



**11<sup>th</sup> Annual National  
Health Research Conference**

# **THE COVID-19 EXPERIENCE: ADJUSTING TO THE NEW NORMAL**

**NOVEMBER 19-20, 2020** ◀

**#NHRC2020 | #NHRC11**





Welcome to the  
**National Health  
Research Conference  
2020**

NOVEMBER 19 -20

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◀ **Dr. the Hon. Christopher Tufton, MP**  
Minister of Health and Wellness

I laud the efforts of the team at the Ministry of Health and Wellness for making this the 11th annual staging of the National Health Research Conference a reality amidst the COVID-19 pandemic.

In doing so, the team has demonstrated what it means to give priority to health research while also affirming this year's conference theme, **'The COVID-19 Experience: Adjusting to the New Normal'**.

Life as we know it has changed. With more than 49.7 million people infected globally and over 1.2 million lives lost, COVID-19 has ushered in a new normal. Critical to our successful adjustment to that new normal is health research.

Health research provides us with the opportunity to scientifically unpack what we have come to know of this latest public health challenge; to examine the various interventions made; and to determine the extent of success of each, in order to refine our response while also planning next steps. It is, of course, also critical that we continue, through a research lens, to take stock of pre-existing challenges and our response mechanisms.

This year's National Health Research Conference is fulfilling this role. I, therefore, welcome the abstracts on mental health during COVID-19, as well as on occupational health and safety, health innovations and maternal health – all of which are important areas of focus during any public health challenge.

Once again, my highest commendations to the Ministry of Health and Wellness' National Epidemiology Team and the Essential National Health Research Committee whose hard work has made this year's conference not only possible but also relevant.



## Mr. Dunstan Bryan

Permanent Secretary  
Ministry of Health and Wellness



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Research is the lifeblood of the medical profession. The many advances and improvements we have experienced in health care delivery in recent times have been as a result of the invaluable work of researchers in the medical field. It is for this reason that I am very pleased that the Annual National Health Research Conference will go ahead this year, despite the disruptions that have been wrought by the COVID-19 pandemic. The conference provides a unique opportunity for researchers and practitioners in the field to not only showcase their work but to engage in knowledge sharing and collaboration on research projects which have the potential to revolutionize the health care sector.

This year's Conference theme, The COVID-19 experience: Adjusting to the new normal, is apt, and will provide a suitable forum for deeper engagement on the implications of the COVID-19 pandemic for the delivery of health care. I am pleased that the Conference will feature abstracts on mental health during COVID-19, as this has become a major policy focus for the Ministry of Health and Wellness. The COVID-19 Mental Health Response Programme which the Ministry will be implementing over the coming months will no doubt benefit from the outputs of this particular research. The other conference papers on occupational health and safety, health innovations and maternal health are also critical in providing the platform for the Ministry to continue to refine and fine-tune its policy response in regards to our work place and health care related COVID-19 protocols.

The advent of COVID-19 has brought about a lot of uncertainty in the health care sector but through the research to be showcased at the Conference we can begin to take a more evidence-based approach to addressing the disruptions being experienced in health and shift from crisis management to strategic management as we adjust to the new normal.

I look forward to a successful Conference and thank all the researchers who will be participating for their contribution to the fight against COVID-19.



◀ **Dr. Jacqueline Bisasor-McKenzie**  
Chief Medical Officer  
Ministry of Health and Wellness

The National Health Research Conference is an important calendar event for the Ministry of Health & Wellness. Now in its 11th year, and for the first time, being held virtually, the conference continues to provide a platform for hundreds of participants to benefit from outstanding research in various areas related to health and wellness. These presentations have far-reaching impact, as Jamaica's health system becomes more responsive to the needs of the population, based on its health profile and determinants that are recognized from work carried out by our own local researchers. We are confronted with new and emerging diseases, to which our cadre of healthcare professionals must respond in a timely and efficient manner in order to safeguard the health of our people. Collecting and analyzing data that is representative of our population paves the way towards relevant and effective policies.

This year's conference theme, **"The COVID-19 Experience: Adjusting to the New Normal"** is of course tied to our present situation, where for the past nine months, Jamaica and countries around the world have had to change how we live and do business, as we face this ongoing public health challenge. COVID-19 has taught us many lessons, with many more to learn and analyze for future references. The COVID-19 experience has again highlighted the important role that health plays in every facet of society. We dare say health is the foundation of any society, as penned by Winston Churchill, who once said: **"Healthy citizens are the greatest asset any country can have."** The documentation of this period in our history, the analysis of our public health responses and outcomes, the effect of the disease on our population, and the impact of clinical management are only some of the areas that will form rich ground for research now and in the future.

I am confident that this 11th staging of the National Health Research Conference will be a success and that the presentations on interventions will inform our best practices. Congratulations to the organizing team on what promises to be another great year in research.



## Dr. Joy St John

Executive Director

Caribbean Public Health Agency (CARPHA)



NOVEMBER 19-20

Thank you for extending an invitation to CARPHA to participate in this Annual National Health Research Conference and for trusting CARPHA to be a continuing partner in this endeavour.

COVID-19 still remains an unwelcomed visitor to the whole world. CARICOM countries have largely avoided some of the worst effects of this unwanted guest as per capita rates of COVID-19 infections and deaths have been relatively low. I am aware that many of our Member States are working tirelessly to meet the requirements of the travel bubble which the CARICOM Heads have established. That is an indication of the resilience and willingness of the respective ministries and sectors to contain disease transmission and prevent illness and death to protect the hard-earned status of a safe bubble for residents and visitors.

Much has been achieved through the region's public health response to COVID-19, but this situation is constantly evolving and so complex, that CARPHA is determined to fulfil its responsibility to anticipate our Member States' needs and analyse the scientific discoveries that will allow us to provide tailor-made guidance for the Region. Globally, many countries have faced unprecedented challenges with procurement of the PPE, testing kits, supplies, materials and equipment chain required for the fight against COVID-19. The CARICOM region is no exception. However, I applaud the leadership of the CARICOM Heads of Government who have worked to find solutions to these challenges. They have demonstrated the political will to protect the greatest resource of our Region-our People.

This pandemic has demonstrated how the leaders have led by example with the All of Society coordinated health focused approach of the response to COVID-19. If the Region continues this trajectory, we will experience remarkable gains in the robustness and resilience of the public health sector. As one Chief Medical Officer so eloquently stated,

**“ COVID-19 will do for Public Health what 9/11 did for Global Security” Dr. Roshan Parasram, CMO TTO, 21st October, 2020**

This expression of regional solidarity, despite the polarizing effect of our numerous languages and cultural influences on our CARICOM Member States, is a testimony to the success of the political construct of the Caribbean Community and the technical buttressing of so many years of Functional Cooperation in Health through the CCH planning framework. Research is integral to our existence and most importantly, in this COVID-19 environment, it is critical to identifying what is unique about how COVID-19 is affecting girls and boys and men and women throughout our Region. COVID-19 has impacted every facet of life and society, and most terrifyingly it threatens what makes us special-that love for each other which encourages close interaction to celebrate how we like to work and learn and play. The damage to our economic activity has already surpassed what we have experienced from the repeated severe weather events exacerbated by Climate Change, that have plagued our corner of the world for decades. Therefore I applaud the Government and specifically the Ministry of Health of Jamaica for the foresight in choosing the theme of this year's Conference and for providing a forum for researchers to highlight the critical findings that are likely to shape policy and programming which address COVID-19.

As we adjust to the new normal, I encourage participants to view COVID-19 as an opportunity to review our infection prevention and control practices as well as the opportunity for strengthening whole of society approaches to responding to public health issues like NCD prevention. We need to take the best practices we are employing in this fight against COVID-19 and apply them to our other health concerns. So even as we learn to co-exist safely with COVID-19, let us embrace the new normal and deliberately redefine and design a better future.

I applaud the organizers for persevering and convening this Conference and wish you and the participants every success.



## Dr. Bernadette Theodore-Gandi

PAHO/ WHO Representative to Jamaica, Bermuda and The Cayman Islands

The Pan American Health Organization (PAHO) congratulates Jamaica's Ministry of Health and Wellness and all stakeholders on the staging of the 11th Annual National Health Research Conference. This national forum will facilitate engagement around current health findings and identify opportunities, from the data presented, to influence positive change within our health sector.

The Pan American Health Organization's second of six core functions is to shape research and stimulate the generation, dissemination, and application of valuable knowledge. The conference's objectives fit squarely into this core work and we are pleased to support and be a part of its 11th undertaking.

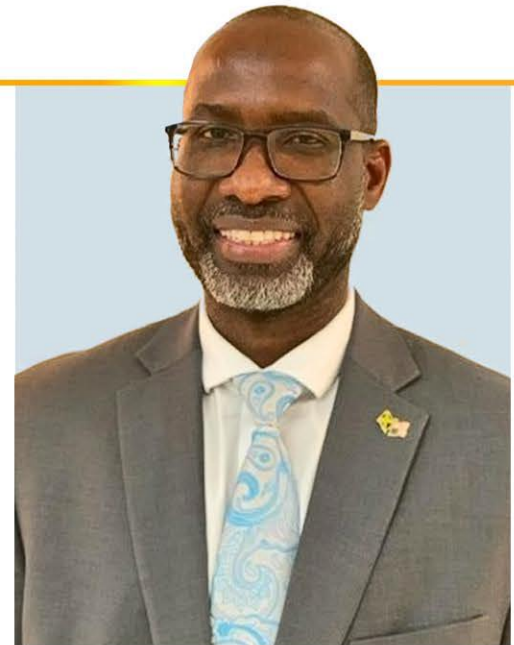
The PAHO/ WHO Strategy for Universal Health recognizes that a health system that works for all must systematically and sustainably strengthen national information systems for health. The health system must also practice decision-making processes that consider ethical, cultural, gender and national perspectives and are guided by evidence. In addition, it is agreed that universal health must be supported by an enabling legal and regulatory environment with renewed focus on the protection of human rights. This becomes more possible, with an adequately financed and systematic approach to quality research and knowledge management.

The Pan American Health Organization is committed to quality research data which if produced routinely, can help to address the social determinants of health, identify and incorporate the best use of technology, evaluate the implementation and effectiveness of interventions, policies and programmes and in so doing, drive continuous improvements and access to quality services. The Pan American Health Organization is committed to being a partner by providing technical support in building a research agenda that prioritizes the health challenges of today and those that are projected to result from the individual, community and economical practices.

The theme of this year's Conference, 'The COVID- 19 Experience: Adjusting to the new normal' is very timely as this pandemic has reiterated the benefit of timely collection, collation and analysis of relevant data, to provide information and evidence for decision making and action in the field of surveillance, case management and prevention and control.. With this motivation, let us with a spirit of equity, remember those most vulnerable who may require targeted support in achieving their best health and life outcomes - the adolescent and youth population, the elderly, low income households, people living with disabilities as well as minorities.

The commitment of the Ministry of Health and Wellness to sustaining this national initiative is highly commendable. On behalf of PAHO and the World Health Organization (WHO), I am confident that this will be an informative and productive Conference and that the discussions and recommendations will inspire positive change in the health and lives of all Jamaicans.





## Dr. Varough Deyde

Director, Centers for Disease Control and Prevention (CDC) Caribbean Regional Office

It is my distinct honor and privilege to bring greetings and congratulate the Jamaican Ministry of Health and Wellness, on behalf of the US Centers for Disease Control and Prevention (CDC), for organizing the 2020 National Research Conference.

The CDC has had a longstanding collaboration with the MOHW (from influenza, HIV/AIDS and now COVID-19). This past October, CDC signed a cooperative agreement with the MOHW to support the Ministry's efforts in addressing various public health needs. Additionally, we have funded PAHO to enhance their support of Jamaica's national response to COVID-19.

The theme of the 11th National Health Research Conference- "The COVID-19 experience, adjusting to the new normal", is a reminder of the impact COVID-19 pandemic has had on the lives and livelihoods of many around the world, including right here in Jamaica.

The conference will provide an opportunity for sharing and learning about how the government, the citizens, and all stakeholders have experienced and managed the pandemic. It also provides a platform to discuss success, challenges, and opportunities brought forth by this pandemic. There is much we don't yet know about this novel coronavirus and the resulting COVID-19 disease. That is why research conferences like this, are so important for us to share new knowledge and disseminate findings on newly emerging diseases.


The four research areas that will be discussed and covered during the conference are of critical importance. As a new disease, COVID-19 pandemic may be stressful for both adults and children and so may the public actions taken to combat it. People could be overwhelmed by what could happen. It is important that stress is managed in a healthy way which helps everyone cope and be resilient.

The safety and wellbeing of healthcare workers and public health responders must remain at the forefront in the overall response to COVID-19 and any other public health threat. Some steps employers can take to reduce workers' risk of exposure to SARS-CoV-2 include to: i) Develop an Infectious Disease Preparedness and Response Plan, ii) Prepare to Implement Basic Infection Prevention Measures, iii) Develop Policies and Procedures for Prompt Identification and Isolation of Sick People, if Appropriate, and iv) Develop, Implement, and Communicate about Workplace Flexibilities and Protections; and v) Implement Workplace Controls.

The scale of the COVID-19 pandemic requires global partnership to identify and implement innovative technology solutions to ensure the most vulnerable among us have access to basic health services. The pandemic has imposed on the global community to think and work differently, and not business as usual. Surveillance around maternal health in the era of COVID-19 is key to understanding the impact of COVID-19 during pregnancy on both the mother and infant and how to mitigate those impacts.

Congratulations to the organizers of the conference and I look forward to learning about the great work to be presented and discussed.



 **Dr. Wayne Henry**  
Director General  
Planning Institute Of Jamaica

The Planning Institute of Jamaica wishes to congratulate you on the hosting of the eleventh annual National Health Research Conference. This investment in health research reflects the importance that the Ministry and the country at large places on strengthening knowledge in the management and delivery of public health services. It is also relevant to the creation of evidence-based policies and programmes that will improve health outcomes for a healthy and stable population.

The sharing of information in this conference places research at the forefront of the health agenda, at a time when access to reliable information is of critical importance. The theme for the conference “The COVID-19 experience: adjusting to the new normal” is therefore quite appropriate in light of this global pandemic.

The response to the pandemic is an important feature of the inter-sectoral response to health emergencies. The public health measures put in place to minimize the impact of COVID-19 have shown in sharp relief the juxtaposition of public policy and social development outcomes. Social welfare, social security and labour market interventions, and in general the delivery of social services have had to transform time-tested systems through innovative and revolutionary approaches.

As we emerge and rebuild, this approach should be built into policies and programmes within and outside of the health sector. It is also an opportunity to embed positive elements of COVID-driven short-term changes, while planning for long-term sustainability of services to cushion the impact of the pandemic. This will include focusing on the health and other developmental milestones outlined in the Medium Term Socio-Economic Framework of the Vision-2030 Jamaica – National Development Plan. The presentations during this research conference will no doubt guide health-related adjustments by identifying emerging vulnerabilities and presenting opportunities for growth. Please accept best wishes for a successful and impactful conference.



## Ms. Carol Coy

Director General  
Statistical Institute of Jamaica



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The Statistical Institute of Jamaica (STATIN) congratulates the Ministry of Health and Wellness (MOHW) on the annual National Health Research Conference's eleventh staging. The theme for this year's conference, The COVID-19 experience: adjusting to the new normal, is very relevant as the pandemic's effects have caused immense changes to our daily lives. These changes have happened rapidly and abruptly.

Over the years, the conference has provided an avenue for sharing information from research conducted by public and private institutions and individuals. The recommendations from many of these studies have been used to inform policies or spawn further research. I anticipate that this year will be no different as discussions are held around mental health, occupational health and safety, health innovations and maternal health.

