

# Diabetes mellitus

## *A Grassroots Intervention*

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[[My:Company]]

# Quality of Life

- **Swings in blood**
  - sugar levels
  - acid levels (ketones, lactate)
- **Infections**
  - bacterial and fungal
- **Pain of**
  - neuropathy
  - musculoskeletal
- **Depression**

# **LAY DIABETES FACILITATOR**

## **Jamaica**

**Programme presented at World Expo  
2000 in Hannover, Germany**

**Acclaimed:**

**‘A Solution of the Future for Chronic Diseases’**

# **LAY DIABETES EDUCATION**

## **(LAY DIABETES FACILITATORS TRAINING PROGRAM)**

- **AIM:** TO TRAIN RESOURCE PERSONS IN COMMUNITIES TO ASSIST THOSE WITH DIABETES
  - **SELECTION CRITERIA FOR PARTICIPANTS:**
    - MUST HAVE SECONDARY LEVEL EDUCATION  
( ...i e > SEVEN YEARS OF SCHOOL)
    - MUST BE A LEADING MEMBER OF THE  
COMMUNITY ( 50%)
- or
- **COMMUNITY HEALTH WORKERS ( 50%)**
    - MOH/GOJ



# LAY DIABETES EDUCATION CONT'D

- TRAINING SITES

HEALTH CENTERS IN THE COMMUNITY

- METHOD OF DELIVERY

LECTURERS TRAVEL TO THE RESPECTIVE LOCATION TO  
CONDUCT TRAINING SESSIONS

LECTURERS:

- PHYSICIAN
- CHIROPODIST
- NUTRITIONIST
- DIABETES EDUCATOR (LAY PERSON)

# LAY DIABETES FACILITATOR

## EDUCATION METHODOLOGY CONT'D

- PRE-TEST
- LECTURES
  - PHYSICIAN - 1 HR
  - CHIROPDODIST - 1 HR
  - NUTRITIONIST - 30- 45 MINS
  - EDUCATION DEMONSTRATION WITH VISUAL AID( BODY-LINK)- 1HR
- POST TEST & COURSE EVALUATION
- CERTIFICATION by  
DIABETES ASSOCIATION & MINISTRY OF HEALTH ( GOJ)

*'each one teach one'*





# PICTURES





# PICTURES















# EVALUATION

- **The aim of the study:**

To measure the effectiveness of resource persons trained in Diabetes Education as **Lay Diabetes Facilitators**, in changing the level of awareness and knowledge of the patients in their communities.

