NIROGI Diviya

Lessons Learnt

On empowering urban and suburban population
Towards healthy lifestyles for
Prevention of diabetes and CVD risk

2009-2016

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NIROGI Lanka Project of Sri Lanka Medical Association

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NIROGI DIVIYA
2009-2016 LESSONS LEARNT

based on work undertaken
for the Sri Lanka Medical Association by the
Expert Committee on Non-Communicable Diseases in
collaboration with the Ministry of Health, Sri Lanka

NIROGI Diviya Lessons Learnt

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Related publications of NIROGI Diviya project

Samarasinghe D, Amunugama S, Arambepola C, Fernando M, Wijeyaratne C. Empowering communities to reduce the burden of diabetes and cardiovascular disease risk: lessons from the NIROGI Lanka project in Sri Lanka. Regional Health Forum 2013; 17(1): 53-60.

Wijeyaratne C, Arambepola C, Karunapema P, Periyasamy K, Hemachandra N, Ponnamperuma G, Beneragama H, de Alwis S. Capacity-building of the allied health workforce to prevent and control diabetes: lessons learnt from the National Initiative to Reinforce and Organize General Diabetes Care in Sri Lanka (NIROGI) Lanka project. WHO South East Asia Journal of Public Health 2016; 5(1):34-39. DOI: 10.4103/2224-3151.206550

Some of the content in this Guide have been extracted from the above publications.

Contents

Message from the President, Sri Lanka Medical Association

Since Independence, Sri Lanka had maintained an outstanding preventive and curative health service. This foundation has helped to achieve and maintain excellent health indicators which are well above other countries with a comparable economic status. This has been possible due to the high level of technical efficiency in the delivery of health care based on good collaboration between the medical and other health care professionals and communities.

At present, we are faced with a rapid epidemiological and demographic change. The two salient features of this change are a rapidly ageing population and an epidemic of non-communicable diseases. In this backdrop, if we are to maintain our success story we have to concentrate on the basic concept of health promotion in parallel to preventive and curative care. The basic concept of healthy diet, wise food choices and active lifestyle through adaption of proper scientific inputs and people-friendly activities, is of paramount importance.

The Diabetes Prevention Taskforce of the Sri Lanka Medical Association has addressed these issues with vigorous and scientific consultation through a multi-disciplinary approach. This is to be highly commended. The work and dedication put in by the members of the taskforce on a voluntary basis is deeply appreciated. This publication by NIROGI Diviya of the NIROGI Lanka Project exemplifies the long years of work by the multi-disciplinary team. The publication also serves as documentary evidence which can be used by all interested parties as the base document to add value in the continuation of the excellent work done by the NIROGI Lanka Project to wider audiences.

Dr Ruvaiz Haniffa
President, Sri Lanka Medical Association
March 2018

Message from the Chairperson, NIROGI Lanka Project

It is my pleasure and privilege to write this message on behalf of the Sri Lanka Medical Association's flagship venture – the NIROGI Lanka Project. As the largest and longest running project of the most mature medical professional organization of Sri Lanka, Asia and Australasia, we recall and reflect with pride how volunteerism among our own professionals has borne fruit with dividends. The combination of health care professionals from multiple disciplines has been our strength since 2004, with the formulation of an expert committee for NCDs. The masters of the field of health promotion joined as a group to innovate measures that could help prevent the scourge of chronic NCDs in our population. We all know and propose, "Prevention is better than cure". However, the grass root level action required in achieving true prevention of a primordial nature is less understood and ill addressed.

NIROGI Diviya as we aptly called it has been one of the greatest accomplishments of the NIROGI Lanka project. NIROGI Diviya was initiated in 2009 focused on the prevention of diabetes and cardiovascular disease risk by empowering the public in suburban and highly urban areas in the district of Colombo, through activities that encourage community and family participation. The lessons learnt were extremely valuable for all of us – from the Ministry of Health's point of view as the protagonists of policy and strategies of implementation to the non-health sector leaders at central and peripheral levels. The choice of the settings being within the bustling towns of Kotte and Kolonnawa (Phase 1) and Colombo Municipal Council (CMC) (Phase 2), the residing populations had their own sets of multiple problems. However, the community response was amazing. The ripple effect of self-expansion and sustainability were witnessed at a very low cost per individual. The outcomes were such, that as a group, the NIROGI Diviya project leads had the onerous responsibility of sharing these experiences in the written and verbal form with the scientific community; entirely with a view to institutionalize the process. Indeed, Phase 2 of the project helped the project leads to expand to the most urban areas in Colombo district. This is the first ever project of this magnitude that had advocated health promotion towards prevention of NCDs through lifestyle modification in highly urban and suburban populations in Sri Lanka.

All these achievements, overcoming challenges and developing innovative actions that were socio-culturally appropriate was not a simple exercise. The commitment from true leaders like Prof. Diyanath Samarasinghe and Dr Sarath Amunugama must be placed on record. The approval of these projects by the then Secretaries of Health,

Dr Athula Kahandaliyanage and Dr Ravinda Ruberu are recalled with gratitude. The successive presidents and councils of the SLMA and related professional colleges was immeasurable. The Foundation of Health Promotion and University of Rajarata, and in particular Dr Manoj Fernando, are remembered with much gratitude. The medical officers of health (MOH) of both Kotte and Kolonnawa divisions and other stakeholders in multitude of settings, academic staff of the department of Community Medicine of the University of Colombo, the RDHS of Colombo district, and successive Directors of the Health Education Bureau deserve our salutation.

On a personal note, the continued commitment of Dr Carukshi Arambepola, who led the team from the NIROGI office in coordinating the entire seven years of the project, who nurtured the process of health promotion at field level with close supervision of health promotion graduates-led community based facilitators, entirely on a voluntary basis, is testament to what a true academic with a wide vision can achieve. Dr Arambepola, in her quiet but determined manner, supervised and supported an arduous project in work settings, schools and communities. It is gratifying that all Ministry of Health leaders have now accepted these initiatives with conviction, based on the outputs and outcomes, and with a passion for sustaining the task. The Health Promotion Bureau has accepted the onerous task of expanding the process, at national level using the NIROGI Diviya Model. Taking over this leadership by Dr Palitha Karunapema, despite his busy schedule as a health administrator, is much appreciated. I cannot name the numerous health and non-health sector personnel who have contributed over the past seven years, as well as our donor- the World Diabetes Foundation that supported us throughout the entire period in technical support, and the staff of NIROGI who have become amazing experts of the entire process.

I thank them from the bottom of my heart and wish everyone a happy and fulfilled NIROGI Diviya!

Prof. Chandrika N Wijeyaratne
Chairperson, NIROGI Lanka Project

Message from the Project Coordinator, NIROGI Diviya

It is with great pleasure that I pen this message for this Guide. Purpose of this publication is to share our experience of NIROGI Diviya with you. We hope that it would enrich your knowledge on the health promotion process, and help you when advocating health promotion.

As the coordinator of NIROGI Diviya project, it was rewarding to work along with an able team for seven long years since August 2009. At the time we initiated NIROGI Diviya project, it was only a small-scale project confined to a few settings in suburban Colombo, but in no time, it expanded and reached an admirable level. The technical expertise provided by Prof. Diyanath Samarasinghe led team at this stage is gratefully appreciated. Following the success we had in the first three years, we were encouraged to further test the health promotion model that was established in suburban settings in highly urban CMC areas. It was a challenge indeed. Most of the lessons learnt in suburban and rural areas where people and systems are more amenable for collective action, are difficult to be applied in highly urban settings. We are proud that NIROGI Diviya is identified as the first-ever health promotion project conducted in the most urban sector in Sri Lanka for such a long period. The lessons learnt in this Guide reflect the commitment, competence and patience of all involved in the project.

In NIROGI Diviya, we have tried our best to uphold the principles of health promotion, without exerting undue influence on the process. A bottom-up approach was used at all times for actively engaging the participants in decision making on lifestyle modification, and thereby empowering them in future to decide on their own health. We paid greater attention to initiating a health promotion process in settings, rather than the activities that took place in groups, and also to the transfer of leadership, skills and competencies from leaders to others in the settings, so that the objective of health promotion could be truly achieved. In doing so, we failed badly in some settings, which we attribute to being unavoidable in health promotion, while in other settings, we were successful to a great extent. ‘

There were several novel approaches used in NIROGI Diviya, from recruiting BSc graduates in health promotion as ‘HP trainers’ at field level, to establishing

autonomously functioning HP settings in non-health sectors. We have shown in this Guide that persons recruited from non-health formal and informal sectors with no prior background on non-communicable disease related work, could be trained with no financial or non-financial incentives to take the lead in their own settings. We have also shown that 'in health promotion, one shoe does not fit all', and that strategies used for initiating and maintaining behavioural change would vary widely, based on their underlying socio-culturally driven determinants. We have provided evidence on such strategies that were successful and the mechanisms used for ensuring the sustainability of health promotion achieved by participants, beyond the end of the project. We are pleased to share with you the novel educational material that had been developed in health promotion.

This Guide begins with the project summary. Key lessons learnt highlight the learning points. Recommendations and applicability of our findings will enable you to avoid the pitfalls in future work. Rest of the Guide is written in three sections. The first section gives the project in a nutshell- its justification and objectives, target population and project areas, brief summary of the health promotional process followed and the organizational structure. The second section describes the NIROGI Diviya project in more detail, highlighting the learning points with regards to the strategies used, obstacles faced and solutions made to overcome each, and successes and failures of the outcomes. Sustainability is the most important aspect in HP, which we have focussed on in section three. This section further describes the strategies used for ensuring sustainability of health promotion, while highlighting the limitations encountered.

The successful completion of NIROGI Diviya has been due to the commitment of many. Especially, the HP trainers were diligent in their work and extremely corporative in executing their tasks even at short notice. Coordinators of the project were an immense strength for me, and managed the project cordially with all our stakeholders. I am truly thankful for their unstinted support and enjoyed working with them.

There had been many barriers that we faced, which we overcame with the kind support extended by the Ministry of Health, RDHS (Colombo) and PDHS (Western Province), and the successive presidents of the SLMA. I appreciate the support extended by multiple disciplines, including the colleges of community physicians of Sri Lanka and general practitioners, and Ms AG Thanuja and the SLMA accounts branch for their fullest support in timely financial transactions.

Everyone in the central team worked on an honorary capacity, and I personally thank and appreciate their commitment towards the success of NIROGI Diviya, especially of Prof. Diyanath Samarasinghe for enlightening us on many practical aspects of health promotion. A special note of thanks is due for the department of Community Medicine

for their continued support and help as resource persons at all times.
Above all, I thank profusely Prof. Chandirka Wijeyaratne, Chairperson of the project who placed her trust in me to do the right thing, and sincerely supporting me throughout all the endeavours. She gave me confidence and a free-hand to execute my task honestly and as a true leader, had no hesitation in appreciating our hard work at every given opportunity.

It was a pleasure working with different sectors of the population, and with most experienced as well as less mature professionals who volunteered to contribute. This is the first ever Guide done in such detail. I sincerely hope that it would be of use to you and any resource person interested in initiating health promotion.

Prof. Carukshi Arambepola
Project Coordinator, NIROGI Diviya

List of annexures

List of Abbreviations

CMC	Colombo Municipal Council
CVD	Cardiovascular Disease
DGHS	Director General of Health Services
HEB	Health Education Bureau
HP	Health Promotion
HPF	Health Promotion Facilitators
mHIS	Mobile Health Information Management System
MOH	Medical Officer of Health
NCD	Non Communicable Disease
NIROGI Lanka	National Initiative to Reinforce and Organize General diabetes care In Sri Lanka
PDHS	Provincial Director of Health Services
PHM	Public Health Midwife
SLMA	Sri Lanka Medical Association
WDD	World Diabetes Day
WDF	World Diabetes Foundation
WHO	World Health Organization
WHO PEN	WHO Package of Essential Non-Communicable Disease Project


ROCHE DIABETES CARE

NIROGI Diviya

NIROGI Lanka is a non-profit project carried out from 2009 to 2016, with the objectives of improving the quality of diabetes care and strengthening the primary prevention of diabetes and cardiovascular disease (CVD) risk, particularly in the low- and middle-income groups in Sri Lanka. It was implemented by the Sri Lanka Medical Association (SLMA) in partnership with the relevant Units of the Ministry of Health under the patronage of the Director General of Health Services (DGHS), and was funded by the World Diabetes Foundation (WDF). The project was under the leadership of its chairperson, Prof Chandrika Wijeyaratne (Professor in Reproductive Medicine, Faculty of Medicine of the University of Colombo).

NIROGI Diviya has been an integral component of the NIROGI Lanka project and focussed on empowering the vulnerable populations in defined areas in the district of

Colombo to prevent diabetes and reduce the risk of CVD through promotion of healthy lifestyles. It was run almost over eight years ably managed by the project coordinator, technical advisory group, project officers, and the central and field resource teams.

Project Coordinator

Prof. Carukshi Arambepola (Professor in Community Medicine, University of Colombo)

Technical Advisory Group

Prof. Diyanath Samarasinghe (Professor in Psychiatry, University of Colombo)
Dr Sarath Amunugama (Deputy Director General of Health Services - Public Health Services, Ministry of Health)
Dr Manoj Fernando (Senior Lecturer in Health Promotion, Rajarata University of Sri Lanka)
Mr Duminda Guruge (Senior Lecturer in Health Promotion, Rajarata University of Sri Lanka)
Prof. Rohini de Alwis Seneviratne (Professor in Community Medicine, University of Colombo)
Prof. Pujitha Wickramasinghe (Professor in Paediatrics, University of Colombo)
Dr Neelamani Hewageeganage (Director, Health Education Bureau, Ministry of Health)

Project Officers

Dr Geshan Kalupahana (2009)
Dr Manura Ratnayake (2010)
Dr Sameera Madugalle (2011)
Dr Yasiru Malinda & Dr Chamath Perera (2012)
Mr Ravindra Zoysa & Mr Sashika Rajapakshe (2013)
Mr Wiji Kumar (2013-2014)
Ms Anurada Karunaratne (2014)
Mr Upula V. Amarasinghe & Ms HKC Truxy (2015-2016)

Field Trainers

Mr Asanga Surendra (2009-2010)
Mr Susantha Indrawansa (2009-2011)
Ms PDM Gayathri (2009-2012)
Mr Wasantha Kumara (2009-2013)
Mr Ravindra Athurupana (2009-2016)
Mr Nalin Kumara (2011-2016)

Financial Administration

Ms A G Thanuja (2010-2016)

Volunteers

Ms Preeni Gunarathne & Ms Uvini Fernandoo (2015)


FIRE
EXIT

Project Summary

Preamble

NIROGI Diviya was initiated in 2009 focussed on empowering the vulnerable populations in defined areas in the district of Colombo to prevent diabetes and reduce the risk of CVD through promotion of healthy lifestyles.

The main objective of its PHASE I (2009-2012) was to establish a low cost, culturally appropriate and sustainable model using a health promotional approach to empower apparently healthy persons living or working in suburban areas in Colombo district, through activities that encourage group, family and community participation towards healthy lifestyles. The project mainly targeted communities predominantly of low- or middle-income families, and small or medium scale schools and workplaces representing different age strata in Kotte and Kolonnawa Medical Officer of Health (MOH) divisions.

By 2012, the project demonstrated excellent outcomes with a massive expansion drive from 30 settings of 300 participants in 2009 to 200 settings with approximately 3000 participants. It further provided evidence on the capacity building of personnel recruited as 'health promotion facilitators' from the non-health formal and informal sectors, through whom the empowerment in healthy lifestyles was smoothly transferred to their peers, co-workers and families. NIROGI Diviya used a 'bottom-up' approach in most of its activities giving a local flavour when identifying their own determinants underlying risk behaviour, when measuring progress using their own indicators and when ensuring sustainability of health promotion in their own settings.

Encouraged by its achievements, NIROGI Diviya continued beyond 2012 as PHASE II (2012-2016) to meet the challenge of empowering populations living in highly urban areas in Colombo district towards healthy lifestyles. In this phase, the main objectives were to apply health promotion (based on the lessons learnt in Phase I) to empower adolescents in large schools, residents in low income pockets, and the middle income as well as working population within the Colombo Municipal Council (CMC) sector, and also to provide evidence on the sustainability of health promotion already established in Phase I in the suburban areas of Colombo district.

The ultimate goal of NIROGI Diviya was to provide evidence on 'local best buys' to advocate it as a nationally relevant program to prevent diabetes and CVD risk, by reaching out to vulnerable populations via already existing networks and lay persons trained in the non-health formal and informal sectors, to empower them to find

solutions to address the underlying determinants of their own risk behaviour through group, family and community based interventions. It is envisaged that the Ministry of Health would take necessary steps to support it being institutionalised and pilot-tested for its feasibility in other districts and populations.

Key lessons learnt

- Empowering the general public to prevent diabetes and CVD risk, by applying a holistic health promotional approach that addresses their underlying determinants of risk behaviour through collective action, is successful and achievable at low cost in suburban and highly urban settings in the district of Colombo.

- Key features of the NIROGI Diviya health promotion (HP) model are:

  - » More reliance is placed on generating a process to change behaviour rather than on conducting 'one-off' activities

  - » Activity based lifestyle modifications are based on addressing the underlying determinants of risk behaviour in groups

  - » Interventions to change risk behaviour are led or owned by the participants rather than by 'external experts', thus leading to community ownership

  - » There is visible transfer of knowledge, skills and ownership of the program from HP trainers and facilitators to the participants, leading to autonomous functioning of settings and establishment of secondary and tertiary settings by the participants

  - » More emphasis is placed on continuous monitoring of the outcomes using their own indicators, and the feedback used to guide the steps that follow

  - » No financial incentives are used for ensuring active participation of the general public in the program, thus sustainable in the long term

- Different approaches are needed to address the underlying determinants in different settings, which are best achieved using a 'bottom-up' approach. Better results are achieved when the people concerned take on the task of measuring progress as well.

- A substantial expansion of health promotion is achievable by its 'rippling effect', where secondary and tertiary HP settings are formed from a relatively small number of primary HP settings that are originally established.

- Most gains of the participants have been in physical activity followed by dietary changes and mental wellbeing, while the gains were marginal in relation to alcohol and tobacco use.

- Of the physical activities, aerobic dancing done as a group activity has been remarkably well accepted by both males and females across all age groups and socio-economic strata. It is also effective as a strategy to engage less motivated persons in health promotion, for cohesive functioning of a setting and as a point of entry into HP. Other successful interventions have been the group activities done using novel approaches with a local flavour (e.g. elders doing stretching exercises to the tunes of classical music and housewives using kitchen utensils, outdoor games played by a mixed group of families).

- Dietary changes have been widespread mostly targeting the intake of sugar, trans-fat, salt (e.g. fast food, sugar sweetened drinks, processed food) and fibre (e.g. fruits, pulses and legumes, rice based meals). Promoting healthy snacking, home gardening in containers and small spaces, novel recipes and healthy meal plans created by housewives, and developing skills to counter-act unhealthy food advertising and labels are the most effective for long-term change. Novel approaches (e.g. on-site cookery sessions including competitions for the entire family, buffet table, quiz and jigsaw puzzles, children drama and demonstrations) are effective for educating participants on healthy diet.

- Of the strategies used for improving mental wellbeing, 'laughter' group exercise and interventions for improving family harmony and efficiency at work (e.g. reducing television viewing time) have been the most popular in community settings and workplaces.

- Housewives, elderly persons and females are the most receptive categories of people towards HP. With more physically challenging tasks, male participation can be improved effectively, while more mind challenging tasks using technology are needed for school children.

- Participants are capable of developing their own quantitative and qualitative indicators to assess their progress, some of which are unique with a local flavour. These can complement the conventional tools used for assessing HP.

- 'Health promotional calendar' is a user-friendly resource material to facilitate

target-oriented goals for continued health promotion among participants.

- The monitoring system operational at field and central levels, which also includes monthly returns and a grading system developed for rating each setting enables early identification of weaker settings and timely action for corrective measures, and for achieving milestones. These are recommended for use in future projects.

- 'mhealth' is an online health information system using mobile technology to record family level data on non-communicable diseases (NCD) and risk behaviour. It is recommended to be pilot tested in the field as a tool for action by public health staff.

- Lay persons from formal and informal non-health sectors can be trained effectively to facilitate the process of HP towards healthy lifestyles at workplaces and community settings in both suburban and highly urban areas.

- Neither informal leaders nor participants in settings need a thorough knowledge on NCD or risk factors to initiate changes in behaviour. Instead, by placing more emphasis initially on changing attitudes and skill development towards a 'healthy and happy life', a demand for theoretical knowledge can be spontaneously created among them, thus less risk on the HP process being 'medicalised'.

- Graduates with BSc (Health Promotion) are identified as a skilled resource to be recruited as full time HP trainers at primary health care level to prevent diabetes and CVD risk.

- Successful initiation of HP in a setting is shown to be determined by several factors: the interest generated among participants towards health, skills of the informal leaders needed to keep the participants together and motivated, and effective facilitation by the HP trainers towards behavioural changes. The initial time and effort spent to stimulate the participants to take charge is worthwhile. External inputs are not needed indefinitely to sustain progress when this happens.

- Sustainability of the HP process is achievable by initiating the process through already existing networks in settings, transferring skills and knowledge from HP trainers to lay persons, ensuring ownership of the activities conducted, and developing a supportive environment and advocacy with the main stakeholders.

- Poor time allocation for group interaction within a setting is a critical logistic

issue faced by HP trainers, which slows down or dampens the expansion drive and sustainability of settings. This is most prominent in large schools.

- Performance of school children as change agents of peers is not adequate, owing to less time availability at school for interaction for building an HP process. Instead, capturing them outside school through scout association and children societies is successful. Health promotion using technology-enabled mechanisms should be explored in future in this regard.

- It is necessary for people to take ownership of their health. However, external facilitation is also required to some extent to provide guidance on how the determinants of the selected goals may be worked out accurately and how they could be addressed effectively. The benefit of regular inputs by competent health promoters is demonstrated in many successful interventions, and should therefore be continued for sustainability.

- Enrichment of the HP process is evident by the collaborations made with field health staff (e.g. MOH and RDHS staff) in suburban areas but not in highly urban settings towards its sustainability, and for technical expertise with the National Institute of Sports Science of Western Province, Department of Animal Production and Health of Western Province, Department of Horticulture and Landscape Gardening of Wayamba University of Sri Lanka, and the physiotherapy unit and several departments of the Faculty of medicine, Colombo.

Recommendations

- NIROGI Diviya provides evidence on the applicability of a low cost, culturally appropriate and sustainable model using a health promotional approach to empower apparently healthy persons living or working in suburban and highly urban areas in Colombo district. This evidence is to be considered as a 'local best buy' and incorporated into the national strategic plan for prevention and control of chronic NCD in Sri Lanka.

- Appointing BSc (HP) qualified graduates to work in collaboration with the field staff as 'HP officers' and be responsible for NCD and non-NCD related health promotional work within a geographically defined area is highly recommended. Their placement within primary health care and its feasibility should be further studied.

- Enabling volunteers from health as well as non-health sectors as a trainable group of informal leaders at the grass root level, along with the public health staff playing an advocacy and supervisory role throughout the process, should be considered as a cost effective strategy that is sensitive to cultural norms and needs. Their potential in facilitating a HP process in settings that they belong to should be recognised and further harnessed through skill development.

- When initiating HP in any setting, precautions should be taken to prevent it being over-medicalized and to ensure that the process is not unduly influenced by financial incentives or external forces, and that the ownership of all activities retain within the relevant settings.

- Ministry of Education should pay due attention to personal development of school children, through which HP in schools could be institutionalised, with dedicated school time and incorporated into the evaluation of a school child.

- It is recommended that based on the lessons learnt, Ministry of Health would take necessary steps to institutionalise the NIROGI Diviya model and pilot-test its feasibility in other districts and populations.

Women Empowerment


Trained HPFs


Family Involvement

Transfer of Power

Social Harmony


Interactive Education

Applicability of evidence derived from NIROGI Diviya

Assessing the impact and outcome following health promotion is complex. Objective measurements such as reduction in body mass index (BMI) and cessation of smoking do not always reflect the actual achievements made by those engaged in HP. There may be subtle changes accomplished by individuals, which are not easily captured in standard tools (e.g. feeling happy, relaxed mood, motivated). Also, since HP is a dynamic process, participants enter and leave the HP process at different time points with no restrictions on movement. Therefore, the participants who were present at baseline or those remaining in a setting at a subsequent time point do not necessarily represent the population-at-risk, when assessing outcomes. On the other hand, restricting the recruitment or subsequent movement of participants may only create an artificially controlled environment. All these could undermine the impact.

