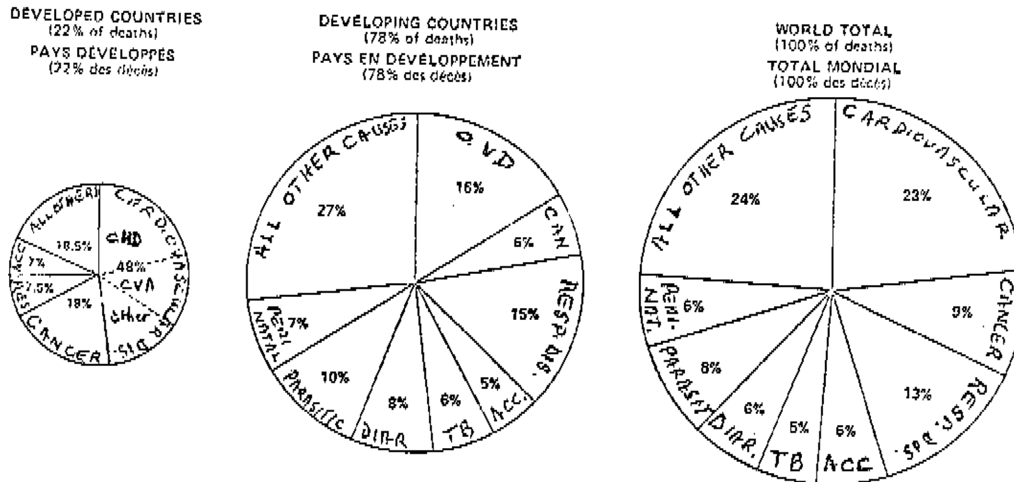
In 1983, the WHA emphasized that appropriate technology now exists to prevent and control a growing number of cardiovascular diseases, such as rheumatic heart disease, coronary heart disease and hypertension resulting in cerebrovascular accident, and called on Member States to pay particular attention to the opportunities for the prevention of cardiovascular diseases as part of their national health systems (WHA 36.32, 1983). The establishment of the CVD intensified programme for action to prevent coronary heart disease and rheumatic fever/rheumatic heart disease was in direct response to this Resolution.

The developing trends linking activities for the prevention and control of cardiovascular diseases with those of other noncommunicable diseases have also recently received policy endorsement in a Resolution which requests, inter alia, that measures for the prevention of cardiovascular diseases be promoted as an example for other noncommunicable diseases and that community studies aimed at the joint control of a number of risk related noncommunicable diseases be fostered and supported (WHA 38.30, 1985).

2. SITUATION ANALYSIS - THE NEED

Twenty-five per cent of all deaths in all ages in the world today are due to cardiovascular diseases; in developed countries they remain the leading cause of mortality and account for 48% of all deaths. In developing countries cardiovascular diseases are the third leading cause of death (16%), after infections (21%) and parasitic diseases (18%) (Fig. 1). With this global situation, the basic need is to stem the tide of CVDs worldwide and counter their growing threat in developing countries.

Figure 1. Estimated distribution of causes of death around 1980



2.1 Coronary heart disease

An important concern is the fact that in countries where mortality from CHD is increasing, ischaemic heart disease is occurring more and more, in younger age groups, especially in men under 65 years, leading to premature morbidity and mortality. Similarly, in those countries where the mortality from CHD is declining, this favourable trend is also more noticeable in males in the younger age groups (Table 1). These observations emphasize the potential for preventing premature death and the danger, especially to younger males, if the epidemic of CHD were to continue unchecked. The reasons for the differences in CHD mortality trends are not completely understood and there is a need to analyze scientifically the circumstances associated with the observed changes, whilst promoting population-based approaches to prevention. The WHO MONICA Project (page 13) is designed to measure trends and assess the extent to which they are related to changes in known risk factors.

In some developing countries, e.g. Singapore, Mauritius, Sri Lanka, coronary heart disease has already reached significant dimensions; in many others, it is a cause of serious concern in some sections of the community, and in all developing countries there is a need for timely preventive action to inhibit the spread and entrenchment of major risk factors in the community through primordial prevention (page 13).

2.2 Arterial hypertension

Hypertension remains the most common cardiovascular disorder - important both in its own right and as a risk factor of other major diseases, e.g. cerebrovascular stroke and CHD. Global estimates suggest that 8-18% of adults have blood pressures above 160/95 mmHg (TRS 628, 1978).

A WHO international cooperative study which was completed in 1980 showed that the community control of hypertension is feasible in various settings and health care systems. Efforts are now centred at the Regional level to promote continuing collaborative activities with Member States. There is a need to define and elaborate approaches that are appropriate to a given country situation. In general, hypertension control is being undertaken as part of a broader approach to the prevention and control of cardiovascular and other noncommunicable diseases, within the context of PHC (page 11).

Other related problems, such as atherosclerosis precursors and hypertension determinants in early life and the possibilities of primary prevention and early treatment of hypertension by means of non-pharmacological intervention, have considerable practical implications and demand continuing study and research (page 13).

2.3 Rheumatic fever/rheumatic heart disease (RF/RHD)

Today, RF/RHD is a problem mainly in developing countries, but, even in global terms, it is still the commonest form of heart disease in children and young adults. Prevalence rates of up to 30 per 1000 have been recorded in school children in some communities and in many developing countries RHD accounts for more than 30% of cardiac patients admitted to hospital.

Earlier WHO cooperative studies in countries in Africa and Asia and in Latin America have demonstrated that the community control of RF/RHD through secondary prophylaxis is both feasible and cost effective in developing countries[1]. However, financial and other local constraints continue to hinder the establishment of effective nationwide prevention programmes and there is a need to support countries with initial inputs from external sources. A 15-country programme for which it has been possible to obtain extrabudgetary funds was launched in 1984 (page 9).

2.4 Cardiomyopathies

Cardiomyopathies (or heart muscle disease of unknown etiology) occur throughout the world. In the past, large scale population studies have not been carried out because of lack of uniform terminology and appropriate epidemiological methods and techniques. Such methods need to be developed and tested and at the same time active encouragement must be given to etiological research that might suggest practical preventive measures.

2.5 Other needs and constraints

Information on the real extent of the problem of CVD is often lacking, especially in developing countries; furthermore, restricted budgets, competing priorities and lack of trained personnel make it difficult to remedy this situation. There is a need to train health personnel to undertake CVD epidemiological research and to develop and test approaches utilizing peripheral health workers in programmes for the prevention and control of CVD as part of PHC.

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[1] The community control of rheumatic fever and rheumatic heart disease. Report of a WHO meeting held in New Delhi, India, 21-23 November 1979. WHO/CVD/80.3, World Health Organization, Geneva (1980).

