

Concepts in Disaster Medicine

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The Application of the Resilient Children, Resilient Communities Initiative to Dominica: A Conceptual Overview

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Abstract

The impact of disasters on the health and wellbeing of children is well documented, with children identified as bellwethers of community recovery. It has also been demonstrated that building community-wide resilience benefits from being approached through a child-centric model of community participation. While much of this work has been focused on the USA, there is a need to develop models to adapt these approaches in international environments. Small Island Developing States (SIDS) are particularly at risk for disaster events. SIDS tend to have less diverse economies and a high dependence on climate-sensitive sectors that are vulnerable to disasters. The National Center for Disaster Preparedness at Columbia University along with Save the Children created The Resilient Children, Resilient Communities Initiative to build child-focused resilience within communities. The Initiative, which has already been applied to sites in the USA, is being adapted for the context of Dominica. The Initiative focuses on child-serving institutions and uses a Community Preparedness Index to quantify the current inventory of policies and practices related to children. The Initiative aims to implement strategies to improve the ability of the community to meet the needs of children in a disaster. This paper explores the application of these concepts surrounding the Initiative.

Disasters affect the health and wellbeing of societies during and well after the impact of the event itself. Increasingly it is recognized that indirect deaths are far in excess of the deaths from disasters, and co-morbidities can be exacerbated by the direct impacts of an event as well as by the disruption to critical civil society “lifelines,” or the functions that enable the continuous operation of critical government and business functions and are essential to human health and safety or economic security.^{1–3} This has cascading impacts which can be understood through the long-term impacts of children in the affected communities.⁴

Disasters create the conditions for negative health outcomes by disrupting the socio-economic fabric of societies for months or years after an event. They can cause primary and secondary effects including physical effects, such as structural or non-structural damage, longer term infrastructural deterioration, and social impacts including fatalities, injuries, emotional stress, and economic impacts.^{5,6} In addition to the potential to cause severe economic losses, disasters can setback development within a country; reconstruction for infrastructural damage alone can divert national resources and international funding which could have been used otherwise for progress and development.⁷ In recent years, the Caribbean region has experienced destructive storm events that have led to the loss of life and dire socio-economic impacts. The island of Dominica was decimated by the passage of Hurricane Maria in 2017. The island is home to the Kalinago, the first inhabitants of the Caribbean. The indigenous group was severely affected by the category 5 storm. Children represent a group within society that have unique vulnerabilities to disaster events. A community’s resilience through its ability to rebound from a crisis can be measured by its ability to take care of children.⁸ This concept article looks to explore the application of The Resilient Children/Resilient Communities Initiative to the Small Island Developing context by applying it to the Kalinago territory in Dominica. From there we assess the potential suitability for the approach to be adapted more broadly in other countries.

Resilience, Institutions, and Communities

The concept of Resilience has been used in varying fields to describe the idea of recovery and bouncing back. Within the disaster research field, interest on the concept of resilience is primarily focused at the community level.⁹ Mayunga¹⁰ proposes the following definition of community disaster resilience as the “capacity or ability of a community to anticipate, prepare for, respond to, and recover quickly from impacts of disaster. This means that it is not only the measure of how quickly the community can recover from the disaster impacts, but also the ability to learn, cope

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with or adapt to hazards.” Varying authors^{10–17} have examined Community Resilience from a capital-based approach. The idea behind this approach is that varying types of capital contribute to resilience. Kendra, Clay and Gill⁹ highlighted 9 elements of resilience that are commonly discussed in the theoretical literature, including social, human, political, economic, institutional, community capital, physical resources, natural resources, and improvisation. The authors also highlighted the level at which each of these exist – the individual or community level or both. These elements of resilience are the focus of efforts aimed at measurement; once there is an understanding of what constitutes resilience, resilience can then be assessed or predicted “by measuring the magnitude of the constituent parts.”⁹

Institutional resilience is “the ability of a network of organizations, groups, and individuals acting collectively to address short or long-term natural hazards and disaster-based shocks to economic, environmental, social, and physical systems. Institutional resilience describes the degree to which these networks plan for, learn from, and operate to address threats, build capacity, and act through coordinative vehicles like planning.”¹⁸ The concept of institutional resilience does not describe the resilience of individual institutions or organizations; rather, it captures the collective contributions of these networks of organizations.¹⁸ Disaster recovery requires an understanding of how organizations interrelate as part of the larger collective system or network.¹⁸ This research places emphasis on institutional resilience. The Sendai framework, adopted in 2015 by countries worldwide, calls for investing in the resilience of communities, recommending that this be done through disaster risk initiatives and the relevant plans, policies, and programs coordinated across relevant institutions and sectors. The framework also calls for specific emphasis on building the resilience of small island developing states due to their unique vulnerabilities.¹⁹