The main intention of NIROGI Diviya project was to establish a culturally appropriate low cost model to empower vulnerable populations towards healthy lifestyles. Since this project has not been designed as a research study, changes attributable to HP cannot be demonstrated using pre- and post-evaluation of the settings. In the project, baseline and subsequent assessments of individuals were not done at specific time lines of the project. This was intentionally avoided as we felt that it could unduly distract the HP process. However, a large number of indicators were used in the project mainly for the purpose of monitoring the HP process in a setting and for individuals to assess their own progress, rather than for evaluating the gains of individuals or settings at specified time points of the project. These indicators and methodology used for evaluation varied between settings. Also, the inputs by field trainers were tailor-made to each setting according to the pace at which the participants went through the HP process, and therefore not all settings were functioning in the same intensity. Therefore, most of the successes and failures highlighted in this Guide are based on anecdotal evidence and on qualitative methods applied during the project.

NIROGI Diviya project was evaluated at the end of both Phase I (2012) and Phase II (2016) in a structured evaluation using research methods by an independent group of researchers. Phase I was assessed using pre- and post-behavioural changes, as perceived by the participants. Phase II was assessed by behavioural changes of the participants at the end of project in comparison with control settings that have not gone through NIROGI Diviya. These reports are available for further evaluation of the outcomes.

This report is produced mainly for practical guidance for future projects focussing on HP and to be used by health administrators, planners and health promoters as local best buys.

Section ONE

Introduction to NIROGI Diviya

This section gives an overview on the justification and objectives of NIROGI Diviya project, target population and project areas, health promotional process followed and the organizational structure of the project

Justification

Urban environments characterize sedentary occupations and recreation, improved transport facilities, inadequate space for being active, increased availability and accessibility to cheaper yet unhealthy ready-to-eat/pre-cooked food, eating out, increased use of tobacco and alcohol, and stress.

Being the commercial capital, Colombo is the most urban district in Sri Lanka. The highly populated Metropolitan area represents the 'city' of Colombo while areas surrounding it represent the suburban part of the district. Recently, most of the suburban areas around Colombo have been flooded with new settlers who have migrated in search of better schooling and work opportunities. To cater to their needs, these areas too have been rapidly transformed into urban cities.

Over the last few decades, rapid and unplanned urbanization has led to drastic changes in the behaviour of people living or working in Colombo district. These include changes from traditional (rice based products, fruits, vegetables, pulses and legumes) to modern diet (energy-dense and micro-nutrient deficient processed food and drinks), from active to sedentary lifestyle, and from less demanding to highly stressful livelihoods. In urban areas, there is increased availability and accessibility to cheaper yet unhealthy food (ready to eat, pre-cooked, fast food and processed food rich in fat, sugar and salt, and poor in fibre and micronutrients; sugar sweetened beverages), less facilities for home grown food, improved transport facilities, less space for active recreation, sedentary occupations, highly stressful work or school environments, and increased opportunities for alcohol and tobacco use. Such risk behaviour enables the accumulation of risk factors of NCD such as diabetes and CVD in people across all age groups.

Health education alone has failed in changing the behaviour of people at risk of diabetes and CVD. Attitudes as well as skills should be developed in them to counter-act the unhealthy environment around them. Health promotion (HP) is defined as "the process of enabling people to increase control over, and to improve their health" (Ottawa charter for health promotion, 1986)[1]. Health promotion needs to look at health holistically and beyond the boundaries of individuals. Health promotion approach has identified five main actions: developing personal skills, strengthening community action, creating supportive environments, building healthy public policy and re-

1 World Health Organization. The Ottawa Charter for Health Promotion. Adopted at the international conference on health promotion, 'The move towards a new public health', 17-21 November 1986, Ottawa, Ontario, Canada. http://www.who.int/healthpromotion/conferences/7gchp/en/

orienting health services. We planned to use this approach to achieve the following objectives.

In response to this scenario in Sri Lanka, NIROGI Diviya project was planned with its main focus on health promotion for reducing the risk of diabetes and CVD in the most vulnerable sectors in the district of Colombo.

Objectives

- To establish a low cost culturally appropriate health promotion model to prevent diabetes and CVD risk in apparently healthy people living in suburban areas of Colombo district (Phase I)
    - » Capacity building of lay persons as health promotion facilitators for initiating and facilitating a process to promote healthy lifestyles in identified settings
    - » To empower vulnerable populations in different settings (e.g. schools, workplaces and community) towards positive health behaviour through group, family and community participation
    - » To provide a supportive environment for change in behaviour
    - » To monitor and evaluate their progress and achievements
    - » To identify early those having diabetes and CVD risk
- To establish sustainability of the model already established in suburban areas of Colombo district (Phase II)
- Based on the lessons learnt in Phase I, to apply health promotion in highly urban areas of Colombo district (Phase II)

Project area and Target population

Research evidence suggests that the most vulnerable for diabetes and CVD risk in urban and suburban areas are low- and middle-income communities who have inadequate knowledge, less-conducive environments to change behaviour, and less financial stability, capacity and opportunities to empower themselves to prevent diseases.

School children in such areas are also prone to unhealthy food habits owing to the abundance of fast food outlets and parental employment forcing them to eat out or snack unhealthily, lack of time for physical activity due to highly competitive school education and classes after school, less active indoor recreation, stress prone competitive education and over expectations, and an environment favourable for alcohol and tobacco promotion.

Considering these facts, NIROGI Diviya was carried out in three types of settings (schools, workplaces and communities) in the following areas in Colombo district.

- Pitakotte and Kolonnawa Medical Officer of Health (MOH) divisions representing the suburban areas
- Metropolitan city of Colombo (Colombo Municipal Council (CMC) sector) representing the highly urban areas

Workers in such areas are also prone to sedentary lifestyles owing to less active office work, less facilities for physical exercise at work place, use of public transport for work, unhealthy food habits especially fast foods due to lack of time to prepare food at home due to employment of both partners, availability of such food in canteens, stressful work environment and substance use.

Health Promotional Process of NIROGI Diviya

NIROGI Diviya was designed to empower residents, school children and employed population on healthy lifestyles through a simple health promotional process that incorporated the involvement of multi-sectoral stakeholders related to formal health as well other relevant non-health education and social service sectors, private sector, non-governmental organizations (NGOs) and informal sector.

Keeping the HP features in mind, the project was carried out in two stages: initiating the process of health promotion in settings and maintaining health promotion in the settings, which are summarised below.

Health promotion has unique features that ensure the wellbeing of individuals and communities:

- Viewing health as a 'positive' concept and as a resource for everyday life
- Using participatory approaches (doing things with people rather than for them), so that they take control over the conditions affecting their health
- Focussing on the determinants of health such as social, behavioural, economic and environmental conditions that are the root causes of health and illness
- Building on existing strengths and assets (e.g. existing programs, strong social network or institutions), not just addressing health problems and deficits
- Using multiple, complementary strategies to promote health at the individual, family, group and community level (e.g. health communication, health education, mutual aid, organizational change, community development and mobilisation, advocacy, policy development)

1. Initiating the process of HP in settings

- Volunteers were selected from schools, workplaces and communities to work as the grass root level worker who would take the lead in implementing the HP process in their own setting. They were called 'HP facilitators' (HPFs).

- Each selected HPF belonged to an already existing network or system in the formal health sector (e.g. public health midwife areas), formal non-health sector (e.g. education, social service, banking and other state sectors, private sector, NGOs) or informal sector (e.g. community based organizations, welfare societies, senior citizen clubs).

- Through this network, HPFs formed an 'active' group of 10-15 members living, working or schooling in the same setting. These group members were called 'HP activists'.

- Within the active groups, under the guidance of 'HP trainers', HPFs initiated discussions with HP activists on the concept of health; measured as a group the health status and risk behaviour relevant to diabetes and CVD risk (diet, physical activity, stress, tobacco and alcohol) using indicators such as BMI, unhealthy food habits, sedentary lifestyle, stressful living and substance use.

- Thereafter, HPFs facilitated the HP activists to set goals for improving their health/risk behaviour; to recognise the determinants underlying their risk behaviour; and then to discuss the solutions to address these determinants as a group.

- HP activists also developed their own indicators to measure the change in behaviour.

- Several activities involving active participation of members and multi-sector participation were initiated to address the determinants.

2. Maintaining HP in the settings

- During regular meetings, progress made on behavioural change of the HP activists was shared with each other. Successes and failures were revisited.
- With time, the role and responsibilities of HPFs was gradually transferred to the HP activists in the group. They in turn, transferred it to others outside the group.
- A few HP activists moved out of their original group and formed secondary groups of 10-15 group members (secondary groups), leading to a ripple effect.
- Throughout this process, HP trainers provided technical support for initiating the process; and implemented strategies to ensure maintenance and sustainability of the process. Their visits to the field settings were more frequent at the initial stages but were tailed off towards the end, so that the settings could become more autonomous, functioning with least supervision by the HP trainers.
- A strong monitoring system was in place throughout the program, operating at different levels. HP activists recorded their progress in diaries; HPFs monitored the progress of their own settings using monthly returns sent to the central resource team; and HP trainers reported to the central resource team on a monthly basis.
- The program was evaluated at different stages by conducting review meetings with the participation of central resource team, HP trainers and all HPFs to share experience. Annual review meetings were held to showcase the achievements of each setting and for advocacy.

Organizational structure of NIROGI Diviya

Several teams operational at different levels managed NIROGI Diviya.

At central level

The technical advisory group provided technical inputs and support for planning and monitoring of the overall project. It represented the Health Education Bureau (HEB), which is the centre of excellence dedicated for public health education and experts in health promotion who had ample experience at field level.

The project coordinator of NIROGI Diviya was responsible for smooth running of the project according to timelines and deliverables, including the coordination of all activities at the central and field levels, monitoring and evaluation of outcomes of the project and financial regulation. The entire team worked on voluntary and part-time basis. To assist the project coordinator, there was a full time project officer who was involved in mediating the activities between the central resource team, HP trainers and field participants, and in organising advocacy events.

At district level

Main collaborators of the project were the Provincial Director of Health Services (PDHS) of Western Province, Regional Director of Health Services (RDHS) of Colombo district, NCD unit and HEB of the Ministry of Health, and the relevant MOHs and staff who played an advocacy and supervisory role at ground level. They were responsible for facilitating the HP activities in their areas, liaising with the HP trainers for smooth establishment of the HP process in the local area, and actively advocating HP during their routine work.

At field level

The project was implemented by 'HP facilitators' (HPFs) who were responsible for initiating and maintaining a HP process in their own settings, by forming a group ('HP activists') through already existing networks and maintaining active engagement of the group.

The team responsible for training HPFs and HP activists in health promotion consisted of 'HP trainers' who were graduates in BSc (Health Promotion) from Rajarata University of Sri Lanka equipped with necessary skills and experience in establishing

HP processes at ground level. They were recruited for the project initially from the Foundation of Health Promotion (FHP) and subsequently on an individual basis. While being field-based, they were solely responsible for facilitating the initiation and maintenance of the HP process in areas allocated to each, monitoring of all the activities of participants at field level, and reporting back to the central resource team.

Section TWO

Health promotion through NIROGI Diviya

This section describes the NIROGI Diviya project in detail. It highlights in relevant places the learning points with regards to the strategies used, obstacles faced and solutions made to overcome each, and successes and failures of the outcomes.

Initiating the process of health promotion

Several steps were followed for initiating HP in the settings.

2.1 Recruiting field based HP trainers

The first step was to recruit field-based HP trainers to be assigned full time to geographically defined areas (e.g. Kotte MOH division, Kolonnawa MOH division and the CMC sector). Their main responsibility was to guide and facilitate health promotion in the given area.

BSc (Health Promotion) graduates were selected for this purpose and were paid a monthly salary. This selection was based on the following:

- Their degree program is three years (special degree- 4 years), during which each student would be in charge of a community-based health promotional project for two years, thus equipped with necessary skills and experience in working with populations at field level. After graduation, most have accrued further experience in non-governmental organization driven projects all over the country. Therefore, they are able to win the confidence of others and function effectively in field settings.

- Currently, these graduates are not recognised as trained cadre in HP by any ministry for regular recruitment, thus provides an unutilised resource group.

- Although the public health sector staff (e.g. public health midwife and inspector) is knowledgeable on HP, there is lack of time and motivation to engage their clients in healthy behaviour related to chronic NCDs, as they are already over-burdened with their primary duty of ensuring optimal maternal and child health care in their region. Also, since their job description is more inclined towards being educators than promoters, some are less skilled in transferring empowerment to others. Employing full time field based HP graduates will overcome these barriers.

Lessons learnt

BSc Graduates in health promotion formed a skilled resource for facilitating HP at the field level to prevent diabetes and CVD risk.

Introducing a new cadre position within the allied health workforce as "Health Promotion Officer" (HPO) is strongly recommended. HPOs could be utilised full time for establishing HP settings within a geographically defined area (e.g. 2-3 MOH divisions). They are best placed at the field level to function under the supervision of RDHS in each district, and in collaboration with other allied health forces of the RDHS office (health education officers, agriculture officers, social workers, etc.) and MOH staff. Their expertise should be utilised at the MOH level for non-NCD related work as well. Recruitment criteria, job description and duty list need to be developed by the Ministry of Health.

2.2 Identifying suitable settings to initiate HP

To capture the target population, three types of settings were selected.

- Low- or middle-income communities of 50-200 families in urban and suburban areas
- Workplaces of more than 1000 workers in urban areas and of 30-80 workforce in suburban areas
- National or private schools in urban areas, and secondary schools of 500-1000 students in suburban areas

Initially, five from each type of settings were selected in Kotte and Kolonnawa MOH divisions that represented the suburban areas (30 settings), and in the CMC sector that represented the highly urban areas (15 settings) of Colombo district. With time, more settings were added as new ones or to replace the non-functioning ones.

The full list of settings is attached (see Annex 1)

Including communities, schools and workplaces as HP settings was ideal, as the target population could be easily accessed in one place, and possessed similar characteristics that enabled them to develop strategies according to their socio-

cultural values and to change behaviour as a group.

Workplaces were specifically used to capture the working population (who are not available for community activities during day time) and to improve male participation (males were reluctant to contribute to community based programs unlike women).

A few examples:

- Formal sector - divisional secretariat (DS) office, MOH office, banks, vocational training centres, garment factory



- Informal sector - geographically defined neighbourhoods, public playgrounds, community centres, public health midwife (PHM) areas, weighing posts



SLMA obtained the administrative clearance for the program from the Ministry of Health and zonal educational directorate and provided letters of invitation (Annex 2).

Not every setting is suitable for HP. Settings more favourable for initiating HP were therefore identified and approached using several strategies.

- **Settings with an already existing well-established network of members** were selected, through which it was easier to introduce the HP process and carry out group-based activities. It also ensured the uninterrupted functioning of a setting. Here are some examples of member networks:






» In workplaces – members of the staff, welfare societies, sports clubs

» In schools – members of school health clubs, girl guide/scout associations, teachers' guild In communities: members of bank societies

(e.g. SANASA development bank, Samurdhi cooperative bank), elders' clubs, social welfare societies, women societies, youth clubs, sports clubs, children societies, voluntary dengue control teams, mothers' clubs (e.g. මවු හවුල)



- In suburban areas, settings were identified and approached **with the help of MOH staff** who were knowledgeable about the area, population structure, and the availability and suitability of community organizations, schools and workplaces in the area. However, this was not possible in the CMC sector owing to the poor corporation extended by public health staff (they were also not working closely with the communities). In such areas, approaching the settings **through personal contacts** was helpful for obtaining initial administrative support.

- In suburban areas, the settings were preferred to be **several in number but smaller in size**, such as small neighbourhoods (e.g. residents of a particular road or housing scheme), small-scale workplaces and Type 2 or 3 schools (up to grade 5 or O/Levels) in the area.

- In urban areas, the settings were preferred to be fewer in number but larger in size, such as large community networks (e.g. 'Dili Lalana' Women's Cooperative Society scattered in Dematagoda, Mattakkuliya and Orugodawatte areas with a membership of 3000 women and 300 informal leaders), workplaces (e.g. Bank of Ceylon Head Office, Inland revenue Department, Survey Department, MAGA Engineering (Pvt) Ltd.) and national schools (e.g. Visakha Vidyalaya, Lumbini College, Good Shepherd college).

- In work places, the settings were approached directly through top-level management. **'Healthy worker and productivity enhancement'** concepts were highlighted during advocacy meetings with the administrators to generate their interest in the program.

- Particularly in large schools, 'happy family and performance through healthy

lifestyles' concept was not much effective for generating interest among the school administrators. Therefore, other approaches had to be used to capture school children **outside the school premises.**

Example: Through scout leaders to capture scouts of several schools attending the annual camping event outside the school premises, children societies operational during weekends or after school, past pupils' association

- **More approachable settings** (with relatively more corporative participants) were selected in the initial round. Once the HP process was well established in these settings, the difficult ones in the area were approached during the subsequent rounds. This strategy created a high demand for the program within an area, to the extent of some groups making personal requests and volunteering to join the project.

2.3 Selecting a leader from each setting

Once all the settings were selected, a person who could lead the group was identified from each setting according to a set of criteria. A new term was coined for them - 'health promotion facilitators' (HPF).

For this purpose, 30 individuals (one per setting) were identified in Kotte and Kolonnawa MOH divisions and 15 in the CMC sector. Once identified, they were approached to obtain their consent. It was emphasized that they would not be paid or given any financial incentives for their role as HPFs.

Criteria for the selection of HPFs:

- Their contribution should be entirely voluntary (they will not receive any financial incentives during the project)
- They should be highly committed, motivated and show enough interest in changing behaviour of themselves and others; have previous experience of active participation during voluntary work and as informal leaders; excel in coordination and team work; and be familiar with the terrain and people living/working in the setting
- They could be of any socio-economic background (e.g. housewives, principals, retired persons)
- Having any medical or health related background was not a pre-requisite for selection (e.g. housewives versus PHM)

Role and responsibilities of the HPFs:

- To work as the grass root level worker who will take the lead in forming an 'active' group with members living/working/schooling within the setting
- To work in his/her own setting under the guidance of an HP trainer
- To engage the group in activity based HP, to monitor their performance and extend the process beyond the group to others in the setting
- To transfer the leadership subsequently to other group members

- To actively contribute to the expansion drive leading to a ripple effect, by enabling the group members to form secondary 'active' groups

- To ensure the sustainability of HP process within each setting

In suburban areas, the HPFs were handpicked based on the recommendations of the MOH staff. Especially the PHMs and public health inspectors (PHIs) were able to provide a feedback on the persons who would be committed for such a task.







Though not directly belonging to the setting, a few PHMs from both Kolonnawa and Kotte MOH divisions were also given the opportunity to function as HPFs in their defined PHM areas. Similarly, DS office staff consisting of several field officers was also given the opportunity to become HPFs in community settings.

Lessons learnt

- Whenever a group was formed only for the purpose of HP, it had a higher chance of failure during its initial stage or thereafter, due to less coherence among the group members and less interest in group activities, especially if the HPF lacked skills in keeping the group together or had less administrative support. Therefore, selecting settings that have an already existing, well-established network or system of members is useful to ensure uninterrupted functioning of a setting.

- MOH staff was a good resource in the suburban areas to identify and approach settings, thus seeking their opinion based on SWOT (strengths, weaknesses, opportunities and threats) analysis is recommended. However, this was not feasible in the CMC sector and therefore, different approaches need to be considered in highly urban areas.

- In community settings, women's cooperative societies, micro-finance institutions (e.g. SANASA development bank, Samurdhi cooperative bank) and elders' clubs were the most receptive for group activities, as they had a well organised meeting schedule and other facilities (venue, refreshments).

- In workplaces, those with a well-established welfare society were ideal, with its membership ranging from the top management to minor staff. However, in some work settings, motives of the HRM staff were somewhat not aligned with the objectives of HP, which was disadvantageous for the transfer of ownership.

- In schools, school health clubs seemed less effective, as in most schools these were not functioning regularly. As such, the group of HPFs had to be newly formed by the teacher in charge, using the handpicked students from different classes.

- Of all types of settings, the greatest resistance for initiating a program was from national schools (reluctance to allocate school time for the program). It was much less from the primary or lower secondary schools (up to O/ Levels) in suburban areas (less competitive academic environment was a plus point). Private schools showed a mixed response. This highlights the need for recognition of long-term benefits of HP for personal development and health of a school child by the Ministry of Education.

In the CMC sector, since the support from MOH staff was minimal, representatives who fitted into our criteria were nominated by the head/leader of that particular setting to function as the HPFs. Most often, they were sectional heads in the workplaces, deputy-leaders of societies in the communities and students in the schools. In addition, for overall supervision, welfare or human resource management (HRM) officers were appointed in workplaces, whereas it was the science or health teachers in schools.

2.4 Orientating the stakeholders towards HP

Once the settings were identified, orientation meetings with the relevant stakeholders were held. These meetings helped in obtaining their corporation especially for allocating time regularly for HP activities within the office/school hours, and providing the facilities for group discussions and activities.

Once the settings and leaders were identified, NIROGI Diviya central resource team conducted an orientation program with the management/administrators of the selected settings to obtain their fullest support (e.g. administrators/representatives of the DS office, zonal education offices, banks, civil organizations, NGOs and community based organisations).

Another orientation meeting was held with the Ministry of Health officials (PDHS of Western Province, representatives of the HEB and NCD unit, RDHS of Colombo district and his staff (medical officers - NCD, consultant community physicians, health education officers, medical officers - mental health) and MOHs of the two selected

MOH divisions.

Objectives of the meeting:

- To orientate them on the project towards achieving its long-term goal through health promotion (to emphasise that this is not a unidirectional educational program by medical experts or a program to screen for NCDs, but a program simply to empower persons to change their behaviour)
- To introduce the project objectives, strategies and planned activities, and the proposed monitoring and evaluation process to gain their fullest support. Role of the invitees was also highlighted.
- To obtain the support from stakeholders to identify suitable settings for initiating the process
- To introduce the HP trainers
- To assist in identifying suitable HPFs from the setting (if this has not been already done)

2.5 Initiating an HP process in each setting

HPFs were responsible for initiating a health promotional process in their own setting, under the guidance of HP trainers and other stakeholders. This process included the following steps:

1. Generate interest among others on positive health
2. Assess one's own health including lifestyle related risk behaviour in order to set goals for improving it
3. Identify the underlying determinants of risk behaviour
4. Make plans to address the chosen determinants by developing strategies to change behaviour
5. Develop indicators to measure the expected changes in behaviour
6. Implement the planned strategies to change behaviour
7. Monitor the progress in behavioural change

The HPFs were trained for this purpose by the central resource team (consisting of HP experts and a few from the technical advisory group) and HP trainers. Their training was designed in a way to acquire skills and knowledge that are needed to empower members in the setting to carry out the above tasks. To this end, several training inputs were given to the HPFs using different material. Theoretical inputs were given during group discussions of case studies that were familiar to lay persons. Details of each training session conducted (objectives, target group, resource, duration and timing, theoretical inputs, skill development, teaching material used and follow up activities are given in the Training Manual (see Annex 3).

The most unique feature of the HPF training was that it was 'built into' the process. Accordingly, the training **was done in several stages**. This ensured a gradual exposure of these lay persons to the concept of HP, and prevented the process being 'medicalised'.

2. 5 (a) The initial training of HPFs

A two-day skill-based workshop was organised .for the HPFs to build their capacity to take the leadership in their settings.

Training objectives:

- To provide basic knowledge on the concepts of health and its determinants (with the emphasis that chronic diseases such as diabetes and CVD is a major obstacle for being healthy or leading a happy life; and that minimising lifestyle related risk behaviour could prevent having such diseases)

- To develop technical skills in the HPFs, so that they could assess their own health status (using indicators such as BMI, blood pressure and sugar, body fat) and risk behaviour (unhealthy food habits, sedentary lifestyle, stressful living and substance use) relevant to diabetes and CVD risk, and thereafter train others to do the same

- To train the HPFs on how to set goals for improving their risk behaviour

- To train the HPFs on how to identify the underlying determinants of risk behaviour

- To introduce the project and its aims, and their role and responsibilities as HPFs

- To develop generic skills in the HPFs on communication, motivation, negotiation and building rapport, which are essential for motivating others to become part of a group that focusses on 'health/wellness'

It was essential that highly theoretical inputs on NCD and its treatment not be given at this stage.

























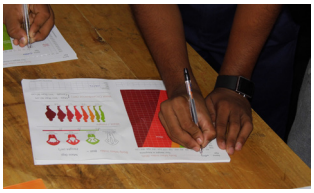






HPFs of all settings were trained together in suburban areas, while in the CMC sector the training of HPFs was done in the individual settings.



2. 5 (b) Formation of an 'active group' by HPFs

Based on the knowledge and skills developed at the workshop, each HPF recruited a group of volunteers who showed interest in forming an 'active group' (about 10-15 per group) within his/her setting. The volunteers were called 'HP activists'.

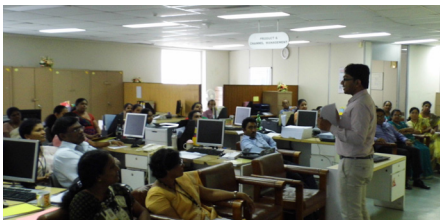



Examples:

- In small workplaces (e.g. DS office), the HPF selected 1-2 departments of his choice.

