MINISTRY OF HEALTH - DISEASES PREVENTION SECTION
UNIT FOR PREVENTION & CONTROL OF CARDIOVASCULAR DISEASE (UPCCD)

Annual report of activities for the period January-December 2013

Report prepared by Bharathi Viswanathan, Programme Manager (also viewed by PB)
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Introduction

In Seychelles, cardiovascular diseases (CVD), notably stroke, ischemic heart disease and hypertensive heart disease has become the largest contributor of deaths (40%) in the entire population. CVD also results in a large burden of disability and also has subsequent social and economic impact.

The Unit for Prevention and Control of Cardiovascular Diseases (UPCCD) provides leadership, expertise and capacity at national level for the surveillance, prevention and control of cardiovascular diseases through education, programs and input into policy.

Goals of UPCCD

1. To collect and disseminate epidemiological data on CVD in Seychelles to guide and monitor programs and policy (surveillance),
2. To promote healthy lifestyles and reduce the prevalence of CVD risk factors through health education in the entire population (public health strategy: health education),
3. To promote healthy lifestyles and reduce the prevalence of CVD risk factors in the population through health policy and environment change (public health strategy: health policy),
4. To reduce the CVD risk factors in high-risk individuals through screening and treatment, particularly persons with hypertension and diabetes (high risk strategy),
5. To conduct research on CVD relevant to Seychelles (research),
6. To train personnel in health and non-health sectors with regards to CVD
7. Participation in local/international expert committees or task forces related to NCDs
8. To increase the capacity of the unit both human and material (capacity).
9. Staff
ACTIVITIES FOR THE YEAR 2013

1. SURVEILLANCE

1.1 Surveillance program in schools (overweight, HBP, lifestyles)

Screening of selected groups of school children (Crèche, P4, S1 and Crèche) for CVD risk factors (in particular overweight, tobacco and BP) is integrated in the ongoing school health program since 1998. The school-based surveillance system provides information for evaluation and planning of programs related to lifestyles and overweight in schools and it allows detection and treatment of various conditions at individual level.

- Several training sessions on site and centrally and visits to schools were organized in order to update the school nurses with the school screening procedures.
- Proper placement of hooks and body meter were done in few schools
- Since there was some shortcomings with the screening program (some nurses were not able to conduct screening as planned due to shortage of nurses at the health center) meetings were organized with the coordinators and the school nurses to improve the program and ensure that the maximum number of school children were screened before the end of this year.
- A total of 4050 students were screened in 2013.
- Data entry for all students screened for the year 2013 is being finalized and analysis and a report will be available within the next weeks.
- A National School Nutrition Committee was set up since last year to promote the implementation of the school nutrition policy and several meetings were organized to discuss the same. UPCCD is represented in the committee.
- A two day workshop was jointly organized with the National School Nutrition Committee to sensitize the tuck shop operators on the provision of healthy food choices and the implementation of the school nutrition policy, attended by over 15 participants.
- UPCCD has received few stock of weighing scales and few large cuffs for BP machines to replace damaged ones in schools through funds allocated under WHO POA Family Planning project.
- Since the unit is having difficult to get the official list of all children enrolled in schools from the Ministry of Education, a meeting was organised with the officials of the Ministry of Education (Mr. Uranie of the MOE) and it was concluded and also guaranteed by Mr Uranie, that as of next year, the EMIS will be able to provide demographic data on time at the beginning of the year.
2. PROMOTE HEALTHY LIFESTYLES IN THE ENTIRE POPULATION THROUGH HEALTH EDUCATION

2.1 NCD Campaign

The National Campaign to promote healthy lifestyles with its motto “Lasante Pou Lavi” or “Health for Life” was initiated and promotes 6 key messages, namely 1) staying smoke free, 2) managing your stress, 3) eating healthily, 4) being active for life, 5) doing regular screening for main modifiable risk factors, and 6) taking regular medications as prescribed. The aim of the campaign is to promote awareness on different risk factors of NCDs in our population and educate people on the various ways to identify and reduce their risks.