As the National Statistics Office (NSO), we cannot over-emphasize the significance of timely research and availability of relevant, accurate and quality data. These represent important elements in the formulation of evidence-based policies, decision-making and sound health behaviour change interventions. The spread of the novel Coronavirus (SAR-CoV-2) has increased the demand across the board for data that can help decision-makers better understand how the virus is spread and the health implications of the disease in the short, medium and long term. There is also an urgent need to understand better the social, economic, and environmental impacts of the measures being implemented to contain the disease's spread.

The importance of producing statistics to inform decision-making increases as governments and the private sector community seek to balance protecting lives and livelihoods. STATIN is proud of its partnership with MOHW in co-chairing the National COVID-19 Research Agenda (NCRA) as it aims to support the national response to the pandemic and the increasing demand for data. We invite everyone, especially health practitioners and health education and behaviour change specialists, to review the recently released 2020 COVID-19 Knowledge, Attitudes and Practices (KAP) Survey report which was undertaken by the Institute and MOHW as part of the NCRA. The KAP survey provides insights into the knowledge, attitudes and practices of Jamaicans regarding the SARS-Cov-2 and COVID-19 with nationally representative estimates at the parish and regional levels.

As we adapt to the new normal, STATIN's commitment to contribute to national development through the provision of quality statistics to enable effective planning and decision-making remains unswerving. Once more, we congratulate our partner, the Ministry of Health and Wellness and look forward to a successful conference and more opportunities to collaborate as we work towards providing quality data for evidenced based decision- making.





## DAY 1 : THURSDAY NOVEMBER 19, 2020 ◀

- 8-8:05 a.m.** National Anthem  
Chair: **Dr. Jacqueline Bisasor-McKenzie**  
Chief Medical Officer  
Ministry of Health and Wellness (MOHW)
- 8:05 - 8:10 a.m.** Invocation  
**Ms. Karen Samuels**  
Administrator, Financial Management Division,  
Spiritual Wellness Committee, MOHW
- 8:10 - 8:45 a.m.** Welcome and Opening Remarks  
Chair: **Dr. Jacqueline Bisasor-McKenzie**  
Chief Medical Officer  
Ministry of Health and Wellness, MOHW
- Greetings** **Dr. Joy St. John**  
Executive Director, Caribbean Public Health Agency  
(CARPHA)  
**Dr. Varough Deyde**  
Director, Caribbean Regional Office, Centers for Disease  
Control and Prevention (CDC)  
**Dr. Audrey Morris**  
Decentralized Regional Advisor, Food and Nutrition and  
Officer-in-Charge, Pan American Health Organization/  
World Health Organization (PAHO/WHO) on behalf of  
**Dr. Bernadette Theodore-Gandi**  
PAHO/WHO Representative in Jamaica.
- 8:45 - 9:05 a.m.** Feature Address  
**Dr. the Hon. Christopher Tufton**  
Minister of Health and Wellness
- 9:05- 9:15 a.m.** Break
- 9:15 -9:20 a.m.** Covid-19 Jingle 2020
- 9:20 - 9:30 a.m.** Break
- SCIENTIFIC SESSION 1: HEALTH AND WELLNESS**
- Moderator** **Dr. Simone Spence**  
Director, Health Promotion and Protection, MOHW
- 9:30-9:45 a.m.** **Dr. Sukanya Prasad (O-01)**  
Perceived health concerns during COVID 19 crisis  
amongst Jamaicans
- 9:45-10:00 a.m.** **Ms. Vonetta Nurse (O-02)**  
The use and understanding of nutrition labels on  
sugar-sweetened beverages: A study of consumers in  
Kingston & Saint Andrew, Jamaica
- 10:00- 10:15 a.m.** Discussion
- 10:15-10:30 a.m.** Break/Poster Viewing
- SPECIAL PRESENTATION: JamCOVID19 Application**
- Moderator** **Dr. Michelle Roofe**  
Senior Director Health Informatics, MOHW
- 10:30-11:00 a.m.** **Mr. Dushyant Savadia**, Founder and CEO, Amber Connect



**11:00-11:10 a.m.**

Discussion

**11:10-11:15 a.m.**

Break

**PANEL DISCUSSION: Emerging and Reemerging Infectious Diseases Pertinent to Latin America and the Caribbean**

**Moderator****Professor Celia Christie-Samuels**

Professor and Chair of Paediatrics (Infectious Disease Epidemiology and Public Health), University of the West Indies

**11:15-12:15 p.m.****Panelists:****Dr. Kimberly Brouwer**

Professor, Family Medicine and Public Health, University of California, San Diego

**Dr. Stephanie Fletcher-Lartey**

Consultant, Health Information, Communicable Diseases and Emergency Response, CARPHA

**Dr. Wilmore Webley**

Associate Professor of Microbiology, University of Massachusetts, Amherst

**Dr. Karen Webster Kerr**

Principal Medical Officer, National Epidemiologist, MOHW

**12:15-12:30 p.m.**

Break

**SCIENTIFIC SESSION 2: Mental Health**

**Moderator****Dr. Naydene Williams**

Director, Health Services Planning and Integration

**12:30-12:45 p.m.****Dr. Ganesh Shetty (O-03)**

Coping with COVID-19 -Helping Our Youth with Tele-Mental Health

**12:45-1:00 p.m.****Dr. Eric Williams (O-04)**

Stress perceived and coping mechanisms of medical students during COVID-19 at The University of West Indies (Mona): A rapid review

**1:00 -1:15 p.m.**

Discussion

**1:15-1:30 p.m.**

Break

**PANEL DISCUSSION: Striking the Balance in Health and Wellness**

**Moderator****Dr. Maureen Irons-Morgan**

Consultant Psychiatrist

**1:30-2:30 p.m.****Panelists:****Dr. Kai Morgan**, President, Jamaica Psychological Association**Dr. Earl Wright**, President, Jamaica Psychiatric Association**Dr. Kevin Goulbourne**, Director, Mental Health and Substance Abuse Services, Ministry of Health and Wellness**2:30- 2:45 p.m.**

Promotional Quiz &amp; Give-Away

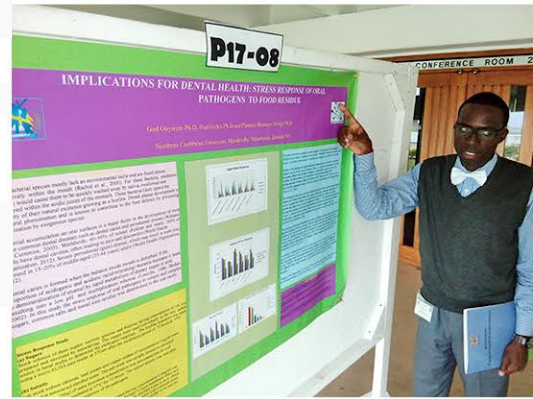
**DAY 2- FRIDAY NOVEMBER 20, 2020** ◀

<b>Chair</b>	<b>Mr. Jasper Barnett</b> , Director, Health Systems Improvement, MOHW
<b>8:00-8:05 a.m.</b>	Invocation <b>Mrs. Songa Parchment</b> Senior Secretary, Planning and Evaluation Branch Spiritual Wellness Committee, MOHW
	<b>SPECIAL PRESENTATION: The Data Protection Act</b>
<b>Moderator</b>	<b>Mr. Jasper Barnett</b> , Director, Health Systems Improvement, MOHW
<b>8:05-8:25 a.m.</b>	<b>Ms. Wahkeen Murray</b> , Chief Technical Director, Information Communication Technology, Ministry of Science, Energy and Technology
<b>8:25-8:35 a.m.</b>	Discussion
<b>8:35-8:45 a.m.</b>	Break
	<b>SCIENTIFIC SESSION 3: Sickle Cell Disease</b>
<b>Moderator</b>	<b>Dr. Nicole Dawkins-Wright</b> , Director, Emergency, Disaster Management and Special Services, MOHW
<b>8:45-9:00 a.m.</b>	<b>Mrs. Patrice Whitehorne-Smith (O-05)</b> Socio-demographic correlates of depressive and anxiety symptoms among Jamaicans during the COVID-19 pandemic
<b>9:00-9:15 a.m.</b>	<b>Ms. Marissa Stubbs (O-06)</b> The experiences of caregivers of persons living with dementia in Jamaica during COVID-19
<b>9:15-9:30 a.m.</b>	Discussion
<b>9:30-9:45 a.m.</b>	Break
	<b>SCIENTIFIC SESSION 4: Sickle Cell Disease</b>
<b>Moderator</b>	<b>Prof. Jennifer Knight Madden</b> , Director, Sickle Cell Unit, UWI
<b>9:45-10:00 a.m.</b>	<b>Dr. Zachary Ramsay (O-07)</b> Exploring Acute, Chronic and Neuropathic Pain Among Jamaicans with Sickle Cell Disease
<b>10:00-10:15 a.m.</b>	<b>Ms. Rachel Bartlett (O-08)</b> Women at risk: Health-Related Quality of Life, Disease Severity and Neuropathic Pain in Sickle Cell Disease in Jamaica
<b>10:15-10:30 a.m.</b>	Discussion
<b>10:30-10:45 a.m.</b>	Break
	<b>SCIENTIFIC SESSION 5: Sickle Cell Disease</b>
<b>Moderator</b>	<b>Dr. Tazhmoye Crawford</b> Director, Monitoring, Evaluation and Research, National Family Planning Board
<b>10:45-11:00 a.m.</b>	<b>Dr. Nicki Chin (O-09)</b>





	The relationship between sleep quality and the quality of life of adults with Sickle Cell Disease in Jamaica
<b>11:00-11:15 a.m.</b>	<b>Dr. Zachary Ramsay (O-10)</b> Cost Barriers to Universal Healthcare: A Cross-Sectional Investigation of Sickle Cell Disease related hospital admissions in Jamaica
<b>11:15-11:30 a.m.</b>	Discussion
<b>11:30-11:35 a.m.</b>	Break
	<b>SPECIAL PRESENTATION: The International Year of the Nurse and Midwife</b>
<b>Moderator</b>	<b>Dr. Tazhmoye Crawford</b> , Director, Monitoring, Evaluation and Research, National Family Planning Board
<b>11:35- 11:45 a.m.</b>	<b>Mrs. Patricia Ingram-Martin</b> Chief Nursing Officer, MOHW
<b>11:45-11:55 a.m.</b>	Discussion
<b>11:55 am-12:00 noon</b>	Break
	<b>SCIENTIFIC SESSION 6: Health and Wellness and Laboratory Studies</b>
<b>Moderator</b>	<b>Dr. Michelle Hamilton</b> Director, National Laboratory Services.
<b>12:00-12:15 p.m.</b>	<b>Dr. Angela Rankine Mullings (O-11)</b> Early detection of the spleen in homozygous Sickle Cell Disease and the prediction of susceptibility of patients to overwhelming infection: Evidence from a retrospective cohort study
<b>12:15-12:30 p.m.</b>	<b>Mr. Kevhvan Graham (O-12)</b> Analysis of Actinobacteria Isolates for Evidence of the Production of Antimicrobial Compounds
<b>12:30-12:45 p.m.</b>	Discussion
<b>12:45-1:00 p.m.</b>	Break
	<b>SCIENTIFIC SESSION 7: Health and Wellness and Laboratory Studies</b>
<b>Moderator</b>	<b>Mr. Howard Lynch</b> Senior Director, Policy Planning and Development, MOHW
<b>1:15-1:30 p.m.</b>	<b>Ms. Tiffany Butterfield (O-13)</b> Assessment of Commercial SARS-CoV-2 Antibody Assays, Jamaica
<b>1:30-1:45 p.m.</b>	<b>Dr. Anya Cushnie (O-14)</b> HIV program outcomes for Jamaica before and after "Treat All": A population-based study using the National Treatment Services database
<b>1:45-2:00 p.m.</b>	Discussion
<b>2:00-2:15 p.m.</b>	Break
<b>2:15-2:20 p.m.</b>	Completion of NHRC 2020 Evaluation Form Research Promotional Quiz
<b>2:20-2:30 p.m.</b>	<b>Wrap-up and Vote of Thanks: Dr. Andriene Grant</b> End of the 11th Annual National Research Conference 2020





◀ DR. SUKANYA PRASAD



◀ MS. VONETTA A.B. NURSE

**NHRC-O-01**

**Perceived health concerns during COVID 19 crisis amongst Jamaicans**

S Prasad<sup>1,2,3</sup>, L Smatt<sup>2</sup>, N Prasad<sup>2</sup>, M Volquez<sup>2,4</sup>

<sup>1</sup>Miracle Medical Centre, St. Thomas, Jamaica <sup>2</sup>Public Health Literacy, USA, <sup>3</sup>Walden University, USA, <sup>4</sup>Colorado State University, USA

**Aim:**

The COVID-19 pandemic is an unprecedented global crisis affecting several countries including Jamaica. The risk perception of a crisis is shaped by both real hazards and perceived threats. A cross-sectional research survey was conducted in August 2020 to evaluate the perceived health concerns during COVID-19 amongst Jamaicans.

**Methods:**

A cross-sectional randomized online questionnaire survey was sent to of total of 268 participants. Out of these, 92 people (34%) responded to the online questionnaire survey in August 2020, and the data was analyzed by SPSS.

**Results:**

Out of 92 respondents, 78% were females and 22% were males, and more than 70% of participants were over 35 yrs. old. 52% of participants perceived the country was not prepared for a crisis such as COVID-19. The biggest concerns during this crisis were family health (39%), economic hardship (28%), societal health (20%), and personal health (13%). In personal health, the majority of Jamaicans were concerned about physical and mental health during this crisis.

**Conclusion:**

The responding and understanding of the on-going COVID-19 pandemic are functions of both real threats and perceived risks. The interaction of biological health and risk perception is complex and dependent on an understanding of the crisis, uncertainty, and catastrophic potential. This research study showed a major burden on population health both in terms of healthcare delivery systems and public health services, thus the burden on the Ministry of health and wellness. Our cross-sectional questionnaire survey also suggests there is a need for more representative research from a larger sample of the Jamaican population, particularly from vulnerable populations. The results also suggest a crisis burden on mental health in addition to physical health, therefore, an effective campaign should be planned to prevent a deepening mental health crisis. The awareness program should be encouraged to motivate and help the public to handle the crisis. The policymakers should consider working with various government entities and NGOs to take measures to handle this situation. Psychological counseling centers including call centers should be made more available for the Jamaican public.

**NHRC-O-02**

**The use and understanding of nutrition labels on sugar-sweetened beverages: A study of consumers in Kingston & Saint Andrew, Jamaica**

V Nurse<sup>1</sup>

<sup>1</sup>Department of Community Health and Psychiatry, Faculty of Medical Sciences, University of the West Indies, Mona Campus, Jamaica, W.I.

**Objective:**

To determine the use, understanding and perception of nutrition labels on sugar-sweetened beverages and related socio-demographic factors among adult consumers.

**Methods:**

A mixed method cross sectional study of 350 adult consumers aged 18-75 purchasing sugar-sweetened beverages at supermarkets. Supermarkets were selected by single-stage cluster sampling. Binary logistic regression was used to obtain the odds of use and competence in understanding the label, and identify significant predictors of nutrition label use and understanding. Qualitative data was recorded, transcribed, collated, organized into themes and interpreted.

**Results:**

Participants' (M 144, F 205) mean age was 34.44(SD=11.63). 65% read the nutrition label when purchasing sugar-sweetened beverages. Females, employed persons and persons with more than 3 children under 18 were 3 times more likely to read the nutrition label (OR 2.53 (95%CI (1.56-4.09), 2.75(95%CI (1.46-5.18) and 2.65(95%CI (1.03-6.83) respectively). Nutrition qualification doubled the likelihood of reading the nutrition label (OR 1.98 (95%CI (1.08-3.61). 24.6% were competent in understanding the nutrition label. Females and persons with tertiary education were twice as likely to be competent (OR 1.79(95%CI (1.03-3.10) and 1.94(95%CI (1.11-3.41) respectively) and persons 30 years and younger were 3 times more likely to be competent (OR 2.45 (95%CI (1.23-4.88).

