

Guidelines for a collaborative long term programme of reduction of cardiovascular risk factors in the population of the Seychelles

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Introduction

The need for a collaborative programme of reduction of cardiovascular risk factors in the population of the Seychelles is based on the five following reasons:

- Evidence of a high incidence of cardiovascular diseases in the Seychelles.
- Evidence of high cardiovascular risk factor levels in the population, as shown by the Seychelles Cardiovascular Diseases Survey carried out in 1989.
- Scientific evidence that a decrease of the incidence of cardiovascular diseases may be achieved by a reduction of the cardiovascular risk factors levels in the population.
- Limited economic and scientific resources in the Seychelles urging for a collaborative action.
- Small and centralized country, with a well organized health system, allowing a prevention programme to be carried out in good conditions.

Definite and possible resources

Governmental and University Organizations

Ministry of Health, Victoria, Seychelles

- Framework and headquarters of the programme (epidemiological and research unit).
- Health workers (health planners, administrative personnel, doctors, nurses, dieticians, health educators, epidemiologists, etc.).
- Medical and educational facilities and material.
- Funding in the frame of exchange training programmes.

Other ministries and bodies, Seychelles

- Collaboration with Ministries of Education, Information, Agriculture, and others.
- Collaboration with the Creole Institute.
- Collaboration with parastatal and private organisations.

Canton of Jura, Department of Cooperation, Delémont, Switzerland

- Provides personnel attached to the programme in the Seychelles.

- Support for stays in Switzerland for Seychellois health workers in the frame of exchange training programmes.
- Funding for material.

University Institute for Social and Preventive Medicine (IUMSP), Lausanne, Switzerland

- Expertise in prevention programmes.
- Expertise in disease registers.
- Educational material.

Canton of Vaud, Department of Public Health, Lausanne Switzerland

- Involvement in the frame of exchange training programmes.

University Medical Policlinic (PMU), Lausanne, Switzerland

- Expertise in the fields of hypertension and lipids.
- Laboratory support (lipids).
- Educational material.

University Hospital (CHUV), Department of Hypertension, Lausanne, Switzerland

- Expertise in the field of hypertension.
- Medical material (e.g. ambulatory blood pressure monitoring).
- Educational material.

International bodies

World Health Organization (WHO), Cardiovascular Unit, Geneva, Switzerland

- Expertise in prevention programmes.
- Possible funding (e.g. travels for exchange training programmes).
- Educational material.

World Health Organization (WHO), Regional Office, Brazzaville, Congo

- Expertise in prevention programmes.
- Possible funding (e.g. travels for exchange training programmes).
- Educational material.

Interhealth, Finland

- Expertise in prevention programmes.

University Institute for Development Studies (IUED), Geneva, Switzerland

- Expertise in development programmes.

International Clinical Epidemiological Network (INCLIN), Newcastle, Australia

- Exchange study and training programmes.

Lions International Diabetes Institute, Melbourne, Australia

- Expertise in prevention programmes.
- Educational material.
- Funding for educational and medical material.

Basic lines of the programme

Basically 3 areas of intervention may be considered, which may overlap each other:

- Training of health workers.
- Health policies.
- Intervention in the population.

Training of health workers

1) Knowledge

- Knowledge on cardiovascular diseases is to be improved by providing a consistent message (e.g. promoting a systematically broader medical approach of patients by linking lifestyle and cardiovascular diseases).
- Regular teaching by local or external experts should be aimed at updating scientific knowledge, including diagnostic and therapeutic skills.
- Creation of a regularly issued news letter for health workers internal use.
- Production of technical documents and manuals (e.g. updates of treatment protocols for health workers as well as leaflets for patients on diabetes, diet, etc.).

Material

- Appropriate basic medical material should be available in all hospitals and clinics (scales, mercury sphygmomanometers, glucometers, etc.).
- Appropriate material for information processing and teaching should be available (e.g. computer, laser printer, CD-ROM, appropriate softwares, teaching material, etc.).

