

THE INSPIRER

Newsletter of the Women in Science, Technology,
Engineering and Mathematics in Ghana (WiSTEM_{Gh})



COVID-19 DIARIES



'WiSTEM_{Gh}!!! Together We Inspire Generations'



Issue 1: July, 2020



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A cross-section of WISTEM_{Gh} team and staff of the Ag. Director's Office

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“COVID-19 is real. Let us all take responsibility and embrace the new normal. Adhere to the prescribed protocol i.e. Washing of hands regularly, Physical distancing, Wearing of face mask etc. Stay safe and remain productive!”

Prof. (Mrs.) Rita Akosua Dickson
(First Female Vice-Chancellor of KNUST)

WISTEM_{Gh} DONATES TO THE KUMASI CENTRE FOR COLLABORATIVE RESEARCH (KCCR) IN SUPPORT OF THEIR NEEDS TOWARD THE COVID-19 BATTLE



Prof. (Mrs.) Ibok Oduro
(President of WISTEM_{Gh})

Prof. Richard Odame Philips
(Scientific Director of KCCR)



A cross-section of the WISTEM_{Gh} team and staff of KCCR

The support systems

The multiple roles are less stressful and more fun when I employ the following strategies that have proven to be helpful before and during the pandemic.

1. The support of spouse: I have been very lucky with a husband who even though has a very demanding job, would leave no stone unturned to make sure that I advance in everything I do. He would step in to take over my roles whenever I have to travel out of home for any assignment. A husband, who is not an engineer, yet tries to understand what I do to positively contribute to any work I do, he is very objective and a realist who tells things as they are and brings out all the challenges associated with the things I do so that we brainstorm and arrive at a good conclusion. For instance, playing the role as the quiz mistress of The Gas Challenge (A Competition by Ghana Gas) in 2019 saw my husband being my coach and my stylist.

2. A home support: I have a reason to believe in asking for help when I need one. I avoid playing the “superwoman”. I make use of family members who are willing to offer a helping hand. I come from a very large family and I make use of that to my advantage. Having a house-help who watches the kids while I have meeting or carry out my online class is a good relief for me. She also helps take care of house cleaning and so I would not need to do everything myself.

3. The help of my colleagues/teaching assistants: I live with the notion that as long as I have breathe, I will keep learning. I ask for the assistance of colleagues or my teaching assistants whenever there is that need and I see a potential to help. I have a group of knowledgeable people around me and hence proofreading and seeking opinions on things I do is also a strategy I use. I also do so with the consciousness of the integrity of such group of people. I have realised that the people around me are there for a period and for a purpose and I do not hesitate in learning from others always.

The multiple roles I play as a career woman, wife, mother and student is possible with God at the centre of it all. I know He gives me the strength, the courage and the capabilities to successfully combine all these roles without compromising on any of them. Positive attitude towards the things I do have been another strength. Every challenge I go through motivates me to press on since I believe whatever I go through is meant to teach me a lesson and to empower me, not to push me down. Falling on available and capable hands for assistance is also a significant part of my survival. Being a woman is indeed not a work for the faint hearted and so I press on till I reach the goal.

Message

from the Executive Desk



It is a delight to welcome you to the maiden edition of “The Inspirer”, an annual newsletter of Women in Science Technology Engineering and Mathematics, Ghana (WiSTEM_{Gh}). WiSTEM_{Gh} is an initiative of a team of dedicated women, under the auspices of the Vice-Chancellor of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi-Ghana. The focus is to stimulate the interest of females in STEM programmes and careers, as well as to encourage practicing women in STEM to serve as role models through mentoring and leadership programmes. It is in view of this mission of WiSTEM_{Gh}, that this special edition of ‘The Inspirer’ has been put together to motivate and to share a message of hope in these trying times.

We are encouraged by the preparedness and readiness with which research scientists the world over, have left the comforts of their homes to contribute their quota to the fight against the disease coronavirus (COVID-19). WiSTEM_{Gh} is particularly impressed with the involvement of women in the fight.

We therefore wish to use this opportunity to salute all frontline workers and most importantly, our sisters leading the fight at Kumasi Center for Collaborative Research (KCCR), Noguchi, Kumasi South Hospital, Komfo Anokye Teaching Hospital. The University of Ghana Medical Center, Ga East Treatment Centre, the KNUST Hospital and all the other facilities involved with testing and or managing of cases. This maiden edition of “The Inspirer” is dedicated to celebrate our gallant WiSTEM_{Gh} members.

Dear reader, please understand that we are not in ordinary times and such times require extraordinary and proactive actions, with a united front to achieve greater outcomes. This is a time of reflection for us as researchers to reconsider how we plan and conduct research, how we engage with the target audience of our research output and our livelihood as a whole. COVID-19 has engendered the need to impact our neighbourhoods, our academic institutions, our respective career paths and our world in a different way. Gone are the days when giving a talk to an assembled group was enough; now one has to rely on the media, in its diverse forms as well as virtual communication. A point of note, however, is that no matter what we choose to do or how we do it, at its core should be the human warmth, kindness and love.

The COVID-19 pandemic has taken the world by surprise but in the midst of it all lies a GOLDEN opportunity to nurture our talents, build resilience and self-belief in order to showcase our capabilities to the world. We can no longer resort to handshakes, pats on the back or even hugs. Nonetheless, we still have our facial muscles despite the masks and most of all, we still have speech. Share an encouraging message, an inspiring song or even a photo with a wide grin from the safety of your home, all to give one another the strength and capacity to go on.

Adhere to, and encourage others to abide by all the COVID-19 safety protocols of physical distancing, wearing face masks and the practice of personal hygiene.

In an unusual way, the importance of family has been repositioned and repackaged to us in this generation with the reaffirmation of the fact that family is one's main resource, without which all accolades, titles and impact in society would be incomplete. Family supersedes race, politics, language and social status. Above all, it is important we are well prepared to have a place with our Father in Heaven and our Lord Jesus Christ: We leave you with the words of a hymn inspired by Psalm 34;

*“Through all the changing scenes of life, in trouble and in joy,
the praises of my God shall still my heart and tongue employ”*

We sincerely hope that the success stories and words of hope shared in this edition will mark the beginning of our quest to inspire the next generation of scientists.

