



Original Article: **Awakening Community Resilience: Strengthening Post-Crash Support for Road Traffic Accident Victims through Sarvodaya's Community-Based Initiatives (A Case Study)**

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Keywords: Post-crash care, Community-based initiatives, RTA

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Abstract

Introduction: The provision of crash care presents a pressing health concern globally, with community-based initiatives offering a cost-effective approach to interventions. The objective of this study was to elucidate the potential community-based initiatives to enhance post-crash support for victims of road traffic accidents, specifically focusing on the efforts of Sarvodaya: a non-governmental organization in Sri Lanka.

Methods: This case study employed a mixed-method approach, incorporating both quantitative and qualitative components. Data collection was done using self-administered questionnaires and Key Informant Interviews. Purposive sampling was done to identify informants (n=37) for the questionnaire survey.

Results: While the informants had mixed perceptions of Sarvodaya's present initiatives to support post-crash care, the REACT – Community Life Saver initiative garnered majority

for its potential to address the needs of the Road Traffic Accident victims. Community engagement was deemed insufficient, underscoring the need for enhanced awareness programs. Collaboration with existing resources, including Community Lifesaver Programs and the Red Cross, was identified as pivotal. Strategies for community-based interventions, including awareness campaigns, first aid training, improved emergency response systems, and victim advocacy, were prioritized for implementation. Implementation challenges such as resource constraints, behavioural issues of both drivers and pedestrians, communication gaps, and policy-legal concerns were highlighted. Addressing these challenges is crucial for the effective support of Road Traffic Accident (RTA) victims at the community level.

Conclusion and recommendations: The study concludes that Sarvodaya has the potential to spearhead community-based initiatives aimed at enhancing post-crash

support for road traffic accident victims, pending the effective resolution of identified constraints.

Keywords: Post-crash care, Community-based initiatives, RTA

Introduction

Road traffic accidents cause nearly 1.3 million deaths and 50 million injuries in the world each year. This situation particularly affects low and middle-income countries which is unacceptable both in absolute and relative terms. However, it has remained unchanged for the past 20 years, despite targeted global efforts to arrest it⁷.

Sri Lanka records an annual average of 38,000 road accidents, resulting in 3,000 fatalities and 8,000 cases of severe injuries, posing a public health challenge for the nation⁵.

A broad and integrated approach to support RTA victims, enabling them to mitigate both the immediate and long-term effects of a crash event, shall facilitate their return to functionality and independence. As such an effective post-crash response necessitates the harmonious integration of trauma care, mental health services, legal support, and legislative measures.

Post Crash response

Post-crash response refers to a coordinated set of actions and procedures undertaken immediately after a crash event to address the needs of those involved, minimize further harm, and provide appropriate medical, rescue, and support services. It encompasses various activities, including emergency medical care, extrication of trapped individuals, securing the accident scene, and notifying relevant authorities. Post-crash response aims to save lives, prevent injuries, and mitigate the impact of

the accident on individuals and the community at large, thereby enhancing the survivability of crash victims⁶. Post-crash care consists of several components. They are outlined in figure 01

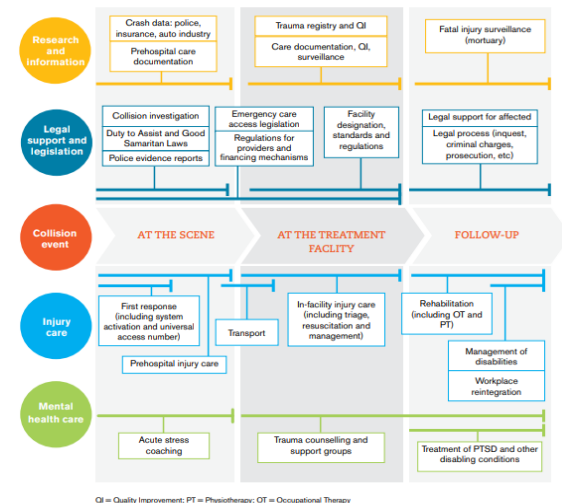


Figure 01: Key components of post-crash response (Supporting Those Affected by Road Traffic Crashes Post-Crash Response 2 Post-Crash Response, 2016)¹¹.

