

Ministry of Health and PAHO/WHO

Guyana National Health Research Agenda

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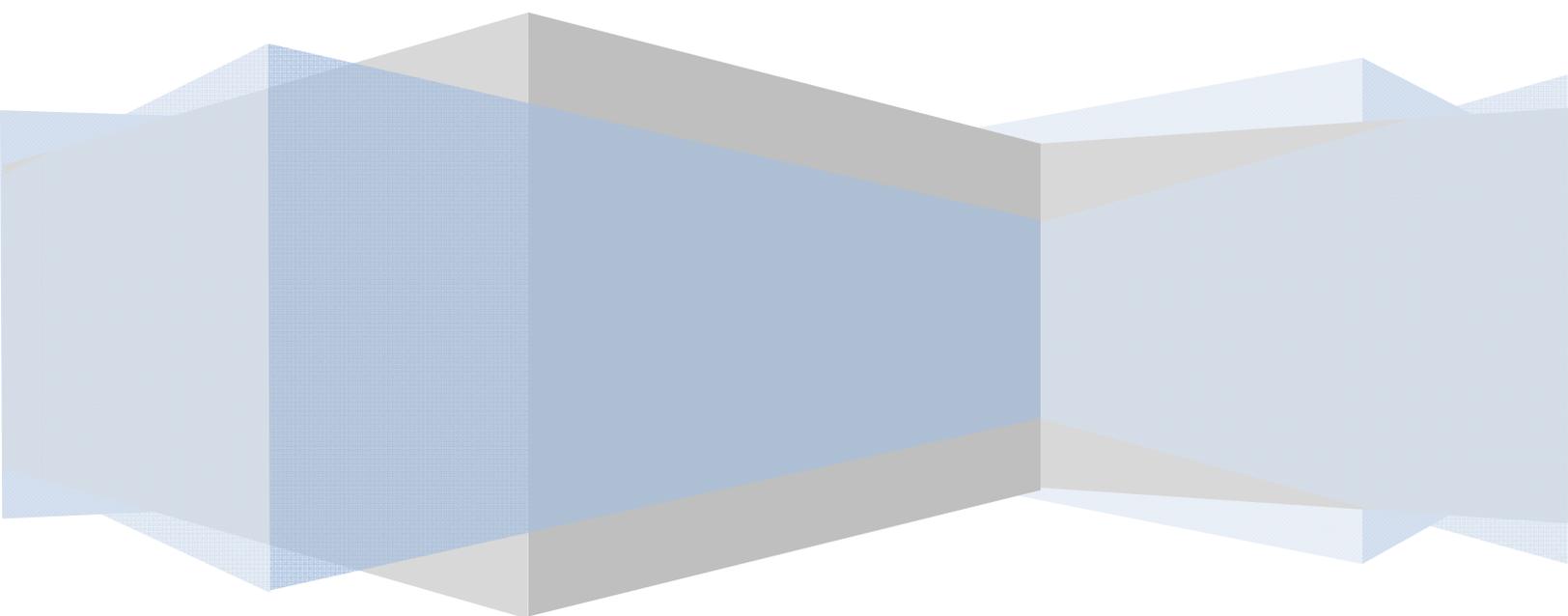


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Executive Summary

This document embodies the unified health research agenda that was drawn from multi-sector regional and national consultations involving representations from the Ministry of Health, University of Guyana (Faculty of Health Sciences and Social Sciences) The Ministry of Agriculture government, academe, research institutions, professional organizations, non government agencies, civil society and funding agencies.

This national unified health research agenda specifies the areas and topics that need to Be addressed in the next five years (2010-2015) in line with global regional and national initiatives. Influencing the health sector like the Millennium Development Goals and the National Health Plan. These identified research topics are not meant to be comprehensive and final. Rather, they represent an evolving list of priorities that can be viewed as research topics in need of immediate action, given current thrusts and realities. Furthermore, these identified Research concerns and topics may serve the following purposes:

- As basis for policy action and advocacy for achieving the critical goals and objectives of health.
- As basis for funding projects particularly by the government sector and other Stakeholders from private and international organizations.
- As basis for academic work (thesis and dissertations)
- As basis for collaboration between and among institutions.
- As basis to maximize resource utilization among stakeholders and minimize Duplication of efforts with the delineation of responsible agencies.
- As the template to advocate for support from local, national and international organizations so health research can be mainstreamed as an essential component
- In providing solutions that impact on the pressing health needs of the country and Contribute to national development.