Stay Safe, Keep Healthy and Be Blessed!

The first time I attempted it, my husband was a bit sceptical at the beginning but marvelled at the end results of my newly developed skill and has since turned me into his personal barber. My kids no more cry over getting shaved but it has turned into a fun time since they compete with each other on who gets a shave first.

Trying on new foods have also become another adventure. I watch videos on YouTube and try new ideas and I must say I am truly enjoying these times at home. Foods I used not to do on my own are all part of my menu now since we have resolved on zero cooked food purchase in this era and probably beyond.

I have also tried on learning new things outside my engineering career, my PhD or my cooking.

I have started with my long abandoned hobby of writing stories and books. I have three things I am currently writing on which before the pandemic had been pushed to the background because there seemed to be no time. I have a lot more time now to also enjoy what I loved to do many years ago.

3. Getting better

I have a lot more time now since teaching is at the comfort of my home and thus I have more time to update my lecture materials for subsequent times. I think I am adding more value to my life in this pandemic than I used to before the pandemic. The time I spent on the road to drop off kids and pick them, to go for lectures and meetings are all time available for my use now. I have a lot more time to attend to other needs which I brushed aside most times because I was too busy. I have a much more structured day where I make sure I do my teaching, learning and spending quality time with my family at home.

4. High running / maintenance cost

Having three very active boys at home means getting a lot more things destroyed as they explore more. They are very adventurous and keeping them so involves getting more toys and study materials at home so they don't lose interest in doing one thing over and over again. This involves having to talk a lot more as they explore and play, to ensure that they don't get hurt. I think I talk not less than three times the time I talked for a week's lecture at home now. During one of their play times, I had my television screen destroyed as one of my boys was testing to see what would happen if he threw something at the TV. I came out to see an enthusiastic boy who was excited to share with me how throwing a plastic bottle at the screen had changed the view of the television because he had been able to put a different colour and lines on the screen. I was short of words because it meant increased expenditure to change either the screen or the entire television set. Changing the screen is not an option now since the cost of doing so is just a little less than buying a new one.

1. More family time

Spending all day with my children at home has made quality time together an integral part of us now and I have come to know them even better. I have realised their individual needs, their various challenges as growing children, their preferences and ways of thinking. I used not to pay much attention before the pandemic because weekdays were extremely busy and weekend was also packed with social and religious activities. My kids seem happier because they have enough sleep, a lot more play time, a lot more time to explore and learn on their own without the earlier pressure, a lot more variety of food since mummy is always exploring to make sure they have different variety of food. Having to engage in various games makes my kids excited. We engage in football, painting, music time, movie time and others. I have been able to discover one of their unique attributes, their love to assist with everything I find myself doing. We cook together always. Whenever I am in the kitchen, they want to be there to assist. Even my little boy, who is less than two years old, would like to sit in the kitchen to watch me cook. Getting involved with everything at home has become the new order of the day. I caught them on camera recently trying to help daddy to change the tyres of the cars at home. It was really pleasant to see the enthusiasm and the satisfaction that they are able to meet a need and they learnt while playing.



2. More adventure

With the fear of the pandemic on my mind, I dread sending my kids out even to the barbering salon. Growing up in a home where my dad was involved in so many things, I tried shaving some of my siblings a couple of times. Getting my boys to shave at the barbering salon was always a big issue because they would fight and cry whenever they were being shaved. In our quest to protect the family, I have rekindled the barber in me and so I successfully shaved their hair every other week since they prefer their hair low most times.



By Prof. Marian Asantewah Nkansah

The COVID-19 pandemic which has ravaged the world the past several months has come with its pros and cons. Cultures and norms have been shifted all in the quest to survive and make the best of the situation. Professional women have had to make major changes at the work place, as well as, at home all in response to this pandemic.

The Maiden Edition of "The Inspirer" focuses on the stories of some WiSTEM_{Gh} members since the first case of COVID-19 was detected in Ghana and how the spread of the disease and the various policy directives by the Government of Ghana have affected the routines of their respective lives.

In this edition, the first four articles showcase the contribution of frontline professionals to the fight against the COVID-19 pandemic. The remaining four articles focus on how the pandemic has affected the roles of professional women as teachers, researchers, wives, mothers etc.

It is our hope that you will enjoy reading and we encourage you to share "The Inspirer" with your friends and colleagues.

We have enjoyed every bit of the process of putting this issue together and we are grateful to the Executive Team of WiSTEM_{Gh} for the opportunity to serve.

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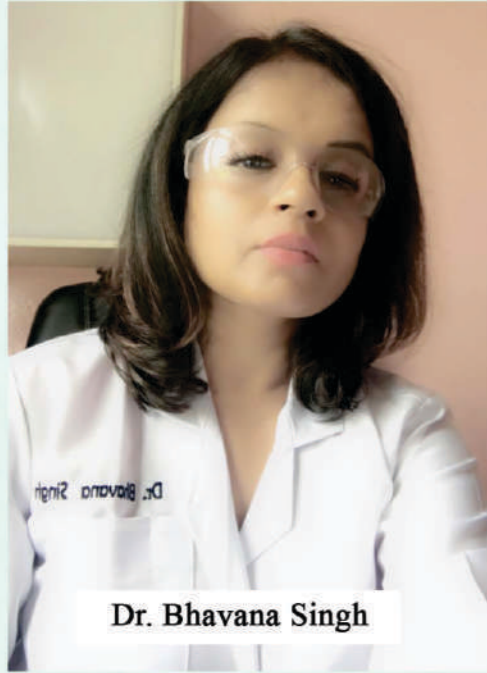
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GETTING CONNECTED IN A SOCIALLY DISCONNECTED TIME: MY COVID-19 DIARY



Dr. Bhavana Singh

Dr. Bhavana Singh, has a [Bsc. Human Biology (KNUST), MBChB (KNUST), Msc (UK)] and is a final year PhD student at the Department of Clinical Microbiology of the College of Health Sciences, KNUST.

