



WORLD **DIABETES** FOUNDATION

**Caribbean Chronic Care Collaborative: Improving the Quality of
Diabetes Care
International Learning Session I
Grand View Hotel, Grenada, December 18-19, 2008**

Contact Information:

Alberto Barceló
Regional Advisor
Unit of Non Communicable
Diseases
Pan American Health
Organization
Washington DC
barceloa@paho.org
Phone 202-9743589
Fax 202-9743632

Enrique Perez Flores
Project Officer
Unit of Non Communicable
Diseases
Pan American Health
Organization
Washington DC
perezenr@paho.org
Phone 202-9743622
Fax 202-9743632

Aim:

Develop a plan to implement a quality of diabetes care improvement strategy in the Caribbean

Objectives:

Review the status of diabetes care in the Caribbean;
Review methodological details including the Chronic Care Model, the Breakthrough Series, and the Assessment of Chronic Illness Care (ACIC) tool;
Develop a plan for health provider training on different aspects of diabetes management following the Caribbean Health Research Council Guidelines; and
Develop an intervention plan for quality of diabetes care improvement.

Participants:

National teams from participating countries (Antigua and Barbuda, Anguilla, Barbados, Grenada, Guyana, Jamaica, St Lucia, Trinidad and Tobago, and Suriname) and selected faculty members.

Regrets:

The Belize team was unable to attend

Location:

Grand View Inn
P.O.Box 614

St. George's
Grenada/W.I

Tel.: (473) 444 4984 / 2342; Fax : (473) 444 1512

Web site: <http://www.grenadagrandview.com/index.htm>

Email: gvinn@spiceisle.com

Requirements

National teams were requested to review the background material and prepare a poster showing the status of diabetes care and ongoing activities in the area of diabetes. Posters were displayed during the learning session.

Background Material:

- **Required Readings**

Wagner EH, Glasgow RE, Davis C, Bonomi AE, Provost L, McCulloch D, Carver P, Sixta C. Quality improvement in chronic illness care: a collaborative approach. *Jt Comm J Qual Improv.* 2001 Feb;27(2):63-80.

Pan American Health Organization. Veracruz Project for the improvement of Diabetes Care (VIDA). FINAL REPORT. Unpublished, 2008.

- **Other Readings**

Bobb A, Gale D et al. The impact of the chronic disease assistance plan (CDAP) on the control of type 2 diabetes in Trinidad. *Diabetes Res Clin Pract.* 2008 Jun;80(3):360-4. Epub 2008 Apr 14.

Bonomi AE, Wagner EH, Glasgow RE, VonKorff M. Assessment of chronic illness care (ACIC): a practical tool to measure quality improvement.

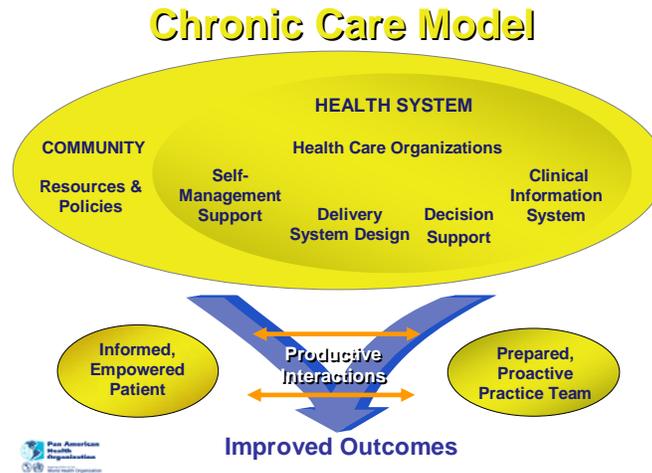
Duff EM, et al. Self-care, compliance and glycaemic control in Jamaican adults with diabetes mellitus. *West Indian Med J.* 2006 Sep;55(4):232-6. *Health Serv Res.* 2002 Jun;37(3):791-820.

