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The Newsletter of the Consortium for Advanced Research Training in Africa

Going Virtual-Adapting to Learning, Events & Meetings During the Pandemic

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APHRC virtual academy: towards better online learning Celebrating CARTA's 100 graduates Adapting to research & teaching in the new era: Accounts of the CARTA graduates

Building a vibrant multidisciplinary African academy that is able to lead world-class research that makes a positive impact on population and public health.

Welcome note

Evelyn Gitau - Director, Research Capacity Strengthening at APHRC

The declaration of a pandemic by the World Health Organization in the first quarter of 2020 meant that we had to adapt fast to what is now termed as a 'new normal'. At CARTA, we offer training as a central tenet of our deliverables and the start of the pandemic adversely affected our implementation. Because of the pandemic, workshops and seminars that called for travel and physical presence were disrupted, setting us on a course toward restructuring our mode of delivery.

The world was moving toward a virtual renaissance as it was the only available option that would ensure continuity and a semblance of business as usual. Luckily for us, we had a digitization program that was in progress prior to the pandemic. The circumstances that we found ourselves in aligned with the ongoing digitization program. Eventually, the digitized CARTA materials will be made accessible to the CARTA community and this will ensure that our partner institutions get the training



The world was moving toward a virtual renaissance as it was the only available option that would ensure continuity and a semblance of business as usual. and support they need without inhibitions during the pandemic and going forward.

Over the past year, we have also put in place structures for our events whereby our seminars and workshops can be held virtually. This means that the Joint Advanced Seminars (JAS), Supervisors Workshop (SW), Partners Annual Forum (PAF) and the Faculty and Administrative Staff (FAS) Seminars have all been held virtually and successfully for that matter.

In this edition of the CARTA newsletter, we bring you stories of fellows, graduates, focal persons and partners; of their innovative, creative and triumphant ways, and of the progress they have made as they worked virtually. In addition, the CARTA Program Managers share an article where they put into perspective what it has been like running a program during a pandemic such as this.

I hope you will enjoy the read.

Redefining programs and events during and beyond the pandemic period

By CARTA Program Managers, Florah Karimi and Marta Vicente-Crespo

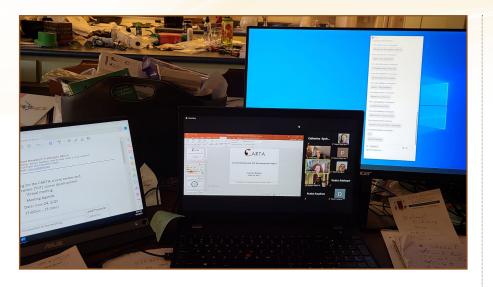
t the onset of the COVID-19 pandemic in March 2020, CARTA adjusted its scheduled activities. We postponed some activities entirely and modified others to allow delivery. As it became apparent that the ongoing crisis would persist and with stringent enforcement of social distancing, CARTA was compelled to fully embrace and implement virtual practices to ensure the programs continued to stay afloat amidst the pandemic. CARTA embraced virtual set-ups for its governance meetings and its training, including the Joint Advanced Seminars (JASes) and the Supervisors Workshop (SW).

Before its immersion into the virtual space, CARTA had initiated the digitization of its pedagogical approaches. CARTA intends to avail reference pedagogy videos to facilitators of various CARTA interventions on the web to a broader audience so that they can be implemented elsewhere. In essence, a blended learning approach is the future of CARTA interventions.

Virtual seminars and workshops: The opportunities and challenges

Virtual events enable the possibility of reaching global dimensions where physical venues become non-existent. Consequently, this allows anyone residing anywhere in the world to attend and be involved. We believe that virtual events have given opportunities for more fellows, facilitators, and partners to be involved and engaged with each other across the consortium without requiring them to travel. Even for short meetings, consortium members and fellows are more available and willing to join virtually, as they do not need to take leave from work or spend time travelling to the venue. This has redefined conventional events while bridging connections.

We perceived the implications of the pandemic as an opportunity that enabled us to venture into new and unknown approaches that were "out of the box" and had vaguely been thought of before. Although shifting to virtual mode was not entirely new, it inspired the consortium members to have different perspectives while accomplishing activities through varying methods. We rescheduled some activities, such as the JAS, SW, and the Faculty and Administrative Staff (FAS) Seminar, to give us more time to design new approaches of engagement amidst the physical limitations resulting from the pandemic. We had our first opportunity to engage in capacity strengthening activities in a virtual learning space in May 2020. This was through a seminar designed for grant managers and accountants from different universities and research institutions to enhance their understanding and skills in grant management and, specifically, in the Good Financial Grant Practices (GFGP). We gradually commenced transiting our other training sessions to blended learning and began with the JAS sessions in October 2020. We transited JAS 2 and 3 to a blended learning space that comprised virtual sessions, in-country residential sessions, and extended clinic sessions for the fellows. We also held a virtual SW



in March 2021 that was externally facilitated and allowed us to appreciate alternative approaches to this kind of training.

Virtual interactions have been given the nod in the new normal due to several factors, including their ability to reach a wider audience, flexibility, cost- and time-effectiveness, and being less logistically challenging. Amidst all the adjustments made by CARTA to embrace the virtual space, we also appreciate the strengths of face-to-face interactions, as expressed by different consortium members and fellows. The networking capability of face-to-face interactions is one that we cannot downplay. In addition, some technical skills are best transferred using face-to-face interactions. Considering the need to professionally carry out our training sessions amidst the new-normal resulting from the pandemic, we engaged an e-learning expert to draw up a strategy and roadmap on how to transit CARTA training sessions to a blended learning space. We completed this process in March 2021.

We look forward to utilizing the blended learning strategy and roadmap to inform future endeavors of the consortium as we refine our training sessions and develop Training of Trainer courses to support the adoption of the CARTA interventions at institutional levels.

Creative communication and interaction approaches during the pandemic

Adapting to the new normal called for time, appeal and creativity. CARTA had to utilize virtual tools and apply them to assist in achieving progress for the program during the unique circumstances brought by the pandemic. A critical approach during this time has been increasing the engagement and communication with the program's stakeholders, including funders, fellows, and partner institutions. The communication and interaction approaches included:

- frequent discussions with the funders on progress and support needed for the program and the future outlook of programs to come;
- surveys on who had been involved in COVID-19 related research amongst the fellows;
- follow-ups on project and fellowship progress;
- increased capabilities of hosting meetings within the consortium and in the respective partner institutions; and
- internet allowances to enhance the connectivity of fellows, focal persons, and facilitators while carrying out consortiumrelated activities.

CARTA made an extra effort to update all the stakeholders frequently on the development and progress of the program. Conversely, the fellows and partner institutions updated the CARTA Secretariat on the progress of their respective projects.

