

Raft and Ripple Model on Collective Community Actions for Health Promotion: An Experience from Sri Lanka

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ABSTRACT

A community-based health promotion project was piloted in Sri Lanka, aiming to improve the growth and development of children below 5 years from 2010 to 2012 by Plan Sri Lanka in collaboration with Foundation for Health Promotion, Ministry of Health, and Rajarata University of Sri Lanka. The project covered over a 100 community settings with an approximate population of 100,000 in 2000 families. The project was facilitated by a team of grass root level healthcare workers and facilitators from the foundation for health promotion. Small group discussions with mothers of children under 5 years of age aimed at initiating collective community actions sustained by self-monitoring mechanisms that proved their effectiveness at setting level. This study is the process evaluation component of the project evaluation conducted in 2012. Focus group discussions, key informant interviews, in-depth interviews, observations, and narratives were used to collect data until the information saturation point is reached. Data were analyzed using a constant comparative analysis method to model the process. The emphasis of this model was on promoting Collective Community Action, a process in which members become engaged in social transformation with greater enthusiasm, knowledge, and skills to affect change in their communities. The inputs, the process, and the generation of collective community actions can be conceptualized by the "raft and ripple model" described in this paper.

Keywords: Child health, Community based interventions, Health promotion, Process evaluation

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INTRODUCTION

Health Promotion and its Relevance

The term "health promotion" is becoming increasingly popular in the health and development sectors around the world. In its loose sense, health promotion encompasses any activity or initiative preventing or curing disease, and/or rehabilitating and comforting. Health Promotion also denotes the specific approach that can be used in reducing disease and promoting well-being.^[1] It employs a growing knowledge base and a specific set of skills and provides a set of tools for planners and implementers to use to make interventions more efficient and effective.

Health is defined in the WHO constitution of 1948 as "a state of complete physical, social, and mental well-being, and not merely the absence of disease or infirmity."^[2] The Ottawa Charter, 1986, defined Health Promotion as the "process of enabling people to increase control over and to improve their health," and health itself came to be seen as less of an "abstract state," and more as "a resource" allowing individuals to lead productive and happy lives: Individually, socially, and economically. In this sense, health is a resource of life rather than the object of living; it is positive and emphasizes the potential of collective and individual resources and also of physical capabilities. Health promotion, therefore, addresses the determinants of health and enables people to increase control over these to improve it. Furthermore, it enables people to address factors beyond ordinary control of the individual by catalyzing collective action. It is this participation that ensures sustainability and longevity of health promotion activity.^[1]

Health promotion aims to address the deficits of "education" and "awareness" programs which, applied alone, rarely engender lasting change among individuals and communities. It seeks to influence socio-cultural and political factors to create and sustain environments favorable to attaining positive health. While individuals are able to make informed choices that are

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appropriate to their own situations, the focus on community-motivated change encourages sustainability in the socio-cultural environment as a whole. Keeping Health Promotion at the heart of the "development strategy" furthermore ensures that "top-down" approaches are replaced with community-centered ones.^[3]

The health promotion approach also serves as a useful way of engaging communities by generating communal interest and participation in programs, and allows wider issues of well-being, self-reliance, and social responsibility to be addressed in a participatory manner. Public health issues such as suicide and interpersonal- and gender-based violence, for example, have been traditionally regarded as complex and with multiple causes, but it has now been widely recognized, however, that some causes may be significantly reduced by challenging and transforming community attitudes. For example, attitudes that excuse violent behavior on the grounds that an individual was under the influence of alcohol, was angry, or because they were "correcting" another individual's behavior, absolve the perpetrator of responsibility

and risk making the violence appear acceptable. By expanding people's understanding of "health," violence can be identified as a determinant that can significantly impede or compromise positive health. Communities become motivated and acknowledge their potential to address those factors within their socio-cultural environment that perpetuate such unhealthy attitudes.^[4]

"Children's Health" Country Program of Plan Sri Lanka

Plan is a non-profit, humanitarian, rights-based, and child-centered organization working in 50 developing countries across Asia, Africa, and Americas. In Sri Lanka, where plan has worked for 30 years, the main operational units are its three program units (PU): North West PU responsible for implementing the programs in Anuradhapura and Kurunegala Districts; and South East PU responsible for Moneragala District and the Plantations PU responsible for Kandy and Matale. Programs are guided by comprehensive 5-year Country Strategic Plans (CSP). Main themes of focus are children's health, children's education, livelihoods, water and sanitation, and child protection. These thematic areas are strategized through detailed Country Programme Outlines (CPO).

