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The Caribbean cancer portal: lessons for sustainability, accessibility, and impact in cancer programs in Caribbean Islands

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The Caribbean Cancer Portal (CCP) adopted a creative approach to developing and implementing a cancer control program in the Caribbean. The virtual interaction space was established to address gaps in education for cancer prevention and for patients and survivors. Systematization captured experiences of stakeholders, and lessons were deduced about best practices for program sustainability, accessibility, and achieving high impact. These lessons are vital to improve knowledge of performance risks and best practices for collaboration and sustainability in this environment. The success of the CCP was marked by active participation of high-impact organizations in the region; multidisciplinary leadership and facilitation by regional experts; stable program structure directly responding to regional needs; and high patronage by a wide cross-section of the Caribbean community. Five themed lessons of best practices evolved in development and implementation of the CCP toward these achievements: diverse, inclusive, and strategic partnerships extending beyond local levels; leveraging and maximizing resources through existing government and non-government institutions and structures; developing need-focused interventions that address all faculties through which health and well-being are ensured; application of scientific principles and concepts in intervention design; and feedback to inform implementation and scale up strategies that are expansive but also sustainable. The lessons underscore the need for greater attention to the methodological approach in cancer control program development. Each activity must be deliberately planned and executed as an independent unit for success. Caribbean cancer control programs can improve with designs that model the adage that a chain is as strong as its weakest link.

KEYWORDS

Caribbean, implementation science, cancer prevention education, cancer patient services, Caribbean cancer portal

Introduction

Research, systematization, and evaluations highlight the growing need for national and regional cancer prevention education and patient support services in the Caribbean (1–3). Compared to medical oncology services, there is a dearth of cancer prevention and psychosocial interventions to sufficiently meet the needs of the Caribbean people (4, 5). There are also disparities between both the quality and quantity of cancer prevention and control programs in larger countries, such as Jamaica, Barbados, and Trinidad, and the smaller countries, such as Grenada, St. Lucia, St. Vincent and the Grenadines, and Dominica in the Windward Islands. The vital role of cancer control programs is well-recognized, and over the years, several regional organizations have led impactful implementations at community and national levels (6). The constraints of regional programs, such as inadequate financing, expanded geographical scope, and the paucity of human resource capacity, need to be addressed with a sense of urgency (7). The absence of a regional structure for documenting and disseminating information related to implementation, outcomes, and lessons maintains a wide gap in knowledge of performance risks and best practices for collaboration and sustainability in this environment. Publications on Caribbean cancer prevention and control programs, evaluation methodologies, and results are virtually absent. Most of the publications are limited to program overview, objectives, description of the delivery, and occasionally, participants' responses. Detailed analyses of the structure, operations, and linked outcomes are not typically reported. Generally, cancer prevention and control programs work in silos with little oversight and lack application of implementation science.

Implementation science is concerned with closing knowledge gaps about prior programs, intended to transfer knowledge to improve the quality and effectiveness of subsequent interventions (8). Studies rooted in implementation science seek to understand what interventions were delivered, how the interventions worked, and how approaches and methods contributed to the experiences of success and challenge in a program (8). Three broad steps are used: planning, implementing, and evaluating the program (9). In capturing information, value is placed on three aspects that allow for systematic documentation of the method-change alignment: (1) behavior change, evidenced in improvement in policy or practice, (2) engagement with a cross-section of stakeholders to effect translation of improvement, and (3) flexibility in the program approaches (9).

