Adapting Cancer Civil Society Organizations to Accelerate COVID-19 Vaccinations in People Living With Cancer in Lowand Middle-Income Countries—A Commentary

Murallitharan Munisamy, MD, MCommHSc, MSc, MMedEd, PhD^{1,2}; Kingsley Ndoh, MD, MPH^{2,3}; Ahmed Abdelbadee, MBBCh, MSc, MD^{2,4}; Isthar Espejo, LLB (Hons)^{2,5}; Florence Manjuh, RN^{2,6}; Alexandra Tamas, BA, MSc (PolEcon), MSc (Geopolitics and IER)^{2,7}; Omolola Salako, MBBS, FWACS^{2,8,9,10}; and Felipe Roitberg, MD^{2,11}

More than a year since the onset of the SARS-COV-2 viral pandemic, the situation continues to be serious, with the latest data recording more than 160 million confirmed cases and almost 3.4 million deaths worldwide.¹ New waves of infection have emerged even in countries that looked to have brought their conditions under control, and in many countries, the outbreak continues unabated.¹ Reining in the pandemic and bringing it to an end will require multifaceted, multistakeholder approaches including public health risk-mitigation measures, community education and empowerment strategies, and successful development and deployment of vaccination programs worldwide.²

Through a combination of global cooperation and innovation, the scientific community has managed to develop multiple vaccine candidates against SARS-COV-2.³ Some of these have successfully completed phase III trials, received emergency authorization, and are already being used in multiple nations to reduce the spread of the pandemic.³ Unfortunately, the development of safe and effective vaccines is only part of a comprehensive vaccination solution.⁴ Challenges in vaccinating a country's entire population include the speed in which the vaccines can be manufactured and transported to wherever they are needed; the successful organization and management of vaccine delivery programs on the ground; and how well vaccines are accepted by potential recipients.⁴

Author affiliations and support information (if applicable) appear at the end of this article.

Accepted on June 25, 2021 and published at ascopubs.org/journal/ go on July 22, 2021: DOI https://doi.org/10. 1200/G0.21.00195 Creative Commons Attribution Non-Commercial No Derivatives 4.0 License @ () () () People living with cancer (PLWC) have been severely affected during this pandemic. Not only are PLWCs at higher risk of contracting COVID-19 infections, but they are also more susceptible to complications when infected with the disease.⁵ Additionally, the pandemic has also caused a detrimental impact on cancer care services for PLWCs, with delays and disruptions tied to poorer outcomes.⁶ For example, recent data projected that because of the pandemic, clinicians in Europe saw 1.5 million fewer patients with cancer over the past

year, with an estimated one in five PLWCs in Europe not receiving the care they needed.⁷

Cancer civil society organizations (CCSOs) have also been faced with numerous challenges connected to the pandemic, which have affected their ability to support PLWCs.^{6,8,9} Many of them have adapted innovative solutions and new approaches to continue providing much-needed services, while quite a few have also taken on completely new roles to cater to the evolving needs of the PLWC communities they serve in the pandemic.⁸⁻¹⁰

As vaccination programs begin to be rolled out across different low- and middle-income countries (LMICs), questions arise on whether CCSOs should take on new roles to support COVID-19 vaccination programs. This is especially relevant since successful rollout of vaccination has been suggested to be one of the ways to get cancer care back on track.¹¹ This commentary explores issues around potential roles CCSOs should play in COVID-19 vaccination programs in LMICs.

Why Can CCSOs Play A Role in Covid-19 Vaccination Programs?

There are some significant challenges in advancing vaccination efforts globally.³ Chief among these is vaccine hesitancy.¹² The multifaceted determinants of vaccine hesitancy (as depicted in Figure 1) can be divided into (1) confidence in the efficacy and safety of the vaccines as well as the system tasked with the process of vaccination; (2) complacency—in which individuals are not motivated to be vaccinated if the perceived risk of the specific disease is low; and (3) convenience—in which the ease (or difficulty) of obtaining the vaccine affects the decision to get vaccinated.¹³

Numerous studies have documented the continuing lack of confidence in the safety and efficacy of COVID-19 vaccines among the public, including PLWCs.¹⁴



FIG 1. 3Cs vaccine hesitancy model¹³ and the possible roles CCSOs can play in improving vaccine acceptability. CCSO, cancer civil society organization; PLWC, people living with cancer.