The ten priority areas that have been identified by key stake holders are, communicable diseases, food and nutrition, chronic non-communicable diseases, human resource development, gender and violence, strengthening health systems, environmental health, mental health, vector control and maternal and child health.

The world Health organization, like many other organizations around the world, has recognized the need to use more rigorous processes to ensure that health care recommendations are informed by the best available research evidence.

Dr Emanuel Cummings PAHO/WHO Consultant (25th October 2010)

Acknowledgements

Special thanks to PAHO/WHO for providing the funding for this project, special thanks is extended to Dr Javier Uribe, Health Systems Advisors at PAHO/WHO Guyana, for his insights into the development this health research agenda. Much appreciation is also extended to The Ministry of Health through its Ministers of Health Dr Leslie Ramsammy and Dr Bheri Ramsarran, Chief Medical Officer Dr Shamdeo Persuad, Permanent Secretary Mr Hyadar Ally, other representatives from various department within the Ministry of Health, lecturers from the Faculties of Health and Social Sciences University of Guyana, Georgetown Public Hospital and the Private Hospitals who all served as either participants and or facilitators in determining the national health research priorities.

Introduction

In 2001, at The Heads of Government of CARICOM meeting in Nassau Bahamas there was a call for the use of evidence-based decision making in the delivery of health care in the region. This decision has somewhat influence the Caribbean Cooperation in Health Initiative (CCH) to establish a number of health priorities for the countries of the Caribbean including Guyana.

Since the early 1990's the concept of Essential National Health Research (ENHR) was introduced to low and middle income countries as a strategy to ensure that limited resources for health are invested in areas with the highest social return. It promotes research as being essential to guide resource allocation and address issues of inequity. It also reinforces the links between research, action and policy. Many developing countries, including Guyana, encounter several constraints which highlight the need for a national health research agenda and the prioritization of research. There are limited numbers of researchers and research centres, and funding for health research is usually dependent on international donor agencies. More often than not, the research agendas of developing countries are already set and not consistent with the health priorities of the country. The result is that researchers are enticed way from important national or regional issues.

The development the National Research Agenda for Guyana is guided by a resolution at the World Health Assembly in 2005 in which, a call was made for the use of research evidence in the development of recommendations , guidelines and policies in addition to the Caribbean Cooperation in Health Initiative (CCH III) which defines the health priorities of the Caribbean that comprises eight program areas, however in Guyana ten program areas has been identified.

The WHO from its inception has focused on research , which is mandated in its constitution, and has been a leading player in the global effort to strengthen ties between research and health development.

Research of any kind must address the needs of the national population and any research agenda should look beyond fundamental problems of disease healing and prevention and focus its interest on other important arenas as determinants of health .

This agenda will address past and current health problems together with the threats expected in the future , supporting the growth of the basic sciences and immediate investigations of emerging problems.

In order for research to prosper there must be investment in the relevant institutions , however many of the developing countries such has Guyana has not been able to attract major investment in its research infrastructure , hopefully this national agenda will stimulate positive changes in this regard

According data from the Ministry of Health Bulletin the leading cause of death in of all ages Guyana are Ischaemic Heart Diseases, Cerebrovascular Accident, Neoplasm, Diabetes Mellitus, HIV/AIDS, Hypertensive Diseases, Suicide, Acute Respiratory Illness, Heart Failure, Cirrhosis, Land Vehicular Accidents and Assault/Homicide.

The major causes of morbidity includes Respiratory Tract Infections, Skin Disorders, Arthritis, Diabetes Mellitus, Accidents and injuries , Worm infestations, Malaria and Acute Diarrheal Diseases.

One of the main objectives of this National Health Research Agenda is to guide the conduct of research so as to facilitate the evidence-informed implementation of the CCH III as well as other activities identified as priority by Caribbean countries including Guyana. The Agenda will therefore identify priority areas for research to provide results that then can guide the development of policies, programmes and best practices. The areas identified by key stake holders in Guyana are:

1. Communicable Diseases.
2. Food and Nutrition.
3. Chronic Non-Communicable Diseases.
4. Human Resource Development.
5. Gender and Violence.
6. Strengthening Health Systems.
7. Environmental Health.
8. Mental Health
9. Vector Control
10. Maternal and Child Health