Table 1. Changes in mortality from ischaemic heart disease for males

Country — Pays	Period* Période*	Percentage increase in mortality in age groups / Augmentation en pourcentage de la mortalité par groupe d'âges						
		40-44	45-49	50-54	55-59	60-64	65-69	Age standardized / Corrigé pour l'âge
Poland — Pologne	1970-1980	**103.7**	**86.0**	**89.4**	**62.6**	36.2	38.9	58.0
Romania — Roumanie	1972-1982	**62.5**	**71.1**	**70.6**	**57.6**	41.8	45.9	53.1
Hungary — Hongrie	1972-1982	**65.7**	**83.5**	**77.5**	**39.2**	27.2	14.2	37.6
Yugoslavia — Yougoslavie	1971-1981	**52.8**	34.2	**50.9**	**37.7**	**42.4**	16.0	34.8
Bulgaria — Bulgarie	1972-1982	**42.5**	**68.5**	**47.0**	**29.9**	8.4	6.9	20.4
Czechoslovakia — Tchécoslovaquie	1972-1982	**26.0**	6.8	**21.0**	6.9	4.7	7.4	8.8
Ireland — Irlande	1970-1980	**9.4**	2.8	**8.8**	**27.2**	−1.9	3.0	6.8
Italy — Italie	1970-1980	−17.6	−6.1	**3.3**	**6.0**	**4.2**	−1.5	1.0
Sweden — Suède	1972-1982	**6.5**	−0.8	0.7	**2.4**	**1.8**	−0.9	0.7
Austria — Autriche	1972-1982	**3.1**	−16.3	**0.5**	**6.5**	**8.6**	−6.7	−0.1
Switzerland — Suisse	1971-1981	−22.5	−26.4	**2.6**	**2.3**	−5.1	**10.9**	−0.2
United Kingdom (Northern Ireland) — Royaume-Uni (Irlande du Nord)	1971-1981	−34.0	−29.8	−4.4	**20.3**	−3.9	**1.9**	−1.0
Norway — Norvège	1972-1982	**3.8**	−7.7	−5.2	**−1.8**	−6.2	−6.7	−5.2
Germany, Federal Republic of — Allemagne, République fédérale d'	1972-1982	−25.6	−21.9	−6.6	−8.7	**−3.1**	**−0.1**	−5.8
France	1971-1981	−19.4	−16.8	**6.2**	**−7.1**	−10.7	−8.9	−8.2
Denmark — Danemark	1972-1982	−22.7	**−7.1**	−17.5	**1.5**	**−7.6**	−12.5	−9.4
United Kingdom (Scotland) — Royaume-Uni (Écosse)	1973-1983	−28.1	−12.5	−12.9	−11.2	**−3.6**	**−9.5**	−9.9
United Kingdom (England and Wales) — Royaume-Uni (Angleterre et pays de Galles)	1972-1982	−24.5	−26.4	−13.9	**−7.1**	**−8.0**	**−10.5**	−11.5
Finland — Finlande	1970-1980	−38.7	−30.0	−20.2	−17.7	**−9.3**	**0.5**	−13.1
Netherlands — Pays-Bas	1972-1982	−37.7	−32.9	−25.2	−22.4	**−16.6**	**−13.1**	−20.0
Japan — Japon	1972-1982	−36.8	**−19.3**	**−13.5**	−24.0	−23.5	**−20.3**	−21.6
New Zealand — Nouvelle-Zélande	1971-1981	**−21.6**	**−16.7**	−27.6	−24.2	−24.3	**−20.4**	−22.9
Belgium — Belgique	1971-1981	−27.7	**−26.0**	−31.4	**−21.5**	**−27.5**	−30.4	−27.7
Canada	1972-1982	−30.9	−31.4	−31.2	−32.9	−21.5	**−27.0**	−27.8
Australia — Australie	1971-1981	−42.6	−37.2	−34.4	−35.3	−33.8	**−27.2**	−32.6
United States of America — Etats-Unis d'Amérique	1970-1980	−40.2	−36.7	−36.4	−35.9	−37.0	−33.7	−35.8

Note: Age groups with an increase higher than the increase (or a decrease smaller than the decrease) in the age-standardized rate are in bold type. — Les groupes d'âges présentant une augmentation plus forte que l'augmentation (ou une diminution plus faible que la diminution) du taux corrigé pour l'âge sont indiqués en caractères gras.

* Most recent 10-year period for which data are available. — Période de 10 ans la plus récente pour laquelle des données étaient disponibles.

3. OBJECTIVES AND TARGETS

The medium term objectives and targets defined for the purpose of the 1984/85 biennial programme budget are as follows:

Objectives

1. To define optimal ways of promoting positive cardiovascular health;

2. To develop methods and coordinate activities leading to the establishment of effective cardiovascular disease prevention and control programmes integrated into the general health care systems in communities.

Targets

This programme's activities aim at fostering national and international action so that by 1989:

(1) improved methods and strategies for preventing cardiovascular diseases and for reducing the prevalence of risk factors in populations will have been identified and tested;

(2) most countries will have made an assessment of the extent of the problems of cardiovascular diseases in their populations and will have consequently selected priorities for intervention;

(3) at least two countries in each Region will be implementing programmes in the context of their health services, based on the above methods and strategies, to demonstrate the feasibility of preventing and controlling cardiovascular diseases in entire populations.

4. GLOBAL PROGRAMME DESCRIPTION

4.1 Approaches to implementation

The approaches adopted for the implementation of the programme are mutually supportive and the activities under them frequently overlap in the various programme areas. These approaches fall into 5 broad categories (ref. MTP p.4):

(i) Epidemiology - promoting studies to establish the extent of cardiovascular disease and to assist in the development of optimal ways of dealing with the problem;

(ii) Prevention and control - developing methodologies and guidelines for specific intervention activities based on PHC and in the context of existing health services;

(iii) Research - promoting research relevant to the stated objectives and to the methods of achieving them;

(iv) Exchange of information and coordination - developing mechanisms for the exchange of information on technical programme activities and for the coordination and monitoring of the global programme;

(v) Training - promoting training, appropriate to each level of health personnel, in preventive cardiology and related noncommunicable disease epidemiology to strengthen programme activities at the country level.

4.2 Programme components and activities (1984/85)

In order to facilitate the progress review and to relate the 1984/85 activities to the stated medium-term objectives and targets, the various programme components are considered in four main categories, as follows:

(i) Intensified programme: activities in key areas reflecting global priorities and contributing to medium-term targets 1 and 3;

(ii) Community-based control programmes: ongoing activities evolving in response to new developments and trends to meet medium-term targets 1, 2 and 3;

(iii) Research: projects undertaken to complement or support specific programme areas;

(iv) Other programme support activities: e.g. training.

4.2.1 Intensified programme activities

The CVD intensified programme was initiated in 1983 in support of Resolution WHA 36.32, and took on definitive form in 1984/85 by intensifying activities in two distinct programme areas:

Action for the prevention of coronary heart disease (CHD)

The immediate objective of this component is to collaborate with Member States in the preparation of national action plans for CHD prevention, including time based goals for analysis of the local situation, and to initiate and evaluate such plans.

During 1984/85 twenty Member States nominated "focal points" to liaise with the Organization in the implementation of the programme and a group of "core countries" was also identified with whom to work closely on the development of national action plans. A framework of guidelines based on the recommendations of two Expert Committees (TRS 678, 1982 and TRS 732[1] 1985) and on the European Conference on the Primary Prevention of CHD (Anacapri, October 1984. EURO Reports and Studies 98.) was prepared and considered at a meeting of principal investigators which was held in November 1985. The refined guidelines will form the basis for planning specific approaches and activities at the national level. In countries which are also participating in the WHO MONICA Project (page 13) the methodology of this research project will make an important contribution to the monitoring and evaluation of the national CHD prevention programme.

Few problems were encountered during the 1984/85 planning phase. The need to align the approaches of the CHD prevention programme to those of the broader concept of countrywide integrated programmes directed simultaneously at a group of noncommunicable diseases, including CHD, was recognized and it is anticipated that the two approaches will actually complement each other.