We engaged stakeholders in systematization of experiences from 2021 to 2024, during the development of the CCP program and the first year of implementation. Our goal was to document methods and to understand the contributions to key successes of the CCP, including active continuous collaboration with the ministries of health and non-governmental organizations in six Caribbean countries—St. Kitts and Nevis, Antigua and Barbuda, St. Lucia, St. Vincent and the Grenadines, Dominica, and Grenada; demonstrated high interest of Caribbean and international populations in the CCP, with registrations for live sessions ranging between 200 and 400 persons; and leadership and facilitation by regional multi-disciplinary experts, including occupational health experts and scientists, social scientists, public health experts, information technology experts, medical practitioners, and health project managers. To do this, we explained how components of the CCP were delivered. The program did not follow a trial model but was designed with flexibility based on expressed needs and perceptions of cancer patients during the COVID-19 pandemic lockdown. The CCP was implemented through a partnership of government and non-governmental organizations in six Caribbean countries. The lessons are, therefore, also relevant and transferable to the partner organizations to strengthen national implementations and improve performance in regional coalitions. We documented practices of the partner organizations and representatives on the Steering Committee that contributed to successful outcomes and actual and potential challenges. Organizational partners can play a double role as research experts in programs (8). To extract lessons, a systematization process was used with Steering Committee members to document experiences, interfacing with the approach and delivery of the CCP. Systematization focuses on documenting people's experiences in a program, whereas the primary goal of evaluation is to measure outcomes (10). The systematization of experiences is typically done in an informal setting (10). The approach is deemed suitable for capturing rich qualitative content from feelings and perspectives (10, 11). Similarly, the applied methods for activities and successes in the CCP program were continually identified, discussed, and documented in individual and group interactions between Steering Committee members and program administrators outside of formal meetings, with additional insights also provided during some Steering Committee meetings. Members voluntarily provided information to the CCP program administrators or responses were invited to specific questions about current and past activities. Formal interviews and tools were not utilized in the systematization process. The responses were, however, captured to guide the discussions around the ongoing development of the CCP program. Emerging themes were organized and described by the program administration for reporting on the CCP in different fora.

To the best of our knowledge, this is the first publication applying implementation science to the Caribbean community of practice in cancer prevention and patient education and support. We derived five themed lessons of best practices: diverse, inclusive, and strategic partnerships extending beyond local levels; leveraging and maximizing resources through existing government and non-government organizations and structures; developing need-focused interventions that address all faculties through which health and well-being are ensured; application of scientific principles and concepts in intervention designs; and feedback to inform implementation and scale up strategies that are expansive but also sustainable. The lessons from the CCP are transferable to various types of cancer prevention and control programs in the Caribbean, including medical oncology programs to strengthen holistic care programs through strengthening strategic partnerships with health professionals and drawing on the support of allied health service organizations to best meet patient needs; cancer patient education programs to reach a wide cross-section of stakeholders through diverse, creative, and need-oriented approaches, harnessing local leadership and facilitation; cancer prevention public health programs to design

the most impactful interventions, including building capacity for delivery and sustainability; cancer patient navigation programs to harness expertise that is readily available and influential; cancer survivorship programs to organize community resources and design evidence-based interventions that are tailored to the needs of the target group; and cancer screening programs to utilize creative strategies to mobilize audiences for services in the interest of social good.

Establishment and implementation of the CCP

The CCP is a virtual site created by the Windward Islands Research and Education Foundation (WINDREF) to deliver cancer education to the public, aimed at promoting disease prevention behaviors, and to cancer patients and survivors, aimed at improving timely and appropriate decision-making in the management of the disease. The construction of the site commenced in 2022, with technical support from the Pan American Health Organization (PAHO). During the COVID-19 pandemic, cutbacks and limits to several essential public health and medical services exposed the need for diverse platforms through which health education and other services could be provided. For people who had critical illnesses, such as cancer, the interruptions due to the required lockdowns to prevent the spread of the SARS-CoV-2 virus had potentially serious health consequences, not just from the lack of access to medical care, but also isolation from information to respond to the global health emergency. Before the COVID-19 pandemic, there was already low uptake and participation in onsite cancer management programs, variably due to financial challenges, long distances from programs, lack of interest in content, and failing health of some cancer patients (5, 12, 13). On the other hand, the situation during the pandemic also provided immense opportunities for countries to tailor and refine public health emergency plans to mitigate adverse impacts on critical healthcare. Four recommendations cited in the Lancet Regional Health Americas article, *The Cancer Epidemic in the Caribbean Region: Further Opportunities to Reverse the Disease Trend,* published in 2022 (10), are pertinent to help strengthen cancer prevention and patient support programs and build resilience to remain optimally functional in adverse situations: develop and implement cancer prevention and patient education programs, make screening and risk assessment readily available to the public, consider gender factors in designing programs, and develop human resources to deliver cancer control programs. Maximizing digital technologies in e-health embellishes health systems' resilience to disruptive events.