The Mid Term Review (MTR) of Plan Sri Lanka's second CSP (2006–2011) recommended, in 2008, that the strategies implemented to achieve the objectives of reducing under-nutrition among children under the age of 5, and increasing knowledge on sexual and reproductive health and HIV/sexually transmitted diseases needed to be reviewed and the interventions re-defined with enhanced community approaches to healthcare.

Plan Sri Lanka continued to acknowledge, on the basis of the national data available, that one of the major health issues affecting children in the country is the under-nutrition of those <5 years of age. According to the children's health CPO of the CSP 2, "The 2008 MTR also showed that of the children <3 years in communities where plan works 13% were stunted, 24% wasted, and 31% were underweight (as opposed to 20% in 2004 – in communities where plan has worked over 5 years). Further analysis of data on illness and the 24 h dietary recall of 223 children classified as under-nourished, showed that very few children had recurrent or chronic illnesses that could have impacted on their poor nutritional condition, but there were significant deficiencies in food intake and related behavior implying poor dietary habits as the causal factor for under-nutrition. The main behavioral factors were as follows.^[5]

1. Poor complementary feeding practices and deficiencies in introducing supplementary foods
2. Poor utilization of local foods due to cultural practices and fallacies
3. Deviation from traditional foods such as finger millet, curd, and dry zone vegetables with a bias towards pre-formulated foods and
4. Inadequate quantities of food given to children.

Plan's rights-based approach to development is known as Child-Centered Community Development, in which children, families, and communities are active and leading participants of their own development. In keeping with this approach, Plan Sri Lanka identified the community-based model of Health Promotions the most relevant strategy for its activities under the health CPO to address the causes of childhood under-nutrition. Integration of Early Childhood Development (ECD) activities into

nutrition programs are widely recommended by the experts in the field based on strong evidence emerging from studies worldwide.^[6] Therefore, evolving new program framework of Plan International recognized the importance of ECD in promoting children's well-being with the aim of promoting healthy growth and development of children between 0 and 5 years of age.

The main objective of the program was to decrease the percentage of undernourished children between age 0 and 3, from 31% to 23% in plan communities by June 2011 (Undernourished weight for age <2 standard deviations below the norm). The capacities of parents, caregivers, communities, and health staff to implement participatory health promotion processes to achieve this objective were to be improved, expecting the outcomes listed below.

1. The primary healthcare staff will be able to engage parents, caregivers and communities and to catalyze their own collective responses through a health promotion approach.
2. Parents, caregivers, and community members will be able to bring about innovative and effective collective community responses, monitor progress, and maintain the initiatives to promote healthy growth and development among children.
3. The technical capacity of the department of health will be improved to continue building the capacity of health staff, enabling them to engage parents, caregivers, and communities to catalyze community owned collective responses.

Implementation started in January 2010, in the districts of Anuradhapura, Kandy, Mathale, and Moneragala and covered over a 100 community settings with an approximate population of 100,000 in 2000 families. There were four main partners in the program – Plan Sri Lanka (setting up of objectives, providing strategic direction and model design, and facilitation of finances and logistics); foundation for health promotion (content design, facilitation of district level inputs, capacity building of field facilitators, and continuous mentoring at community level); Rajarata University of Sri Lanka (content design, facilitation of inputs at all levels, and capacity building of field facilitators), and the Health Education Bureau of the Ministry of Health (supervision and mediation between different levels of Health Departments) were the partners collaborated in the project.

The process evaluation of the project was initiated in 2011 December with the aim of conceptualizing a model that can be used to scale up the activities to other communities.

MATERIALS AND METHODS

The review team comprised three members, one each from the main two partnering agencies and an independent reviewer with a background in public health. The study population was the partners, implementers, stakeholders, and communities involved in the project in the four districts. The process evaluation incorporated individuals collaborating at various levels of project implementation and community participants in the selected settings. Purposive and snowball sampling were performed to identify study participants other than the community participants. Community members were randomly selected from the settings selected by the cluster sampling method used in the main evaluation process. The number of focus group discussions, in-depth interviews, key informant interviews, observations, and narrative presentations conducted at each level of implementation is presented in Table 1.