Mahabir D, Gulliford MC. Changing patterns of primary care for diabetes in Trinidad and Tobago over 10 years. *Diabet Med.* 2005 May;22(5):619-24. <http://www3.interscience.wiley.com/cgi-bin/fulltext/118699984/PDFSTART>

Pan American Health Organization. Final Report: Institutional Response to Diabetes and Its Complications (IRDC)—An Evaluation of the Quality of Diabetes Care <http://www.paho.org/english/ad/dpc/nc/dia-irdc-final-rpt.pdf>

Workshop Summary

Guiding and Supporting National Quality Improvement Initiatives for Diabetes in Less Well Served Parts of the World: A proof of Concept Project in the Caribbean.



In keeping with the protocol of the Guiding and Supporting National Quality Improvement Initiatives for Diabetes in Less Well Served Parts of the World: A proof of Concept Project in the Caribbean members of national Diabetes team from nine Caribbean countries participated in first international learning session of the project which was held on December 18th -19th , 2008, in Grenada.

During the course of the meeting country representatives were introduced to the Chronic Care Model (on which the project was developed) in detail along with several other tools that are available for the evaluation of care in clinical settings (including a chart review, interviews, and cost analysis), diabetes registries as a tool to improve clinical care, the Diabetic Care Pathway and the Quality Improvement Cycles. Examples of interventions utilized in Central American countries (Mexico, Guatemala, El Salvador, Costa Rica and Nicaragua) to improve the quality of their diabetes care (e.g.clinical information systems, training in foot care, education and capacity building) were also presented. Countries and territories outlined their tentative strategies for intervening and established timelines for the interventions.

According to the protocol of the project leaders of national diabetes team will be tasked with implementing an assessment of national diabetes care will be undertaken within each country using the questionnaire devised by the World Health Organization (National Capacity Survey for Chronic Diseases, focused on diabetes) attached. The survey will provide an overview of key aspects of the health care system with respect to diabetes. Persons in charge

of national teams are responsible for carrying out these baseline assessment, with the technical support of the PAHO NCD Advisor.

National diabetes teams should then implement a quality of diabetes care improvement intervention. This intervention consist in three learning sessions that will include training of health providers to improve the quality of care based in selected priorities followed by three action period. The learning session will consist in training, priority selection and planning. During the action periods the teams will carry activities to improve diabetes care. The intervention can be monitored using one or various tools that were provided during ILS-1, such as the Patient Record Card, the Assessment of Chronic Illness Care (ACIC) questionnaire, the Pan-American Sentinel Surveillance or the diabetes registry (CDEMS). The selected tool should be applied before the first action period and after the third and last action period.

National teams should meet periodically to plan and evaluate the national strategy to implement the interventions.

During the first learning session, national teams will train the local teams (teams in the primary health clinics etc) in the Caribbean Health and Research Council's Guidelines for the Management Diabetes Mellitus in Primary Care in the Caribbean and discuss with the local teams the other interventions (e.g. training for providers and patients in footcare, education of patients and providers etc.) which will be implemented to improve the quality of Diabetes care in participating countries. The Pan American Health Organization can provide faculty members (experts in Diabetes Mellitus) to assist countries with the training component. During the learning sessions health providers will select priorities for the quality improvement project and will present results of activities.

National team are suggested to implement Quality Improvement Cycles of Plan- Do-Study-Act (PDSA) during the action periods to achieve the desired changes identified during the learning sessions, share information with each other and have the opportunity to contact the experts to clarify any concerns and receive technical assistance. The identified local coordinators will be responsible for summarize information for the evaluation of teams. The leaders of the collaborative will begin to prepare the report which will be shared with other members of the local and national team. The report will include the goals, performance measures, summaries of the PSDA cycles that have been carried out, monitoring forms and the self evaluation of achievements. Together with the faculty members, the teams will prepare for the second and third learning session which will be scheduled later in the year. Detail list of priorities identified by country participants is presented in Table 1. A list of country teams is presented in Annex 1. Annex 2 presents a description of faculty functions and a list collaborators across the Caribbean. Annex outlines available abstracts of relevant articles.