We conducted regular communication and discussions with the fellows and individuals to develop alternative methods of achieving their milestones during the pandemic period.

The above helped us understand the status of various program components, leading to programmatic, fellowship, and project adjustments that included re-programming of activities, project extensions, and considerations for leave of absence.

Additional support to fellows

With the alarming disruptions of most program activities, the need to provide urgent support to the fellows became a priority to ensure they advanced in their doctoral and post-doctoral fellowships. The priority was to ensure that substantial safety measures were provided and implemented for everyone. We advised the fellows and students to take a leave of absence when considered necessary to mitigate delays caused by the pandemic. We also provided childcare support to the fellows to cushion them against adverse family-related effects on their fellowships. We also offered additional fellowship support in the form of research funds, stipend enhancement and last-mile thesis/dissertation funding support to cushion the extra expenses due to the demands of working during the pandemic.

Opportunities for greater reach and impact of the program

With the changes in the world, we believe that it is essential to alter our perspectives and have a positive outlook to see more opportunities for the future. Embracing the positive aspects of conducting events virtually, such as being timeefficient and cost-effective, can make way for further opportunities.

Given the significant shift towards virtual practices, this can induce and foster other beneficial opportunities, such as having mini-CARTA programs established in each institution with the full support of the central CARTA. This would reduce the exposure during the pandemic (let's be aware of the pace at which vaccines are becoming available in our context) and bring the additional benefit of exposing more individuals worldwide to CARTA's good practices. The process of refining the CARTA courses and training institutional-based facilitators to carry out the various CARTA courses - the JAS, SW, FAS, and the Graduate Workshop (GW) - is the first step, decentralization and enhancing CARTA activities at the institutional level. In addition, the imminent completion of the digitization of CARTA pedagogical approaches will provide a reference to fellows and facilitators as they adapt the CARTA courses to their contexts.

Conclusion

During this period, CARTA continues to identify opportunities to strengthen the program for sustainability and greater reach and impact. The virtual space will remain an integral part of the CARTA program moving forward as we learn how to combine virtual and face-to-face interactions to maximize the strengthening of our partner institutions. We will also enhance our fellowship and institutional support to ensure that they remain effective within the African region and beyond while also refining our courses and transferring facilitation capacities to our partner institutions.

Of innovative programs, going virtual and strengthening partnerships

We caught up with the CARTA Co-Director, **Catherine Kyobutungi**, who is also the Executive Director at APHRC. Here, she talks to the CARTA Communications Officer, **Gloria Chemutai** about CARTA's journey during the pandemic, the Program's foray into the virtual realm and the innovative transitions that have taken place so far. Read on.

How and why did CARTA decide to redesign the program around virtual activities?

We knew that our fellows needed support during the pandemic, so we had to figure out how to customize the training and make sure that they had what they needed to make the most progress with their PhDs. At first, we assumed the pandemic would only last a few months, so we were concerned about short-term measures to modify the CARTA training program, which is heavily reliant on face-to-face interactions. We realized later in the year that we needed to plan for a longer period, but we also saw the pandemic disruptions as an opportunity to do things differently. We used the lessons learned from the short-term interventions and began planning a longer-term, possibly permanent, transition to the virtual environment for CARTA training activities.

How did CARTA support its fellows during the pandemic? What stands out?

The CARTA program is very interactive and its training hinges a lot on face-to-face interactions among fellows and, with their supervisors and course facilitators. Initially, we held discussions with the focal persons at the partner universities and identified unique challenges that the fellows were facing and ways to address them.

Subsequently, we purchased additional video teleconferencing licenses for virtual interactions, allowing fellows to participate in webinars and conferences, as well as communicate with their supervisors and one another with ease.

We provided care grants whereby fellows with childcare or other care responsibilities that have increased due to the COVID-19 situation can pay caregivers leaving them free to concentrate on their PhD studies. In addition, we have enhanced the research grants to allow fellows collect data safely and provided the so-called last mile fellowship for those fellows who were stuck for one reason or another and could not complete their studies.

What innovations have emerged during this period?

When the pandemic first struck, it became evident that virtual interactions would become the norm in the short-to-medium term. For some time now, we have been developing the APHRC virtual academy, as we envision a future where learners can learn wherever they are, anywhere in the world. The



pandemic created an opportunity for us to take the plunge into something we could not have considered before and now with the academy, we can easily deliver the CARTA training interventions more efficiently.

Besides that, we also rolled out the concept of Mini-Joint Advanced Seminars (mini-JAS), in which fellows have a two-week residential stay within their country and receive training virtually. This limits their exposure to Covid-19 from international travel while allowing them to have protected time to advance in their PhD. The mini-JAS thus provides fellows with opportunities for face-to-face interactions and networking similar to what they would have received in a full JAS with fellows from other countries.

Furthermore, before the pandemic struck, we had begun a process of converting the CARTA teaching materials into digital formats as part of a long-term institutionalization strategy. Digitizing the materials and making them more accessible is a step towards expanding the CARTA program's reach to a wider audience within our partner institutions. We have now fast tracked the digitization process that once completed, will allow the secretariat, fellows, and facilitators access all of the CARTA teaching and learning materials remotely and independently, without physically congregating.

What are the opportunities and lessons learned that could help to better prepare for the future?

When life gives you lemons, you make lemonade. The pandemic is horrible, but it has also compelled us to do things we would never have considered before. When such disruptive events occur, we should take the time to identify the positive aspects that will serve as entrance points for big changes.

Throughout the pandemic, we have heard of "the new normal" but perhaps what existed prepandemic was not meant to be normal, or perhaps it was the wrong normal. What we call the new normal is what should be the norm. We took many things at face value and as the norm, such as flying in people for meetings without considering the environmental impact. The pandemic has forced us to reassess everything we believed was normal and to see that other methods of learning are much more convenient, faster, affordable, and less disruptive to people's everyday routines. Even after the epidemic is over, I believe we should not go back to how we used to do things, or we will have learned nothing. Although there will be opportunities for people to meet and communicate in person, there will also be more efficient ways to accomplish things that are more convenient for everyone involved.

The pandemic also made people realize that the vast majority of people could work from home and be productive. Despite its challenges, it has proven to be efficient and less stressful for the majority of members of the CARTA community.

CARTA has reached the 100-graduates milestone. Why is it exciting?

The CARTA theory of change has always been about critical mass, and so every person who graduates gets us closer to that elusive goal. Every person who graduates becomes part of a different category of the CARTA community and as a result, we have a larger pool from which to cultivate research leaders and change makers.

Lastly, how important are partnerships to CARTA's success?

CARTA is a consortium whose success relies solely on partnerships. We believe that our collective capacity as partners is greater than the sum of each individual partner's capacity. The governance structure is all-inclusive and members of the consortium exercise their power through a democratic, consultative, and respectful system.