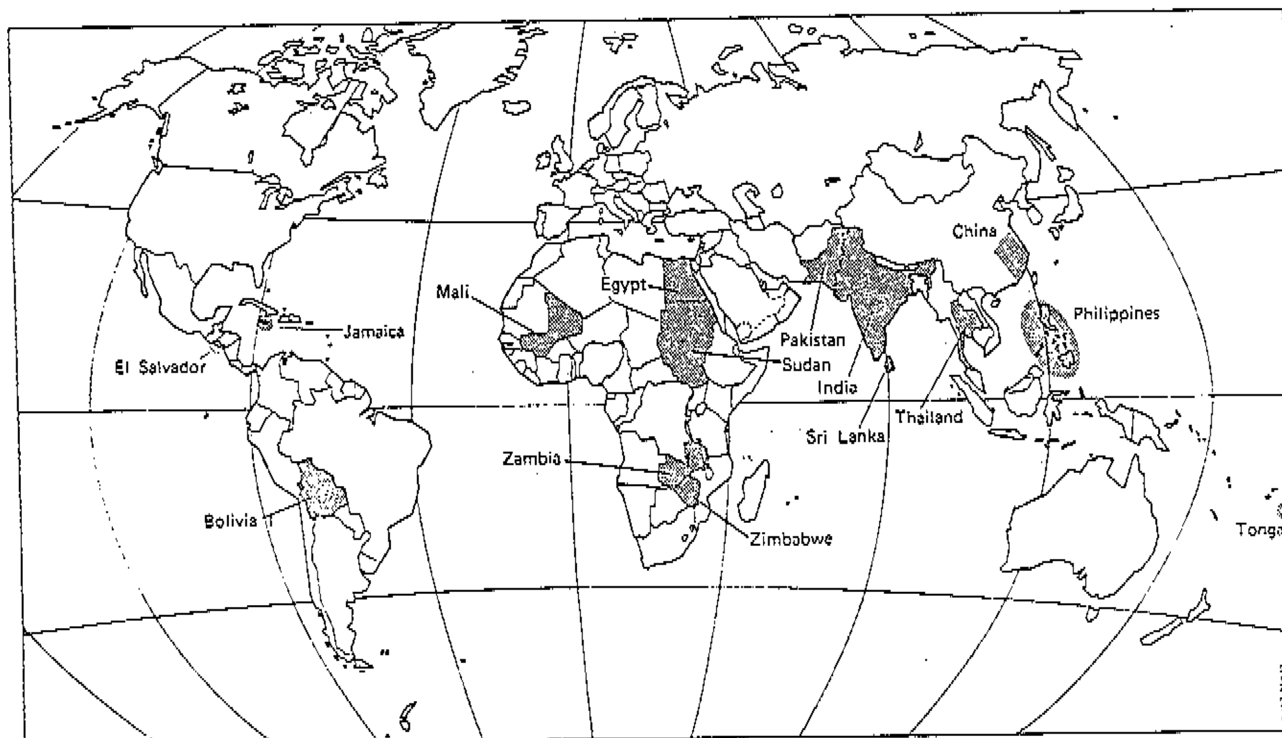
Action for the prevention of rheumatic fever/rheumatic heart disease (RF/RHD)

Based on earlier WHO experience[2], the present programme has been developed on the principle that sound knowledge and reliable technology already exist for implementing community programmes for the prevention of RF/RHD and that such programmes are both feasible and cost-effective. The immediate objective of the WHO programme is therefore to collaborate with Member States, so that by 1986 each collaborating country will have established a community-based RF/RHD prevention programme in at least one local area, with the intention of extending activities towards nationwide coverage over a stated period of time. The programmes will involve case-finding, registration, surveillance of suspected cases and follow-up of known and newly-identified patients, aiming to prevent recurrences of RF by providing secondary prophylaxis to the maximum number of registered patients (i.e. not less than 70%).

During 1984/85, 15 countries - three in each of the five WHO Regions in which the incidence of RF/RHD is still unacceptably high - were identified for intensive collaboration in this programme area (Fig. 2). National programme managers, assisted by local programme advisory committees, have been appointed in all 15 countries and regional planning meetings were held with the national programme managers in each of the five Regions involved. As an outcome of these meetings country plans of operation, based on guidelines prepared by WHO, were elaborated and were endorsed by the Governments of the respective collaborating countries.

[1] In press.
[2] The community control of rheumatic fever and rheumatic heart disease. Report of a WHO meeting held in New Delhi, India, 21-23 November 1979. WHO/CVD/80.3.

Figure 2. MAP OF THE WORLD SHOWING 15 COUNTRIES* PARTICIPATING IN THE WHO RF/RHD PREVENTION PROGRAMME (AGFUND SUPPORTED)



* Since preparation of this figure, Iraq has been added to the countries participating in this programme.

Approaches are also being made through local nongovernmental organizations and the International Society and Federation of Cardiology (ISFC) is collaborating closely with WHO to promote the programme through national heart foundations and cardiac societies.

The most tangible positive feature is the fact that extrabudgetary funds for the 16 country programme have been pledged by the Arab Gulf Programme for UN Organizations (AGFUND) over a two-year period.

Difficulties related to funding might arise in the medium and long-term, when the collaborating countries assume full responsibility for their programmes. In order to mitigate the likelihood of such an eventuality, the current programmes are emphatically service-oriented and are being incorporated into the existing PHC and national health system right from the start. It is also anticipated that the formal Government endorsement of the national plan of operation will help to secure regular budgetary provision for the programme from national sources.

4.2.2 Community-based control programmes

Comprehensive Cardiovascular Community Control Programme (CCCCP)

The WHO CCCCP was initiated in 1975 and was actively promoted during the Sixth General Programme of Work (1978-83). Over the years, it has evolved in a pragmatic way to accommodate new developments and trends, while retaining the fundamental concept of the population approach to disease prevention and control.

In 1984/85 important steps were taken to adapt the CCCCP in two main directions conforming to the global MTP which emphasizes that "whenever feasible studies will be initiated in simultaneous control of other noncommunicable diseases".

(i) Integrated noncommunicable diseases prevention and control

The trend to enlarge the scope of the local CCCCPs to include other noncommunicable diseases continued during 1984/85, particularly in the European Region where the experience gained from the CCCCPs has constituted a sound basis for the development of the Regional integrated programme; pilot studies were started in an initial group of eight countries. In the Region of the Americas an approach to integrated interventions was initiated and the process is being systematically monitored through a special project (MORE Project). Similar trends are occurring in developing countries where the emphasis is on combining selected cardiovascular and other noncommunicable disease prevention and control linked with primordial prevention in PHC. The evolution of these changes is depicted in Fig. 3.

(ii) Cardiovascular disease control and primordial prevention in PHC

Based on WHO experience with CCCCPs in developing countries and on the recommendations of meetings of principal investigators (Nairobi, 1981 and Manila, 1983) plans to integrate CVD prevention and control measures linked with primordial prevention in PHC in developing countries were effectively promoted in 1984/85.