TABLE 1: AREAS FOR INTERVENTION (BASED ON IDENTIFIED WEAKNESSES BY COUNTRY)

COUNTRY	AREA OF THE CHRONIC CARE MODEL					
	Self Management Support	Delivery System Design	Decision Support	Clinical Information System	Organization of Health Care	Community
Anguilla			Guidelines and protocols.	Registries. Monitoring.		
Antigua and Barbuda	Education programs for families.		Guidelines and protocols. Foot care.		Specialist: Ophthalmologist and pediatrician	
Barbados			Training on diabetes care. Standardization of guidelines. Auditing private practice.			
Grenada		Inclusion of A1C and lipids.	Guidelines and protocols. Standardization of guidelines in private sector.		Overcrowded clinics.	
Guyana			Training on use of guidelines.	Monitoring and evaluation.		
Jamaica	Education programs for patients	Improve labs capacity.	Guidelines and protocols.	Inadequate system.		
St Lucia		Documentation of care.	Training on diabetes care.	Integration of data.		
Suriname					Multiple roles of personal.	
Trinidad			Criteria for using insulin. Standards of care for eye and kidney.			

Meeting Agenda

Thursday, December 18, 2008

8:00-8:30	Registration
8:30-8:45 AM	Welcome, Representative from the Ministry of Health of Grenada
8:45-9:00 AM	Learning Session Introduction, Dr. Alberto Barceló, Regional Advisor, PAHO
9:00-9:45 AM	Diabetes Care in the Caribbean. Dr. Carlisle Goddard, UWI Cave Hill, Barbados.
9:45-10:00 AM	Questions and Answers
10:00-10:30 AM	An International Perspective of Diabetes Care, Dr. C Saudek, John Hopkins University
10:30-10:50 AM	Coffee Break. Visit to Posters.
10:50-11:15 AM	Questions and Answers
11:15 AM-12:30 PM	Diabetes and the process of primary care in the Caribbean (interventions by country representatives). Moderator: Dr. Carlisle Goddard, UWI Cave Hill, Barbados.
12:30-2:00 PM	Lunch
2:00-2:30 PM	The Chronic Care Model, Judith Schaefer, McCall Institute
2:30-2:45 PM	Questions and Answers
2:45-3:15 PM	The use of Registries to monitor diabetes care. Cecil Pollard., West Virginia University
3:15-3:30 PM	Questions and Answers
3:30-3:45 PM	Coffee Break
3:45-5:00 PM	Strengths and weaknesses of diabetes care in the Caribbean. Selecting priorities for quality improvement (Working groups coordinated by Shirley Alleyne)