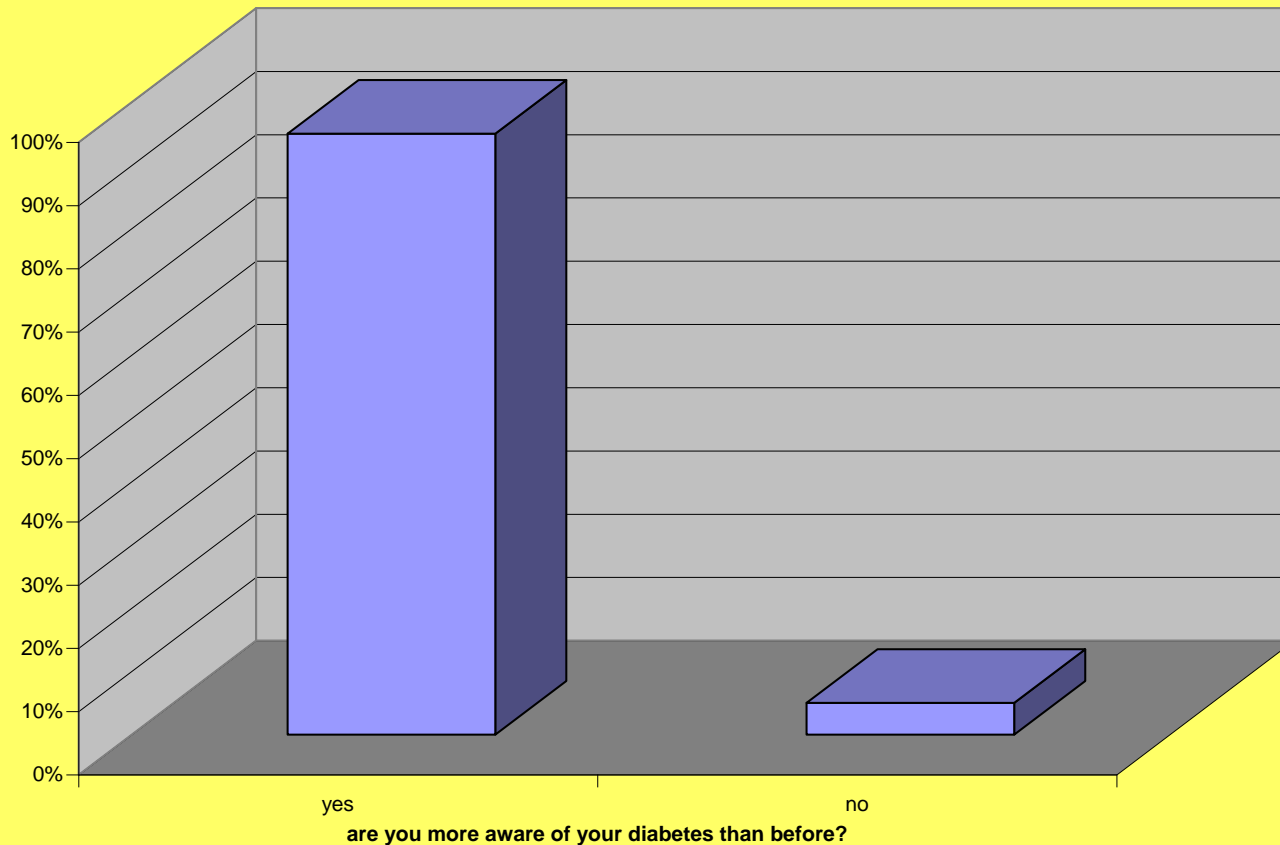
# Population

**A multistage sampling technique was the method used to select two categories of respondents for the evaluation.**

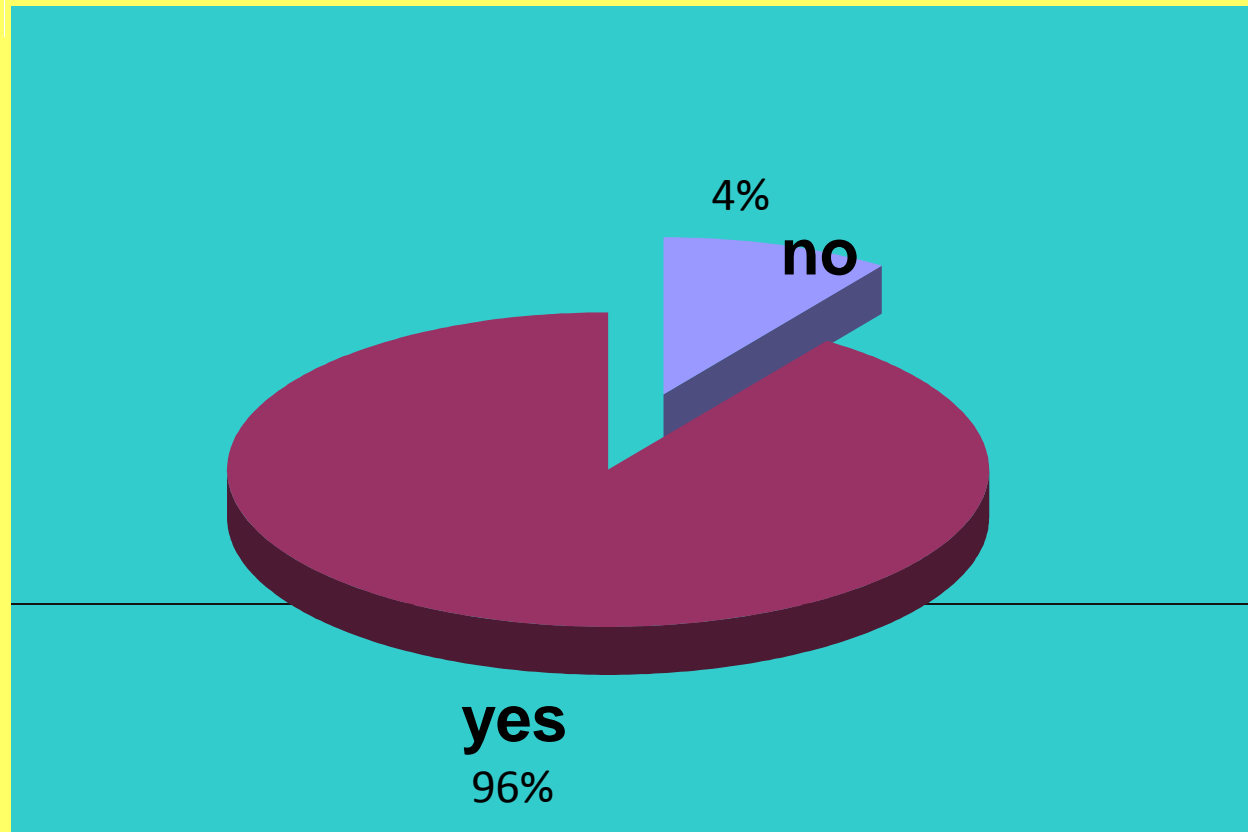
- **Category 1** consisted of persons who had received training as lay diabetes facilitators.
- **Category 2** was comprised of patients who received counselling from the trained facilitators