During the Covid-19 pandemic, the focal persons at the partner institutions had to come up with innovative strategies to keep the fellows engaged and supported.

Moreover, our strong partnership with funders has been invaluable. Throughout the pandemic, they have extended much flexibility and support, which we do not take for granted.

Fundraising for researchers in the pandemic era

By CARTA Communications Officer, Gloria Chemutai



he continued COVID-19 pandemic has caused a significant impact on the research community. It has induced disruptions to active research projects while raising new challenges for other researchers, from transitioning to uncommon approaches and measures of working to acquiring funding during these unsettling times. As funding bodies and governments invest considerable amounts in emergency aid and research relating to COVID-19, other research areas are enduring halting situations.

While considerable proportions of funding are being channelled for public health research relevant to the COVID-19 pandemic, some researchers and research teams at universities and research institutions may be struggling to acquire funding assistance for their research. Hence, they need to resort to more aggressive and creative approaches in acquiring funding support. For some scientific communities, this new situation with funding has posed a challenge and brought uncertainty with more unforeseen competition in terms of getting funding. Many research projects have had to be deferred, even though their projects are essential as well. Consequently, most research has moved towards working for the pandemic rather than their original research topics.

The Funding Landscape of Research

With the worldwide attention focusing on the COVID-19 pandemic, other issues have been overshadowed. For the research community, projects are being halted, conferences are being postponed, and university laboratories are idle, while some efforts have been redirected towards COVID-19 related research. Meanwhile, in academic publishing, journals are prioritizing papers on COVID-19 more than other subjects, while researchers are unable to complete their projects, making them unlikely to submit papers. With this, research councils and governments

prioritize considerable amounts for COVID-19 research, leading to fewer funds or no increment for other research. Seasoned researcher Nino Kuenzli, from our non-African partner institute Swiss Tropical and Public Health Institute, says that "even for some science communities, this is an inhibition or challenge that brings uncertainty, while things are becoming competitive in terms of getting funding." Research that is still considered important is being disrupted and redesigned into working for the pandemic rather than their initial research agendas.

Furthermore, with remote working and e-learning due to the lockdowns and restrictions, researchers are forced to adopt different approaches in working and acquiring data. In Nino's experience, scientists are the most privileged researchers during the pandemic. Especially with the high workload in public health research, the condition has become calmer and flourishing, with more time to think, work, do research, and write papers. Although the data is anecdotal, the exponential growth in publishing papers has been a positive experience, in addition to having time to accomplish other equally important tasks.

Strategies for Research Fundraising

The COVID-19 pandemic has generated limitless uncertainty in everyday lives. Nevertheless, as advised by health officials, this is not the time to panic but instead implement prudent strategies to mitigate the circumstances. This similar advice of applying smart strategies should also be adapted in the challenging task of acquiring funds and financial support for research.

Nino suggests that writing a good grant is still one of the most successful methods for researchers. Young scientists, in particular, should prioritise writing quality proposals, focusing more on interesting and essential research questions, and building the proposal based on resolving those questions. A successful grant proposal should possess a few key requisites, such as a unique research problem, sufficient feasible plans for solving the problem, and pertinent budget planning. Some researchers strive to devise innovative proposals in their attempt to appease the funders but often overlook the essential components of designing a successful grant proposal.

"This is what CARTA teaches its fellows, and that is what we also try to do with our PhD students. In following that advice, researchers should take time to sit down and think, to research, to read, to understand where the science stands, to then formulate new important questions and the right methods to answer those questions," Nino stresses further.

For Frederick Oporia, an early career researcher and CARTA Cohort Ten fellow from Makerere University, persistence and assertiveness in writing and submitting proposals are also fundamental approaches in obtaining any research funding. "Looking out for any relevant calls is essential, in order to submit the applications. Do not lose hope and energy if they are rejected. In the end, one of them will end up in your basket," he advises.

Particularly for early career researchers, they should continuously remain resilient and tenaciously pursue their studies despite the circumstances. Even when their applications are rejected, they should not be deflated while diligently improving on the next application with aggressive persistence. Being rejected does not imply that the research is irrelevant, but it may just be an unsuited interest for the grant call. Hence, researchers should improve on their proposals based on the comments given and enhance submissions to be more detailed, promising, and appealing.

The Challenges and Opportunities for Research Fundraising

Since substantial funding has been allocated for COVID-19 related research, the opportunities and chances of winning such grants can be achieved by aligning one's research to the COVID-19 pandemic. Although this may be a challenge for most PhD fellows who are already focused on their study areas, but it may enhance their chances of acquiring their desired grants.

In addition, virtual access is another innovative opportunity that is useful for research fundraising. Hybrid virtual approaches will continually evolve and enhance the digital pivot, fusing in-person and online situations and becoming the research format for the future. These methods can offer effective fundraising opportunities, even after the pandemic, enticing funders by embracing technology in research methodologies.

Nino insightfully speculates that, since virtual technology has become more conveniently accessible, it has become extremely efficient to have meetings with research candidates from different locations in the world without spending funds on traveling. With this, scientific exchange has become easier and more cost-efficient. Moreover, this positive experience can also be applied for fundraising, making it convenient to approach funders from all over the world while emphasizing those that will appeal to the research at hand.

According to early career researcher Frederick,

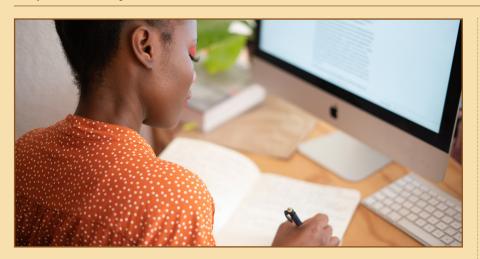
researchers should not only rely on one source to acquire financial support. In addition, thorough reading and understanding of the grant's instructions are pertinent in designing a successful grant proposal, other than writing it in immaculate English or other required languages.

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Partners in action

APHRC virtual academy: Towards better online learning experiences

By Peter Muriuki, Program Officer, APHRC



B y 2019, African Population and Health Research Center (APHRC), was already feeling the pressure and demand for capacity building workshops. With the workshops came extensive travels that trainers had to make within short periods of time. Participants were also met with course fees and travel costs which meant that the workshops became unaffordable to many. It called for a decision to address these limitations while ensuring that the workshops continue.

It is due to this debacle, that APHRC deemed it wise to commission a study into the idea of virtual workshops. As we debated on how well to migrate workshops online, the pandemic struck. With COVID-19 in our midst, and measures like social distancing in place, it caused APHRC to assess how its training program, and the CARTA program, can be adapted to a mix of virtual spaces and faceto-face interactions — to a 'Virtual Academy'. The goal was to strengthen and maintain the training programs whilst preserving the high quality of provision that the organisation is known for.