Second Day: Friday, December 19, 2008

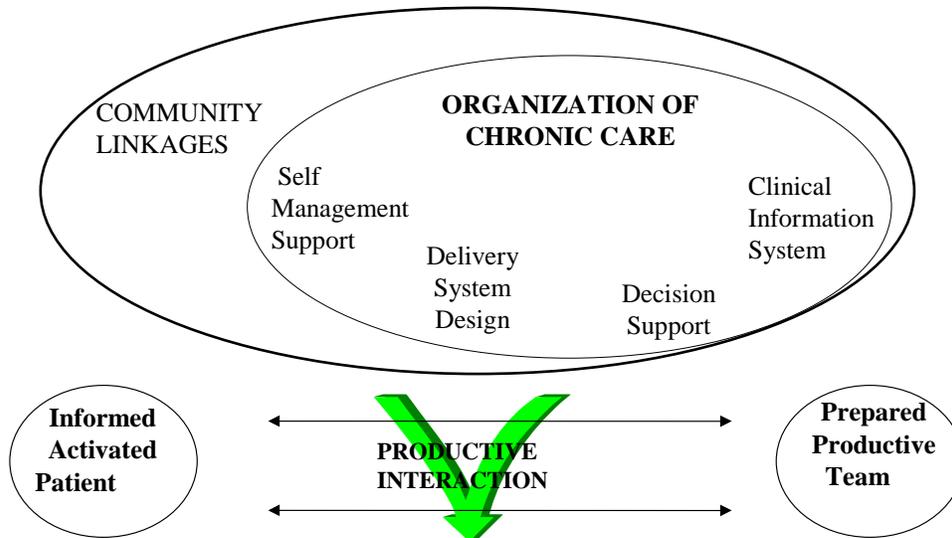
8:30-9:30 AM	Review of results of working groups. Enrique Perez Flores, PAHO, Washington DC
9:30-10:00 AM	Assessment of Chronic Illness Care, Judith Schaefer, McCall Institute
10:00-10:30 AM	Questions and Answers
10:30-10:45 AM	Coffee Break
10:45-11:15 AM	Diabetic Care Pathways, Dr. H Taylor, John Hopkins University
11:15-12:00 AM	Questions and Answers
12:00-12:30 AM	Quality improvement cycles, Alberto Barceló, PAHO
12:30-2:00 PM	Lunch
2:00-2:30 PM	Questions and Answers
2:30-3:45 PM	Working Groups: Planning for Quality of Care Improvement Site selection Identifying priorities Monitoring Intervention plan
3:45-4:45 PM	Plenary Session: An agenda for quality of diabetes care improvement in the Caribbean, Coordinated by Alberto Barceló, PAHO
4:45-5:00 PM	Conclusions. Adjourn

Presentation Summaries

The Chronic Care Model Presented by Alberto Barceló

The Chronic Care Model¹

CHRONIC CARE MODEL



FUNCTIONAL AND CLINICAL OUTCOMES

The Chronic Care Model calls attention to the need for systems change if patient outcomes are to be improved. These system changes are ultimately intended to bring about the development of informed, activated patients and prepared, proactive practice teams. Productive interactions between activated patients and prepared practice teams increase the likelihood of optimal functional and clinical outcomes (see Figure 3). In this model, there are six focal areas for improving chronic care:

1. Health System: Organization of Care:

Health care systems can create an environment in which organized efforts to improve health care for chronic illness take hold and flourish. Critical elements include a coherent approach to system improvement, leadership committed to and responsible for improving clinical outcomes, and incentives to providers and patients to improve care and adhere to guidelines (including non-financial incentives such as recognition and status).

2. Community: Resources and Policies:

¹ Wagner EH, Glasgow RE, Davis C, Bonomi AE, Provost L, McCulloch D, Carver P, Sixta C. Quality Improvement in Chronic Illness Care. A Collaborative Approach. J Quality Improvement 2001;27(2):63-80.

The performance of health care systems can be improved if linkages are made to community resources relevant to effective diabetes care. These linkages may be made through resource directories, referral paths and joint programs. Community resources that support care for diabetes, including both governmental programs and programs of community-based voluntary organizations, are needed to augment health care services, but health care organizations are often poorly organized to make use of existing community programs or to stimulate their development.

3a. Self-Management Support

Effective self-management support helps patients and families cope with the challenges of living with and caring for chronic conditions in ways that minimize complications, symptoms and disability. Successful self-management programs rely on a collaborative process between patients and providers to define problems, set priorities, establish goals, create treatment plans and solve problems along the way. The availability of evidence-based educational skills training and psychosocial support interventions are key components of a delivery systems self-management support structure.

3b. Decision Support

Effective chronic illness care programs operate in accord with explicit guidelines or protocols, preferably evidence-based guidelines, whose implementation is embedded in routine practice supported by reminders, effective provider education, and appropriate input and collaborative support from relevant medical specialties.

3c. Delivery System Design

Effective chronic illness care requires more than simply adding additional interventions to an existing system focused on acute care. Rather, it necessitates basic changes in delivery system design. Effective diabetes care often requires clear delegation of roles and responsibilities from the physician to other professionals who are full part of the caring team (e.g. nurses, health educators) and who have the knowledge and time to carry out the range of tasks required to manage complex chronic conditions. Effective diabetes care also implies the use of planned visits, continuity of care and regular follow-up.

