

Topics : The trend of global health

<Report>

The utilization of the safe community assessment tool and development of community action plan for injury prevention

Jonathan P. GUEVARRA¹⁾, Juanita A. BASILIO²⁾, Lita L. ORBILLO²⁾,
John Juliard L. Go³⁾, Esperanza Anita E. ARIAS⁴⁾

¹⁾ Department of Health Promotion and Education, College of Public Health, University of the Philippines Manila

²⁾ Family Health Office, National Center for Disease Prevention and Control, Department of Health, Philippines

³⁾ Office of the Representative in the Philippines, World Health Organization

⁴⁾ Quezon City Health Department, Quezon City, Philippines

Abstract

Objectives: (1) To assess the community in terms of road safety; (2) to find out if other places/areas and structures in the community have the necessary safety measures in place; and (3) to formulate a plan of action based on the results of the assessment.

Methodology: The status of the selected community was assessed using the Safe Community Assessment Tool developed by the Philippines' Department of Health in collaboration with its partner agencies and institutions. The tool focused on two aspects: (a) road safety covering, pedestrian, passenger, and motorists; and (b) other public places and structures covering electrical posts and recreational areas. All areas/sites (sitios) in the whole village were assessed. Results were presented in the plenary, and an action plan was formulated based on the results of the community assessment.

Results: Assessment teams composed of representatives from different sectors evaluated the seven sites in their community utilizing the Safe Community Assessment Tool. The results of their evaluation were consolidated and presented in a community plenary session to determine the most common gaps in terms of the safety indicators in the tool. The most common gaps noted were the lack of safety/traffic signs and pedestrian lanes; and open canals/ manholes. Stray animals and tangled and dangling electrical wires were also seen in some of the evaluated areas. An Action Plan that focused on simple and cost-effective community interventions was made to address the identified problem areas.

Conclusions: Community participation was proven to be an effective component in coming up with a community-based action plan. Different sectors of the community must be highly involved in all phases of community activities if tangible results are to be achieved and sustainability of activities is to be ensured.

keywords: safe community assessment tool, community participation, injury prevention

(accepted for publication, 11th September 2013)

I. Introduction

According to the WHO Global Burden of Disease data in 2002, over 700,000 children under 15 years of age died due to injuries [1]. The Philippine National Injury Survey done in 2003 revealed that the fatal injury rate in

childhood (0–17 years) was 59 out of 100,000 children, with road traffic accidents and drowning as the leading causes [2]. Road traffic accidents accounted for 262,000 child deaths globally in 2004 [3]. This data shows that injury is a health concern that must be given proper attention by authorities.

Each case of child injury has dire consequences. For

Corresponding Author: Jonathan P. Guevarra
E-mail: jpguevarra@gmail.com

every child who dies due to injury, there are several thousands of children who live with varying degrees of injuries, including their effects on the psychological and social well being of the child. Injuries also have negative economic consequences brought about by the cost of diagnosis, treatment, and rehabilitation. Injuries can result not only in the loss of limbs and lives but also of time spent in playing or being with family. Likewise, injury affects the lives of the injured as well as their families and people with whom they interact.

There is a need to create safe environments where children live, learn, and play. As a response to the growing concern for injuries affecting children in the country, the Philippines' Department of Health, in collaboration with various stakeholders, developed the Safe Community Assessment Tool [4], which can be used to assess the community environment in terms of safety on the road as well as other public places and structures. This is geared towards assisting the community in formulating action plans to create safe environments for children. In December 2010, this tool was utilized in a village in the Northern Philippines, and results served as a basis for developing a community-based action plan.

This report describes the assessment of a community in terms of (a) road safety (covering the road, pedestrian, passenger, and motorists) and (b) other public places and structures (covering electrical posts and recreational areas). It also describes the action plan formulated based on the results of the assessment done in the community.

II. Methods

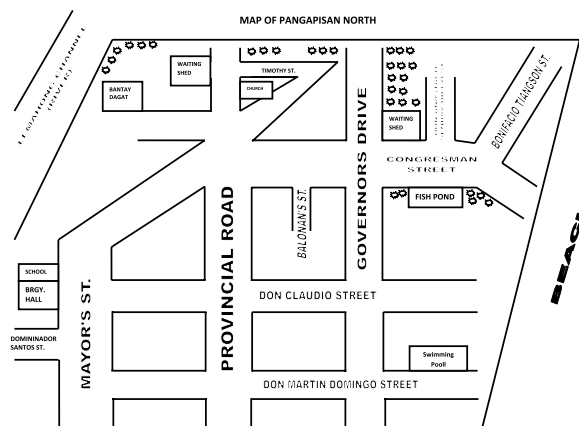
There were various activities undertaken in creating safe environments for children. For the purpose of this report, the tool utilized was adopted from the Safe Community Assessment Tool crafted by the Philippines'

Department of Health multi-sector Technical Working Group on Child Injury Prevention and Control. The original tool contains standards for road safety, public places and structures. In addition, it also contains items involving the behaviour of the motorists, pedestrians, passengers, and children. The assessment focused only on the road safety, public places and structures in the community.