PAHO's Policy on Research for Health

It is the desire of the Pan American Health Organization that a national health research system be found in every country in the Americas and that the evidence of research should constitute the cornerstone for all activities aimed at attaining the highest level health and equity. This policy should be an overarching policy that will underpin all of PAHO's work that will attempt to integrate research into other PAHO policies, strategies and action plans aimed at addressing regional needs and strengthening countries essential public health functions. The policy will also help to harmonize, align and facilitate the implementation of major global research strategies in the region of the Americas. Some of the benefits that that any country will derive from having a national health research agenda include:

- Increased awareness of and access to methodologies for setting national priorities to address their most pressing health problems.
- Access models of strong regulatory framework and structures, including the use of available tools to register and follow research projects systematically and ensure adherence to the highest ethical and quality standards for research.
- A national workforce capable of conducting research and using it to inform the development of health policy.
- Improved production, use and communication of reliable, relevant and timely evidence and information.

In essence a robust national health research system will facilitate the creation and enhancement of a strong multisectoral and multidisciplinary teams in the investigation of issues that are of national interest. In addition countries and institutions will be able to me more effectively engage with external research institutions and partners in ways that will advance their national agendas and to make more efficient use of limited resources and it will strengthen PAHO's leadership role in influencing the regional research for health agenda. The fundamental importance of research for the World Health Organization is reflected in its constitution, in the eleventh General Programme of Work, 2006-2015

Goal

To develop a National Health Research Agenda that will clearly identify priority areas and guide research nationally and to facilitate the achievement of health-related development goals and improve the health outcomes of the Guyanese population.

Objectives

1. To identify areas for research that should be given high priority nationally
2. To identify critical gaps and prepare a health research agenda that can be adapted or adopted by all the national stake holders.
3. To fill gaps in the availability of locally relevant research evidence to inform health policies, intervention programs and practices at the national level.
4. To promote the generation of relevant, ethical and quality research.
5. To serve as a guide to researchers and funding agencies indicating the current priorities of the Caribbean.
6. To strengthen research governance and promote the definition of research agendas
7. To improve competencies and support for human resources involved in research.
8. To foster best practices and enhanced standards for research.
9. To promote the dissemination and utilization of research findings

Rationale

The need for a national unified health research agenda for Guyana was conceptualized by the PAHO/WHO in collaboration with the Ministry of Health as an extension of the Caribbean Health Research Agenda that has been formulated by the Caribbean Health Research Council. This national unified health research agenda will consolidate the efforts of the various public and private agencies particularly the Ministry of Health, the University of Guyana, the Georgetown Public Hospital, the Ministry of Human Services and other private and non-government organizations.

The national unified health research agenda is expected to serve the needs of the population, particularly the underprivileged, the disadvantaged and those with special

needs. Results of the researches identified in the agenda are expected to provide evidence for critical policy actions that should change behavior and the dynamic interactions of players in the health system. The results of these researches will lead to the improvement of health outcomes and equitable delivery of health services, ensuring availability of quality health products, facilities and services, and the development of safe, affordable, accessible world-class health technologies/ products. Moreover, the research agenda also seeks to address concerns to promote and enhance the observation of health research ethics and the development of a functional health information system.

Background Information and Health Situation

Guyana covers an area of 215,000 km² and is located along the northeastern coast of South America. The Country has a tropical climate with almost uniformly high temperatures and humidity and much rainfall that usually create floods along the coast and some interior locations, hence creating the environment for vector borne illnesses, such as malaria and dengue fever.

The country is divided into 10 administrative regions with Regional Democratic Councils responsible for the delivery of services to their catchment population. Four of the ten administrative regions (2, 4, 6 and 10) have urban centres. Housing over the last few years has become increasingly modernized. Guyana is rich in natural resources; its economy is based on agriculture (primarily sugar and rice), gold, bauxite and timber.

The estimated population according to the 2002 census is 751,223 in which the majority lives along the coast line with smaller groups scatter in the interior, consist of various ethnic groups with East Indians accounting for 43.4 %, descendants of Africans 30.2 %, Mixed 16.7 % and Amerindians 9.2 %. Females accounted for some 49.5 % of the total population, and for 55% of the population over age 60. Approximately 28.4. % of the population lives in urban areas, and of the 71.6% that live in rural and coastal areas. The crude birth rate is 23.2. The crude death rate remained nearly constant 6.6. Life expectancy at birth is 67. Health Expenditure consists of 5.5 % of the gross domestic product.