The high penetration of digital and mobile technologies in the Caribbean is an advantage for public health education and patient services. The CCP was created to leverage the region's information communication technology (ICT) capacity to enhance health literacy and to improve the functional capacity of the health sector during public health emergencies. In the virtual space, access to CCP-hosted programs is practically unlimited to cancer patients, survivors, family/household members, caregivers, healthcare practitioners, and the public. A range of materials, covering various topics, were presented and posted on the Portal.

The CCP program has realized some important successes, including attracting active participation of high-impact organizations across the Caribbean region—six ministries of health, two regional non-governmental organizations, and local organizations with interest in cancer services; a stable program structure that directly responds to pressing needs of the region;—accessible education and patient support services; and high patronage by a wide cross-section of the Caribbean community—over 1,000 attendees in the first year including men, women, youth, health professionals, patients, and survivors.

The collaboration between government and non-governmental organizations was beneficial for maintaining the high quality of the CCP program and ensuring there is both top-down and bottom-up mobilization. The CCP evolved to represent the actual, and more so, the desired standards of the partner organizations for cancer education and support services. Synchronous and asynchronous presentations, interactive discussions, and educational material postings were among the deliverables intended to enhance public knowledge of cancer prevention and risk reduction measures, promote timely and informed decision-making in the prevention and management of the disease, and increase available channels for psychosocial support for cancer patients. The CCP is an affirmative step toward advancing digital health and tele-oncology services in the Caribbean. Major successes of the CCP program included active participation of high-impact organizations across the region—six ministries of health, two regional non-governmental organizations, and local organizations; multidisciplinary leadership and facilitation by occupational health experts and scientists, social scientists, public health experts, information technology experts, medical practitioners, and health project managers; a stable program structure that directly responds to regional needs—education and patient support services; and high patronage by a wide cross-section of the Caribbean community—over 1,000 men, women, youth, health professionals, patients, and survivors attendees in live events in the first year. The CCP was officially launched in February, 2024.

Discussion

Diverse, inclusive, and strategic partnerships extending beyond local levels

The CCP was developed through a collaborative effort between WINDREF and local and regional organizations, including the ministries of health in six Organization of Eastern Caribbean States (OECS), Caribbean Association of Oncology and Hematology (CAOH), Grenada Cancer Society (GCS), and Grenada National Chronic and Non-communicable Disease Commission (NCNCDC). The Pan American Health Organization (PAHO), through the Eastern Caribbean Office, provided technical support for the first phase of development. Representatives of the collaborating organizations formed the Steering Committee, which provided oversight and planned the CCP activities, anchored through the Ministry of Health in Grenada. From the start, the CCP partnership consisted of national and regional organizations

working toward tackling cancer and other chronic diseases in the region. This partnership was strategic and cohesive, revolving closely around shared interests in cancer management and available resources. The constituents of the partner organizations became an extended pool of reachable stakeholders with ready interests in the CCP offerings. Later, the ministries of health in five other countries joined the CCP program as partners. The extended partnership maintained active interactions, modeling the initial relationships.

In the developmental stage, to solidify the network, roles were undertaken by the partner organizations based on the entity's mission and objectives. This approach enabled alignment and fusion of the CCP with the work of the partner organizations, fostering collaboration instead of competition. WINDREF focused on research and development, education, mobilization of partners, and networking; Ministry of Health, Grenada focused on increasing visibility and accessibility for the population; GCS focused on identifying relevant and in-demand content and activities for posting and hosting; NCNCDC focused on advocacy and mobilization; and CAOH focused on knowledge management and dissemination. The partner organizations also had the potential to effectively mobilize their constituents, which, otherwise, would have remained underserved and unreached.