It is now almost two years since the idea of going virtual arose and the APHRC virtual Academy is in its last design stages. It will be launched in the coming few months. The blended learning model places the learner (training participants) at the center, promotes independence and capability development, and supports self-directed learning. This model which combines online, virtual and face-to-face promotes an all-inclusive training experience that allows learners to experience immediacy, community, interaction with instructors and peers and audio-visual communication which would otherwise be absent in a virtual-only model.

According to a report that outlines the Virtual Academy's strategy roadmap, the model features six parts including an online classroom or library, online workshops, in-person training, community of practice, screen casting and hyflex. The online classroom will feature self-paced but facilitated learning. Learners will navigate the learning platform on their own according to their training needs and will engage with various media including videos, quizzes and they will have access to guidance and support from course facilitators as per need basis.

Online workshops will involve training facilitators and participants meeting online at the same time using a virtual software such as Zoom. In-person workshops will be reserved for highly technical workshops and will still remain an important part of the academy with the advantage being that facilitators can still integrate some of the digital learning resources from the virtual academy to enhance the face-to-face learning whilst still observing important guidelines in the prevention of the spread of the Corona virus.

The community of practice (CoP) will be a space for collaboration, sharing and collective learning in a specific field. This will specifically fit the needs of the CARTA program where the focus will be maintaining some of the cultural aspects of CARTA such as the interaction between CARTA fellows, facilitators, partners, graduates, mentees and mentors.

Screen casting will be a specialized form of learning content development particularly focused on software training where facilitators record videos of themselves carrying out specific software actions and learners can learn from watching the videos and repeating them as many times as they need.

Lastly, the hyflex part of the model will allow a blended learning environment where some learners interact face to face while others join through technological means such as video conferencing. This will be particularly useful where some learners are in the same country and others are spread out in different countries. The Covid-19 pandemic may have stopped travel and public gatherings, but it doesn't necessarily have to stop training and learning. The Virtual Academy envisions a future where learners can learn in the comfort of their homes devoid of the need to travel which reduces participation costs as it removes the need for travel, accommodation and miscellaneous spending while ultimately reducing APHRC's carbon footprint which results from extensive travel.

The APHRC Virtual Academy ultimately widens the access of APHRC's training programs while maintaining the high quality of training programs that APHRC is recognized for. Most importantly, it allows APHRC programs to be offered affordably in addition to engaging experts who can train from different countries and continents.

The Journey of a CARTA graduate: A chat with Marie Chantal

Marie Chantal Uwimana (Cohort Six, University of Rwanda) recently graduated from the University of the Witwatersrand. She talks to CARTA Communication Officer, Gloria Chemutai about her PhD journey, what lessons she learnt, and most importantly, her progress despite the challenges during the COVID-19 pandemic.

What was your journey like, as a CARTA fellow?

It started with a hectic time during the preliminary screening of the CARTA fellowship. I remember that I was the first midwife from the University of Rwanda to apply. After being awarded the fellowship, I started thinking about my PhD journey by asking myself questions about managing family, work, and lifelong studies. Despite these personal reflections, I was committed in undertaking my academic journey to increase my research skills and upgrade my academic level. The journey was not an easy one, due to my francophone background training. In addition to that, I had to pursue my PhD in the English Language, while completing it in a foreign university with a different academic and organizational culture. Fortunately, after completing the ESE:0 assignments, I obtained admission at Wits University in 2017, and I managed to graduate within three years.

How did you manage the pressure of pursuing a doctoral degree amid the COVID-19 pandemic?

Sincerely speaking, it was not easy. The COVID-19 pandemic was announced while I was attending the JAS-4 at Makerere University. People had become stressed due to the increased number of new cases adding to the high number of deaths recorded in western countries. I had wondered what would happen in LMIC during the COVID-19 pandemic, with the existing inadequate resources in the health sector. Despite all the worries, I had decided to continue working closely with my supervisors, who had encouraged me to submit the final version of my thesis by the end of March 2020.

What lessons have you drawn from being a CARTA fellow that you can share with others in the journey?

The ESE:O assignments and the Joint Advanced Seminars (JAS) have made a significant impact on my PhD journey.

Although the ESEO program was demanding and stressful, it provided me with the fundamental competencies in academic writing, from formulating the research gaps, to working through and composing the literature reviews and research proposal outline.

As for the JASes, they helped me to restructure and refine my research ideas. I was working



on Childbirth Care, specifically "measuring the importance of labour support practices by nurses and midwives", and I obtained immense support from the JAS facilitators, while gaining handson experiences in building a solid theoretical foundation for my research project. I also had the opportunity to interact with advanced senior statisticians, who had guided me on utilising the research tools and how my research should be developed. From the discussions, I managed to create and apply a questionnaire that fits my local context. In addition, the JASes equipped me with transferable research skills in qualitative and quantitative data collection and analysis. This is an essentially skill for my academic career. I have started transferring these skills and competencies to my colleagues, as well as the undergraduate and postgraduate students at the University of Rwanda. This is due to the inspiration I acquired from several facilitators at each JAS.

What do you think made it possible for you to succeed as a doctoral student?

Being accepted onto a CARTA fellowship gave me the confidence to embark on such a challenging journey. With this, I realized that many factors contributed to the success of my PhD. The Continuous reminders from the CARTA secretariat regarding reporting and milestone deadlines made my PhD journey feasible. Over time, I have learnt that, to achieve more in life, I need to set high aspirations and targets for myself within a clear timeline.

Besides that, is a personal commitment that constitutes establishing reliability, clear communication, and action plans between the students and supervisors. I recall that before travelling to Wits University, I had effective discussions with my supervisors and agreed on the purpose of my trip. It was a helpful way to stay on track and keep my supervisors up to speed on my progress. Commitments to my goals, as well as the peer support and supervisory support, have jointly influenced me to achieve better progress in my research, and be continually self-motivated to accomplish the next steps in front of me.

Furthermore, taking time out to reconnect with my children, husband, friends, and relatives helped. This is an imperative way to step back, revitalise and recharge one's 'batteries'. However, this downtime can hardly be possible during a PhD journey, as it is frequently easy to become so busy in one's research, and develop a warped perspective. For me to overcome this notion, in addition to all my study tasks, I would always keep in mind that I have additional responsibilities as a mother and wife. Thus, I always planned my trips to Wits University, in consideration to the holiday periods of my children and husband. With this in mind, I could ensure that I have time to spend together with my family, relaxing and having memorable fun moments.

Tell us what you wish to achieve and pursue after this and what you want to accomplish in your research area.