**Conclusion:**

Respondents read nutrition labels but did not necessarily understand them. Targeted health education, cognizant of socio-demographic factors, policy change and further research are needed to ensure that the nutrition label delivers intended benefits as a public health tool to address the prevalence of obesity, by providing consumers with information to make healthier food choices.





◀ DR. GANESH SHETTY

**NHRC-O-03****Coping with COVID-19: Helping Our Youth with Tele-Mental Health**

G Shetty<sup>1</sup>, J Leiba<sup>1</sup>, C Onyefulu<sup>1</sup>, S Weaver<sup>1</sup>

<sup>1</sup>Kingston and St Andrew Health Department, Kingston, Jamaica

**Background:**

A collaborative initiative of the Child and Adolescent Mental Health Unit of Ministry of Health and Wellness, and Guidance and Counselling Unit of Ministry of Education supported offering of Tele-Mental Health Services (TMHS) through twenty Child Guidance Clinics sites in Jamaica.

**Objective:**

To evaluate the feasibility, accessibility, and acceptability of the Child and Adolescent Tele-Mental Health Services.

**Methods:**

A cross-sectional design was used to assess the views of 50 adolescents (11-18 years) and 50 parents/caregivers who received TMHS, from the two-child guidance clinics under Kingston and St. Andrew Health Department. Data were collected using two questionnaires with reliability coefficients of 0.837 and 0.959.

**Results:**

Between April and September 2020, 494 children received 1,632 sessions using TMHS, and 179 sessions were offered face-to-face (a total of 1,811 sessions). This is a small increase in the number of sessions compared to the same period in 2019. The number of missed sessions decreased almost by half from 39% to 19%. Most participants perceived TMHS as comfortable, convenient, and confidential modality, which saved the cost and time of travelling. Nearly 90% of participants believed that TMHS prevented unnecessary exposure to COVID-19. Over three quarters were satisfied and hoped that TMHS would continue in spite of 28% of adolescents and 42% of the parents/caregivers not finding TMHS as satisfying as talking in person.

**Conclusion:**

This study supports that Child and Adolescent Tele-Mental Health Service is a feasible, accessible, and acceptable modality of sustaining the delivery of child and adolescent mental health services during COVID-19 pandemic in Jamaica.



◀ DR. ERIC WILLIAMS

**NHRC-O-04****Stress perceived and coping mechanisms of medical students during COVID-19 at The University of West Indies (Mona): A rapid review**

E Williams<sup>1</sup>, R Hutson<sup>1</sup>, S Dasgupta<sup>1</sup>, J Williams-Johnson<sup>1</sup>, S French<sup>1</sup>, J Ifill<sup>1</sup>, R Edwards<sup>1</sup>, A Blake<sup>2</sup>, P Singh<sup>1</sup>, M Johnson<sup>1</sup>, L Graham<sup>1</sup>, O Ismail<sup>3</sup>, R Gibson<sup>4</sup>, R Lindo<sup>5</sup>

<sup>1</sup>Emergency Medicine Division, Department of Surgery, Radiology, Intensive Care, University Hospital of the West Indies, Kingston, Jamaica, <sup>2</sup> Caribbean Institute for Health Research-Sickle Cell Unit, The University of the West Indies, Mona Campus, Kingston, Jamaica, <sup>3</sup> Faculty of Science and Sport, School of Mathematics and Statistics, University of Technology, Kingston, Jamaica,

<sup>4</sup> Faculty of Medical Sciences, Department of Community Health & Psychiatry, The University of the West Indies, Mona Campus, Kingston, Jamaica. <sup>5</sup> Faculty of Medical Sciences, Department of Basic Medical Sciences, Biochemistry Section, University of the West Indies, Mona Campus, Kingston, Jamaica

**Aims:**

The aim of this study was to determine the stress perceived and the coping mechanisms utilized by registered medical students in the MBBS degree programme at the UWI (Mona Campus) during the COVID-19 pandemic.

**Methods:**

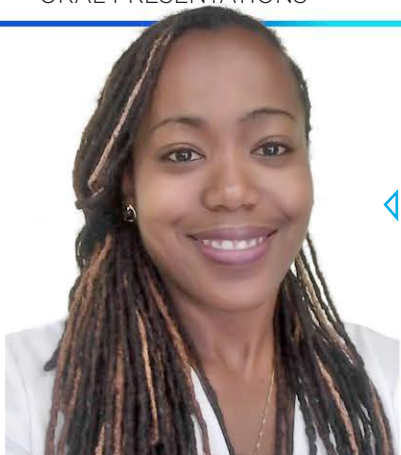
This was a descriptive cross-sectional study conducted among medical students. Data were collected electronically using the online platform – Survey Monkey. Of a possible 1500 students, 308 responded over the period March 13th, to July 31st, 2020 in the midst of the COVID-19 pandemic. The instrument used to collect data consisted of three sections; Part A: Sociodemographics and general information; Part B: Perceived stress using the “Perceived Stress Scale” (PSS-10) and Part C: the Brief COPE inventory assessing coping strategies. The data were analyzed using descriptive statistics, t-tests and multiple linear regressions. Ethical approval was granted by the Mona Campus Research Ethics Committee.

**Results:**

A sample of 308 students voluntarily participated in the study. Their ages ranged from 18 to 35 years. There was a female preponderance (70.1%) and an average age of 22.7 ± 3.1 years. The results revealed that 5.8% of the students were mildly stressed, 47.1% were moderately stressed, 33.8% were highly stressed, and 13.3% did not indicate their stress levels. Female students exhibited a higher degree of stress than male students. Active coping, emotional support, behavioral disengagement, acceptance and self-blame were all coping strategies that were significant predictors of stress level.

**Conclusions:**

There was a high perception of stress among the students and the majority utilized active coping strategies. Against the background of the likely heightening of stress experienced by medical students because of the COVID-19 pandemic, interventional programmes, such as workshops which emphasize appropriate coping techniques should be helpful. A curriculum for stress management and policy-driven strategies should also be considered by the medical school.



◀ **MRS. PATRICE  
WHITEHORNE-SMITH**

### NHRC-O-05

#### Socio-demographic correlates of depressive and anxiety symptoms among Jamaicans during the COVID-19 pandemic

*P Whitehorne-Smith<sup>1</sup>, D Oshi<sup>1</sup>, G Mitchell<sup>1</sup>, C Agu<sup>1</sup>, A Bailey<sup>1</sup>, W Abel<sup>1</sup>*

*<sup>1</sup>Department of Community Health and Psychiatry, University of the West Indies, Mona, Jamaica*

#### Background:

Evidence suggests that stressful life events such as those seen in the current global coronavirus disease (COVID-19) pandemic can result in the development of mental health problems among the general population.

#### Objectives:

This study sought to investigate the prevalence rate and socio-demographic correlates of depressive and anxiety symptoms among Jamaicans during the ongoing COVID-19 pandemic.

#### Methods:

This was a cross sectional, population-based online survey. Persons 18 years and older, who reside in Jamaica were targeted via the Facebook social media platform. Those interested in participating were routed to a separate survey platform. The questionnaire captured data related to socio-demographics, knowledge of COVID-19, beliefs and attitudes about COVID-19. Mental health issues including depressive and anxiety symptoms were assessed with questionnaire items from the Patient Health Questionnaire (PHQ-2) and the Generalized Anxiety Disorder (GAD-2).

#### Findings:

A total of 485 participants were involved in the study (90.8% female and 9.2% male). Almost all participants felt that COVID-19 had greatly affected their lives, 97.7%. The prevalence of notable depressive symptoms and anxiety symptoms was 54.7% and 49.2% respectively. Multinomial logistic regression found significant associations of younger age, unsteady employment/ being unemployed and lower educational level with higher prevalence of notable depressive and anxiety symptoms. Also, 67.4% of participants responded "yes" or "maybe" to needing additional help or support to cope during COVID-19.

#### Conclusion:

The findings suggest the need for the government to develop targeted mental health initiatives for young adults, the under- or unemployed and those with lower levels of education.



◀ **MS. MARISSA STUBBS**

### NHRC-O-06

#### The experiences of caregivers of persons living with dementia in Jamaica during COVID-19

*M Stubbs<sup>1</sup>, J Robinson<sup>1</sup>, R Amour<sup>1</sup>, I Govia<sup>1</sup>, E Freeman<sup>2</sup>*

*<sup>1</sup>Epidemiology Research Unit, Caribbean Institute for Health Research, The University of the West Indies, Mona Campus, Jamaica*

*<sup>2</sup>Care Policy Evaluation Centre, The London School of Economics and Political Science, London, UK*

#### Aims:

The COVID-19 pandemic presents a period of potential crisis for people caring for those with dementia. Some carers and care recipients will contract the virus. Moreover, it is likely that complete or reduced face-to-face contact within social networks and reduced availability of services will affect care provision. This paper describes the experiences and challenges of family and other informal caregivers of persons living with dementia during COVID. It will highlight the types of resources that this group of vulnerable persons and their carers need during the pandemic.

#### Methods:

The Strengthening Responses to Dementia in Developing Countries (STRiDE) project considers the experiences of those providing unpaid care for people living with dementia. Between March and September 2020 we contacted 27 participants (n=19) and potential participants (n=8) to briefly discuss their experiences of the COVID-19 pandemic. The details of these calls were documented and thematic analysis was conducted.

#### Results:

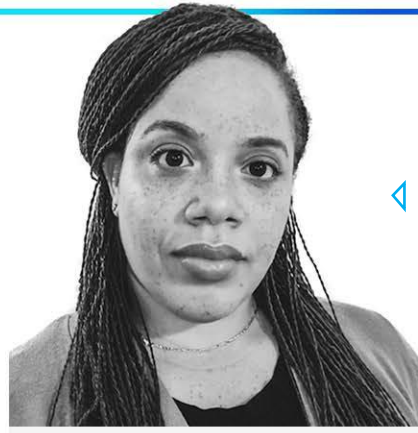
Participants shared challenges around mobility during lockdowns and curfew ordinances, access to support services, disruption in care, adapting to changing living arrangements in order to better manage care, and managing death and loss in the context of restrictions on travel and public gatherings during COVID-19.

#### Conclusions:

The pandemic has highlighted participants' resilience and their coping mechanisms, and the fragility of the care systems they have constructed and their experiences of them. It has intensified pre-existing challenges faced by family carers and created new challenges. Recommendations include more sustainable support for caregivers and their care recipients.



◀ DR. ZACHARY RAMSAY



◀ MS. RACHEL BARTLETT

**NHRC-O-07****Exploring Acute, Chronic and Neuropathic Pain among Jamaicans with Sickle Cell Disease**

Z Ramsay<sup>1</sup>, R Bartlett<sup>1</sup>, J Grant<sup>2</sup>, A Ali<sup>3</sup>, G Gordon-Strachan<sup>1</sup>, M Asnani<sup>1</sup>

<sup>1</sup>The Sickle Cell Unit, Caribbean Institute for Health Research, The University of the West Indies Mona, Kingston, Jamaica, <sup>2</sup>Avicanna Inc., Toronto, Canada, <sup>3</sup>The Department of Medicine, The University of the West Indies Mona, Kingston, Jamaica

**Aims/objectives:**

Acute pain is the main complication of sickle cell disease. Chronic and neuropathic pain may also be experienced but have not been formally described in Jamaican patients. This study was conducted to determine their prevalence and characteristics and to determine the common pain locations and modalities of management.

**Methods:**

A cross-sectional study was conducted in Kingston, Jamaica. All well patients 14 years of age and older, who were not pregnant and without history of clinical stroke were consecutively recruited. Anthropometric measurements, haematology studies and an analgesia checklist were completed.

Subjects completed the ASCQ-Me questionnaire to describe acute pain, and the pain DETECT questionnaire to describe neuropathic pain and pain patterns - from which chronic pain was defined.

**Results:**

There were 257 subjects (55.6% females; mean age 31.7±12 and 75% SS genotype); the prevalence of chronic and neuropathic pain were 21.5% and 17.9% respectively. Acute pain was severe and frequent, with a mean severity at last attack of 6.8±3.1. Females, current leg ulcers and strong opioid use produced higher odds of neuropathic pain; whereas older age, milder genotypes and daily analgesic use had the highest odds of chronic pain. Opioids were used by 40.1% in the previous four weeks, while non-pharmacological analgesia such as physiotherapy was less used but reported to be very effective.

**Conclusion:**

Chronic and neuropathic pain are common, and more screening is needed for both in clinical practice. The use of opioids needs to be carefully managed, while also exploring and utilizing more targeted therapies.

**NHRC-O-08****Women at Risk: Health-Related Quality of Life, Disease Severity and Neuropathic Pain in Sickle Cell Disease in Jamaica**

R Bartlett<sup>1</sup>, Z Ramsay<sup>1</sup>, A Ali<sup>2,3</sup>, J Grant<sup>2</sup>, A Rankine-Mullings<sup>1</sup>, G Gordon-Strachan<sup>1</sup>, M Asnani<sup>1</sup>

<sup>1</sup>Caribbean Institute for Health Research, The University of the West Indies, Mona Campus, Kingston, Jamaica, <sup>2</sup>Avicanna Inc., Toronto, Canada, <sup>3</sup>Department of Medicine, Kingston Public Hospital, Kingston, Jamaica

**Objectives:**

Health related quality of Life (HRQOL) is an important consideration when managing chronic diseases, like sickle cell disease (SCD). Assessment of neuropathic pain and associations with HRQOL in SCD are rarely reported. This cross-sectional study examines the HRQOL of adult Jamaicans with SCD and its associations with sociodemographic and clinical factors, including disease severity and neuropathic pain.

**Methods:**

Well patients with SCD were recruited consecutively and administered questionnaires to collect data on sociodemographics, HRQOL using the Adult Sickle Cell Quality of Life Measurement Information System (ASCQ-Me), and NP using Douleur Neuropathique 4 (DN4). Means, t-tests, ANOVA tests, Pearson's correlation and multivariate linear regression analyses were performed using STATA 14.0.

**Results:**

There were 257 respondents, with 56% female, mean age 31.7 years (SD: 12.2; range: 14-67 years), and 75% with SS genotype. All ASCQ-Me t-scores indicated better functioning among participants than the US referent population: emotional impact 53.5±10.1; sleep impact 56.2±9.7; social function 57.9±10.7; pain impact 58.6±7.8; and stiffness impact 61.1±7.2. NP was likely present in 25.7% of the population. On multivariate analyses, acute pain and higher disease severity significantly worsened all HRQOL domains. Females with leg ulcers reported worse stiffness and sleep and lower social functioning. Unemployed females had significantly greater pain impact. NP reduced emotional functioning and obesity contributed significantly to greater stiffness and poorer sleep.

**Conclusions:**

Comorbidities such as NP and obesity are becoming more prevalent in SCD and impact HRQOL negatively. Gender specific studies are needed to understand the significantly poorer HRQOL in women. Key Words: Sickle Cell Disease, Jamaica, Neuropathic Pain, Health-Related Quality Life, Adult Sickle Cell Quality of Life Measurement Information System (ASCQ-Me), Douleur Neuropathique 4 (DN4)



◀ MS. NICKI SUE-ANN CHIN

**NHRC-O-09****The relationship between sleep quality and quality of life in adults with sickle cell disease in Jamaica**

*N Chin<sup>1</sup>, M Asnani<sup>1</sup>*

<sup>1</sup>*Caribbean Institute for Health Research - Sickle Cell Unit, The University of the West Indies Mona Campus, Kingston, Jamaica*

**Objective:**

Impaired sleep quality has adverse health effects especially with chronic illness. This study aims to examine the relationship between self-reported quality of sleep and health related quality of life (QoL) in adult patients with sickle cell disease (SCD) attending the Sickle Cell Unit in Jamaica.

**Methods:**

A cross-sectional study evaluated 177 well SCD patients (63.3% Females; mean age 34.2± 12.6 years; 75.1% homozygous SS disease) using The Pittsburgh Sleep Quality Index (PSQI), and the Adult Sickle Cell Quality of Life Measurement Information System (ASCQ-Me) questionnaires. Disease severity was calculated from the ASCQ-Me Medical History Score. Multiple linear regression models examined the predictors of sleep quality. The association between sleep quality and QoL was examined using t-tests.