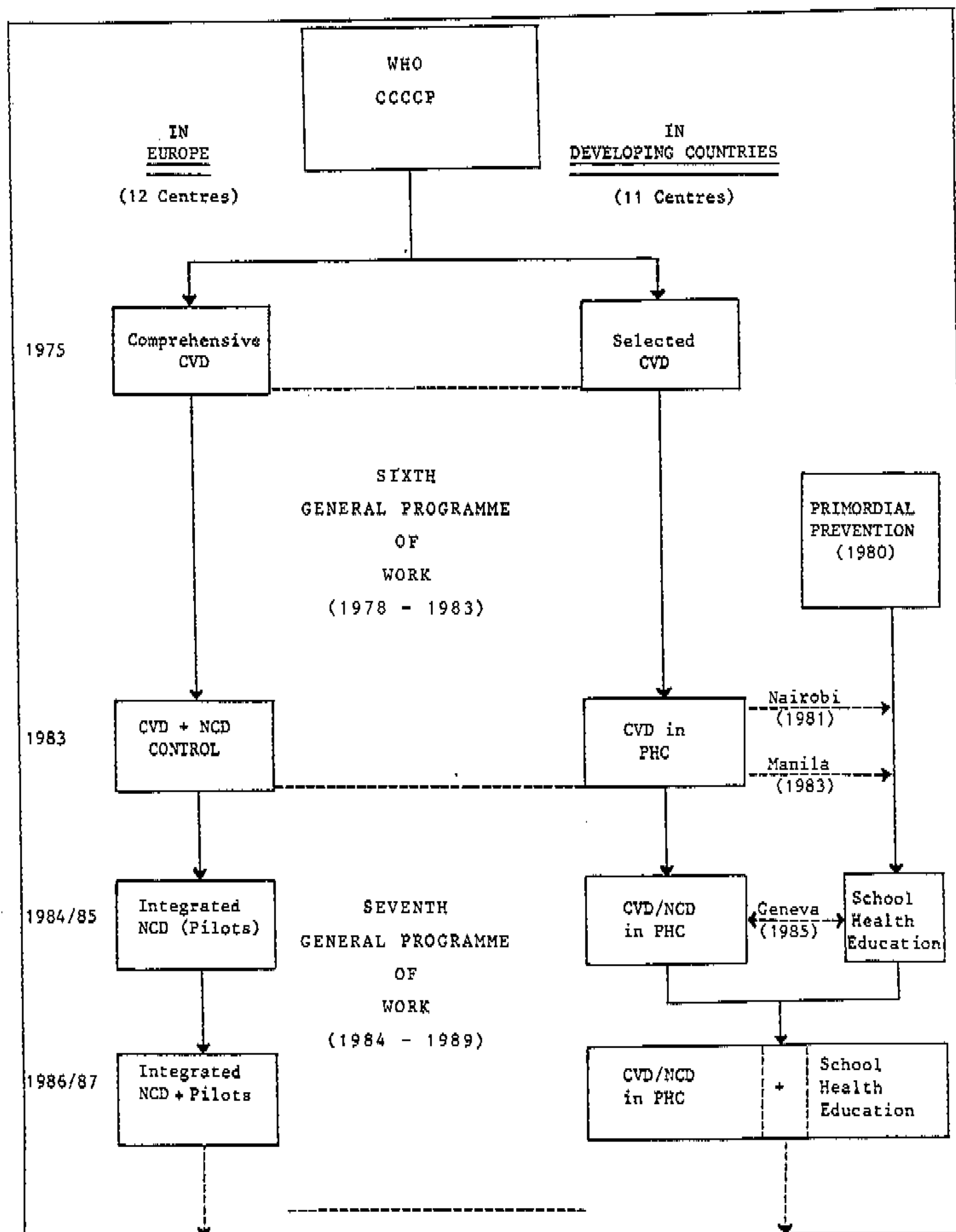
At the first joint meeting of investigators in the two programme areas (Geneva, June 1985) two categories of activities were identified for combined implementation, whenever feasible:

- primordial prevention based on comprehensive school health education programmes, which also provide the operational framework for complementing activities for the prevention of other NCD, and

- incorporating the prevention and control of selected cardiovascular and other noncommunicable diseases, e.g. hypertension and diabetes, into PHC.

Pilot projects were initiated in 9 developing countries in 1985. In two centres the projects are linked with District Planning and Management for PHC and involve activities between WHO (NCD and SHS Divisions jointly) and the collaborating country. This latter dimension should facilitate the adoption of project recommendations into the national health system. The 1984/85 activities in this programme are directed to the achievement of the related medium-term objective (target 3).

Figure 3. Evolution of WHO Comprehensive Community Cardiovascular Control Programme



Primordial prevention

Primordial prevention aims to prevent the entrenchment of life style related risk factors in communities which have not yet acquired them to a significant degree. Admittedly, this is a difficult task and the fact that, traditionally, the prevention of diseases that have not yet reached public health proportions do not qualify for high priority in many countries poses an added constraint. The programme approach during 1984/85 therefore emphasized health education in children, based on comprehensive health education programmes in schools as part of a broad approach to the prevention of cardiovascular and other noncommunicable diseases in PHC (see 4.2.2 (ii) above).

The primordial prevention programme also provides an operational framework for complementing activities in other programme areas, e.g. prevention of smoking and other forms of tobacco use. These linkages were explored during 1984/85 and are being pursued.

4.2.3 Research

The WHO MONICA project

This is a major multinational research undertaking to monitor trends and determinants in cardiovascular diseases over a ten-year period (1984-1993), involving 41 centres in 26 participating countries.

During 1984/85 sustained efforts were made to streamline the management and quality assurance procedures of the project. A new MONICA Quality Control Centre (MQC) for Event Registration was established in Dundee, in addition to the MQCs for ECG coding in Budapest and for Lipid Standardization in Prague. An official position paper describing the scientific aspects of the project was published in 1985[1].

Apart from the specific research objectives, the MONICA project offers a framework on which ancilliary studies can be built and will provide countries with better data on which to plan and assess their efforts to control cardiovascular diseases. From this point of view alone, the project should make a noteworthy contribution to national strategies for the achievement of health for all by the year 2000.

Pathobiological determinants of atherosclerosis in youth

The cause of atherosclerosis - the underlying pathology of CHD - remains elusive and this international collaborative study (carried out jointly with the ISFC) is expected to contribute to the understanding of how the early lesions occur and what factors influence their progression. Fifteen centres in different sociocultural and environmental settings were identified in 1984/85 for the study; the protocol was also finalized and the first meeting of principal investigators was held in Geneva in September 1985.

Hypertension research

(i) Epidemiological studies on the extent of the problem were continued in several countries in every Region. These studies are conducted as part of local prevention and control programmes and are not usually pursued as ends in themselves. In Europe and the Americas emphasis was also placed on the health services research related to hypertension as a community health problem.

Continuing attention was given to blood pressure studies in children and the report of a WHO Study Group on this subject was published in 1985 (TRS 715).

[1] WHO Chronicle, 39,(1) 3-5, 1985.

(ii) Cross cultural studies on the relationship between dietary factors and blood pressure could provide important clues for primary prevention and non-pharmacological treatment of hypertension. In 1984/85 WHO supported an ISFC international project - INTERSALT - designed to examine the relationship between sodium and potassium excretion and blood pressure. The Organization also undertook to coordinate a research project on cardiovascular diseases and alimentary comparison ("CARDIAC" study), initiated by the WHO Collaborating Centre for Research on Primary Prevention of CVD, at Shimane University, Japan.