She is a Senior Medical Officer at the University Health Services, KNUST where she has been working from 2001 (20 years).

With the continuous rise in the number of confirmed COVID-19 cases in many African countries, healthcare workers across the continent have been at the forefront of the response to the disease. As a Clinician at the KNUST Hospital, I am part of the rapid response team E (RRT) of the KNUST Hospital, that consists of three doctors, 4 nurses, a biomedical scientist, a pharmacist, a driver and a cleaner.

The RRT is a team of health workers, also classified as the front liners, whose major roles are to assess, triage, resuscitate, and

escalate patients care to a safer environment when needed. The RRT is actually a reactionary team that is activated when a patient breaches pre-defined calling criteria, typically based on derangement of abnormal vital signs. The hospitals guidelines for classification of COVID 19 are strictly adhered to, followed by the clinical evaluation of patients with suspected/confirmed COVID-19 which includes escalation of care in the event that the patient requires transfer to the referring centers.

All RRT staff of KNUST have undergone a thorough training in donning and doffing of personal protective equipment (PPE), awareness of any modification of calling criteria and means of activation that is specific to COVID-19, as well as, criteria for escalation to senior decision makers. The hospital staff regularly receive training materials regarding the evaluation and management of such patients, and are up-to-date with the global management plans of the same patients.

As in other parts of the world, health care workers in Ghana are also confronted with challenges in the face of the coronavirus pandemic. Most of us are apprehensive about the availability of personal protective equipment (PPE) as there has been a general shortage even in the richest parts of the world, and that is scary. As health care professionals and front liners, I realized, we are not afraid of hardships and fatigue, but we hope that people can understand us in the right way, especially in difficult times such as these.

At this point, at the KNUST Hospital, the first thing being executed on every duty is to identify patients who show symptoms of coronavirus, figure out their degree of severity and stratify them. Our access to tests is limited, so we have to be very selective about whom we give them to and that is very unfortunate. We have reduced inflow of all routine patients. However, we are focused on anything urgent and also anyone showing possible coronavirus symptoms.

To prepare for the surge in patients, the Hospital's authorities are progressively retrofitting spaces

THE MULTI ROLE AS A CAREER WOMAN / MOTHER / WIFE / STUDENT AND THE SURVIVAL STRATEGY

By Ing. (Mrs.) Emmanuela Kwao-Boateng

I am a lecturer at the Department of Chemical Engineering at KNUST, Kumasi. Multi-tasking has been the biggest strength I have had to lean on in these times of keeping my kids home. With the diversity in the three boys I have, attending to their unique needs have given me a lot more insight on my role as a mother. My normal day before the pandemic was characterized by my mornings being "Rush Hour". I normally told my family, friends and students to call me only after 8:00 am since mornings were very busy and I would not want to be distracted in anyway. Fixing breakfast for the family and lunch for the boys every morning was exhaustive as my kids are trained to eat home-made food most times. Getting them ready for school each morning was quite a task since my second boy most days would give me a morning drill before bathing or getting dressed. It was always frustrating but reflecting on these times actually bring smiles to my face knowing how he succeeded most mornings to get on my nerves.

Dropping them in different schools every morning before getting to the office was strength draining but I had to enthusiastically do it since my husband is also in a very demanding job and his path to work not close to any of their schools.

Managing with one family car long before the pandemic meant my husband had to get ready very early and make sure he grabbed a car to work to avoid being late while he left me with the only car to take the kids to school and pick them all up by the end of the day. The stress on him was telling so we got a new car to add on so he could get to work freely without any struggles. I mostly managed to get to each school before 8:00 am to avoid their schools being closed before their arrival.

Managing as a career woman, mother, wife and also a PhD student has been quite a task where I made sure I did as much as I could before picking up my kids from school since their pick-up mostly meant close of work. Sampling, laboratory work, data

collection and analyses had to be done mostly between the hours of 8:30 am to 5:00 pm, making each day a very busy one. During the days that I needed to round up a few works before going home, I had to keep the boys busy at the office either with their homework or give out my laptop or phone for them to enjoy their videos while I worked - so you can just guess how often I have to change my screen protector.

Most evenings involved fixing dinner, overseeing homeworks and getting them to bed early. My second boy is actually a late night keeper who can linger around till well after 11 pm before going to bed. Putting him to bed earlier meant him waking you up in the middle of the night complaining that he cannot sleep.

My husband and I always had to find a way around it to make sure he sleeps early enough and stay asleep till morning.

During the pandemic

With the onset of the pandemic and closure of schools, there are several positives and challenges that came with it but I must confess that my case has been more of the positives than the challenges.

The major things I have had to do in this time of COVID-19 as a breast-feeding and working mother with two growing children, were to keep the home in tandem with home schooling of the children and working from home. These tasks have been extremely fun but quite challenging. This is because, all the tasks were equally important and had to be handled meticulously. Therefore, all my time and energy were spent on keeping the home. Home schooling and breast-feeding mother duties were the most stressful of them all.

My new baby for instance, needed a lot of attention, especially during the nights.

This usually led to extreme tiredness and body aches during the day, but I had to endure. The baby's smiles alone were enough to keep me going.

In addition, I've had to be cleaning, cooking, doing laundry, bathing and breast feeding the new baby and screaming on top of my voice to prevent the older children from hurting themselves during play times.

Working from home has also not been easy at all. This has been due to inconsistencies in internet connectivity and the regular interruptions caused by the children during my working periods. Getting in touch with some of my project students has also been difficult because of internet inconsistencies in some parts of the country. This has made supervision of final year project thesis quite burdening.

Amidst all these challenges, some opportunities and new discoveries about life have been made.

Life under COVID-19 has helped me discover certain creative abilities in my children which will help shape their future. It has given me an opportunity to spend more time with my children and husband thereby creating a much stronger family bond. I have also become more active on the internet and learned new ways of using online tools to work. Family tasks which have been postponed "for God knows how long", have also been accomplished. As children of God, the entire family has learned to serve God diligently and to appreciate the gift of life and family. My children and I also have had the opportunity to sew quality face masks for ourselves to help protect us from the pandemic.

