NCD prevention trough community based participatory approach,

The NIROGI Lanka project, Sri Lanka Medical Association and Ministry of Health.

Authors: Mr.TMPT Jayawardana, Dr. Palitha Karunapema. Dr. lalith Senarathne, Prof Chandrika Wejeyarathne

Background

The global burden of diseases has been in a transition from communicable diseases to non-communicable diseases throughout last decades.. Mortality and morbidity from non-communicable diseases has overrun the communicable diseases recently. In year 2016, 56.9 million deaths recorded globally and 40.5 million of this number (71%) was due to NCDs. The burden of NCDs in low or middle income countries is significant According to the figures from 2016, 77% of global NCD deaths occurred in low and middle income countries. In south East Asia is the risk of non-communicable diseases such as cardio vascular disease, diabetes mellitus, cancer, chronic obstructive pulmonary diseases and road traffic accidents has become one of the major public health issues.

In Sri Lanka, 83% of total annual deaths are due to NCDs. Most of these deaths are premature and the impact on economy is significant for the country. Multiple risk factors are considered as responsible for the rising proportions of NCDs in the country and modifiable risk factors such as unhealthy diet, physical inactivity, tobacco use, harmful use of alcohol and mental stress are more common.

Ministry of Health Sri Lanka has prioritized the need of NCD control under the master plan and has taken number of policy decisions. The preventive actions were first initiated in 2016 and now on the process. As a part of these actions, there are number of steps taken and implementation of Healthy Life Style Centers (HLCs) to early diagnose NCDs and to implement behavioral change within risky groups was one of the major steps taken. Although the HLCs are effective in screening for NCDs and providing services for already identified groups, its ability in approaching high risk groups and wider community for primary prevention activities are limited. Hence, the need of grassroots level community programs has been recognized. The Government has also recognized the need for targeting the rapidly increasing prevalence of diabetics within the lower socio-economic groups in the country and number of targeted projects was initiated. NIROGI Lanka is such an initiative and collaboration between Sri Lanka Medical Association (SLMA) and the Ministry of Health. The project aimed to take preventive measures within communities at risk of developing diabetes and cardiovascular diseases and to minimize complications among persons already suffering from diabetes. The project also aimed at establishing a low cost culturally appropriate health promotional model to empower people in suburban and highly urban Metropolitan areas towards healthy lifestyles by enhancing community participation. The activities were also expected to address the gaps in the existing

healthy life style centers such as the lack of community engagement and lack of program to improve healthy lifestyle in groups with high risk of NCDs.

The Process of NIROGI Lanka Project

This project implemented in 7 selected district of Sri Lanka including Colombo, Kaluthara, Kandy, Rathnapura, Kurunegala, Anuradhapura and Gall. This article presents planning, implementation, evaluations and the results of activities conducted under NIROGI Lanka project in three Medical Officer of Health (MOH) divisions in kaluthara district of Sri Lanka, namely Horana, Madurawala and Banadaragama. An action plan was designed prior to the implementation. One school, three mothers group and one government office were selected from each MOH division to initiate the activities.

Engage with the communities

Health Promotion Officer (HPO) was appointed to facilitate the activities in these areas. According to the action plan HPO connect with active members of the MOH and conducted facilitated discussion with them about NCDs and life style modifications. These discussions were also facilitated by the MOH responsible for the area and contributed and coordinated the communication between community leaders and the facilitator. The involvement of other stakeholders including government and non-government organizations in the area were also sought.

Initial meetings were conducted in the places suggested by community members and the participation was poor in the beginning and majority of the community did not attend. With the suggestions from active members, activities such as small Health camp and aerobic exercise sessions were organized and those events attracted more community members. Discussions were conducted with the participants for those events on improving kitchen practices to be healthier, concept of family happiness, importance of early child care and developments and discussed about identifying determinants for common health issues for particular community. The enthusiasm of the groups increased and the interaction with the program improved following these activities and it created a good platform to talk about other health issues and to encourage them to identify the determinants for those.

Prioritize determinants and actions

The facilitated discussions were more focused towards NCD risk and risk factors. The participants were motivated to take actions to reduce the risk by taking control of their lifestyle and making efforts unhealthy lifestyles. They were also encouraged to identify the exiting risk and determinants of NCDs. It was done through group discussions, group activities such as taking physical measurements etc. Active community members were given training to measure BMI and weight to hip ratio and how to body fat analyzer and blood pressure meter. Once they could monitor health status of them and fellow community members, the activity became interesting for them

These activities encouraged community members to talk about their health status and led them to identify, risk factors as well as risky behaviors in their day to day life. Identifying the

determinants for NCDs was the paramount and the identified determinants were different between communities. The participants measured the determinants and initiated activities to address the determinants. With the support and guidance of health promotion officer, they created tools to measure those activities namely activity check list, model charts, happy mood calendar etc. Those tools were also used to identify hidden determinants which increased the NCD risk.

