

Case Report

The Health Sciences Unit's 2nd Annual Research Day- Sustainable Development of Health in Trinidad and Tobago: Addressing the Issue of Non-Communicable Diseases

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ABSTRACT

The Health Science Unit's 2nd Annual Research Day, is an annual event hosted by the Health Sciences Unit, providing a platform to showcase the research currently being conducted by the University of Trinidad and Tobago. It provides a forum of discussion, for current and future leaders within the Health Sector of Trinidad and Tobago.

“Sustainable Development of Health in Trinidad and Tobago: Addressing the issue of Non-Communicable Diseases”; the theme of this year's Research Day brought together healthcare professionals from various parts of Trinidad and Tobago. It sought to highlight research undertaken in the field of health administration; providing an opportunity for players in the health sector to: present, examine and discuss the research evidence that will guide the development of innovative strategies that respond to the needs and realities of the population being served.

The event was structured around short presentations followed by question and answer sessions to encourage the audience to engage the presenters.

It was found that the objectives of the research day were met as presenters showcased research in areas relevant to addressing the issue of NCD's, as well as their contributions towards the sustainable development of the healthcare system of Trinidad and Tobago. Attendees were given the opportunity to engage the presenters in discussions towards the improving of the healthcare system. It was seen that through research based intervention and stakeholder informed options, we can effectively respond to the issues affecting the health care system.

Keywords: Sustainable Development, Non-Communicable Diseases, Research, Health Sector

INTRODUCTION

The Health Science Unit's 2nd Annual Research Day entitled “Sustainable Development of Health in Trinidad and

Tobago: Addressing the issue of Non-Communicable Diseases”, was held on Friday 30th September, 2016 at the SAPA little theatre, San Fernando.

This is an annual event hosted by the Health Sciences Unit, provided a platform to present research done on NCD's and an opportunity to showcase the research currently being conducted by the University of Trinidad and Tobago. The vision of the Research Day is to innovate and effect change in the health care system in Trinidad and Tobago by creating forums of discussion, for current and future leaders within the Health Sector of Trinidad and Tobago.

This Research Day brought together over sixty (60) Healthcare Professionals from the various Regional Health Authorities (RHAs) of Trinidad and Tobago, Atlantic LNG, Nursing students of the University of the Southern Caribbean and private health and wellness institutions. The research day was structured around short presentations followed by question and answer sessions to encourage the audience to engage the presenters.

The theme chosen for this year's event sought to highlight research undertaken in the field of health administration. It was derived from past lessons and innovations relevant to health sector reforms, providing an opportunity for various players in the health sector to: present, examine and discuss the research evidence that will guide the development of innovative strategies that are responsive to the needs and realities of the population being served.

The 2016–30 Sustainable Development Goals set out by the United Nations, are currently comprised of seventeen (17) main goals; one (1) of which covers health. The proposed health goal: “ensure healthy lives and promote well-being for all at all ages”. One (1) of the targets under the goal is the reduction of a third less non-communicable disease (NCD) related mortality (Norheim et. al, 2015). For this goal to be realized, it would require a multi-targeted approach and commitment from multiple sectors both governmental and non-governmental.

It is estimated that in 2008, 63.0% of deaths which occurred globally were due to chronic NCDs; 44.0% of these being in persons under 70 years of age. By 2020 approximately 44 million deaths are expected to be caused by chronic NCD's (Hospedales et. al, 2011). Diabetes mortality in Trinidad and Tobago is 600% higher than in the United States, the rate of cardiovascular disease mortality 84% higher, and cervical cancer are 3–12 times higher. The problem of excessive alcohol use contributes to the already alarming mortality and morbidity figures (Hospedales et. al, 2011). There therefore exists a great need for intervention from multiple sectors in society to address these health challenges effectively.

The intervention would require policies to address the risk factors for the population such as diet and exercise, nutrition and taxation; co-operation from the health sector including NCD screening, diagnosis and management of those persons at risk and living with the diseases (Hospedales et. al, 2011). Research and education of these health sector stakeholders, is therefore necessary to effectively address the issues surrounding the control of NCD related problems, plaguing the population.

Feature Presentation:

‘Sustainable Development of Health in Trinidad and Tobago – Addressing the Issues of Non-Communicable Diseases’

Dr. Anton Cumberbatch, the feature presenter began the day's activities. He commended Dr. Carrington on her contributions to the research undertaken by the students with the hope of transforming it into policy.