This has been attributed mainly to a paucity of contextspecific communications to relevant communities and active disinformation campaigns from antivaccine and pseudoscience groups.^{14,15} CCSOs, as trusted institutions among PLWCs, can use their trusted reputation and social capital to aid in confidence-building and acceptance in vaccines among the communities they work in. One way they could support PLWCs is to help them understand their relative risk. For example, in the United States, a part of the initial fear of taking the Pfizer-BioNTech vaccine a few weeks after its approval and use was attributed to reported cases of Bell's palsy.¹⁶ CCSOs can play an active role in helping PLWCs to simplify and distil the plethora of news and studies, which can be one of the ways to boost confidence in vaccines.¹⁷

PLWCs as well as health care workers working in cancer care may also be complacent toward COVID-19 vaccinations, with the unfounded perception by some of being at lower risk to contract the disease, while others may feel that vaccination is futile because of the complex emotional stresses and mental health issues they face currently.^{14,18} CCSOs, especially those working within the psychosocial landscape, can assist in identifying individuals with vaccine complacency as well as those with mental health issues, which may be affecting vaccine acceptance, and carry out individual or group-level interventions as and when required for this purpose.

Vaccination programs will most likely need to be carried out via multiple modalities, with modifications to take into account varying geographical locations, local context, and

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even specific cultural mindsets.^{3,15,18} PLWCs are diverse and heterogeneous, with individuals living with different cancers as well as being in different stages of survivorships on different treatment regimens.¹⁹ Additionally, the clinical trials that led to the approval of a number of the vaccines did not include enough patients with cancer on active treatment to generate ample evidence for patients with cancer vis-à-vis the state of their immune cells. This has led to diverse recommendations and, in some instances, confusion among patients with cancer on whether or not to vaccinate against COVID-19.20,21 Large-scale mass vaccination programs may find it challenging to assess and manage these individual needs of PLWCs. CCSOs, by contrast, may be better suited to bridge this gap between health authorities, oncologists, and the patients themselves to facilitate vaccinations among PLWCs.

PLWCs have been indicated as an at-risk group who need to be prioritized for vaccinations.²² In the tussle between vaccine supply and the race for vaccination even within each country, concerns abound on equitable distribution of vaccines.²³ CCSOs are institutional advocates for PLWCs and can raise concerns to key stakeholders as well as play an oversight role over distributions to ensure PLWCs are indeed prioritized and provided with access to vaccines in a timely manner. CCSOs are well positioned to be able to address ethnic, sex, economic, geographic, and cultural diversities of the communities they work with and can use their institutional knowledge and social capital to triage and prioritize PLWCs within these communities for vaccination.^{24,25}

How Can CCSOs Play A Role in Covid-19 Vaccination Programs?

Some of the strategies in which CCSOs can play an active role in COVID-19 vaccination programs include the following.

CCSOs Being Used as Vaccination Centers for PLWCs. CCSOs providing clinical services would already have suitable infrastructure and resources for registering, administering, and subsequently risk-assessing and observing PLWCs for unintended postvaccination events. CCSOs can be contracted by specific governments or international organizations to act as vaccination centers specifically for PLWCs and will also confer additional benefits by acting to decrease the load on clinical systems already managing active COVID-19 infections as well as being low-risk centers, which are a safer avenue for PLWCs at risk for COVID-19 infections. In specific instances, CCSOs can also establish and carry out mobile vaccination camps to reach vulnerable PLWCs or those in geographically inaccessible regions. Integrating the care of communicable and noncommunicable diseases (NCDs) has been successfully carried out in Malawi, for example, where integrated HIV and NCD care was provided.²⁶

CCSOs Acting to Support Governments in Purchasing and Distributing COVID-19 Vaccines for PLWCs. In LMICs with fragile overburdened health systems, CCSOs may be able to support governments in purchase and distribution of COVID-19 vaccines, specifically for PLWCs. This could be done working together with larger global partners and prove to be a manner in which vaccines can be provided to PLWCs, who are a high-priority group to be vaccinated. In countries such as India and Tanzania, civil society organizations have played an important part in providing access to essential medicines, and also acted to exercise wider market influence by controlling competition and prices.²⁷