In conclusion, life during the COVID-19 pandemic has been psychologically stressful. However, with the help of God, family, friends and safety protocols stipulated by the Ghana government and its health professionals, we shall overcome it.

Blessings nkotseeee!!!

throughout the hospital and campus. I also feel we have been fortunate being in Africa and seeing what was happening in other epicenters like Italy and USA, and having more time to prepare. So I can say we haven't faced shortages yet, and we have tried to secure what we think would be need going forward. But we have had people in every sphere of our work test positive also just like other countries: from environmental service workers to nurses to physicians. I think all of my colleagues I interact with, just sort of assume we will get it, but I feel safe in the hospital. I must say that we are quite resolute in fulfilling our duties, even in times like these.

The government's announcement for salary rise, tax exemption, health insurance packages for healthcare workers and promotion of the local manufacturing of PPE and other logistics to meet our needs in the clinical setting have been encouraging and morale boosting. I think there is a lot of room for things to get worse, but the best thing the government has done is to put in the social distancing and other measures in place to reduce community spread in the country. But one thing that has been beautiful to see is the community coming together to help each other. They are finding the best of themselves. It is so good to remember that. On a personal front, the pandemic has basically created a level of anxiety and fear in our workplace about exposure. And sometimes all I feel like doing is to advocate for myself, and for my colleagues and my patients. I always feel the need to find a way to feel protected, so I can do my job. At home, my daughter and I have already separated ourselves and are no more hugging and cuddling each other like we used to. My husband is in India attending to his sick mother and we do not know when he will be able to join us back in Ghana and it has already been 3 months. After work, I come into the house and go straight to the shower, and use alcohol to clean my cellphones, badges and eyeglasses. I try not to bring anything into the house from the hospital.

During my second RRT duty, that was one week into the lockdown period in Ghana, I was exposed to the first positive COVID-19 case at KNUST hospital and as part of the measures in the context of containment of COVID-19, I was self-quarantined at home for 14 days. This was because as I had a fever and sore throat, and, therefore, had to self-isolate till my test results came negative for COVID-19. During that time, I realized that quarantine/lockdown had essentially made all of us equidistant, whether we live across the country or somewhere nearby, which is both terrifying and comforting. I tried to concentrate on the comfort alone.

I have always been more of an extrovert, so this time all cooped up was challenging for me, but the phone calls, Skype calls and WhatsApp calls provided me with the interaction I needed, despite the lack of physical human contact. My friends and colleagues who were also quarantined for the same reason during this period decided to start a self-help group and we shared all the beautiful moments of outdoor games, watching movies and doing research during this period at home. My parents, sisters, fellow colleagues and hospital director were all very supportive and caring. We maintained the equidistant calls and the days went by and I am back to work after I tested negative for COVID-19.

Lastly, every day I open up my email and I am inundated with information. I sort through and check in with my colleagues elsewhere in the country to try to pool information, so I can best take care of my patients. My practice has changed a lot since COVID-19, and I have been calling and texting most of my old clients and

keeping them updated regularly regarding the pandemic, but holding off on having them come in unless there is an urgent need. At the same time I have been amazed at how health workers in Ghana are willing to self-sacrifice. Everyone is walking directly into the fire, and there is no thought about what that means for their own personal well-being. But we have to try our hardest regardless keeping in our minds that every bit of effort could mean another life saved.



LIFE AS A WOMAN/ MOTHER / WIFE IN THIS TIME OF COVID – 19



Dr. (Mrs.) Bennetta Koomson

I am a lecturer at the Department of Materials Engineering at KNUST Life for me in this time of COVID-19 has been characterised by mixed feelings! It has been full of anxiety, challenges, new learning experiences and a good time for creating a much stronger family bond.

The anxiety has basically been caused by the news on social media platforms concerning the deadly and horrific nature of COVID-19. The challenges, new learning experiences and family bond experienced as a woman in this time of COVID-19 are discussed in the subsequent paragraphs.

I basically began the year 2020 as an expectant mother. And so, the entire family, as well as work colleagues (co-lecturers) had been looking forward to the delivery of my new baby in March, 2020. For the purpose of growing in my career, I also had strategic plans on research work put in place awaiting implementation.

All was set for a wonderful year!

As expected, the new baby finally arrived and I was full of joy, hope and happiness. Most people around me resonated same emotions and I could not be thankful to God for anything more than that. The year seemed to have begun very well for me and so, I was hopeful that it would even turn out better than anticipated.

After a week of my baby's delivery however, a higher number of COVID-19 cases were reported in Ghana and so, a ban was placed on all social gatherings. Some protocols including, frequent hand washing, use of alcohol based hand sanitizers and social/physical distancing were announced to be followed by all and sundry. My two other children, aged eight and six, had to stay away from school until further notice. At this point, I realized how serious the disease was. I immediately began researching on how to manage life as a new breastfeeding mother (with two growing children), wife, lecturer and church worker. Having heard of the horrible lockdown experience in China and the rumors of possible lockdown in Ghana too, the family decided to store as much food as we could. I found myself involved in panic buying which had a psychological effect on me. My kitchen and store room were well stocked with cooking oil, rice, gari, beans, vegetables and tubers. My deep freezer also had its own share of chicken, fresh and smoked fish, cassava and corn dough, grated okra just to mention a few. I also got enough data to help me stay active on the internet.

USING NUMBERS TO PREDICT SCENARIOS IN THE TIME OF A PANDEMIC



Prof. Atinuke Olusola Adebajji

I am an Associate Professor of Statistics at the Department of Statistics & Actuarial Science of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi.

I currently head the Department, and also double as the Coordinator of KNUST's Laboratory for Interdisciplinary Statistical Analysis (LISA).

My first degree (BSc Statistics) was obtained from the University of Ilorin, Nigeria in 1990; following that, I pursued an MSc in Statistics in 2001 and, subsequently, obtained a PhD in the same discipline in 2006, all from the University of Ibadan, Nigeria. In 2016, I obtained a Master of Public Health (MPH) in Reproductive, Family and Public Health from KNUST.