Other projects

WHO involvement and interest in certain areas were maintained without specific financial involvement:

- Thrombogenesis: The results of a study supported in 1981 were finally published in 1985 (ref. para. 6.(xvi). The study aimed to assess the feasibility of collecting large numbers of samples for haemostatic function tests, to see whether there were any relationships with age, smoking and other risk factors.

- Physical activity: Monitoring physical activity based on an agreed methodology was promoted as an optional study in the MONICA project. Studies on physical fitness in normal working life involving investigators in three European centres were also continued during 1984/85. A WHO/ISFC monograph based on earlier work on physical activity was published in 1985 (ref. para. 6.(xviii).

4.2.4 Programme support activities

Exchange of information and coordination (MTP Sect. 6.4)

(i) Standardization of nomenclature, diagnostic criteria and methods.

In 1984/85 joint ISFC/WHO Task Forces dealt with the following topics:

- nomenclature of coronary arteriograms;
- programmed ventricular stimulation;
- percutaneous transluminal coronary angioplasty.

The reports of these Task Forces will be published.

(ii) Major Programme related meetings (1984/85)

WHO/CVD Intensified Programme: Prevention of RF/RHD

Scientific Group on Sudden Cardiac Death

Expert Committee on Prevention and Control of CVD in the Community

Consultation on Cardiomyopathies

Meeting of Investigators on Development of Methodology for CVD Prevention and Control in PHC

ISFC Study on Pathobiological Determinants of Atherosclerosis in Youth

Meeting of National Programme Managers on Coronary Heart Disease Prevention

Consultation on Appropriate Diagnostic Technology for the Management of CVD

Meetings of the WHO MONICA Project:
- Steering Committee (5)
- Principal Investigators (2)
- Quality Control Centres (1)

WHO/ISFC Task Forces (3 meetings)

Training in cardiovascular disease epidemiology and prevention
(MTP Sect. 6.5)

During the biennium several national training workshops were carried out in all Regions in support of specific local programmes. Regional training courses were held in three Regions and a scientific working group was convened in another Region. At the global level WHO continued support for the ISFC annual ten-day teaching seminars.

5. MONITORING AND CONTROL

Individual field projects were monitored on the basis of annual progress and financial reports, regular meetings of principal investigators and occasional site visits. The monitoring of the actual global programme for 1984/85 requires information on "budget and finance" and on the "milestones" attained during the period.

5.1 Budget and finance information

The budget and finance information for the 1984/85 biennium in respect of global activities are shown in Table 2, together with those for 1982/83 and 1986/87, which are also presented for comparison. Table 3 summarizes the distribution of global funds by Region in support of the 1984/85 activities.

5.2 Milestones

A significant milestone during the biennium was the completion of the planning phase of the intensified programme (para. 4.2.1) and the successful acquisition of extrabudgetary funding (US $750 000) for the rheumatic fever/rheumatic heart disease component. The tempo of ongoing activities was maintained and all meetings planned for the period were convened on schedule. The status (as of 31 December 1985) of the various activities listed in the MTP (Annex 2) are summarized in Table 4 (page 19).

Table 2:

REGULAR BUDGET (RB) INFORMATION - 1982/3 AND 1984/5 COMPARED (GLOBAL - i.e. HQ - ACTIVITIES)

(ZERO-GROWTH BUDGET)

		1982/3	1984/5	1986/7
1.	Meetings			
	Expert committees on:			
	- Cardiomyopathies (CVD 404)	41 800		
	- Prevention & Control of CVD in the Community (CVD 406)		48 200	
	- Appropriate Diagnostic Technology in the Management of CVD (CVD 407)			48 200
	Study Groups on:			
	- Blood Pressure Studies in Children (CVD 053)	24 200		
	Scientific Groups on:			
	- Primary Prevention of Hypertension (CVD 051)	24 200		
	- Sudden Cardiac Death (CVD 064)		31 400	
	Cardiovascular Diseases Steering Committee (CVD 054)			31 400
	Meeting of Investigators on Epidemiological Studies of Atherosclerosis Determinants and Precursors (CVD 050)*	26 800		
	Meeting of Investigators on Comprehensive Cardiovascular Disease Control Programmes in the Community (CVD 028)	27 000		
2.	Research activities:			
	Multinational Monitoring of Trends and Determinants in CVD (WHO MONICA Project) (CVD 048) (Steering Committee)	25 300	40 000	48 500
	Research, Development and Training in CVD (CVD 005)	200 000	137 000	137 000
	Epidemiology of Cardiomyopathies: Methodology of Population Surveys (CVD 052)	10 000	28 000	
	Standardization of Nomenclature, Diagnostic Criteria and Methods (CVD 036)	20 000	22 000	
	Development of Methodology for "Primordial" Prevention of CVD in Developing Countries (CVD 038)	20 000	47 000	
	Development of Methodology for CVD Prevention and Control Programmes in Relation to Primary Health Care (CVD 067)		59 000	74 600
	Study of Atherosclerosis and Hypertension Determinants in Early Life (CVD 068)		24 000	26 000
	Appropriate Technology in Cardiology (CVD 066)		8 500	
3.	CVD Intensified Programme			
	Prevention of Coronary Heart Disease		335 000**	
	Prevention of Rheumatic Fever/Rheumatic Heart Disease		165 000**	
	WHO MONICA Project (PI's meeting, support to MDC) (CVD 080)			80 000
4.	Extrabudgetary Funding (EF)			
	WHO MONICA Project (CVD 048A) (NHLBI, USA)		90 000	90 000
	Prevention of Rheumatic Fever/Rheumatic Heart Disease (AGFUND)			750 000
5.	Planning and Management (staff) (CVD 902)	912 100***	793 700	796 100
	TOTALS: RB:	1 345 600	1 238 800	1 241 800
	EF		90 000	840 000

* Combination of two projects (CVD 049 + 050)
** Extra allocation to CVD programme for 1984/5 only.
*** Staff reduced by transfer of post of scientist to office of Director NCD

Table 3:

APPROXIMATE DISTRIBUTION OF GLOBAL FUNDS (US$) BY WHO REGION IN SUPPORT OF 1984/5 ACTIVITIES INCLUDING SUPPORT TO INSTITUTES

Project	AFR	AMR	EMR	EUR	SEAR	WPR	CVD/HQ	TOTALS
CHD				110 000			70 000	180 000
RF/RHD	23 000	20 000	25 000	—	30 000	25 000	30 000	153 000
MONICA				266 000*		2 000	40 000	308 000
R.D.T.**				20 000		12 000	40 000	72 000
PRIM.PREV.	6 000		3 000	4 000		3 000	20 000	36 000
CVD/PHC	9 000						35 000	44 000
ATHERO.				14 000			48 000	62 000
CARDIOMYO.				13 000			15 000	28 000
STANDARD.							22 000	22 000
TOTALS:	38 000	20 000	25 000	427 000	30 000	42 000	320 000	905 000

* Includes support to MONICA Data Centre, Helsinki, up to end of 1986

**R.D.T. = Research, Development and Training

6. RELEVANT REPORTS, DOCUMENTS AND PUBLICATIONS

i) Report of a meeting on Strategies and Approaches to the Implementation of the CVD Intensified Programme - Action for the Prevention of Coronary Heart Disease, Geneva, 14 December 1983. WHO/CVD/84.1

ii) WHO/CVD Intensified Programme - Action to Prevent Rheumatic Fever/Rheumatic Heart Disease. Report of a Planning Meeting, Geneva, 4-5 April 1985. WHO/CVD/84.3

iii) Dodu, S.R.A.: The WHO Intensified Programme for the Prevention of CVD. Heartbeat, 2 September 1984.