# Diabetes Awareness in Category 2 (Patients)

Fig 4.1 Diabetes Awareness



# Awareness of Facilities

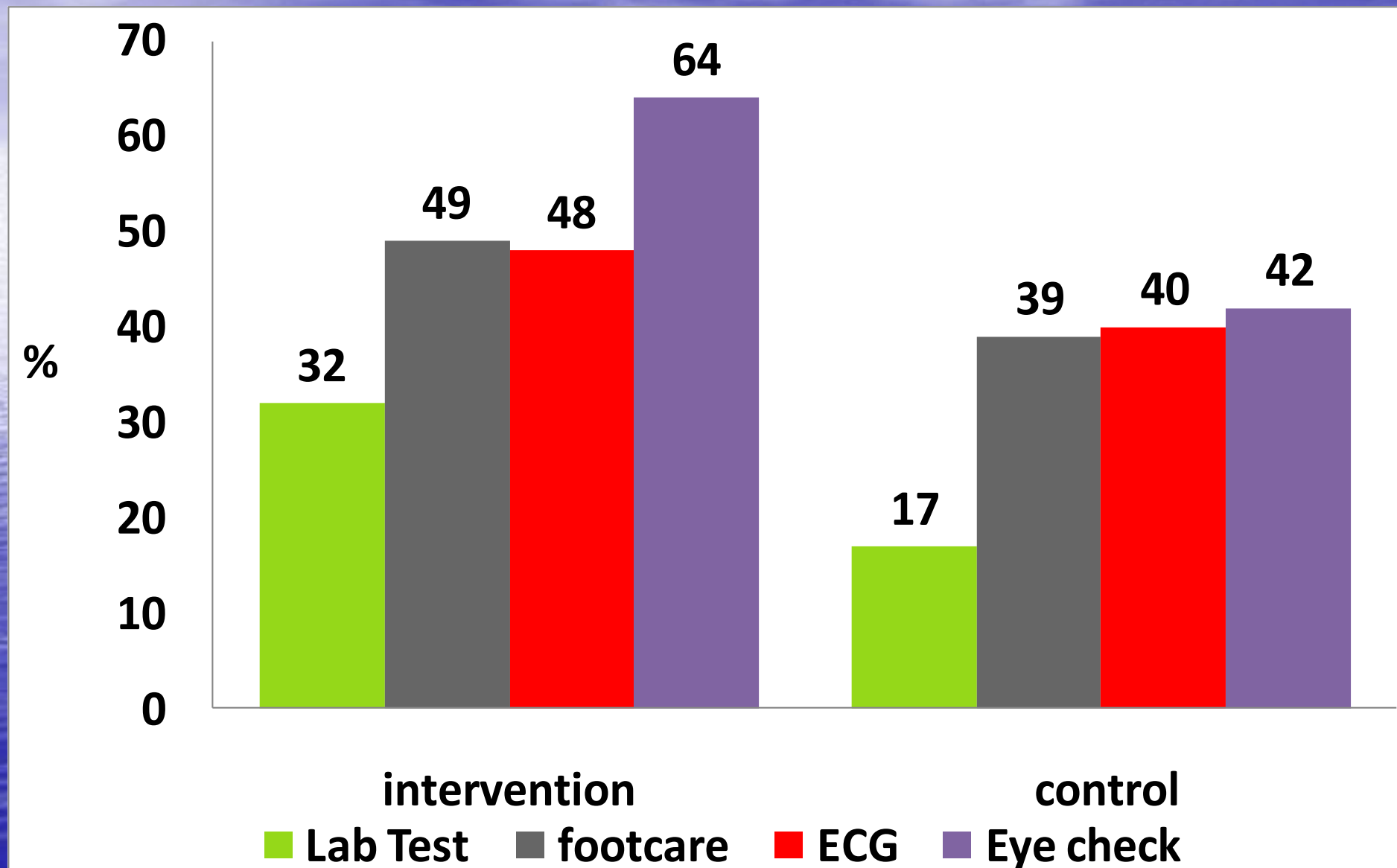




## ***Mx in Past one Year***

<b>Type of Checks</b>	<b>Examination Done (%)</b>		<b>Number Of Patients</b>
	<b>Yes</b>	<b>No</b>	
<b>Eye</b>	32.9	67.1	82
<b>ECG</b>	32.9	67.1	82
<b>Blood sugar</b>	82.9	17.1	82
<b>Feet</b>	57.3	47.7	82