In the wake of the COVID-19 pandemic, the Ghana Academy of Arts and Sciences (GAAS), solicited for voluntary contributions aimed at modeling the COVID-19 pandemic, with a special focus on Ghana. Four teams were set up by both the GAAS and the Government of Ghana (GoG).

I was invited to join the data analysis/research team led by Prof Sagary Nokoe, right from its inception.

The goal of the team is to analyse COVID-19 data to assess effectiveness of interventions and mitigation measures, make predictions on incidences, peak number, peak day and related statistics. My main task on the team was to conduct statistical analysis and interpret results to form the basis for policy decisions.

The early start of data collection and a comprehensive data is needed to make asound interpretation to effectively inform policy decisions. The study is on-going and it is hoped that the set objectives will be achieved along the way.

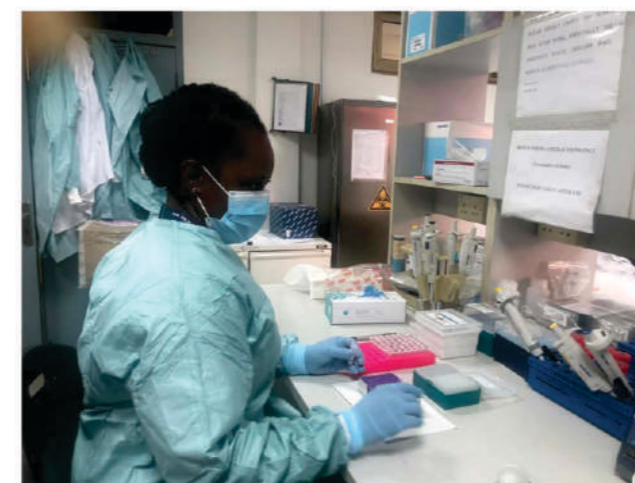
ADAPTING 'OLD HANDS' TO SUIT A NEW JOB

By Dr. Augustina Angelina Sylverken

I am a Lecturer at the Department of Theoretical and Applied Biology, and a Researcher at the Kumasi Centre for Collaborative Research in Tropical Medicine (KCCR), all of the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana.

I completed my PhD in 2012 through a collaboration between the Kwame Nkrumah University of Science and Technology, Kumasi, the Bernhard Nocht Institute for Tropical Medicine in Hamburg and the Institute of Virology, University of Bonn Medical Centre, Germany. My major area of specialisation is investigating diseases of viral origin transmitted from animals to humans.

As part of my PhD, which was sponsored by the United Bank of Switzerland (UBS), I studied the role of human coronaviruses and other common respiratory viruses in causing respiratory infection among children under five. I undertook a Post-doctoral research position jointly provided at the KCCR, and the Institute of Virology, University of Bonn Medical Centre, Germany, and worked with the renowned German Virologist, Prof Christian Drosten. As a Post-doctoral researcher, I was involved in studies to gain more insight into the origins and reservoirs of zoonotic viruses' transmission as a proxy to viral zoonosis. Here, we studied the family of Coronaviruses as a paradigm for the transmission interface between wildlife, livestock and humans. This and my previous involvement in large scale multidisiplinary studies positioned me in the fight against Severe Acute Respiratory Syndrome coronavirus-2 (SARS-CoV-2).



For the current pandemic, KCCR is one of the two designated research centres leading in the testing of cases. As the leader of the Virology group at KCCR, I coordinate and oversee the testing of the samples. Beyond sample testing, awareness creation and education is also key to the fight against the pandemic. Consequently, my efforts have also been channeled to educating and training relevant stakeholders and the general public. In doing this, I have granted several interviews and joined in several discussions with media houses belonging to Multimedia group, Media General group, Ghana Broadcasting Cooperation, among others. I also had the rare opportunity of being on a panel to educate over 250 staff of GIZ on issues

pertaining to COVID-19. Furthermore, I have facilitated trainings at the regional level to District Directors of Health in the Ashanti and Western North regions and had a virtual meeting to train them on sample collection, packaging and transportation of COVID-19 suspected cases. I recently facilitated a high level WHO/AFRO training session on COVID-19 Case Management and shared perspectives on the laboratory diagnosis of COVID-19 in Ghana.

To make operational government's efforts to establish additional laboratories across the country, I have led the team to establish two laboratories in the Northern region of Ghana, namely, the Public Health Reference Lab, Tamale, and the Veterinary Services Department - Pong Tamale. I was also instrumental in setting up the facility for testing suspected COVID-19 samples and routine samples at the Komfo Anokye Teaching Hospital (KATH), Kumasi.

My involvement in the fight against the COVID-19 pandemic has been humbling. I am proud that I could support the fight with my expert knowledge on Coronaviruses. It is my hope that together, we will be able to help, in any small way we can, to limit the spread of the virus and, hopefully, halt its transmission.

• Awareness and acceptance of the emotional (fear) state is key to working to prevent it and its consequences; It very important for one to consider ways to overcome fear during these uncertain times. Some of the preventive measures include the following:

- Awareness and acceptance of the emotional (fear) state is key to working to prevent it and its consequences;
- Selective attention – choose to listen to particular TV or radio stations whose reportage is authentic;
- Mindfulness and meditation skill;
- Relaxation techniques- Exercising the body, listening to music of choice, watching movies of interest (comic), reading books, calling friends and family members on phone, WhatsApp (video), zoom;
- Cognitive restructuring – changing of illogical (negative) thought to concentrate on positives;
- Obeying all health and safety protocols;
- Seeking to learn new things from the situation – personal hygiene and business opportunities;
- Holding on to a higher source: GOD – praying, reading religious books (Bible, Koran) and having the faith in the saving power of your maker – 1 John 4:4, 1 John 5:4, Isaiah 43: 1-2, Exodus 14:14, Isaiah 65:24, Isaiah 41:30 (forgive me for the Bible quotes- I believe everyone can also find comforting words in preferred religious book);
- Join people of the same faith in fellowship on radio, TV, YouTube, WhatsApp, Facebook etc.; and
- Taking the opportunity to bond with the family through indoor games, taking a stroll and even clean-up activities at home.