Table 1: Methods of data collection at each level of implementation

Level of implementation	Key informant interviews	In-depth interviews	Focus group discussions	Observations	Narrative presentations
National	13	Nil	Nil	Nil	Nil
Provincial	4	Nil	Nil	Nil	Nil
District	6	6	5	7	Nil
MOH office	8	12	8	12	4
Community settings	4	16	12	38	12
Total	35	34	25	57	16

As described in Table 1, only key informant interviews were conducted at National and Provincial levels. At the district level, all the methods of data collection were used except for narrative presentations. Formal observations were used at the district level to observe training and follow-up sessions for resource personnel at the district level. At the Medical Officer of Health (MOH) office level, all the methods of data collection were used. Observations were aimed to understand processes at training sessions and changes in the milieu of the MOH office with the training of the health workers attached to it. Narrative presentations at MOH level were experiences in grass-root level health workers in implementing the community-based health promotion project. In community settings level, all the methods were used, and observations were mainly to identify and understand the collective community actions initiated and conducted by the communities. Narrative presentations were also used for this purpose so that complex processes underlying the community actions can be interpreted in accurate and a comprehensive manner.

All interviews and focus group discussions were conducted by trained independent interviewers guided by semi-structured, preformed protocols. The interview and discussion guides were validated in terms of face and content validity by a panel of experts with local and international experiences in health promotion approach and community-based interventions related to public health. Observations were conducted in both informal and formal manner and were guided by preformed observation checklists when formal. Narratives were presented to a panel of experts and assessed for validity and reliability based on narrative action research methodology.^[7,8] All the focus group discussions, interviews, observations, and narrative presentations were video filmed with the participants consent for later reference. Data were analyzed using a constant comparative analysis method, and a conceptual model was composed based on the findings.

RESULTS

Inputs

The capacity-building package for the communities is modeled in Figure 1. The technical capacity building in this project was intended to be participatory and empowering. Participants were allowed to develop their capacities at their own pace, in the areas of their own informed interest, so the use of structured modules that would restrict creativity and flexibility of the facilitators and the participants was avoided as much as possible.

Inputs at all levels that described below were provided by Health Promotion facilitators from the Foundation for Health Promotion, Sri Lanka. Senior Health Promotion facilitators were involved in capacity building at all levels of implementation. In each district, where the process was implemented, there were two field health promotion facilitators. Unlike the senior Health

Promotion facilitators, these worked full time being residential in the district under their responsibility. Field health promotion facilitators were health promotion specialists graduated from the Rajarata University of Sri Lanka.

The following broad categories of capacity building processes were applied at all levels.

Discussions at Formal Settings

Classroom-based, reflection-feedback-consolidation processes

These were conducted by a senior health promotion facilitator. A series of discussions were held at a frequency of once every 2 months. The first ever encounter with a group was of 2 days duration and subsequent meetings were single day sessions. Those who attended the subsequent discussions were the same set of participants.

The principal objective of the first encounter was to engage the participants with the program by raising their interest and enthusiasm to initiate a process to improve their health. The sessions focus on understanding health as a positive concept. Then participants are encouraged to reflect on how their actions and the actions of others can have wider effects on health of their communities. Participants become capable to recognize that factors affecting household and individual practices are modifiable and that changing negative factors in the community can have positive impacts on individual health. The sessions are interactive, combining psychological self-reflection with verbal interaction with other participants and the facilitators. In the 2nd day, participants are given the opportunity to choose a relevant "health goal" to discuss with the facilitator at length. Examples of goals selected include reducing body mass index, and promotion of healthy growth among children. At the end of the initial encounter participants take over a task to implement in their community environments.

In subsequent meetings participants have the opportunity to share their experiences of implementing their strategies. Others are then able to contribute further ideas for improvement of strategies and the facilitator continues to encourage and share ideas from other similar initiatives.