Continuing the process

While the participation of the community improved the ability of group leaders to facilitate activities were also increased. Regular review meetings were held at related MOH office and the community group leaders, who are working with community group or represent work place, school etc were also part of meetings. These meetings enhanced the capacity of the current leaders and useful to expand the program with new activists. They have their own priority with the respective community or organization. The role of HPO was to facilitate the role of these leaders without interfering their tasks and routing program. The training programs enhanced the capacity of active leaders to act as health promotion community leaders in their settings on NCD prevention. Their activities were tailored to address the specific needs of each individual setting and led to behavioral changes for NCD risk reduction in community. Although there was a list of NCD prevention activities, only selected activities were applicable to specific settings. Priorities of the settings are varies according to the socio economic status and the level of education. Thus the ownership of the community let them to define the suitable and doable activities for them.

Evaluation of the progress

The participants engaged in selected activities and measured the progress by themselves by using methods and tools created by themselves. The HPO facilitated them on creating tools and reviewing the progress. This active involvement of participants encouraged the community members to continue on the activities. In each month HPO presented the progress of the activities in the Healthy Lifestyle Centre (HLC) meeting at RDHS Kaluthara. The staff of the HLC had the opportunity to provide feedback on the progress. The community leaders also had an opportunity to learn from the experience of other communities.

Sustaining the community generated activities

One of the objectives was to continue community generated activities without frequent facilitation. The HPO subsequently reduced number of field visits during last three months of the program and tried to continue follow-up through respected group leaders. Each group selected their own health facilitators to collect new messages on NCDs and to share them with other group members. This role was assigned to another member quarterly. The established groups were also linked with HLC and MOH clinics. This also helped the respective communities to stay updated.

Activities of these community groups were monitored two years and necessary deviations to the activities were done.

The active community members acted as field health promotion facilitators by joining this Health promotion programs .in other government institutions, non-governmental organizations, schools, and private sector work places in the area. These activities were useful to buildup the capacity of community leaders and also to expand the benefit of the program to other settings in the communities.

Observed outcome of the project

Approximately 2100 households connected with the program from 32 community settings. At least one member from each household involved. After 2 years, around 18 settings sustained to be active and continued the activities with minimum facilitation (around 400 members). These settings had 400 active members and they are also agents for their family and specific groups they are belong to. Thus the number who indirectly exposed was likely 3 or 4 times of 400.

During the project, in addition to the improvement of the knowledge of people on NCDs and the interaction with HLCs, there were number of behavioral changes observed. Community members change the custom of offering sweets including biscuits cake etc to visitors to their homes. Alternatively, herbal drinks, fruit juices and healthier options were offered. The food choices of the households were also changed. People became more concerned on junk food and deviated to home cooking.

Kitchen of the households transformed to facilitate healthy use of salt, sugar and oil by taking simple steps to measure and control those. The community environment was improved and peer learning became common and people developed the habit of sharing learned knowledge on wellbeing and NCD prevention with others. With the improved knowledge, mothers improved food choices and food preparation for school children. There was a concern on fruit and vegetable consumption. The community awareness on being physically active has improved and there were some people who started regular exercises

The HPO who evaluate the process used general check list, and pre designed tools to assess the changes. Fifty five percent (55%) of community participants reduced their weight. Majority of them reduced consumption of junk food, sugar beverages, processed food, and high salty food. Home gardening became common among members and it increase fruit and vegetable consumption of their family. Many of those community groups engaged in activities to generate extra income such as making handcrafts. The economic empowerment contributed to better life choices and improved access to healthy food. Community participants who were engaged in home gardening decided to share harvest with others and also the learned knowledge on healthy eating.

End of the two year follow-up of the project, Ministry of Health decided to institutionalize this initiative due to the positive results shown and the long term effects. Rotary International collaborated with the project to fund for next few years especially the activities changing behaviors of the work place environment of community settings.

Conclusion and discussion

This program co-exists with the prevailing public health care programs of the country and NCD prevention efforts of Ministry of Health including HLCs. It also fit in to the public health care system to improve the spectrum and the quality of the services by supporting grass root level health care workers.

As a result of this program, NCDs became a priority issue within the non-health sector programs on agriculture, local administration, education, development, micro finance etc.

Operating collaboratively with the other stakeholders, HPO acted as a coordinator at grass root level. It has enabled and gear up the current government services in all the project implemented areas.