There has been some amount of improvement with regards to delivery of health care, 96 % of all births are conducted by skilled personnel, and there is 98 % immunization coverage for the preventable diseases. There are 21 doctors and 12.6 nurses per 10,000 of the population. The country has a total of 380 health institutions, consisting of health post, health centres, district hospitals, private hospitals, national hospitals, geriatric hospital and rehabilitation centre and diagnostic centres. There are also 21 beds per 10,000 of the population.

The major cause of mortality among children under 5 includes diarrhoeal diseases, malaria, severe infections, birth asphyxia, congenital abnormalities, pneumonia and injuries with an overall mortality rate of 17.3 per1000 live births.

The major causes of death for all ages are ischaemic heart disease, vascular disease, neoplasms diabetes mellitus, HIV/AIDS, hypertensive disease, suicide, heart failure, acute respiratory infections, cirrhosis, land transport accidents and assault or homicide. With regards to mortality by region, neoplasm has been recorded as the major cause in regions 1, 7 and 10, diabetes in region 9, cerebrovascular accidents in regions 3, 5 and 8 and Ischaemic heart disease in regions 2, 4 and 6. With regards to mortality by ethnicity, neoplasm has been recorded as the major cause among Portuguese, persons of African origin and Amerindians, Ischemic heart disease for persons of East Indian origin and acute respiratory infections among Europeans. Overall Non-communicable chronic diseases accounts for 74.1 %, communicable disease 13.2 % and injuries 12.7 % for all deaths

There are a number of agencies have regulatory responsibility for food quality particularly the six municipalities that have the responsibility by laws to monitor food processing and food service sectors in their respective areas.

There are a number of disease prevention and control programs: The priorities include maternal and child health, the Expanded Program on Immunization (EPI), HIV/AIDS and other STIs, malaria, and chronic non-communicable diseases. The Epidemiology Division of the Ministry of Health has overall responsibility for disease surveillance.

Drinking water coverage in all areas of the country is estimated to be 70% with 54% of households having piped water, quality remains an issue. Sanitation coverage throughout the country has been estimated at 90%, there is a constant increase access having access to flush systems and hence a decrease in the use of pit latrines. There are problems with solid waste management especially in the municipalities.

The Environmental Health Department, within the Ministry of Health, is responsible for ensuring that proper standards are maintained by the food protection and control services at the regional level.

Food supplements are distributed to pregnant women and young children attending public health clinics in selected high-risk communities. A number of community-based organizations are involved in implementing on-site feeding programs.

Health Research Publication and Funding.

Health research in Guyana is still in its developmental stage. Although there have been efforts to improve the health research situation in the country since the 90s, developments have been sluggish because of waning financial, logistic and political support from major stakeholders.

Available information from various sources reveals that there are several hundred or more research projects conducted to date. However, even though a significant amounts of these projects were within the ten priority areas identified , very little has been published and been made available for the formulation of policies.

The key stake holders who attended the workshop felt that a significant amount of research projects have been conducted in the area of non-communicable diseases and in some areas of communicable disease particularly in the field of HIV/AIDS and to a lesser extent tuberculosis and malaria. The research findings in the area of HIV/AIDS, malaria tuberculosis, malaria, nutrition and chronic non communicable diseases have been presented at conferences such as the Caribbean Health Research Council and other national and international conferences, several papers have also been published in the West Indian Medical journal in addition to international journals such as the International Journal of Diabetes and Metabolism and the Canadian Journal of Infectious Diseases, the Cajanus, other PAHO/Who Publications among others at the national, regional and then the international level.

With regards to the area of food and nutrition the perception is that even though some amount of research is done much more needs to be done. All the other areas namely, maternal and child health, vector control, human resource management, gender and violence, environmental health, and mental health, very little or no research has been done.

With regards to funding the only areas that has received significant amounts for funding within recent time, are within the within the area of communicable disease, are HIV/AIDS, malaria and to a lesser extent tuberculosis. Some amount of funding has been made available for some non communicable diseases, such as diabetes mellitus and food and nutrition and to a lesser extent gender base violence. Little or no funding has been made available for the other areas.

The Countries that invested has yielded significant increase in international funding

Generally the chronic deficiency in research and publication in the area of health, may be due to the lack of collaboration among stake holders, the scarcity of research funds and different donor or personal research interests. Of the researches conducted, quite a few were on communicable diseases. There was also a considerable proportion of

researches devoted to nutrition, health concerns of vulnerable populations and metabolic, degenerative and lifestyle related disorders and herbal medicine.