- In community, the HPFs selected their own residential area or if she/he was a member of a particular society, she/he took this as her/his group.

- In large work places, a group from each floor/department was selected by the HPFs.



Volunteers planning to join the group for obtaining medical treatment or advice were discouraged. All others were invited for the first meeting organised within the setting.

PHMs during their field visits coordinated with the HPFs to link up members to the

active groups. However, the MOH staff and head of the workplace/school played only a facilitator role when recruiting volunteers to the active groups.

2. 5 (c) First local meeting of HPFs with the active group

This was held at a convenient and neutral place within each setting, so that all in the active group felt important and were not threatened by the surroundings. E.g. religious place, community centre, school playground







Prior to this meeting, HP trainer in charge of the area discussed with each HPF the different strategies that could be adopted for initiating the process, from which the most suitable ones were selected. In further support, the HP trainer attended the first meeting of the active group.

In each setting, the HPFs started the discussion firstly to generate interest among the group members on actively promoting favourable conditions for a happy life. The discussion focused on recognising 'poor health' due to chronic diseases as an obstacle for this, and 'good health' as being not merely the absence of diseases but a dynamic status of physical, mental and social wellbeing.

Thereafter, the HPF trained the group members on how to measure their own health status including the risk behaviours relevant to diabetes and CVD, such as:

- Body mass index (BMI), blood pressure, blood sugar, body fat
- Physical inactivity
- Unhealthy food habits

- Mental distress
- Tobacco and alcohol use

The HP trainer facilitated this task by providing the basic equipment (electronic weighing scales, stadiometres, measuring tapes, automatic digital blood pressure monitors, body fat analysers, glucometers and strips).

Finally, another discussion took place among the group members to set goals for improving their health/risk behaviour and to identify the underlying factors that determine their health/risk behaviour.

In some settings, the given objectives were achieved by conducting more than one group discussion.

Members worked in groups to identify the determinants of risk behaviour that need to be addressed, to achieve the goals that were set regarding their health.

Strategies used to arouse interest on HP among the group members

Several strategies were used:

- Conducting group activities such as preparing a healthy meal with the group, aerobic dancing and 'laughter' group sessions were used to generate a discussion on positive health.

- Delivering an interactive lecture on NCD risk factors by a medical doctor followed by calculating their own BMI, caught the attention especially of administrators in large work places in the CMC sector. However, every effort was taken not to medicalize it but find routes to deliver the HP concept to all.

- Health was stressed as a positive phenomenon rather than as a state of no disease. Focussing on the ultimate goal of the program as 'to live a happy life' or 'to have a happy family and work life' received more attention than stressing on the goal of 'to be healthy' or 'to prevent or control diabetes or blood pressure'. It also attracted the participation of apparently healthy persons in the program.

- Of the measurements made, analysis of body fat using the body fat analyser was a novel experience for most, and therefore helped in generating an interest in their health.

- In some schools, teachers were approached initially and their BMI and blood pressure measured prior to creating student groups of HP activists. In some

schools, several advocacy programs were done to win the confidence of principal and staff.

- Emphasis during the first training workshop of HPFs was on building soft skills in motivation, negotiation and team building, rather than on improving their knowledge on diabetes or risk factors.




2. 5(d) Second training workshop for HPFs

A workshop similar to the first one was held in 2-3 weeks.

Training objectives:

- To report back on the formation of active groups of HP activists (this was the main objective)
- To develop further skills in HPFs on problem solving and to improve knowledge on healthy lifestyles
- To train the HPFs on how to facilitate the active groups to make plans on addressing the underlying determinants of risk behaviour, and to decide on the indicators to measure the progress of behavioural changes

'Social learning theory' was used when planning interventions, which addresses both the underlying determinants of health behaviour and methods of promoting change. This theory views change as a product of the interaction between individuals and their environments. Accordingly, social norms and cues, environmental influences,

individual beliefs, and the level of confidence in the ability to successfully make a change on health behaviour become important determinants.

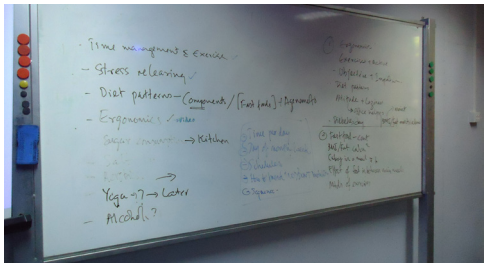
HPFs were trained to consider these aspects when facilitating the group members to act as 'change agents'.

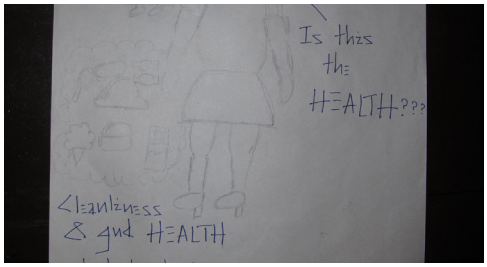
As much as the members in active groups (HP activists), the HPFs were also expected to change their behaviour.

2. 5(e) Second local meeting of HPFs with the active group

Members worked in groups to achieve the following objectives:

- To identify the common norms and beliefs on diabetes and CVD risk
- To decide on a few crucial determinants of their risk behaviour that need to be addressed
- To find solutions and develop strategies in groups to address the selected determinants
- To develop their own monitoring indicators to assess the progress





HPFs ensured that all in the group played a unique role and actively contributed to the discussions on suggestions made for addressing the underlying determinants, out of which the most suitable ones were selected for further discussion on their feasibility. In most settings, the given objectives were achieved by conducting more than one group discussion.

The active groups carried out discussions in groups on the initiation of behavioural change, aimed at addressing the underlying determinants of their risk behaviour, via appropriate strategies developed with a local flavour, and carried out through social participation, while measuring and reflecting on the progress made, using the indicators developed by each group.

Given below are two examples on addressing the underlying determinants.

Example 1 - Housewives during their group discussions identified that being "addicted" to television – especially to serial tele-drama was a determinant underlying their family conflicts. Liberation from the hold of television was their desired outcome, which was achieved through shared knowledge of its unforeseen ill effects on the family (neglect and less time spent with children, negative behaviour of others) and by initiating alternative activities with family during this time. Progress of their change in behaviour was assessed by monitoring the reduction of time spent on watching television, which was done numerically as well as presented in charts maintained.

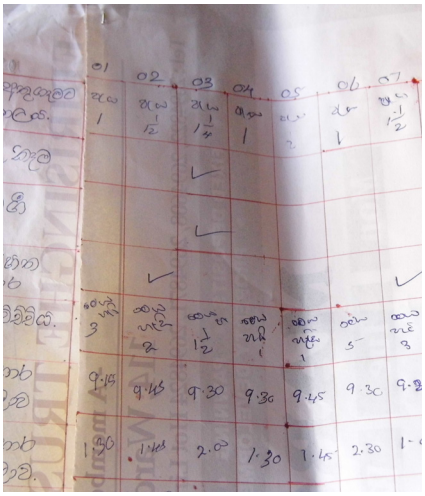
Example 2 - In community settings, a common determinant preventing mothers from being physically active was the influence of negative or hostile comments made by some members of the wider community. In some settings, there were objections by older males to women exercising or playing games in public grounds. Encouraging others to join in regular games and exercise, and working out collective ways to deal with negative comments were among the responses that emerged. Some women, who initially discouraged their peers, joined in the exercise programs later when they began to see visible improvements in body shape and high energy levels of those who exercised regularly.

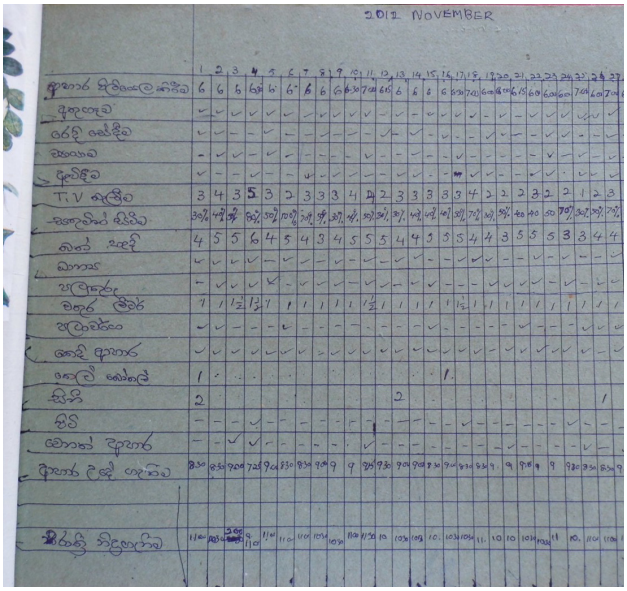
In both examples, reported reductions in the number of quarrels and conflicts within the household and in the community, improved family wellbeing and increased savings were among the other improvements documented.

Several indicators were developed by the group members to monitor their progress. Some were novel indicators, which were more appropriate and suitable for the given setting.

Here are some examples of the novel indicators developed in groups at different levels:

Setting	Indicator
Myself as an HPF	• Days/times I spent in a happy mood • Times I received positive responses from others • Times I showed my friendliness to others • Times I got angry with my children/spouse/colleagues
Community	• My level of interest in attending the HP program • Times I avoided doing sedentary recreational activities • Times I engaged in active recreational activities • No. of hours I spent watching television • Incidents that made me recognize the bad influence of television
School	• Type of food bought from the canteen/ brought from home • Times I received positive responses from my parents or teachers • My level of interest in doing studies/sports • Times I engaged in my hobbies
Workplace	• Leave taken per month • Daily output/completed assignments/productivity at workplace • Times I had conflicts at work • Tea break spent in a useful manner • Times I helped another colleague

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Lessons learnt on initiating an HP process

- More emphasis was placed initially on generating interest within the group to initiate a process and thereby change behaviour, than on providing a lot of information on diabetes, CVD and risk factors.

- The arousal of interest in HP was linked to subsequent activities, such as measuring health status, finding solutions to change behaviour and planning ways to assess the progress, all of which directed the participants to take the responsibility to their hands.

- During initiation, the HP trainers and HPFs played only a facilitator role, while the group members took the lead in activities. This stabilised the ownership of the program from the start.

- HP trainer visited each location to stimulate a process by means of questions, discussions and explanations for improving wellbeing through collective action.




- HPFs did the measurements (e.g. BMI, blood pressure and blood sugar) initially to enable group members to identify their health status. Subsequently, group members did the measurements to monitor their progress of behaviour change

Practical difficulties encountered during the initiation of HP

- In suburban settings, the initial training was conducted for all HPFs together. However, this was not possible in the CMC setting, as the settings having an extensive network had a large number of HPFs (e.g. 130 leaders of the 'Dili Lalana' women's cooperative society scattered in three low income areas, 40 staff officers of BOC head office, 35 office and site workers in construction institutes, 25 students in national schools) and therefore, training was done in each individual site. This prevented the interaction of HPFs attached to different settings, and sharing of experience and solutions.

- Some HPFs (e.g. schools and workforce including PHMs) could not obtain permission to attend the training sessions or it overlapped with another duty at work, despite sending letters in advance counter-signed by the zonal director or RDHS (see Annex 4).

- The commonest practical difficulty in most settings was the delay in organising meetings between the HP trainers, HPFs and their active groups. This was not such a major issue in the settings that were part of a larger network (e.g. SANASA development banks, women societies and elders' clubs), where they anyway had to meet on a regular basis. In large work or school settings where there was a person appointed for coordinating this task, success depended on his efficiency.

  Example: HR officer or social welfare officer, teacher in charge of physical education, science or health subject

2. 5(f) Implement multiple complementary strategies using participatory approaches

Members worked in groups to achieve the following objectives:

- To initiate activity-based behavioural changes towards the following:
  - » A healthy diet
  - » Daily physical activity
  - » Mental wellbeing
  - » Tobacco and alcohol cessation

- To monitor the progress in behavioural change

HPFs facilitated this process by engaging in the following:

- By encouraging active participation among the group members
- By providing note books to record their activities and provide feedback on the progress at individual and group levels

- By providing low-cost accessories such as balls, bats, badminton racquets to address the determinants (These were distributed only if a request was made, and prioritised according to the active participation shown within the setting

- By monitoring the implementation of activities

The activities were not based on strict guidelines or selected from a list of recommended activities, so that they had the freedom to decide and thereby be responsible for their own action. The role of HPF and HP trainer was only to facilitate whatever the plans that the active groups came up with. As a guide, evidence collated of international and local best buys could be perused by the HP activists when considering the most suitable HP activities for the setting.









2.6 Successful interventions

Measurement of the impact of interventions was complex. In addition to the outcomes or desired behavioural changes, changes in the determinants of such endpoints were also assessed. For example, in efforts to reduce excess body weight, they recorded the changes in individual body weight as well as shifts in the selected determinants. The determinants addressed may have included the availability and cost of different food items, the ability to overcome the desire to watch favourite programs on television or handle negative or hostile reactions of others who constantly discouraged them or made fun of their endeavours.

The improvements documented within communities cannot meaningfully be presented as a percentage of the population involved, because the denominator is indefinite in an intervention targeting an ill-defined community through random individual volunteers.

Substantial positive gains in behaviour were shown at individual and family levels.

- Such changes were mainly in the areas of diet and physical activity.
- Action in most communities began with shared exercises or games on a regular basis. As things progressed, the more successful communities broadened the focus to include other factors such as diet, tobacco and alcohol use, and mental well-being.
- Housewives, elders and children were the most effective in empowering the families or peers in return.
- Community participation through capacity building of HPFs and HP activists was successful in changing behaviour. However, male particiaption was less than that of females.








PHYSICAL ACTIVITY

Most gains especially in the CMC areas were related to physical activities.

- **Outdoor games** - Housewives in suburban settings preferred to engage in outdoor games that they were familiar with, such as elle, cricket and simple ball passing that they had done during school time. They used public play grounds, temple premises or premises of a participant. It later became a family event involving children and males. They had it as a regular event on a fixed day of the week (e.g. Friday evening or weekend), which also improved their family harmony and social interactions.

- **Introduction of aerobic dancing** – One of the HP trainers followed the physical fitness instructor certificate course conducted by the National Institute of Sports Science for gaining theoretical and practical skills required. He linked up with promotion of sports activities in the Western Province. Through his initiation, aerobic dancing was introduced to all the settings in urban and suburban settings. This was extremely well received by individuals irrespective of their socio-economic status, age and gender.

- In large work settings (e.g. MAGA Engineering (Pvt) Ltd.), Bank of Ceylon Head Office), aerobic dancing was conducted routinely once a week for the employees. Once they were familiar with the activity, the leadership in conducting each session was rotated among the participants. With time, frequency of the sessions increased to twice a week. On their own initiative, they designed a t shirt and trouser for the activity, with the financial support of their superiors.

- In low resource settings, aerobic dancing was incorporated to their regular meeting schedule. As a group, women and banking societies pooled money to purchase a sound system with amplifiers, so that its loud music motivated those not involved in the programme to join. Children participated with their mothers. A few members initiated group classes in other settings, which turned into self-generated income for them. In work settings, the gymnasium was utilised for this purpose. This encouraged them to use the gymnasium too more frequently.

- In community settings, aerobic dancing sessions were conducted in play grounds or near walking paths, so that others engaged in jogging or walking were also keen on participating. In playgrounds, it was a regular event every weekend morning. Males as well as high social class participants were present. Example: Regular aerobic sessions at Meethotamulla - Middle income people who only came for walks or jogging joined the low income groups doing aerobic exercises. It has become a regular event now in Meethotamulle grounds

- There were many who lost weight after being introduced to the aerobic dancing programme. They shared their experience and did exercise demonstrations in less keen settings or at special events of NIROGI Diviya programme.

- To complement, yoga and other stretching exercises were introduced by some participants who were familiar with such techniques to their settings.

- For those who had less time to spare, NIROGI Diviya produced a video on real time aerobic dancing of 45 minutes (see Annex 5). This can be used at home or at workplaces, in single or group sessions.

- In suburban community settings, exercises were done in their usual attire as wearing sports garments created a cultural barrier (e.g. Muslim women). Initially, there was resistance by males in the area (e.g. spouse, older men) preventing women from playing in public playgrounds.

However, women were able to overcome these issues with time as a group. Also, the active participation of the public health midwives at these sessions changed the attitudes of onlookers. Later, males too joined the outdoor games and aerobic dancing sessions of women.









- Older participants formed walking clubs in the area. However, these were not popular among the middle age or younger people who were busy with household chores early in the morning or evenings.

- Aerobic exercise sessions were conducted during lunch break or after work in large workplaces. Both were equally popular.



- Stretching exercises were introduced to participants. In particular, participants in elders clubs engaged in stretching exercises according to the tunes of Sinhala classical music, which made them sing as well during their regular weekly meetings.

- The activities were adjusted to suit the culture- most activities had a local flavour.

- Low cost equipment were encouraged to be used for being active (e.g. elle, bat, soft ball). The project gave a small contribution for purchasing equipment as a reward only for those actively engaged in HP or if such group made a request. The balance money was generated within the group by conducting sal pil, etc.

- There were sessions by invited resource persons on doing stretching exercises at home using cooking utensils and kitchen ware.











- **Limitations:** Mixing of people of different social classes led to personal conflicts, poor group dynamics, etc. This led to disintegration of the formed activity groups in some settings.






By end of the project

- A total of 25 community participants were trained as aerobic exercise trainers. Some use it for income generation.
- Regular aerobic dancing/exercise sessions have been initiated in eight community settings (200 participants), 2 public playgrounds (150 in Umagiliya ground in Meethotamulla, and 100 in Diyatha Uyana in Kotte) and in 3 work places (50 in Bank of Ceylon Head Office branch, 20 in MAGA Engineering (Pvt) Ltd.), 40 in Kolonnawa SANASA development bank branches).
- HPFs from different settings were trained to build links between those in active groups.
- Ex: HP activists trained as aerobic trainers through the Western Province Sports Science Institute

DIETARY PRACTICES

Changes in dietary practices were widespread.

- Women were mostly targeted for these activities, as they were directly involved in meal preparation at home. They were empowered on monitoring the progress made by family members too.

- Simple interventions such as exchanging spoons for serving curries and rice, not adding salt to rice, serving sugar in a separate bowl at home and at workplaces were introduced to the participants.

- Strategies to improve nutritional value of food such as cutting (not chopping) fruits and vegetable, adding bean sprouts to curries, using rice/kadala/ulundu based flour to thicken gravy and on preparation of fruit and green leave salads and juices were given.

- Meal plans were developed in groups to ensure easy preparation for working women.

- Simple messages on eating more natural food and cutting down on processed food rich in trans-fat were given. In this regard, more emphasis was placed on changing their attitudes on unhealthy food/drink items eaten for social value or as part of trend.

- Virindu sessions were organised by children to highlight the dietary messages.

- Groups discussed the possible interventions for substituting unhealthy snacks high in fat, sugar and salt with healthier options for children at home.

- Groups were empowered on the media and food advertising strategies used for promoting such unhealthy snacks.

- School children were empowered on reading food labels for identifying healthier

options.

- They were also requested to evaluate the healthiness of canteen food and drinks based on labels.

- Children demonstrated a LEDA KADE to highlight the strategies used by food manufacturers, advertisers and retailers to promote unhealthy food products. It was further used for de-valuing the costly unhealthy food products (e.g. cake versus a bunch of bananas)

- Cookery demonstrations of healthy meals were done for active group leaders in low income settings by resource persons from the Colombo medical faculty. This was followed by sharing of the cooked meal with resource persons and






- Cookery demonstrations were a frequent event at initiation of a programme or during showcasing of achievements of participants.

- Competitions were held for the whole family in settings together in Kotte and CMC areas for preparing a healthy meal. Each team in the competition was given money to purchase goods and prepare a healthy meal within a limited time. The NIROGI Diviya team assessed the activity on team spirit, healthiness of the meal prepared, cleanliness, taste and on time management. This improved family harmony and social interactions. The winning teams were rewarded.

- Competitions were held for developing innovative recipes that were high in nutrition and taste. The best 10 were compiled into a book.

- In collaboration with the Sri Lanka Association for the Advancement of Science (SLAAS), several sessions were held in Kotte and Kolonnawa areas on home gardening to encourage especially flat dwellers to grow potted vegetables and green leaves in limited spaces. Several techniques using hydro therapy for planting were demonstrated by resource persons from Wayamba university. Preparation of composting was also shown.

- Specific lecture discussions were organised with ayurveda doctors on the nutritional value and health value of natural food items (e.g. green leaves and small fruit commonly found in suburban areas but not consumed) and traditional meals.

- Value of natural dairy products was highlighted by conducting programmes by resource persons from the veterinary department. Preparation of paneer, butter and other dairy products were demonstrated, along with several dishes prepared using panner.

- Myths and beliefs on food, medicinal value of plants and iron rich natural food etc. were discussed at a seminar organised with academic resource persons of Wayamba university for group leaders from active settings. This was organised by the SLMA.

- BUFFET table was a novel education material developed by NIROGI diviya to educate people on the quantity and quality of their meals. This was demonstrated in Deyata Kirula and other invited programmes.

- Noteworthy reductions in excess body weight among those reached were documented in all active settings.

MENTAL WELLBEING

Several achevements were incorporated in to daily life to improve mental wellbeing

- At community level, several HPFs who were already into meditation shared their experience with others routinely through sessions organised for several settings together. This led to organising several activities in collaboration with the area temple such as sal pil and sermons, through which health messages on healthy lifestylewere also conveyed effectively.

- Group discussions were held with resource persons in psychology on improving their mental wellbeing. After the first sitting, they formed smaller groups to discuss their underlying factors for poor wellbeing. During these discussions, television viewing was highlighted as one that decreases family harmony. Women worked in groups to find solutions.





- Laughter group sessions were introduced, which was well received by participants. It became a compulsory event in the routine meetings of low income women societies.

- Several social events were organised by settings collectively in areas to commemorate avurudu, Vesak and Christmas seasons, during which several health messages were conveyed by them to outsiders. This also improved family harmony and enthusiasm for HP.

- Every HP activity was conducted with team building skills. Event ended with a shared meal prepared by them together.

ALCOHOL AND TOBACCO USE

Reductions in tobacco and alcohol use were reported in fewer settings – around 15% – while improvements in subjective well-being were also noted.

- School level activities took place in boys schools. There were posters designed by students and displayed in and around school premises.
- School children visited the boutiques within 1 km of the school, and pasted posters on smoking and alcohol. Way side boutiques and small scale hops selling packets of lunch were mainly targeted for this activity.
- In areas that were at increased risk of alcohol and narcotic abuse (e.g. near magazine prisons, Kolonnawa), several programs were conducted using school children and out of school adolescents. They were recruited through children's clubs and most active in the program were those having parents who were alcohol abusers or engaged in such illicit activities. Doing these activities outside school premises helped children to freely engage in their task.

- Several meetings were held for males in the area to engage them in discussion on strategies for reducing alcohol and tobacco smoking. Children played a key role in changing the behaviour of their parents. Maintaining the health promotion calendar with new targets for each month was used for this purpose.
- Poster competitions were held on this theme for children and family.

OTHER GAINS

- Associated benefits, not directly related to the risk factors addressed, were sporadic reports of improved family harmony, financial management and community cohesiveness.










2.7 Indicators used by participants to monitor the progress in behavioural change

A comprehensive list of the indicators used by participants in different settings is given in Annex 6. Given below are some of the successful indicators used by them:

- Anthropometric parameters – BMI, waist circumference
  The project supported this task by providing the required equipment while some settings initiated fund raising projects to purchase the equipment.

- Body fat level measured using the body fat analyzer – This was a novel experience for them and was considered a better incentive than BMI for adopting a healthy lifestyle.

- Diet related indicators – snacking practices, adding sugar to tea, serving sugar - introducing a sugar bowl at home and workplace, intake of refined and processed food, counter-acting food advertisements, checking food labels

- Physical exercises – stretching exercises, aerobic dancing, daily physical activities, recreational exercises, attitude over exercises, factors that maintain physical inactivity

- Mental stress – family relationships, conflicts, television viewing, money management, relaxation

- Alcohol use – factors which promote use, community norms and beliefs, reducing the use

- Indicators on changing behaviour – Physical activity becoming an important part of life, healthy dietary habits, family happiness, reducing Alcohol consumption and Smoking

- Initial discussions guided attention to the underlying causes or determinants of these factors. Therefore, monitoring of behavioural change also referred to changes in the underlying contributors to the targeted factors – physical activity, diet, tobacco and alcohol use, and mental well-being.

- For monitoring purpose, participants preferred to use a small diary, which was provided by the project. Some used a checklist of indicators that would be used on a daily basis to assess the progress. It assisted them to reflect on their practice continuously. In some households, children took this responsibility to their hands to change behaviour of their parents.

- Some HP activists used their creativity to develop material for monitoring the progress of their activities.