It was always refreshing that after such education, people contacted me to express their gratitude for the information which gave them insight into how they could protect themselves from any psychosocial challenges and its effects, especially in relation to fear during this uncertain time. It also opened doors for some people to seek counselling on other issues relating to COVID-19 and general life.

Finally, it is refreshing for all of us to focus on the good news that there is the possibility of recovery even when infected with the virus so, let us all do the needful and leave the rest to God, who is mighty to save.

Being infected with COVID-19 is not a death sentence. We shall overcome, this too shall pass.

THANK YOU.



WALKING THROUGH FEAR IN TIMES OF UNCERTAINTY: THE COVID-19 EXPERIENCE

I hold a BEd. Psychology, MSc. Health Education and Promotion, and MEd. Guidance and Counselling. I am a Senior Counselling Psychologist at the Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Counselling Center.

The KNUST Counselling Center (KCC) team works to provide psychosocial counselling to the university community, persons infected or affected with the COVID-19 and the general public during these uncertain times. As the issues of COVID-19 unfolded, with increasing numbers of infections and death all over the world, including Ghana, I realised something I choose to call a silent “mental infection” that people were overlooking, but which could lead to serious morbidity and mortality: fear. I took it upon myself to provide education to the



Mrs. Victoria De-Graft Adjei

general public on fear and its impact on the mental and physical wellbeing of individuals through radio. Fear is one of the emotional states of an individual when faced with threat to life and uncertainties. It is an unpleasant feeling triggered by the perception of danger: real or imagined. It is important to note that fear is a normal emotional state or feeling at a time, however, it becomes a problem when it is prolonged and unattended to. The novel coronavirus of 2019 (COVID-19) is believed to have started in Wuhan, China, in December, 2019 and spread to other countries. By March, 2020, when Ghana had its first case, Ghanaians began to question the country’s preparedness to combat the virus, given the challenges characterising our health system. Government announced a lockdown in greater Accra and greater Kumasi metropolitan areas, closure of educational institutions and churches and mosques; a ban on social gatherings was instituted and adherence to health protocols encouraged.

These health protocols included the washing of hands with soap under running water, social distancing, covering of mouth with tissue when coughing or sneezing, applying sanitizers on the hands as often as possible, wearing of masks to cover nose and mouth, and not touching our t-zones (nose, eyes and mouth). All these measures made the reality of the dangerous nature of the virus dawn on people, leading to fear. All of a sudden, life was no more the ‘usual’. It was, therefore, necessary for education on the impact of the virus and measures to prevent fear among people. As earlier indicated, fear is a normal emotional state but, can be very detrimental to health and wellbeing. Feelings of uncertainties, threat to life, false information, hypochondriasis (feeling of being vulnerable to a diseases) and stigma, among others, can cause fear in an individual. These can have physical and psychological impact (effects). Headache, diarrhoea, insomnia, fatigue, restlessness, fever, obesity, hypertension etc are some of the physical effects of fear.

The psychological effects include, but not limited, to psychosomatic illnesses, anxiety, stress, loneliness, social isolation, irritability, boredom, forgetfulness and even death.

It very important for one to consider ways to overcome fear during these uncertain times. Some of the preventive measures include the following:



**As all hands
come together to fight
the invisible enemy
COVID-19, we are
strengthened in our
common humanity.**

THE COVID-19 PANDEMIC, MY JOURNEY SO FAR, AS A WOMAN HELPING IN THIS FIGHT

By Dr. Yaa Asantewa Osei

I am here to share my story today, because I saw the seemingly unpredictable beginning of this wonderful journey, the precious achievements of how far we have come today and the anticipated brightest future ahead. I have lived by my deepest conviction of making impact in the lives of people no matter where I find myself these past few months.

I have come to believe that you become relevant to people when you are there at their utmost hour of need. Today, I stand to share a success story of one thing that many people did not have hope in but has become the epitome of celebration and a life saver to Mother Ghana. Being thankful is an understatement, but I am overwhelmed by the success through Gods guidance and protection we have achieved.

The Production Unit of the Faculty of Pharmacy and Pharmaceutical Sciences was commissioned in 2016, when I had just fully joined the University as a young female lecturer in the Department of Pharmaceutics. I was incredibly happy that, at least, the Faculty was now getting into the space of what it taught others to do. My expectation was that, with all the quality knowledgeable people we have, the production unit was going to be functional right from day one. The story over the months was different. Pretty nothing much was done there. I had been thinking about how to get involved but did not know how to approach it. A new Dean commissioned a new oversight committee, of which I was part. The committee met severally, looking at the best way forward.