Following the continuous sensitization of the campaign through media programs, several workplaces and organizations have organized activities to promote the healthy lifestyles at their workplaces.

UPCCD, Mental Health and Cancer Unit collectively assisted the workplaces with these activities and this includes:

- Screening and health talk on CVD, cancer and drug was organised as part of the International Women’s Day on 8th March, attended by 25 participants

- Screening and talk was organised for Castello Beach Hotel, Praslin attended by 28 participants

Providing screening results and counseling to participants
• Screening and health talk at Barclays Bank attended by 86 staffs. Participants with high risk e.g. high blood pressure, obesity, high blood sugar were referred to their respective health centre for further management

• Screening and health talk at the SBC attended by 50 staffs

• Screening and health talk as part of the 5th June by Evangelist group attended by 85 participants

• Screening as part of the National Day Expo attended by 110 participants

• Screening and health talk for health workers of Mahe, Praslin and La Digue attended by 1200 health workers

• Screening disability day at EX SMB hall attended by 85 participants

• Screening at Air Seychelles attended by 200 staffs

• Screening at Cascade DA attended by 30 participants

• Screening at Fun day activities, Parti le peuple, A. Royale attended by 71 participants

• Screening at NRA activity at freedom square for children aged 5-17 years attended by 82 participants out of which 22 were overweight and 3 were obese.

• One day screening sessions organised as part of Men’s Health on Mahe attended by over 20 men

• Participants with high risk e.g. high blood pressure, obesity, high blood sugar were referred to their respective health centre for further management

  **UPCCD staff measuring the blood pressure and blood sugar**
2.2. Theme days

The two main theme days organized by the UPCCD with other collaborators provided additional opportunity for increasing awareness of the general population on related issues. Extensive coverage was made in all national media. Press releases and statements by Health Minister were aired in the mass media, which conveyed to the public a sense of high level priority given by Government to NCD and healthy lifestyles.

2.2.1. The theme for World No Tobacco Day 2013 was “Ban tobacco advertising, promotion and sponsorship”

Main activities included:

- Address for the occasion by the Minister of Health.
- Finalization of regulation on “health warnings’ on tobacco products
- The Seychelles National Tobacco Control Act 2009 requests that all tobacco packets include a health warning that covers at least 50% of each of the two main sides. The regulation clarifies the content and format of the health messages, e.g. the type of images, the wording of the messages, and other issues. The regulation is finalized by the National Tobacco Control Board and the same is published in the official gazette on 13 May 2013.
- Regulation will be enforced as of May 2014.
- Around 1500 A4 coloured flyers with information about this regulation were produced and sent to all the retailers and the importers in the country.
- Airing of spots related to the health warnings messages.
- Several other programs and articles on the media on tobacco control.
- 15 One-hour sessions focusing on the Act and the dangers of smoking and measures for monitoring enforcement were organized for the health workers at Ephelia Resort from May-June and attended by ~1000 health workers.
- Sensitization on the tobacco act and the implementation issues to various works and public places were organised and same was attended by over 200 participants.
2.2.2. World Health Day 2013 theme: “High Blood Pressure”.

Main activities of the world health day include;

- Address for the occasion by the Minister of Health.
- Workshop to sensitize health workers on high blood pressure;
  - Total of 15 one day workshop was organised at Ephelia Resort to sensitize the health workers on high blood pressure from April – June
  - The workshop was organised by DGHR in collaboration with the UPCCD and was officially launched by the Minister for Health Mrs. Mitzy Larue
  - Total of 1200 health workers attended the workshop
  - UPCCD collaborated with the DG HR, MOH with the organization of the workshop
  - The day included in particular the sessions in the morning for all health workers the morning presentation of topics namely high blood pressure, smoking, diabetes, nutrition and alcohol and caner and in the afternoon several team building activities.
  - In addition, all the health workers were also given the chance to participate in the screen session which included checking of BP, BMI, and Diabetes. Overall the sessions were well appreciated by the participants.
  - Overall the screening results shows high prevalence of overweight and obesity, good proportion of health workers with high or very high blood pressure, high blood sugar values.
  - The result shows the need for the promotion and availability of healthy food at the canteen, provision of water fountain in all health centers and promotion of physical activity amongst health workers.
  - UPCCD compiled the report and sent to DGHRD and the same was presented to CMT.
Health Minister making opening remarks