Vulnerable Groups, Disasters, and the RCRC Initiative

Disasters do not affect all members of society equally; many scholars^{20–24} have investigated and acknowledged the unequal distribution of risk and vulnerability based on factors such as gender, race, age, disability, health status, poor education, social class, and occupation. Vulnerable populations within a society are especially at risk to disasters. Children fall under the category of vulnerable persons due to their capacity to be affected by a disaster.²⁵ They are more likely to suffer physical, long-term developmental, and psychological setbacks after a disaster.²⁶ For the last decade it was estimated that 175 million children on a yearly basis would be affected by disasters brought about by climate change.²⁷ In countries around the world, children make up between 20–50% of the population; it is important to focus on their unique needs and prioritize their protection during disasters.^{26,28} In Dominica, a high percentage of the population are youth; 41.9% of the population fall within the age group 0–24.²⁹

Varying sectors of civil society are often poorly coordinated to meet the needs of children following disaster events.³⁰ In the US, approximately 69 million children attend daycare, school, or other child-centered programs daily.³¹ These entities, therefore, bear a huge responsibility for children’s wellbeing if a disaster occurs. Many child-serving institutions, communities, and systems are not adequately prepared to meet the needs of children when a crisis occurs.⁸ To address this problem, The National Center for Disaster Preparedness (NCDP) located at Columbia University and Save the Children developed the Resilient Children/Resilient Communities

(RCRC) Initiative to focus on building child-focused resilience from a community perspective.³⁰ The aim is to implement strategies to improve the community’s ability to meet the needs of children in a disaster. The initiative connects child-serving institutions to federal and state preparedness efforts. The Initiative was previously applied in Putnam County and Washington County; New York and Robeson County; and New Hanover County in North Carolina and the regions of Humacao and Mayagüez in Puerto Rico, both recovering areas from Hurricane Florence and Maria, respectively.³² The initiative focuses on supporting community institutions that serve children, parents, and caregivers. The target of the intervention is, therefore, child-serving institutions.³⁰ This model uses an all-hazards approach to address issues related to safety and security within the context of disasters.

The Community Preparedness Index (CPI) is a key component of the initiative. It is a quantitative measure of preparedness. The CPI is an assessment tool that guides officials and community leaders in determining the jurisdiction’s preparedness to meet the needs of children in a disaster. The CPI measures community sectors; some of this information includes where children are cared for, where children could end up after a disaster, and elements related to preparedness including sheltering, evacuation, and pediatric needs.^{30,33} The main output from the CPI is a score that is used to determine the level of preparedness, policies, and activities already in place.³³ This output can be used to clarify authority during a disaster, identify and build upon current strengths, and to highlight planning and leadership gaps within varying sectors. Scores can be used to illuminate areas for improvement within communities and it is up to the community to decide the priority areas for improvement.³³ While there are many studies that measure community resilience,^{34–45} the intent of this research was to test the applicability of the CPI developed for the RCRC Initiative, which was initially applied within the context of the US, to a small island context.

The aim of this approach is to use the RCRC Initiative to build child-focused resilience in the Kalinago Territory, an indigenous reserve in the post-disaster territory of Dominica. Following Hurricane Maria in Dominica, UN Secretary General Antonio Guterres visited the indigenous territory and reinforced the need for developed countries to tackle climate change and reduce the risk to islands like Dominica.⁴⁶ This study places emphasis on indigenous groups that tend to be vulnerable as well as understudied within the disaster literature. Focusing on vulnerable groups who tend to be disproportionately affected are recommended by both the Hyogo and Sendai Framework.^{19,47} This study is important because it places emphasis on those most vulnerable: children of indigenous origin.