iv) Dodu, S.R.A.: Coronary Heart Disease in Developing Countries: The Threat can be Averted. WHO Chronicle, 38(1), 3-7 (1984)

v) Cardiomyopathies. Report of a WHO Expert Committee. WHO technical report series no. 697, 1984

vi) Blood Pressure Studies in Children. Report of a WHO Study Group. WHO technical report series no. 715, 1985

vii) Sudden Cardiac Death. Report of a WHO Scientific Group. WHO technical report series no. 726, 1985

viii) Community Prevention and Control of Cardiovascular Diseases. Report of a WHO Expert Committee. WHO technical report series no 732, 1985 (in press)

ix) Report of a Meeting of Investigators on Epidemiological Studies of Atherosclerosis Determinants and Precursors, Geneva, 7-9 November 1983. WHO/CVD/84.2

x) Tell, G.S. et al.: Epidemiology of Atherosclerosis Determinants and Precursors During Adolescence: Memorandum from a WHO meeting (WHO Bulletin - in press)

xi) Draft Protocol for an International Study of the Pathobiological Determinants of Atherosclerosis in Youth. WHO/CVD/85.3, July 1985

xii) Primary Prevention of Coronary Heart Disease. Report of a WHO meeting, Anacapri, 15-19 October 1984. EURO Reports and Studies 98, 1985

xiii) Development of Methodology for the Prevention and Control of Cardiovascular Disease in Primary Health Care in Developing Countries. Report of a WHO Meeting of Investigators, Geneva, 18-20 June 1985. WHO/CVD/85.5

xiv) Tunstall-Pedoe, H.: Monitoring Trends and Determinants in Cardiovascular Disease and Risk Factors: The WHO MONICA Project. WHO Chronicle, 39(1): 3-5, 1985

xv) Uemura, K. & Pisa, Z.: Recent Trends in Cardiovascular Disease Mortality in 27 Industrialized Countries. World Health Statistics Quarterly, Vol. 38, No. 2, pp 142-162, 1985 (plus Annex 1 - separate reprint, pp 1-30)

xvi) Gross, F., Pisa, Z., Strasser, T. & Zanchetti, A.: Management of Arterial Hypertension. A practical guide for the physician and allied health workers. WHO, Geneva, 1984

xvii) Meade, T.W. et al.: An International and Inter-regional Comparison of Haemostatic Variables in the Study of IHD. Report of a Working Group. International Journal of Epidemiology (in press)

xviii) Cardiomyopathies - Approaches to Prevention and Early Detection. Report of a WHO Consultation, Geneva, 25-27 March 1985. WHO/CVD/85.6

xix) Physical Activity in Disease Prevention and Treatment - A WHO/ISFC monograph. Masironi, R. & Denolin, H. (eds), H. Piccin/Butterworth, 1985

xx) Reports of joint International Society and Federation of Cardiology/World Health Organization Task Forces:

- Report of the Joint International Society and Federation of Cardiology/World Health Organization Task Force on Nuclear Cardiology. Zaret, B.L. et al. European Heart Journal, 5, 850-863, 1984

- Range of Normal Values for Left and Right Ventricular Ejection Fraction at Rest and During Exercise Assessed by Radionuclide Angiocardiography. Pfisterer, M.E., Battler, A. & Zaret, B.L. European Heart Journal (1985)6, 647-655

- Recommendations for Standardization of Measurements from M-Mode Echocardiograms. O'Rourke et al. News from the American Heart Association, 69:854A-857A, 1984

- P-QRS-T Morphology. Journal of the American College of Cardiology, June 1984

- Circulatory Variables Measured by Invasive Techniques. Definitions, abbreviations, units, methods of measurements and normal values. A report of the WHO/ISFC Task Force on Haemodynamics. European Heart Journal, Volume 6, Supplement C, October 1985.

- Nomenclature of Coronary Arteriograms (in preparation)

- Percutaneous Transluminal Coronary Angioplasty (in preparation)

- Programmed Ventricular Stimulation (in preparation)

7. BASIS FOR PROGRESS REVIEW

The Steering Committee is requested to review the progress of the global programme during 1984/85 and assess its efficiency and effectiveness in relation to the medium-term activities programmed for the period 1984-1989. The activities listed in the MTP (Annex 2) therefore provide an appropriate basis for this purpose. The status of these activities as of 31 December 1985, are shown in Table 4; additional information will be made available, if required.

Table 4: STATUS OF ACTIVITIES LISTED IN THE MTP AT THE END OF THE 1984/85 BIENNIUM

I. EPIDEMIOLOGY

Targets:

1. By 1989 epidemiological studies should be stimulated/promoted in countries where such information is not available.

2. Identification of better defined and better methodological means for reassessing the extent of the problem in countries.

3. In 1989 a review of the overall prevalence situation and an "atlas" of the world situation will be presented.

MTP Activities (1984-1989)	1984/85 activity area (ref. in text)	Status Start	Complete
a) Selection of national coordination centres and formulation of strategies	(a) CHD; RF/RHD (4.2.1)	Dec.1983	Ongoing
b) Epidemiological surveys and analysis of their results	(b) & (c) In relation to community programmes (4.2.2)	1978	Ongoing
c) Promotion of epidemiological research in specific CVD areas, e.g. cardiomyopathies	Cardiomyopathies consultation (4.2.4(ii)). (See also Section III, para. 1)	1985	1985

II. PREVENTION AND CONTROL

Targets

1. By 1989 in each region, several countries will have ensured activities to formulate and implement comprehensive cardiovascular community control programmes. Whenever feasible studies will be initiated in simultaneous control of other NCD. These studies will be integrated with existing health services. In Europe, a programme of control of CVD by the year 2000 will be implemented.

2. Monitoring and periodic evaluation of progress by investigators and experts in the field.

MTP Activities (1984-1989)	1984/85 activity area (para. ref. in text)	Status Start	Complete
a) Support to countries in the development of national strategies for the prevention and control of CVD, including:			
i) Development and testing of guidelines for integration of CVD control with PHC	(i) CHD; RF/RHD (4.2.1)	1985	Ongoing
ii) Development of comprehensive CVD control in the community integrated in health services; studies on their extension to include other NCD	(ii) & (iii) CVD + primordial prevention in PHC (4.2.2)	1983-84	Ongoing
iii) Collaboration with countries in health education and behavioural changes in healthy living habits (primordial prevention)			
iv) Prevention and control of arterial hypertension in the community	(iv) Ongoing as part of (ii)		
v) Prevention and control of RF/RHD in the community	(v) Intensified programme (4.2.1)	1984	Ongoing
b) The WHO MONICA Project, aimed at development of a system for monitoring CVD incidence and its determinants in entire populations	(b) Research (4.2.3)	1984	Ongoing
c) Evaluation and development of rehabilitation and secondary prevention - integration with health services.	(c) Regional (no global activity)	——	——
d) Evaluation of the role and improvement of health services in CVD control.	(d) No global activity	——	——
e) Summary of the state of the art by expert committees and other expert groups on prevention and control of major CVD.	(e) Scheduled meetings (4.2.4(ii) & 6)	1985	1985
f) Provision of consultant services to Member States and collaborating centres on request.	(f) Related to (ii)-(v) and to (b) above	Established	Ongoing

III. RESEARCH

Targets

1. Development of effective methods for identification of risk factors and their assessment in the context of etiology and pathogenesis of CVD, and their prevention and control.