Presentation on high blood pressure

Interaction with audiences

CMT participation

- Programs related to the workshop were aired on the media

2.3 Production of IEC materials

4) Around 2000 A2 size posters on high blood pressure were produced and same were distributed to all public places, health centers, schools of Mahe, Praslin and La Digue.

- In addition, 200 Christmas cards with healthy messages were designed & produced
3. TO PROMOTE HEALTHY LIFESTYLES IN THE ENTIRE POPULATION THROUGH HEALTH POLICY

3.1 Seychelles Tobacco Bill

UPCCD lead the development of the draft of a comprehensive Bill for Tobacco Control. The Act involves various measures including 1) total ban on smoking in all public places, enclosed workplaces, and public transports, 2) health warnings and other matters to display on cigarette packets, 3) ban on tobacco advertising and sponsorship, 4) prohibit sales of tobacco products to minors, 5) formation of the National Tobacco Control Board and several other measures.

- The National Tobacco Control Board met several times to discuss preparation of several guidelines e.g. enforcers, health warnings display on packages, reporting instrument and others
- The Seychelles National Tobacco Control Act 2009 requests that all tobacco packets include a health warning that covers at least 50% of each of the two main sides. The regulation clarifies the content and format of the health messages, e.g. the type of images, the wording of the messages, and other issues.
- Guidelines on the ‘health warnings and the messages’ notice has been finalized by the National Tobacco Control Board and the same has been published in the official Gazette on 13 May 2013. The warnings and messages will be implemented as of 31 May 2014.
- Sensitization of the bill to the specific groups and the general public through several interactive sessions were organized.
- Several letters to specific retailers and producers on the implementation of the health warnings.

**Example of health warnings to be displayed on tobacco products in Seychelles**
3.2. NCD Strategic Plan

Following the conclusion to set up a high level taskforce to develop the draft of the national strategic framework for the prevention and control of non-communicable diseases, a working group was identified and same was finalized.

The first meeting of the task force/working group was organized this year. The working group involves members from Ministry of Finance and Trade, Community Development, Ministry of Health, Media, WHO LO, NATCOF, NCC and others.

The meeting was attended by 12 members and chaired by Dr. Jude Gedeon, PHC with welcoming note, followed by the presentation by Dr. Bovet, Consultant NCD. Dr. Bovet presented the global and local situation of NCD’s and emphasized the need for the most cost effective (“best buys”) interventions to address the four main risk factors of NCDs including 1) tobacco use, 2) physical activity, 3) healthy diet and 4) alcohol consumption.

In addition it was also mentioned that following the follow-up of the Political Declaration at the High-Level UN General Assembly meeting in New York in September 2011 to address the NCD’s, WHO has just finalized the global plan of action for the NCD’s and the same was adopted at the WHA in May 2013. Following the adoption of this plan countries are requested provide reports on the implementation of the NCD plan and the status. The first report to be submitted to WHO in 2014.

Following the presentation, members discussed in detail the various measures/strategies to be considered/included in the Seychelles NCD plan and this includes;

1) To update the current data on NCD’s in the population. UPCCD to conduct the Population Survey on NCD’s and provide results by March 2014.