I intend to engage more in research and publishing on maternal, newborn, adolescent, and reproductive health issues in LMIC. I wish to continuously share my research capabilities and experiences through collaborations with local, regional, and international consultants in maternal, newborn, and reproductive health. As a way of giving back and contributing to society, I intend to be more involved in community outreach activities that promote a positive experience in pregnancy outcomes.

My take-home message is to encourage colleagues to embrace the PhD experience. I know that it will not always be a smooth journey, as it will be tough in different ways. Nevertheless, in whatever challenges you may experience, just ensure to stay focused on your target, and you will inevitably overcome your problems. Above all, ensure that you obtain sufficient support from your biggest and knowledgeable supporters to help and guide you further in reaching success.

Lastly, I wish to acknowledge CARTA funders for supporting my PhD fellowship. C

CARTA Celebrates a Milestone: Crossing the 100 Graduate Mark

Cohort One (20 Graduates, Enrolled in 2011)



























1st Line from left: Babatunde Adedokun, Caroline Sambai, Celine Niwemahoro, Dieudonné Uwizeve, Esnat Dorothy Chirwa, Esther Clyde Nabakwe, Francois Niragire, Fresier Maseko, Joshua Akinyemi.

2nd Line from left: Kennedy Otwombe, Mphatso Steve Kamndaya, Nicole De Wet, Peter Suwirakwenda Nyasulu, Rose Okoyo Opiyo, Sulaimon Atolagbe Afolabi, Sulaimon Taiwo Adedokun, Sunday Adedini, Taofeek Oluwole Awotidebe,

3rd Line from left: Victoria Mathew Mwakalinga, Wells Robert Utembe.

Cohort Two (14 Graduates, Enrolled in 2012)























1st Line from left: Austin Mtethiwa, Diana Menya, Francis Fagbamigbe, Herbert Longwe, John Njenga, Linda Nyondo, Mary Obiyan, Maurice Mutisya, Mcharo Evaline. 2nd Line from left: Olufunke Oluwatoba, Peter Mwamtobe, Sarah Nakubulwa, Scovia Nalugo Mbalinda, Wandera Stephen.

Cohort Three (17 Graduates, Enrolled in 2013)



1st Line from left: Adefolarin Adeyinka Olufolake, Adesola Olumide Sangowawa, Angeline Chepchirchir, Anitha Philbert, Anne Khisa, Banjo Olufunmilayo, Charles Kato Drago, Charles Masulani, Fredrick Okaka, 2nd Line from left: Joel Faronbi, Judith Mangeni, Ojo Melvin, Oluwaseun Obasola, Samantha Lalla Edwards, Save Kumwenda, Thomas Emmanuel Olusegun, Tonney Nyirenda.

Cohort Four (17 Graduates, Enrolled in 2014)



1st Line from left: Admire Chikandiwa, Andrew Tamale, Boladale Moyosore Mapayi, Daniel Respicius Shumbusho, Henry Zakumumpa, Jewett Nieuwoudt, Joel Magutah Karani, John Alonge, Kaitesi Batamuliza. 2nd Line from left: Michael Mutua, Mohamed Kassim, Moshi Irene Richard, Nkosiyazi Dube, Oladapo Akinyemi, Sunday Joseph Ayamolowo, Taiwo Modupe, Wambura Mbuthia.

CARTA Celebrates a Milestone: Crossing the 100 Graduate Mark

Cohort Five (15 Graduates, Enrolled in 2015)



1st Line from left: Celestin Ndikumana, Cheikh Faye, Emmanuel Kaindoa, Esther Afolabi, Felix Khuluza, Folusho Balogun, Fred Manigaraba, Hellen Jepngetich, Jeanette Dawa. 2nd Line from left: Jepchirchir Kiplagat, Justine Bukenya, Kikelomo Mbanda, Lester Kapanda, Maria Chikalipo, Yolanda Kolisa.

Cohort Six (13 Graduates, Enrolled in 2016)























1si Yin Mc

1st Line from left: Abe John Olugbenga, Aliyu Taofeek, Betty Karimi, Kalulu Khumbo, Kudus Adebayo, Macellina Yinyinade Ijadunola, Marie Chantal Uwimana, Mary Wanjira Kamau, Molete Mpho Primrose, Nomfundo Floweret Moroe.

2nd Line from left: Oluwaseyi Somefun, Omobolanle Aanuoluwapo Olajubu, Osiro Olivia Awino, Mpho Molete.

Cohort Seven (7 Graduates, Enrolled in 2017)



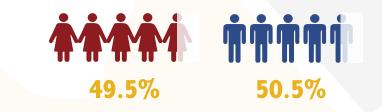
1st Line below: Abiola Olubusola Komolafe, Adetutu Olufemi, Alexander Kagaha, Blessings Kaunda, Funmilola Folasade Oyinlola, Madalitso Enock Chisati, Marie Claire Uwamahoro.

Cohort Eight (1 Graduate, Enrolled in 2018)



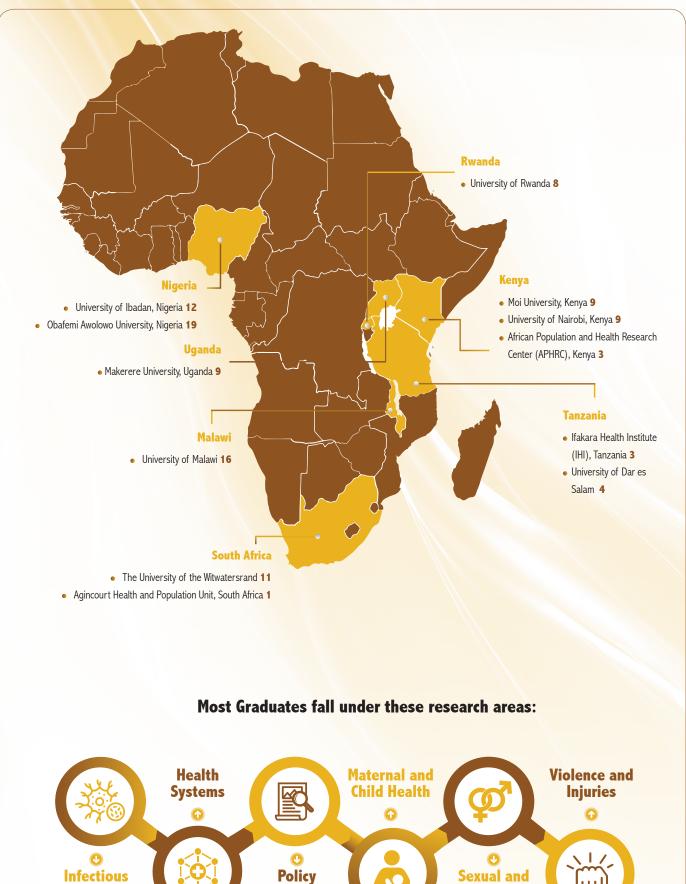
Getrude Shepelo.