2. By 1989, countries implementing comprehensive programmes of control in CVD should be actively engaged in research with special emphasis on prevention and control.

MTP Activities (1984-1989)	1984/85 activity area (para. ref. in text)	Status Start	Complete
a) Support to countries to identify research areas related to CVD control programmes, including studies on primordial prevention	(a) & (b) overlapping with CVD + primordial prevention in PHC (4.2.2)	Established	Ongoing
b) Promotion of health systems research in the application of existing knowledge on CVD control.	No specific global activity - overlaps (a)	----	----
c) Promotion and coordination of research relevant to the WHO programme, concentrating on etiology, pathogenesis and prevention of major CVD, e.g. precursors of atherosclerosis, & cardiomyopathies	International cooperative research (4.2.3) - WHO MONICA Project - Precursors of atherosclerosis	Established 1984 1985	Ongoing 1993 1988
d) Identification of unknown risk or protective factors & development of related intervention	No global activity started	----	----
e) Development of appropriate technology for CVD community control.	Consultation and Expert Committee	Dec. 1985	Nov. 1986
f) Exchange of research workers with special emphasis on the exchange of experience and cooperation in mutually beneficial areas.	No global activity started	----	----

IV. EXCHANGE OF INFORMATION AND COORDINATION

Targets:

1. Development of an effective mechanism for regular exchange of information on activities in the field being carried out in centres collaborating with WHO, and advances in the field relevant to prevention and control of CVD in populations.

2. Standardization of nomenclature, classification, criteria and methods in collaboration with the ISFC.

3. Continuation of global monitoring and evaluation of programme activities through periodic meetings of the CVD Steering Committee and regional advisers, and establishment of national coordinating committees in each region.

MTP Activities (1984-1989)	1984/85 activity area (para. ref. in text)	Status Start	Complete
a) WHO/ISFC Task Forces on Classification and Nomenclature of: - Haemodynamics - Electrocardiography - Nuclear cardiology - Echocardiography and promotion of global use of standards recommended by these Task Forces.	(a) Three Task Forces established (4.2.4(1) and also b)	1984/5	1986
b) Coordination of technical cooperation with other UN agencies and NGOs in CVD and related fields (precursors of atherosclerosis, nutrition, education activities including smoking)	(b) NGOs in official relations with WHO (International Society & Federation of Cardiology, International Federation Sports Medicine)	Established	Ongoing
c) Maintenance of communicating network of individuals, institutions, government contacts	(c) CVD mailing list, Expert Advisory Panel etc.	Established	Ongoing
d) In collaboration with NGOs, establishment and dissemination of guidelines on: - effective nutrition - optimum physical activity - smoking control - appropriate drug treatment and selected information advances in CVD control, and national projects in this field.	(d) Not started. Planned as part of CHD prevention (4.2.1)	----	----
e) Evaluation of information exchange on a regional basis.	(e) Not started.	----	----
f) Global CVD Steering Committee and regional advisory committees on CVD/NCD	(f) Scheduled meetings	Established	Ongoing
g) Evaluation and optimization of the use of the mass media in CVD community control activities.	(g) Not started	----	----

V. TRAINING

Targets:

1. By 1989 training centres and appropriate facilities should be established in each region, and capacities for training in implementation of community prevention and control programmes further strengthened. The collaboration of NGOs interested in this field should be ensured.

2. Promotion of self-reliance of countries in the development of manpower for CVD and other NCD control programmes.

MTP Activities (1984-1989)	1984/85 activity area (para. ref. in text)	Status Start	Status Complete
a) Strengthening of national institutions to provide training in epidemiology and control techniques.	(a) Regular activity (4.2.4)	Established	Ongoing
b) Continuation of the preparation of manuals, guidelines and other education material for health personnel at all levels as well as for the public	(b) CHD; RF/RHD (guidelines) CVD/NCD+ primordial prevention in PHC (manual)	1985 1985	Ongoing 1986
c) Continuation of courses in epidemiology, prevention and control of CVD for health personnel at varying levels, including support to international teaching seminars in CVD prevention and control.	(c) Continuing activity (4.2.4)	Established	Ongoing

SECTION III. ONGOING AND FUTURE PROGRAMME ACTIVITIES

1. 1986/87 ACTIVITIES AND PROGRAMME BUDGET

The 1986/87 activities and programme budget are listed in Table 5 of the present report and in the official WHO publication PB86/87, pages 266-267 and 422.

In 1984/85 the Director-General made available an additional allocation of US$500 000 for the development of a CVD intensified programme. Since it was emphasized at the time that this was a one-time supplement only, the CVD Unit had to make internal adjustments to its programme for 1986/86 in order to accommodate ongoing activities within the zero growth budget demanded by the Organization. Two separate manoeuvres were adopted: (i) suppressing the budget lines for cardiomyopathies and standardization of nomenclature with the intention that limited budgetary support for these areas in 1986/87 might be provided from Research, Development & Training funds; (ii) combining "CVD prevention in PHC" and "primordial prevention in developing countries" into one programme area with a reduced total budget.

However, an additional US$400 000 bas been allocated to the CVD programme for 1986/87. A list of activities that will be carried out in addition to the regular programme has been proposed and is shown in Table 5.

2. FORESEEABLE TRENDS FOR 1988-1989 AND FOR THE PERIOD OF 8GPW

The main approaches to achieving the stated programme targets will be through (a) the population approach and development of national action plans; (b) primordial prevention and prevention in early life; and (c) integrated CVD and NCD intervention programmes. Each of these approaches will be supported by specific activities to be elaborated in the corresponding medium-term programme, under the following general subprogrammes: epidemiology, prevention and control, research, exchange of information and coordination, training.

WHO will promote prevention and control of CVD through PHC and in support of national strategies for health for all by the year 2000. Approaches will vary according to the priority given to the CVD problem in different countries, and will range from primordial prevention activities directed at health education in schools, to nation-wide intervention programmes aimed at changing unhealthy life styles in whole communities. An intersectorial approach will be adopted in each country within the national CVD prevention strategy and WHO will provide guidelines and other material to support such efforts.

The trend towards the adoption from an early age of healthy lifestyles and a positive approach to health is increasing, and individuals are being persuaded take a greater responsibility for their own health. These positive approaches to health promotion and maintenance will form the principal thrust of the CVD and NCD community based programmes.

As requested in resolution WHA38.30, increased effort will be directed to controlling CVD together with other noncommunicable diseases in an integrated way. The development of activities together with those of other NCD programmes will be pursued to ensure optimum use not only of WHO's resources but also those of countries. A combined approach to prevention and control of chronic diseases was anticipated in the planning stages of programmes such as those on comprehensive cardiovascular community control and primordial prevention. Programmes in developing countries carried out as part of primary health care will also be implemented in an integrated way as far as possible.

The research programmes of the Organization in CVD will be organized in direct support of the applied programmes, and will include the WHO MONICA Project and an international pathobiological study of atherosclerosis determinants in youth. These projects are expected to yield information applicable to other NCD programmes.