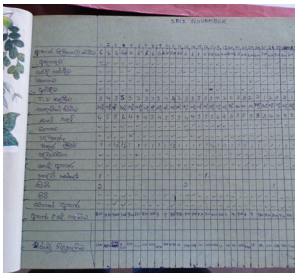
- The project designed an interactive calendar that helped an individual to record activities related to lifestyle on a daily basis on the calendar itself, and thereby develop goals at end of every month that they could achieve in the following month. E.g. Health promotion calendar












Maintaining health promotion in settings

HPFs were responsible for maintaining health promotion in their setting, with the help of HP trainers and other stakeholders.

During this stage, HPFs were further trained on achieving the following, while they continued to engage group members in HP:

1. **Building up the process of behavioural changes that address the underlying determinants of risk behaviour**
2. **Reflection on the behavioural change by measuring the progress**
3. **Achieving overall progress in the group and sharing this knowledge**
4. **Ownership of the process**
5. **Transferring knowledge and skills to others**

The procedure followed is given below in the flow diagram.

3.1 Subsequent local meetings of HPFs with the active group

Further discussions took place in groups

Training objectives:

- Critically evaluate the initiated interventions and identify possible future failures or drawbacks
- Identify the weak interventions with suggestions of other group members
- Identify and address the obstacles (possible strategies to address obstacles)

In some suburban settings, PHM during her field visits coordinated with the HPFs to advocate behavioural changes at every given opportunity at the field level. If they

were also functioning as HPFs, they engaged the communities during domiciliary visits or at routine clinics. Healthy lifestyle clinic staff played an advocacy role to refer community members to HPFs.







3.2 Third training workshop for HPFs

A follow up workshop was held 3-4 months after the second training workshop for all HPFs, with the aim of further strengthening health promotion in the settings.

Training objectives:

- To share experience and discuss the strengths and weaknesses of the strategies used in groups by the HPFs
- To enable the HPFs to reflect on the progress based on monitoring indicators and further change

- To enable the HPFs to apply successful interventions beyond the active group in home or work setting

Sessions included group discussions to share experience, to discuss the strengths and weaknesses of the strategies used in groups, and then to reflect on their progress based on the monitoring indicators and further change.

At the same time, the central resource team assessed the performance of each HPF

in terms of empowering the participants in developing strategies to change behaviour and indicators to measure change, and in finding solutions to address their underlying determinants. Further, site visits were planned by the central resource team to observe the settings and suggest environmental support for healthy behaviour, and for advocacy on policy changes at settings.

In suburban settings, the training workshop as held for all HPFs together, while in urban settings, it was done separately in each setting.

There were several competencies that were developed in HPFs:

- Knowledge on determinants of health, HP principles and practice
- Skills on making community diagnosis, addressing stakeholders with regular updating of skills
- Attitudes of inclusiveness, equity, gender
- Communication on listening skills, empathy and mass awareness strategies
- Advocacy
- Resource mobilization through new partners, community mobilization, promoting social capital
- Social marketing to sell the idea
- Program management
- Generate evidence for evidence-based outcomes/impact and synthesis

In addition to these competencies, they were exposed to relevant topics on patho-physiology and prevention of diabetes and CVD risk; psychological issues related to these diseases; nutrition in these diseases; gestational diabetes and its prevention; and childhood diabetes and its prevention

3.3 Continuation of local meetings of HPFs with the active group

The number and timing of discussions depended on the need and motivation of the group members.

Usually, it was once a month. Most discussions were linked with a regular activity in the community (e.g. monthly meeting of social welfare society, loan deposit days, pension day) and at workplaces (welfare day, pay day).

A few satellite meetings were facilitated by the HP trainers with several settings together (to learn by sharing experience).

Objectives:

- To further introduce practical theory based inputs (as prescribed in modules) on NCDs and specific knowledge on healthy diet, physical activity and mental wellbeing (to be conducted based on the demand for this by participants)
- To share experience and discuss the strengths and weaknesses of the strategies used in groups

- To reflect on their progress based on monitoring indicators and further changes

Responsibilities:
HP trainers facilitated the above process in each setting by engaging in the following:

- By motivating the HPFs to give leadership while ensuring active participation of participants
- By guiding the HPFs to initiate behaviour change of group members
- By providing low cost equipment if needed

- By encouraging the record keeping of activities and feedback on progress




- By identifying the weak/slow performers and encourage the good performers
- By maintaining records on meetings held, the number attended, activities carried out and plans for the future

HPFs in each setting facilitated this by,

- providing leadership to organize group activities
- keeping group members motivated
- continuous monitoring of progress using their own indicators

Institution/society leaders were refrained from having undue control over the participants when organising or conducting meetings of active groups.

Participants in all the settings did not perform in the same intensity or were not at the same level of progress at any given point in time. More intense motivation and also a higher frequency of meetings and more time allocation were carried out for settings lagging behind.

Since settings that do not show substantial progress would be subsequently removed from the program, it is essential to include settings at the beginning more than the desired number. If there is any setting that is resistant to change despite several attempts by the HP trainer and HPF, it was dropped as it is counter- productive to hold on to such settings.

The process continues autonomously because the relevant insights and activities are now incorporated into the day-to-day lives of the given families and communities.












Responsibilities of HP trainers towards the latter part of the program

Several additional responsibilities were given to the HP trainers after about one year (given in box).

Additional responsibilities of HP Trainer

- Introduce theory based inputs on NCDs and specific knowledge on healthy diet, physical activity and mental wellbeing (to be done based on the demand for this by participants)
- Ensure that leadership and ownership of the program is gradually transferred from HP activist to all in the group
- Ensuring that activities done in groups are transferred outside the group to family members, neighbourhood, etc.
- Ensuring the formation of secondary target groups by participants who are active and can take the leadership to form new groups
- Empower primary and secondary groups to create healthy policies within their settings
- Expand the settings either in number within the setting or the number of settings to secondary active groups
- To ensure formulation of healthy policy at setting level
- To modify the physical environment conducive for healthy
- Phase out with his involvement in the setting activities

HP trainers visited the settings weekly during the first few weeks and reduced the frequency of visits subsequently to around once a month or so, to provide inputs on technical matters. The frequency of visits was not rigidly laid down and was responsive to the demand from each setting.

Subsequent review meetings with HPFs mainly focused on building capacity on how to sustain the HP process and also expanding the target population.

When understanding of the required process grew among the active group members, measurement of change was progressively shifted to other members in each setting.

3.4 Monitoring of the HP process of NIROGI Diviya

Monitoring was initiated at the beginning of the project and took place at different levels. It comprised a comprehensive mechanism built into the HP process.

Monitoring at field level

HPFs maintained a file for each setting and submitted a report to the HP trainer on a regular basis. HP trainers also carried out field meetings with the HPFs on a regular basis (once in 2-3 weeks).

Records maintained by the HP trainers included assessments of the progress made by active group members in each setting. Items such as how interested they were, how well they recognized the benefits of collective action and how well they selected the determinants to be addressed were subjectively rated by the HP trainers. They further discussed with HPFs, in reviews with the central resource team, how these assessments could be made increasingly reliable and valid.

In communities and workplaces in suburban settings, MOH monitored the field activities, played a supervisory role and advocated healthy lifestyles at the MOH level.

Monitoring at central level

A community physician representing the health Education Bureau paid random visits to the field settings to observe the activities of HP trainers and HPFs (see Annex 7). They gave a feedback for them as well as for the central team. Data recorded by members of the settings and HPFs were collated and classified under the headings of process, outcome and impact. "Impact" referred to the desired changes in diet, body weight, and use of tobacco and alcohol. "Outcomes" referred to determinants they chose to address, such as vulnerability to commercial promotions, availability and price of different foods, or attitudes to women exercising or playing games in public grounds. "Process" referred to the frequency and quality of the interactions the active groups had with themselves, HPFs and HP trainers.
Every month, the project coordinator and a few members from the technical advisory group carried out a review meeting with HP trainers to report back and plan for next step. A feedback was obtained about each setting from the HP trainers.

Each HP trainer reported back to the project coordinator once a month on the following:

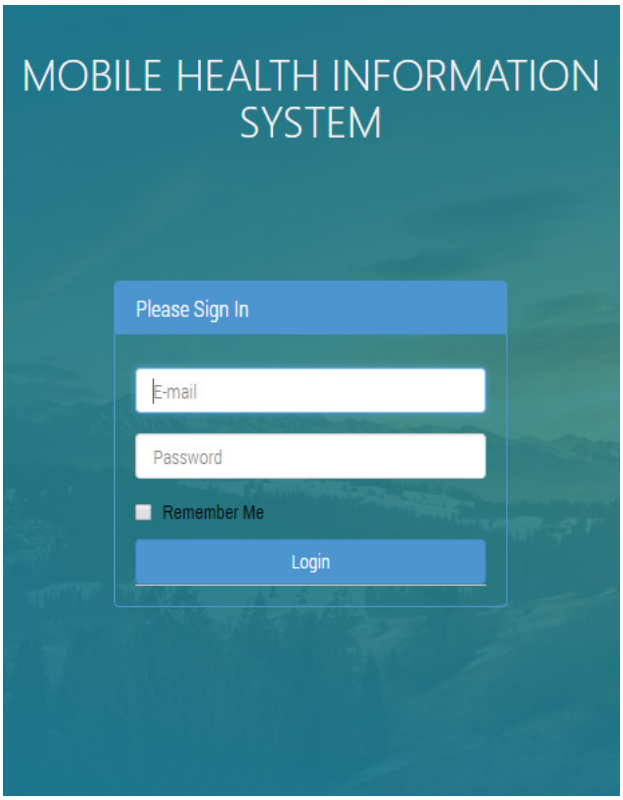
- Their progress made
- Future targets developed for the groups on a weekly basis
- Summary report of the status of settings and monitoring indicators
- To obtain technical inputs from the central resource team

Several assessment guides (Assessment guides 1-3) were used for monitoring the progress (see Annex 8). Each setting was scored on a pre-determined scoring system to assess its progress and sustainability and was colour-coded accordingly (see Annex 9). More attention was paid to the ones showing poor performance to identify the barriers to HP among the group and find solutions. Also, the ones showing good performance were discussed to assist them to move to the next level.

Getting into the practice of measuring results by people in the given settings is itself a positive product of health promotion. Improved capacity of a community to assess progress, and be guided by what it finds, is a highly desirable product. This is counted as a major lesson learnt

Practical difficulties faced during monitoring

The monitoring involved a lot of paper work for the HPFs and HP trainers. This task was discouraging for some. Some who did well in settings were not too keen or good in recording the outcomes in reports. As such, the progress of each setting could not be based entirely on the reports or outcomes assessed. As a solution, based on the work plan provided by HP trainers for each month, the central resource team paid random visits to the settings for monitoring purpose. This had to be done cautiously, as the idea that they are being watched made participants do things differently simply to satisfy the review team, which was not the objective of NIROGI Diviya project. As an alternative, an online database including a data entry system using mobile technology was developed by the NIROGI Diviya project to feed the information from the field itself, so that there would not be any delay in sending the information to central team. This system is ready to be pilot tested as an assessment tool for action (see Annex 10).



3.5 Review meetings at central level

Review meetings were held for all HPFs every 4 months in the first year and every 6 months in second and third years. During these reviews, the following objectives were achieved.

Objectives:

- To share experience on HP activities
- To assess the sustainability of HP activities
- To group the HP activists according to their performance
- To provide more technical/skill inputs for less active HP activists
- To provide incentives/rewards for active performers

At the review meetings, a grading system was applied to assess the work done by HPFs and HP Trainer towards the expansion of settings and empowerment of participants.

The central resource team held six formal review meetings at a common venue, with participation of the original representatives and keen new volunteers from the selected settings as HPFs.

3.6 Annual review meeting at central level

The main objective was to provide an opportunity for participants to show case the achievements of each setting and for advocacy.

Every year, achievements of the participants of all settings were showcased at a public event entirely organized by the HPFs and group members under the patronage of NIROGI Diviya project (e.g. In Janakala Kendraya auditorium, දියවැඩියා කඳවුරු in Kotte, Kolonnawa communities). It created a platform for the participants to showcase and be recognised for their achievements in health, to be creative and learn from each other's successes and solutions found for common obstacles. This event

also motivated the family members and others not directly involved with the program to join the active groups to engage in HP.

In some years, it was held in different regions in parallel with the World Diabetes Day celebrations in October. Such events were entirely organised by the HP activists. NIROGI Diviya facilitated it by providing necessary equipment (e.g. multimedia, educational leaflets, financial assistance for them to develop educational tools/ material and for refreshments). The project coordinator or another resource person was invited to conduct one session in the program to provide technical knowledge on a selected topic. For this, NIROGI Diviya collaborated with experts in the fields of indigenous medicine (nutritious value of herbs and local plants), physiotherapy (health benefits), food science technology (health benefits of local food and traditional food preparatory techniques), gardening in small spaces, food items for income generation.



All these opportunities were used for further building of the HP process in the settings and expanding it to other relevant groups such as families, peers, etc.

At every given opportunity, the most active HPFs and HP activists were mobilised for public events as resource persons. Training of medical undergraduates of Sir John Kothelawela Defence University, Deyata Kirula Health promotion stall and at other invited public exhibitions organised by NGOS e.g. Lion's club, elders' associations, field visits of WHO delegation from SEAR.


Central resource team in collaboration with the RDHS carried out two outreach programs in Jaffna and Polonnaruwa districts to train the public health staff as HPFs. During these events, the training was mainly done by a few trained HPFs selected from suburban and urban settings. They took the lead role in the training as well as shared their experience of successes and failures (see Annex 11).

WDD celebration programmes

Lessons learnt on the maintenance of HP

- When making plans for changing behaviour, solutions were made collectively, rather than at individual level. This made the solutions more socio-culturally acceptable while removing common barriers more effectively.
- Indicators to assess the progress were developed by the group members themselves, so were relevant and practical to achieve. E.g. number of times I lost my temper during office work, Number of times I shouted at my children as indicators of mental wellbeing
- The built-in monitoring system operational at different levels provided close supervision of the fieldwork carried out, so that weaker settings could be identified early and timely guidance given to the HPFs. However, the monitoring included immense paper work, thus use of distant communication modes (online communication) for meetings with the central resource team is highly recommended.

- The majority of HPFs in both urban and suburban settings were skilful in transferring their knowledge and technical skills to others in the active group, so that ownership of the program could be shared among all in the group. It also encouraged some of the group members to become leaders in other settings.

- HP trainers played only a facilitator role by visiting each location to stimulate a process by means of questions and discussions. Field visits seemed to be important for maintaining enthusiasm among target groups, for guiding the HPFs, for assessing the progress made, for identifying the weaknesses of settings and rectifying those, and for monitoring and reporting to the central resource team.
- Tailoring off the frequency of visits by HP Trainers towards the latter part of the program was encouraged for more active participation of the active group members. However, in some suburban community settings, despite placing so much emphasis on the independent functioning of HPFs and groups, the mere presence of HP Trainers was still considered essential, indicating the dependency of participants on external inputs.

- Having health care workers (e.g. PHM) as HPFs provided mixed results.
    - » Their success depended on the commitment of the MOH and other staff members towards the program (e.g. administrative regulations for engaging in such work during working hours posed an obstacle).
    - » Some proved to be excellent promoters. They used innovative strategies to engage their communities in HP at every given opportunity (e.g. weighing clinics, ujq yjq„ dengue prevention programs). After work, they too engaged in outdoor physical exercises and became role models for others. Some were initially reluctant to do so in their uniform, but later overcame this issue.
    - » However, there was also a tendency in some to engage more in health education than in health promotion. As a result, they found it difficult to transfer knowledge, skills and ownership to others in the group.

Constrains faced and solutions found during the maintenance of HP

With the progress and changes becoming more visible, designated time (1-2 hours per month) was allocated in large schools in urban areas, enabling HP trainers to discuss with the group of HPFs on their progress and future action. Private schools were more flexible than state schools in time allocation. However, there were some major drawbacks.

- HPFs in schools failed in their role as change agents, as there was no school time allocated for the HPFs to interact with their peers in class room. Enthusiasm on having group discussions after school was low due to other extra-curricular activities or tuition after school, which they placed more value in.

- In some large schools, screening for NCD risk factors plus a health educational camp was conducted by the trained school children at end of every school term to showcase their achievements and to generate interest in teachers and other children. Though many were interested, there was no serious commitment other than their interest in updating the knowledge on medical conditions or content of the school curriculum.

- HP activists in schools failed in the expansion drive to engage children outside the active group, as there was no time allocated for such interaction during school time. Based on informal feedbacks, online methods (e.g. social media, blogging, texting) were identified as effective modes for engaging school children in HP. However, due to school restrictions, it was not possible to implement this task. It is recommended that this strategy be further explored in future projects.

- At workplaces, time was allocated for HPFs to interact with HP trainers (1 hour per month), which gradually increased to 2 hours in some settings with wider participation. Introducing the aerobic dancing session as a regular event every week motivated many including the managers to take part in the sessions. Conducting the initial interactive advocacy program by the central resource team was also useful as it generated interest among the management to have an uninterrupted program.

- HP trainers visited the settings frequently during the initiation of HP process, and gradually tailored the number of visits, to enable the active groups to function more autonomously. However, the active groups (even the most successful

settings) expected the mere presence of HP trainer during meetings, as they identified him as a motivational force.

Lessons learnt on health promotion in NIROGI Diviya

- Utilising lay persons as HPFs to intiaite and maintain the process of HP through community participation in school, community and worksettings seemed to be effective. With time, their role, responsibilities and competencies were gradually transferred to the HP activists in the group, and in turn to others outside the group. Some HP activists actively contributed to the expansion of the settings in number and size.

- Using a bottom-up approach was able to address the core underlying determinants of negative health. These determinants were found to differ between settings, indicating that assessing the HP success should not be limited to change in behaviour alone but to change in their attitudes and competencies.

- Substanial positive changes in individuals and their families were seen mainly in the areas of diet and physical activity.

- The most successful settings in changing behaviour and the expansion drive have been the community settings. Housewives, elders and children were the most effective in empowering the families or peers in return. Empowering especially mothers led to a major positive impact on the behaviour of families since they are the decision makers especially in relation to diet. Male particiaption was mainly in physical activity.

Section THREE

Sustainability of NIROGI Diviya

This section describes the strategies used for ensuring sustainability of the HP process that has been initiated by the HP trainers and health promotion facilitators.
It further highlights the limitations encountered.

Mechanisms to ensure sustainability

Several mechanisms were in place to ensure sustainability of the HP process.

Non-financial commitment of HPFs

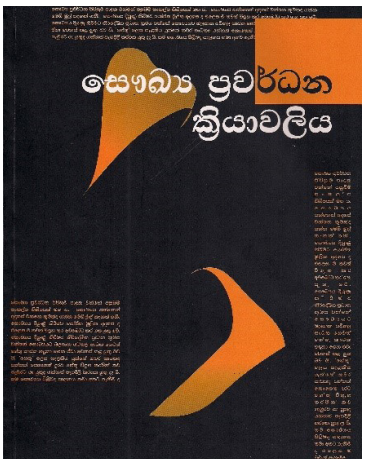
Sustainability of a setting relies on the voluntary commitment of the HPFs. When financial incentives are given for participation in a program, there is a higher tendency for it to collapse once it reaches the end. To avoid this, no financial incentives were given to HPFs and participants throughout the program. The selection of HPFs was done according to their willingness and potential as informal leaders, and not based on any political affiliation, health related background or socio-economic status (read section 2.3). Those interested in personal gains were discouraged from joining the active group. Also, having a person selected from the same setting worked positively.

Initial training of HPFs in soft skills on leadership and team building

More emphasis was given during the training of HPFs for developing skills such as motivation, negotiation and team building, which were essential for the sustainability of an HP setting under his/her leadership (read section 2.5.a). Further, it was the responsibility of HP trainers to ensure that HPFs play only a facilitator role with no undue control over the participants.

Mechanism to guide and monitor the HP trainers

Throughout the program, the HP trainers were guided by the technical expert group. The manual on HP developed by Prof. Diyanath Samarasinghe et al was useful in this regard. There was also a strong mechanism to monitor the progress made by HP trainers in each setting, including a star system introduced to grade the settings (read section 3.4).



Strategies for improving the active participation of group members

The uninterrupted functioning of a setting was ensured by selecting settings with an already existing network of members (read section 2.2). For example, the largest women society involving over 200 women leaders was scattered in three adjoining areas of low-income families. They had an excellent network of 2000 women who met their leaders in small groups every week. Another well organised network was seen in elders clubs who met monthly at temples or community centres for group interaction and to share a meal, and also in micro-finance banking societies (e.g. SANASA development bank).

Wherever there were indirect incentives built-into the existing network, group participation was shown to be much higher. For example, the eligibility of members for loan schemes depends on regular attendance at monthly meetings in welfare societies. Even if the HP process was generated within the membership, non-members too were allowed to participate in activities such as aerobic exercise sessions from the beginning.

Using a bottom up approach

In HP, 'one shoe does not fit all'. The activities were developed to cater to the needs of its recipients. For example, the underlying determinant for physical inactivity was lack of space in low income settings, while it was the lack of time in high income settings. Therefore, there was no strict adherence to a guideline that specified the action of HPFs or active groups. Instead, a bottom-up approach was used to decide on the activities by the participants themselves within the HP framework, while the HP trainer was solely

responsible for reviewing the progress of participants and facilitating their activities (read section 2.5). For example, in the bank sector, it had been the routine practice to sell short eats rich in sugar and fat in a cart every evening. The active group identified this as one of the main determinants of unhealthy snacking, and worked towards de-valuing the food sold, while naming it as the 'NCD cart (කරත්තය)', which created a trend among workers to refuse such food.




Developing setting-specific measurements to assess progress

The active group members were free to develop their own indicators to assess not only their progress made towards healthy lifestyles but also the process in doing so. At setting level, emphasis was given not only for the number of activities that took place in the group but also to the sustenance of the HP process within the setting.

Strategies used for maintaining the interest in HP among group members and others

Several strategies were used both by the central team and active participants to sustain health promotion in the settings.

- Interactive educational stall for promoting healthy lifestyles – The layout of this stall was designed by the central team under three themes: 'I want to know', 'Am I at risk?' and 'I want to change'. First section provided the background information on the impact of unhealthy lifestyles on health using interactive

material (videos and posters in both Sinhala and Tamil languages). Second



section focussed on self-evaluation of the four main lifestyle-related risk factors of NCD (e.g. BMI, waist, body fat, interactive buffet table that assesses one's quality and quantity of diet). Last section focussed on their knowledge and motivation needed for change (e.g. quiz programs on diet, jig saw puzzles on types of oils, flip charts, booklets), with prizes given for having satisfactory knowledge. This stall was manned by participants.





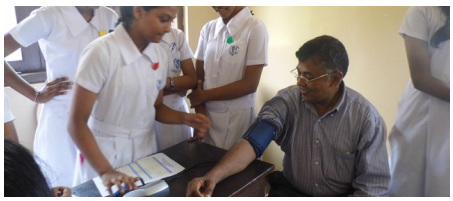

- Health promotion camps (saukya prawardana kadawura) organised by different sectors of the population especially at the end of school term. Given below are some of the highlights-

- Events organised by school children for awareness among peers and parents

    - 'Leda Kade' with the objective of de-valuing unhealthy snacks and pre-cooked meals, demonstrating marketing strategies used on television for promoting unhealthy food for children, and awareness through 'perahera' on streets for awareness on unhealthy lifestyles; surveillance of tobacco sales in food establishments/boutiques around schools.

    - Health screening of teachers took place at end of term in national schools by active group members (e.g. at Yasodhara Vidyalaya)


- Activists in national schools held showcasing events for children of Grades 7-11. During these sessions, they discussed future plans for children of other grades.










- Events organised by housewives – Interactive 'Buffet table' to demonstrate and educate on both quality and quantity of meals we eat

- Rewards (NIROGI Diviya badge) were given for those who performed well in changing behaviour of themselves and others. Case by case assessment was done to identify the deserving persons and reward them.



- Active participants volunteered to participate in public exhibitions to educate the general public and demonstrate their skills. One regular event was their participation at the Deyata Kirula educational exhibition, in which the stall on health promotion was manned by the participants. Another was the SLMA walk for health in which the active members participated.

- World diabetes day celebrations- Participants played an active role as educators of the general public. Several interactive tools such as jigsaw puzzles, quiz events and demonstration of healthy broth, nutritional value of food were used.

- Cookery competitions were held[2].















2 Cookery competition took place between groups. Each group was given Rs.500 to buyprovisions; Males brought the food and helped women to prepare food. All were given 1Hr. Best meal was chosen based on Nutrition value, cleanlines, low cost and team effort.

- Health Promotion fair to sell fresh and cooked healthy food

- Art competitions were held annually to encourage children to engage in HP at community level. Children's societies took the lead in organising these, and acted as change agents of their peers and parents.