**Results:**

The mean global PSQI score was 7.0 (SD 4.2) with 66.1% having poor sleep quality. One-fifth (20.3%) of participants were overweight or obese. In multivariate regression analysis, sleep quality was worse in those with higher disease severity (OR = 1.41, p value 0.05) and higher body mass index (OR = 1.16, p value 0.01). All quality of life domain scores were negatively associated with poor sleep quality (pain impact 56.4 vs. 61.2; sleep impact 54.5 vs. 61.8; emotional impact 56.0 vs. 59.1; social impact 56.5 vs. 61.9; stiffness impact 58.2 vs. 63.0. All p values < 0.01).

**Conclusion:**

Poor sleep in SCD is highly prevalent, is associated with poor quality of life and should be assessed routinely. Overweight and obesity are emerging in this population and are associated with negative health outcomes.



◀ DR. ZACHARY RAMSAY

**NHRC-O-10****Cost Barriers to Universal Healthcare: A Cross-Sectional Investigation of Sickle Cell Disease Related Hospital Admissions in Jamaica**

*Z Ramsay<sup>1</sup>, R Bartlett<sup>1</sup>, C Clarke<sup>2</sup>, M Asnani<sup>1</sup>, J Knight-Madden<sup>1</sup>, G Gordon-Strachan<sup>1</sup>*

<sup>1</sup>*The Sickle Cell Unit, Caribbean Institute for Health Research, The University of the West Indies Mona, Kingston, Jamaica,* <sup>2</sup>*The Department of Economics, The University of the West Indies Mona, Kingston, Jamaica*

**Objectives:**

Jamaica abolished all public health sector user fees in April 2008. Estimates from the Jamaica Survey of Living Conditions (JSLC) suggest that expenses still exist. Sickle cell disease (SCD) is a common genetic disorder in Jamaica with a high public health burden. We aimed to identify the proportion of these patients making out-of-pocket payments (OPP) and the other cost barriers to universal healthcare.

**Methods:**

Well patients presenting to the Sickle Cell Unit in Kingston, Jamaica were consecutively recruited and interviewed about their latest admission within the previous four weeks, between October 2019 and August 2020. Parents or guardians completed the questionnaire on behalf of paediatric patients. The questionnaire included the PSQ-18 and modifications of the JSLC.

**Results:**

There were 103 patients with ages ranging from 7 months-56 years (51.5% female, 60.2% public hospital admissions, and 54.4% paediatric). Most adults earned near minimum wage (mode: \$J6,200 - \$11,999 per week) and 48.5% lived in overcrowded households. Only 39.8% had National Health Fund (NHF) cards and 15.7% used a Drug-Serv pharmacy. OPP were made by 33.9% of subjects admitted to public hospitals, with 81% being for items unavailable at the facility. Using public transportation, private hospital admission, and having more disease complications were predictive of "having to pay for more of my healthcare than I can afford".

**Conclusion:**

As many as 1 in 3 SCD subjects reported OPP with public admissions. Efforts are needed to increase the use of NHF cards and Drug-Serv pharmacies, and the availability of government subsidized items.





◀ **DR. ANGELA RANKINE-MULLINGS**

### NHRC-O-11

#### Early splenomegaly in homozygous sickle cell disease and the prediction of susceptibility to overwhelming infection: An analysis of prospectively acquired data

A Rankine-Mullings<sup>1</sup>, T Logan<sup>2</sup>, M Asnani<sup>1</sup>, G Serjeant<sup>3</sup>

<sup>1</sup>Sickle Cell Unit, Caribbean Institute for Health Research, The University of the West Indies, <sup>2</sup>Chaplain's School of Hospitality and Tourism Management, Florida International University, USA, <sup>3</sup>Sickle Cell, Kingston, Jamaica

#### Objectives:

Pneumococcal prophylaxis can prevent infections but there are many others to which patients with sickle cell disease (SCD) are prone. Our objective was to determine the relationship between early splenomegaly in patients with homozygous SCD and the subsequent occurrence of severe infection.

#### Methods:

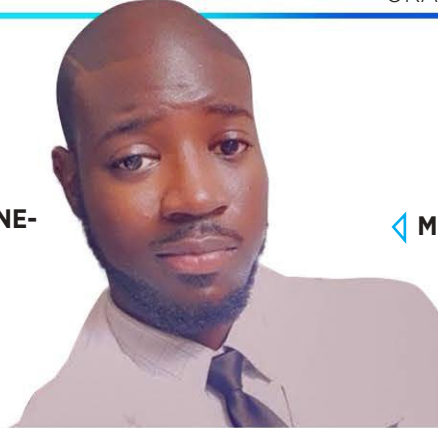
Patients were classified based on age of splenomegaly: before 6.9 months (early), 7-12 months (mid), after this age (later) or never palpated. Patients with splenectomy (n=29), who emigrated (n=47) or died (n=61) prior to an occurrence of infection were excluded. Using a log-rank test for equality of survivor functions and logistic regression, the odds of infection occurrence was compared between groups.

#### Results:

Of 159 patients, 53 early, 37 mid, 62 late and 7 with no splenomegaly, the following organisms accounted for severe infections in 97 persons: pneumococcus 34 (35%), salmonella 20 (20.6%) haemophilus influenza 10 (10.3%), Staphylococcus, 6 (6.2%), klebsiella 8 (8.2%), E Coli 11 (11.3%) and others 8 (8.2%). The mean age at first enlargement of the spleen and first infection was 1.3 years (95% CI 1.0, 1.5]) and 5.6 years (95% CI 4.2, 6.9) respectively. Seventy-five percent (n=40) of the early group had infections compared with only three patient (43%) in the never group ( $\chi^2 = 9.2$  p-value 0.027). The odds of getting an infection for the early group was 2.6 times that of the other groups (p = 0.009).

#### Conclusion:

Early detection of splenomegaly can predict children at increased risk of a severe infection and will contribute to their clinical care.



◀ **MR. KEVHVAN GRAHAM**

### NHRC-O-12

#### Analysis of Actinobacteria Isolates for Evidence of the Production of Antimicrobial Compounds.

K Graham<sup>1</sup>, S Brown<sup>1</sup>

<sup>1</sup>The Department of Basic Medical Sciences, Biochemistry Section, The Faculty of Medical Sciences, The University of the West Indies, Mona, Jamaica

#### Objectives:

The actinobacteria are one of the most pharmaceutically valuable groups of bacteria known to scientists. This research aims to examine isolates present in Jamaica to analyze their putative antibiotic-producing ability by screening against pathogenic bacteria, with the aim of identifying novel compounds.

#### Methods:

Ninety pigment-producing actinobacteria isolates were morphologically characterized to establish diversity. After colony isolation using rep-PCR, unique isolates were inoculated into Bennett's Broth for culturing. Using the Agar Well Diffusion method, seven pathogenic bacteria were used in the antimicrobial analysis. The fresh cultures were introduced in wells to the nutrient agar plates containing the bacterial pathogen. The plates were incubated for 24hrs at 37°C, following which the zones of inhibition were observed and measured.

#### Results:

Both medical-associated and food spoilage related pathogens were tested against the isolates. Of the medical-associated pathogens, an average of 29% of the isolates showed inhibitory activity and for the food spoilage related pathogens, 70% of the isolates showed activity.

#### Conclusion:

The overall examination of the isolates of actinobacteria screened from Jamaica displayed promising results with regards to the potential of isolating antimicrobial agents. This research is significant because it can lead to the discovery of novel antimicrobial compounds that could assist in the fight against antimicrobial resistance.



◀ **MS. TIFFANY R. BUTTERFIELD**

### NHRC-O-13

#### Assessment of Commercial SARS-CoV-2 Antibody Assays, Jamaica

*T Butterfield<sup>1</sup>, A Bruce-Mowatt<sup>1</sup>, Y Phillips<sup>1</sup>, N Brown<sup>1</sup>, K Francis<sup>1</sup>, J Brown<sup>5</sup>, D Taylor<sup>3</sup>, C Bruce<sup>4</sup>, D McGrowder<sup>5</sup>, G Wharfe<sup>5</sup>, S Sandiford<sup>2</sup>, T Thompson<sup>7</sup>, J Anzinger<sup>1,7</sup>*

<sup>1</sup>The University of the West Indies, Department of Microbiology, Kingston, Jamaica, <sup>2</sup>The University of the West Indies, Department of Basic Medical Sciences, Kingston, Jamaica, <sup>3</sup>AstraZeneca, Department of Oncology Research, Gaithersburg, Maryland, United States of America, <sup>4</sup>The University of the West Indies, Department of Surgery, Kingston, Jamaica <sup>5</sup>The University of the West Indies, Department of Pathology, Kingston, Jamaica, <sup>6</sup>The University of the West Indies, Department of Medicine, Kingston, Jamaica, <sup>7</sup>Global Virus Network, Baltimore, MD, United States of America

#### Objective:

The performance of the Roche Elecsys® Anti-SARS-CoV-2, Abbott Architect SARS-CoV-2 IgG, Euroimmun SARS-CoV-2 IgA, Euroimmun SARS-CoV-2 IgG ELISA, and Trillium IgG/IgM rapid assays was evaluated in Jamaica, the largest country of the English-speaking Caribbean.

#### Methods:

Diagnostic sensitivities of the assays were assessed by testing 42 serum samples from 37 SARS-CoV-2 PCR-confirmed persons. Serum samples collected  $\geq 14$  days after onset of symptoms or an initial SARS-CoV-2 RT-PCR positive test for asymptomatics.

#### Results:

Serum samples collected  $\geq 14$  days after onset of symptoms or an initial SARS-CoV-2 RT-PCR positive test for asymptomatics showed diagnostic sensitivities ranging from 67.9-75.0% when including all possible disease severities and increased to 90.0-95.0% when examining those with moderate to critical disease. Grouping moderate to critical disease showed a significant association with a SARS-CoV-2 antibody positive result for all assays; Elecsys® Anti-SARS-CoV-2 ( $\chi^2=19.03$ ,  $p=0.001$ ), Architect SARS-CoV-2 IgG ( $\chi^2=15.72$ ,  $p=0.003$ ), Euroimmun SARS-CoV-2 IgA ( $\chi^2=21.11$ ,  $p=0.007$ ), Euroimmun SARS-CoV-2 IgG ( $\chi^2=18.77$ ,  $p=0.016$ ), and Trillium IgM ( $\chi^2=11.59$ ,  $p=0.021$ ) and IgG ( $\chi^2=17.20$ ,  $p=0.002$ ). Diagnostic specificity, assessed by testing 122 serum samples collected during 2018-2019 from healthy persons and from persons with antibodies to a wide range of viral infections, ranged from 96.7-100.0%. For all assays examined, SARS-CoV-2 real-time PCR cycle threshold (Ct) values of the initial nasopharyngeal swab sample testing positive were significantly different for samples testing antibody positive versus negative. For the Elecsys® Anti-SARS-CoV-2, Architect SARS-CoV-2 IgG, Euroimmun SARS-CoV-2 IgG, and Trillium IgG assays, the mean Ct value was  $23.5 \pm 5.7$  for samples testing antibody positive and  $34.6 \pm 1.0$  for samples testing antibody negative. Mean Ct values for Euroimmun IgA were  $24.0 \pm 5.7$  for samples testing antibody positive  $31.8 \pm 6.8$  for samples testing antibody negative, and for Trillium IgM,  $23.0 \pm 5.8$  for samples testing antibody positive and  $33.5 \pm 2.8$  for samples testing antibody negative.



◀ **DR. ANYA CUSHNIE**

### NHRC-O-14

#### HIV program outcomes for Jamaica before and after “Treat All”: A population-based study using the national treatment services database.

*A Cushnie<sup>1</sup>, R Reintjes<sup>1,2</sup>, S Lehtinen-Jacks<sup>1,3</sup>, P Figueroa<sup>4</sup>*

<sup>1</sup>Unit of Health Sciences, Faculty of Social Sciences, Tampere University, Tampere, Finland, <sup>2</sup>Department of Health Sciences, Hamburg University of Applied Sciences, Hamburg, Germany, <sup>3</sup>School of Health, Care and Social Welfare, Mälardalen University, Västerås, Sweden, <sup>4</sup>Department of Community Health and Psychiatry, University of the West Indies, Mona, Kingston, Jamaica

#### Objective:

The study aims to assess changes in HIV treatment outcomes for Jamaica, after the implementation of the WHO Treat All strategy in 2017.

#### Method:

A population-based study using the National Treatment Service Information System. The sample consisted of all persons 15 years and older, placed on ARV before and after Treat All was implemented, across all 4 regional health authorities. Patients were assessed for two binary outcomes: 1. HIV stage at diagnosis (early vs. late diagnosis) and 2. viral load status achieved after ARV initiation (suppressed vs. unsuppressed). Categorical variables: age/years, gender and health regions, were investigated using multivariable logistic regression. Adjusted odds ratios and 95% confidence intervals are reported.

#### Results:

After Treat All, there was an increase in median baseline CD4 results and the proportion of early diagnoses increased from 40% to 54%. There was a small increase in viral suppression from 76% to 80%, a decrease in baseline viral load testing from 61% to 46% and an increase in the uptake of first viral load testing after starting treatment from 13% to 19%. Males and persons 40+ years showed higher odds of late diagnosis before and after Treat All.

#### Conclusion:

Jamaica's HIV program outcomes have improved after Treat All was implemented. Early diagnosis, immediate treatment initiation and viral load testing uptake have increased. Viral suppression has also increased for those on ARV. However, there is a need to implement targeted testing for men and persons over 40 years to decrease the frequency of late diagnosis.

## NHRC-20-P-01



◀ Dr. Paul Andrew Bourne

### THE MENTAL HEALTH STATUS OF SDA LEADERS IN JAMAICA

P Bourne<sup>1</sup>

<sup>1</sup>Northern Caribbean University, Jamaica

#### Background:

Major depressive disorder is a medical condition that influences peoples' mood, behaviour and decision-making skills. Despite knowledge on this medical condition, for centuries, religious leaders have suffered from this disorder; yet a dearth of empirical information is available on the matter. A comprehensive review of the literature unearths not a single study that has examined the psychological state of religious leaders in Jamaica.

#### Objective:

This study seeks to: 1) evaluate the mental health status among religious leaders in Central Jamaica, and 2) examine the state of fatigue and emotional well-being among religious leaders in Central Jamaica, and whether these differ based on self-reported major depression,

#### Methods:

A correlational research design was used for this research, with a sample of 206 religious-leaders in Central Jamaica. A standardized questionnaire was developed to evaluate the various research objectives.

#### Results:

Three and four-tenth per cent of the sampled respondents indicated that they suffer from major depression. On the other hand, general fatigue was high among the sampled respondents (50.1±11.3, 95%CI: 48.5-51.7, from a maximum value of 85.0). It was found that only emotional well-being and age emerged as factors of general fatigue among religious leaders in Central Jamaica ( $F[2,173]=12.847$ ,  $P < 0.0001$ ) that accounted for 11.9 per cent of the variance of general fatigue (Adjusted squared R).

#### Conclusion:

With a part of this phenomenon being irritability, sadness, and lack of interest, untreated religious leaders who suffer from this condition pose a problem to effective leadership and themselves.

## NHRC-20-P-02



◀ Ms. Tabitha Muchee

### FOOD CONSUMPTION PATTERN OF CHILDREN AT WAKEFIELD PRIMARY SCHOOL IN TRELAWNY, JAMAICA

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#### Introduction:

It is very important to pay attention to what the school age children are eating. Their food consumption pattern should be adequate to meet the physiological needs and cognitive developments as this is the most critical period of a child's growth. At this age food consumed should be diverse, within and between food groups. Validation of the dietary diversity scores and food variety score has made the assessment of dietary adequacy among young children easy. Moreover, dietary diversity of food consumption has been correlated with the improved nutrition status of children.