An assessment of significant amounts of the research conducted reveals that the quality of research still cannot be fully assessed because of lack of information. There is very little or no observable consistent information showing the relationship between health research production and health gains improvement.

Health researchers are still concentrated in the National Capital or Urban Regions where majority of academic institutions offer related degree programs and where medical centers and research centers and more research mentors are located. A substantial proportion of health researchers are in the clinical sciences because of the predominance of researchers with medical degrees. Research capabilities are mostly in the clinical sciences rather than in the health social sciences, basic sciences and advanced sciences like biotechnology.

In addition, many health research institutions still do not have institutional ethics review boards or do not have members with appropriate training in health research ethics.

Health research funds are still not being given a priority except for areas such as HIV/AIDS. A review of health funding reveals that majority of health research funds are provided for system or operations research by international donors for special projects, while other priorities such as communicable and non communicable diseases and fundamental have attracted little or no funding. Moreover, funds and resources are still hardly adequate to support health research, capacity development for health research, support for facilities improvement, and the provision of awards and incentives for health research. These deficiencies and gaps should be addressed with the formal establishment of a national research agenda. The University of Guyana operates a Research and Publication Committee out of its Registry. This committee review and approves funding for research projects within the University.

Ethical Review Board

There is a fully functional National Ethical Review Board/Research and Ethics Committee that is located within the Ministry of Health. The secretariat of this board operates out of the office of the Chief Medical Officer. The Board meets on the second Saturday of every month. Researchers are asked to submit their research protocols at least 14 days before in order to give the members of the Board adequate time to review the proposals. Once proposals are deliberated and approved, researchers are informed in writing within the shortest possible time.

Recently there has been the establishment of a local chapter of Caribbean Bioethics Society and proposal is being formulated for Ethics Committees at the University of Guyana and the Georgetown Public Hospital.

Human Resource Development

In order to support the implementation of this national research agenda there should be a number of training programmes in the form of workshops and short courses in the following areas involving researchers and support personnel from all of the key institutions.

- Basic Epidemiology and Statistics
- Training in the use of Epi Info software for data entry and analysis.
- Training in project proposal writing
- Training in research ethics
- Training in data entry , analysis and report writing
- Training in survey methods
- Training in disease surveillance
- Training in survey methods
- Upgrading of the laboratory support staff in the relevant areas.

Training of human resources for research should be coordinated with a training plan at a national level that meets the specific needs of the education institutions, the ministries, the health institutions and civil society. Training through virtual mechanism should be explored in order to reduce cost. The research curricula at the training institutions should include topics such as methodology and research management, bioethics, communication techniques and scientific writing.

Framework for Consultations

Activities

1. A Questionnaire using a modified version of the Delphi Methodology was circulated to all key stake holders to determine the priority areas for research nationally. Delphi Method can be defined as the use of an interactive process to achieve consensus or expert opinion where a problem does not permit the application of precise analytic techniques but can benefit from subjective judgment on a collective basis.
2. These Stake Holders were invited to a workshop where the information gathered from the questionnaire formed the basis for the discussions
3. Final Report outlining the Research Agenda for Guyana

The Steps involved in the Delphi Methodology include: (Modified)

1. Development of the Delphi Questionnaire
2. Transmission of the Questionnaire to all the key stakeholders
3. Analysis of the Questionnaire

4. Hosting of a face to face workshop with the key stakeholders
5. Final Report circulation of the results
6. Follow up and implementation of Research Agenda for Guyana

To arrive at a set of priorities in the workshop or round table discussions, participants in the consultations were assigned to designated groups. In each group, Participants recommended research topics that were later rated by the whole group using the Delphi Questionnaire.

National Health Research Priorities

Below are the 10 areas of national research priorities with their sub-headings that has been agreed upon with **1** being the one the highest priority.