- Drama and viridu sessions by children



- On demand, there were several educational programs organised by NIROGI Lanka. Whether to conduct a program was decided based on the demand of participants and always linked with their HP work. Only the resource persons

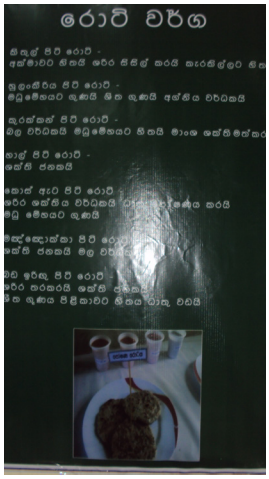
were arranged from the project, while participants themselves did the rest of the organization of the event (e.g. preparing refreshments, arranging a venue, question and answer session). Every event was done field based for which participants of adjoining areas were also invited. No one was paid for participation. At the end of every session, plans were made for follow-up activities. These were monitored and supervised by the HPFs and HP trainer during their regular meetings.

- Debates conducted on healthy lifestyle themes

A few examples:

- Interactive workshops on home gardening and demonstrations of practically useful methods for gardening with limited space and composting

- Nutritional value of locally available fruit and vegetables which are less commonly consumed, healthy ways to improve digestion of healthy food



- Program on preparing paneer at home was given as a source of income generation and as a good source of protein especially for children. Thea active groups worked towards purchasing milk for the entire community and expanding it as a home industry.

- Medicinal value of fruits, vegetables, spices and accompaniments were delivered by Ayurveda doctors

- Interactive workshop Healthy diet through traditional methods of cooking, spices and cooking methods

- Outreach programs to introduce HP in Jaffna and Polonnaruwa areas among the MOH staff. Academic members of the department of Community Medicine of the Faculty of Medicine participated as resource persons.

- Every opportunity that encouraged group gathering to convey the message of healthy lifestyles (e.g. Sal pila, avurudu uthsawa, wesak dansela, scout camps) organized by the participants to motivate others to change behaviour



Examples: Saukya Kadawura, Showcasing event at Janakala Kendraya cultural centre, Madiwela community centre
It was an encouragement for new participants to join the program.

Transfer of skills and ownership of the program to active members in groups

The interventions were designed primarily to empower the active group members to implement, monitor and evaluate their own efforts, and thereby to empower others not directly involved in the program. The task of monitoring the progress and assessing the impact was also shifted to active group members.








HP trainers were responsible for ensuring that ownership of the program was transferred to all its participants and not retained within the leaders of the existing network. Even if this was difficult at the start, it was likely to create lasting improvements. HP trainers provided feedback on the quality of the proposed actions, the determinants identified and the indicators chosen for assessing the progress. Such feedback was provided only as suggestions, and not as 'instructions' conveyed with authority. There was very minimal interference by the administrators of the NIROGI Diviya project, so that the recognition of health promotion achieved by the groups was retained within group members.

Empowerment of people to make independent decisions on health-related behaviour

A highly desirable characteristic noted was that people in the given settings took charge of the process within a few months. In suburban settings, success was seen mostly within residential communities, while only a few schools invited succeeded in sustaining the initiative.







Family participation at HP events

Family participation was encouraged by conducting family events during festive seasons. It helped in improving the participation of males and school children, and to carry forward the team building efforts in future activities.








Male participation

Increasing the male participation in HP was challenging especially in the community settings. They were reluctant to discuss dietary modifications in groups as they perceived such activities being more appropriate for housewives. This barrier was overcome to a greater extent by discussing themes on improving physical activity and introducing more physically exerting activities such as aerobic exercises at workplaces and in communities. A mechanism was placed so that every participant took turns to lead the aerobic exercise session.



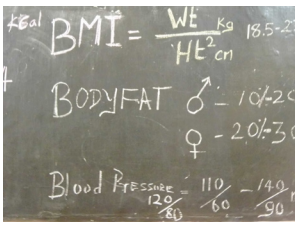

Male participation was also improved by taking the playground as one setting, so that males who came for morning walks were attracted to aerobic program. Once the interest was generated, other themes related to alcohol and tobacco use and mental stress and dietary habits were discussed.




Males attached to Youth Centres were able to extend the aerobic exercise sessions to peers of their residential areas. They also made it an avenue to initiate discussions on other determinants of risk behaviour in the area.

For improving male participation, cookery competitions were held, during which males were given specific responsibilities (e.g. purchasing goods, assisting women to carry out strenuous tasks). The program was followed by a discussion on changing diet.

Scouts were approached during their camping week. Change in menu was an outcome of the program. Later, the HP trainers were invited by Japan friendship to introduce aerobic exercises to the youth.



Collaborations

During the initiation stage of HP and thereafter, collaborations were made with several relevant stakeholders.

MOH staff in suburban settings was the main stakeholder, but not in the urban settings. They played a supervisory and supportive role for smooth functioning of the HP settings. They too participated in some of the activities, and during their home visits, they encouraged non- members to join the active groups. MOH assisted in providing space and equipment (e.g. weighing scales) for carrying out some activities. The project provided a video player, computer and a printer to the two MOH offices, so that the HPFs could use them. In addition, the HP trainers were all given a set of equipment (blood pressure apparatus, weighing scales, stadiometres).

Collaborations[3] were also made with the sports ministry (e.g. for introducing games for the members, training of HP trainers), scouting associations (for obtaining the support of scout leaders), relevant ministries (veterinary services, agriculture department) and universities (academic contribution as resource persons).

3 Umagiliya grounds; Wllampitiya(showcasing at WDD celebration) NIROGI Diviya initiated an aerobic exercise program every evening. Middle upper income families who used the ground for walking also joined the group. Due to high demand it was made a compulsory event every morning. It remains 80 to date.

Ethnic mix

Since the project was done in Colombo district, there was a satisfactory ethnic mix within the settings. The groups were sensitive to ethnic and cultural differences of the participants when looking for solutions in groups.








School children engaging in health promotion outside the school hours

Since utilising school time for engaging children in health promotion was a difficult task, they were recruited outside school hours as members of children societies. These groups also activated the out of school adolescents who were involved in tobacco and smoking behaviour.





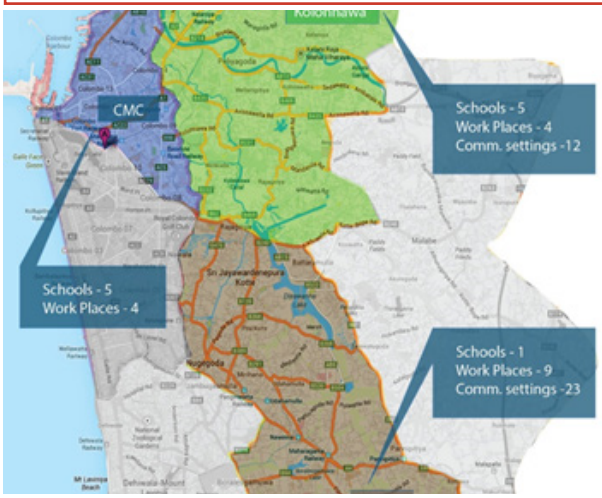
Expansion drive through ripple effect

Some of the active group members in turn initiated settings on their own by recruiting 10-15 participants. This led to a rippling effect.

People in highly enthusiastic settings created new "secondary" settings. A few instances were reported where the activity spread from the secondary settings as well.

In suburban settings during Phase I (Annex 12),

- The eventual number of settings grew from the initial 30 to 133.
- The formal evaluation at end of three years found that 101 of these settings were "functional" in maintaining their health-related initiatives in a visible and organized way (83 community settings; 14 work place settings; and 4 school settings). The spontaneous spread of successful initiatives occurred mostly in residential community settings.
- Of the 101 settings that were functional, 85 had been established as secondary or tertiary settings (76 community settings; 9 work place settings; and no school settings).
- The total number of participants in the program expanded from an initial 500 to 6583 individuals, of whom 4962 individuals remained actively involved in community-based programmes.
- As evident in the evaluation of component 3, the 'adequacy in health promotion' (assessed using six indicators on the process of behaviour change, behaviour change and motivation to continue behaviour change) was satisfactory, and ranged between 35-40%; 65-40% and 90-95%, respectively.



In highly urban settings during Phase 2,

- HP model was established successfully in 27 community settings, 10 workplaces and 6 schools in the highly urban areas in the CMC sector. Beneficiaries of the programme were over 3500 persons.
- About 205 school children were trained as the primary target group and about 3948 peers as the secondary target group.
- About 1052 community members were trained as the primary target group in low income pockets and thereby about 9398 family members through them.
- About 45 workers were trained as the primary target group and about 1810 co-workers.

Autonomously functioning settings

Of the 101 settings that were functional in Phase I, 16 were categorized as functioning 'autonomously without any involvement of HP trainers' (11 community settings; 4 work places; 1 school). In urban settings too, the HP programme was incorporated as a regular activity in the community and work settings, which enabled the settings to function autonomously with only the leadership given by the HPFs.

This spontaneous spread is one of the most powerful indicators of the spirit generated when people take charge of activities. Many members interviewed in the formal evaluation after Phase I revealed that they were continuing to further spread the activities, which they had begun to enjoy.

Supportive environment and policy changes

Achievements in some settings have been beyond changing behaviour at local level to address changing the local environment and health policies. Especially in work settings, the 'Healthy workplace' concept was well-accepted by the administrative and managerial staff, and in practice by incorporating into their work norms along with physical organizational changes.

HP trainers and the central teams assisted in creating supportive environments, whenever the active groups made requests. Such provisions were based on their performance.

- Provision of necessary equipment, educational material, funding for conducting activities and inputs from technical experts (e.g. on home gardening techniques, nutritional value of food products, exercises) were some of the group activities facilitated by the NIROGI Lanka project.

- In some settings, these activities were well supported by the participants themselves, by raising their own funds, thus being self-sufficient (e.g. sal pila during Vesak festival, healthy food sales)

- Ministry of Health was also advocated to develop a supportive environment. Indicators for such environments were developed to assess the extent of the managers and superiors' support given to prevent diabetes.

With the establishment of health promotion in some settings, healthy local policies were developed, as given below:

Banking sector

- A healthy canteen policy was developed to increase the availability of healthy food items. Serving sugar in a separate bowl in the canteen; availability of fresh fruits for dessert; having green leaves as a regular option for lunch were some of them. Also, the active group worked towards eliminating the serving of unhealthy food items.

- One of the active groups consisted of managers and senior executives. They decided to extend health promotion to other branches in future.

- A regular exercise group was formed in large workplaces. The management allocated time for them once a week to engage in aerobic exercises. The participants were able to get a t-shirt designed funded by the management.

Women societies

- Women met in groups one day per week to carry out their societal work. Most groups incorporated a laughter session and aerobic exercises as regular events before convening the meeting.

Aerobic dancing, home gardening and making paneer at home were introduced to them in demonstrations and lectures done by resource persons from the sports ministry, horticulture department of Wayamba University, Institute of Indigenous Medicine and veterinary services. These are popularly used by some housewives for income generation.

Schools

HPFs of a few schools were successful in influencing the authorities to promote healthy food in canteens. However, since it was difficult to introduce HP to everyone in the school, HPFs were not able to capitalise on this intervention to change behaviour of others.

Advocacy

Several local advocacy programs were conducted, such as art competitions on health messages to prevent diabetes for school children, cookery competitions to develop a book on novel recipes of housewives.

In urban settings, a total of 15 dissemination/advocacy meetings were held to showcase

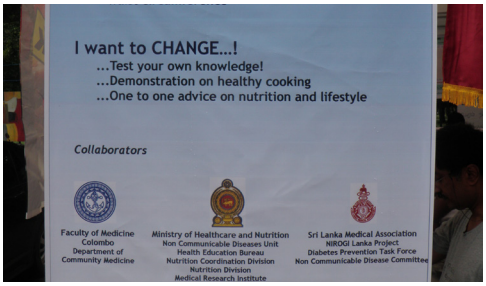
the achievements of participants and for advocacy among health ministry officials.

Participation at national and regional health festivals such as World Diabetes Day programs, Deyata Kirula, SLMA walk, WHO sponsored health festival and other public exhibitions is noteworthy towards advocacy. The mobile health promotion stall including the interactive exhibition kit created by the NIROGI Diviya program was in demand at such events. This stall was run by the central team and HPFs, and advocated the novel approaches used in health promotion.

To commemorate the 'World Diabetes Day', a public exhibition followed by a health walk was conducted every year. At the public exhibition site (BMICH), activities such as a public seminar, exhibition on healthy food and cooking, Yoga practices, Physical exercise demonstrations were held, which were of educational value to adults, children and parents.

An audio clip titled 'Seeni mala" (song on diabetes prevention) and a video clip titled 'Beyond diabetes' were created by the central team and were launched at one of the world diabetes day celebrations under the patronage of the honourable minister and officials from the Ministry of Health.

World Diabetes Day 2009



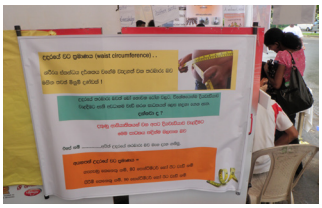
World Diabetes Day 20012


















World Diabetes Day, Kolonnawa











Outreach programs to train health care workers as HPFs were conducted in two distant districts (Jaffa and Polonnaruwa). In addition, 19 programs were conducted throughout Sri Lanka including Jaffna, Wattala, Katana, Polonnaruwa, Bandaragama, Nuwara Eliya in collaboration with Lions Club, Gonapola, Balangoda, Nugegoda, Kottawa, Visakha Vidyalaya, Nuwara Eliya in collaboration with Nuwara Eliya Base Hospital, Peliyagoda, Kotahena, Moratuwa, Mahawewa, Ratnapura and Udupussellawa on screening for diabetes and CVD risk, and advocating the HP model to hospital and public health staff.






An advocacy package was developed to motivate the policy makers of the division and settings to solicit their support in making healthy policies, developing supportive environments and community empowerment. It detailed out what support is expected from them. HP trainers were motivated to form steering committees in each setting with the view of monitoring the progress of the activities. They were advocated once a year in a central meeting to maintain their enthusiasm.


Other activities towards advocacy:

1. Declaration of responsible sponsorships - Annual sessions of the Ceylon College of Physicians, Asia Pacific Academic Consortium for Public Health, 125th SLMA International Medical Congress
2. Media programmes (radio- TV-newspaper in all three languages)
3. T-Shirts designed with logos of NIROGI Diviya, NIROGI Lanka, WDF and SLMA inserted - and a message "Walk today for a healthy tomorrow"
4. Symposia/Seminars where the achievements, successes, challenges and lessons learnt of NIROGI Diviya project were highlighted to a wide audience comprising local and international stakeholders:

    - » Symposium on 'TOWARDS A HEALTHY HEALTHCARE WORKFORCE ' at 125th SLMA International Medical Congress 2012- Evidence based planning for prevention and control of NCD participated to the working group on NCD prevention & control
    - » SLMA Regional meetings- Prevention and control of NCDs
    - » Seminar on Multidisciplinary approach to the Prevention of NCDs -organized by Organization of Professionals of Sri Lanka 2012
    - » Annual Academic sessions of Ceylon College of Physicians 2011
    - » International Conference on Non Communicable Diseases organised by Commonwealth Association - keynote address 2011

Showcasing the achievements of NIROGI Diviya took place annually at the field level as well as in a meeting at the central level in attendance of the WDF representatives and relevant local stakeholders (Ministry of Health, WHO, HEB, NCD Unit, NGOs, Ministry of Education). It helped in advocating the model established in NIROGI Diviya as a local best buy in the prevention and control of diabetes. As a result, funds were allocated in 2016 through the World Bank funded Health System Development Project of the Ministry of Health and WDF to pilot test the model in eight other districts in Sri Lanka, with a view for assessing the feasibility of institutionalising it at primary healthcare level throughout the country. This project also explores utilising the services of HP trainers as HP officers.

The proposed institutionalization process of NIROGI Diviya program is illustrated in Annex 13.

Practical implications of NIROGI Diviya

Too many small-scale experimental interventions are forgotten or ignored because of failure to popularize the methodology used or its core strategy. Although publication of results in scientific journals is touted as the best route of dissemination, this may not always be the case. The content of most "programmatic" activities is probably decided more on the basis of skilled advocacy than on evidence of the effectiveness or cost benefit. Disseminating lessons from small-scale experiments is not easy. Encouraging results do not necessarily lead to calls for the successful action to be disseminated widely. And when any seemingly promising strategy is applied more widely, as rarely does happen, the successful intervention may not live up to the promise that its originators claimed. One reason for this failure is that the core features that underlie success are not emphasized and preserved during the wider application. Thus, the activity is applied incompletely or inaccurately, and the key ingredients of success are lost. The ingredients contributing to the promising results of this intervention are common to many health promotional interventions. The growing evidence on the benefits of using these in efforts to improve cardiac health or prevent NCDs suggests that the health sector would do well to advocate strongly for incorporating such efforts. Several "natural" or understandable obstacles need to be addressed if we wish to take promising "grass-roots" lessons to the program level. A specific obstacle to dissemination that became evident through this intervention was the reluctance, especially initially, of professionals and authorities to trust the ordinary citizen or lay person to do things without an expert in charge. We must take care to identify and preserve the core elements of any intervention that we want to implement on a wider scale.

This small-scale experimental intervention reinforces the need to take into account the following considerations in implementing similar programs aimed at creating sustained behaviour change in a community.

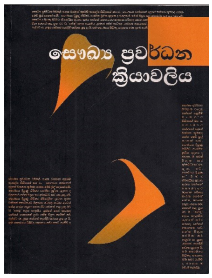
- People can bring about major improvements through changes in their own life settings.
- Working out and addressing the determinants of a desired behaviour enhances results.
- Continuous measurement of progress and redirecting activities improves efficiency.
- Changing behaviour is probably easier for a group than an individual.

- Disseminating the process requires mainly technology transfer and not expensive physical resources.
- Facilitators often need to learn new skills to spread the strategy.
- These skills are not difficult to acquire. Results that awaken communities to what they are able to achieve are eventually “costless”. We must stimulate policy-makers and professionals to become aware of the huge potential of such initiatives.

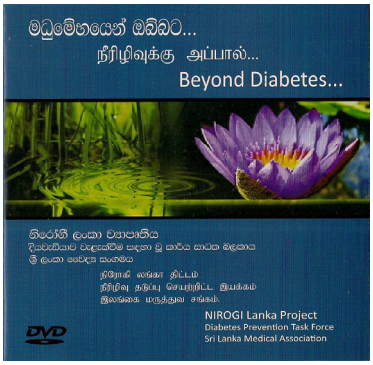
Educational material and tools developed

Health education material (leaflets, posters, flip charts, booklets, interactive video and audio clips), novel and interactive exhibition kits (quiz program, flip charts, buffet table, food pyramid), manual on health promotion for programmers, annual calendar with health messages based on community art competitions for children, interactive DVD on physical activity for adolescents and adults, and calendar (2015) for self-appraisal of health promotion activities throughout the year.

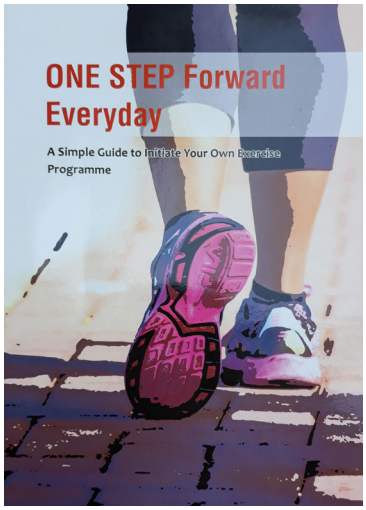
1. Book on 'The Process of Health Promotion' by Prof. Diyanath Samarasinghe in both Sinhala and Tamil languages (1000 copies distributed to health education and promotion staff throughout the country)



2. 'Beyond diabetes'- An interactive educational video on prevention of diabetes (prepared in all three languages)

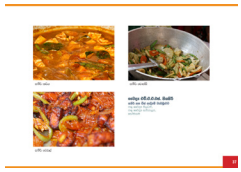


3. 'One Step Forward Everyday' (in both English and Sinhala languages) – a practical booklet with instructions on initiating an exercise program on your own was developed by Dr Carukshi Arambepola and Ms HKC Truxy. It highlights parameters for assessing physical fitness, myths and beliefs on exercises, health benefits, safety issues related to exercises, and the stages in initiating a program. For testing the knowledge, there are questions and answers given, and assessments using simple tasks and activity to be carried out.



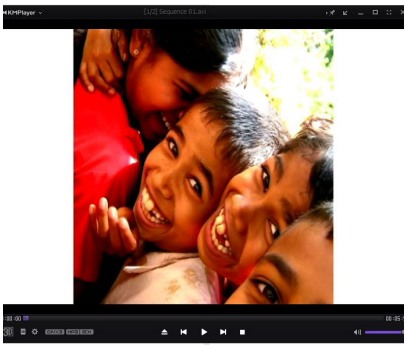
4. Recipe book of newly created healthy recipes by HP activists from several settings in Kolonnawa and Kotte areas





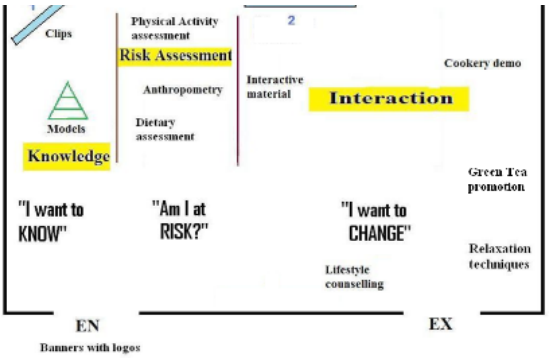
5. 'SeeniMala' – A song composed on diabetes and sung by doctors involved with NiROGI Diviya and distributed island wide to health institutions (public and private)

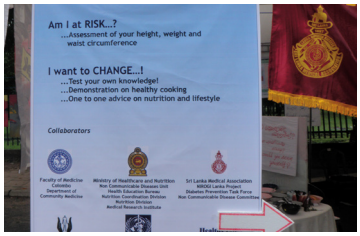


6. BMI Wheel to be used in field settings for easy reference of BMI levels
7. Educational Leaflets
8. In 2014, an art competition was held among school children on key messages related to healthy lifestyles. Both a wall calendar and a desk calendar were developed using some of the best messages.
9. In 2015, an educational calendar was developed and distributed. This was unique as it was an interactive tool which could be used for recording their daily eating

habits, activities, tobacco and alcohol, and mental wellbeing. At the end of each month, there was provision to set targets and goals for the next month, thus encouraging reflective practice.

10. Mobile Health Promotion stall with an interactive exhibition kit– The layout of this stall was designed by the central team under three themes: 'I want to know', 'Am I at risk?' and 'I want to change'. First section provided the background information on the impact of unhealthy lifestyles on health using interactive material (videos and posters in both Sinhala and Tamil languages). Second section focussed on self-evaluation of the four main lifestyle-related risk factors of NCD (e.g. BMI, waist, body fat, interactive buffet table that assesses one's quality and quantity of diet). Last section focussed on their knowledge and motivation needed for change (e.g. quiz programs on diet, jig saw puzzles on types of oils, flip charts, booklets), with prizes given for having satisfactory knowledge. This stall was manned by participants.





11. Billboards set up in 33 settings of Colombo and suburbs using celebrities as role models to promote healthy lifestyles
12. A unique health information management system (mHIS) was developed with the assistance of the school of computing, University of Colombo and department of Community Medicine of the Faculty of Medicine, Colombo. Mr. Upula Amarasinghe

developed the platform for hosting it as an online data record. This information system was capable of obtaining information using online data recording with less paper based work, which was ideal for PHM work in the field and in clinics. It was also able to follow up follow up data from birth to death on NCD and other health conditions. Necessary changes were done to improve the system with the assistance of public health staff, and experts in paediatrics, IT. It was handed over to pilot test it using the Kotte university health project data.

Health Promotion Calendar | 2014


තර්ඛාරුකමට ඉඩනොදෙමු...
2014
July
August
NIROGI Lanka Project
Diabetes Prevention Task Force
Sri Lanka Medical Association
www.nirogilanka.org | Email: dpthlma@gmail.com | Tel:0112693303


දියවැඩියාවෙන් අපේ අනාගතය රැකගනිමු ...
දියවැඩියාව හඳුවන සාධක
දියවැඩියා අවදානය අඩුකර ගනිමු
2014
September
October
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සෞඛ්‍යසම්පන්න ජීවිතයක් සඳහා
විස විසෙන් තොර ආහාර රටාවකට හුරුවෙමු ...
2014
November
December
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නිරෝගි සිතුවම් පවුර
2014
May
June
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Educational Leaflets

සීනි අඩුකරමු, ආයු වැඩි කරමු..