CCSOs Advocating for Equitable Vaccine Access for COVID-19 Vaccines for PLWCs. In LMICs, CCSOs can act as advocates to governments and other key stakeholders to ensure that PLWCs are prioritized in terms of vaccine access. CCSOs are perfectly positioned for this role since most already are in strong social partnerships with key public

AFFILIATIONS

¹National Cancer Society of Malaysia, Kuala Lumpur, Malaysia ²Union for International Cancer Control (UICC) Young Leaders Programme 2019/2020, Geneva, Switzerland

³Department of Global Health, University of Washington, Seattle, WA ⁴Department of Obstetrics and Gynecology, Faculty of Medicine, Assiut University, Assiut, Egypt

⁵Fundacion Aladina, Madrid, Spain

⁶Women's Health Program, Cameroon Baptist Convention Health Services, Cameroon

⁷European Network for Smoking and Tobacco Prevention

⁸Department of Radiation Biology, Radiotherapy and Radiodiagnosis, College of Medicine, University of Lagos, Nigeria health stakeholders within their national settings. Additionally, CCSOs can act as public oversight bodies to ensure that the rollout of vaccines is being carried out in a systematic, transparent manner. CCSOs have successfully advocated for governments and other stakeholders to provide equitable access to medicines in various other disease settings, including in HIV.²⁸

CCSOs Providing Vaccine-Specific Health Education and Health Promotion. CCSOs can play an important part in building the confidence of PLWCs as well as their families and carers to COVID-19 vaccines. Most CCSOs already have strong scientific reputations and good working relationships with experts, as well as the implicit trust of their communities. CCSOs can act to bridge the gap between the evidence of COVID-19 vaccines and PLWCs who are grappling with these abstract scientific concepts via innovative and effective communication approaches.

These may include simplifying vaccine and side-effect data using social media or even celebrities to increase vaccine confidence and utilizing of existing channels used for dissemination of cancer information to include vaccine health education and health promotion.

CCSOs that are already in many instances actively involved in debunking cancer misinformation and pseudoscience should also extend these capabilities to counterbalance vaccine myths and the narrative of antivaxxers. One successful example of CCSOs acting to drive vaccine-specific health education and health promotion was during the promotion of HPV vaccination in Europe.²⁹ In specific communities, CCSOs can also work with community cultural or religious leaders to identify possible beliefs that may hinder vaccine uptake by vulnerable populations and work to address them.³⁰

The success of COVID-19 vaccination programs is one of the key checkpoints for ending the pandemic and, through this, provide a clear path to put cancer care back on track.² CCSOs can and should play a role in vaccination programs in their own communities, especially in LMICs with fragile health systems that are severely under strain fighting the COVID-19 pandemic.

⁹Sebeccly Cancer Care, Lagos, Nigeria

- ¹⁰Oncopadi Digital Clinic, Lagos, Nigeria
- ¹¹Instituto do Câncer do Estado de São Paulo, Sao Paulo, Brazil
- ¹²European Society for Medical Oncology (ESMO), Lugano, Switzerland

CORRESPONDING AUTHOR

Murallitharan Munisamy, MD, MCommHSc, MSc, MMedEd, PhD, National Cancer Society Malaysia, 66 Jalan Raja Muda Abd Aziz, Kuala Lumpur 50300, Malaysia; e-mail: muralli@cancer.org.my.

AUTHOR CONTRIBUTIONS

Conception and design: Murallitharan Munisamy, Isthar Espejo, Alexandra Tamas, Felipe Roitberg

Commentary

Administrative support: Murallitharan Munisamy

Provision of study material or patients: Murallitharan Munisamy, Ahmed Abdelbadee, Isthar Espejo, Florence Manjuh, Alexandra Tamas, Omolola Salako

Collection and assembly of data: Murallitharan Munisamy, Kingsley Ndoh, Ahmed Abdelbadee, Alexandra Tamas, Omolola Salako

Data analysis and interpretation: Murallitharan Munisamy, Kingsley Ndoh, Isthar Espejo, Florence Manjuh, Felipe Roitberg

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Final approval of manuscript: All authors

Accountable for all aspects of the work: All authors

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Open Payments is a public database containing information reported by companies about payments made to US-licensed physicians (Open Payments).

Murallitharan Munisamy

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Omolola Salako

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Felipe Roitberg

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