The CPI was designed to quantify the success of the initiative. It allows for the measurement of the varying sectors’ ability to address children’s disaster needs as time goes by. Following the training and the formation of the community coalition, the CPI can be run again, asking the same questions across the different sectors. The final score will measure any progress or changes made. This will measure the success of the Initiative. This type of numerical means of assessing resilience allows for the measurement of progress toward resilience, making it possible to identify priority areas for improvement, monitor changes, and show how resilience improves over time.⁴⁸

Dominica, The Kalinago, and Disaster Exposure

The Commonwealth of Dominica is in the Eastern Caribbean has a population of 74 629.⁴⁹ Like many countries, it has a dual burden of development with an increase in chronic disease rates. The island’s

infant mortality rate (IMR) is recorded at concerning levels. 2015 data shows an IMR of 19.6 per 1000 live births, while the under 5 mortality rate was 20.8 per 1000 livebirths. Because most women give birth within the health care system, these high rates of neonatal deaths indicate a need for the enhancement of the quality of services and resources available to newborns and their mothers.²⁹ In Dominica, chronic illness is also an increasing burden on the population. The major diseases of concern include hypertension and diabetes and their associated complications (heart disease, stroke, blindness, kidney failure, and amputation), as well as cancer. Overweight and obesity rates are also increasing in children and adolescents.⁵⁰

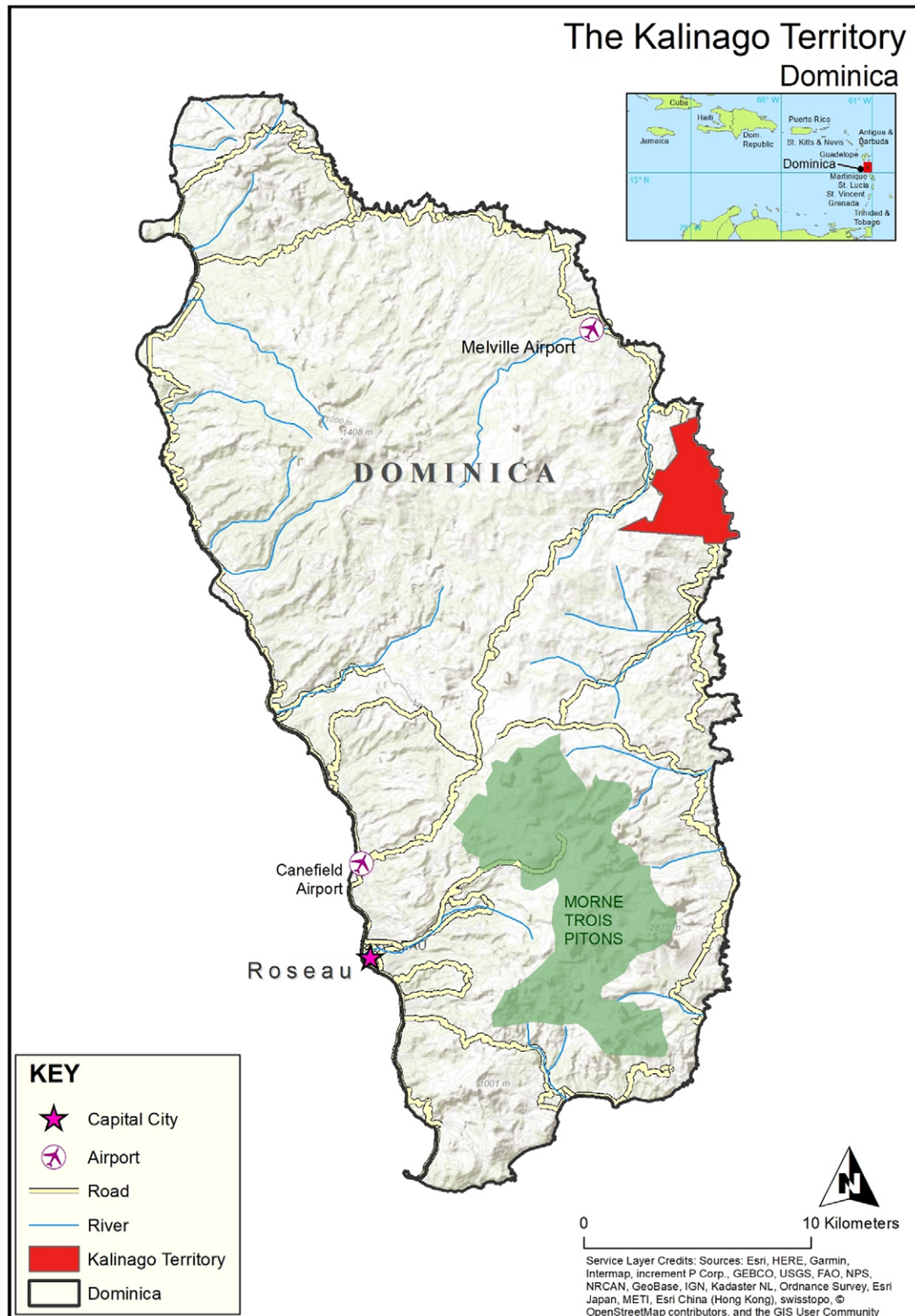
Like many other small island developing states, Dominica faces a high vulnerability to natural disasters, climate change, and economic shock.⁵¹ Dominica was ranked as the poorest country in the Eastern Caribbean in 2022.⁵² It is estimated that the percentage of the population below the poverty line is 29% (2009 estimate).⁴⁹ The country's GDP (purchasing power parity) is estimated at 787.7 million USD; the island attributes 22.3% of its 2017 GDP to agriculture, 12.6% to industry, and 65.1% to services.⁴⁹ Agriculture is an important contributor to the economy of Dominica; it is, however, intermittently affected by hurricane activity.⁵³ The island is a large exporter of bananas, but a cycle of tropical storms and hurricanes in the late 20th and early 21st century has led to the banana industry being heavily affected.⁵³ Other sectors have also been affected by the passage of storms. In 1979, Hurricane David devastated the fishing industry by destroying almost all of the boats on the island.⁵³ In an attempt to diversify, Dominica has promoted itself as an eco-tourism destination; the heavily forested island is known as "the Nature Island of The Caribbean" due to its unique flora and fauna.⁵³