- එදිනෙදා ගන්නා ආහාර මඟින් ස්වාභාවික සීනි හා එකතු කරන සීනි යන වර්ග දෙකකින් සීනි සිරුරට ලබේ.
- සීනි සිරුරට ශක්තිය ගෙන දෙන අතර ඉක්මණින් උරාගනී.
- ආහාරවල ස්වභාවිකව සීනි ඇති නිසා අමතරව කිරීමේ අවශ්‍යතාවයක් නැත.
- සීනි එකතු කරන්නේ නම් එම ප්‍රමාණය දිනකට එක් අයෙකුට තේ හැඳි 6කට වඩා අඩුවිය යුතුය. තරබාරු නොවුනත් අප වැනි ආසියානිකයන්ට දියවැඩියාව වැළඳීමේ අවදානම වැඩි නිසා ආහාරයට ගන්නා " එකතු කරන සීනි ප්‍රමාණය ගැන සැලකිලිමත් වීම වැදගත්වේ.
- වැඩි සීනි ප්‍රමාණය මේද තෙල් බවට හැරී සිරුරේ විවිධ තැන්වල තැන්පත් වී තරබාරුව ඇති කරයි.

සීනි භාවිතය අඩු කර ගන්නේ කෙසේද ?

සීනි

- පැණි බීම වෙනුවට පිරිසිදු ජලය පානය කිරීම.
- අතුරු පසට පළතුරු ගැනීම.
- අතුරුපස ලෙස පැණි රස ආහාරයට ගන්නා විට කුඩා ප්‍රමාණ වලින්
- ළදරු ආහාර සීනි නැතිව පිළියෙල කිරීම.
- සීනි නැතිව හෝ එක් තේ හැන්දක් යොදා තේ කෝප්පයක්

පැණි රස සහිත ද්‍රව්‍ය	අඩංගු සිනිලෝ කැලරි ප්‍රමාණය(Kcal)
සුදු සීනි(ග්‍රෑම් 100)	390
මී පැණි(මිලි ලීටර් 100)	300
තිතුල් පැණි(මිලි ලීටර් 100)	230
හකුරු (ග්‍රෑම් 100)	340

මේද අම්ල වර්ගය	අඩංගු ආහාර	ඒවායේ කාර්යයන්
සංතෘප්ත මේද අම්ල SATURATED FATTY ACID	කිරි, කිරි නිෂ්පාදන, මස්, මස් ආශ්‍රිත නිෂ්පාදන, තෙල් සිරි සහ තොල් තෙල්	රුධිරයේ අඩංගු හෘදයට අහිතකර කොලෙස්ටරෝල් වෙවන් LDL ප්‍රමාණය ඉහළ නංවයි
ඒක අසංතෘප්ත මේද අම්ල MONO UNSATURATED FATTY ACID	කජු, රට පඳු, කොපිරිං, තෙල් සහිත ඇට වර්ග, අලි ගැට පේර, සැහෙන්ගා, බිබිළි, සූර්යකාන්ත සහ පඳු තෙල් වැනි එළවළු, තෙල් වර්ග	ශරීරයට හිතකර කොලෙස්ටරෝල් වෙවන් HDL ප්‍රමාණය ඉහළ නංවයි මෙමඟින් හෘදය රෝග වැළඳීමේ අවදානම අවම කරයි
බහු අසංතෘප්ත මේද අම්ල POLY UNSATURATED FATTY ACID — ඔමේගා -6 OMEGA 6	බීත්තර, කුකුල් මස්, වව්ටැස්සා ඇට, තල, බඩ ඉරිඟු තෙල්,සෝයා තෙල් සහ සූර්ය කාන්ත තෙල්	
බහු අසංතෘප්ත මේද අම්ල POLY UNSATURATED FATTY ACID — ඔමේගා -3 OMEGA 3	මේදය සහිත මාළන් (බලයා,හුරුල්ලා, කානුයා කුම්බලාවා, බේල්ලා සහ සැමන්) සෝයා තෙල් සැහෙන්ගා තෙල් සහ මීදු වර්ගයෙහි හදූ තොළ පසෙස් පළා වර්ග	ඔමේගා 3 මේද අම්ලයේ වලුන්පත්නයේ වන ඩී.එච්.ඒ ළඳරුවාගේ මොළය හා ස්නායු පද්ධති වර්ධනයට වැදගත්වේ.එය ළදරුවාට අවශ්‍ය ප්‍රමාණයෙන් මව් කිරි වල අඩංගුව ඇත. මෙම මේද අම්ලය විවිධ ආසාධිත රෝග වලින් ගැනීමට උපකාරී වේ. (උදා- අදෙම් ආතරයිටිස්, දියවැඩියාව වර්ග රෝග හා ප්‍රතිශක්ති වීකෘතිතා වැනි තත්වල පාලනය කරයි.

අසංතෘප්ත මේදය අධික උෂ්ණත්වයකට රත් කිරීමේදී ට්‍රාන්ස් මේදය(trans fat) බිහිවෙයි මේ නිසා අසංතෘප්ත තෙල් වර්ග වලින් හැකිතාක් හෙළඳු ආහාර බැද ගැනීම සුදුසු නොවේ. විශේෂයෙන් මෙම තෙල් වර්ග වරක් භාවිතා කළ පසු නැවත භාවිතයට ගැනීමෙන් ට්‍රාන්ස් මේද මට්ටම ඉහළ යයි. එබැවින් එක් වරකට වඩා භාවිතය සුදුසු නොවේ පේස්ට්‍රි, පැටීස්, රෝල්ස්, කට්ලට්, කේක්, බිස්කට්, චොකලට් වැනි ආහාරයන්හිද මාගරින් වලද ට්‍රාන්ස් මේදය අඩංගු වේ. ට්‍රාන්ස් මේදය ශරීරයේ අහිතකර කොලෙස්ටරෝල් මට්ටම ඉහල නංවමින් හෘද රෝග අවදානම ඉහල නංවයි.

කොලෙස්ටරෝල්

මනුෂ්‍ය ඇඩිරයේ දීය වී ඇති වැදගත් සත්ව තෙල් වර්ගයකට කොලෙස්ටරෝලය යන නම කියනු ලැබේ.ඕනිස් සිරුරේ කොලෙස්ටරෝලයට අයිති වැදගත් කාර්යය කිහිපයක් ඇත.

එයින් සමහරක් නම් :-

- හෝමෝන වර්ග සැදීමට මූල පිරිමි
- පිත නිෂ්පාදනය වීමට මූලික ද්‍රව්‍යයක් වීම
- ස්නායු පද්ධතියට ආහාරණය සැපයීම
- සෛලය පටල නිර්මාණය සඳහා සහභාගී වීම
- "ඩී" විටමිනය නිෂ්පාදනයට මූල පුරන ද්‍රව්‍යයක් වීම

අවශ්‍ය ප්‍රමාණයට වැඩියෙන් රුධිරයේ කොලෙස්ටරෝලය සිරුරේ රුධිර නාලිකාවල තැන්පත් වී අතුරු තත්ව ඇති කරයි.

කොලෙස්ටරෝල වර්ග දෙකකි.

01 ආහාරයෙන් අපව ලැබෙන්නා වූ කොලෙස්ටරෝලය "බහිර්ජනිත"
උදා:- කිරි, මස්, බිත්තර
02 මිහිස් සිරුර ඇතුළත ම නිෂ්පාදනය කරනු ලබන කොලෙස්ටරෝලය "අන්තරජනිත"

- සත්ව ආහාරවලින් හෘද රෝගීනටත්, රුධිර කොලෙස්ටරෝලයටත් ඉතාම හිතකර වනුයේ මාගු හා බිත්තර සුදු මදුයන් පමණි.
- කුකුළු මස්හි සම කොපිත ඉවත් කිරීමෙන් තෙල් ප්‍රමාණය තවදු අඩුකළ හැකිය.
- ප්‍රතිසංස්ලේෂණය සඳු මස් වර්ග කිසි සේත් හිතකර නොවේ. උදා හැම්, බේකන්, සොසේජස්

හෘදයාබාධ

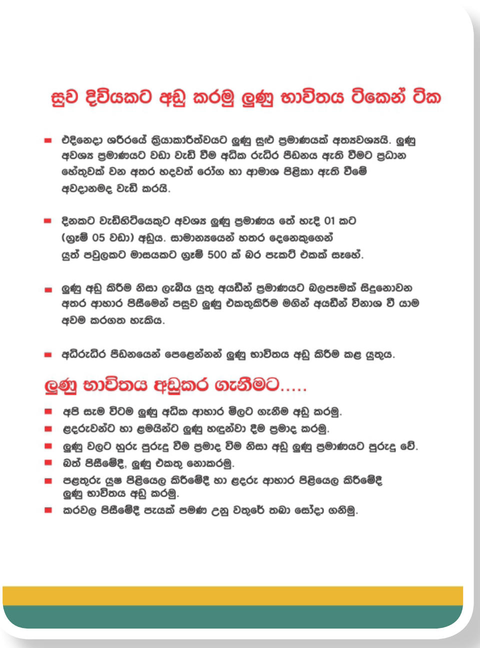
හෘදයට රුධිරය සපයනු ලබන්නේ කිරීටක ධමනි මඟිනි යම් හෙයකින් හෘදයේ කිරීටක ධමනියක් අවහිර වුව හොත්, ඒ දියේ ලේ ගමනය නවතී. එසේ වූ සඳු එම කිරීටක ධමනිය මඟින් ලේ ලබා ගත් හෘදය වස්තුවේ මාංශ පේශීන් අළිය වේ. ලේ සැපයුමට සම්පූර්ණයෙන් ම කැපී ගිය හොත්, එම හෘදය මාංශ පේශි හොඳින මිය යයි. "හෘදයාබාධය" යන මේ වචනයෙන් හැඳින්වෙනුයේ හෘදයේ මාංශ පේශියේ කොටසකට රුධිරය නැති වීමෙන් එම කොටස මරණයට පත් වීමේ රෝග තත්වයයි.

හෘදයාබාධයන් වැළැඳීමට හේතු වන සාධක

- රුධිරයේ කොලෙස්ටරෝල් ප්‍රමාණය.
- මානසික අසහනය
- දියවැඩියාව
- තරබාරුව, වයසාම මිදූ සඳ.
- දුම් ඉරීම
- අධික රුධිර පීඩනය

හෘදයාබාධයේ ප්‍රධාන රෝග ලක්ෂන

- පපුව මැද ඇතිවන තද කිරීමක් වැනි පීඩන වීම් අත දිගේ හෝ හකු දෙපට යන වේදනාව හෝ උර පෙති අතරින් ගමන් කරන වේදනාව.
- ආමාශයේ ඇතිවන දුර්වීල්ල
- අධික ලෙස දහඩිය දැමීම.
- වමනය
- හෘද ස්පන්දනය දැකීම.
- කරකැවිල්ල
- හුස්ම ගැනීමේ අපහසුව.

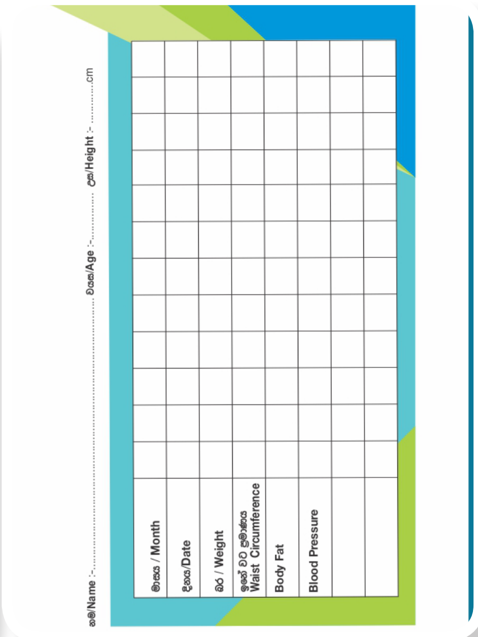


සුව දිවියකට අඩු කරමු ලුණු භාවිතය ටිකෙන් ටික

- එදිනෙදා ශරීරයේ ක්‍රියාකාරීත්වයට ලුණු සුළු ප්‍රමාණයක් අත්‍යවශ්‍යයි. ලුණු අවශ්‍ය ප්‍රමාණයට වඩා වැඩි වීම අධික රුධිර පීඩනය ඇති වීමට ප්‍රධාන හේතුවක් වන අතර හදවත් රෝග හා ආමාශ පිළිකා ඇති වීමේ අවදානමද වැඩි කරයි.
- දිනකට වැඩිහිටියෙකුට අවශ්‍ය ලුණු ප්‍රමාණය තේ හැඳි 01 කට (ග්‍රෑම් 05 වඩා) අඩුය. සාමාන්‍යයෙන් හතර දෙනෙකුගෙන් යුත් පවුලකට මාසයකට ග්‍රෑම් 500 ක් බර පැකට් එකක් සෑහේ.
- ලුණු අඩු කිරීම නිසා ලැබිය යුතු අයඩීන් ප්‍රමාණයට බලපෑමක් සිදුනොවන අතර ආහාර පිසීමෙන් පසුව ලුණු එකතුකිරීම මගින් අයඩීන් විනාශ වී යාම අවම කරගත හැකිය.
- අධිරුධිර පීඩනයෙන් පෙළෙන්නන් ලුණු භාවිතය අඩු කිරීම කළ යුතුය.

ලුණු භාවිතය අඩුකර ගැනීමට.....

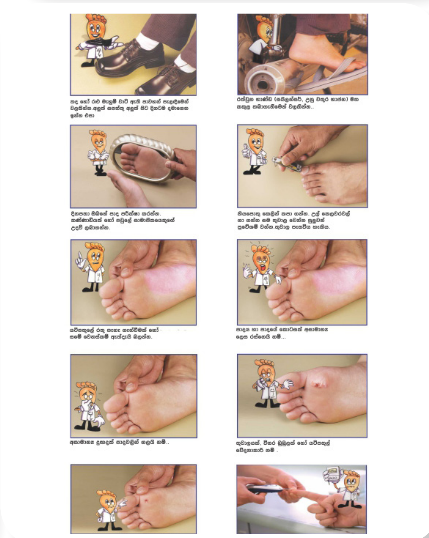
- අපි සැම විටම ලුණු අධික ආහාර මිලට ගැනීම අඩු කරමු.
- ළදරුවන්ට හා ළමයින්ට ලුණු හඳුන්වා දීම ප්‍රමාද කරමු.
- ලුණු වලට හුරු පුරුදු වීම ප්‍රමාද විම නිසා අඩු ලුණු ප්‍රමාණයට පුරුදු වේ.
- බත් පිසීමේදී, ලුණු එකතු නොකරමු.
- පළතුරු යුෂ පිළියෙල කිරීමේදී හා ළදරු ආහාර පිළියෙල කිරීමේදී ලුණු භාවිතය අඩු කරමු.
- කරවල පිසීමේදී පැයක් පමණ උනු වතුරේ තබා සෝදා ගනිමු.




සක්‍රිය ජීවිතයක් සඳහා
සිදුකල හැකි ජීවන රටාවේ වෙනස්කම්.

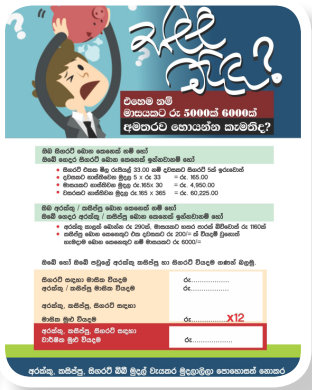

මාධ්‍යය ජනතාව
රවටන
උපක්‍රම


බෝනොවන රෝග
Modifiable Risk Factors
Unhealthy Diet
Physical Inactivity
Tobacco Smoking
Alcohol Usage
Mental Stress
Risk Conditions
High Blood Pressure
Increased Blood Glucose
Elevated blood Lipids
Obesity
Leading Diseases
Cardiovascular Diseases
Chronic Respiratory Diseases
Cancers
Diabetes
Stroke

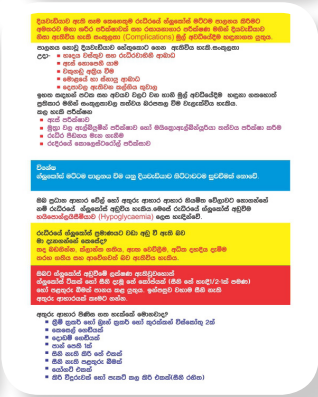


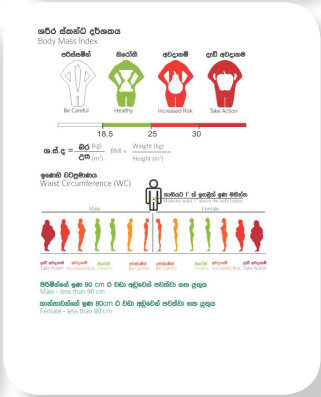

මම කොහොම කෙනෙක්ද?

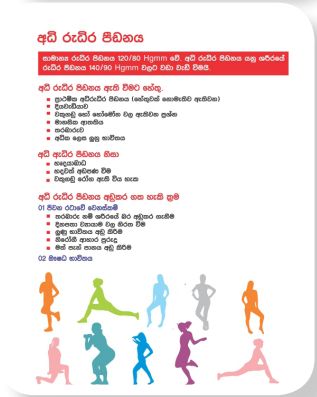

ඔබ ලබා දුන් පිළිතුරු අනුව
ඔබට හිමිවන ලකුණු ප්‍රමාණය
ලකුණු 17 කට අඩු නම්
ලකුණු 18 න් 39 අතර නම්
ලකුණු 18 න් 39 අතර නම්


බැඳිලි ඛාදය?
එහෙම නම්
මාසයකට රු. 3000ක් 6000ක්
අමතරව හොයාගන්න කැමතිද?


දියවැඩියාව යනු කුමක්ද?




ශරීර ස්කන්ධ දර්ශකය
Body Mass Index


අධි රුධිර පීඩනය


පිළිකාවක් කලින් හඳුනාගැනීමේ ජීවිතය ජයගනිමු.


ආහාර වේලේ ගුණාත්මක සහ ප්‍රමාණාත්මක බව
Quantity and Quality of Diet


ආහානාහය යනු කුමක්ද?

- Take regular meals to avoid drug related hypoglycaeia.
- Reduce the portion size of the meal

Carbohydrates

- Should account for 45% - 60% of the total caloric requirement.
- Avoid taking refined sugar based products –sweets, ice cream.
- Avoid adding sugar to drinks (i.e. tea).
- Try to take more complex carbohydrates – with a high fiber diet.
- Eat a lot of vegetables and moderate amount of fruits.

Fat

- Should account for less than 35% of the total caloric intake.
- Reduce saturated fat (mostly red meat) as much as possible
- Avoid trans-fat –mostly in fast foods.
- Try to consume unsaturated fat, especially monounsaturated –vegetable oil and oily fish.

Protein

- Normal protein diet.

Lifestyle modifications
Exercise

- Ask the patient to commence an exercise regimen involving 30-60 minutes of moderately strenuous physical activity at least on 5 days of the week.

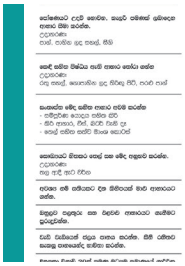
What is the advice you would give a patient on Insulin therapy?

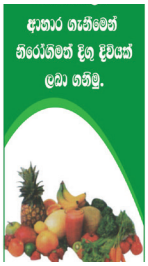
- Tell the patient the reason for starting Insulin.
- Advice on where to obtain Insulin and Insulin injection devices.
- The most commonly used device will be a plain syringe this has a 29G needle and should be calibrated up to 100U of Insulin.
- Storage of Insulin – In the refrigerator (middle compartment)
- Before injection clean the injection site. Check the injection bottle (regular insulin is colourless and all other preparations are turbid)
- Gently roll the bottle on your palms.
- Do not use surgical spirit to clean the area.
- Demonstrate the technique of injection.
- Tell the patient to inject on slightly different places on the same site and then rotate the sites.
- Syringes can be reused if the same person is using it. Dispose sharps into a sharps bin.
- Have your meals to avoid hypoglycaemia.
- Educate on symptoms of hypoglycaemia - The signs of hypoglycaemia range from mild to severe and may include extreme hunger, headache, dilated pupils, sweating, shaking, coldness, clamminess, nausea, and dizziness. In very serious cases there may be vomiting, blurred vision, slurred speech, paralysis, seizures, and even coma

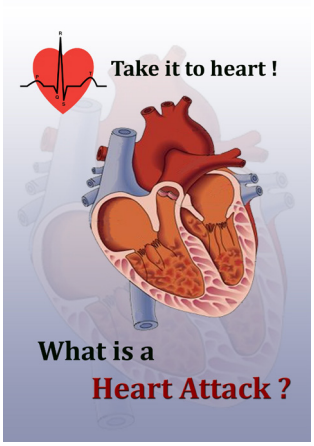
Educate on first aid during a hypoglycaemic attack

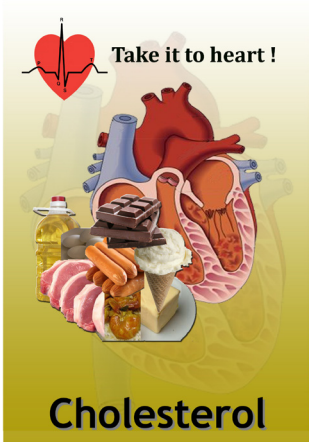
- The solution is to simply eat food that is rich in sugar (eg: - sugar candy or teaspoon full of sugar). Sugar that is combined with fat and protein, such as cake or cookies, is not advised because the protein and fat prevent the sugar from being absorbed quickly.
- If a friend or family member notices these symptoms, they should insist that the victim drink a cup of soda or juice.
- The victim needs to be alert and oriented enough to swallow. If the victim is unconscious or has a decreased level of consciousness, then call for anambulance.

- Advice to follow up in the clinic.
- Weight and BMI
- Assess the glycaemic control of the patient.
- Reminder on Dietary and lifestyle modification.
- Advice on the options available
  -Regular self-monitoring of blood glucose (having a glucometer and self-testing)
  -FBS
  -HBA1c –Gives an estimation of the glycamic control over the preceding 6-8 months
- Educate on complications
  Diabetic Retinopahy –Advice to arrange for an eye referral annually
  Diabetic Nephropathy –Advice to do UFR and urine for microalbumin at least once a year.
  Diabetic Neuropathy – Advice to seek for medical treatment if postural hypotension, erectile dysfunction or any other neurological deficit.









மாரடைப்பு மற்றும் பாரிவாதம்

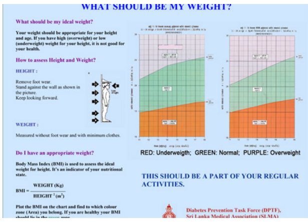
நிறுநிறு

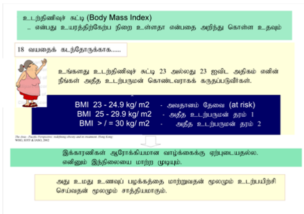
உயர்ரத்த அழுத்தம்

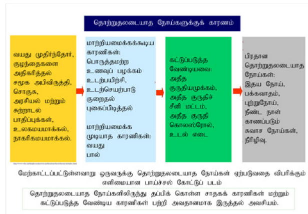
உப்புப் பாவனையைக் குறையுங்கள்

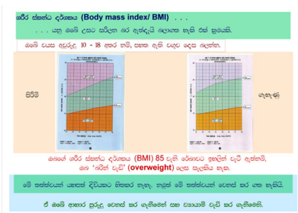
குடி தண்ணீர்

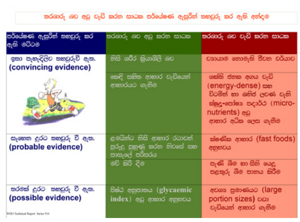
Posters

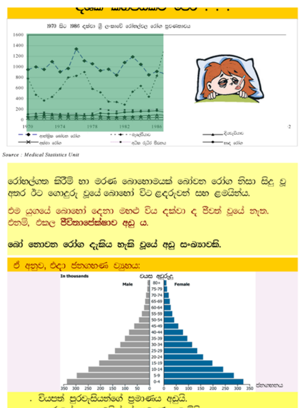

WHAT SHOULD BE MY WEIGHT?
RED: Underweigth; GREEN: Normal; PURPLE: Overweight
THIS SHOULD BE A PART OF YOUR REGULAR ACTIVITIES.

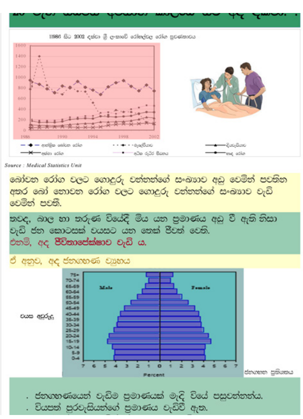

BMI 23 - 24.9 kg/ m2
BMI 25 - 29.9 kg/ m2
BMI > / = 30 kg/ m2











Health Promotion Calendar | 2015

සක්‍රිය ජීවිතයක් සඳහා සිදුකළහැකි ජීවන රටාවේ වෙනස්කම්

Lifestyle Modifications for an Active Lifestyle

රූපවාහිනී වැඩසටහන් නරඹීමේදී දැන්වීම් යන අතරතුර, අඳුනින් නැගිට තරමක් ඇවිදීම
When watching TV, stand up and move with every commercial break

රූපවාහිනියේ දුරස්ථපාලකය ඉවත් කර රූපවාහිනී නාලිකා මාරු කිරීම සඳහා නිතරම අඳුනින් නැගිටීම
Remove the TV remote controller and change channels by hand

ගමනාන්තයට ළඟාවීමට කලින් බසයෙන් බැස කිසියම් දුරක් පයින් ඇවිදීම
Get down from the bus before the destination and walk some distance by foot

කාර්යාලය තුළදී පිඩුලි සෝපානය භාවිතා කිරීම අවම කර මහල් කිහිපයක් පඩිපෙළින් ගමන් කිරීම
Minimize the use of lift in office and try to use the staircase.