Maintaining cohesion in coalitions and partnerships can be challenging, and many organizations have been dissolved for lack in this area (14). Competing priorities distract and disrupt unification around a common agenda (14). The success of the CCP depended on selecting organizations that had not only a deep interest but a high stake in issues around cancer management, keeping the matter in priority focus among the entities. The alignment of the objectives of the CCP and other regional cancer prevention and control programs created a thriving environment for coalitions. The CCP program was a niche for entities to deliver in a supportive network. Around a shared agenda, non-partner organizations took ownership of the CCP activities and engaged constituents. For example, non-partner cancer support groups mobilized constituents to participate in live events on the Portal.

Cancer education and support programs can benefit immensely from the input of multidisciplinary professional teams (15–17). Diversity in views and perspectives, if positively harnessed, can bring creativity to programs (18). The development of the CCP benefited from expertise in oncology, information ICT, public health, health promotion, health administration, medical services, grant writing, and project management, represented on the Steering Committee. The skill set of the Steering Committee was expanded after the launch, with the addition of representatives of the ministries of health in the five other participating countries. The structured interfacing of these organizations from the six countries enabled an integrative and inclusive approach to the development and implementation of cancer programming in the region.

Stakeholder engagement relates to tangible and intangible inputs from individuals and communities that are potentially affected, positively or negatively, by an intervention (19, 20). Often, genuine participation is underrepresented in the planning and implementation stages (21). Active exchange of information among stakeholders encourages participation and reduces stakeholder attrition (22). It is usually difficult and time-consuming to remedy preventable issues that stem from a discreet or obvious disregard for meaningful stakeholder participation. In the absence of "true" participation, interests wane quickly, and programs are at risk of failure. The structure and progress of the CCP program reflected the collective thinking of the Steering Committee, which also served as the "think tank" for the development and oversight of activities. The Steering Committee met regularly, at least once per quarter, with *ad hoc* meetings, when required. Meeting attendance was usually high, there was consensus for decision-making, and engagements among representatives extended beyond the formal meetings. The approval for the use of the logo of the partner organizations was an indication of commitment to the CCP. Commitment is significant for sustainability; organizations tend to be dedicated to the success of programs to which their namesake is attached.

The CCP was launched in February 2024 after almost 3 years of development. From the early stage of implementation, the Portal attracted the interest of various groups in Caribbean populations, with high registration for each event. The live events featured topics such as *Challenges faced by Caribbean people after cancer diagnosis: envisioning better care— who must lead the fight?*, targeting the general population; *Youth and cancer, potential carcinogenic exposures through cosmetics and occupations*, targeting young people; *Compassion fatigue, an occupational hazard*, targeting medical professionals; *Men and Cancer*, targeting men and boys; Cancer and Gut Microbiome, targeting the public; Advanced Treatment for Prostate Cancer, targeting medical professionals; and Cancer and Alcohol, targeting the public; *Human Papilloma Virus (HPV), Occupations, Cosmetics, Food and Cancer*, targeting the public. Patients, medical practitioners, allied health professionals, academics, cancer survivors, community caregivers, and students regularly participate in events and interact via the Portal.

Leveraging and maximizing resources through existing government and non-government institutions and structures

The CCP was administered by WINDREF, an independent non-profit organization that was established in 1994 and operating from headquarters in Grenada (23). The Foundation has long-standing productive working relationships with several government and non-governmental organizations in the Caribbean. In 2017, the Center for Health Equity (CCHE) was established to provide support to disadvantaged populations, including people affected by chronic diseases and with limited access to health services (23). WINDREF was a key partner with the Government of Grenada in developing and implementing the local COVID-19 response from 2020, the first institution to host SARS-CoV-2 virus testing in the country, and played a leading role in contact tracing and the vaccination program. The Foundation is well-placed to administer the CCP and to develop its resources for sustainability.