3d. Clinical Information Systems

Timely information about individual patients, and populations of patients, with diabetes is a critical feature of effective programs, especially those that employ population-based approaches. The first step is to establish a disease registry for individual practices, which includes information about the performance of important elements of care. Health care teams that have access to a registry can call in patients with specific needs and deliver planned care, can receive feedback on their performance, and can implement reminder systems. The model has been successfully used to improve care of chronic conditions such as diabetes, asthma, congestive heart failure, depression and geriatrics in more than 300 health care organizations in USA.

Chronic Disease Registry Project: Summary.
Presented by Cecil Pollard, West Virginia University

My presentation to the PAHO Caribbean Chronic Care Collaborative: Learning Session One was entitled the West Virginia Chronic Disease Registry Project (WVCDRP). The presentation covered the basics for the project, lessons learned from other efforts, overview of our Diabetes Prevention and Control Program, basic results of our efforts, and some of our future plans.

Previous experience from working with the provider community taught us several things. One, provider education is rarely sufficient to create change in practice patterns. Two, physicians are reluctant to attend training that requires travel and closing practice. Three, providers like to see, and will use, current data about their practice.

The remainder of the presentation discussed how we worked with community health centers to provide education to providers and staff, how we implemented and used registries, how that data is used, and discussion of some of the results from our efforts to improve patient care.

The WVCDRP is an integral part of a broader approach to preventing or reducing the burden of diabetes. There are two primary components to our efforts. The first component is the educational component and the second component is to establish registries and work with providers to use registry data. With the assistance of three chronic disease educators providers are kept apprised of the latest knowledge for treatment and control of diabetes. Targeted education is available for physicians, mid-level, and administrative staff. Through these efforts we assist community health centers to develop treatment teams to provide a full array of services and education to patients. Much of this education is delivered as part of professional continuing education and credit hours are often awarded. In addition to the “medical” education providers and staff are also trained to work with patients to enable patients to become enlightened patients that are self-motivated to improve life style and risky behaviors. Several different curricula are available to assist patient to improve their self management skills and to be better advocates for their care.

The second component, implementing and using registries is an extremely rewarding activity in light of the improvements we can document in patient care. We have improved the registry to the point that it is easily modifiable to almost any circumstance where a registry is desired. Innovations in the use of existing data and importing data have greatly decreased the amount of maintenance, data entry, which is required.

We recently had an article published (Journal of Rural Health, to be published this winter) on the use of CDEMS (Chronic Disease Electronic Medical System-the name of our registry). One of the key finds is that community

health centers that made the most use of our registry show significant improvement in certain patient clinical indicators over those sites that had minimal use of the registry. In addition, patient education, patient services, and documentation improved with more use of the registry.

Current and future endeavors will require the integration of electronic health records (EHR) with registry functions. We are currently working with several EHR's to assist in the integration. This is an essential activity because many, if not most, EHR's lack sufficient reporting tools.



TRINIDAD AND TOBAGO HEALTH SCIENCES INITIATIVE

Diabetes Outreach Program Presented by Henry Taylor, John Hopkins University

Executive Summary

Authored & Prepared by:

Johns Hopkins Diabetes Team

Dr. Christopher Saudek, MD

Dr. Henry Taylor, MD, MPH

Dr. Nadeen Hosein, M.D.

Dr. Rita Kalyani, MD

Mrs. Nancyellen Brennan, NP, CDE

Revised 1/09

EXECUTIVE SUMMARY

We are implementing a Diabetes Outreach Program that will address a major health need in Trinidad and Tobago (T&T). The world-wide epidemic of diabetes is, sadly, due to over-nutrition and under-activity. In T&T, the problem is more serious because diabetes is more prevalent and more severe in societies of African and East Indian descent. This epidemic is a financial as well as human crisis, and is especially difficult to address because diabetes requires grass-roots, one-by-one behavioral and medical intervention. The over-arching goals of the TTHSI Diabetes Outreach Program are to improve the health of people with diabetes in T&T, to build capacity for diabetes care, and to develop diabetes research and development in T&T.