The support groups, including non-governmental organizations, play a pivotal role in providing immediate post-crash care for RTAs, addressing both victims and the broader impact of these incidents. Its function extends beyond immediate medical attention to encompass its wider influence on road safety. This study intends to explore potential community-based initiatives to enhance Post-Crash Support for Road Traffic Accident Victims by Sarvodaya which is a non-governmental organization in Sri Lanka.

Sarvodaya

The Sarvodaya Shramadana Movement of Sri Lanka consists of the main incorporated body officially known as Lanka Jathika Sarvodaya Shramadana Sangamaya, a group of legally independent units catering to specific fields of development activities

and the village-level Sarvodaya Shramadana Societies.

Sarvodaya Disaster Management Centre

The Sarvodaya Disaster Management Center (SDMC) is a key unit of Sarvodaya, which is dedicated to community-based disaster response. SDMC provides extensive training to Sarvodaya volunteers and community groups, ensuring they are equipped for effective disaster response. This is exemplified by the Community Life Saver Project, "CL REACT." During emergencies, SDMC mobilizes trained volunteers through the Sarvodaya Network to mitigate disaster risks at the community level.

Objective

The objective of this study is to elucidate Potential Community-Based Initiatives to Enhance Post-Crash Support for Road Traffic Accident Victims by Sarvodaya.

Methodology

- I. Research Setting: The study was conducted at the Sarvodaya Headquarters in Moratuwa, Sri Lanka.
- II. Study Design: This research employed a mixed-method approach, incorporating quantitative and qualitative components.
- III. Study Methods: Data collection methods included the distribution of questionnaires and conducting Key Informant Interviews.
- IV. Study Population: The study targeted officers in managerial roles at the Sarvodaya Headquarters, volunteers, and district coordinators.
- V. Period of data collection: March 17, 2024, to April 6, 2024.
- VI. Sampling: Purposive sampling was utilized to ensure comprehensive

coverage of potential community-based initiatives aimed at enhancing post-crash support. The sample size was thirty-seven (37). Data collection continued until saturation was achieved.

- VII. Study Instruments: A self-administered questionnaire was developed to collect demographic and substantive information. Key Informant Interviews were also conducted with the Head of Field Operations and the Project Manager of the Disaster Mitigation Project.
- VIII. Development of the Questionnaire: The questionnaire covered various areas including participant profiles, awareness of RTAs, existing support systems, community engagement, needs and priorities, potential initiatives, implementation challenges, and suggested solutions. The questionnaire was reviewed by the Director of Sarvodaya Institute of Higher Learning, and a pretest was conducted with two Sarvodaya volunteers for validation.
- IX. Method of Data Collection: The self-administered questionnaire was distributed to all participants by the principal investigator (PI). Key Informant Interviews were conducted by the PI. Data were manually recorded, and participants were given the option to respond to the questionnaire in their preferred language.
- X. Data Analysis: Data were entered into Microsoft Excel 365 for analysis. Descriptive statistics, such as proportions and percentages, were used to analyze categorical data.

Results

Participants profile

The questionnaire survey predominantly included District coordinators, which collectively accounted for 88% of Sri Lanka's administrative regions (n=25). The districts not represented in the survey were Matara, Batticaloa, and Mannar. Officers in the Sarvodaya headquarters and volunteers were also represented. Figure 01 below shows the distribution of the participants (n= 37) in the questionnaire survey.