PAHO is the WHO arm for public health work in the Americas, including Caribbean countries. The organization provided technical support for the countries, primarily through the ministries of health. Harnessing the expertise and experience of PAHO was instrumental in ensuring a seamless startup

and establishing appropriate structures for management and engagement with partners and service providers. Following the support from PAHO, options were explored for long-term funding commitments, including receiving subvention from governments and donations from reputable organizations that do not have conflicts with the policies and procedures of the program partners. To limit expenditure, low-cost and free open-source software was used in the construction of the Portal, which was also designed for low maintenance. Another cost-control measure is directly soliciting the services of volunteers or through the ministries of health or partner organizations.

The CCP was not designed to be effort-intensive and time-consuming to interact or navigate. Education materials were posted for asynchronous access at users' convenience. Digital materials were solicited from the ministries of health and other organizations to populate the Portal. Public health students and professionals at St. George's University (SGU) were accessible to WINDREF and supported the development of the CCP program. At the same time, it was recognized that organizational capacity building was necessary to improve administrative and delivery capacity, particularly of community-based and non-governmental organizations. Succession planning was another area that received little attention in organizations (24). A named alternate representative was important for substitution and to maintain the presence and contributions of the partner organizations in the CCP when primary representatives transitioned. A smoother transition was likely when hand-off representatives had prior exposure to the CPP program.

Application of scientific principles and concepts in intervention design

While being generally flexible in the design and delivery method, the CCP was aligned to the socioecological model, ensuring inclusivity and responsiveness to beneficiaries' needs. The socioecological model postulates a comprehensive approach to program development, targeting health determinants and behaviors across all proximal and distal levels in society—individual, interpersonal, community, organizational, policy/systems (25). The CCP program caters to the provision of cancer prevention and patient-centered education in a centralized virtual location for synchronous and asynchronous access. At the individual level, the educational content was expected to evoke consciousness of personal risk that may not have been previously known. Health literacy was expected to contribute to decision-making for prevention and care-seeking behaviors to improve health outcomes. The CCP also supported relationship-building within and between communities of patients, survivors, caregivers, and other stakeholder groups. Access to information can lead to improvements in the communication and relationship between care seekers and care providers (26, 27). The discussion fora encouraged cooperation and support within the Caribbean community to address health challenges. Caribbean societies can experience transformations in health outcomes from greater access to health education programs and support services. Very often, the most at-risk groups are left behind in participating in health education programs, national and regional dialogue, and services, widening the health literacy gap and introducing disparities in participation and access to services (15, 28, 29). The high penetration of ICT was a major factor that facilitated unrestricted access to the CCP by people in all socio-economic groups in the Caribbean. Apart from the option to procure continuing medical education (CME) credits, there was no cost to access the Portal, which eliminated financial barriers related to travel and other fees associated with on-site and fee-for-service programs.

Developing need-focused interventions that address all dimensions through which health and well-being are ensured

The lack of education for cancer prevention and patient support emerged as one of the most important needs in the survey of cancer patients in 2020. Other challenges that ensued from the COVID-19 pandemic lockdown included restrictions in accessing medical care and psychosocial support services. The patients' responses indicated there was a need for continuity of health and wellness services during adverse situations, across all levels of the healthcare system. Cancer prevention and control programs in the Caribbean region were also constrained by scarce human and financial resources that negatively affected the reach to target groups, the scope of the programs, and the sustainability of the activities (30, 31). Upscaling was difficult at both the local and regional levels.

To adequately address the rising prevalence of cancer in the Caribbean, interventions must be designed to attract participation of different population groups. If interventions are not effective in raising awareness and prompting action, the incidence of cancer will undoubtedly continue to rise in the Caribbean. The education for prevention component of the CCP targeted the general population, responding to the need to increase awareness of cancer and the disease trend in the region (4, 32, 33). Scheduled live education sessions were focused on two broad areas: (1) cancer risk management (cancer prevention), targeting the public, and (2) information related to pre-treatment, in-treatment, and post-treatment, targeting persons diagnosed with cancer, members of the household, caregivers, and survivors. Health professionals, employed in the public service, working with cancer support groups, and volunteers were invited to deliver presentations. The live sessions were not intended to be academic but interactive, with the language and content tailored to the appropriate levels of attendees. The style of delivery varied between presentations and discussions. The involvement of regional professionals with different training and delivery styles may have been the most important step to keep the interest of new and returning users to the Portal.