# ***Medical Checks done after intervention***

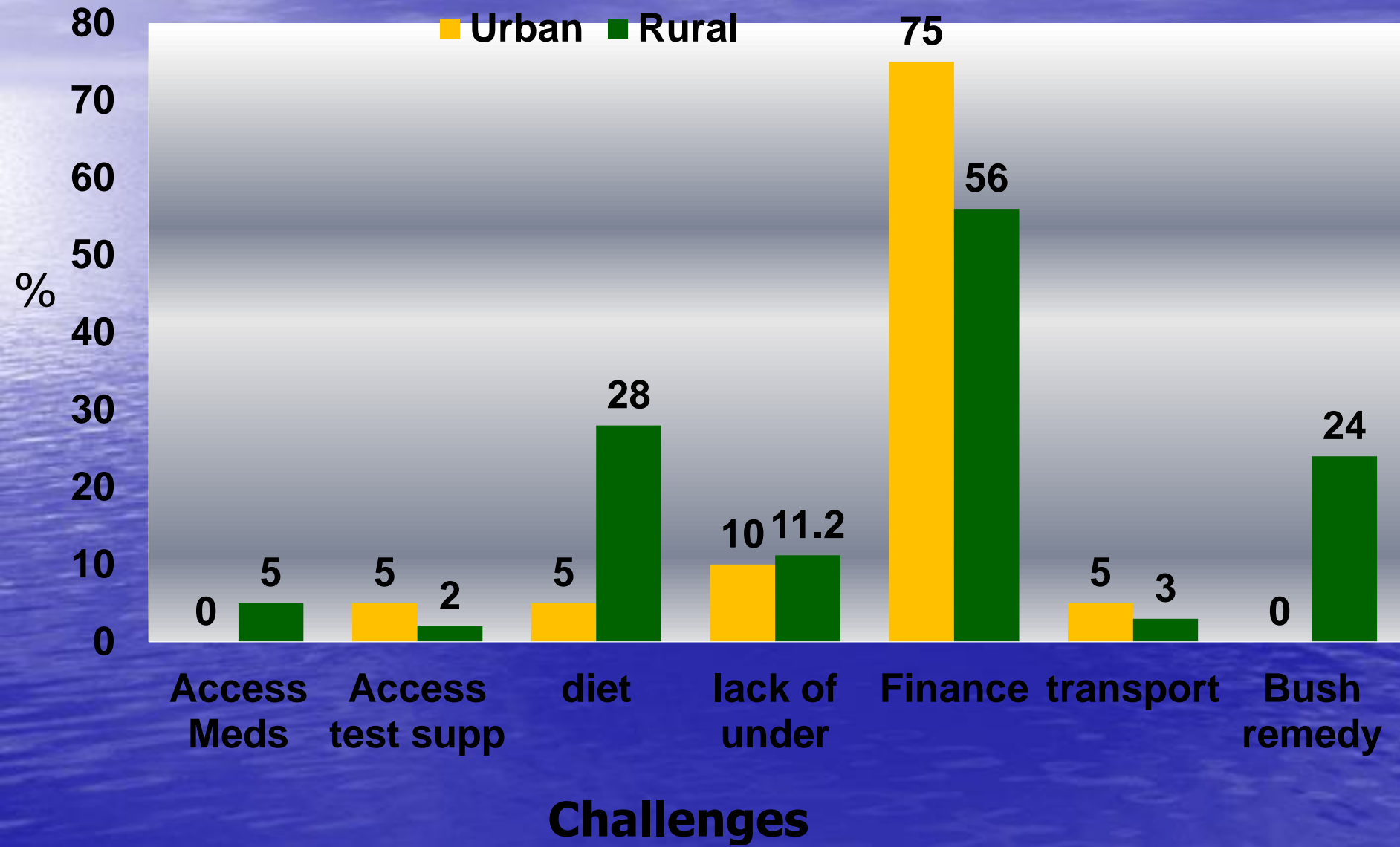


# Main Challenges Faced by Patients

Challenges	Frequency	Percent
Finance	25	78.1
Access to medication	20	62.5
Dietary	18	56.3
Transportation	5	15.6
Education counseling	7	21.9
Other	3	9.4

# ***Challenges faced by Patients***

Finance was the greatest challenge faced by patients





# Patients' Awareness of Resource Persons in Their Communities

Question ?	PARISH	
	1yr	3yrs ....later
Do you know resource persons in community	<b>Clarendon</b> N=40	<b>Westmoreland</b> N=42
Yes	97.5%	83.3%
No	2.5%	16.7
Did you get assistance from them		
-Yes	<b>77.5%</b>	<b>59.5%</b>
-No	<b>22.5%</b>	<b>40.5 %</b>

## ***Knowledge of Patients' current behaviour.***

<b>Questions</b>	<b>Yes %</b>	<b>No %</b>
Are patients more knowledgeable re diabetes	93.8	6.2
Are Patients taking better care of themselves	81.3	18.7
Are patients visiting clinics more frequently.	87.5	12.6