Graduates by Gender





CARTA Graduates by Country



10

Reproductive

Health

Research

Diseases

Adapting to research and teaching in the new era: Accounts of the CARTA graduates

We invited CARTA fellows and graduates to share their experiences of carrying out research, teaching, and pursuing their community public engagement (CPE) activities amidst the pandemic. We believe there are great lessons to learn from their experiences and how they progressed despite the COVID-19 challenges.



Henry Zakumumpa, Cohort Four Graduate, Makerere University

 Covid-19 was an opportunity for me to repurpose a small component of my research to studying the effects of 'lockdown' measures on access to antiretrovirals.

Tell us a little about your research interests

What really excites me is research around how we can make HIV treatment more accessible to the millions who need it but can't get in resourcelimited settings like Uganda. So, I am into implementation research around innovations for increasing treatment coverage in low-income countries through programme efficiencies such as appointment spacing for stable patients. How can we reduce the congestion and overcrowding at HIV clinics across Uganda? Those are the kinds of questions that get me out of the bed every morning! Some refer to this kind of work as health systems research.

What has your experience been like carrying out research and CPE activities amidst the COVID-19 pandemic?

Covid-19 has been an enormous barrier but also, in some ways, an opportunity for conducting research. The requirements for observing

prevention measures such as social distancing, wearing face masks and using alcohol-based sanitizer, while necessary, have increased the costs of conducting research and impeded on-going research immensely. For instance, budgeted transport refunds to participants could no longer suffice due to increased public transport fares owing to social distancing in matatus or public transport commuter vans. For us who conduct qualitative interviews, face masks can reduce effective communication. Also, Covid-19 has altered social norms such as eliminating handshakes with study participants. The Uganda National Council of Science and Technology released 2020 guidelines for conducting research during the pandemic which places stringent measures on researchers. On the other hand, Covid-19 was an opportunity for me to repurpose a small component of my research to studying the effects of 'lockdown' measures on access to anti-retrovirals. It gave my re-entry grant research findings much more currency than would have ordinarily been the case. I have already written a manuscript in this regard which has received an expedited peer review at a Journal house and special attention due to Covid-19 being such a topical subject.

As a researcher, how did you overcome practical issues such as contact, communication, connectivity? What are the solutions relating to carrying out CPE during the Covid-19 pandemic?

I agree that communication was encumbered due to lock down restrictions. One strategy I used was to leverage my past engagements, networks and contacts with health workers across Uganda. I was able to retrieve phone numbers based on my earlier field work engagements dating back to my PhD research of seven years ago. I maintain a database of the telephone contacts of health workers in HIV clinics across the country which came in handy during the lockdown when inperson meetings became a challenge.

What are the greatest lessons you have drawn as a researcher and are there any opportunities you have seen emerge from the pandemic?

Well, there have been many lessons. One that I wish to share is the need to be dynamic and being able to respond to the changing tide and moving with the times. I repurposed a component of my re-entry grant research to look at strategies for dispensing anti-retrovirals during Covid-19 lockdown and it has attracted immense attention including from USAID which saw my preprint on 'Research Square' and has led to new opportunities for research around decentralizing anti-retrovirals distribution to outreach sites in the community.



Respicius Shumbusho- Cohort Four Graduate, University of Dar es Salaam

 The study changed from a pre-post intervention to an interesting communityled, collaborative, and partnership form of learning activity. This helped me to learn and apply more perspective seeking methods such as community dialogues and JPRMs.

Tell us a little about your research interests

Born and raised in a rural community, I experienced the cost of being a member of a low-income community. Preventable deaths were common due to delayed access to care as a result of poverty, corruption, misuse of resources, and inequalities. was made to believe that someone was responsible for these conditions. Having joined an academic and research career as a political scientist, my attention was on the policies and how they produced these outcomes. I was assuming that politics had failed to ensure redistributive justice in the provision of essential services including healthcare. My frustration regarding what would empower the passive and voiceless rural communities to voice out and demand the right to access guality healthcare continued until the time I transitioned from political science to public health through the CARTA PhD training fellowship in 2013. Since then, my research interest has been on community empowerment and accountability in rural primary healthcare.

What has your experience been like carrying out research and CPE activities amidst the COVID-19 pandemic?

The unprecedented outbreak of Covid-19 brought an impression that everything including research would come to a stop. Associated with the pandemic was a mix of information both accurate and inaccurate. This sparked up fear and panic to the extent that active data collection had to stop to ensure security of my engagement team and target participants.

Given these changes, capitalizing on some CPE strategies was seen to be the most feasible choice to take. We formulated a Community Advisory Committee (CAC) and conducted regular online training for the local volunteers. We developed detailed implementation guidelines and tools to allow the volunteers to plan, budget, and organize Joint Planning and Reflection Meeting (JPRM) sessions during which the communitylevel stakeholders could monitor the progress and outcomes of the CBM activities in areas such as responsiveness of the service providers, facility performance, and the strength of partnership.

As a researcher, how did you overcome practical issues such as contact, communication, connectivity? What are the solutions relating to carrying out CPE during the Covid-19 pandemic?

Unlike today where there is adequate knowledge regarding the epidemiology of Covid-19 transmissibility, the situation was not the same in March and April 2020. Besides the role of collecting the required information, I had a responsibility of providing relevant information to the communitylevel study stakeholders including the volunteers and local government officials and to develop alternative data collection tools. The access to and transmission of relevant information was a challenge due to the unavailability of reliable power sources, which makes few who can afford buying phones to prefer feature phones. Similarly, it was rare to have people who were using the internet as a prerequisite for ICT and web based research and engagement platforms. Apart from our volunteers, not many people other than facility managers and head teachers possessed mobile phones with the capacity to access the internet.

Despite this, we had to replace a paper-based facility data collection questionnaire with a mobile application, impala, which reduced unnecessary contact between the volunteers and health workers. The eight volunteers were provided with smartphones, which they used to receive the information on the measures for Covid-19 transmission and prevention and control. The same phones were used to enter and submit facility data using the impala application.

What are the greatest lessons you have drawn as a researcher and are there any opportunities you have seen emerge from the pandemic?

Doing research during the pandemic has become a great opportunity to learn. The first lesson has to do with the relevance of the CPE methods in making scientific research demystified - something that is doable by lay communities if they are properly facilitated and supported. Following the pandemic, CPE activities brought the communities at the centre of the project. The study changed from a pre-post intervention to an interesting community-led, collaborative, and partnership form of learning activity. This helped me to learn and apply more perspective seeking methods such as community dialogues and JPRMs. With these community-led and empowering initiatives, the participation of lay communities in research planning and implementation becomes realistic. The process of co-creation, especially working with a broad variety of community-level stakeholders to conceptualize and understand their problems does not only strengthen cooperation between the research team and study communities but also increases the trust of the study communities in scientific research and evidence informed choices in addressing community problems. This has significant implications on the sustainability as could be learnt with the case of JPMRs, which have been adopted and are still in use by primary healthcare stakeholders in the study villages.