- We will work to build capacity for diabetes care by promoting education at all levels (public, nursing, trainees, physicians), with lectures, public education programs, media and professional presentations.
- We will implement a clinical program that starts in two Regional Health Authorities (RHAs) (Eastern and Southwestern), extending over time to other RHAs of T&T. Success measures include 1) improved performance in meeting regional diabetes guidelines for process and outcome measures; 2) accessible data bases on status of diabetes care; 3) improved professional capacity and expertise of health care professionals; 4) better use of the specialized, expert care for complex cases. A research and development program in T&T will contribute important, high quality diabetes projects.

Our clinical program targets people with diabetes and evaluates their clinical status. A well trained core Diabetes Outreach Program staff applies point-of-care

technologies to efficiently determine patients' level of blood glucose control and whether they have no, minimal, moderate or severe diabetic complications. Low-tech measures such as blood pressure and foot exams are complemented by high-tech approaches such as digitally transmitted retinal photography. This evaluation and stratification of people with diabetes is absolutely essential because patients can be appropriately triaged into continued chronic, preventive care, more intense care or, rarely, emergency care. The core Diabetes Outreach Program staff will work in two models: in the ERHA, fixed model located in two permanent central sites (Sangre Grande and Rio Claro); in the SWRHA, teams will travel among health facilities throughout the RHAs.

Central features of the Diabetes Outreach Program activities include uniform evaluation approaches, uniform data collection, follow-up, and training of the local health care providers as well as patient education. The core will be hired through the RHA public health systems after interviewing selection by the TTHSI Hopkins staff. The core staff will be trained to be knowledgeable about diabetes, providing them with the equipment and consumables to conduct the evaluations, and computers and software to record the data in uniform, easily aggregated format. Finally, they will be trained in effective educational approaches for people with diabetes and health care staff. Ultimately, follow-up care will be by the T&T Health Center professionals, implementing recommended management guidelines. We will help them be in a position to do this.

The promotion of research and development is central to the TTHSI Diabetes Outreach Program. Data generated from the patient evaluations will promote health care delivery research useful to the nation in health policy planning: what is the cross-sectional state of diabetes and diabetes care in T&T? What are the most or least interventions? What progress is made over time? The TTHSI diabetes project will also promote research collaborations between T&T professionals and Johns Hopkins faculty. And it will allow development of new technologies that are useful in delivering health care.

The success of the program will depend on various partnerships, including with the Regional Health Authorities, the Ministry of Health, the Diabetes Association of Trinidad and Tobago, the Pan American Health Organization, the Trinidadian professional community and the national academic community.

Annex 1

Meeting Participants

Antigua & Barbuda

Dr. Oritta Zachariah, Medical Officer of Health

Ms. Juanita James, Chief Nutrition Officer

Mrs. Cleothilda Hampson, District Nurse/Midwife

Anguilla

Nurse Alma Hughes, Quality Assurance Officer - telephone number; 264-497-3042, email address - hughesaa@yahoo.com;

Dr. Renante Guinto, Internist - telephone 264-584-8336; email address: dr-guinto@yahoo.com;

Nurse Fay Thomas Astaphan - 264-4974420; email address : saefay@hotmail.com.