Dominica is exposed to a range of natural hazards including tropical storms and hurricanes, volcanoes, earthquakes, floods, landslides, mudslides, and tsunamis.⁵⁴ The most historically significant and common hazards to the island are tropical cyclones and hurricanes, as the island is in the Caribbean region, one of the most disaster-prone regions worldwide.⁵⁴ The hurricane season officially begins on the 1st of June and ends on the 30th of November. Fifteen of the Caribbean islands are part of the top 25 countries affected by disasters associated with tropical cyclones, and the probability of a hurricane making landfall for 7 of these islands including Dominica is above 10% for any given year (IMF 2016 as quoted in ACAPS 2017). This puts people involved in tourism, farming, and fishing in highly vulnerable positions because their livelihoods depend on natural resources and infrastructure that are often destroyed by disaster activity. With most of Dominica's population living in low-lying coastal areas, coastal inundation and storm surges often lead to severe economic impacts related to the loss of livelihoods and housing.⁵⁵ The island is almost completely volcanic in origin and has 9 active volcanoes; in 2007 it was estimated that over the upcoming 90 years there would be at least 1 major eruption.⁵⁴ Dominica has also dealt with flooding, landslides, and mudslides; 35 persons lost their lives between 1925 to 2015 due to landslide activity.⁵⁴ Using the example of Hurricane Maria, the storm caused catastrophic damage which led to 31 persons being killed and 37 persons missing; the storm caused overall losses and damages estimated at 1.3 billion USD or 224% of Dominica's 2016 GDP.^{50,56} Around 65 000 persons or 80% of the population were directly affected, 90% of roofs were destroyed or damaged, water and power supplies were disrupted, crops destroyed, roads and transport routes blocked, and livelihoods severely affected for months following the disaster.⁵⁶

The Kalinago, originally known as the Caribs, came from South America and are the last remaining tribe of pre-Columbian Carib Indians dating back to about 3000 B.C.⁵⁷ According to historical documentation by explorers including Christopher Columbus, all the islands of the Caribbean were once occupied by the Caribs. However, disease, enslavement, and constant battles with Europeans decimated the numbers of Carib Indians inhabiting the region.⁵⁸ The Kalinago were involved in a bitter battle to keep their lands and life with the arrival of Christopher Columbus and European settlers, and they eventually fled to the Eastern side of the island. In 1763, when the British took control of the island, the Kalinago were given 232 acres of land; officially, this territory was expanded to 3700 acres in 1903.⁵⁷ The population of approximately 3300 persons (approximately 5% of island's population) live in the Kalinago Territory located on the eastern side of the island (Map 1).⁵⁹ This territory is the only surviving indigenous reserve in the Caribbean; while their language has been lost, other aspects such as basket weaving, canoe building, and a communal system of land tenure remains.⁶⁰