Adesola Olumide, Cohort Three Graduate, University of Ibadan



 I think researchers will do more online – initiate and develop research consortia, conduct
community and public engagement activities online, etc.

Tell us a little about your research interests

I started out focusing on injury prevention and later on moved to adolescent and young people's health, mainly focusing on health-risk behaviours and determinants of poor health among adolescents. I still conduct research in injury prevention, mainly as this relates to adolescents and young people. My initial research in adolescent and young people's health focused on the prevalence and determinants of health risk behaviours among adolescents. I also examined the costs of these risk behaviours. My work has now progressed to adapting and/ or developing and testing interventions to address poor health indices among adolescents. I also have a keen interest in deploying mobile technology interventions, leveraging on adolescents' ardent use of mobile technologies. I advocate for adolescent health and well-being, and anytime I hear, "adolescent" my attention is almost always drawn to the conversation.

What has your experience been like carrying out research and CPE activities amidst the COVID-19 pandemic?

The pandemic has impacted research, CPE activities, and indeed every sphere of life and health. Things slowed down but thankfully didn't get to a complete halt. Everyone had to re-strategise; putting the health and safety of research participants, research staff, and also investigators on the front to ensure that as a researcher, one did not put others at risk. On my part, I was interested in understanding how the pandemic affected adolescent health and well-being, for instance, the immediate effect of the pandemic and movement restriction measures on adolescents, how it affected their access to health care, help, and even facilities for recreation, the impact of being constrained to stay away from school, etc.

Concerning CPE activities, the pandemic underscored the need to engage with community members, including adolescents and young people, around COVID-19 issues. In-person CPE activities had to be replaced with virtual ones. Initially, we were apprehensive that we would lose all the benefits of in-person interactions; however, we learnt to maximize the opportunities available online. Incidentally, the CARTA re-entry grant I received in 2019 was used to develop an intervention for parents of pre and early adolescents, which was deployed as an entirely in-person mode and a hybrid/ blended mode that utilized both in-person and online methods - WhatsApp. The hybrid model was very successful in participation, engagement with the study materials, and retention.

How did you ensure that you were still reaching your intended populations seeing that face-to-face interactions have not been possible in many instances?

The good thing is my primary population – adolescents and young people- are at the forefront in the digital space, so as a researcher, I joined them in their comfort zone. That said, there are still very many adolescents and young people who don't have access to the internet, making it imperative that one still makes efforts to engage with them; otherwise, they will be left behind. For those in the second category, I reached them through parents or other trusted community contacts whom I had met before the lockdown or who were introduced to me. Also, working through community and social groups – churches, occupational groups, etc. helped when the movement restrictions were eased.

What are the greatest lessons you have drawn as a researcher, and are there any opportunities you have seen emerge from the pandemic?

The research community is an excellent resource during challenging times such as the entire world has faced in the last one year-plus. As a researcher, you are not alone if you are willing to step out of your usual circle and ask for help. Someone would be able to share how they addressed whatever challenge you think you are facing.

Also, digitally supported research and training are here to stay. I think researchers will do more online — initiate and develop research consortia, conduct community and public engagement activities online, etc. The ability to connect online is a great opportunity for international collaborations. We have all become more comfortable in the digital space and have learnt that we can achieve a lot. On the flip side, we have expanded our working hours beyond the 8 am -to-4pm or 9 am -to-5pm period because official online meetings beyond our usual office hours are gradually becoming a part of the "new normal." We need to learn how to strike a new balance in our work-home lives as the internet has made the lines more blurred.

Mainstreaming CARTA interventions: The triumphs of Makerere and Obafemi Awolowo universities

Intervention towards Strengthening Research Training in Obafemi Awolowo University (ItSTRETO)

By Melvin Ojo and Olayinka Otuyemi

Principal Project Implementor: Sunday Adedini | Other Implementors: Kayode Ijadunola, Akanni Akinyemi, Joshua Aransiola, Melvin Ojo

CARTA awarded the Obafemi Awolowo University an institutionalization grant that was implemented for three years. The intervention aimed at scaling up the CARTA curriculum at the University. There are three main components to the intervention, one arm of it was to build the research capacity of doctoral candidates in population studies and public health-related disciplines. The second was focused on strengthening the capacity of doctoral supervisors at the University, while the third component was a stakeholder's engagement, which involves creating a platform for critical reflections on doctoral training at the University, the challenges confronting the running of postgraduate training, and opportunities that can be explored.

The implementation of the intervention was delayed and commenced about eight months later from the timelines. The deferral was connected to a local industrial dispute among the staff of the University and national strikes that affected the operations of the University within that period. Despite the initial setback, the intervention recorded many success stories.

The first arm of intervention provided priceless opportunities for eighteen doctoral candidates exposed to the CARTA curriculum. The fellows recruited recorded tremendous progress in their doctoral studies compared to other postgraduate students known to them. Close to half of the fellows received travel funds to present their research ideas to a broader audience. Nine among them had at least a publication in reputable sources. Two won scholarships and are now pursuing their doctorate studies elsewhere.

The training of supervisors also recorded much interesting feedback. The supervisors of the eighteen fellows participated in retreats and workshop sessions on effective supervision of postgraduate research. The workshop

with supervisors was facilitated by the Provost of the postgraduate college and other senior professors that are members of the college's Board. The strategic involvement of the Provost and other members of the college's Board built goodwill for the intervention and bathed the route to more fruitful engagements with other stakeholders within the university system. The cooperation of the supervisors was tremendous and commendable.

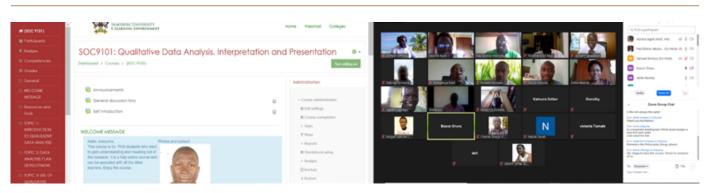
The component that focuses on the stakeholders involved in graduate training at the University was highly successful. Partly, the meetings adopted a participatory approach. In this sense, the intervention team members allowed the key officers of the University, especially the Deputy Vice-Chancellor Academic, to chair the discussion. The interactions at this level provided opportunities for retrospections on the challenges faced and opportunities to enhance graduate training at the University.

The successes recorded at each phase of the project and the sense of belonging that key stakeholders had, made the scaling of the CARTA curriculum across the thirteen faculties at OAU less cumbersome. At this point, the postgraduate Provost and members of the Board took up the challenge and negotiated institutional adoption of the curriculum.