දිනකට මිනිත්තු 20 - 30 දරුවන් සමඟ ක්‍රීඩා කිරීම
Play with your kids for 20-30 minutes a day

SEPTEMBER 2015

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Mercantile Holidays ❀ Bank Holidays ✱ Public Holidays ○

මේ මාසයේ දී ..
During this month ..

days
days
hrs
kg
days

NIROGI DIVIYA

www.nirogilanka.org | Email :dpthlma@gmail.com | Tel:011 2693303

ශරීර බර අඩු කර ගැනීම සඳහා ඒවායුක ව්‍යායාම

Aerobic Exercise for Reducing Body Weight

ඔබ කෙරෙහි ක්‍රියාශීලීද?

මධ්‍යම වැඩිවියන් සඳහා දිනකට මිනිත්තු 30 ක් වත් සතියට දින 5 ක් හෝ ඊට වැඩියෙන් 'තරමේ වෙහෙසට පත්වන' කාර්යයන් වළඳ යෙදීම හෝ දිනකට මිනිත්තු 20 ක් වත් සතියට දින 3 ක් හෝ ඊට වැඩියෙන් 'තදින් වෙහෙසට පත්වන' කාර්යයන් වළඳ යෙදීම කළ හැක.

For healthy adults, recommend at least 30 minutes of moderate-intensity physical activity (working hard enough to break a sweat, but still able to carry on a conversation) for five days per week, or 20 minutes of more vigorous activity three days per week.

| ACSM's physical activity recommendations |

OCTOBER 2015

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Mercantile Holidays ❀ Bank Holidays ✱ Public Holidays ○

මේ මාසයේ දී ..
During this month ..

days
days
hrs
kg
days

NIROGI DIVIYA

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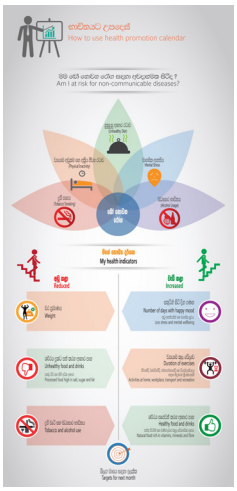
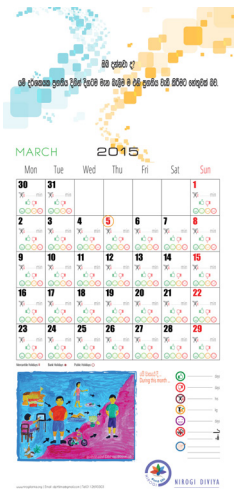
Health Promotion Calendar | 2015



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අඩපණ කරයි
TOBACCO USE CAN MAKE YOU IMPOTENT
NOVEMBER 2015
Mon Tue Wed Thu Fri Sat Sun
Mercantile Holidays
Bank Holidays
Public Holidays
During this month ...
NIROGI DIVIYA


Waist Circumference (WC)
Measure waist 1" above the belly button
Male
Female
Take Action
Increased Risk
Healthy
Be Careful
Be Careful
Healthy
Increased Risk
Take Action
Male - less than 90 cm
Female - less than 80 cm
MAY 2015
Mon Tue Wed Thu Fri Sat Sun
Mercantile Holidays
Bank Holidays
Public Holidays
During this month ...
NIROGI DIVIYA

Health Promotion Diary

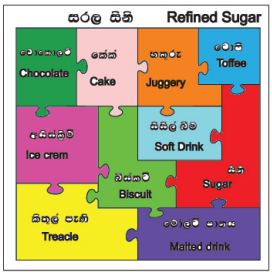
DAY

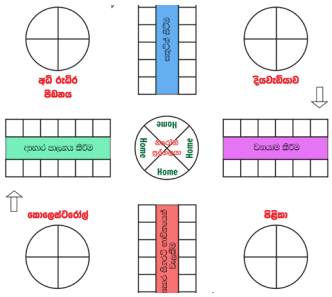
DATE DD/MM

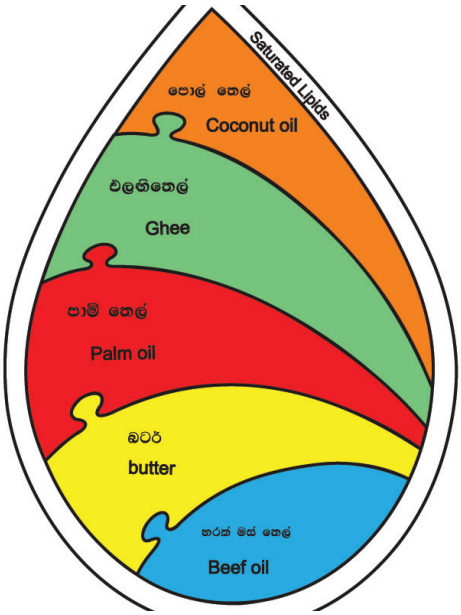
අද දවස කොහොමද ?

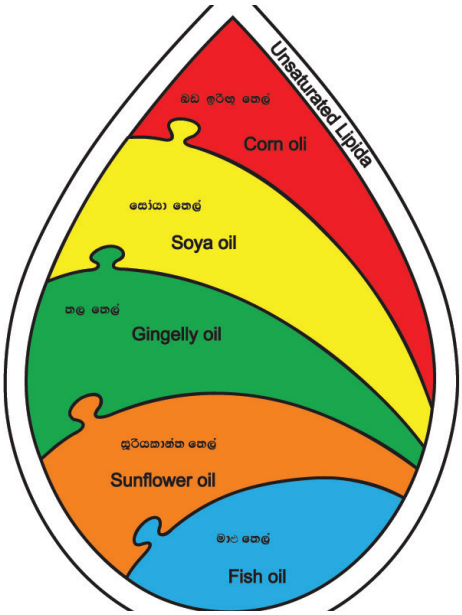
අද මගේ දවස ගෙවුනේ මෙහෙමයි.. (එක් එක් ක්‍රියාව සඳහා කොපමණ කාලයක් වැය කලේ ද ?)

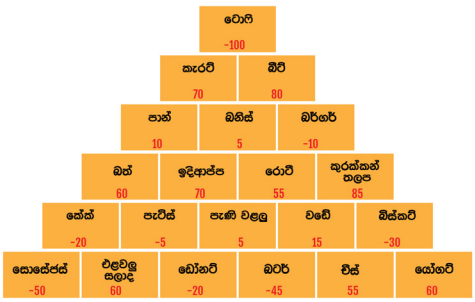
Interactive Games

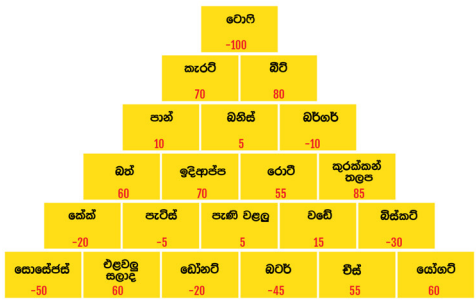












Section FOUR
Annexes

Annex 1

List of settings included in the project

Health Promotion Settings - Urban

Setting Category	Settings
Workplaces	Wijaya para sanasa samithiya
	Gothatuwa gowijana sewa
	Gothatuwa samurdhi bank
	Kolonnawa vocational training officers
	MAGA Construction
	BOC
	Survey Department
	College House
Schools	Gothatuwa maha widuhala
	Kotuwila Maha Viduhala
	Good Shepherd Convent
	Visakha Vidyalaya
Community Settings	Wadudodawaththa women sty
	Kotikawaththa Library
	Maligawaththa Women Society
	Meethotamulla Women Society
	Kotikawaththa Sanasa Bank
	Orugodawaththa women Bank
	Angoda TB Ilangarathne Ground
	Pirivena Para Mattakkuliya
	Majithplace Women Society
	kambikotuwa Women Society
	Mihindusenpura

Health Promotion Settings -Kotte

Setting Category	Settings
Field Workplace	Kotte AGO
	Mahagagama AGO
	Maharagama YMBA
	Nawinna income tax department
	Nugegoda bank
	Nugegoda samupakara samithiya
	Pitakotte samupakara samithiya
	Pubuda maawatha wedihiti samithiya maharagama
	Rathmalana AGO
	Udahamulla CO-OP CITY
Field schools	Madivelarahula college
CMC Schools	Lumbini widyalaya kirulapana
Community Settings	Ambuldeniya shalawapara samithiya
	Athulkotte maligawa para
	Dambahenaparakaanthasamithiya
	Dapaana mawadihiti samithiya
	Dematagodaalidenapansalasamithiya
	Godigamuwa nayasamithiya kantha
	Godigamuwa wadihitisamithiya
	Kalalgoda samurdhi resweema
	Kottawa kulasewana mawatha
	Madiwela 4/5 patumaga
	Madiwela iyamporuwa temple
	Madiwela perapasala samithiya
	Madiwela pragathipura 3rdpatumaga
	Madiwela wyayaama kandaayama
	Maharagama pamunuwa wyaparikayange samithiya
	Maharagama pansalapaara samurdhi resweema
	Maharagama sanasa wedihiti samithiya
	Makumbura wadihiti samithiya
	Maligawapara lama samajaya
	Waththegedara samurdhi resweema
	Wijerama kaantha samithiya

Annex 2

Sample of administrative clearance letters for the program from the Ministry of Health and zonal educational directorate

NIROGI Lanka Project

Diabetes Prevention Task Force (DPTF)

SRI LANKA MEDICAL ASSOCIATION

No.06. Wijerama Mawatha, Colombo 07. Tel/Fax: 2693303

www.nirogilanka.org, dptfslma@gmail.com

WORLD DIABETES FOUNDATION

5th February 2010

Divisional Secretary,
Maharagama

Dear Sir/Madam,

Review Meeting on 12th February 2010:
Request for the Participation of Mr. Dinusha Chamara

I would like to thank you for your support towards the NIROGI Lanka Project by granting Mr. Dinusha Chamara permission to participate as a Health Promotion Facilitator at field settings in the Kotte MOH area.

The Monthly Review Meeting of our project has been scheduled to be held on Friday 12th February 2010 from 8.30 a.m. to 4.00 p.m. at the Auditorium of the Health Education Bureau. I would be grateful should you release Mr. Dinusha Chamara on the day of this meeting so that he may participate in its proceedings.

I trust you would continue to support us in our activities, and look forward to our future collaboration as well.

Thank you.

Yours sincerely,

Dr. Carukshi Arambepola
Coordinator, Component 3 (Central)
NIROGI Lanka

NIROGI Lanka Project
Diabetes Prevention Task Force (DPTF)
SRI LANKA MEDICAL ASSOCIATION
No.06. Wijerama Mawatha, Colombo 07. Tel/Fax: 2693303
www.nirogilanka.org, dptfslma@gmail.com
WORLD DIABETES FOUNDATION

21st December, 2012

Secretary,
Ministry of Education,
Isurupaya,
Battaramulla.

NIROGI Lanka Project – Diabetes Prevention Task force (DPTF)
Sri Lanka Medical Association
No: 6,Wijerama Road,
Colombo 07.

Dear Sir/Madam,

Requesting permission to conduct health promotional activities in state schools in Colombo Municipal Council area

This is to kindly request your permission to conduct health promotional activities in state schools in Colombo Municipal Council area in order to promote a healthy lifestyle among school children in reducing the risk of developing Non Communicable Diseases (NCDs), particularly Type 2 Diabetes.

This initiative is carried out by NIROGI Lanka Project of the Sri Lanka Medical Association (SLMA). The SLMA is the apex professional body of the medical professional colleges and associations in Sri Lanka and the second oldest in Australasia. It consists of representatives of relevant professional groups viz. General Practitioners, Physicians, Paediatricians, Obstetricians, Community Physicians, Surgeons, the Diabetes Association of Sri Lanka and University Academics.

NIROGI Lanka is a project conducted since year 2009 by the Diabetes Prevention Task Force, which has the mandate of the SLMA to stimulate and support the adoption of effective measures for the surveillance, prevention and control of Diabetes Mellitus in Sri Lanka combined with prevention of cardiovascular diseases. The DPTF has continued to act as a catalyst in helping with the implementation of a cohesive prevention programme to achieve most objectives through the existing delivery mechanisms in conjunction with the Ministry of Health, WHO and other relevant stakeholders. The DPTF has acknowledged the major role played by the Ministry of Education in the implementation of the NCD action plan of the Ministry of Health by promoting healthy lifestyles since early childhood.

The initial project NIROGI Lanka (Phase I) was funded by the World Diabetes Foundation and has had excellent outcomes with successful reviews. This initiative is for the Phase 2 of the project called NIROGI Diviya.

Objectives of NIROGI Diviya are:

NIROGI Lanka Project

Diabetes Prevention Task Force (DPTF)

SRI LANKA MEDICAL ASSOCIATION

No.06. Wijerama Mawatha, Colombo 07. Tel/Fax: 2693303

www.nirogilanka.org, dptfslma@gmail.com

WORLD DIABETES FOUNDATION

11th December 2009

. . . . . .

. . . . . .

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Dear Sir/Madam,

NIROGI Lanka Meetings: Request for Leave

On behalf of Diabetes Prevention Task Force (DPTF), I wish to extend my sincere gratitude for your support extended to the activities of our task force.

With the intention of improving diabetes care in Sri Lanka, we have been awarded a US$ 625,000 fund by the World Diabetes Foundation. One of its objectives is prevention of diabetes by empowering the public through activities that encourage community and family participation in defined settings of the Kotte and Kolonnawa MOH areas.

This project is implemented by the DPTF under the guidance of the Ministry of Healthcare and Nutrition.

I am pleased to inform you that . . . . . in your employment has been selected as a Health Promotion Facilitator for this programme and would be carrying out health promotional activities at. . . . . for a period of three years. I would be grateful should you grant him/her leave as necessary so he/she may participate in biweekly meetings at the identified local setting and monthly review meetings of the programme at the Health Education Bureau, Colombo.

I look forward to your continued cooperation in future.

Thank you.

Yours sincerely,

Dr. Carukshi Arambepola

Coordinator, Component 3, NIROGI Lanka

NIROGI Lanka Project
Diabetes Prevention Task Force (DPTF)
SRI LANKA MEDICAL ASSOCIATION
No.06. Wijerama Mawatha, Colombo 07. Tel/Fax: 2693303
www.nirogilanka.org, dptfslma@gmail.com
WORLD DIABETES FOUNDATION

10th February 2010

Dr. D. D. Karunaratne
Head, Department of Communication and Media Technologies
University of Colombo School of Computing
University of Colombo
Colombo 3

Dear Dr. Karunaratne,

Outreach Programme to Jaffna: Request for the participation of Mr. Dinusha Amerasinghe

The NIROGI Lanka Project has planned to conduct an outreach programme dealing with aspects of health promotion in Jaffna and its environs on 18th February 2010. It has also been proposed to discuss aspects related to the community based Health Information System (in whose activities your institution is a kind collaborator) during this programme.

I would be grateful should you grant permission to Mr. Dinusha Amerasinghe of your department to participate in this programme. Please be kind enough to excuse him from services from the 17th to the 20th of February 2010.

Thank you.

Yours sincerely,

Dr. Carukshi Arambepola
Coordinator, Component 3
NIROGI Lanka

Cc: Prof. Rohini de A. Seneviratne

NIROGI Lanka Project

Diabetes Prevention Task Force (DPTF)

SRI LANKA MEDICAL ASSOCIATION
No.06. Wijerama Mawatha, Colombo 07. Tel/Fax:2693303
www.nirogilanka.org, **dptfslma@gmail.com**

WORLD DIABETES FOU

5th February 2014

Ms. Hettihewa
Assistant General Manager
Metropolitan Branch
Colombo.

Dear Madam,

Requesting permission to conduct health promotional activities at the Metropolitan Branch, Bank of Ceylon

During the past few decades, diabetes characterized by an early onset, severe nature of disease and premature death has been reported among Sri Lankans. This trend is expected to rise over the next years, paving the way to advanced diabetes and many other non-communicable diseases (NCD). Epidemic of obesity, low level of physical activity as well as unhealthy food choices especially among the working population may be the major contributors to this increase in diabetes. Once affected, it adversely affects almost every organ in the human leading to irreversible damage such as amputations, neuropathy, kidney and heart failure and blindness. Therefore, it is imperative that we educate especially the working population in combating this adversity and ensure the well-being of your employees thus, increased productivity. This is to kindly request your permission to conduct health promotional activities in your bank in order to promote a healthy lifestyle among your employees in reducing the risk of developing NCD. This initiative is carried out by the 'NIROGI Lanka' Project of the Sri Lanka Medical Association (SLMA).

SLMA is the apex professional body of the medical professional Colleges and associations in Sri Lanka and the second oldest in Australasia. It consists of representatives of relevant professional groups viz. General Practitioners, Physicians, Paediatricians, Obstetricians, Community Physicians, Surgeons, Diabetes Association of Sri Lanka and University Academics.

'NIROGI Lanka' is a project conducted since year 2009 by the Diabetes Prevention Task Force, which has the mandate of the SLMA to stimulate and support the adoption of effective measures for the surveillance, prevention and control of NCD. The project was funded by the World Diabetes Foundation and has had excellent outcomes with successful reviews. This initiative is for the second Phase of the project called **'NIROGI Diviya'**. Objective of the NIROGI Diviya is health promotion in different settings (amongst the most vulnerable groups) through capacity building of them as health

Annex 3

Training Manual (First five pages given)

Training Manual for initiating the process of health promotion

(Based on NIROGI Diviya Health Promotional Project (2009-2016)

Prepared by
Carukshi Arambepola

NIROGI Diviya team:
Upula Amarasinghe
Chulani Truxy

A summary of the Training Manual on the Health Promotion Process followed in NIROGI Diviya

Prepared by Dr. C Arambepola

Initial Meeting with the selected MOHs in each district to identify 10-15 HP activists in community, work and school settings per MOH area	**Criteria for selection of HP activists:** • Highly motivated and shows interest in changing behaviour of themselves and others, past experience in active participation in voluntary work and as informal leaders, excel in coordination and team work, familiar with the terrain and people living/working • The selection is based on the recommendation of MOH and staff. • MOH staff can also be selected as P activists. • However, it is not essential for HP activists to have any medical or health related background. **Criteria for selection of settings:** Based on the feedback of PHI and MOH staff, settings should have an already established network to reach out for people (e.g. bank network, samurdhi banking)
First workshop with HP activists, MOHs and central resource team (including HP trainers appointed to each MOH area)	Duration: 2 days **Objectives:** • To develop motivational and negotiation skills in HP activists • To measure health and their own risk behaviour related to NCDs Training manual: Module 1
Each HP activist forms their own primary HP group of 10-15 participants from their own setting	HP trainers meet up with HP activists to play a facilitatory role in recruiting participants to the primary HP groups

First meeting in the setting Each HP activist holds the first meeting with the HP activists in their own setting	**Objectives of group work:** • To measure health status of each participant and facilitate each participant to carry out a self-assessment on their risk behaviour related to NCDs. • **Responsibilities:** • HP activist will take the leadership. • HP trainer in each MOH area will facilitate this by providing the basic equipment (scales, stadiometers, measuring tapes, blood pressure apps, body fat analyser, glucose tests, cholesterol tests
Second workshop with HP activists, MOHs and central resource team (including HP trainers appointed to each MOH area) (In 3 weeks after the first workshop)	Duration: 1 day **Objectives:** • To identify the underlying determinants of their risk behaviour • To find strategies (by taking into account the cultural and social appropriateness, cost and time spent on the solution) to address these risk behaviours • To acquire generic skills in promoting healthy behaviour • To change attitudes towards healthy lifestyles Training manual: Module 2

Second meeting in the setting
Each HP activist holds the second meeting with the HP activists in their own setting
	Objectives of group work:
	• Group members identify the underlying determinants of their risk behaviour
	• Group members find solutions in groups to address these underlying determinants
	• Carry out activity based health promotion targeting behavioural change towards:
	  • Healthy diet
	  • Physical activity
	  • Mental wellbeing
	  • Tobacco and alcohol cessation
	• Develop their own monitoring indicators
	  • Anthropometric parameters
	  • Progress on activities
	  • risk behaviour assessments
	
	HP trainer in each MOH area facilitate this by
	• motivating active participation of participants
	• providing low cost equipment such as balls, (only if it is requested for)
	• providing note books to record their activities and feed-back on progress

Several meetings with HP trainer, HP activists and participants in each setting (usually once in 2 weeks)	**Objectives of group work:** • Activities done in groups • Record their activities using indicators developed in each group • Share experience and discuss the strengths and weaknesses of the strategies used in groups • Reflect on their progress based on monitoring indicators and further change HP trainer in each MOH area facilitates this by - motivating the HP activist to give leadership • ensuring active participation of participants • guiding the HP activist to change behaviour of group members • providing low cost equipment such as balls, (only if it is requested for) • providing note books to record their activities and feedback on progress • identifying the weak/slow performers and encourage the good performers • maintain records on meetings held, no. attended, activities carried out and plans for the future HP activist in each setting facilitates this by • providing leadership to organize group activities • keeping group members motivated • continuous monitoring of progress using their own indicators
Third workshop with HP activists, MOHs and central resource team (including HP trainers appointed to each MOH area) (in 3 months after the second workshop)	Duration: 1 day **Objectives:** • To discuss the strengths and weakness of their solutions to changing behaviour • To reflect on their sustainability based on feedback of their own idnicators Training manual: Module 3

Several meetings with HP trainer, HP activists and participants in each setting (usually once a month)	Same as given above on similar meetings **Additional responsibilities of HP trainers:** • Introduce theory based inputs (as prescribed in modules) on NCDs and specific knowledge on healthy diet, physical activity and mental wellbeing (to be done based on the demand for this by participants) • Ensuring that leadership is gradually transferred from HP activist to all in the group
Review meetings with HP activists, MOHs and central resource team (including HP trainers appointed to each MOH area) (Every 3 months in first year)	Duration: 1 day Objectives: • To share experience on HP activities • To assess the sustainability of HP activities • To group the HP activists according to their performance • To provide more technical/skill inputs for less active HP activists/participants • To provide incentives/rewards for active performers • To further introduce theory based inputs (as prescribed in modules) on NCDs and specific knowledge on healthy diet, physical activity and mental wellbeing (to be done based on the demand for this by participants) Training manual: Module 4
Several meetings with HP trainer, HP activists and participants in each setting (Usually once a month)	Same as given above on similar meetings in settings **Additional responsibilities of HP trainers:** • Ensuring that ownership and leadership of the program are gradually transferred from HP activist to all in the group • To ensure formulation of healthy policy at setting level • To modify the physical environment conducive for healthy lifestyle within each setting

Review meetings with HP activists, MOHs and central resource team (including HP trainers appointed to each MOH area) (Every 6 months in second and third years)	Same as given above on similar review meetings **Additional responsibilities of HP trainers:** • Ensuring that leadership is gradually transferred from HP activist to all in the group • Ensuring that activities done in groups are transferred to family members • Ensuring the formation of secondary target groups by participants who are active and can take the leadership to form new groups • To ensure formulation of healthy policy at setting level • To modify the physical environment conducive for healthy lifestyle within each setting
Annual review meeting with HP activists, MOHs and central resource team (including HP trainers appointed to each MOH area) This will also be represented by one participant from each setting.	**Objective:** At end of each year, show casing the achievements of each setting

Annex 4

Permission letters to attend the training sessions or it overlapped with another duty at work, despite sending letters in advance counter-signed by the zonal director or RDHS

Add from K folder- BOC permission letter, workplace letter, HPF meeting acknowledgement, Mr. Liyanage review letter, MoE letter, etc.