He began with the statement that heart disease, hypertension, cardiovascular diseases, diabetes and chronic respiratory conditions all account for 60% of death in Trinidad and Tobago (Inter-American Development Bank, 2014). With this surge in NCD related deaths, an alarming increase in obesity in children has been observed with it now becoming an epidemic in the

Caribbean. The biggest indicator of chronic disease in Trinidad and Tobago can be observed in obesity in young children and teens which increases their risks of developing other chronic diseases at an earlier stage in life.

The Trinidad and Tobago Health Sciences Initiative (of which the UTT's Health Sciences Unit emerged) was created as a form of intervention to address this current situation; and investments made by the Government, responding to increases in the cases of Chronic Diseases.

He went on to explain the impact of the Economy on Chronic Disease and Chronic Disease on the Economy in Trinidad and Tobago:

As our economy grew, instances of chronic disease exploded. As such it could be seen that a better standard of living, does not always translate to a healthier way of life. The excess money led to alcohol, substance and food abuse, with many persons leading unhealthy lifestyles. It is therefore not economical respond to these changes by investing heavily in disease treatment centres.

- In 2005 the Government spent 2.3 Billion on Healthcare.
- In 2015 the Government spent 6.1 Billion Per Capita.
- Spending has increased from 1000-4500 in 10 years.

Trinidad and Tobago has spent more on the Health System but still suffers from an increasing number of chronic disease related problems. It can be hypothesised therefore that areas of focus are not impacting the diseases and financial support is not where the problem as a society lies.

Long term Strategies towards sustainable development:

- The \$110 Million IDB loan given to the government of Trinidad and Tobago should be used to support physical activity initiatives for the population such as; outdoor gyms, school based activities, educational campaigns towards behavioural changes to drinking

and smoking, improvement of the health information management system.

- The implementation of a standardized electronic health system, to enable the Regional health authorities and the Ministry of Health to be connected on a single network. This would ensure better tracking and treating of persons currently suffering from NCD related diseases.

Short term Strategies towards sustainable development:

- Reduce wastage and inefficiencies in the Health care system.
- The development of a research budget to promote a research culture in Trinidad and Tobago: There is a great need to highlight the effectiveness of data and research and evidence based decision making. A culture change needs to be made.

RESEARCH PRESENTATIONS

Presentation 1-

Ms. Mahalia Roberts-Alexander- Barriers to Self-Care Compliance in Male Type 2 Diabetic Patients

The first research presentation for the Morning was given by Ms. Mahalia Roberts-Alexander. She stated that diabetes could be delayed and/or prevented with proper self-care and health management. It was observed that 1 in 8 males suffered from diabetes mellitus in Trinidad and Tobago (Barceló & Rajpathak, 2001). What makes this so significant was that males were less likely to seek treatment and medical consultation on health-related matters. This delay translates to a delay in treatment and increased complications associated with disease when they eventually seek treatment.

The Orem Self-care Deficient Theory was used as the model for this study of men suffering from Type II diabetes, at the Point Fortin Health facility in Trinidad. Respondents were monitored based on their diet, exercise, self-care routines and knowledge of the disease accessed via a questionnaire. The questions were

structured to determine if there was a change in the participants' knowledge before and after diagnosis. It was found that baseline knowledge of Type II Diabetes showed no influence on self-care activities.

She concluded her presentation with the following recommendations:

- A greater focus needs to be placed on males with diabetes.
- Direct education should be geared towards meeting the needs of the patient.
- One on one plans should be individually made to treat foot care which a tailored to the needs of each patient.
- Individual discussions can include return demonstrations to ensure that the information has been understood.

Presentation 2-

Ms. Laura Lewis- Glucose Response to Caffeine Ingestion in Male Sprague Dawley Rats

Ms Laura Lewis was the second presenter for the morning. She began her presentation by describing how diabetes is developed and how Diabetes Mellitus/Type II Diabetes interrupts the natural homeostatic function of the body and its ability to use and store glucose efficiently.

She stated that a diet that is based on the control of the intake of carbohydrates and exercise are currently used to control the disease. Studies have shown however, that the ingestion of caffeine can adversely affects the insulin glucose dynamic in medically administered insulin (Thong et al, 2002) (Battram et al ,2005). This meant that that diabetic persons who consume caffeine regularly, have a greater resistance to the absorption of insulin. This is due to the production of adrenaline which limits the effectiveness of insulin.

Two (2) groups of test rats were used; they were introduced to caffeine over a period of two (2) months with the amounts being increased incrementally via four (4) discrete doses.

Results confirmed that the caffeine users had lower blood glucose levels, while

the non-habitual group had an average increase in their blood glucose levels. The clinical significance of this may be used to create a mathematical model for the treatment of Type II diabetes.