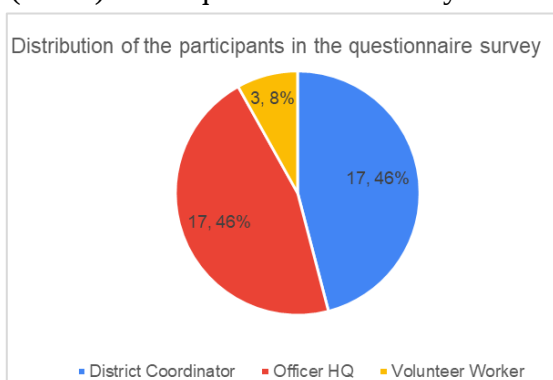


Figure 01: Distribution of the participants in the questionnaire survey.

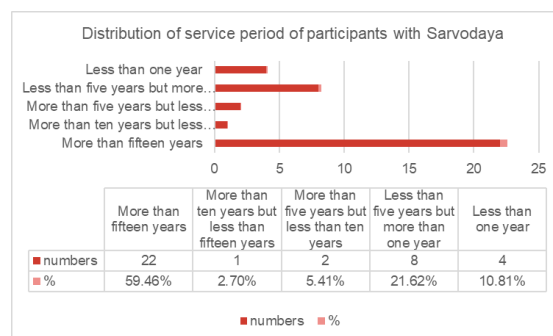
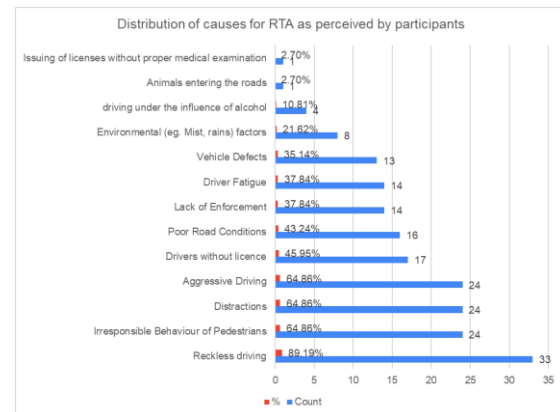


Figure 02: Distribution of service period of participants in the questionnaire survey.

According to Figure 02, over 60% (n=23) of the participants reported having worked with Sarvodaya for more than 10 years, thereby collaborating and strengthening the survey's findings.

The distribution of causes for Road Traffic Accidents in different districts as claimed by the participants is shown in figure 03.



Over half of the respondents have asserted that behavioural issues among both drivers and pedestrians are the primary contributors to Road Traffic Accidents (RTAs). These issues include reckless driving, irresponsible pedestrian behaviour, distractions, and aggressive driving.

The difficulties encountered by RTA victims in accessing post-crash support are summarized below (Table 01).

Table 01: Difficulties encountered by RTA victims in accessing post-crash care (n=37)

Difficulties	Count	%
Legal challenges	28	75.68%
Transportation challenges	21	56.76%
Financial hardship	19	51.35%
Loss of occupation	14	37.84%
Psychological Trauma	14	37.84%
Distance from urban centers	13	35.14%
Limited healthcare infrastructure	12	32.43%
Social Stigma and Discrimination	8	21.62%
Inadequate Rehabilitation Services	7	18.92%
Rural and Remote Challenges.	2	5.41%

Over 50% of respondents have stated that legal, transportation, and financial

challenges represent significant hurdles for Road Traffic Accident (RTA) victims in accessing post-crash care.

Sarvodaya initiatives

Figure 04 below demonstrates the distribution of responses made for the inquiry on existing Sarvodaya initiatives in place to support RTA victims.