Exchange training programmes

Such proficiency programmes should be planned in various areas:

- Diabetes (e.g. CHUV, PMU).
- Blood pressure control (e.g. CHUV, PMU).
- Ambulatory medicine in reference centers (e.g. PMU).
- Preventive medicine (e.g. IUMPS).
- Attachment to on-going preventive programmes (e.g. Ticino Canton, North Karelia, etc.).
- Attachment to a register unit (e.g. IUMPS).

2) Health policies

Lobbying policy makers is central to effective preventive actions. Smoking, alcohol, diet and exercise are the major areas to be tackled by health oriented policies and recommendations.

Cigarette-smoking

- Specific policies should address smoking (e.g. increased taxes, warnings on cigarette boxes, definition of smoke free areas, etc.).
- Policies from other countries should be evaluated as possible models.

Diet

- Policies should tend to avoid healthy traditional diet being systematically replaced by “modern”, possibly less favorable regimens.
- Knowledge of local diet patterns and health traditions should be deepened and worded for appropriate management of health issues.
- Creole diet is healthy in many respects and health beneficial features should therefore be actively identified and promoted (TV programmes, books, etc.).
- Fruit and vegetables consumption is to be actively promoted by taking appropriate measures addressing better production, availability (e.g. distribution) and acceptability (e.g. prices, fruit juice stalls, promotion of traditional recipes, etc.).
- Traditional diet and cooking habits need be carefully evaluated before new policies are successfully implemented.
- Advantage should be taken of the nearly monopoly role of the Seychelles Marketing Board (SMB) in the control of imports and food marketing by influencing regulations so that healthy products are more available or cheaper (through import control, taxation and pricing mechanisms).
- Policies on healthier lifestyle should be exemplarily implemented in schools and particularly in the 1 year residential National Youth Service (NYS) involving more than 95% of Seychellois male and female adolescents.

Exercise

- Healthy lifestyle and sports activities should be actively promoted at all levels.
- Reciprocally, the programme should support the existing national mass-sport policy.

3) Primary and secondary intervention in the population

Media

- There is a need for developing attractive, health-related educational material (TV spots, health programmes).

- Journalists need be actively involved in the programme for their own interest and commitment will greatly affect the effectiveness of the delivered message.
- Opinion leading people (in sports, politics, medicine, etc.) should similarly be actively involved.

Schools

- The diet available in schools should be exemplary (especially in the one-year residential National Youth Service for adolescents). For example, fruit and vegetables should be used more frequently and healthy traditional food promoted.
- Material to process healthy foods (e.g. devices to make fruit juices) should be made more available.
- A larger place should be allocated to health issues and lifestyle education.

Clubs, national organisms and working places

- Healthy lifestyle principles should be actively promoted within the numerous sports clubs of the country. Motivated sports fans would then become motivators in their own family circle.
- These considerations also apply to the army, police and other national organisms.
- Healthy lifestyle and sportive activities should also be actively promoted in working places.

High blood pressure

- Hypertension is the most prevalent major risk factor in the Seychelles and should therefore be managed drastically.
- Since a large proportion of adults visit a doctor at least once a year, it would be more efficient to concentrate on improving case-finding at the clinics level rather than to embark on screening in the total population. Implementing systemic blood pressure determinations for all people attending clinics would therefore enable screening of a high proportion of the whole population within a one or two years.
- Case-finding strategy must however systematically and regularly be carried out in specific population groups (obese, diabetics, smokers, pregnant women, etc.).
- Practical guidelines should be available for screening, diagnosis and treatment of hypertension.
- Opportunities for people to have their blood pressure checked up should be provided in various social places or events (pharmacies, shops, public fares, etc.).
- Specialized clinics should be created to deal with problematic hypertensive patients.

Cigarette-smoking

- Prevention should actively focus on adolescents.
- Females should be discouraged of smoking by emphasizing on the health benefits for children resulting from a smoke free environment.
- Prevention should avoid guilty arguments.
- Repeated medical advocacy to quit smoking is effective on the long run and this effort should be devoted to the 54% of current adult male smokers.

Hypercholesterolemia

- Practical guidelines need be defined and implemented for screening, diagnosis and treatment.