#### Objective:

This study sought to find out the food consumption pattern of children at Wakefield Primary School in Trelawny. The study investigated the relationship of children's profile and food consumption pattern.

#### Methods:

The study used a correlational design for the purpose of describing existing relationship of independent variables which were: student's profile and food consumption pattern. The study subjects were primary school children of Wakefield in Trelawny who were in school at the end of 2019 calendar year. Eighty-three subjects were sampled from the total population of four hundred and sixty-five children. Purposive sampling was used to select students from grades 4, 5 and 6 because they could understand the questions being asked and were enrolled in the school. Data was entered and analyzed using a Statistical Package for Social Sciences (SPSS) version 22 for Windows 11. Descriptive and inferential statistics including means, frequencies, percentages and standard deviations was used. Inferential statistics included T-test, general linear model and repeated measure ANOVA.

#### Results:

Findings revealed that more mothers (32%) than fathers (19%) had attained tertiary education. Majority (43%) of the children lived with mothers alone and only 4% lived with fathers alone. The children participant consumed below (1002Kcal) the recommended Food Based Dietary Guide Lines for Jamaica (2200Kcal) in all the food groups except sugars that was above the recommended allowance. The results further showed that age is a significant predictor of food consumption of the respondent ( $P=0.018$ ).

#### Conclusion:

Children's daily food consumption was far below the Jamaican recommended dietary allowance. Sugar consumption was above the recommended daily allowance. The study objectives were accomplished by showing that children's profile affects the food consumption pattern. Children's age was significant to their food consumption pattern.



**NHRC-20-P-03**



◀ **Dr. Paul Andrew Bourne**

**NON-COMMUNICABLE CONDITIONS AMONG SDA LEADERS IN JAMAICA**

*P Bourne<sup>1</sup>*

<sup>1</sup>*Northern Caribbean University, Mandeville, Jamaica*

**Objectives:**

To evaluate the nature of NCDs among religious SDA leaders in Central Jamaica, 2) determine the extent of NCDs among religious SDA leaders in Central Jamaica, 3) assess the healthcare-seeking behaviour and prevalence of ill-health experienced among religious SDA leaders who reported having a NCDs, and 4) determine the per cent of religious SDA leaders who reported having hypertension and diabetes mellitus.

**Design and Methods:**

The current study employed a correlational cross-sectional design. The population for this research was leaders who serve in the Seventh-day Adventist churches in Central Jamaica (n=350). The response rate was 58.9 per cent, and a standardized questionnaire was developed to collect data and evaluate the research objectives.

**Findings:**

The most prevalent NCDs were hypertension (28.9 per cent), high cholesterol and arthritis (18.6 per cent, each), chronic respiratory (8.8 per cent), and diabetes (8.5 per cent). Seventy-two and two tenths per cent of those who reported having an NCD sought medical care compared to 84.5 per cent of those who did not report an NCD ( $\chi^2(df=1)=4.231, P = 0.042$ ). Leaders with NCDs were less likely to report good health than those who did not report NCDs ( $\chi^2(df=1)=25.048, P < 0.0001, \chi = -0.352$ ). Thirty-two per cent of the those who reported at least one noncommunicable disease were 65+ years old.

**Conclusion:**

NCDs among religious SDA leaders are showing worrying signs and these must be affecting their decision-making capabilities.

**NHRC-20-P-04**



◀ **Dr. Pauline Russell-Brown**

**IS SUB-DERMAL IMPLANT REMOVAL INDICATIVE OF CONTRACEPTIVE DISCONTINUATION**

*P Russell-Brown<sup>1</sup>, C Knight<sup>1</sup>*

<sup>1</sup>*Jamaica Family Planning Association (JFPA), Jamaica*

**Introduction:**

More than 85% of women of reproductive age in Jamaica have ever used a modern contraceptive and, currently, 72.3% use a modern method. Sub-dermal implants represent less than 1% of the method mix. Discontinuation of implant use is perceived to be high and indicative of contraceptive discontinuation. If the Jamaica Family Planning Association is to reach additional user targets, it is important to assess implant discontinuation and switching among women who use one or other of the two JFPA fixed clinics.

**Objectives:**

The objectives were to determine:

1. discontinuation rate for sub-dermal implants;
2. women's reasons for discontinuing implant use;
3. whether women who remove their implants discontinue contraceptive use;
4. whether implant discontinuation rates vary by clinic.

**Methods:**

A retrospective study of registered users of a sub-dermal implant in the period January 2016 to December 2018 was conducted. Information on date of Implant consultation, implantation, implant check-ups and implant removal was abstracted from the JFPA's electronic patient data system.

**Results:**

Over the 3-year period, 13.8% of implant users replaced their implant with another and 34.7% switched to another contraceptive. 51.5% of removals occurred before term. Reasons for removal were not always available.

Removal rates of 13%, 4% and 7% were found for the rural clinic compared to 37%, 78% and 64% for the urban clinic for each year respectively.

**Conclusion:**

Implant removal does not mean contraceptive discontinuation. Further research is needed to isolate the factor(s) associated with implant discontinuation in general and differences observed between the two clinics.

## NHRC-20-P-05



◀ Dr. Kimberley Sommerville

### IMPROVING POLYCYSTIC OVARIAN SYNDROME MANAGEMENT IN KINGSTON, JAMAICA (IMPOK)

*K Sommerville*<sup>1</sup>

<sup>1</sup>University of Aberdeen, UK

#### Objectives:

To understand how general practitioners in Kingston, Jamaica currently diagnose PCOS, determine opinions of general practitioners and women with PCOS regarding management of PCOS and determine a) views of participants to metformin compared to lifestyle change to manage PCOS b) openness of participants to partake in a randomized controlled trial comparing use of Metformin and lifestyle changes to treat PCOS

#### Methods:

This was a qualitative study using content analysis method held in the parish of Kingston & St. Andrew, Jamaica with women diagnosed with PCOS based on the Rotterdam criteria, and general practitioners who treat women. The data were collected via 12 semi-structured interviews with women with PCOS between the ages of 18 to 40 years and from 18 online surveys by general practitioners.

#### Results:

The analysis of the data noted five themes and fifteen sub-themes from discussion with participants. These include: 1) Knowledge of PCOS (Hormonal imbalance, Insulin resistance and Infertility); (2) PCOS Diagnosis by General Practitioner (Menstrual dysfunction, Pelvic Ultrasound and Hormonal panel); (3) PCOS comorbidities (Type 2 Diabetes and Dyslipidemia); (4) PCOS Management (Oral contraceptive pills, Metformin and Lifestyle change) and (5) Openness to PCOS Trial (Resistance to medication, Resistance to lifestyle change, Financial constraints and Poor patient compliance).

#### Conclusion:

Diagnosis of PCOS in Kingston, Jamaica appears to be standard using the Rotterdam criteria, however there are varied opinions of women with PCOS and general practitioners regarding PCOS management, as OCPs and lifestyle changes were the most commonly used for menstrual irregularities. The lack of medical literature detailing the prevalence of PCOS in Jamaica with its common symptoms, complications and successful treatment regimens leaves local doctors and women with PCOS with no adequate local guideline of management specific to the population. The management of women with PCOS could be enhanced by earlier diagnosis, increased knowledge on hormonal panel testing and improved nutritional support, while a PCOS RCT would be enhanced by firstly increasing general PCOS awareness amongst citizens in Jamaica.

## NHRC-20-P-06



◀ Dr. Kimikawa Morgan-Channer

### COVID-19 OUTBREAK IMPACT ON STROKE INCIDENCE: THE JAMAICAN EXPERIENCE

*K Morgan-Channer*<sup>1</sup>, *A Ali*<sup>1</sup>, *E Simon*<sup>1</sup>, *D Buckley-Smith*<sup>1</sup>, *L Dominic*<sup>1</sup>, *H Wong*<sup>1</sup>, *C Singh*<sup>1</sup>

<sup>1</sup>Kingston Public Hospital, Kingston Jamaica

#### Background:

Jamaica's first index case of novel coronavirus was confirmed on March 10, 2020. Since then the number of cases has risen to more than 5000, 60% of these within 20 miles radius of the Kingston Public Hospital (KPH). Since September 2019, the KPH started a stroke registry as a quality improvement measure to support the stroke care program development at our National Tertiary Referral Centre.

#### Objective:

We investigated the impact of COVID-19 outbreak in Jamaica on the total number TIA /Stroke admissions from the Accident and Emergency (A&E) Department at KPH.

#### Methodology:

We reviewed entries for all medical admissions from the A&E Department for the period January-May 2020.

#### Results:

There were 110 stroke /TIA admissions in February 2020. After the first COVID-19 case, Stroke/TIA admissions fell to 74 cases and 60 cases in March and April respectively. TIA/ stroke admissions in the <50 years age groups rose from 12 cases in February to 20 cases in May, a 67% increase. In particular, for the age group 15-24 years there were 0 in February 2020 with 3 cases in May 2020.

#### Conclusions/Discussions:

Our data suggests that, while the pandemic is reducing the overall numbers of stroke presentations to hospital, there may be a tendency for an increase in stroke incidence in the age group 15-24 years. This may be related to the procoagulant effect of novel coronavirus infection among other factors. All patients with stroke in this age group should be tested for COVID-19 infection to confirm or refute this potentially important association.

**NHRC-20-P-07**



◀ **Ms. Patricia Thompson**

**HUNGER/UNDERWEIGHT AND VIOLENT BEHAVIOUR DURING COVID-19**

*P Thompson<sup>1</sup>*

<sup>1</sup>*Jamaica Island Nutrition Network (JINN), Jamaica*

**Background:**

Survey data during COVID-19 (UNICEF 2020), revealed increase in food insecurity among low income homes. Anthropological data (Gayle, 2019) indicate a relationship between hunger, anger and violent behaviour especially in boys. Data from national security suggest a high likelihood of gang recruitment and violence in the 10-13 age group in certain inner-city areas.

**Objectives:**

To assess the nutritional status of school children during COVID-19 and determine food security status relative to behavioural manifestations. To assess nutritional status using BMI standards. To observe the school food environment and determine the food security at homes. To determine relationship of nutrition circumstances to behaviour.

**Methods:**

Six inner city schools in Kingston provided a convenience sample of 231 students aged 11-13 years comprising 122 boys (52.8%) and 109 girls (47.2%). Weight status of students was determined. Food insecurity was assessed qualitatively through emailed questionnaires from camp coordinators and from parent interviews by telephone to determine student behaviour.

**Results:**

Sixteen percent (16%) of students was determined to be malnourished with underweight for height at 7.4% and overweight at 8.7%. Of the underweight, boys outnumbered girls by 3.5x but overweight girls outnumbered boys by 4x.

**Conclusion:**

Feeding strategies by PATH need to be better targeted from adolescence based on sex as well as SES at both school and home. School food coordinators and parents should be educated on feeding children appropriately at different ages as a strategy towards mitigating the serious problem of violence in Jamaica.

**NHRC-20-P-08**



◀ **Mr. Megueal Julien**

**IT TAKES TWO TO CONCEIVE: ATTITUDES OF ADOLESCENT MALES TOWARDS SEX AND ADOLESCENT PREGNANCY**

*M Julien<sup>1</sup>*

<sup>1</sup>*The University of the West Indies, Mona, Kingston, Jamaica*

**Background:**

This research aimed to determine the attitudes of adolescent males towards sex and adolescent pregnancy. A mixed methods study consisting of quantitative and qualitative components utilized a cross sectional study of two Secondary Schools in KSA for self-administered questionnaires completed by 318 adolescent males aged 15-19 and in-depth interviews at the Women’s Centre Jamaica Foundation with adolescent fathers.

**Aim:**

Conversations around sex have been had with adolescent males mainly with friends (56.3%) and parents (54%). On average, 22% said they would have sex whenever they feel ready regardless of age. Popular considerations for contraceptives to prevent pregnancy were male condoms (90.1%) and pulling out before ejaculating (63.1%). Approximately 52.2% of respondents disagree that teenagers should abstain from sex while 10.4% believe that sexually active teens do not need to use contraceptives. Three out of every four males said being in love could influence engaging in sex while 93.3% said financial security would be important to them before having a baby. Almost a third of males (30%) expressed ambivalence towards the possibility of getting a girl pregnant saying they would deny being the father, with only 22% saying they would “man up” and offer support. In select in-depth interviews among 6 adolescent fathers, most were not planning on becoming fathers when they did and had their first sexual experience before age 14.

**Conclusions :**

The research shows many adolescent males appear to be susceptible to becoming fathers in adolescence due to limited avenues for formal discussions on male sexuality. For this reason, targeted sexual health campaigns need to focus on adolescent males at home, school and in the communities.



**NHRC-20-P-09**◀ **Mr. Shaun Wellington****REALIGNING INSTITUTIONAL OCCUPATIONAL HEALTH & SAFETY PRACTICES DURING COVID-19**

S Wellington<sup>1</sup>, J Vigilance<sup>2</sup>

<sup>1</sup>Office of Occupational Safety & Health, Northern Caribbean University, Mandeville, Jamaica, <sup>2</sup>Office of Research and Graduate Studies, Northern Caribbean University, Mandeville, Jamaica

**Aim:**

The Office of Occupational Safety and Health (OSHO) is responsible for ensuring a safe environment for workers, students and visitors to the Campus. OSHO is supported by the Health Center, Counseling Services, and Campus Safety and Security. With the onset of the COVID-19 pandemic, OSHO adopted several protocols established by the Ministry of Health and Wellness (MOH&W). This study sought to assess the adherence to the new health and safety protocols and identify the challenges and opportunities faced with establishing new hygiene practices.

**Methods:**

The MOH&W COVID-19 Inspection Checklist for Workplaces, Public Facilities/ Spaces was adopted with a maximum compliance score of 31 points. Inspection visits were made between August 24 and Sept. 29, 2020. Upon the first visit, sites which scored less than 100% were given a verbal warning; If scores remained less than perfect upon a second visit five days later, a warning letter was issued. To support the proper cleaning and sanitization of office spaces, the Touch Area Cleaning Check-Sheet was created by OSHO.

**Results:**

Compliance scores ranged from 32 to 90 % upon first visit but improved upon subsequent visits. The major challenges included lack of man-power and the strain placed on custodial workers because of increased work-load but provided the opportunity for training in cleaning protocols to minimize the spread of COVID-19.

**Conclusion:**

Many of the issues related to compliance were outside the direct control of individual offices. An increase in the custodial workforce will improve compliance with the new health and safety protocols.

**NHRC-20-P-10**◀ **Ms. Susan A. Muir****SOCIAL MEDIA HEALTH INTERVENTIONS DURING THE COVID-19 PANDEMIC: A RAPID SYSTEMATIC REVIEW**

S Muir<sup>1</sup>

<sup>1</sup>University of Technology, Jamaica

**Objectives:**

The aim is to analyze and discuss the scholarly literature about social media health interventions (SoMeHIs) during the COVID-19 pandemic. The objectives are (i) to identify factors of COVID-19 SoMeHIs associated with changes in knowledge, attitudes and practice (KAP), (ii) to review the effectiveness of SoMeHIs crafted and curated for health literacy and behavior change, and (iii) to recommend a suitable theoretical framework and criteria for SoMeHIs.

**Methods:**

A review of papers from 2019 – 2020 about SoMeHIs suitable for COVID-19 was conducted using two online databases. The Joanna Briggs Institute Prevalence Critical Appraisal Tool was used to evaluate potential bias of the studies.

**Results:**

Factors that impact the effectiveness of SoMeHIs on KAP include nudges, media richness, dialogic loop, content type and emotional valence. There is some evidence that SoMeHIs may improve handwashing and collective action; however, misinformation and negative sentiments are apparently moderating factors for health promotion. Two theoretical frameworks and various criteria were identified suitable for SoMeHIs.