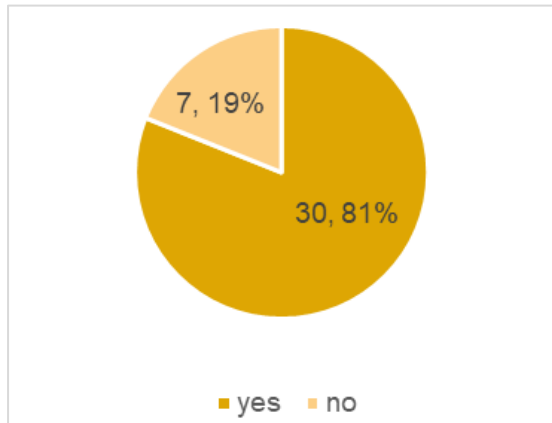


Figure 04 indicates that 81% of respondents assert that Sarvodaya currently lacks initiatives to support victims of Road Traffic Accidents (RTA). However, the remaining participants (n=7, 19%) contend that initiatives like REACT, Road Safety Programs, and community awareness programs are already operational. Furthermore, there are youth first aid teams established across 25 districts.

The potential of the “REACT – Community Life Saver” initiative to address the needs of RTA victims

Figure 05 below shows the distribution of different perceptions of the responders on the potential of the “REACT – Community Life Saver” initiative to address the needs of RTA victims.

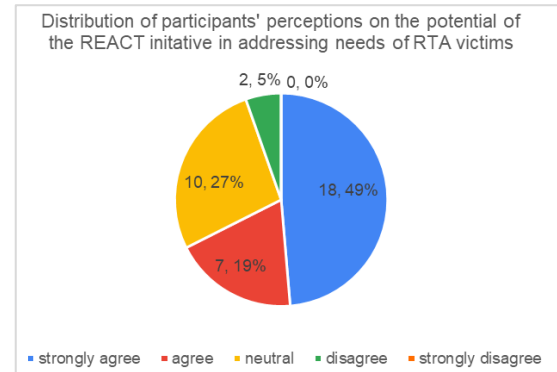


Figure 05: Distribution of different perceptions of the responders on the potential of the “REACT – Community Life Saver” initiative to address the needs of RTA victims

As per the findings above 68% of the respondents are confident that the existing “REACT – Community Life Saver” initiative has the potential to address the needs of RTA victims.

Community engagement

Figure 06 below shows the distribution of perceptions of participants on community engagement in supporting RTA victims.

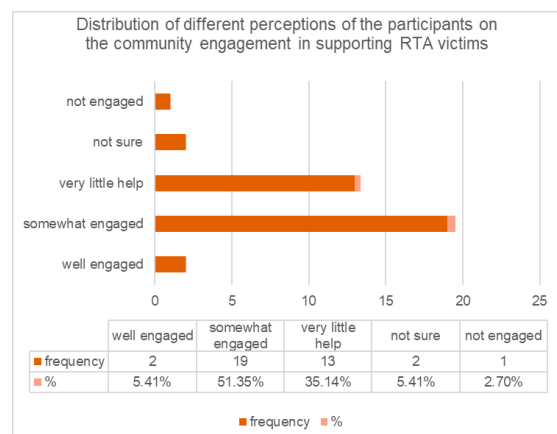


Figure 06: Distribution of perceptions of participants on community engagement in supporting RTA victims

As per Figure 06, the majority of participants claimed that the community is not well engaged in supporting RTA victims, indicating the need to drive community awareness programmes.

Existing other resources that can be leveraged to enhance support for post-crash victims

The participants claim that Community lifesaver programs, the Red Cross organization, the 1990 Suwasariya ambulance service, interested individuals in the communities, the civil defence committee, and the district disaster management committee are the potential resources that can be collaborated when driving community-based initiatives in support of crash victims.

Needs and priorities

Figure 07 below shows the distribution of perceptions of participants on the activities that require the most attention in driving community-based initiatives in support of post-crash care.

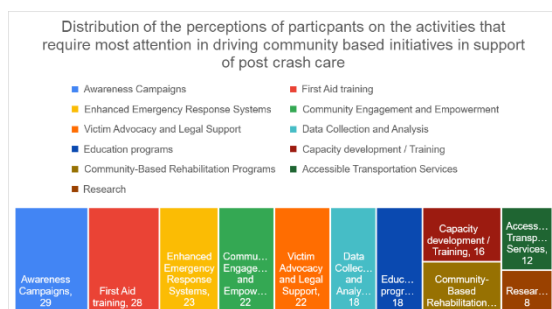


Figure 07: Distribution of perceptions of participants on the activities that require the most attention in driving community-based initiatives in support of post-crash care.