2) Increase tax on sugar and fat

3) Proper food labeling and content in all food products

4) Part of the tax revenues from Tobacco, Alcohol to be given to MoH for the strengthening of the prevention programs

5) Promote fiscal interventions for physical activity e.g availability of the use of play grounds in schools after school hours and weekends, provision of walking lane

5) Promote water fountains in schools

6) Ban advertising targeting children

7) Include Health in all policies e.g. housing, community development and others

The working group will meet in 2014 to explore further measures and strategies for the development of the draft strategic framework and that the draft to be ready by May 2014 before the next WHA.
4. SCREENING AND TREATMENT TARGETING HIGH RISK PATIENTS

4.1 Smoking Cessation

The program consists of giving medications and counseling to smokers who want to quit. This program is dependent on the availability of treatment procured by WHO. The unit is currently running out of stock of the nicotine replacement therapy to support the smokers to quit smoking. Therefore, the unit is currently advising the clients to buy their NRT at the private pharmacies and counseling and follow-up is provided at the unit. A main priority would be that NRT is provide to patients free of charge by the MOH, particularly considering that NRT is part of the list of essential medicine by WHO and considering that there is no reason that NRT has another status than other main medications for NCDs.

- Total of 30 new smokers were enrolled in 2013, out of which ~ 8 smokers quit smoking completely and 22 relapsed.

4.2 Selected investigations and counseling for NCD patients

Staffs provided counseling and advice to patients particularly as a follow up of screening sessions performed

- Ambulatory BP measurement based on self-measurement of BP at home (~20 persons).
- Counseling and/or treatment to high risk patients (~50 clients).
5) RESEARCH RELATED TO CVD

5.1 Modelling the Epidemiological Transition Study (METS)

The METS study is a prospective multicentre study (USA, Jamaica, Ghana, South Africa and Seychelles) that aims at assessing whether physical activity (measured with objective methods, like doubly labeled water and accelerometers) can prevent overweight and diabetes, and if so, at which minimal level of physical activity. The study targets 500 randomly selected adults aged 25-45.

- Interview on 24 hr dietary recall
- Placing Actical device in a participant

- Most of the participants completed the 3\textsuperscript{rd} phase of the study within the timeline as planned by the protocol.
- Scanning of data is ongoing and same being sent to Loyola on regular basis.
- All blood samples of the study have been sent to USA.
- The 4\textsuperscript{th} phase of the study has started since March 2013 on the same participants and this includes; administering questionnaire related to dietary pattern, blood pressure measurements, accelerometer, body composition analysis and weight. In addition the measurement of the Doubly Labeled Water in 32 participants and the Bone Mineral Density in all participants were conducted this year
- The fourth phase will go on until March 2014.
- A total of 380 participants were seen in 2013. Few drop outs were noted this year due to overseas, death and other reasons.
- The study will be extended up to 2015.
- A study coordinator from USA visited Seychelles during the last week of January 2013 to repeat the Resting Metabolic Rate tests in 75 participants and to train UPCCD staffs on the conduct of the Bone Mineral Density (BMD) procedures.
5.2 Polypill Project

- Project to assess the effectiveness of fixed dose combination drug ("polypill") for prevention of cardiovascular diseases in primary health care in Seychelles.
- English River health center has been identified to pilot the project since 2013 and then the project to be extended to other health centers later.
- Since project will target hypertensive and other high risk patients, there is a need to update the register of hypertension and diabetes in the English River Health Center.
- The updated register will provide a good basis to anticipate the numbers of patients who will need polypill and it is a necessary step to subsequently plan and evaluate the project.
- Around 300 patients has been entered so far in the register.
- Ground work to revive the chronic register at English River Health Center is on hold since June, as Mr. George Madeleine, who was supposed to work on the program has been transferred to the health promotion Unit. Arrangements are currently being made for the replacement and same expected to start as of January 2014.

5.3 Seychelles Heart Survey (SHS) 2013

Cardiovascular diseases (CVD) and other non-communicable diseases (NCD) such as cancer, diabetes, and pulmonary disease are attributable in large part to only a few modifiable risk factors, particularly smoking, insufficient physical activity, inadequate diet, hypertension, and abnormal blood cholesterol and glucose levels.