In December 2010, a community (*see location map of Pangapisan North, Lingayen, Pangasinan*; Figure 1) in a province in Northern Philippines was selected based on the recommendation of the Philippines' Department of Health. The local political and health leaders were briefed on the project and their permission and participation were obtained. They, in turn, identified community members (village council members — chairman and council members) and representatives from different sectors (public health nurse, midwife, school teachers, village health workers, and community health and safety volunteers) to be part of the community core group. To prepare them for the tasks ahead, the members of the core group were oriented on the project. The training on various aspects of Injury Prevention and Control included basic concepts on injury, child injury, and a safe community. The majority of the training time was spent on the Safe Community Assessment Tool — what each item refers to and how to use the said tool. The core group was further subdivided into sub groups (composed of at least three members) to cover each area, ensuring that each group is represented by different sectors. They were given ample time to assess the site assigned to them using the Safe Community Assessment Tool. A plenary session was held where the results of the assessment per site was presented; a consensus on prioritization was reached; and a plan of action was formulated.



Location Map of Lingayen, Pangasinan, Philippines



Vicinity Map of Pangapisan North, Lingayen, Pangasinan, Philippines

Figure 1 Location of Pangapisan North, Lingayen

III. Results

The community participants were put into seven groups (composed of at least three members) and were assigned to assess the areas in the community, namely Sites I, II, III, IV, V, VI, and VII (Aplaya). Each group assessed their assigned area using the safe-community assessment tool, and the results of the assessment were presented in a village (barangay) plenary, presided over by the Village Chairperson on Health and Sanitation. Through a consensus, the community concerns were prioritized taking into consideration the identified problems that need to be addressed at the soonest possible time and community resources. The most common gaps noted were: (1)–Absence of signage indicating school and church zones, intersections, dead-ends, speed limits, yielding, etc.; (2)–Absence of pedestrian lanes in critical crossing areas like schools, churches and other major thoroughfares; (3) Open canals and manholes; (4) presence of stray animals; (5) tangled electrical wire. Taking these identified gaps into consideration, the members of the group came up with a community-based plan of action inspired by suggestions from community members.

The Community-based Plan of Action is a matrix composed of seven columns/parts: problem (the identified community concern); activity (action that needs to be carried out to address the problem); time frame (target implementation period of the activity); target (area where the activity will be implemented); resource requirement (the material resources needed to achieve the activity); person/organization responsible (the assigned person or organization tasked with carrying out the activity); and indicator (the measure that will show that the activity is being successfully implemented). The community action plan is presented in detail in Table 1.

The preparation of the community action plan was facilitated by the main author.

The head of the village council committee on health and sanitation spearheaded the discussion on the preparation of the details of the plan, then presented it to the members for comments and approval.

IV. Discussion

Apart from their homes, the community is where children spend most of their time. Considering that it consists of playgrounds, schools, churches, markets, etc. the community then becomes vital in preventing child injuries. Therefore, it is imperative that, aside from the home, communities should be made safe for children as well [5].

According to the WHO Collaborating Center on Community Safety Promotion (Karolinska Institutet, Stockholm, Sweden) -there are six indicators for safe communities: (a) an infrastructure based on partnership and collaboration, governed by a cross-sectional group that is responsible for safety promotion in the community; (b) long-term sustainable programs covering both genders and all ages, environment and situations; (c) programs that target high-risk groups and environment, and programs that promote safety for vulnerable groups; (d) programs that document the frequency and causes of injury; (e) evaluation measures to assess their programs, processes and effects of change; and (f) on-going participation in national and international safe communities networks [6].

The Philippines has initiated efforts to come up with communities that are safe for raising children, such as the pilot project in Pangapisan North, Lingayen, Pangasinan. The National Policy and Strategic Framework on Child Injury Prevention [7] and the National Policy on Violence and Injury Prevention [8] provided the frameworks for multi-sector participation and collaboration for preventing child injury. The involvement of various sectors of the village of Pangapisan North during the different phases of the initiative show how important multi-sector participation is.

Though much still needs to be done, the Department of Health (DOH) has undertaken the first steps in initiating activities in order to come up with a community that is safe for children. In 2009, the DOH, in collaboration with various stakeholders, outlined the characteristics of a safe community, focusing on road safety (covering roads, pedestrians, passengers and motorists) and other public places and structures (covering electrical posts and recreational areas). An assessment tool was developed covering the above-mentioned characteristics.