As per Figure 07, Awareness campaigns, first aid training, enhanced emergency response systems, community engagement and empowerment, and victim advocacy and legal support have been prioritized by respondents as areas to be paid more attention.

Feasibility

Table 02 below shows the distribution of potential interventions that have been

prioritized by respondents as the most feasible interventions by Sarvodaya in support of RTA, in terms of resource availability, community involvement, and sustainability

Table 02: Distribution of potential interventions that have been prioritized by respondents as most feasible interventions by Sarvodaya in support of RTA victims.

Initiative	Count	%
First Aid training	21	56.76%
Awareness Campaigns	13	35.14%
Enhanced Emergency Response Systems	13	35.14%
Community Engagement and Empowerment	13	35.14%
Education programs	9	24.32%
Capacity development / Training	5	13.51%
Victim Advocacy and Legal Support	4	10.81%
Community-Based Rehabilitation Programs	4	10.81%
Accessible Transportation Services	4	10.81%
Data Collection and Analysis	3	8.11%
Research	0	0.00%

As per the above table 02 above, First Aid training, Awareness Campaigns, Enhanced Emergency Response Systems, and Community Engagement and Empowerment have been endorsed as the most feasible initiatives by Sarvodaya in terms of resources, community involvement, and sustainability.

Challenges

Participants identified the following challenges in implementing the initiatives in support of RTA victims.

1. Resource constraints
 - Inadequate training for first responders

- Absence of trained counsellors for RTA victims
 - Lack of vehicles in reaching the crash site at a given time
2. Community awareness, behavioural and attitudinal challenges
 - Incompliance of drivers and pedestrians with traffic rules and regulations
 - Lack of interest in the community on road safety and post-crash assistance
 - Reluctance to be informed and participate actively
 - Fear of being videoed instead of receiving assistance from the people who gather around the victim
 - Lack of awareness within the community regarding post-crash care
 - Decreased community participation due to hardships created by the economic crisis
 - Fear of confrontation with litigation issues in the event of a crime
 - Lack of community understanding of legal matters related to post-crash care
 3. Communication and coordination
 - Absence of communication loop between hospitals and the community support group
 - Lack of access to real-time RTA information management system
 - Lack of a mechanism for direct coordination of services provided by insurance companies
 4. Government Intervention and Policy Issues
 - Loss of active involvement of state to facilitate community involvement to enhance post-crash care
 - Difficulties encountered in utilizing government resources required for training

SWOT Analysis

The situation analysis on the potential Community-Based Initiatives to enhance post-crash support for Road Traffic Accident Victims by Sarvodaya will be as follows.

Strengths	Weaknesses
1. Competent and experienced workforce 2. Potential initiatives already in operation 3. Existing community awareness programs on Road Safety 4. Existing youth first aid teams across 25 districts. 5. Wide representativeness of the workforce across all districts	1. Resource constraints 2. No access to real-time RTA database 3. No link to the RTA alert system

Opportunities	Threats
1. Potential collaborations with Community Lifesaver Programs, the Red Cross, the <i>Suwasariya</i> ambulance service, local individuals, and district disaster management committees 2. Possible collaborations with the National Trauma Secretariat, National Council for Road Safety, and Sri Lanka Police 3. Increasing state and media attention on preventing RTA fatalities 4. Reducing RTA fatalities is a Sustainable Development Goal. Hence broader international collaboration is possible with resourceful development partners	1. The negative attitudes of the community towards post-crash assistance 2. Decreased community participation due to economic challenges 3. Confrontations are expected to protect casualties without causing additional harm from untrained individuals or inappropriate actions 4. Lack of immunity from unnecessary legal confrontation in procedural jurisdictions

Discussion

Laypeople can make post-crash care more cost-effective. They can contribute to enhance post-crash care by activating the emergency care system and facilitating the safe transportation of RTA victims to hospitals. Training of laypeople for better coordination with helpline services and basic first aid can make post-crash management more effective.