Population-based surveys of NCD risk factors should be conducted every 5-10 years, in order to monitor trends in risk factor levels related in the population and provide relevant information in order to guide the health response.

Three population-based surveys have been carried out in adults in Seychelles in 1989, 1994 and 2004 (Seychelles Heart Study I, II and III). Globally, these surveys showed divergent secular trends: a marked decrease in the prevalence of smoking prevalence, unchanged levels of blood pressure, and upwards levels of overweight and diabetes. These findings have been instrumental in developing prevention programs and policy to reduce NCDs in Seychelles since the early 1990s.

A new survey has been conducted in 2013 (Mahe) and will be continued in 2014 (La Digue & Praslin).
- The survey took place in Mahe between September-December 2013.
- The Survey will be completed in Praslin and La Digue during 2 weeks in February 2014.
• The survey in Mahe included 1037 adults aged 25-64, who had been randomly sampled from the population census, a participation rate of 73%.

• The survey involved various measurements including questionnaire-based information on lifestyles and dietary habits, blood pressure, anthropometrics and other physical signs, bone density (by ultrasound), ECG and blood collection (blood sugar, A1c, blood lipids, creatinine, CRP, etc)

• The unit is currently working on the logistics of the survey on Praslin and La Digue

• Total budget of the survey amounts so far to ~SR. 1,300,000.

• Overall, the budget breaks down as follows: PHD (~SR. 500,000, including salary of staff SEYPEC (~SR. 300,000), STC (~SR. 250,000) WHO (~SR. 250,000), University of Lausanne (SR. 150,000, not accounting salary of Dr Bovet) and smaller amounts from other sponsors (in particular Omron).

• A first report of the survey is expected to be released by April 2014.

• A quick look at the data on Mahé, which still need to be verified and properly age-adjusted, suggest the following secular trends (compared to findings in the previous Seychelles NCD surveys): a further increase in the prevalence of overweight/obesity, increasing diabetes prevalence, a stable prevalence of hypertension with improved control rates, a slightly decreasing tobacco prevalence and no increase in the prevalence of cholesterol.

6) TRAINING

6.1 Training related to NCD/Management

• Ms. Bharathi Viswanathan, Programme Manager completed a 15 month course on the Leadership for Change (LFC) and received her certificate in August 2013.
7. PARTICIPATION TO INTERNATIONAL/LOCAL/ EXPERT COMMITTEES/TASK FORCES RELATED TO NCDS

7.1 International/Local meetings

- Ms. Viswanathan attended a half-day meeting at MoH to discuss the way forward of the ‘Social Determinants of Health’
- Ms. Viswanathan was unable to attend the Global Youth Tobacco Survey (GYTS) workshop in Atlanta, USA in March, due to health problem.
- Mr. Madeleine attended several meetings to discuss the International Womens’ day activities
- Ms. Labiche attended one day workshop on Early Childhood on 10 May at ICCS.
- Several meetings related to; school health, national school nutrition committee, WHO POA
- Several meetings by the National Tobacco Control Board.