Community level programs

At the community level, formal sessions were held in association with community weighing posts, meetings of community-based organizations, community gatherings organized specifically for this purpose, family days organized by plan staff, or in formal settings of schools or pre-schools. The content of the discussions was customized to the particular context of the setting. Conducted by a senior facilitator, the structure of the sessions is generally similar to all formal sessions as described above. These sessions were preceded and followed-up by a rigorous field level mentoring

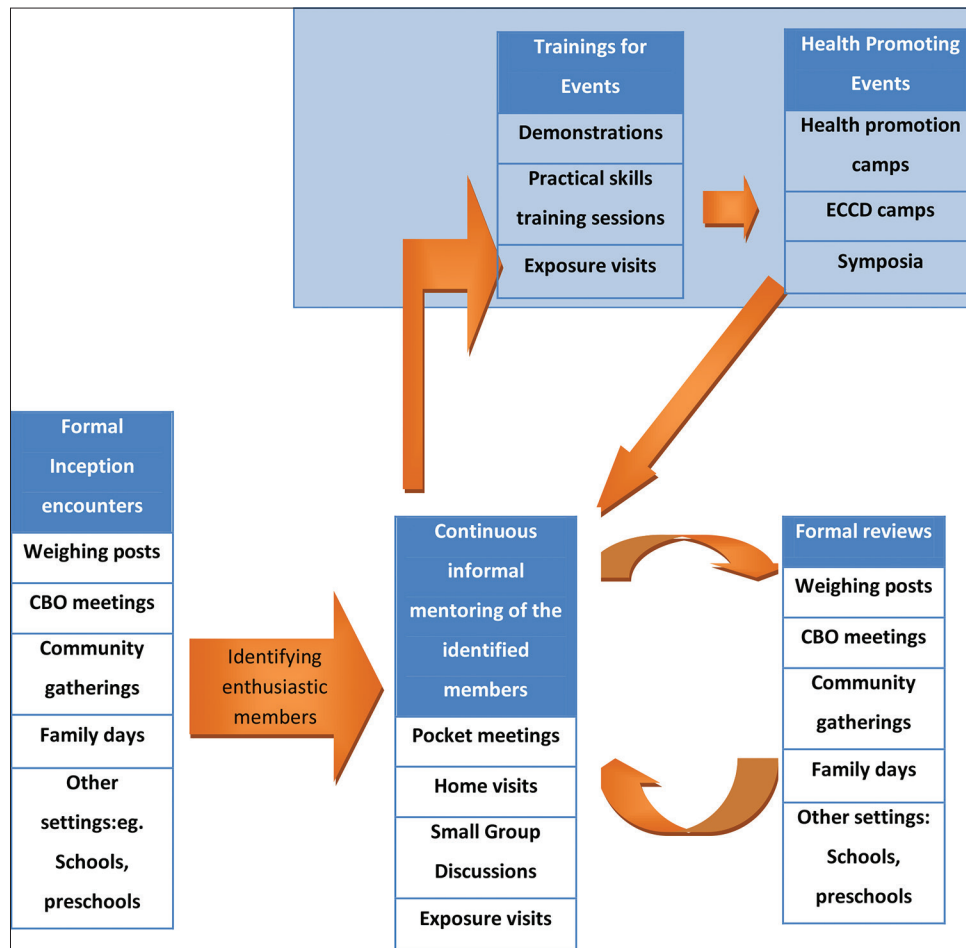


Figure 1: Capacity-building frame-work for the communities

process by the Public Health Midwife (PHM) and/or the Health Promotion field facilitator.

Health Promoting Event-based Training

When the process at the community level progressed to a level where members of the community, field health promotion facilitators and the health staff decided the knowledge and skills as well as the enthusiasm developed by the group members are best disseminated throughout the community by an event; such health promotion events were facilitated. When groups of participants decided to conduct health promoting events in their respective communities/ settings, they needed specific event-related health promotion skills and knowledge. Health Promotion Camps, Early Childhood Care and Development Camps, Mini-symposia, and the symposia at District and National level are the events so organized. These events will be evaluated and documented in a separate publication.

Informal Discussions, Mentoring, and Follow-up with Community Groups

Field health promotion facilitators provided inputs during the discussions held initially at weighing posts, as it was the easiest access point for a PHM. Later they met with the enthusiasts in the community pre-identified during the formal sessions or meetings at the weighing clinic. These were held as pocket meetings held in

the field, on someone’s lawn or a communal gathering place. They then aggregated members from these pocket meetings into small groups and facilitated discussions.