Barbados

Dr Kenneth S George - Senior Medical Officer

Mrs Larone Hyland - Health Promotion Officer

Mrs Claudette Casey - Deputy Chief Public Health Nurse

Belize

Dr. Aisha Andrewin, Ministry of Health
Lorraine Thompson, PAHO

Grenada

Dr. Christine La Grenade - Director of Community Health Services
E—mail clagzll@yahoo.com Telephone (473)440-2649
Mobile # (473)405-3209

Dr. Dolland Noel Consultant, Physician

E-mail min-healthgrenada@spiceisle.com
Telephone (473)440-2898
Mobile # (473)420-1416

Ms. Janet Sylvester Chief Community Health Nurse;
E-Mail: min-healthgrenada@spiceisle.com ;
Phone: 473-440-2640

Guyana

Dr. Shamdeo Persaud, Chief Medical Officer (Ag.), Ministry of Health
Dr. Janice Woolford, Maternal and Child Health Officer, Ministry of Health
Dr. Gumti Krishendat, Coordinator, Chronic and Non Communicable
Diseases, Ministry of Health

Jamaica

Dr. Tamu Davidson, Ministry of Health
Dr. Sandra Knight, Ministry of Health

St. Lucia

Jackie Joseph
email: jackiehcjoseph@gmail.com

Jacinta Prospere
Tel: 468-5342 (w), 450-3099 (h), 717-2456 (c)

Aisha Percil

Suriname

Dr Elizabeth Bergrraaf

Dr Lucien K. Kloof

Dr Nancy Von Wissebrook

Trinidad & Tobago

Terence Babwah, Ministry of Health
Emander Scobie, Eastern Region Health Authority

Annex 2



**Carlisle
Godard**



**Judith
Schaefer**



**Christopher
Saudek**



**Henry
Taylor**



**Cecil
Pollard**

The Faculty

The faculty is a group of diabetes experts who assist national and local teams in the development of the quality of care initiative. Faculty members also help in teaching and coaching participating teams. Faculty member should be recognized experts in different areas related to diabetes such as endocrinology, clinical management, diabetes education, foot care, cardiology, nutrition, physical activity, eye care, etc. Faculty member will be expected to mentor and advice national and local teams in their areas of expertise. In addition faculty members can provide advice for the development of the regional project, the design of educational material and analysis of data. Some of the faculty members can be selected for site visits, evaluation and monitoring of the progress of the development of national initiatives and the overall project. Faculty members should be able to work as volunteers or can assume the project functions as part of their duties at the university or agency. The project will cover faculty expenses related to traveling and participating in project related meetings.

Faculty

UWI Mona (Jamaica):

Errol Morrison (emorrisn@uwimona.edu.jm or errol.morrison@uwimona.edu.jm)

Terrence Forrester (terrence.forrester@uwimona.edu.jm)

Rainford Wilks (rainford.wilks@uwimona.edu.jm)

Dalip Ragoobirsingh (dalip.ragoobirsingh@uwimona.edu.jm)

CHRC:

Donald Simeon (dtsimeon@trinidad.net)

UWI Cave Hill (Barbados)

Anselm Hennis (ahennis@caribsurf.com),

Trevor Hassell (thassell@caribsurf.com) ,

Dr. Collette George,
Dr. Carlisle Goddard,
Dr. Michael Krimholtz

J Hopkins

Christopher Saudek (csaudek@jhu.edu)

Henry G Taylor (hgtaylor@jhspk.edu)

West Virginia University

Cecil Pollard

Annex 3

Abstracts of Relevant Articles

Diabetes Res Clin Pract. 2008 Jun;80(3):360-4. Epub 2008 Apr 14:
The impact of the chronic disease assistance plan (CDAP) on the control of type 2 diabetes in Trinidad.

Bobb A, Gale D, Manmohan S, Mohammed A, Seetahal F, Small P, Mungrue K.

University of the West Indies, Faculty of Medical Sciences, Department of Paraclinical Sciences, EWMSC Mt Hope, Trinidad and Tobago.