The application of the Safe Community Assessment Tool gives the local community the opportunity to do its part in ensuring that their constituents live in an environment that protects them from harm. Most of the checklist indicators (e.g., has covered manholes; absence of stray animals; presence of pedestrian lanes; signage and pedestrian crossing signs; has secured electrical posts and power/cable lines) are simple, can be found or must be present in the community, and may be considered trivial by some people. In fact, most of the indicators tend to be overlooked. Yet, however simple and trivial they may seem, they play a large role in ensuring the safety of people, especially growing children. Signage, for example, serves as a warning: some actually tell people what to do (yield, obey speed limits, etc.). Pedestrian lanes indicate a safe place where people can cross and serve as a warning for motorists to

Table 1 The Community Action Plan for Injury Prevention

Problem	Activity	Time Frame	Target	Resource Requirement	Person/Organization Responsible	Indicator
Lack of signage / traffic signs	Putting up of signage and traffic signs	1 month	Critical areas: <ul style="list-style-type: none"> • School Zones • Churches • Intersections 	<ul style="list-style-type: none"> • Steel Plates • Steel Poles • Reflectorized Paint • Paint Brush • Cement • Gravel 	<ul style="list-style-type: none"> • Village Chair, Committee on Public Works, Health and Sanitation • World Health Organization • Department of Health • Parents and Teachers Association • Faith-based groups 	<ul style="list-style-type: none"> • Number of signage / traffic signs put up • Proportion of identified areas with signage / traffic signs • Number of road traffic accidents
Absence of pedestrian lanes	Painting of pedestrian lanes	1 month	<ul style="list-style-type: none"> • School Zones • Church Zone • Congressman Street • Governor's Drive 	<ul style="list-style-type: none"> • Paint • Paint Brush 	<ul style="list-style-type: none"> • Village Chair, Committee on Public Works • World Health Organization • Department of Health • Parents and Teachers Association • Faith-based groups • Community members 	<ul style="list-style-type: none"> • Proportion of identified areas painted with pedestrian lanes • Number of injuries resulting from crossing the street in the target areas identified
Presence of open canals and manholes	Construction of manhole covers and box culverts	1 month	<ul style="list-style-type: none"> • Site VII (Aplaya) • Don Dominador Santos Street • Don Martin Domingo • Site III • Don Claudio and Governor Drive's intersection 	<ul style="list-style-type: none"> • Steel • Cement • Gravel • Wires • Plywood (2 × 2 × 14) • Nails 	<ul style="list-style-type: none"> • Village Chair, Committee on Public Works • World Health Organization • Department of Health • Parents and Teachers Association • Community members 	<ul style="list-style-type: none"> • Proportion of identified open manholes and open canals covered • Number of accidents / injuries as a result of open manholes / canals
Presence of stray animals (dogs, cats, chickens, goats, etc)	Passage of a Barangay Ordinance regulating stray animals	1 month	<ul style="list-style-type: none"> • Pangapisan North 	<ul style="list-style-type: none"> • Copies of national laws and local ordinances 	<ul style="list-style-type: none"> • Village Council 	<ul style="list-style-type: none"> • Village Ordinance passed, disseminated and implemented • Number of bites caused by stray animals (dogs, cats) • Number of accidents / injuries caused by stray animals
Hanging/ tangled electrical wires	Request local electric company to fix hanging electrical wires	3 months	<ul style="list-style-type: none"> • Pangasipan North 	<ul style="list-style-type: none"> • Letter to Electric Company through Engr. 	<ul style="list-style-type: none"> • Village Chair, Committee on Public Works 	<ul style="list-style-type: none"> • Request letter to Electric Company submitted • Hanging electrical wires fixed

slow down. Based on these, interventions would also be simple, cheap and affordable. The use of the Safe Community Assessment Tool also enables the community to analyze data and come up with doable strategies and activities using the most simple and cost-effective resources and materials available. The most creative

communities can even utilize indigenous materials, which are readily available and abundant in their community, and which would be as effective as the commercially available ones. The experience in the selected site also embodied the importance of multi-level preparations.

V. Conclusions and Recommendations

Community participation was proven to be an effective ingredient in coming up with a doable community-based intervention plan. Different sectors (village leader and committee chairman on health, community nurse, midwife and volunteers; teachers; village safety committee members and other concerned residents and organizations) of the community must participate in all phases of community activities if a tangible result and sustainable intervention are to be realized.

The community is hereby encouraged to proceed to the next phase, which is the implementation of the planned interventions. If carried out, this is going to be the start of shaping a community that is safe for its people in general, but for children in particular. However, when implementing interventions that will make use of the identified resources, the community must be creative and innovative in how it uses the materials indigenous to the community. In the same way, involvement of the different sectors of society must be encouraged in this very important community initiative.