Obesity

- Emphasis should be brought to modify the cultural image of obesity (“slim is smart” instead of “obesity is desirable”).
- Stigmatization against obese people should be avoided.
- The traditional extensive use of oil in cooking (resulting in increased prevalence of obesity and hypercholesterolemia) should be addressed.

Diabetes

- Practical guidelines should be available for screening, diagnosis and treatment.
- It should be emphasized that successful management of diabetes particularly depends of the joint action of health personnel and patients.

Evaluation of the prevention programme

- Mechanisms and indicators for monitoring the campaign are to be developed (e.g. measures of incidental cases, acceptability indexes, follow-up and participation rates).
- After a 5 year period, an evaluation process (e.g. survey) should be carried out to assess the effectiveness of the programme.

Research

Research in the field of cardiovascular diseases should be continued in order to:

- Get and update knowledge on actual issues (e.g. implementation of a register of cardiovascular diseases, assessment of blood pressure measurement artefacts by ambulatory blood pressure monitoring; assessment of the lipid levels in Seychellois patients with myocardial infarction, compliance to therapy of “resistant” hypertensive patients to be assessed by drug metabolites in the urine; etc.).
- Maintain the incentive of the health personnel involved in the prevention programme.

- Maintain and promote fruitful contacts with external experts.
- Provide appropriate and specific information to assess the appropriateness of the programme actions.

First year initial actions

- The knowledge of young adults on health will be surveyed in order to properly design the form and content of the information to be delivered to this key population group (in collaboration with the Department of Health of Ticino, Switzerland).
- A pocket-size “Health booklet”, with entries for everybody’s own risk factors values, will be distributed to all adults. Its use and meaning will be extensively commented in all media.
- Attractive TV clips on cardiovascular issues will be shot in the Seychelles and other available similar material be used or compiled (e.g. TV clips used in a preventive programme in Ticino).
- A major anti-smoke campaign will be designed.
- Effort will be devoted to implement systematic blood pressure readings for all patients in all clinics and develop context sensitive diagnostic, evaluation and therapeutic guidelines.
- A 24-hour ambulatory blood pressure monitoring protocol will be implemented in order to gain knowledge on the significance of single blood pressure readings in the Seychellois population (in collaboration with the Department of Hypertension, CHUV, Lausanne).
- Blood lipids levels will be analysed for all cardiac admissions to the Hospital of Victoria. This study will assess the extent of lipid disorders in this group of patients in the Seychelles so that appropriate treatment guidelines may be prepared (in collaboration with the PMU, Lausanne).
- Of utmost importance, a national, prospective register of cardiovascular diseases will be initiated to monitor the incidence of cardiovascular diseases using standard criteria (in collabo-

ration with the University Institute of Preventive Medicine, Lausanne).

Steering committee

Cardiovascular Diseases Task Force

The Cardiovascular Diseases Task Force is issued from the Ministry of Health of the Seychelles and it includes the following persons:

- C. Shamlaye (chairman), J.-P. Gervasoni (managing director), O. Choisy, J. Edmond-Quilindo, A. Kitua, D. Rosalie, J. Padayachy, J. Tsang Kwai Kew.

The Task Force is scheduled to:

- Conduct the programme of prevention.
- Meet on a regular (monthly) basis for the duration of the programme.
- Be the link with external experts/centers/organizations for expertise, technical or financial assistance.
- Other members will be coopted as necessary.

Associated external organizations

- Canton of Jura, Department of Cooperation, Delémont, Switzerland (F. Lachat, Y. Petermann).
- University Institute for Preventive Medicine, Lausanne, Switzerland (F. Paccaud).
- University Hospital, Department of Hypertension, Lausanne, Switzerland (H.R. Brunner, B. Waeber).
- University Medical Policlinic, Lausanne, Switzerland (A. Pécoud, R. Darioli).
- World Health Organization, Cardiovascular Unit, Geneva, Switzerland (I. Gyárfás).

Their main functions will include:

- Assistance in development, initiation and evaluation of the programme.
- Training of Seychellois health workers.
- Fund raising.
- Technical assistance (laboratory, clinical, educational, etc.).
- Identification of experts.
- Link with other similar intervention programmes.