7.2 Publication and presentations

7.2.1 Publications in peer reviewed journals

General issues


Data from CVD population surveys in Seychelles

Data from METS study

Data from Seychelles Children Development Study

Data from Global School Health Survey

7.2.2 Presentations in Seychelles
- Viswanathan B. ‘Seychelles Heart Survey’, ethics committee, Ministry of Health, Victoria, 16 July 2013. (O)
- Viswanathan B. “Dangers of smoking and tobacco control in Seychelles” Workshop on Improving the School Nutrition Environment to help tackles the Childhood Obesity in Seychelles. International Conference Center, Victoria, Seychelles, 3 Mar 2012. (O)
- Labiche J. ‘Cardiovascular Diseases and its risk factors’ meeting with secondary school students, Mont Fleuri School, Victoria, 5 April, 2013 (O)
- Labiche J. ‘Prevalence of overweight and obesity in school children’ meeting with school health nurses at the Ministry of Health, Victoria, 2 June 2013 (O).
- Bovet P. Seychelles Broadcasting Company (SBC) – Seychelles TV. The Seychelles Heart Survey 2013. Interview in “News Extra” (program following news bulletin, 20:10-20:30),
- Bovet P. Seychelles Broadcasting Company – Seychelles radio. SBC radio, Seychelles “studio clinic”, “Legislation and regulation on health warnings”, Victoria, 26 June 2013 (repeat on 27 June)
- Bovet P. “Diabetes”, 30 min TV program Bonzour Sesel, June 2013
- Bovet P. “Hypertension”, 30 min TV program, Bonzour Sesel June 2013
- Bovet P. Presentation on “Global situation underlying national plans of action on NCDs” (45 min). Drafting Committee of Seychelles Plan of Action for Prevention and Control of NCD”, Victoria, 25 Jun 2013.
- Bovet P. Presentation on “Guidelines on HBP, blood lipids and diabetes”. Conference for Workers 2013, Ministry of Health, Ephelia Hotel, 15 & 22 June 2013 (O, 45 min)

8. TO INCREASE THE CAPACITY OF THE UNIT
11.1 Manpower:
This was one of our major shortcomings for the Unit as few new projects are being planned for the coming years e.g. Poly Pill project and the dissemination of the Seychelles Heart Survey 2013. The unit had successfully managed to replace one staff who had resigned June this year. However the unit is still awaiting replacement for Mr. Madeleine who has been transferred since September 2013. It is very crucial and important to fulfill the replacement as soon as possible for the effective running of the programs.
11.2. Budget Big Achievement!!

The unit has received majority of the funds requested to run the programs (mainly for the conduct of the Seychelles Heart Survey 2013) this year under the PHD budget. This is good news; however funds still needs to be considered for the purchase of Nicotine Replacement Therapy next year.

9. STAFF

Ms. Bharathi Viswanathan (BV), Programme Manager
Dr. Pascal Bovet (PB), Consultant, NCD
Mr. George Madeleine (GM), Senior Nursing Officer (Transferred to HP Unit, Post Vacant)
Mrs. Barbara Fock-Tave (BF), Nursing Officer
Ms. Juddy Labiche (JL), Senior Staff Nurse
Ms. Gaynor Mangroo (GM), Health Promotion Officer
Mrs. Vanessa Lafortune (VL), Office assistant
10. CONSTRAINTS

10.1 Medications for smoking cessation

Following the extensive media coverage to encourage smoking cessation program and the National Tobacco Control Act, several clients are approaching the Unit to quit smoking.

The Unit is running out of stock of nicotine replacement therapy since 2009 to support the smokers to quit the habit. Although, the Unit is currently advising the clients to buy their NRT at the private pharmacies, it has to be noted that such treatments are sold very expensive. It is important that MoH assists with the purchase of NRT to support the program in future. Because NRT is now part of the list of essential medications of WHO, NRT should be provided free of charge to smokers in MOH. The Unit needs to have medications to treat at least 100 smokers per year.

CONCLUSION & RECOMMENDATION

Overall the Unit has achieved a majority of its objectives set for this year. The unit worked as a team to achieve the above and builds the same with other sections of the MoH and other external organizations. It has to be noted that support received from the management and other relevant partners has to be commended and the unit feels that the success of its objectives for the year 2013 has been a collective effort. We are pleased to say that funding for the majority of the activities for this year was supported by the PHD and also by other sponsors (WHO, SEYPEC, STC, UNIL).

RECOMMENDATIONS

- Ensure that MOH and other relevant institutions provide adequate funds for running programs in 2014
- Ensure that the school nurses are allocated full time for the school health program
- Funding specially needed for the conduct of the Global School Based Students Health Survey in 2014
- Need to complete the NCD strategic framework to give clear direction for the section.
- Provide training related to NCD to staffs.