Exposure visits were organized for health staff and communities as a tool to enhance enthusiasm and to provide opportunities to learn and share innovative activities from peers. The initiatives, changes reported by the community members, and the changes they observed were later discussed based on the five principles of the model.

Central to the efficacy of this approach is for individuals to learn how to improve their own well-being in order that they can promote health in others, the application of new skills to the participants’ own lives and the concurrent changes in attitude and outlook on life are primary motivators for them to address the well-being of others. The process is then cyclical and self-perpetuating: Observation of the improvement in others as a result of their own efforts leads to further improvement of their own health and, in turn, even further improvement in the health of others.

The Process – Raft and Ripple Approach for Collective Community Actions

The inputs, initiation of a process as a result of the outputs, and the generation of collective community actions can be conceptualized by the “raft and ripple effect,” as given in Figure 2.

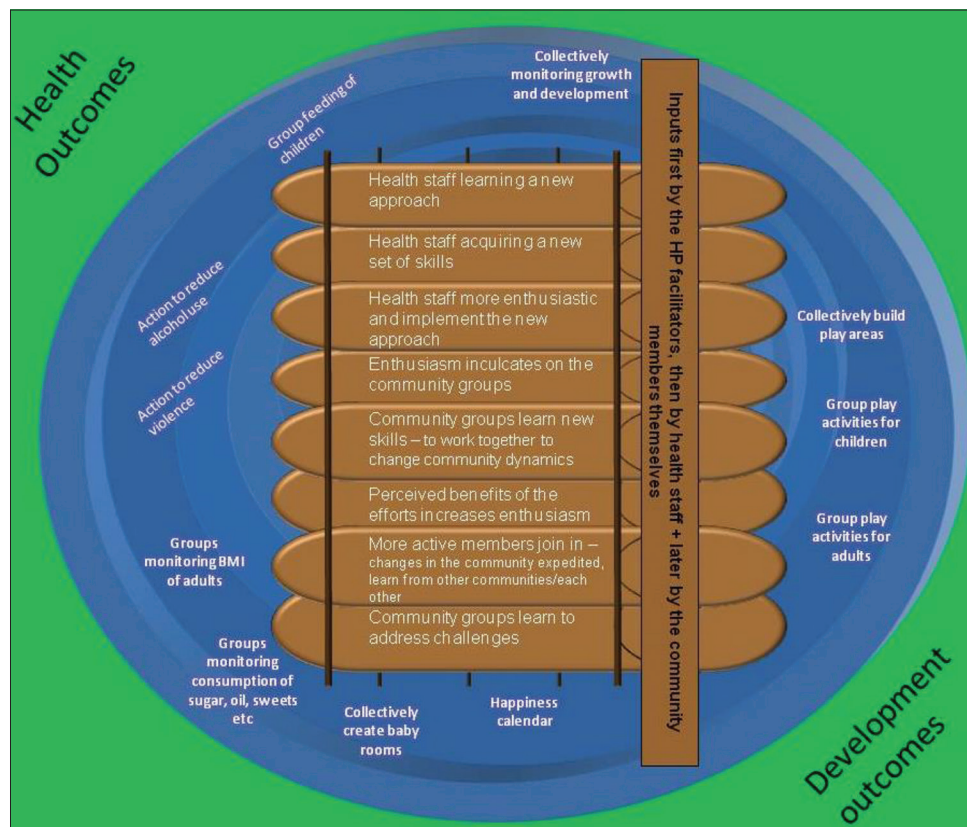


Figure 2: The raft and ripple effect of community-based health promotion process: A conceptual model

Even though external facilitators were necessary for the initial inputs, with time, communities and the existing health staff could take over the input process gradually as their capacity is built (“pole” for steering the raft). Thereby, it becomes a self-dependent process. The process of growing enthusiasm among the health staff, inculcating the enthusiasm and skills among communities, and them gaining control over the initiatives can be visualized as parallel sheets bound together to form the “raft.” This reflects that some phenomena of change in the process are parallel and interdependent. At the same time as the changes among the health staff and community groups begin to appear, collective action from the groups start to emerge as ripples.

DISCUSSION

The output of formal inductions at different levels was the initiation of health promotional processes in various settings (e.g., Offices, villages, weighing posts, and schools) by the participants. Tasks they undertook at the end of the sessions provided the purpose and the basis to initiate a process. For example, PHMs, after the initial encounters held at the MOH office with the senior health promotion facilitators, undertook discussions with women who attended clinics for monthly weighing of their infants and young children.