1. Communicable Diseases

2. Dengue
3. Acute Respiratory Infections (viral and bacterial)
4. Acute Diarrhoeal Diseases (Salmonella, Rotavirus, E.Coli)
5. Sexual Transmitted Infections
6. Lymphatic Filariasis
7. Hansen's Disease
8. Leishmaniasis and Chagas Disease
9. HTLV/ Hepatitis
10. Malaria
11. HIV/AIDS Tuberculosis

2. Food and Nutrition

1. Dietary patterns of High Risk population
2. Malnutrition
3. Micronutrient studies
4. Food Consumption
5. Food Safety
6. Food –Borne Illnesses
7. Food availability
8. Food Economics
9. Diet and Chronic diseases
10. Nutrition and HIV/AIDS

3. Chronic Non-Communicable Diseases.

1. Risk factors for chronic non-communicable diseases
2. Management of Diabetes and its complications
3. Management of Hypertension and Strokes
4. Management of Ischaemic Heart Diseases
5. Neoplasm (Breast, prostate, pancreas, cervix)
6. Haematological disorders
7. Haemoglobinopathy
8. Asthma
9. Chronic Digestive Diseases (peptic ulcers)

4. Human Resource Development.

1. Human resource planning
2. Succession Planning
3. Continuous and specialized training
4. Retention and rewards
5. Recruitment
6. Motivation
7. Relevance of training in key and critical areas
8. Management development
9. Rotation Management

5. Gender and Violence.

1. Socioeconomic causes and impact
2. Socio-cultural factors
3. Legislation and support systems
4. Contributing factors Sources of violence
5. Violence against women, children, men, and the disabled
6. Epidemiology of violence
7. Complications of gender base violence

6.Strengthening Health Systems.

1. Governance, acts statues and policies
2. Decentralization
3. Donor Support programmes
4. Operational Management
5. Procurement
6. Financial accountability
7. Unit Satisfaction
8. Physical Infrastructure
9. Strategic Information

7.Environmental Health.

1. Climate Change and the environment
2. Solid waste management
3. Environmental Pollutants
4. Waste water management
5. Potable water supply
6. Inspection
7. Building code regulation
8. Health education health promotion
9. Zoonotic diseases
10. Foodborne Illnesses

8.Mental Health

1. Substance Abuse
2. Suicide
3. Depression
4. Mental Health Disorders
5. Support Services
6. Gender dimensions
7. Cultural Dimension

9.Vector Control

- 1.Climate Change and vectors
- 2.Mapping of vectors distribution
- 3.Insecticide Resistance
- 4.Social Ecology
- 5.Knowledge Attitudes and Practices in relation vector borne illnesses.
- 6.New and emerging vectors
- 7.Vector Control
- 8.Monitoring and evaluation

10.Maternal and Child Health

1. Epidemiology of Congenital malformations
2. Genetic factors associated with congenital malformations
3. Pregnancy Induced Hypertension
4. Teenage pregnancy
5. Substance Abuse
6. Anemia
7. Malnutrition
8. Infant and young child nutrition
9. Maternal nutrition
10. Adolescent Health

Conclusion

The development of a national Health Research Agenda should be understood as a gradual and complex process that involves the effective participation of all sectors of society and stakeholders, and requires an environment of trust. There must be the political will to support such a venture, since the country will benefit significantly from this process. The formulation of this agenda involved the participation of civil society, the academic institutions and the Ministry of Health. A national health research agenda without the relevant financial support is doomed to remain underdeveloped. In addition to public funding there must be concerted efforts to attract research grants from donor agencies in the form of collaboration with other academic institutions. It is critical to advocate for increasing incentives towards research in order for research to progress in and contribute towards national development. The world of health is one of the most

dynamic and productive sectors in terms of the bulk of scientific knowledge and the speed of its production. Knowledge translation to be used by decision makers, policy makers and the general public is a complex but critical task and should be part of a national plan of dissemination of research results.

Annex

Delphi Questionnaire (Modified)

Instruction:

- 1. Please fill in your responses for questions 1 through 9 in the text box provided.**
- 2. Please answer “Yes”, “No” or “Don’t Know” to parts a, b and c of questions 1-9.**

Name:

Institution:

Position:

Date:

The information collected above will be treated confidentially. Your contribution to the process

Will be acknowledged; however, individual answers will not be divulged.

1. Communicable Diseases

From your perspective:

A. Is there enough and adequate research conducted in Guyana to support the Implementation of programs to address issues of communicable diseases

b. Has the evidence on the topic, derived from performed research been Used extensively to support the implementation of programs or re-definition of Actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and How important would you rate such research (on a scale of 1-10; with 10 being the Most important and relevant) to address the sub-priority area of communicable diseases

List no more than **10 topics**.

.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.

10.

