

A Historic Conference

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The 58th Annual (CHRC) Research Conference is historic as it is the first to be hosted by the Caribbean Public Health Agency (CARPHA), which became operational in January 2013. The Caribbean Public Health Agency was established through an Inter-Governmental Agreement that merged five CARICOM Regional Health Institutions, including the Caribbean Health Research Council (CHRC). Notably, all the core functions of CHRC have been subsumed under CARPHA, including the hosting of the Annual Scientific Meeting.

This inaugural hosting of the Conference by CARPHA has coincided with a significant innovation. For the first time, the Conference is themed, with the 2013 theme being '*Child Health*'. The response by stakeholders to this change was very positive, resulting in over 150 papers being accepted for presentation. This represents a 50 per cent increase compared with last year's Conference. One reason for this must be the historical and inextricable (though sometimes overlooked) link between Caribbean research, the Annual Conference and improvements in child health in the region. Indeed, significant pioneering health research for the treatment of Severe Acute Malnutrition (SAM) placed the Caribbean on the world stage. At the time, SAM was known as Protein Energy Malnutrition (PEM) and the research was conducted at the Tropical Metabolism Research Unit (TMRU) of the University of the West Indies (UWI) in Jamaica, starting in the 1950s. Notably, the Unit's early research coincided with the establishment of the predecessors of the CHRC *ie* the Standing Advisory Committee on Medical Research (SAC, 1956–1972) and the Commonwealth Caribbean Medical Research Council (CCMRC, 1972–1998). Not only was the Annual Conference a primary vehicle by which such research findings were disseminated, but the SAC and CCMRC were hosted by the TMRU until 1986 when the Secretariat was relocated to Trinidad and Tobago.

The clinical and public health applications of the research at the TMRU resulted in the significant decline in the mortality rates of children suffering from SAM. However, despite the success at the TMRU ward in the early days due to the application of their innovatory manage-

ment protocols, more than 50 per cent of malnourished children admitted to other Jamaican hospitals were still dying. In addition, those who survived were hospitalized for prolonged periods of time. The reality had to be faced that TMRU's outreach was inadequate – the protocols established in the TMRU had not been properly disseminated. Appreciating the urgency of the situation, Professor John Waterlow, TMRU's first Director, prepared an Action Plan and in collaboration with the Ministry of Health (MOH) developed treatment guidelines to improve the quality of hospital care. These new guidelines were initially met with resistance and scepticism from the hospital staff who questioned whether they would be successful. Nevertheless, they persevered and the staff began realizing that these new guidelines were indeed helpful and the mortality rates of the malnourished child fell dramatically and the period of recovery was shorter.

Professor David Picou, TMRU's second Director who was both a paediatrician and researcher, scaled up the community outreach programme in Jamaica where it was initially carried out by TMRU staff visiting hospitals. The outreach also expanded to other Caribbean countries and after advocacy by Professor Picou, the Ministers of Health of the CARICOM Member States agreed that all Caribbean hospitals should adopt the TMRU guidelines. The application of the research conducted at TMRU to the treatment of malnutrition went beyond the Caribbean with the publication of the World Health Organisation manual "The Treatment and Management of Severe Protein-Energy Malnutrition", which was published in 1981. This was used to save millions of lives all over the world. However, there is still work to be done as recent data from the WHO indicated that every year nine million children under age five years die worldwide. Malnutrition in children continues to be a serious public health problem, accounting for one-third of these deaths.

It is also important to highlight another area of research that has had a tremendous impact on child health in the Caribbean and internationally, which was started by Professor Sally Grantham-McGregor at the TMRU in the early 1970s and has been continued by Professor Susan Walker and the rest of the team at the Epidemiology Research Unit, Tropical Medicine Research Institute, UWI. The researchers of their Mental Development Group have

been conducting research of the highest standard to identify the risk and protective factors of mental development as well as low-cost, effective interventions. The latter usually comprised psychosocial stimulation and the benefits included improvements in achievement, behaviours and IQ in school children. Critically, the benefits of the interventions continued into adulthood with improvements in key life skills/competencies. Remarkably, the interventions were also associated with a reduction in violent behaviour. The Group also examined the effects of a range of health factors on development including under-nutrition, low birth weight, anaemia, violence, parasitic infections, *inter alia*.

One positive outcome of their extensive body of research has been collaborations with the Ministry of Health in Jamaica to implement cost-effective interventions for children in low income communities, enabling the latter to meet their development potential. Their research findings have also been used to improve the development of children in other Caribbean countries and internationally. The latter is exemplified by their contributions to *The Lancet* Series on Early Child Development in 2007 and Child Development in Developing Countries in 2011. They reported that the most effective early child development programmes are those that provide direct learning experiences for children and their families, are geared towards younger and more disadvantaged children, involves other systems such as nutrition or family support and are sustainable. Investment in early childhood development would lead to children being better able to reach their potential and this would in turn result in their securing better jobs as adults, thus reducing the level of poverty. The long term positive economic impact on the region is clear.

Yet another excellent example of a collaboration that benefitted the health of children is the programme for the elimination of vertical transmission of HIV and congenital syphilis in Jamaica. This involved researchers at the Department of Child and Adolescent Health, UWI in Jamaica, led by Professor Celia Christie-Samuels and their colleagues at the Ministry of Health. To date, this partnership has resulted in a reduction in vertical transmission rates from 30 per cent to less than five per cent. A new initia-

tive has just commenced to eliminate such transmission. Barbados has made significant progress and their rate of vertical transmission of HIV is less than two per cent.

This Editorial would be incomplete without highlighting the contributions of Sir Kenneth Standard, the cornerstone of the development of public health in the Caribbean. He was the first Professor of Community Medicine at the UWI and promoted the primary healthcare model, emphasizing community participation. Sir Kenneth believed in the use of allied health workers and insisted that no one category of health worker could adequately deliver healthcare. He established the Community Health Aide programme, which revolutionized healthcare in Jamaica. He was passionately committed to preventive medicine and fiercely protective of the importance of community healthcare. All health centres had Aides assigned to them through the MOH, paying particular attention to immunization and nutrition. This community-based, preventative medicine approach contributed greatly to the successful decrease in malnutrition rates as well as the success of Expanded Programme in Immunization.

The examples cited above are just a sample of the many ways in which research presented at the Annual Research Conference was used to improve the health of the region's children. However, despite these tremendous achievements, there remains a great deal more to be done. Further research is needed to address issues such as child abuse and violence and the increasing rates of childhood obesity. Although their deleterious impact on our children is clear, we need to identify creative and effective interventions to combat these problems.

The improved health of children in the Caribbean is due largely to the successful strategic alliance between the researchers and health policy-makers. Although challenges remain, we should be confident that we possess the human resources to overcome and ensure a better life for our children.

In closing, I must point out that too often we dwell on the negatives that occur in our Caribbean countries. We need to stop and look at our accomplishments and make them more widely known to all stakeholders. This would not only educate our Caribbean people but allow them to share in our pride.