**Conclusions:**

Important factors of SoMeHIs that impact social media (SM) users during COVID-19 include nudges, media richness and dialogic loop. Studies suggest that SoMeHIs could improve handwashing and collective action during the pandemic. The SPHERE (Social Media and Public Health Epidemic and REsponse) continuum model may be a suitable theoretical framework during epidemics. Recommendations for policy makers include frequent dissemination of concise compelling health messages via popular SM platforms and the sponsorship of online research targeting vulnerable persons (e.g. the elderly, poor, disabled, youth, health workers) to inform computer-tailored SoMeHIs.

## NHRC-20-P-11



◀ Dr. Phylcia Ricketts

### ACHIEVING SAFE FISH CONSUMPTION AMONG PREGNANT WOMEN IN JAMAICA

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#### Aims and objectives:

Fish consumption is critical for a balanced diet during pregnancy. Fish contains essential nutrients such as selenium and the omega fatty acids (DHA and EPA). However, fish may also be contaminated with mercury. Mercury exposure can have severe adverse effects on fetal brain development. Previous studies have shown the significant relationship between maternal fish consumption and prenatal mercury exposure in Jamaica. Therefore, women should be sufficiently advised on their fish intake during pregnancy. The main aims of the study were to (i) calculate estimated portion size for each types of popular fish, (ii) design a fish consumption advisory and (iii) implement and evaluate public awareness of prenatal mercury exposure.

#### Method:

The estimated portion size was calculated using the WHO/FAO dietary requirement and reference limits, average body weight of pregnant women and the nutrients and mercury concentrations in each fish. This data was then used to design a dietary advisory so that pregnant women can reduce prenatal mercury exposure. Educational brochures and flyers were created and distributed to an antenatal clinic.

#### Results:

The estimated meal size in order to reduce high prenatal mercury exposure, and to meet dietary requirement for selenium and omega 3 fatty acids was 4 fish meals or 1000g per week. Pregnant women should limit consumption of Mullet fish and Kingfish to 1 meal or 400g per week.

#### Conclusion:

The fish consumption advisory was a useful tool for proper diet planning during pregnancy. It is suggested that these resources be available in every antenatal clinic, in order to prevent unnecessary prenatal exposure to mercury.

## NHRC-20-P-12



◀ Ms. Janel Bailey

### INVESTIGATING MUSCULAR ADAPTATION TO A SWIM-TYPE AND A TRACK-TYPE TRAINING REGIME IN ELITE JUNIOR ATHLETES

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#### Background:

The short preparatory phase and dense competition period, that characterizes the swim and track macrocycle may induce physiological stress and inefficient muscular adaptation

#### Aim:

To investigate changes in markers of muscular adaptation (muscle thickness [MTH] muscle strength, blood lactate) induced by swim-type and track-type training regimes in elite junior athletes.

#### Method:

The study included 39 runners and 20 swimmers. Frequencies (TF) and volume (TV) of each training type (sprint, resistance, endurance, plyometric) were collected using a training regime questionnaire, along with internal training load (TL) which was determined using the session perceived exertion method. This data was collected during the general preparation (T1), specific preparation (T2), and competition (T3) phase of the 28-week swim and track and field macrocycle. Muscle strength, muscle thickness (MTH), basal (b La-) and, post-exercise lactate (POE La-) were measured at T1 and T3.

#### Results:

Statistical analyses revealed significant differences in training data at T1 only. Swimmers focused predominantly on endurance training and were exposed to significantly less resistance training relative to runners (U=4.52, p=0.01). Significant hypertrophic changes ( $\Delta$ :3.43, p=0.01) were observed among runners only, who also demonstrated greater overall strength improvements after adjusting data for baseline strength values. Despite both groups exhibiting significant improvements in bLa- (p=0.01) and POE La- (p=0.01) levels, swimmers had more favorable changes, after adjusting for T1 levels.

#### Conclusion:

In accordance with the literature, swim-type training induced more favorable metabolic changes, while track-type training was successful in inducing functional (strength) and morphological (muscle thickness) changes. Improvements in strength and lactate changes are indicative of increased resistance to muscle fatigue. Given that training protocols were most distinguishable at T1 with significant variations in endurance and resistance training. It is recommended that coaches carefully consider the balance between endurance and resistance training during this phase, to account for possible limitations in muscle adaptation markers.

## NHRC-20-P-13



◀ Dr. Sharmaine Tapper

### THE ROLE OF SOCIAL MEDIA IN PROVIDING PSYCHOSOCIAL SUPPORT DURING COVID-19: VICARIOUS EXPERIENCES

S Tapper<sup>1</sup>, J Vigilance<sup>1</sup>, J Tapper<sup>1</sup>

<sup>1</sup>Northern Caribbean University, Mandeville, Jamaica

#### Aims:

Recent studies have indicated that living vicariously through others, although advantageous initially, can become detrimental on one's overall mental health. (Moran & Asquith, 2020). Given the recent orders of the Jamaican government with restrictions on daily social activities, there has been an increasing need to turn to virtual forms of social activities. Guided by the Theory of Reasoned Action (Fishbein & Ajzen, 1975) and the Saturated Self (Gergen, 1991), this study is framed to identify the role of social media in meeting the psychosocial needs of individuals during these unprecedented times.

#### Methods:

This qualitative study utilizes content and thematic analyses. Health and Wellness programs aired on NCU FM over the past 5 years beginning January 2016 to July 2020 were selected and the accompanying data from five main social media platforms, namely, Facebook, YouTube, Twitter, Instagram and WhatsApp were analyzed.

#### Results:

Results suggest that amid the mandates of physical distancing and other reduced social interactions, vicarious experiences are embraced across gender, age, and territorial boundaries. Coupled with this, themes of willingness to try something new, commitment to improving quality of life emerge as the new normal.

#### Conclusion:

Increased and directed use of social media can greatly improve the overall health and wellness of individuals during this pandemic, thereby reducing the overall cost associated with COVID-19 to the nation. The policy implications suggested offer invaluable insights as we navigate the new normal.

## NHRC-20-P-14



◀ Dr. Leroy Campbell

### A NEW MATERNAL MORTALITY CLASSIFICATION SYSTEM HIGHLIGHTS THE IMPORTANCE OF INFECTION AS A CAUSE OF DEATH, JAMAICA (1998-2018)

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#### Aim:

To re-classify the causes of pregnancy-related deaths (1998-2018) by body system regardless of whether the complication was obstetric or medical. This will help clarify the human and other resources needed to end preventable maternal deaths as women delay childbearing and present in pregnancy with pre-existing medical conditions, some undiagnosed.

#### Methods:

The underlying cause of maternal deaths have been reclassified into seven groups: infectious; cardio-reno-vascular; haematological; respiratory; neoplasia; all other systems and external causes. Cause-specific triennial mortality trends are presented for 1998-2018. For 2016-18, variations in age, time of age and region of residence are examined.

#### Results:

Since 1998 circulatory and haematological conditions remain the leading causes of death. Combining direct and indirect deaths however moved infectious conditions up to third, especially since 2010. When late maternal and coincidental deaths are included, the upward trend in external causes are of concern, as is the contribution of cardiovascular conditions to death after six weeks postpartum. For 2016-18 adolescents mostly died from circulatory disorders or infection, while among the 35+ age-group, haematological conditions rivalled cardiovascular disorders. The north east region was most different with blood and infection deaths prevailing, unlike cardiovascular problems elsewhere.

#### Conclusion:

This new classification system increases the visibility of infection deaths and requires that we improve timely access (within 24-hours) to antibiotic therapy. Access to blood products in the north east must be addressed, alongside efforts to provide care beyond the puerperium for women with cardiovascular conditions so as to reduce preventable maternal deaths and improve long term survival.



**NHRC-20-P-15**



◀ **Prof. Jennifer Knight-Madden**

**THE PEDIATRIC PULMONOLOGY CLINIC AT THE UNIVERSITY HOSPITAL OF THE WEST INDIES; THE RESPONSE TO COVID-19**

*J Knight-Madden<sup>1</sup>, A Aikman<sup>2</sup>, K Bailey<sup>3</sup>*

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**Objectives:**

The Pediatric Pulmonology Clinic began to use telemedicine to decrease the exposure of their patients to possible infection with COVID-19. The aims of this study were to determine what proportion of patients who were booked to attend clinic from April to May 2020 had telephone visits and how patients accessed medication during this time.

**Methods:**

Parents were called prior to the clinic appointment, asked whether they had planned to bring their child and asked not to do so. On the day of the appointment, parents were called, asked about the child's status and their preferred method of ensuring adequate medications until the next visit. Children with poor control, were referred to Pediatric Casualty for a face to face visit the next day. Data analysis will be undertaken using Stata v 16.

**Results:**

Forty-six (94%) of 49 parents were reachable by phone prior to clinic; voice mail messages were left for the other three. Parents of all patients were called on the clinic dates. Fourteen parents (29%) were planning to keep their appointments. Twenty-six (53%) parents chose to collect prescriptions at the clinic, seven (14%) requested that prescriptions be called in or messaged to pharmacies while ten (20%) already had access to prescriptions. Three patients were referred to Pediatric Casualty to be seen the next day.

**Conclusion:**

The approach used was efficient in allowing the virtual assessment of all patients, shielding patients who would have come. Patients were able to access prescriptions to continue therapy.

**NHRC-20-P-16**



◀ **Dr. Geoffrey Barrow**

**INNOVATIVE CONTRIBUTIONS OF HEALTH CONNECT JAMAICA TO THE NATIONAL HIV RESPONSE: A NOVEL MODEL FOR HEALTHCARE SERVICE DELIVERY IN THE PRIVATE SECTOR**

*G Barrow<sup>1</sup>, S McLeish<sup>2</sup>, S Wallace-Brown<sup>2</sup>, D Darrow de Mora<sup>3</sup>, N Etwaroo Persaud<sup>3</sup>, T Paul<sup>1</sup>*

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**Objective:**

Health Connect Jamaica (HCJ) aims to provide equitable access to high quality healthcare services delivered in the private sector targeting low-middle income persons living with HIV.

**Methods:**

HCJ was developed in collaboration with the Jamaica Ministry of Health and Wellness as an integrated component of the national response, ensuring the standardization of service delivery between the public and private sectors. This intervention integrates three private partners- clinicians, laboratories and pharmacies- with a central support unit at the University of the West Indies, into a hub and spoke structure. Key features of the network are reflected in our approach to Community and Health Systems Strengthening, Healthcare Financing and Demand Generation. Funding is provided through the PEPFAR - and USAID-supported Epic project implemented by FHI 360.

**Results:**

Between July and October 2020, 20 clinicians, 2 laboratory companies, 1 mental health provider and 147 clients were onboarded. Additionally, HCJ returned 37 (30.8%) contactable clients categorized as lost to care from public sector facilities and diagnosed 3 with HIV. HCJ also provided HIV testing to 4 sexual partners of clients receiving care within the network. Satisfaction surveys among 13 clients found 100% approval of the service for both themselves and for referral of a friend.

**Conclusion:**

Health Connect Jamaica can significantly contribute to the national HIV response and as a potential model of private-public partnerships for clinical health care services.

## NHRC-20-P-17



◀ Dr. Pauline Russell-Brown

### COMPARING THE HEALTH SEEKING BEHAVIOURS OF PREGNANT WOMEN IN TWO JFPA CLINICS IN THE TIME OF COVID-19

P Russell-Brown<sup>1</sup>, D Boyd-Brown<sup>1</sup>, V Brown<sup>1</sup>, N Lammie<sup>1</sup>, N Smith<sup>1</sup>, O Thorney<sup>1</sup>

<sup>1</sup>Jamaica Family Planning Association (JFPA), Jamaica

#### Introduction:

The standard protocol for antenatal clinic (ANC) visits for no risk pregnant women, is monthly visits up to 28 weeks gestation; followed by fortnightly visits up to 37 weeks and weekly after. In the 3 months between March when Jamaica reported its first case of COVID-19 and June when some government-imposed restrictions were relaxed, the JFPA made adjustments to clinic operations. Concern for quality care led the Association to conduct a study of ANC users.

#### Aims/Objectives:

The study aimed to explore the effect of COVID-19 restrictions on pregnant women's health seeking behaviours.

#### Methods:

A mixed method data collection approach was used. The Association's electronic database provided demographic data, information on gestation at registration and appointment dates for each client. In addition, conversations were conducted with women when they returned for their clinic visit or when they called into the clinic.

#### Results:

In April and May as many as 89% of pregnant women who used Clinic A missed their scheduled appointments. All women missing their appointments returned for services within 2 months of the missed visit. On the other hand, the majority of pregnant women who used the services of Clinic B called ahead of time to determine if services were being offered or to speak with the nurse. Callers received counselling through the Association's tele-counselling service and later attended for their appointment. Women's behaviours were informed by concern for themselves and their babies becoming infected.

#### Conclusion:

The underlying factor influencing health seeking behaviours of ANC clients may be the same but their responses are not.

## NHRC-20-P-18



◀ Ms. Hasina L Nicholson

### NICOTINE DIFFERENTIALLY CROSS-TALK WITH ALCOHOL AND MARIJUANA

M Ali<sup>1</sup>, H Nicholson<sup>1</sup>, V Richards<sup>1</sup>, B Miller<sup>1</sup>, W McLaughlin<sup>1</sup>

<sup>1</sup>Department of Basic Medical Sciences, Faculty of Medical Sciences, The University of the West Indies, Mona campus, Kingston, Jamaica

#### Introduction:

The prevalent assumption is that nicotine's co-intake with alcohol or marijuana either potentiates or lessens these drugs' response.

#### Objective:

To understand behavioural addictive drugs cross-talk, using Zebrafish as the animal model.

#### Methodology:

Zebrafish of equal size and caudal fin length, displaying swimming coordination were selected. Fish were treated with 0.5-1.5mg/L nicotine (N-TF), 0.25-1.5% alcohol (A-TF) and 25-200mg/L marijuana tea extract (MTE-TF) or in combination of nicotine (1.0mg/L)-alcohol (0.25-1.00%)(N-A-TF) or nicotine (1.0mg/L)-MTE (25m-100mg/L) (N-MTE-TF). Caudal-tail-flickering (CTF) were recorded after immobilization of fish with free caudal fin projection. ImageJ software was used to evaluate different discrete velocity swimming (DVS), total distance travel (TDT), swimming coordination (Sm-cord), escape behaviour and CTF.

#### Results:

N-TF, A-TF and MTE-TF showed time and concentration dependent effects, resulting in different pattern of DVS and CTF; all potentially disturb the Sm-cord. Nicotine lowered the alcohol dependent swim burst through incorporation of nicotine CTF and alcohol CTF. In contrast for N-MTE-TF, both drugs reduced each other's CTF, producing stiff CTF which lowered the DVS.

#### Conclusion:

Nicotine and alcohol act simultaneously while marijuana terminates nicotine's action. Nicotine is necessary for speedy recovery after drug withdrawal. The effect are dose dependent, effective only at lower doses but higher doses produced increase mortality. Therefore, co-consuming these drugs is more dangerous to health than consuming each drug alone.

**NHRC-20-P-19**



◀ **Dr. Ashley Lewis**

**PREVALENCE AND DETERMINANTS OF PERCEIVED QUALITY OF HEALTHCARE AMONG HEALTH CENTRE ATTENDEES WITH DIABETES AND HYPERTENSION**

*A Lewis<sup>1</sup>, M Cunningham<sup>1</sup>, J Samuels<sup>1</sup>, S Davis<sup>1</sup>, Q Jackson<sup>1</sup>, A Gentles<sup>1</sup>, L Murdock<sup>1</sup>, J Smith<sup>1</sup>, C Grant<sup>1</sup>, J Gordon<sup>1</sup>, Z Bullock<sup>1</sup>, V Baisden<sup>1</sup>, N Waldron<sup>1</sup>*

<sup>1</sup> *The Department of Community Health and Psychiatry, Faculty of Medical Sciences, The University of the West Indies, Mona, Kingston, Jamaica*

**Aim:**

To determine the prevalence and determinants of perceived quality of healthcare (PQH) among persons with diabetes mellitus (DM) and hypertension (HTN) attending health centres in six parishes in Jamaica.