A study aimed to identify the facilitators and barriers in providing post-crash emergency care for road traffic injuries in the district of Aligarh, Uttar Pradesh, India¹² reveals that nearly all respondents (98.58%) recognized laypersons as crucial facilitators in post-crash care, along with police and roadside shopkeepers. Lay persons were notably effective in calling for

help, identifying nearby health facilities, and facilitating victim transport. This conclusion underscores the significance of community-based initiatives to enhance post-crash care. Nevertheless, the findings of this case study on the potential community-based initiatives to support post-crash victims by Sarvodaya reveal crucial insights into both challenges and opportunities in this domain in Sri Lanka.

This study confirms the capacity of Sarvodaya to spearhead such initiatives at the community level while identifying potential areas of interventions that are within the reach and grasp of Sarvodaya.

The unlawful behavioral conduct of drivers and pedestrians act as significant contributors to road traffic accidents. It emphasizes the need for comprehensive

strategies addressing both drivers' and pedestrians' conduct. A study done on Community-based interventions⁹ presents a promising strategy for reducing unintentional injuries among children and adolescents. These interventions focus on altering behaviour, promoting environmental changes, and implementing legislation to shift social norms regarding safety behaviours. A systematic review of 32 studies assessed the impact of such interventions on childhood injuries, safety behaviours, and the adoption of safety devices, targeting schools, municipalities, and cities.

Despite some ongoing initiatives by Sarvodaya such as REACT and Road Safety Programs, there is a perceived lack of support for RTA victims by Sarvodaya at present. However, as perceived by a significant portion of participants, REACT initiative, has the potential for impactful interventions to address the needs of RTA victims.

Community engagement emerges as a critical aspect, with participants expressing concerns about limited involvement in supporting RTA victims. Collaborative efforts with existing resources like Community Lifesaver Programs and the Red Cross organization could strengthen community-based initiatives.

The identified needs and priorities, including awareness campaigns, first aid training, and enhanced emergency response systems, align with the feasibility of interventions as assessed by the study. However, several implementation challenges need to be addressed, including resource constraints, communication gaps, and policy-legal concerns.

These findings are consistent with the study done in Iran⁸ which analyzed 36 semi-

structured interviews with various stakeholders. Barriers included the involvement of laypeople, lack of coordination, inadequate pre-hospital services, and infrastructure deficiencies. Recommendations for improving laypeople's involvement included public education campaigns in first aid and emergency services, and targeted training for professional drivers, police officers, and volunteers. An integrated trauma system and infrastructure improvements were also deemed crucial. While the involvement of laypeople is vital for effective post-crash management, systemic improvements such as integrating trauma systems and enhancing human and physical resources are essential.

A volunteer first responder network in Bangladesh¹⁰ utilizes an emergency hotline and 24/7 call center to dispatch trained responders via text notifications. In six years, Trauma Link expanded from one highway section to three, covering 135 km and aiding 3,119 patients from 1,544 crashes. With a 100% response rate, responders reached scenes within five minutes in 88% of cases. Most patients, mainly young men, were transported to hospitals within 30 minutes, with accurate triage decisions. Trauma Link effectively addresses barriers in rapid response, triage accuracy, first aid, and timely transport, with high community acceptance and volunteer dedication. Policymakers could integrate this model with existing emergency services, and other countries could replicate it to manage traffic injuries efficiently.

The "REACT – Community Life Saver" initiative, coupled with the youth first aid teams of Sarvodaya, shows promise in executing such operations.

Conclusion and recommendations

Sarvodaya has the potential to launch community-based initiatives to enhance post-crash support for Road Traffic Accident victims provided the identified constraints are duly addressed.

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