Patient and survivor support services focused on promoting and prolonging health, for example, through physical activity and healthy diets. Factual materials were sourced from organizations such as the World Health Organization, Pan American Health Organization, National Cancer Institute, ministries of health, and local cancer support groups. In addition to self-paced learning and the convenience of virtual access, the materials were presented in reader-friendly formats with graphics, video content, and simple language. Games were included on the Portal for

recreation and interactive education engagement, targeting cancer patients, in particular. Cancer education manuals and courses also contained interactive learning materials. A research page contained information originating in the Caribbean, expected to be of high interest to academics and health care professionals. The variation of materials can attract usage of the Portal as a one-stop-shop for cancer education. Themed chat rooms and live events with survivors are planned for future implementation. The Portal can be a useful reference for students in health science programs from primary schools.

The Breast Cancer Risk Assessment Tool (BCRAT) of the National Cancer Institute, U.S. Department of Health and Human Services was made accessible through the platform for personal use to assess breast cancer risk. The intended use of the tool on the site was to raise awareness among users about health status, health behaviors, and health history. The outputs from the use of the tool may also motivate users to pursue further screening and take preventive health actions. If these results are achieved, the incidence of cancer can be reduced in the region.

Cancer treatment is expensive, and many patients are already challenged to afford the basic standard of care. Some patients experience rapid disintegration in the quality of life, attributable to the prolonged active stages of the disease and depleting resources. Low socioeconomic status is a major barrier to accessing high-quality services and complying with treatments. The CCP did not intend to increase the financial burden on cancer patients and, therefore, a fee-for-service structure was not established. The program utilized technical support and resources through collaborative arrangements. For example, technical support was provided by the Pan American Health Organization through the Grenada Ministry of Health for Phase I development of the program. The absence of a user-fee-based structure eliminated financial barriers to participating in the live sessions and accessing materials on the platform. Affirming health equity measures is especially important for the region, given the prediction of rising cancer cases (7, 12). The demand for the CCP is likely to increase as well, however, equity outcomes can only be realized when all groups have access to information and services for health benefits. If the CCP has a positive impact, there can be social change in the region with a decrease in the incidence of cancer and informed, timely actions for treatment and care. To maintain relevance, the Portal will need to be upgraded continually to respond to feedback and the changing needs of the Caribbean people.

Feedback to inform implementation and scale-up that are expansive but also sustainable

In September 2022, the CCP was piloted with a group of 26 individuals comprising people diagnosed with cancer, students in tertiary institutions, academics, individuals who were not diagnosed with cancer, healthcare program representatives, and physicians. The pilot included a 2-part online survey via the CCP: one survey assessed the aesthetics, utility, and effectiveness of the Portal, and the other assessed the utility and effectiveness of the cancer risk assessment tools for the context of the Caribbean. Key findings from the assessments, ranked on a scale of 1–5, show the portal was easy to access via log-in (84.6% ranked 5/5), users could easily navigate and find information (76.9% ranked 5/5), the portal was aesthetically pleasing (42.3% ranked 4/5 and 46.2% ranked 5/5), and the information was comprehensive (34.6 ranked 4/5 and 42.3% ranked 5/5). Specific to the risk assessment tools, users shared that the results were provided in a short time after entering personal data (62.5% ranked 5/5), the results were useful indications of the state of health (26.7% ranked 4/5 and 60.0% ranked 5/5), the amount of time taken to use the tools was adequate (68.8% ranked 5/5), and the results were useful for influencing health behaviors (68.8% ranked 5/5). The participants provided recommendations to improve the CCP, including the need for information on other cancers with increasing and high prevalence in the region, such as skin cancer and childhood cancers, including recorded testimonials from cancer survivors, and tailoring the risk assessment tools to the Caribbean context. The results from the assessment were valuable in tailoring the Phase II proposal, ensuring that the document was more responsive to the needs of the target audience.