According to Cuny,⁵ natural disasters highlight "the inherent weaknesses in a society." This weakness tends to affect the poor and marginalized who suffer and are affected disproportionately in both rich and poor countries.⁶¹ In Dominica, Indigenous persons are more likely to be poor compared to other groups. One in 2 persons or 49.8 % of people of indigenous origin are poor; this is, however, a reduction from the 70% poverty rate in 2003 (Country Poverty Assessment 2009 as quoted in DVRP 2014). The Kalinago were particularly affected by Hurricane Maria. Ninety percent of the Kalinago community, who are among the country's most vulnerable people, had their houses destroyed with Hurricane Maria.⁴⁶ Most persons within the territory are involved in sectors that are climate-sensitive, including fishing and farming. This meant that the storm devastated livelihoods, deepening the already concerning levels of food insecurity and poverty.⁶²

Indigenous persons are more vulnerable to the impacts of climate change and disasters due to a legacy of exclusion and inequality, and are often the last to receive public investments in infrastructure and basic services. Indigenous persons face many barriers to full participation in the formal economy, decision-making, and the political process.⁶³ In Dominica, however, the Kalinago are given a voice and are involved in politics in the island. Dominica is a parliamentary democracy; the head of state in Dominica is the President, while the Prime Minister is the head of government. The Prime Minister supervises the Cabinet, which is made up of Ministers responsible for varying Ministries related to varying sectors of public administration within the island.⁵⁴ Local government also exists as a form of political decentralization to encourage locals to participate in the island's political decision-making process and encourage local autonomy.⁵⁴ The Kalinago Council is a part of Dominica's local government system and was established to be the official representative of the Kalinago people. They are responsible for day to day affairs within the territory, setting and enforcing bylaws, adjudicating civil disputes, and managing small projects, infrastructural development, and matters related to the communal land system.^{54,64} The council is made up of the Chief and 6 members who are elected to office every 5 years.⁶⁴ The Kalinago are also represented in government by an elected Parliamentary representative.⁵⁸ In the year 2000, the Department of Carib Affairs was established to address the needs of indigenous persons on the island. This was changed to a Ministry in 2005 and is now referred to as The Ministry of Environment, Rural Modernisation, Kalinago Upliftment and Constituency Empowerment.⁶⁵



Map 1. The location of the Kalinago Territory within the island of Dominica.
Map created by Author. Data Source : OCHA (<https://data.humdata.org/dataset/cod-ab-dma>)

The purpose of Kalinago Upliftment within the Ministry is to enhance quality of life, create economic opportunities, and protect and improve the assets of Indigenous persons.⁶⁵ A study carried out in 2018 found that members of the council saw the Ministry as a liaison between the government and the Council.⁶⁶

Adapting the CPI for Dominica

For this postdoctoral project, the CPI was edited and questionnaires were adapted for the context of Dominica. The RCRC initiative was designed for the American context. In Dominica, a sovereign small

Table 1. The type of questions that are part of the CPI (source: Save the Children and National Center for Disaster Preparedness)⁵⁶