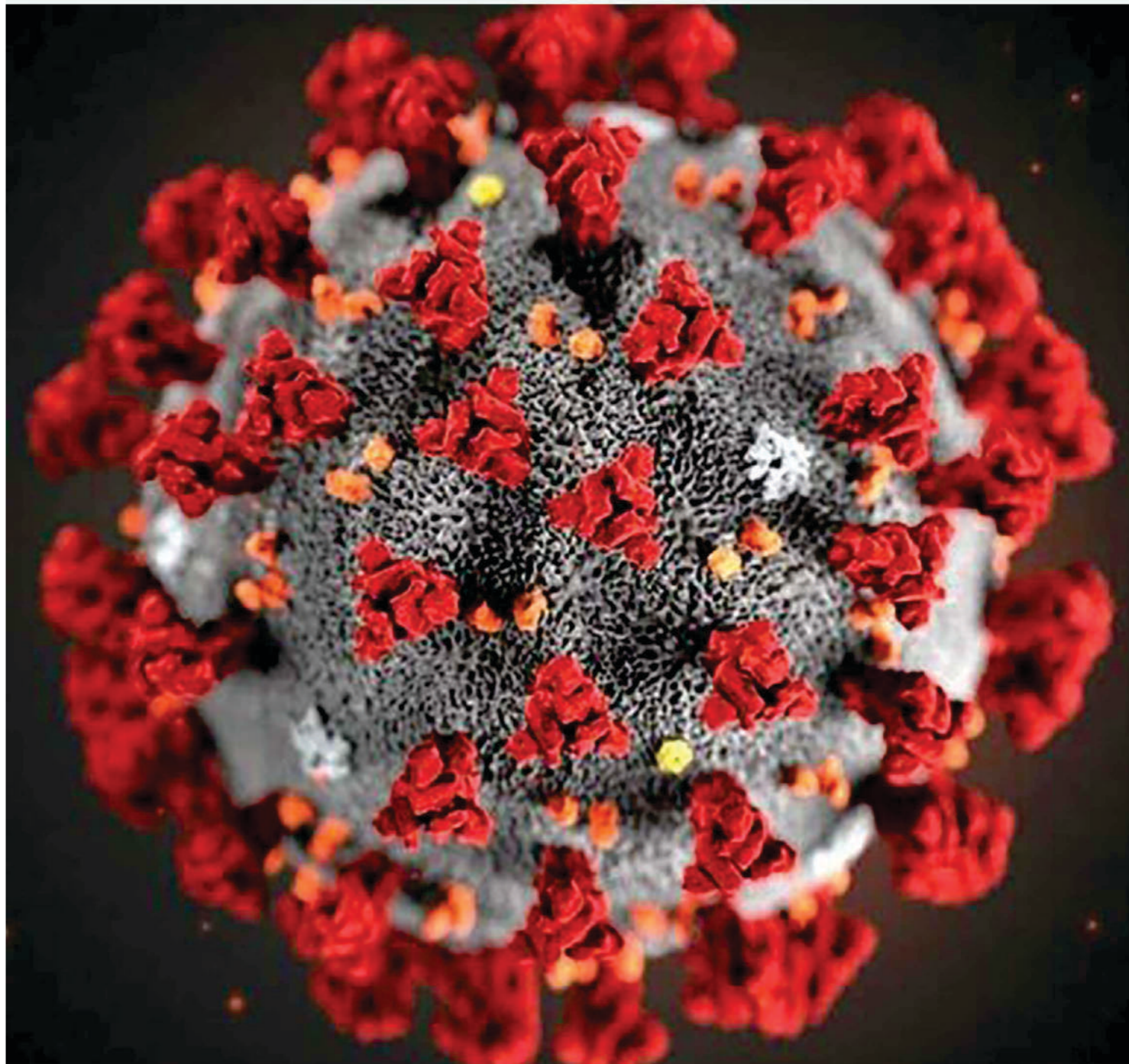
On the flip side, my interest in manufacturing got me working personally on formulations that I thought could be industrially taken up one day. It took days of a lot of reading, experimentation, and hard work to get the quality products being sought after. By mid 2018, the unit started churning out a few liquid soap products, which was principally used in the faculty.

With the reconstitution of the management of the Unit, I was opportune to have oversight responsibility of the Unit's activities. We started making products on a large scale out of the formulations that I had developed. Our products gradually trickled out of the faculty to other Units of the University, with our main client being the University Hospital. The products included two different types of liquid soaps, two different types of disinfectants, stain removers, two different types of antiseptics and our star products: the alcohol-based gel hand sanitizers and the World Health Organisations (WHO) standard hand rubs. The pressure of production was not much because our client would come twice a month with orders.

COVID 19 - THE TURNING POINT

In the mid-March this year, we woke up as nation, to the news of having recorded the country's first case of the COVID-19. Within a few days, our case count started increasing, and the demand for hand sanitizers increased significantly alongside with it. The Production Unit, which I am heading, had to plan our production output to meet demand. Our usual output of 100 litres a month significantly increased to thousands of litres in a day. A place that was run by 3 people had to substantially increase its workforce to

A TIME OF



ADAPTATION AND RESILIENCE

I must admit that aside the strength God gives me to accomplish these tasks, I couldn't have done any of them without the help of my ever- supportive husband, my big sister and her wonderful family babysitting most of the time for us considering the fact that we have never had a helper around. COVID-19, albeit its plenty cons, its pros cannot be underestimated.

These include a conscious effort to stay and keep clean at all times, team work at all levels meaning we all look out for each other, family bonding that helps us know our children and spouses better and help them cope better with their anxieties and boredom better, open display of free-will giving as demonstrated by the distribution of personal protective equipment and provisions to institutions as well as to the less privileged in the society by companies as well as individuals.

There is also a revival of the CAN- DO spirit in the citizenry evidenced by local mass production of hand sanitizers, face masks and other PPEs that hitherto were mostly imported, revelations about the constraints in our healthcare systems, public schools and prisons that had been overlooked/neglected for a long time, development of a personal closer relationship with one's Maker which had sometimes been overshadowed by the over- reliance on our religious leaders and sometimes just keeping up appearances at our various places of worship, a sober reflection about what really matters in this life as most of our closets and suitcases containing stock piles of expensive clothing and accessories remain closed with nowhere to wear them to, opportunities to partake in virtual ceremonies giving us a little rest during the weekends as well as saving a lot on fuel costs are just a few of the cons. May we find some peace and enough rest during this COVID-19 crisis to give off our best at our various units once things normalize again.

20 people to produce thousands of litres in a day. The quality products being churned out attracted many customers from far and near, with news coverage across several media platforms.

To date, we have served not only the University but the whole population of Ghana in these hard times. It has been an uphill task, but we have come far from ground zero to a fully functional Production Unit. We started working manually, in terms of the mixing, but now can boast of a 2000 liters capacity mixer and even more improvements in our manufacturing setup.

In this pandemic I have learnt that, my preparation with the small beginnings was the strongest foundation I had to build on for this big task. Given the fact that face-to-face classes were suspended, I had to fully assume the role of a production manager to help steer the unit in this COVID-19 crisis.



The burden of the production unit was so heavy initially because, each day I would come and meet hundreds of people queuing to buy hand sanitizers and I was scared that, I could not meet their needs.