Significance for the Caribbean region

The CCP program provided a unique opportunity for organizations in the Caribbean to collaborate and close the gap in education and services for cancer prevention and support for patients and survivors. There have been calls to develop and scale up cancer education and services for the people in the region, acknowledging that national and regional cancer management programs face many challenges and few are successful in achieving and contributing to high impacts (13, 30, 34, 35). Lessons regarding methods, approaches, and outcomes were not deliberately captured and shared to help improve subsequent interventions. To our knowledge, there is no established regional system for collecting, collating, and sharing designs, methodologies, and lessons from cancer prevention and control programs developed and implemented in the region. The CCP program may be the first to highlight successful practices of a regional education program for cancer prevention and patient support on a virtual platform.

The lessons may be applicable to various other prevention and control programs. First, education and patient support programs can benefit immensely from diverse, inclusive, and strategic partnerships. Government and non-governmental organizations can work harmoniously to develop creative programs that respond adequately to population needs. Second, sharing resources and working collaboratively will put the regional countries in a better position to develop sustainable and more impactful cancer education and patient support services. Third, need-driven programs have the greatest chances of success. Research and inquiries provide a basis to support tailored programs that adequately address the most pressing needs of the Caribbean people. Fourth, factors that influence health behaviors and outcomes at each socioecological level should be considered from the initial planning stage of programs. Education and health theories, such as the Health Belief Model and the Socioecological Model, are useful guides for cancer control program development.

Finally, stakeholder participation must be meaningful in shaping the program. Stakeholder feedback is powerful information to understand the impact of cancer control programs and to help reshape interventions to better align with the needs and interests of intended beneficiaries. Qual+quan evaluations and systematization of experiences provide rich information to help design and redesign programs.

A limitation of this work is related to the short period of existence of the CCP. As the CCP program continues to roll out, it is expected that other key lessons will emerge, which will need to be observed and documented. A retrospective assessment would be needed, more appropriately after 3 years of implementation or following a major change in the program structure, to determine how much interest remains in the program. Systematization of stakeholders' experiences and the documentation of processes and lessons should be continuous and thorough to close knowledge gaps for enhancing future programs. Hopefully, in the near future, reference can be made to the application of the lessons in other cancer prevention and control programs. As new programs emerge in the region, the CCP may also compare strategies and outcomes to refine best practices for regional organizations. The experiences of other organizations should not be ignored and the CCP program will remain open to exploring and adopting lessons.

Finally, the lessons and recommendations are transferable for the development and implementation of several types of cancer prevention and control programs in the Caribbean. It is hoped that the methods used in the CCP will be adopted and contribute to enhancing the planning, implementation, and sustainability of other regional programs. This publication brings to light how communities of practice, using implementation science, can benefit from the systematization of stakeholders' experiences to document and share information on methodologies that are effective for social change. Medical services, public education programs, patient education programs, patient navigation and support programs in the Caribbean are among organizations that may benefit immensely from the lessons to expand reach to stakeholders, build coalitions for change, and improve mobilization and sustainability of program activities. Drawing on lessons from the CCP, organizations can seek improvements through actions, such as reorganizing program components, restructuring leadership, developing policies to guide new directions, embracing a shared vision, and expanding partnerships in support of the vision. Knowledge banks would be extremely valuable to support the collection, analysis, and dissemination of information relating to sustainability, accessibility, and impacts of cancer prevention and control programs in Caribbean countries.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

LT: Conceptualization, Investigation, Supervision, Writing – original draft, Writing – review & editing. S-AJ: Investigation, Writing – original draft, Writing – review & editing. SC: Investigation, Writing – original draft, Writing – review & editing. SN: Writing – original draft, Writing – review & editing. OG: Writing – original draft, Writing – review & editing. CN: Writing – original draft, Writing – review & editing. KT: Writing – original draft, Writing – review & editing. TW-P: Writing – original draft, Writing – review & editing. CM: Writing – original draft, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

The reviewer AA declared a past collaboration with the authors LT, SN, & OG.

Generative AI Statement

The author(s) declare that no Gen AI was used in the creation of this manuscript.

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