1. YES/NO/DON'T KNOW questions, such as:
<i>Do state or local building regulations include structural and engineering standards designed to protect school buildings against the kind of natural hazards to which the school system is most at risk?</i>
<input type="checkbox"/> Yes
<input type="checkbox"/> No
<input type="checkbox"/> Don't know
2. SELECT ALL THAT APPLY questions, such as:
<i>Does AT LEAST ONE state, county or local agency maintain a database containing the following information for family child care homes? (Select all that apply)</i>
<input type="checkbox"/> Normal operating locations
<input type="checkbox"/> Intended evacuation location
<input type="checkbox"/> Children with special healthcare needs
<input type="checkbox"/> Children with disabilities and access & functional needs
<input type="checkbox"/> Children with limited English-speaking ability
<input type="checkbox"/> Age distribution of children
<input type="checkbox"/> Gender distribution of children
<input type="checkbox"/> Don't know
In these questions, the user can select either "Don't know" or any combination of the other answers (a user cannot select "Don't know" and other answers).
3. FREQUENCY questions, such as:
<i>The minimum frequency for hospitals to conduct a functional exercise of their emergency response plan is:</i>
<input type="checkbox"/> Once a year
<input type="checkbox"/> At least once every 2 years
<input checked="" type="checkbox"/> Less frequently than every 2 years
<input checked="" type="checkbox"/> There is no minimum frequency
<input checked="" type="checkbox"/> Don't know
In these kinds of questions, the user must select only 1 answer.
4. LEAD ORGANIZATION questions:
These are the questions within the major sections of the CPI (Child Care Centers, Family Child Care Homes, Public Schools, Private Schools and Hospitals) that determine whether or not a user must complete the "Lead Organization" section of the CPI.
A typical Lead Organization question looks like this:
<i>Is any governmental or non-governmental organization formally designated or commonly recognized as the lead organization to help private schools in the community he prepared for Evacuation in advance of an emergency?</i>
<input type="checkbox"/> A public agency or not-for-profit organization is the lead organization, AND this is formally designated in statute, regulation or executive order
<input type="checkbox"/> There is a de facto lead organization, hut it is not formally designated in statute, regulation or executive order
<input type="checkbox"/> There is no formally designated or de facto lead organization for this element of preparedness
<input type="checkbox"/> Don't know
5. OTHER SCALAR questions, such as:

(Continued)

Table 1. (Continued)

<i>How would you characterize the nature of governmental review of private school emergency response plans?</i>
<input type="checkbox"/> Substantive / constructive (for example, officials read the plans carefully and provide direction on how to improve plans)
<input type="checkbox"/> Formulaic /compliance oriented (for example, officials review that the plans have been completed or meet the technical requirements for submission, but offer little or no direction to schools)
<input type="checkbox"/> Typically no feedback or minimal feedback
<input type="checkbox"/> Don't know
6. SOURCE OF REQUIREMENT questions:
Each of the major sections of the CPI asks detailed questions about an institution's obligations to address evacuation, sheltering in place, drills and exercises, emergency medical and behavioral health services, communications, continuity of operations planning and other elements of preparedness. A typical question looks like this:
Identify the requirements for child care centers to address the following elements of preparedness for COMMUNICATING WITH PAHENTS/ GU'AROIANS, STAFF AND LOCAL RESPONSE AGENCIES: (select as many as apply of the first three answer options OR any one of the last three answer options)
<input type="checkbox"/> The Law requiring child care centers to have a written emergency plan specifies this
<input type="checkbox"/> Laws unrelated to emergency plans require this to be addressed
<input type="checkbox"/> A Lead agency requires child care centers to address this
<input type="checkbox"/> Child care centers are NOT REQUIRED to address this, hut DO anyway
<input type="checkbox"/> Child care centers are NOT REQUIRED to address this and do NOT
<input type="checkbox"/> Don't know
7. SCREENING questions:
Each of the major sections of the CPI contains three questions that serve to direct the user to appropriate detailed questions about particular dimensions of preparedness. The three questions are almost identically worded in all of the major sections.
These questions either deal with laws, laws (unrelated to plan requirements) that address preparedness or voluntary preparedness that is not mandated/imposed by law or by a regulatory/supervisory body, for example:
<i>Do the legal provisions that require child care centers to have emergency response plans require that such plans address (Select all that apply):</i>
<input type="checkbox"/> Evacuation
<input type="checkbox"/> Sheltering in place
<input type="checkbox"/> Communicating with parents/guardians, emergency responders and staff before, during and after emergencies
<input type="checkbox"/> Pediatric emergency medical situations
<input type="checkbox"/> Emergency mental/behavioral health services for children
<input type="checkbox"/> Facility continuity of operations
<input type="checkbox"/> Conducting exercises and drills
<input type="checkbox"/> The needs of children with disabilities or access & functional needs in a disaster
<input type="checkbox"/> None of the above Don't know
8. INFORMATION ONLY questions:
These are fill-in questions, neither the SCREENING questions nor the INFORMATION ONLY questions are taken into account in generating the section values or the overall CPI value.