For the identified sectors or institutions that can assist the community in implementing the plan, they must ensure that the culture of doling-out is not being cultivated in the minds of the community. They may assist the community in coming up with project proposals which they can submit to agencies that support similar initiatives. They can also be of assistance in educating the community on the process and benefits of networking.

The Department of Health is also encouraged to use the safe community assessment tool in other areas in order to create more communities that are safe for its people and children in particular. To do this, the DOH will need the support of the Department of Interior and Local Government (DILG), Local Government Units (LGUs) and other similar-minded groups and institutions. In a broader scope, orientation activities on Safe Settings must be done in the Centers for Health Development (CHD) nationwide and the CHD must cascade this to the provinces and local government units.

Acknowledgments

National Center for Disease Prevention and Control (NCDPC), Department of Health (DOH), headed by Dr. Eduardo C. Janairo, for unwavering support; World Health Organization (WHO), headed by Dr. Soe Nyunt-U (WHO Representative in the Philippines) and Dr. Rajam Krishnan (Technical Officer, WHO-WPRO), for providing technical assistance and for the financial support to this pilot project; and the Village Chairman, Chair and Vice-Chair of the Village Health and Sanitation Committee, Members of the Council, and Representatives of the different sectors and community organizations of Pangapisan North, Lingayen, for their active participation and full support in all phases of the project.

This project is part of the Philippines' Department of Health program on Child Injury Prevention and Control.

References

- [1] Global Burden of Disease. World Health Organization 2002.
- [2] Quizon MC, Linnan M. Philippine National Injury Survey (PNIS) 2003.
- [3] Peden M, Ozanne-Smith J, Branche C, Rivara F. World Report on Child Injury Prevention, Edited. World Health Organization, Switzerland, 2008.
- [4] Department of Health, Philippines. The Safe Community Assessment Tool, May 2009.
- [5] Department of Health, Philippines. Training Module on the Administration of Safe Settings Assessment Tools, May 2009.
- [6] Ekman DS, Svanström L. Guidelines for applicants to the International Network of Safe Communities and Guidelines for maintaining membership in the International Network of Safe Communities, WHO Collaborating Centre on Community Safety Promotion Karolinska Institutet, Stockholm, Sweden. November 2008.
- [7] National Policy and Strategic Framework on Child Injury Prevention (Administrative Order No. 2006-0016). Department of Health, Philippines, 2006.
- [8] National Policy on Violence and Injury Prevention (Administrative Order No. 2007-0010). Department of Health, Philippines, 2007.

コミュニティにおける安全評価ツールの活用およびそれに基づく 傷害予防に対する行動計画の開発

抄録

目的：(1)路上の安全面からみたコミュニティを検討すること，(2)コミュニティにおける路上以外の場所や構造物で安全対策が必要なものを見つけること，および(3)安全評価に基づいたコミュニティの行動計画を組み立てること，を目的とする。

方法：選択されたコミュニティの安全に関する状況は，フィリピン保健省と協力機関が開発した安全評価ツールを用いて評価された。主として，(a)道路，歩行者，乗客および運転手，および(b)道路以外の場所と電柱や娯楽施設を含む構造物の2つの側面からコミュニティ全体における安全面が検討された。

結果：さまざまな分野からの代表者で構成された評価チームが，コミュニティにおける安全評価ツールを活用し，コミュニティの7つの場所を評価した。その評価結果がまとめられ，ツールの中で示されている安全指標から共通している相違点を確定するためコミュニティの総会が開催された。指摘された安全面における相違点は，安全／交通標識の不足，歩行者通路の欠如，囲いのない水路／蓋がないマンホールの順で多かった。野良犬や縫れてぶら下がっている電線も一部のコミュニティで見られた。住民は，特定された問題箇所に取り組むため簡便で費用効果のよいコミュニティの介入に焦点を当てた行動計画を作った。

結論：住民参加は，コミュニティに基づいた安全対策の行動計画を考案するにあたり有効な要素であることが確認された。住民が具体的な成果を達成し，持続可能な活動が確保される場合，コミュニティのさまざまな分野からの関わりがコミュニティ活動のすべての段階から必要であることが示唆された。

キーワード：コミュニティにおける安全評価ツール，住民参加，傷害防止

Jonathan P. GUEVARRA¹⁾, Juanita A. BASILIO²⁾, Lita L. ORBILLO²⁾,
John Juliard L. GO³⁾, Esperanza Anita E. ARIAS⁴⁾

¹⁾ Department of Health Promotion and Education, College of Public Health,
University of the Philippines Manila

²⁾ Family Health Office, National Center for Disease Prevention and Control,
Department of Health, Philippines

³⁾ Office of the Representative in the Philippines, World Health Organization

⁴⁾ Quezon City Health Department, Quezon City, Philippines