Technological and clinical advances in CVD diagnosis, treatment and management will be closely monitored, in particular non-invasive techniques. There have been rapid advances in the development of methods such as coronary artery bypass, echocardiography, coronary angioplasty, nuclear magnetic resonance, laser technology, computerized cardiac tomography, etc., and expertise and knowledge in their application are growing. The cost effectiveness and appropriateness of these methods in different health care systems will be constantly reviewed.

The possibilities of adapting ongoing international training seminars and WHO regional training courses to include application of CVD prevention and control are being reviewed in collaboration with nongovernmental organizations, in particular the International Society and Federation of Cardiology. Different approaches to different health care systems, as well as to different levels of health workers, will be also taken into consideration when organizing such courses.

2.1 Implications for the 1988/89 programme budget

The most important implication for planning the 1988/89 programme budget is uncertainty at this stage as to whether the budget level of the 1984/5 and 1986/7 biennia can be maintained. The substantial extra allocation of funds to the CVD programme in both these biennia ($500 000 and $400 000 respectively vs. CVD regular budget funds of about $446 000) has enabled the strengthening of CVD programme activities, specifically the elaboration of programmes on CHD prevention, and on RF/RHD prevention in developing countries, to promote application of existing knowledge at the community level. A contribution of $750 000.- from AGFUND has been pledged for a 16-country RF/RHD prevention programme in 1986/7. Every effort will be made to pool resources available for CVD throughout the Organization and to attract extrabudgetary resources, but CVD prevention is not yet a priority for donors. Although countries are demanding greater input from WHO in the development of national prevention programmes, most are not in a position to pledge the necessary budgetary support. A substantial contribution from the Organization in terms of both manpower and funding is likely to be needed at least until 1990 to sustain the present impact of the programme.

3. ACTIVITIES PROPOSED FOR 1988/89

During the final biennium of the Seventh General Programme of Work, continuing efforts will be made to follow through to completion the activities required to meet the terminal targets of the 1984-1989 MTP. At the same time, special attention will be paid to approaches that will provide a smooth transition to the Eighth General Programme of Work (1990-1995).

Table 5 summarizes the main activities of the global programme proposed for 1988/89. These represent a continuation of ongoing activities such as the WHO MONICA Project and the International Pathobiological Study on Atherosclerosis Determinants.

The targets of the CVD/MTP subprogrammes for 1984-1989 are also likely to be met and the targets for the 8th General Programme of Work will be modified to reflect the increased orientation towards application of known preventive measures worldwide.

4. PLANS FOR THE NEXT MEDIUM-TERM PROGRAMME (1990-1995)

4.1 8th General Programme of Work: Section 13.16 - Cardiovascular Diseases

A brief outline of the section on CVD is given below.

4.1.1 Objectives

To prevent and control major cardiovascular diseases in the population.

4.1.2 Targets

By 1995:

(a) All countries will have assessed the extent of cardiovascular diseases in their populations and will consequently have selected priorities for intervention if necessary.

(b) At least three countries in each region will have developed and applied national strategies for the prevention of CVD in their populations.

(c) Sufficient information will have been gathered on different approaches to CVD prevention in different populations to enable WHO to recommend the most appropriate approach in different health service situations.

4.1.3 Approaches

The main approaches to achieving the stated programme objective will be as follows:

- the population approach and the development of national action plans;
- primordial prevention and prevention in early life;
- integrated CVD and NCD intervention programmes.

Each of these approaches will be supported by specific activities, which will be elaborated in the corresponding medium-term programme, under the following general subprogrammes: epidemiology, prevention and control, research, exchange of information and coordination, training.

The WHO CVD programme will continue to be developed in a coordinated and cohesive way at three levels:

At country level, WHO will promote prevention and control of CVD through primary health care systems and in support of national strategies for health for all by the year 2000. Approaches will of course vary according to the priority given to the CVD problem in different countries, and will range from primordial prevention activities directed at health education in schools, to nation-wide intervention programmes aimed at changing unhealthy life styles in whole communities. An intersectoral approach will be adopted in each country within the national CVD prevention strategy, and WHO will provide guidelines and other material to support such efforts.

WHO will promote and collaborate in undertaking epidemiological studies on cardiovascular diseases; promote health education activities among children, adults and workers exposed to cardiovascular health risks; support training of community workers, health and allied personnel in cardiac resuscitation and rehabilitation.

WHO will monitor and evaluate the different approaches to CVD prevention and control in a variety of countries and attempt to identify the approaches that are best suited to different systems of health care.

The Organization will also continue to provide a forum to promote exchange of information and experience from different countries.

The intercountry/regional level will be guided by the stated needs of countries. In general, WHO will promote appropriate technology for effecting improvements in cardiovascular health and CVD prevention. Training of health and health-related personnel will continue to be promoted, with emphasis on primary health care.

At the interregional/global level, coordination, development and promotion of WHO activities to achieve the programme objective will continue to be pursued. Close liaison will be maintained with international and nongovernmental organizations working in CVD-related fields.

In order to ensure optimum use of the Organization's resources, the development of activities together with those of other NCD programmes will be pursued. This combined approach to prevention and control of chronic diseases was anticipated at the planning stages of programmes such as those on comprehensive cardiovascular community control and primordial prevention. Programmes in developing countries carried out as part of primary health care will also be implemented in an integrated way, as far as possible.

Technical support will also be provided, whenever necessary, especially to promote research and exchange of information and expertise. Training of different levels of health personnel, adapted to local situations wherever possible, will continue to be promoted. The preparation of basic educational materials will receive attention.

Table 5: BUDGET PROPOSALS FOR 1988/89 COMPARED WITH 1986/87

		US$ 1986/87	US$ 1988/89
1.	Meetings		
	Expert committees:		
	- Appropriate Diagnostic Technology in the Management of CVD (CVD 407)	48 200	
	- Prevention of Cardiovascular Diseases in Youth		48 200
	Scientific/study group:		
	- Diet and Cardiovascular Diseases		31 400
	CVD Steering Committee	31 400	
2.	Research activities		
	The WHO Monica Project (CVD 048)		
	- Meetings of the Steering Committee	48 500	48 500
	- Meeting of PIs & support to MDC	80 000	80 000
	Research, Development & Training (CVD 005)	137 000	137 000
	CVD Prevention & Control in PHC (CVD 067)	74 600	74 600
	Study of Atherosclerosis and Hypertension Determinants in Early Life (CVD 068)	26 000	26 000
3.	Planning and Management (Staff) (CVD 902)	796 100	796 100
	TOTAL REGULAR BUDGET:	1 241 800	1 241 800
4.	Additional funding from DG's Development Programme for 1986/7 only[1]		
	Consultants	55 000	
	Meetings of investigators on (a) CHD prevention	25 000	
	(b) RF/RHD	40 000	
	WHO MONICA Project (MDC & PIs)	85 000	
	CVD/NCD Prevention	30 000	
	CHD Prevention Programme (Prague Centre & literature reviews)	85 000	
	CVD studies in children	80 000	
	TOTAL:	400 000	
5.	Extrabudgetary Funding		
	WHO MONICA Project (CVD 048A) - NHLBI, USA	90 000	90 000
	RF/RHD Prevention - AGFUND (pledged)	750 000	

[1] Support for the CVD intensified programme in 1986/87 is being maintained from DGDP. It is expected that activities beyond 1987 will be continued mainly through concerted action at the regional and country levels