island developing state, the structure of disaster management differs from that in the US. Corresponding to federal, state, and county levels in the US, disasters are managed at national, district, and community levels in Dominica. Dominica is divided into 7 districts.⁶⁷ In order to ensure a higher standard of disaster preparedness and coordination, the nation is divided into 7 districts. At the district level, there are District Emergency Operations Centers and District Emergency Committees to coordinate local activities in the event of a disaster.⁶⁷ In order to further decentralize disaster management, a network of Community Disaster Emergency Committees and Community Emergency Operations Centers were also established within NEPO to cover the 138 communities in Dominica.⁶⁷

The questionnaires for the CPI cover 9 main sectors (Emergency Shelters, Foster Care, Hospitals, Child Care Centers, Family Child Care Homes, Lead Organizations, Private Schools, Public Schools, and Community Wide Questions) and gauge current policies, plans, and laws in place to deal with disaster response as it pertains to children.⁶⁸ There are 8 types of questions that are part of the CPI in various combinations across the main sectors (Table 1).

To edit the CPI and take into the account the different structures of disaster management, background research as well as discussions with key stakeholder agencies were carried out. This included representatives from the Kalinago Council, varying agencies, and representatives from the ministries. Initial interviews with respondents from institutions were carried out via Zoom. This helped to edit each questionnaire for the Dominican context, as the CPI was designed for the context of the US, where Disaster Management is organized on a county and state level. Certain questions and options within questions did not apply to Dominica. For example, under the “Public schools” sector, questions were asked about “which entities maintain information on children with limited speaking ability;” in Dominica, the main language is English and it was determined that this option would be deleted. For the context of the US, there are questions about “state, county, or local” laws or agencies (Table 1, number 2); because states and counties do not exist in Dominica, the language was changed to community, district, or national level. Two sectors from the USA context, “Child-care centers” and “Family Child Care Homes,” were removed because these types of institutions were not found within the Kalinago territory. A new sector, “Health Centers,” was introduced because it is a community-based institution where members of the Kalinago receive health care services and care during emergencies. Information was collected for 7 of the 8 sectors with representatives from varying ministries and institutions filling out the questionnaires. For the RCRC Initiative, usually representatives from the institutions who are interviewed also live in the respective county. In the case of Dominica, however, persons interviewed from the institutions usually live outside of the territory. These persons, however, are knowledgeable of the plans and policies related to the management of disasters on a national level. At times, the questionnaires ask specific questions about the community; representatives, however, were knowledgeable of answers whether they were community specific or laws or regulations set out at the national level that all institutions abide by.

Prospects for Wider Application

The effort so far has demonstrated conceptual congruence, with modification, of the RCRC Initiative into an international environment. However, implementation and evaluation are necessary to further validate this approach. As the data is captured, CPI scores will be calculated and gaps and areas for improvement will be

identified. Following this, an Action Planning workshop will be held to co-design the next action steps for the community. Next steps may include priorities for training, planning, awareness, and communication and technical assistance. This will include representatives from varying institutions, such as the Ministry of Environment, Rural Modernization and Kalinago Upliftment, The Kalinago Council, and community-based institutions. Depending on the identified community needs, training will be carried out with selected institutions from the sectors based on time and resources. This training may include emergency and disaster plans, community inclusive emergency and disaster management, best practices for community-wide emergency management, and continuity of operations planning.

Further, the effort includes working with local leaders on the formation of a Community Resilience Coalition within the Kalinago Territory. This will convene local community leaders and representatives, child-serving institutions, and emergency managers to develop and implement action plans as well as community-wide exercises. This study through the RCRC Initiative represents an opportunity to focus on these child-serving institutions that play an important role in the safety of children, and the community coalitions created through this initiative will identify child-centered preparedness strategies that will build community resilience.³⁰

The RCRC Initiative proves itself as a methodology that can be adapted and applied to sites outside the US. The Initiative allows for an understanding of how organizations interact as part of the larger disaster management system and allows for better coordination in meeting the needs of children following a disaster. Placing emphasis on those most vulnerable in society is a critical tool of community resilience, particularly in Small Island Developing States that face unique vulnerabilities. This study allows for a lens to be placed on indigenous communities, highlighting their experiences as they relate to disasters. By applying methodologies like this to varying settings, there can be a greater understanding of the gaps and changes needed within child-serving institutions.

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Jeff Schlegelmilch: involved in conceiving and designing the analysis, data analysis, and writing of this paper.

Competing interest. None declared.

Ethical standard. The research described in this paper was conducted with oversight under the Columbia University Institutional Review Board for human subjects research protocol number IRB-AAAU2886.

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