**Methods:**

In this cross-sectional study, one hundred and fifty persons eighteen years and older attending health centres across six parishes having either DM or HTN were selected using simple random sampling. An interviewer-administered questionnaire was used and included questions developed by researchers to measure prevalence of PQH in the domains of clinician-client communication (CCC), emotional support (ES), patient education (PE), environment and facilities (EF) and overall satisfaction (OS). A waiver for ethical approval was granted by the UWI Ethics Committee. Data were analyzed using SPSS.

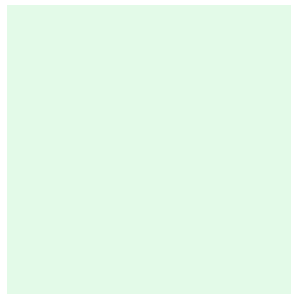
**Results:**

The mean PQH scores for CCC and PE was 4.6 out of 5. There were significant differences in mean PQH scores for CCC by age groups, with younger adults having higher scores. The mean PQH score for the domains of EF was 4.7 out of 5, with significantly higher scores for those not in union and those with higher monthly income. The mean PQH scores for OS were 16.3 out of 32, demonstrating a low level of PQH.

**Conclusion:**

There were high mean PQH scores for CCC, PE and EF but a low mean score for overall satisfaction with care received. These high levels of mean PQH scores suggest that the delivery of primary health care services in Jamaica is well perceived, however effort is needed in specific areas to improve overall satisfaction.

**NHRC-20-P-20**



◀ **Mr. Marvin Joseph**

**POLICY IMPLICATIONS GOVERNING THE NOVEL SEXUAL AND REPRODUCTIVE HEALTH-COVID-19 FRAMEWORK**

*T Crawford<sup>1</sup>, D Grant<sup>1</sup>, M Joseph<sup>1</sup>, A Black<sup>1</sup>, C Dosunmu<sup>1</sup>, K Parchment<sup>1</sup>*

<sup>1</sup> *National Family Planning Board, Jamaica*

**Objective:**

The universal imposition of the COVID-19 pandemic continues to threaten human security including sexual and reproductive health (SRH). This remarkable piece of work aims to assess the policy implications governing the novel SRH-COVID-19 Framework.

**Methods:**

A paradigm shift was taken regarding the training of selected healthcare providers in Contraceptive Forecasting Techniques; conducting clinic monitoring (using the Logistics Indicators Assessment Tool); and enabling District Health Information System-2 (DHIS-2) Visits for HIV Prevention. This shift featured number, time/schedule, space and adjustments; wearing protective gears; sanitising; and conducting investigations regarding SRH service delivery. Clinic appointments were staggered, and specific SRH services curtailed to facilitate physical distancing.

**Results:**

Approximately 35 trainees were apportioned (by ≥10) and staggered re number, time and space. Family planning service visits for some parishes decreased by maximum 15% when compared with the corresponding period of March 2019. The IUCD method that required clinical administration, was decreased by maximum 90%. The clinic monitoring observed protocol sometimes, and the DHIS-2 visits were reduced; testing for HIV had declined by 35.5% between March and September 2020. Consonant with these activities, the SRH-related targets under the Strategic Business and Operational Plans were adjusted, with consideration to the shift regarding the SRH-COVID-19 Platform. This was a way of balancing occupational and reproductive health security and reproductive rights, as per the WHO Guidelines.

**Conclusion:**

Policy implications and posture are noted in six tiers: Capacity Building, Data, Access, Resources, SRH Service Delivery, and Occupational Health Security.



## EMERGING AND RE-EMERGING DISEASES PERTINENT TO LATIN AMERICA AND THE CARIBBEAN

### DR. KIMBERLY BROUWER ►

Dr. Kimberly Brouwer is a professor and infectious disease epidemiologist at the Herbert Wertheim School of Public Health and Human Longevity Science at the University of California San Diego. She applies her expertise in mixed methods research to developing new approaches to public health challenges. A recurrent theme of her research has been to explore the effect of mobility and marginalization on transmission and diffusion of infectious diseases. Dr. Brouwer also serves as the Vice Chair for Public Health Education and co-directs the Global Health track of the SDSU/UCSD Joint Doctoral Program in Public Health. She originally earned her Ph.D. in molecular epidemiology from the Johns Hopkins University School of Hygiene and Public Health and was awarded a Fulbright Fellowship to investigate factors relating to disease severity of schistosomiasis in Zimbabwe.



### DR. WILMORE WEBLEY ►

Dr. Wilmore Webley, is an Associate Professor of Microbiology and the Director of PreMed/Pre-Health Advising at the University of Massachusetts Amherst where he mentors students desirous of being accepted to various health profession programs. Dr. Webley has made significant contributions to the field of microbiology, vaccinology, allergy and immunology. He is a graduate of the Northern Caribbean University and the University of Massachusetts Amherst respectively and has been the recipient of various awards and scholarships including the Fulbright scholarship.



### ◀ DR. STEPHANIE FLETCHER-LARTEY

Dr. Stephanie Fletcher-Lartey is a public health and bio-preparedness epidemiologist with over 23 years of public health experience. Her career spans the areas of research, and frontline infectious disease management, environmental health and emergency response. She served as coordinator for the Caribbean Regional Burden of Illness Study and the Jamaican arm of the study in 2008-2009. She has worked for over 5 years as Bio-preparedness Epidemiologist at the New South Wales Ministry of Health in Australia. She has also served as an Advisor to the Australian Government Aid program to the Fiji Health System in 2018. Dr. Fletcher-Lartey has been the recipient of numerous awards and is currently a Consultant with the Caribbean Public Health Agency, coordinating the work of the Health Information, Communicable Diseases and Emergency Response Team.



### ◀ DR. KAREN WEBSTER-KERR

Dr. Karen Webster-Kerr is the Principal Medical Officer, National Epidemiologist, Ministry of Health and Wellness, Jamaica. She is a public health expert who led the response to the large urban outbreak of malaria, 44 years after it was eradicated from Jamaica. The strategies employed resulted in the re-elimination of malaria. She is an effective leader with a passion for epidemiology and research. Dr. Webster-Kerr faithfully chairs various committees and working groups and adds great value to each. She leads the team in the characterization of the COVID-19 outbreak in Jamaica, the “information for action” and is Principal Investigator for the Centers for Disease Control and Prevention Grant: Surveillance and Response to Avian and Pandemic Influenza in Jamaica and the Co-Principal Investigator for the Jamaica Health and Lifestyle Survey III 2016/2017. She is also Chair of the Health Thematic Working Group for Jamaica’s National Development Plan: Vision 2030.



## STRIKING THE BALANCE IN HEALTH AND WELLNESS



### ◀ DR. KAI MORGAN

Dr. Kai A. D. Morgan is a licensed clinical psychologist with past working experience as Consultant at the UHWIs Department of Community Health & Psychiatry. In 2016, she ventured into private practice and consultancy work, a family manufacturing business, an outdoor cinema and mobile outdoor advertising business along with her team of experts. She is currently the President of the Jamaica Psychological Society and her research interests include: sexual behavior, motivation, relationship dynamics and anything regarding Caribbean culture/psychology.

### DR. EARL WRIGHT ▶

Dr. Earl Wright boasts a wealth of experience and has served in numerous senior positions both locally and internationally where he has been championing the promotion of mental health. Dr Wright is a graduate of the Kingston College and University of the West Indies in Kingston Jamaica as well as Harlem Hospital/Columbia University, New York USA respectively. He is currently Consultant Psychiatrist, President of the Jamaica Psychiatric Association and Chairman of the Mental Health Technical Group (MOHW).



### ◀ DR. KEVIN GOULBOURNE

Dr. Kevin Goulbourne serves as Director of Mental Health and Substance Abuse Services in the Ministry of Health and Wellness, a position he has occupied since 2018. A native of Malvern in St. Elizabeth, Dr. Goulbourne is a graduate of the Bethlehem All-age School, the Munro College and the University of the West Indies (Mona). A specialist Psychiatrist, Dr. Goulbourne has a keen interest in drug abuse treatment and in 2017, he completed the Hubert Humphrey Fellowship in Drug Abuse and Health Services Management at Virginia Commonwealth University, Richmond, USA. Dr. Goulbourne is currently a board member of Patricia House, a drug abuse rehabilitation facility in Kingston. He also served as Regional Psychiatrist in the Western Regional Health Authority, Consultant Psychiatrist for the Bellevue Hospital, chairman of the National Council on Drug Abuse and last but not least, Medical Director in the Medical Services Branch of the Jamaica Constabulary Force. He is currently married and in his spare time, enjoys football, cricket, cycling and lawn tennis.

## JAMCOVID-19 APPLICATION



### ◀ MR. DUSHYANT SAVADIA

Mr. Dushyant Savadia is viewed as an entrepreneur with global reach, a humanitarian and among others a noted public speaker. A native of India, Mr. Savadia currently lives in Jamaica and was instrumental in making Jamaica the headquarters of the Amber Group with offices in 23 countries. He is an International Program Director of the Art of Living Foundation, one of the largest global humanitarian NGOs that focus on improving the quality of life by focusing on developing a stress-free, violence free global society. He has extensively travelled to over 50 countries across the globe and has personally led stress management workshops to people from different walks of life - from farmers to corporate executives, inner city communities to heads of state as well as youths to prison inmates to reduce stress, crime and violence.

## THE INTERNATIONAL YEAR OF THE NURSE AND MIDWIFE

### MRS. PATRICIA INGRAM- MARTIN ▶

Mrs. Patricia Ingram-Martin began her nursing career some twenty-five years ago at the Victoria Jubilee Hospital (VJH). While there, she served as Registered Nurse, Registered Nurse Midwife, In-service Education Officer and Deputy Director of Nursing Services. Mrs. Ingram-Martin was later seconded to the Bustamante Hospital for Children as Director of Nursing Services in 2010. After seven (7) years of service to that institution, she further progressed by way of another secondment to the head office of the Ministry of Health and Wellness (MOHW) where she currently occupies the position of Chief Nursing Officer. Mrs. Ingram-Martin is married with two children and is an active member of various Committees and Councils both locally and regionally. She is also a guest Lecturer at the Ministry of Health and Wellness' In-service Education Unit, and has served as Associate Lecturer for the University of the West Indies School of Nursing (UWISON), Mona. She is also the Deputy Chair of the Regional Nursing Body (RNB).



## DATA PROTECTION ACT



### ◀ MS. WAKHEEN MURRAY, LL.M

Miss. Wahkeen Murray is the Chief Technical Director with responsibility for Information and Communications Technology (ICT) within the Ministry of Science, Energy and Technology. She has served in this position since 2012 and over the last 17 years, has been exposed to and developed knowledge and expertise in the areas of telecommunications, electronic commerce, intellectual property rights, cyber security and data protection. Miss Murray graduated from the University of the West Indies with a Bachelor of Arts and a Bachelor of Laws and was subsequently called to the Jamaican Bar in 2003. Miss Murray also holds a Masters of Laws Degree in Technology, Media and Telecommunications Law from Queen Mary University of London.





## BACKGROUND

The Ministry of Health and Wellness National Health Research Conference was staged on November 21-22, 2019 at the Jamaica Conference Centre under the theme Wellness Now: Embracing Change Together. Abstracts on (i) mental health, (ii) nutrition, (iii) best practices, (iv) advances in medicine and (v) Sickle Cell Disease were showcased. Seven hundred and twelve (712) persons were in attendance over both conference days, exceeding the target set of 700 attendees. Representation included participants from the Ministry of Health and Wellness and the four Regional Health Authorities (South-East Regional Health Authority, North-East Regional Health Authority, Western Regional Health Authority, and Southern Regional Health Authority), other Ministries, Departments and Agencies of government, tertiary institutions, development partners and non-governmental Organizations.

## OBJECTIVES

The conference gives recognition to research being conducted in the public sector and partner institutions across the country. This forum provides an important means of promoting evidence-based decision-making. Objectives for the 2019 conference were:

1. To share the findings of health studies conducted by the Ministry of Health and Wellness and other institutions and individuals in Jamaica;
2. To identify operational research with the potential to influence or be translated into policy;
3. To facilitate special discussions and presentations that focus on the Conference theme.

## EVALUATION METHODOLOGY AND RESPONSE RATE

Evaluation of conference activities was conducted through analysis of responses to an instrument designed by the Conference Secretariat. One hundred and sixty-two (162) respondents completed the paper-based evaluation survey tool onsite, representing twenty-three percent (23%) of the attendees. In order to boost this figure, an online self-administered survey was sent to conference attendees. A filter question was included to ensure that those who already completed the paper-based form would not complete the online tool. An additional ninety-five (95) attendees completed the online evaluation tool, bringing the overall response rate to 36%. This report represents the combined paper-based and online evaluation forms, and should be interpreted with the knowledge that online responses were submitted up to three months after the conference.



## EVALUATION RESULTS

The most popular means by which respondents heard of the conference was from a colleague or supervisor (37%). The majority of respondents indicated that the conference met and/or exceeded their expectations, 96%. Over sixty percent of the respondents reported that they would attend future conferences (61%) and that they would recommend the conference to a colleague (62%).

A summary of responses to selected evaluation questions is given in Figures 1-3. Approximately nine out of ten participants strongly agreed or agreed that the conference fulfilled objectives 1 and 3. Approximately eight out of ten participants strongly agreed or agreed that objective 2 was met and the majority (87%) of respondents strongly agreed or agreed that oral and poster presentations fit well with the conference theme.

Respondents placed a high value on the value of the conference (94%) and the quality of oral (92%) and poster presentations (86%) at the conference. Seventy-three percent (73%) of respondents strongly agreed or agreed that sufficient space was allocated for poster presentations. The timing for the oral presentations and the timing of the discussion sessions were rated favorably by respondents, 87% and 79% respectively. The majority of respondents agreed or strongly agreed that audio-visuals were effective (84%). Participants gave reasonable ratings for the overall logistics of the conference and the logistics surrounding meals (75%). With respect to the quality of meals, only 44% of participants indicated that meals were satisfactory, with (26%) strongly disagreeing or disagreeing that the meals were satisfactory.

## RESEARCH EVALUATION

### ORAL PRESENTATIONS

Participants were asked to indicate which oral research presentation demonstrated the greatest potential to impact health policy and practice. The top three mentioned by participants are listed in *Table 1*.

The most frequent response was Miss Shamonica Francis' oral presentation entitled *Antidepressant Potential of an Aqueous Extract of Arachis hypogaea testa*. This presentation scored the highest among the judges and was awarded the best overall oral presentation as well as the best student oral presentation.

The second most frequently mentioned presentation was *Our Women Are Hurting: Chronic Psycho-Social Effects of Child Sexual Abuse Among Jamaican Women* by Ms. Roxanne Harvey.

The third most popular research presentation was Mr. Samuel Owusu's study entitled *Complementary and alternative therapies used by patients with Hypertension and Type 2 Diabetes Mellitus in western Jamaica*.

*Table 1: Top 3 Oral Research Demonstrating the Greatest Potential to Impact Health Policy and Practice*

Oral Presentation	Presenter	Frequency (Out of 81 respondents)	%
<b>O19-19</b> - Antidepressant Potential of an Aqueous Extract of <i>Arachis hypogaea</i>	<b>Shamonica Francis</b>	<b>10</b>	<b>12</b>
<b>O19-13</b> - Our women are hurting: Chronic Psycho-social Effects of Child Sexual Abuse among Jamaican Women	<b>Roxanne Harvey</b>	<b>9</b>	<b>11</b>
<b>O19-01</b> - Complementary and alternative therapies used by patients with hypertension and type 2 diabetes mellitus in western Jamaica	<b>Samuel Owusu</b>	<b>8</b>	<b>10</b>

## POSTER PRESENTATIONS

Participants were asked to indicate which poster presentation demonstrated the greatest potential to impact health policy and practice. The top three (3) mentioned by participants are listed in Table 2.