In spite of the success story of significantly increasing production capacity, at the expense of our research and academic life, to meet the demands of our customers, there has been many hurdles and challenges, as well. These include: the handling of so many people to get the job done, learning to manage various egos and temperaments, and learning to be corrected when wrong,

I have personally developed so much in these hard times. I have had to learn things that, otherwise, would not be part of my original discipline of interest. I have gathered knowledge in human resource management, customer care, procurement, accounting and finance, conflict resolution and expectation management.

I have attempted to be the super woman and still had to learn about the frailty of my human life and ability. I have had to sacrifice a lot: my time, money, family, research, and others to realise the vision of this production unit. Not that I consider these not important, but the protection of the population had become my utmost priority. If one person is not protected, there was a high probability that they could infect a significant population.

Shouldering the burden alone was not easy, but the beauty about this journey is the strength I draw from my Maker and the assurance from my family especially my husband, children, mother, in-laws, and all colleagues. Managing my family has been one of the toughest jobs I have had to tackle these few months. Being a mother of three strong boys is not easy. My husband and kids have had to endure months of mummy being away for more than 12 hours in a day. The earliest we leave the production unit is 10pm each day. Yet the very people who have been denied my presence and emotional support have been my biggest support

throughout this journey. They pray for me and encourage me each day. The success story will not be complete unless the family knows how I deeply appreciate their love and support.

In the fight against COVID 19, we have risen to the challenge and we are still in it till we all win this war. We have stood the test of time to stay relevant. When all our colleagues saw that the unit was overwhelmed by the demand of hand sanitizers, many closed their laptops, labs, and books to come into the formulation and packaging. We have come this far because everyone supported. Amazing and wonderful women in Science have been my biggest support in these hard times. Dr. (Mrs.) Vivian Boamah, Dr. (Mrs.) Linda Fondjo, Dr. (Mrs.) Marian El Boakye-Gyasi and Miss Dorcas Atubea Addo, you women are so amazing. It has been three months of every day grinding but they have just been there for me.

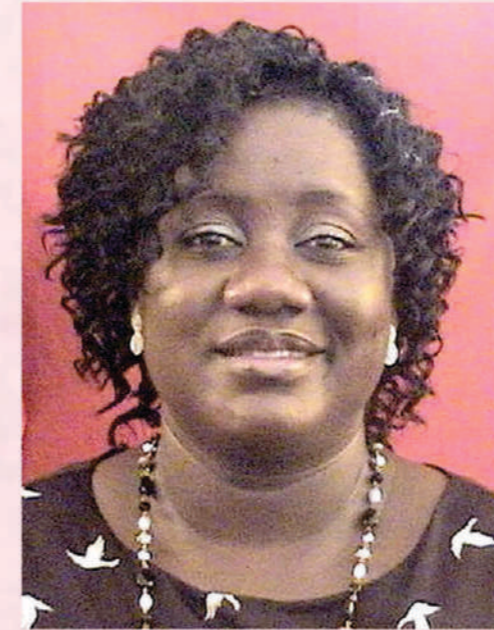
The story can never be completely told without the women, their hard work, encouragement, and readiness to help in any way is invaluable and I am eternally grateful.

To this I quote from Bernard Kelvin Clive, "The future is not just about start-ups but stay-ups; anyone can start but it takes those who can stand the test of time to stay relevant."

I might not be the soldier at the war front, like the health workers working on patients, but a soldier who is stopping the enemy in its tracks to prevent its advancement. We are stopping the spread of the virus and we hope this war comes to an end soon.



MY COVID- 19 EXPERIENCE: HOW MY LIFE HAS CHANGED SINCE THIS COVID- 19 REARED ITS HEAD IN OUR COUNTRY



Dr. (Mrs.) Linda Asare- Adjebeng Bedu- Addo. (Pharmacist, UHS)

Gone are the days I could gladly go to work with my makeup and simply walk into my office. Now, my surgical masks and N95 as well as the pre-triaging protocols at our main entrance will not allow any of that. Scrubs and trainers have taken over almost all of the executive 'shada'. Gone are those days I could just hug and pick up my girls upon arrival from the hospital even after observing all the necessary safety protocols. Now I have to go to work with poly bags that I can dispose of immediately I get home so I don't infect the rest of my family if I have, perchance, picked the virus from stepping out of my front door. Gone are those days I could just walk in to check on my widowed mum. I can't do that now for fear of infecting her with the virus since she falls within the most vulnerable group. Our usual monthly visits to my mother-in-law's in the Central Region too have stalled.

Everywhere and everything is COVID, COVID, COVID... as if that is the only thing that matters now. My duty days start with checking to see that the concentration of bleach (chlorine) needed for disinfection of the holding/ isolation areas. There is also a need to de-contaminate equipment used in picking samples from suspected patients, to ensure they meet the standards prescribed by the World Health Organization (WHO). In- house preparation of WHO standard sanitizers as well as, ensuring that the various units in our facility have adequate supply of these sanitizers is also checked. Pre-triaging of the clients to determine who has to be isolated or who has to be managed immediately by the team on duty for that day is not left out of my routine. Reassuring the patients as they wait for their samples to be taken forms an integral part of what I do on duty days. Taking of samples as well as sending those samples to Kumasi Center for Collaborative Research into Tropical Medicine (KCCR) - our major testing centre for this part of Ghana - is not left out. If any medications are prescribed for our clients in the holding area, I make sure that I pick those that are available at our pharmacy for them so as to contain the virus in the holding/ isolation area should their test come out positive later. I also give them adherence counselling and advise them to continue to observe all the COVID-19 safety protocols before they leave. After everything we write reports on our patients, as well as, the procedures done for them, and submit to the team head before leaving for the house.

Leaving the hospital after running these tight schedules, my life as a wife, mother, daughter and sister begins again after going through the safety protocols at home. My girls spray me from head to toe with 70% alcohol, after which I have to run to the bathroom to shower before I can receive their hugs. Checking to see what assignments have been given, as well as, helping to submit these online assignments, cooking and washing are just a few of the things I do when I get home.