Facilitators first provide an overview so that the participants understand the broader meaning of health, its relevance to daily living, and their potential capacity to influence it. Then, the scope of potential aspects of life that could be improved with health promotion processes was demonstrated to the participants. Content of the discussion that followed depended

on the most suitable entry point jointly decided by the Field Health Promotion facilitators, PHMs, and the participants. The topics usually undertaken by groups were: Promoting growth and development of children, because the target group was mothers of young children; promoting healthy eating habits; promoting regular physical exercise, particularly among women; and alcohol prevention and promotion of family well-being. Depending on the topic selected, facilitators and the PHM discussed the determinants, which can be influenced through collective action to challenge the status quo and improve the situation. By understanding the relevance of improving well-being to leading a happy and productive life, that its determinants are changeable by acting together and recognizing the control that they were going to have on the process participants got motivated. Further, when the facilitators shared experiences from other communities, the participants at the new setting realized that there were other communities who have done it successfully and got interested more.

At the end of this initial discussion, most of the participants got together to form neighborhood groups of five to six families. At almost at every setting, there were a proportion of mothers who decided not to join the groups. This proportion directly corresponded to the quality of facilitation of the initial discussion. Every group decided on a task to carry out as a group. With the help of the facilitators groups furthered their understanding on the determinants of the selected health goal. Then, the groups discuss various possible responses to influence and change the status of the determining factors. They selected few practical responses which they think will be effective to change the status quo. Sometimes the facilitators had to share few examples that

they knew of or to arrange exposure visits for the groups to get over inertia.

Once the small group starts with some simple activity, the facilitators and PHM nurture the change and motivate the group even more. They also sensitize the groups to appreciate the small, but significant benefits they achieved initially, that otherwise often go unnoticed. The members of the small group shared their experiences with others in the community. Existing community-based forums, such as the "death donation society," women's societies, or "farmers associations" provided opportunities for them to meet people who do not have small children and therefore are often not a target audience of PHMs. Sharing was mostly done during casual conversation, for example, while awaiting the meetings to start. This ignited flames of enthusiasm among new people. Sometimes the pioneer members were invited to speak more formally in other regular forums and more people started making the improvements in their lives. The pioneers helped with the followers. This made the pioneers wanted in the community adding to their pride. Sometimes the pioneers belonged to an excluded family or a group. One mother who had studied only up to Grade 2, was poor in reading and writing skills, and was subjected to caste-based discrimination in a community, helped other more educated mothers to create their own "happy-child book". With this she gained respect and her part of the community was morally re-included in the rest of the community.

With the increasing engagement of the mothers and the community, the enthusiasm of the PHM grew too. She started to enjoy her job more. Some PHMs reflect that how unhappy they were before for being posted in a remote village, away from their families and loved ones but with the initiation of health promotion process how they enjoy their work now. *"I feel that I am the luckiest government official in the world"* shared one PHM who once was counting her days to get a transfer out of the area. The members of the community feel a sense of bonding with the PHM now, which had made her job easier. PHMs perceive that male participation also increased in health-related activities as there are spaces for men to get involved as well.

CONCLUSIONS AND RECOMMENDATIONS

What this process leads to is a self-propagation of a cycle of motivation, identification of determinants, influencing the determinants through a collective action, monitoring progress, and altering responses; without external inputs.

Self-propagation of this cycle does not mean that communities do everything on their own and duty bearers (service providers) do not have any responsibilities. The analysis of whether the duty bearers fulfill their responsibilities is performed by the communities in the identification of determinants, and demanding better quality of essential services becomes a collective action.

This phenomenon, up to a certain extent, is now seen in many of the communities where the program was successfully

implemented. The focus group discussions and interviews for the compilation of this report took place in November 2011. By this time, the funding and external facilitation at all levels had been temporarily suspended for almost 4 months by Plan Sri Lanka. Nevertheless, the collective action that generated was observed to be continuing even without external support.

Thus Raft and Ripple model can be adapted to different settings to generate collective community actions for health promotion.

CONFLICT OF INTEREST

The authors declare no potential conflicts of interest with respect to research, authorship, and/or publication of this article.

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