The most frequent response was Colleen Campbell's poster entitled *Knowledge and Practice Related to Lifestyle among Adults with Diabetes and Hypertension*.

The second most frequently mentioned presentation was *Mental Health Awareness training in courses such as First Aid for Mental Health can act as a means of early intervention, treatment, prevention and help to change societal views, especially amongst youths and professionals who can influence change* by Trudy King. This poster was also awarded most impactful presentation by the judges.

The third most popular was Kaydian Henry's poster presentation entitled *The Willingness of Individuals With Non-Communicable Diseases, to Adopt a Plant Based Diet: A Mixed Methods Study*.

Table 2: Top 3 Poster Research Demonstrating the Greatest Potential to Impact Health Policy and Practice

Poster Presentation	Presenter	Frequency (Out of 76 respondents)	%
<b>P19-04</b> - Knowledge and Practice Related to Lifestyle Among Adults with Diabetes and Hypertension test	<b>Colleen Campbell</b>	<b>9</b>	<b>12</b>
<b>P19-23</b> - Mental Health Awareness training in courses such as First Aid for Mental Health can act as a means of early intervention, treatment, prevention and help to change societal views, especially amongst youths and professionals who can influence change.	<b>Trudy King</b>	<b>8</b>	<b>11</b>
<b>P19-12</b> - The Willingness of Individuals, with Non-Communicable Diseases, To Adopt a Plant Based Diet: A Mixed Methods Study	<b>Kaydian Henry</b>	<b>6</b>	<b>8</b>

## CONCLUSION

The 2019 conference *Wellness Now: Embracing Change Together* was a success. The attendance of over seven hundred participants in 2019 indicates a growing audience and the need for publicizing the conference more aggressively through additional mechanisms.

The overall results of the evaluation suggest that the majority of attendees and respondents were very satisfied with the current format of the conference, as well as the quality of offerings presented. Overall satisfaction was above 90%, highlighting the impact and value of the conference to the development of a research culture and improving the usage of technology and innovation in healthcare.

Further emphasis on the strengthening of logistics will be carried out for future conference activities. This will include decreased waiting time for lunch and break, the quality of food served and a smoother registration process.

Summary figures of the main Conference Evaluation findings

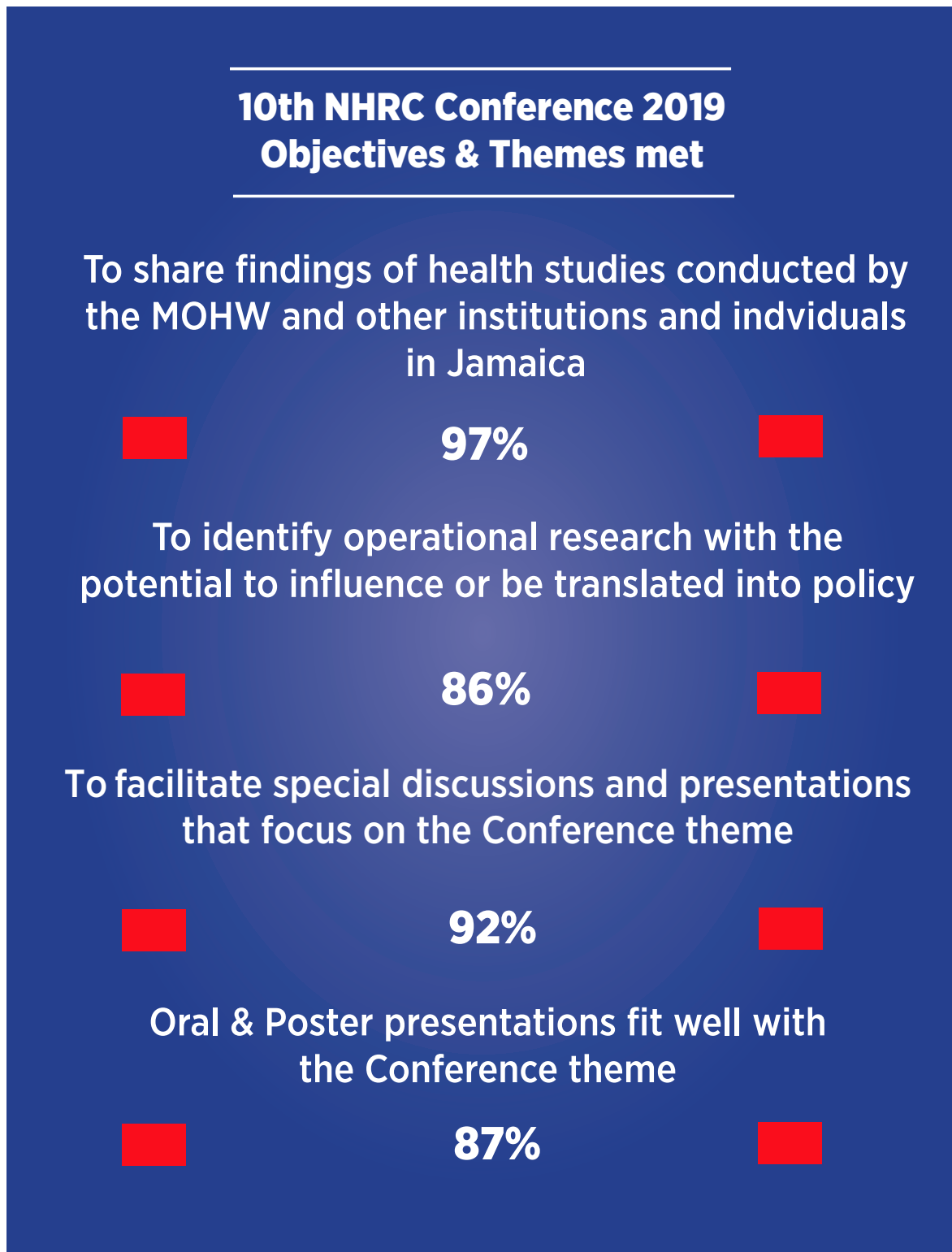


Figure 1: **Conference objectives and Themes met**



Figure 2: Overall value of the Conference

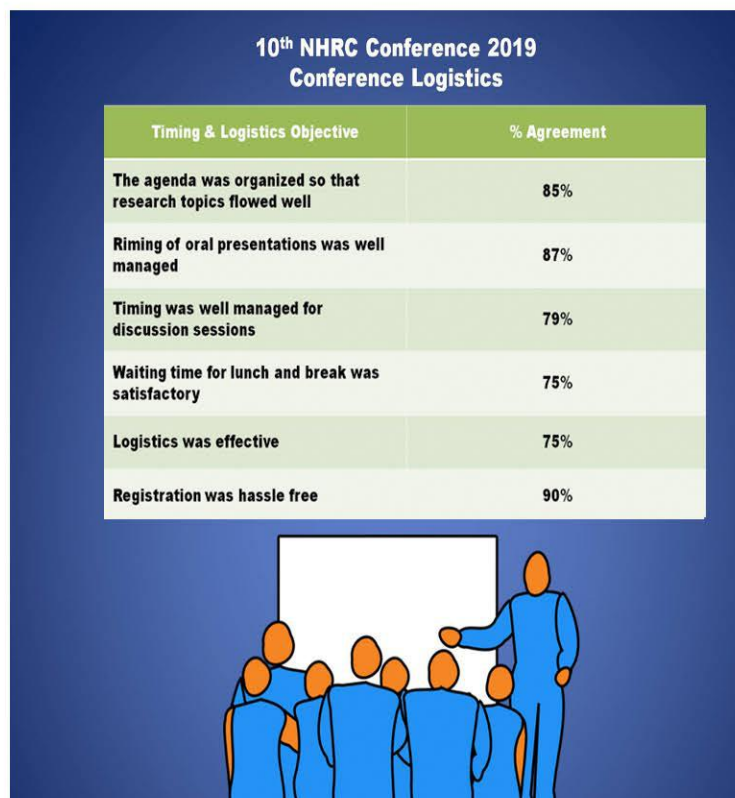


Figure 3: Conference Logistics

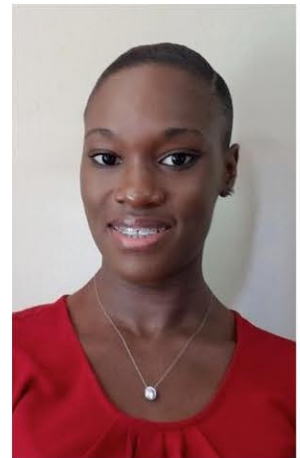


# 2019 CONFERENCE WINNERS



## ORAL PRESENTATIONS

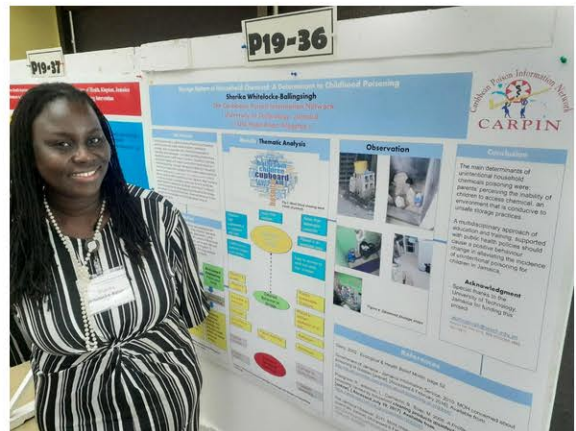
**Best Overall Oral Presentation and Best Student Presentation** were awarded to Miss Shamonica Francis for research entitled “Antidepressant Potential of an Aqueous Extract of *Arachis hypogaea* testa”



**Most Impactful Oral Presentation** was awarded to Dr. Ijah Thompson, for research entitled “Exploratory evaluation of stress and burnout among Jamaican employees”

## POSTER PRESENTATIONS

**Best Overall Poster Presentation** was awarded to Sherika Whitelocke-Ballingsingh, for research entitled “Storage Patterns Of Household Chemicals:- A Determinant to Childhood Poisoning”

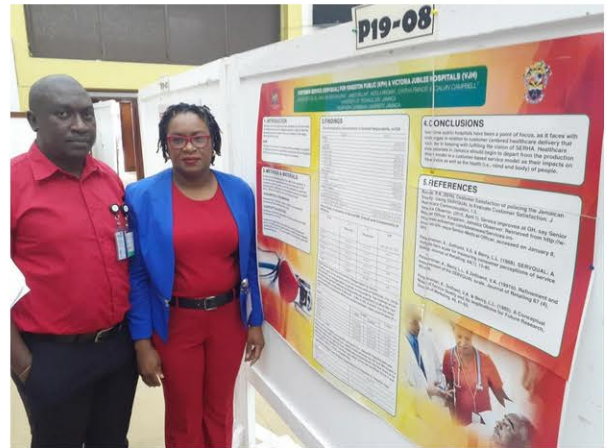




# 2019 CONFERENCE WINNERS

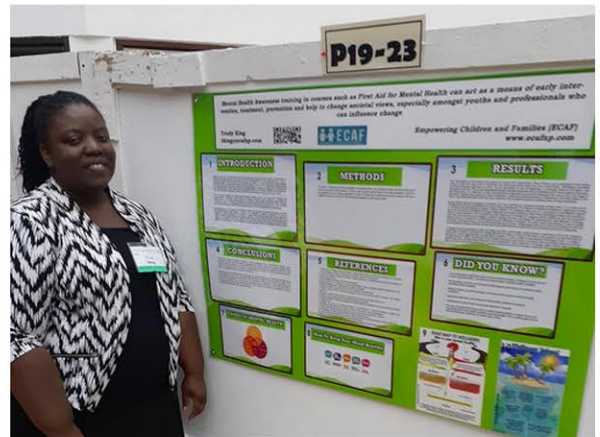
## POSTER PRESENTATIONS

**Best Student Poster Presentation** was awarded to Jacqueline Ellis and Paul Bourne, for research entitled “Customer Service (SERVQUAL) for Kingston Public & Victoria Jubilee Hospitals”



**Most Impactful Poster Presentation** was awarded to Rochelle Amour, for research entitled “Where does dementia policy belong? Exploring the Caribbean policy landscape”

**Most Impactful Poster Presentation** was awarded to Trudy King, for research entitled “Mental Health Awareness training in courses such as First Aid for Mental Health can act as a means of early intervention, treatment, prevention and help to change societal views, especially amongst youths and professionals who can influence change”



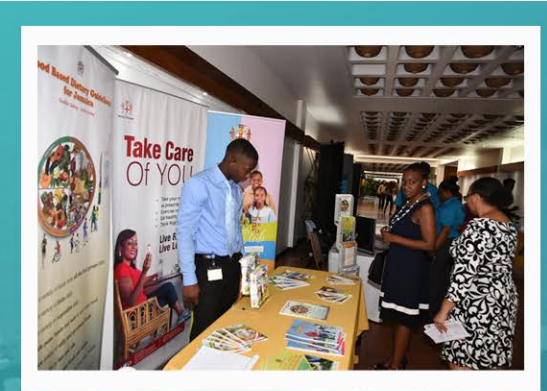


# National Health Research Conference PICTORIAL





# National Health Research Conference PICTORIAL







### Our Secretariat

The successful execution of the National Health Research Conference is dependent on a dedicated Secretariat comprising members of the Epidemiological Research and Data Analysis Unit (ERDAU), persons from a number of Divisions within the Ministry as well as from educational institutions. In addition to the planning team, the Secretariat also receives assistance from a core group of volunteers as well as specialists who aid in adjudication of abstracts and judging of presentations, as well as those who assist in the moderation of sessions. The Secretariat also relies on the assistance and support of the senior technical team of the Ministry of Health and Wellness, as well as the Public Relations and Communications, Health Promotion and Education and Procurement Units of the Ministry as well as the Budget and Finance Directorate.

Member	Position
Dr. Andriene Grant	<b>Chair, Director, Epidemiological Research and Data Analysis Unit (ERDAU)</b>
Mrs. Nicole Martin Chen	<b>Member, Director, Health Status Monitoring, Evaluation and Analysis</b>
Mrs. Renee Brooks	<b>Member, Director, Standards Research and Development</b>
Mr. Stephen Davidson	<b>Member, Director, Public Relations and Communications</b>
Mr. Hector Burrowes	<b>Member, Monitoring and Evaluation Officer-GIS, ERDAU</b>
Mrs. Karen Nelson	<b>Member, Deputy Chief Nursing Officer</b>
Mrs. Stephanie Bernard Stephens	<b>Member, Health Planner, Health Systems Improvement Branch</b>
Ms. Romae Thorpe	<b>Member, Biostatistician, ERDAU</b>
Ms. Fiona Henry	<b>Member, Administrator, National Epidemiology</b>
Ms. Kimberly Nain	<b>Member, Senior Policy Analyst</b>
Mr. Jovan Wiggan	<b>Member, Epidemiological Officer, National Epidemiology</b>
Ms. Kharelle Thomas	<b>Member, Data Entry Clerk, ERDAU</b>
Ms. Kimberlee Smythe	<b>Member, Help Desk Co-ordinator, Systems Information and Technology Unit (SITU)</b>
Mrs. Stacian Williams-Maitland	<b>Member, Research Officer, Standards Research &amp; Development Branch</b>
Ms. Samantha Pryce	<b>Member, Secretary, ERDAU</b>
Ms. Shanice Blagrove	<b>Member, Secretary (Acting), ERDAU</b>
Mrs. Tanielle Mullings	<b>Member, Research Officer, ERDAU</b>

# YOUR WORRIES OVER **COVID-19** MAY BE MANY



## BUT YOU CAN **OVERCOME!**



Keep a Journal.



Talk about how you feel with someone you trust.



Exercise.



Call the Mental Health & Suicide Prevention Helpline: 888 NEW LIFE(639-5433)

VISIT :  [www.moh.gov.jm/mental-health/](http://www.moh.gov.jm/mental-health/)