Presently, a Research Methodology course has been approved by the University's Senate, and the course has commenced in modules form starting from the current academic session. The lectures began online and the modules developed for the intervention were expanded with the involvement of the postgraduate college. The students have commended the college for the timeliness of the course and the uniqueness of the curriculum in bridging the gaps in capacity for research at the doctorate level.

Institutionalization of CARTA innovations into graduate training at Makerere University

By Charles Drago Kato, David Owiny, Stephen Wandera, Gabriel Tumwine, Andrew Tamale, John Bosco Isunju, and Buyinza Mukadasi



Sample of a designed online course uploaded on the MUELE platform (left). And a sample of a zoom lecturer during a virtual training (right)

 or over a decade, Makerere University offered doctoral (PhD) crosscutting
courses and continued professional development (CPD) courses for doctoral students and supervisors, respectively.

For some of these courses, several curricula existed, and training depended on the availability of donor funds. When the University was still grappling with this challenge, the CARTA institutionalization call was presented with an overall goal of supporting partner institutions to institutionalize selected CARTA innovations. Under the leadership of the Directorate of Research and Graduate Training (DRGT), Makerere University was competitively awarded a grant entitled: "Strengthening capacity for doctoral training and supervision at Makerere University: a multidisciplinary doctoral students and supervisors' mentorship approach."

Under this grant, we intended to: harmonize and standardize curricula for PhD crosscutting courses and Continued Professional Development courses for

supervisors, train PhD students and supervisors using the harmonized curricula, and support the Directorate of Research and Graduate Training to review and harmonize guidelines for graduate training.

To achieve the project objectives, a team that included CARTA graduates was constituted to support the implementation. The team started by harmonizing curricula for four PhD crosscutting courses and one supervisor training course using fragments from both the CARTA and Makerere University training models. The courses include: Research methods & proposal development, Qualitative data analysis, Interpretation and presentation, Quantitative data analysis, Scholarly writing & communication skills, Continued professional development for doctoral supervisors.

The courses were initially developed for face-to-face training, but the challenge with this training mode was that a limited number of students could be accommodated. The coming of COVID-19 in the early months of 2020 led to several restrictions that warranted a change in training strategy from physical training to virtual training. Since the University already had an online platform — Makerere University E-Learning Environment (MUELE), the project team and key stakeholders agreed to develop online materials for subsequent virtual training

By CARTA Communications Officer, Gloria Chemutai

(https://muele.mak.ac.ug/).

We started by identifying key resource persons for each course and took them through a series of trainings on online course development before material development and uploaded on the Makerere University online platform - MUELE. After designing the online courses, the next step was to create the course shells and upload the designed online materials for each course. At the end of the grant period, a total of 194 participants had been trained virtually and included 179 PhD students and fifteen doctoral supervisors. At the end of the training, participants provided feedback used to improve the curriculum and make recommendations for future training.

To support the institutionalization process and doctoral training, graduate training policies and guidelines were reviewed during the grant period. These guidelines focused on graduate admission, registration, teaching and learning, and on research and graduation. The overall goal was to align graduate training processes with guidelines for the National Council for Higher Education and the Inter-University Council for East Africa. Together with the curriculum, the reviewed guidelines were presented to the DRGT for review and will later be submitted to Senate for approval.

Social media as a tool for science communication

S ocial media has firmly established itself as a tool and platform for sharing information. It is now part of our personal and professional lives and we can no longer ignore its existence. In the world today, over 3.9 billion people use social media worldwide. Africa alone has over 200 million users.

Researchers and scientists particularly can use social media to advance their work. They can use it to reach policy makers, contribute to conversations, or to reiterate facts. Especially during the current Covid-19 pandemic, it can be useful in subduing and extinguishing negative rumours about vaccination and disease.

In the current circumstances where physical interaction has been limited to a great extent, the use of social media or virtual platforms has played a vital role in keeping the world connected. Since the beginning of the Covid-19 pandemic, not only have there been restrictions and restraints in physical contact but social distancing as well, which eventually have become the norm and widely practiced requirement in current circumstances. Consequently, as people are struggling to keep in contact with each other, social media serves to be an excellent channel in keeping people connected all across the world without the need for physical association.

Although social media is unable to completely resolve the need for physical connection, yet it has reduced the gaps in communication to a great extent, compensating the world with digital and virtual connection. Particularly during

these uncertain times, social media has played a significant role in creating awareness regarding the pandemic, allowing people from all walks of life to be able to offer services, as well as helping people to cope during these extremely difficult times.

Social media, coupled with news platforms, has also been crucial in keeping people updated on the condition of the world and the spread of the Coronavirus. It became one of the most important platforms that enabled healthcare facilities and scientists to disseminate information and developments about the new disease. Platforms like Twitter and Facebook are two of the leading channels in providing updates on the statistics of the pandemic, while live broadcast media platforms inform a greater audience of the global events and current situation of the virus.

Healthcare systems have been greatly burdened because of the unbreakable intensity of the spread of the virus, which may limit the treatment for other diseases. Nevertheless, through the use of social media and virtual platforms, healthcare practitioners have been able to effectively facilitate their patients. For instance, many healthcare practitioners have been able to provide their patients with online service regardless of where they were situated. Incidentally, people with diseases other than the Coronavirus infection have also been able to consult and maintain contact with professional healthcare providers.

Apart from being an essential communication channel during the pandemic, social media is also useful for scientists to validate substantiating information while eradicating negative assumptions. It is through these platforms that they are able to provide people with verified information and facts, in order to extinguish rumours, myths and unverified facts.

All things considered, it is evident that social media has become significant in keeping the world together. Particularly in the times of the pandemic, one cannot fathom how the world would be without it. If it had not been for the use of social media, a big part of information, awareness and human connection would have been lost.

However, although social media has improved human connection, still one has to be cautious in using it, due to some of its negative outcomes, such as information theft and cyber bulling that may lead to a greater psychological harm among people from all ages.

A message of hope to the CARTA community in the face of uncertainty

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The COVID-19 pandemic has undoubtedly had profound effects on all aspects of life for families and communities. The challenges that it has brought forth may seem unnerving to many of us. It has been tough on both the physical and mental wellbeing of countless people. We are aware of those who have experienced inevitable losses, more so the tragic deaths of loved ones during a time when gathering to mourn has been confronted by lockdowns, travel restrictions, and general safety concerns. We also understand that it has been a trying time for many within the CARTA community, especially those for whom care responsibilities lie, as they take care of children, aging parents, as well as themselves. On behalf of the entire CARTA community, please accept our deepest sympathies. Our thoughts are with you and your families. Let's find comfort in our solidarity and the hope that things will eventually get better. We look forward to better times ahead.



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