OBJECTIVES: (1) To measure the proportion of participants who used hypoglycaemic agents provided by CDAP only, for at least 6 months, and attained an HbA1c of $\leq 7\%$ (a measure of glycaemic control) and (2) to determine the attitudes and practices of patients and pharmacist in this new programme. **DESIGN AND METHODS:** The attainment of a glycosylated haemoglobin (HbA1c) concentration of $\leq 7\%$ in patients with type 2 diabetes mellitus was used as a measure of good glycaemic control. Consequently we measured the HbA1c in 208 subjects who satisfied the entry criteria. Two questionnaires were designed, pre-tested and administered to both patients and pharmacist in the programme to determine their attitudes and practices. **RESULTS:** Of the 208 eligible participants, 128 (61.5%) were well controlled, 94% of all participants were satisfied with CDAP and only 23.3% of participants experienced one or more minor side effect with the drugs used from CDAP. There were no significant differences between patients who were well controlled and poorly controlled with respect to gender, physical activity and diet. **CONCLUSION:** The study demonstrated that CDAP has impacted favorably on the control of type 2 diabetes mellitus in Trinidad, most participants were satisfied with the programme and there were no major adverse effects from the drugs used.

PMID: 18407368 [PubMed - indexed for MEDLINE]

Related Links

How well controlled are our type 2 diabetic patients in 2002? An observational study in North and Central Trinidad. [Diabetes Res Clin Pract. 2007] PMID:16889868

Validity of random blood glucose as a predictor of the quality of glycaemic control by glycated haemoglobin in out-patient diabetic patients at Kenyatta National Hospital. [East Afr Med J. 2002] PMID:12625691

Repaglinide : a pharmacoeconomic review of its use in type 2 diabetes mellitus. [Pharmacoeconomics. 2004] PMID:15099124

Classical cardiovascular risk factors in Trinidadian patients with type 2 diabetes mellitus are not influenced by the level of plasma glycaemia. [West Indian Med J. 2001] PMID:11993019

Effect of diabetes drug counseling by pharmacist, diabetic disease booklet and special medication containers on glycemic control of type 2 diabetes mellitus: a randomized controlled trial. [J Med Assoc Thai. 2005] PMID:16623018

West Indian Med J. 2006 Oct;55(5):330-3: **Knowledge, motivation and barriers to diabetes control in adults in Jamaica.**

Wint YB, Duff EM, McFarlane-Anderson N, O'Connor A, Bailey EY, Wright-Pascoe RA.

University of the West Indies School of Nursing, Department of Medicine, Faculty of Medical Sciences, University of the West Indies, Kingston 7, Jamaica.

In this descriptive study, individual structured interviews were conducted on a random sample of 35 men and 98 women from a population (n = 510) of clinic patients. Open questions sought to determine the extent of knowledge, motivation and barriers to lifestyle changes for control of diabetes mellitus (DM) in Jamaican adults. These were coded into themes and described. Other data were analysed using SPSS. Men (61.8 +/- 14.8 years) were older than women (54.9 +/- 13.7 years) and demonstrated less knowledge (p = 0.006). The respondents (71%) indicated the need for more education. Barriers to lifestyle changes and glycaemic control included a low education level (64%), inadequate knowledge (80%), lack of perceived risk (80.4%) and lack of self-monitoring (93%). Only 23% were controlled to HbA1c < or = 6.5%. The patients' reference to the physicians as a primary source of information indicated the need for a collaborative team approach, and the incorporation of diabetes education as an indispensable service at this clinic.

PMID: 17373301 [PubMed - indexed for MEDLINE]

Related Links

Self-care, compliance and glycaemic control in Jamaican adults with diabetes mellitus. [West Indian Med J. 2006] PMID:17249312

Dietary intake and barriers to dietary compliance in black type 2 diabetic patients attending primary health-care services. [Public Health Nutr. 2002] PMID:12020385

Barriers to control of blood glucose in diabetes mellitus. [Am J Med Qual. 2000] PMID:10680221

The DiGEM trial protocol--a randomised controlled trial to determine the effect on glycaemic control of different strategies of blood glucose self-monitoring in people with type 2 diabetes [ISRCTN47464659]. [BMC Fam Pract. 2005] PMID:15960852

Knowledge and beliefs regarding type 2 diabetes mellitus in rural Mexico. [Ethn Health. 2003] PMID:14660126