*Additional
Comments:*

2. Chronic Non Communicable Diseases

From your perspective:

A. Is there enough and adequate research conducted in Guyana to support the Implementation of programs to address issues of non communicable diseases

b. Has the evidence on the topic, derived from performed research been Used extensively to support the implementation of programs or re-definition of Actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and How important would you rate such research (on a scale of 1-10; with 10 being the Most important and relevant) to address the sub-priority area of non communicable diseases

List no more than **10 topics**.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.

- 5.
- 6.
- 7.
- 8.

- 9.

- 10.

*Additional
Comments:* _____

3. Food and Nutrition

From your perspective:

A. Is there enough and adequate research conducted in Guyana to support the Implementation of programs to address issues with regards to food and nutrition?

b. Has the evidence on the topic, derived from Guyana performed research been Used extensively to support the implementation of programs or re-definition of Actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and How important would you rate such research (on a scale of 1-10; with 10 being the Most important and relevant

List no more than **10 topics**.

*Additional
Comments:* _____

4. Human Resource Development

- a. is there enough and adequate research conducted in Guyana to support the Implementation of programs to address the area of food security and food safety?
- b. Has the evidence on the topic, derived from Caribbean performed research been used extensively to support the implementation of programs or re-definition of actions?
- c. Is the amount of funds for these research topics sufficient?
- d. If more research is needed, what research topics would you find most relevant and how important would you rate such research (on a scale of 1-10; with 10 being the most important and relevant to address the sub-priority area of Food Security?

List no more than **10 topics**

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Additional Comments: _____

5. Gender and Violence

From your perspective:

a. is there enough and adequate research conducted in Guyana to support the implementation of programs to address issues of mental health?

b. Has the evidence on the topic, derived from performed research been used extensively to support the implementation of programs or re-definition of actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and how important would you rate such research (on a scale of 1-10; with 10 being the most important and relevant) to address the sub-priority area of mental health
List no more than **10 topics**.

.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

*Additional
Comments:* _____

6. Strengthening Health Systems

From your perspective:

a. Is there enough and adequate research conducted in Guyana to support the implementation of programs to address issues of Human Resource Development?

b. Has the evidence on the topic, derived from performed research been used extensively to support the implementation of programs or re-definition of actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and how important would you rate such research (on a scale of 1-10; with 10 being the most important and relevant) to address the sub-priority area of Human Resource Development

List no more than **10 topics**.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

*Additional
Comments:* _____

7. Environmental Health

From your perspective:

a. Is there enough and adequate research conducted in Guyana to support the implementation of programs to address issues of Gender and violence?

b. Has the evidence on the topic, derived from performed research been used extensively to support the implementation of programs or re-definition of actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and how important would you rate such research (on a scale of 1-10; with 10 being the most important and relevant) to address the sub-priority area of gender and violence
List no more than **10 topics**.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.

- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

*Additional
Comments:* _____

8. Mental Health

From your perspective:

a. is there enough and adequate research conducted in Guyana to support the implementation of programs to address issues of strengthening health systems?

b. Has the evidence on the topic, derived from performed research been used extensively to support the implementation of programs or re-definition of actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and how important would you rate such research (on a scale of 1-10; with 10 being the most important and relevant to address the sub-priority area of strengthening health systems.

List no more than **10 topics**.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Additional

Comments: _____

9. Vector Control

From your perspective:

a. Is there enough and adequate research conducted in Guyana to support the implementation of programs to address issues of environmental health ?

b. Has the evidence on the topic, derived from performed research been used extensively to support the implementation of programs or re-definition of actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and how important would you rate such research (on a scale of 1-10; with 10 being the most important and relevant) to address the sub-priority area of environmental health
List no more than **10 topics**.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Additional

Comments: _____

10. Maternal and Child Health

From your perspective:

a. Is there enough and adequate research conducted in Guyana to support the implementation of programs to address issues of mental health ?

b. Has the evidence on the topic, derived from performed research been used extensively to support the implementation of programs or re-definition of actions?

c. Is the amount of funds for these research topics sufficient?

d. If more research is needed, what research topics would you find most relevant and how important would you rate such research (on a scale of 1-10; with 10 being the most important and relevant) to address the sub-priority area of mental health
List no more than **10 topics**.

Research Topic Rating (1-10)

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Additional

Comments: _____

Participants List

DATE: OCTOBER 20, 2010

VENUE: REGENCY SUITES/HOTEL

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