Presentation 3-

Dr.Malachy Ojuro- Assessment of the Need for Bed Management Policy at the Eric Williams Medical Sciences Complex.

Dr.Ojuro was the third presenter for the morning. His presentation was based on research done during his thesis.

His study highlighted the importance of having a system wide bed policy at the Eric Williams Medical Sciences Complex, to deal with issues of overcrowding which impacts on the quality of care received.

Previous needs assessments done, were focused on needs from the view of doctors, nurses and management level employees of the hospital. The research was unique since it included the view of the patients; the persons of highest importance.

He explained that since Eric Williams Medical Sciences Complex was previously a paid facility built to cater to the needs of a specific persons; the change from private to a free facility meant that the same services would now be made accessible to a greater number of individuals.

The focus of this study was the adult emergency room with 100 persons surveyed: 50patients and 50 staff via questionnaire.

From the results of the questionnaire, Dr. Ojuro recommended the implementation of a functional bed management policy at EWMSC as one of the many issues identified as reasons for stakeholder dissatisfaction. He also suggested the need for further studies to quantify mass responses into statistically inferable data.

Presentation 4-

Ms. Charmaine Borrel- What Are the Experiences of Partners When a Maternal Death has occurred?

Ms. Charmaine Borrel, the fourth overall research presentation of the day presented a purposive study exploring the experiences of the partners who have died during childbirth.

She followed a qualitative design to effectively capture the feelings and experiences of the partners via face to face interviews.

From her investigation, it was found that many of the partners experienced significant grief and tend to inflict self-blame for the loss. Financial burdens and psychological effects on children from the relationship were also found to place additional burdens on the grieving partners.

The researcher highlighted specific experiences faced by interviewees and concluded with the following recommendations:

- Guidance Counselling should be made available for all immediate family members as none is currently being offered by the Regional Health Authorities.
- The practicing and implementation of techniques which would reduce the risk of maternal deaths.

Presentation 5-

Ms. Allyson Pouchet- A Study to Explore the Attitudes of the Pharmacists Employed At the Tobago Regional Health Authority towards Compliance with the Systematic Inventory Management Method.

Ms. Pouchet presented a qualitative study was conducted using semi structured interviews, administered to 5 key informants at the Tobago Regional Health Authority to ascertain the compliance to the implementation of a systematic inventory management system.

She began by giving a background on the introduction of an inventory system by the TRHA where all pharmacist was required to record and keep track of drugs coming in and being dispensed, as well as the expiry dates. The implementation of the systematic inventory management method meant that the pharmacists were held

directly accountable for the inventory. These requirements were not embraced by the pharmacists.

The interviews revealed that all the pharmacists complained of insufficient training and exposure to inventory management as one of the reason for their apprehension in the use of the management method.

Ms. Pouchet concluded her presentation with the suggestion derived from her study. She suggested the provision of adequate inventory management training for untrained graduates.

Presentation 6-

Ms. Dianne Hinneh- An Investigation Into The Relationship Between Perceived Social Loafing And Absenteeism Among Nurses At The Eric Williams Medical Sciences Complex.

The final presentations for the day was done by Ms. Dianne Hinneh. Her research was aimed at determining whether perceived social loafing is associated with absenteeism among nurses of the medical and surgical wards of the hospital.

Her study was based on a quantitative design where she collected data in the form of a structured questionnaire from one hundred and five (105) registered nurses.

Her research revealed that there was no relationship between the nurses' perception of social loafing by his or her work colleagues and their absenteeism. MsHinneh went on to indicate that other factors related to absenteeism among nurses including age and tenure were discovered in her investigation.

She also discovered, that higher levels of comfort experienced in workplace relationships between the nurses and their managers showed an increase in absenteeism; with most nurses, unalarmed by the high absenteeism rates experienced in their units.

Ms. Hinneh concluded her presentation with recommendations for

curbing the levels of absenteeism seen. These included:

- Implementing and enforcing absenteeism policies.
- Changing absenteeism culture of the organization, and implementing a monitoring and evaluation system for absenteeism.

Summary:

In summary, the objectives of this research were met as presenters showcased research in areas relevant to addressing issue of NCD's as well as their contributions towards the sustainable development of the healthcare system of Trinidad and Tobago. Attendees were given the opportunity to critically analyze the researchers' presentations; engaging them in discussions to understand how to improve the healthcare system. It was seen that through research based intervention and stakeholder informed options, we can effectively respond to the issues affecting the health care system of Trinidad and Tobago.

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