Annex 5
Video on aerobic dancing

Annex 6

List of the indicators used by participants in different settings

Diet
Eating at least five kinds of fruits & vegetables daily
Not taking fast food more than 3 times every week
Not taking deep-fried food daily
Consuming unpolished rice or rice based products at least once a day
Not taking a large quantity of rice per meal (Not more than 2 servings)
Homes, schools, health facilities and other workplaces which cultivate fruits & vegetables
Canteens and restaurants which serve healthy & safe food
Sectors implementing the planned programme to achieve food security
Physical activities
Engage in at least 30 minutes of continuous moderate physical activity daily
Setting population who have participated at least once in a physical activity programme during the past year
Settings with at least one trained physical activity coordinator
Settings with an appropriate place for physical activity programme
Tobacco
Do not use tobacco during the past 1 year
(by 3 age group: <21, 21-50 and >50)
Participating settings that clearly display “No Smoking” posters or other materials
People with knowledge of the range of harmful effects of smoking
Settings that motivate people not to smoke
People do not smoking in public places
Alcohol
Lifetime abstainers (by 3 age group: 15-<21, 21-50 and >50)
People who have not taken alcohol during the past 1 year (by 3 age group: 15-<21, 21-50 and >50)
Shops prosecuted for selling alcohol to people less than 21 years of age

Shops prosecuted for selling alcohol during prohibited days or hours
People with knowledge of the range of harmful effects of alcohol
Social functions (i.e. attainment parties, weddings and funerals) not serving alcohol
Settings that motivate people not to drink
People do not drink in public places
Stress
People verbally sharing their problems & worries
People having a schedule
People using humour for relaxation
People practising meditation and relaxation exercises
People using diversion & distraction methods for relaxation writing down, Drawing, others
People engaging in physical exercise
People doing gardening
People having a hobby
People indulging in nature walks
People playing a musical instrument
People engage in recreational activities
People interacting with pets
People taking holidays for relaxation
People visiting religious places regularly
Settings having relaxation and recreational facilities (e.g. soft music)
People using the facilities
People who feel they are not discriminated against, downgraded, labelled negatively
Client-friendly health care settings
Child-friendly schools
Mental health promoting workplaces, work practice & policy
Mental health promoting activities in the community

Annex 7

A sample of a report following a random visit to the field settings to observe the activities of HP trainers and HPFs

Field visit to the health promotion setting –Kotte

Starting time: **2.30 pm**
Venue: **Community Centre-Mahindarama Mawatha**
Number of setting members: **26**
Number of facilitators: **3**

Strengths:

1. Welcome faces of the audience in commencing showed their approval of this activity.
2. Facilitators were capable of making the meeting a very interactive one
3. The discussion was not on a specific health issue but on health and well being as a whole
4. Motivation of community members was evident from the requests for an additional session per week
5. Session included variety of activities: discussion, play time, etc.
6. Since the group included people from different backgrounds the friendly atmosphere softened the differences between them

Suggestions of improvement

1. Members should be given a chance to come up with their own priority issues and what they want to discuss.
2. Look for ways to involve every member in each activity.
3. Encourage volunteers to come up with their success stories, failures and perceived reasons behind them: this would be a learning exercise for the members and the facilitators

(the exercise session commenced by the time I left the meeting, at 3.50 pm)

By,
Dr. Sujatha Liyanage

Annex 8

Assessment guides used in field settings

Assessment Guide I:
Indicators for evaluating interventions through health promotion principles

1. Program initiated by community
2. Program/ interventions continuing by community itself
3. Community has the knowledge to continuing the program
4. Community has the skills to continuing the program
5. People are aware (knowing) about the whole process, at the start to the end. (Engage in planning, implementing and at last get benefits)
6. Community has started new interventions by them self
7. Interventions can consider as community based
8. Are people having a proper methodology to measure their progress
9. Measuring progress by community
10. People are addressing genuine factors for improving their health
11. Effect for the whole community because of addressing selected determinants
12. More People changed their practices towards a healthier way
13. Time that taken to reach current status of the process is best
14. Effectiveness of whole intervention
15. Whole program consist with interconnected programs, each one supports to achieve main objective

Assessment Guide II: Health Promotion Activities/ Setting Assessment Guide

Process followed:

1. How did you stimulate people to join the health promotion group at the beginning?
2. How many members are there in your health promotion group?
3. How frequently do you meet the other members of your group?
4. Are all actively participating in the discussion during the meetings?
5. How do you carry out the health promotional activities – with the group, alone or with family members?

Success and failures in behaviour change and attitudes:

6. What are the risk behaviours that were mainly addressed during your health promotional interventions?
7. What did you identify as the major determinants that you should address to improve the wellbeing of you/ your community?
8. Of those determinants, which ones were you able to change or tried to change?
9. What are the strategies used by you to improve your diet, physical activity, alcohol and tobacco and mental wellbeing of you or your family or your community?
10. Did you use indicators to measure the progress of the family, group or the community?
11. Did you record those measurements to see the progress?
12. Did you ever experience any change in your wellbeing (weight, smoking reduction, reducing alcohol consumption etc.) due to your interventions?
13. Is there any positive change in attitudes within the family, group or the community due to the interventions that you have done?
14. What is the present status of the interventions that you initiated?

Dissemination:

15. Did you ever try to introduce the activities that you have learnt to another community, a group or to any other person outside your family?
16. How do you plan to disseminate the interventions to your family and community?
17. How difficult or easy is it to change the behaviour of family members, colleagues or community members?

Sustainability

18. What are the main reasons for you to remain in the program for so long?
19. How long do you plan to continue these health promotion activities?
20. How important is it to have the presence of a health promotion officer during your meetings or activities?
21. To which extent do you expect the participation of the health promotion officer in the program?
22. How confident are you now on changing another person towards healthy lifestyles?
23. Do you meet only for the purpose of doing health promotion activities or is it done as part of another programme/society activity)
24. How you explain the social relationship between your family members?
25. Did you expect the presence of the health promotion officer in future?
26. Explain, how do you plan to continue the activities without the health promotion officer?

Assessment Guide III:
Indicators for changing areas of tobacco and alcohol usage

1. Perceptions / attitudes/ Believes of peoples about Alcohol & Tobacco usage
    a. Taking a value for behaviour
    b. As a bad quality
    c. Improving social status
    d. As a pain killer
    e. As a stress releaser

2. Social Harm
    a. Social harm of cigarette
        i. Effects of second hand smoking
        ii. Violating others right to health
    b. Social harm of alcohol
        i. Violence behaviour (Conflicts between groups)
3. Economic harm
    a. expenditure for tobacco for month
    b. way of calculating the expenditure
    c. think it cause to economic drain
    d. How alcohol cause to economic drain
    e. What is the harm to health of alcohol

4. Personal Factors
    a. Health harm of smoking cigarettes
        i. Diseases related with smoking
5. Knowledge about media glamorization on alcohol and tobacco
    a. Tracking the incidences in media
    b. Reporting them and aware others
    6. take collective actions within the village

Assessment Guide IV: Guideline for setting grading

	Indicator	Marks given	Description
1	# of Active Participants	[<10] – 3 [10-20] – 6 [>20] – 9 Visits arranged by the community – 1	[# of people who asking questions, # of people who visit regularly for discussions]
2	Spreading of the activities within the community	Non – 0 Within the same community – 5 Spread activities to another setting – 10	This indicator will measure the extent of spreading of the activities throughout the community, without the facilitation of the health promotion officer
3	Addressing determinants within the community	Physical activeness- 2 Change dietary habits – 2 Interventions for smoking cessation – 2 Alcohol prevention interventions – 2 Mental stress - 2	This will measure the activity depth and the intensity of interventions with addressing the determinants by the health promotion officer or the community it self
4	# of tools developed	Tool for addressing community issues – 4 Tool developed for addressing family issues – 2 Using the tool within the family – 2 Using the tool within the community/ setting -2	Here the community or the setting will be defined as more than 10 households.
5	Measuring the progress	Keep records individual basis – 8 (more than 10 person) Maintain setting base records – 12	

	Indicator	Marks given	Description
6	Results / Changes	Norms/ attitudes - 5 Practices – 5 (only practices within community or individual level) Changes in physical parameters in individual level – 10 (more than 10 individuals in same setting) Changes in physical parameters in community/ setting level – 10	Here marks will give only for one level, maximum will be 20.
7	Continuation of the process	Totally by the community – 20 Health promotion facilitator must visit frequently - 0 (more than one visit for to continue the process) Facilitator visit needed twice a month or less for to enrich the process - 10	Through this indicator it will measure the activeness and the existence of the community activists who can drive the community towards success. The extent of the empowerment will also measure by this indicator.

Annex 9

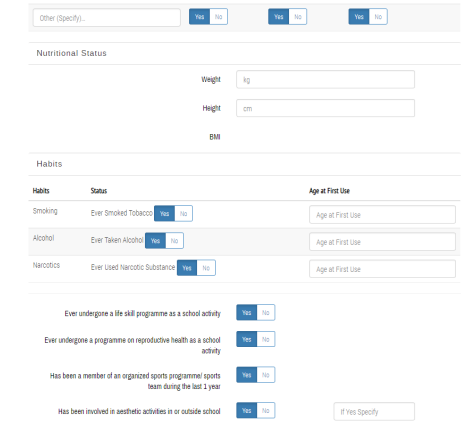
Sample of the pre-determined scoring system to assess its progress and sustainability

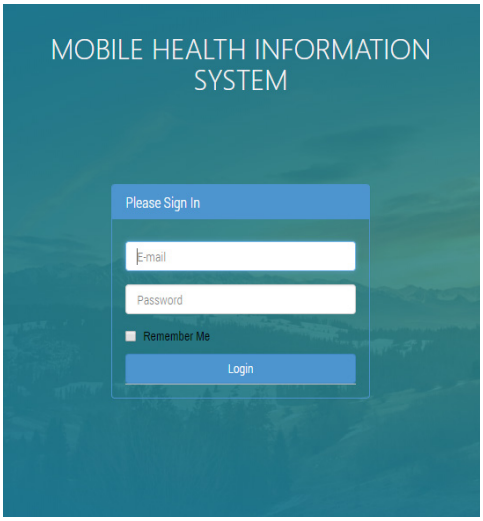
Pl. add a screen shot of the settings with colour coded we had on wall.

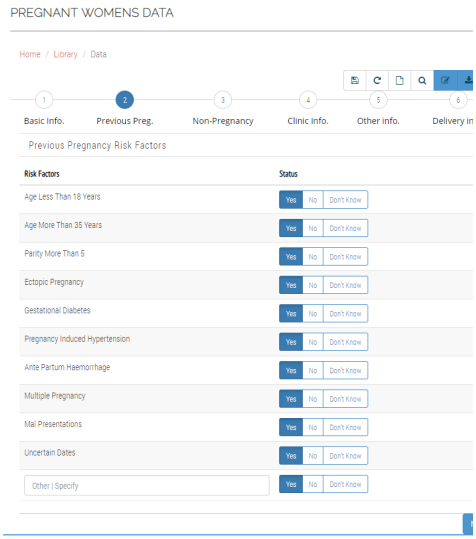
Annex 10

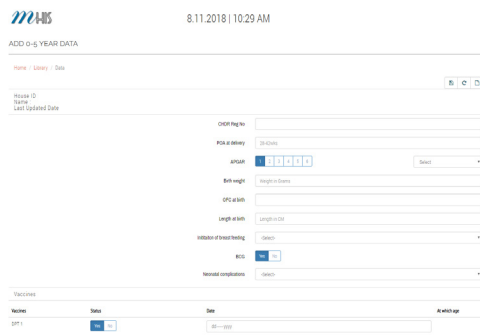
Online database including a data entry system using mobile technology

Mobile Health Information System









Annex 11

Agenda of outreach programs of NIROGI Diviya

Three parallel programmes

1. Exhibition on Prevention of Diabetes

Venue:	
Time:	
Theme:	Beyond Diabetes
Target Audience:	The general public
Medium of Conduct:	-
Contents:	Video Clip
	Interactive Material
	Cookery demonstration
Other activities:	Training of pre-intern medical officers on conducting an educational stall for the public
Resource Persons:	Staff members of the Department of Community Medicine, Colombo, postgraduate trainees in Community Medicine from Colombo and Jaffna Universities and NIROGI Lanka coordinators

2. Establishment of Health Promotion Settings by the NIROGI Lanka Project

Venue:	
Time:	
Target Audience:	Volunteers, teachers, PHMs, retired persons etc. (10-15 participants)
Medium of Conduct:	-
Resource Persons:	Dr. Manoj Fernando/Mr. Duminda Gamage and NIROGI Lanka field trainers (Programme to be notified later)

3. Session on Non-Communicable Diseases Prevention

Venue:	
Time:	9.00 a.m. – 4.30 p.m.

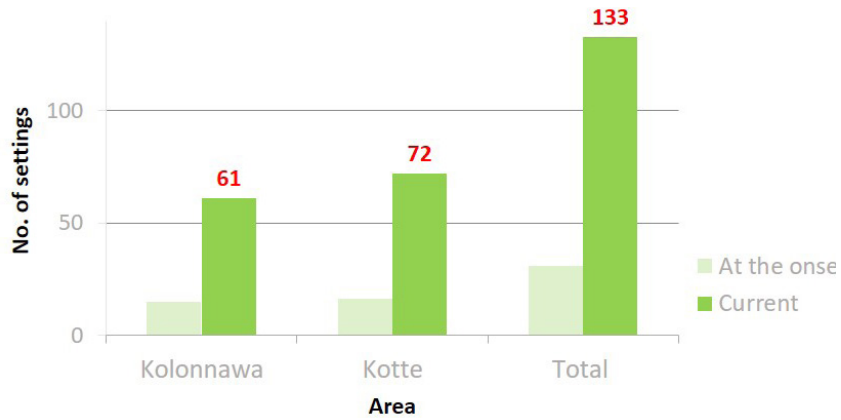
Target Audience:	Public health staff members
Medium of Conduct:	English
9.00 a.m. - 10.30 a.m.	Prevention and control of NCD and risk factors and introduction to current programmes conducted by the Ministry of Healthcare and Nutrition – Prof. R. de A. Seneviratne (Dept. of Community Medicine), Dr. Palitha Karunapema and Vindhya Kumarapeli (CCPs/NCD Unit, Ministry of Healthcare and Nutrition)
10.30 a.m. - 10.45 a.m.	Tea
10.45 a.m. - 12.45 p.m.	Improving mental health in the prevention of NCD – Dr. Wasantha Gunathunga (Head, Department of Community Medicine, Faculty of Medicine, Colombo)
12.45 p.m. - 1.30 p.m.	Lunch
1.30 p.m. - 2.15 p.m.	Prevention of cancers at MOH level - Dr. Thilanga Ruwanpathirana (Postgraduate trainee in Community Medicine, Department of Community Medicine, Faculty of Medicine, Colombo)
2.15 p.m. - 3.30 p.m.	Principles in health promotion in relation to NCD – Dr. Sarath Amunugama (Director, Health Education Bureau, Ministry of Healthcare and Nutrition)
3.30 p.m. - 4.00 p.m.	Exchanging ideas + Tea

Annex 12

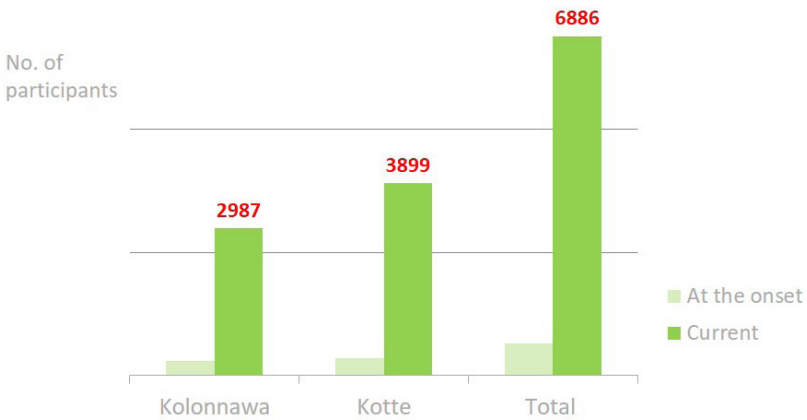
Expansion of primary and secondary settings in suburban and highly urban settings

Expansion

- Settings created



- Participants recruited



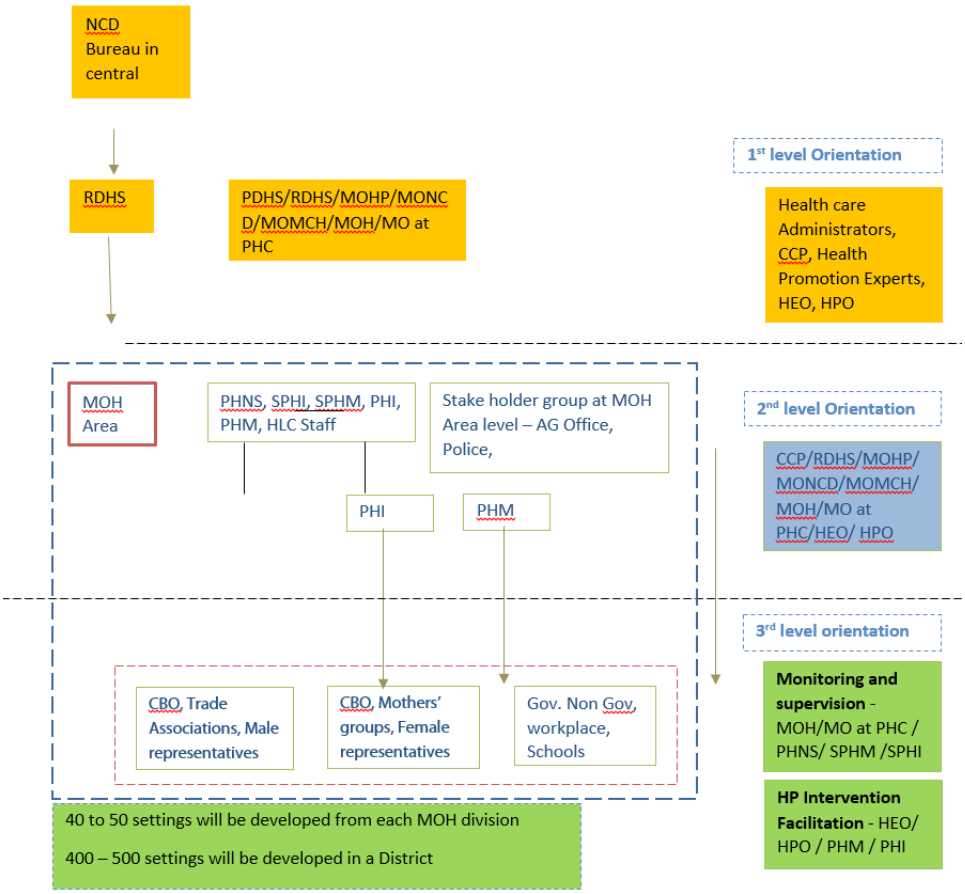
- Expansion of different settings

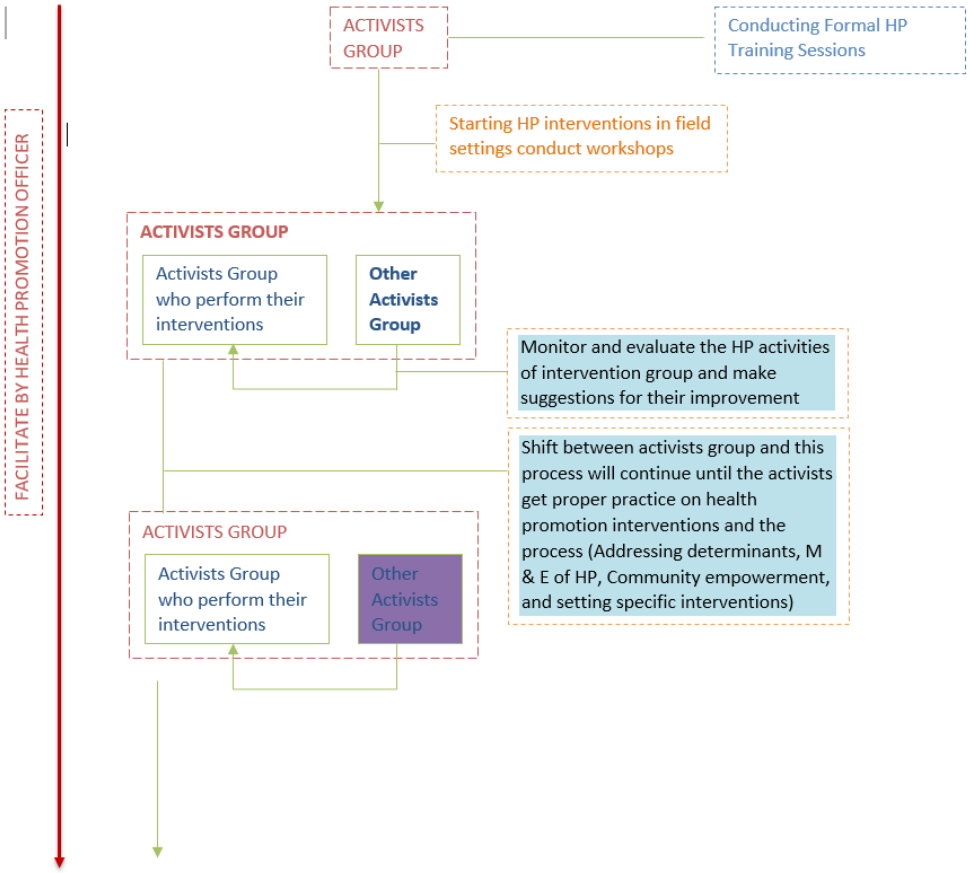
Autonomous:
15 / 72 (Kotte)
12 / 61 (Kolonnawa)

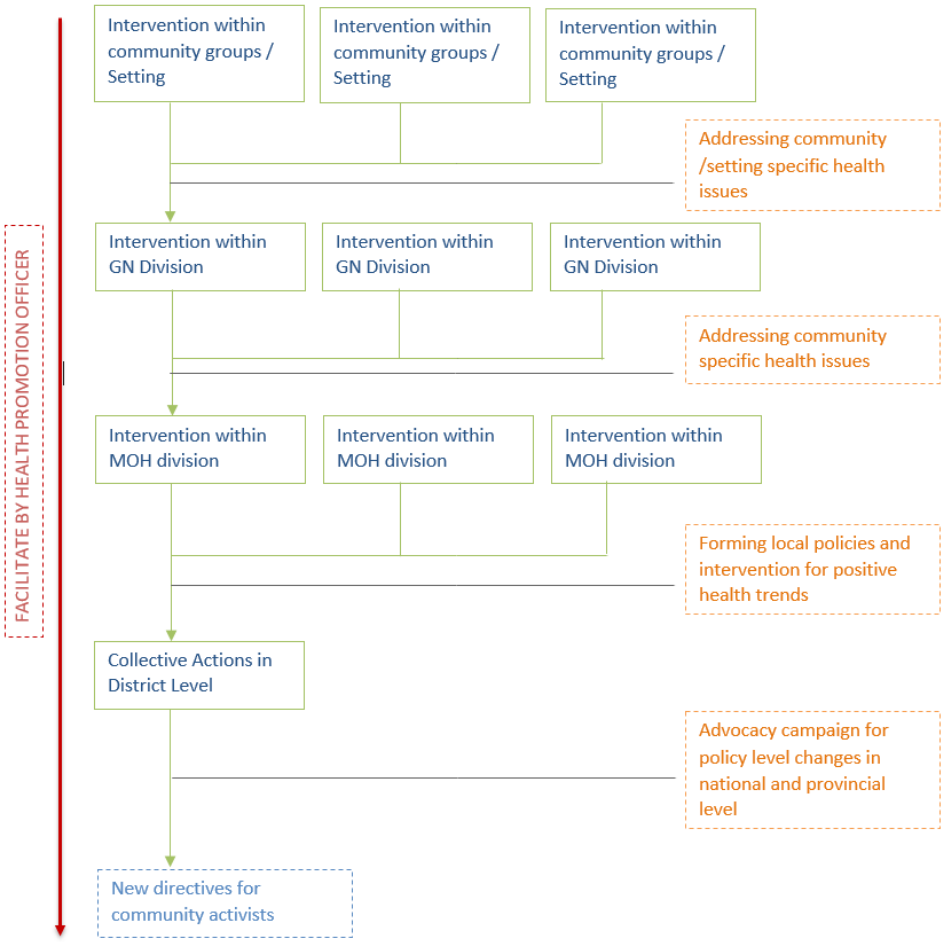
Annex 13

Proposed institutionalization of NIROGI Diviya

Levels of Health Promotion Training




ACTIVISTS GROUP
Conducting Formal HP Training Sessions
Starting HP interventions in field settings conduct workshops
FACILITATE BY HEALTH PROMOTION OFFICER
ACTIVISTS GROUP
Activists Group who perform their interventions
Other Activists Group
Monitor and evaluate the HP activities of intervention group and make suggestions for their improvement
Shift between activists group and this process will continue until the activists get proper practice on health promotion interventions and the process (Addressing determinants, M & E of HP, Community empowerment, and setting specific interventions)
ACTIVISTS GROUP
Activists Group who perform their interventions
Other Activists Group


FACILITATE BY HEALTH PROMOTION OFFICER
Intervention within community groups / Setting
Intervention within community groups / Setting
Intervention within community groups / Setting
Addressing community /setting specific health issues
Intervention within GN Division
Intervention within GN Division
Intervention within GN Division
Addressing community specific health issues
Intervention within MOH division
Intervention within MOH division
Intervention within MOH division
Forming local policies and intervention for positive health trends
Collective Actions in District Level
Advocacy campaign for policy level changes in national and provincial level
New directives for community activists

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