# Population Studies

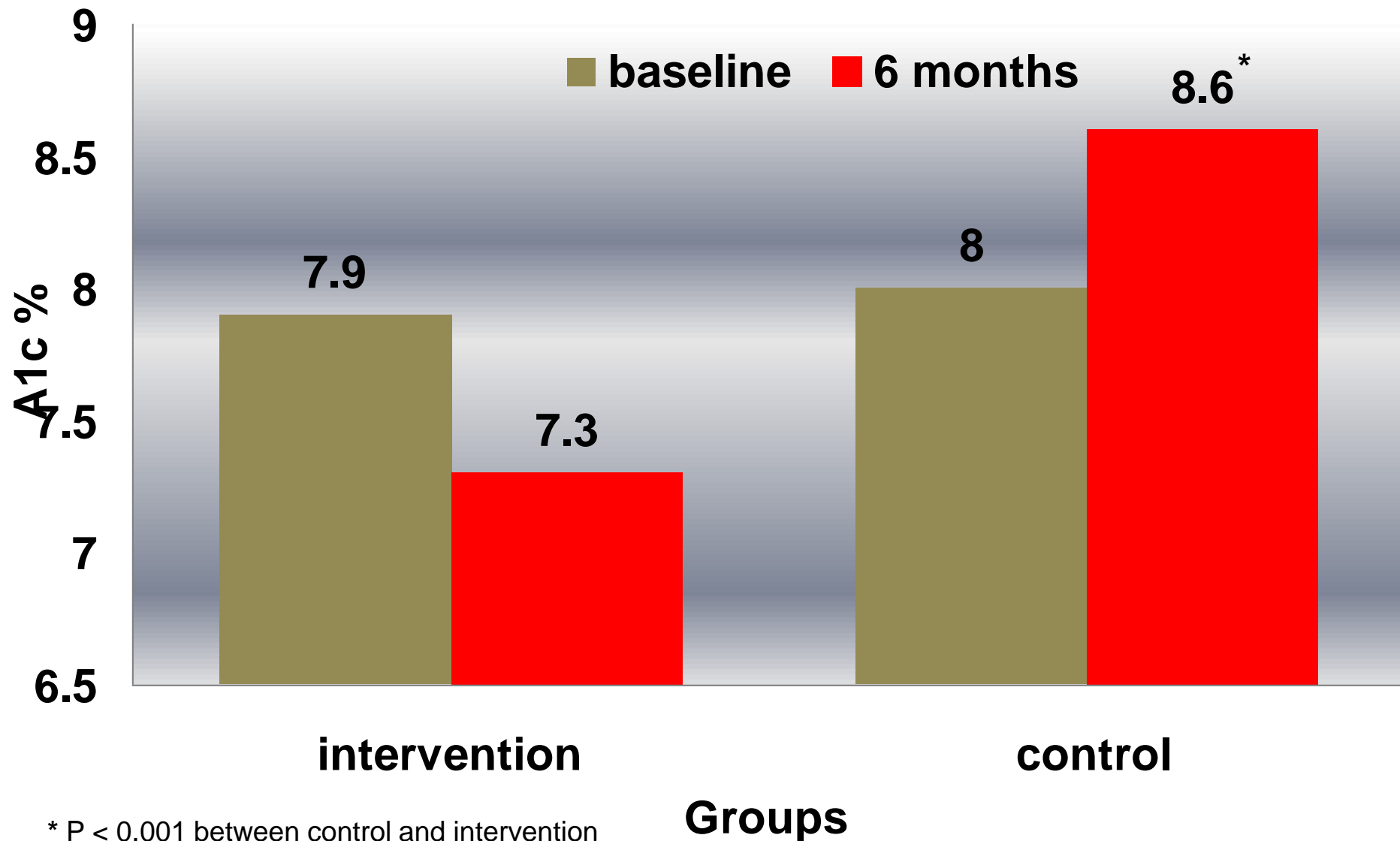
**A1c values dropped by an average of  
0.6%**

**In the first 6 months of follow up.**

*....Lurline Less 2008*

# Mean A1c diff. between groups

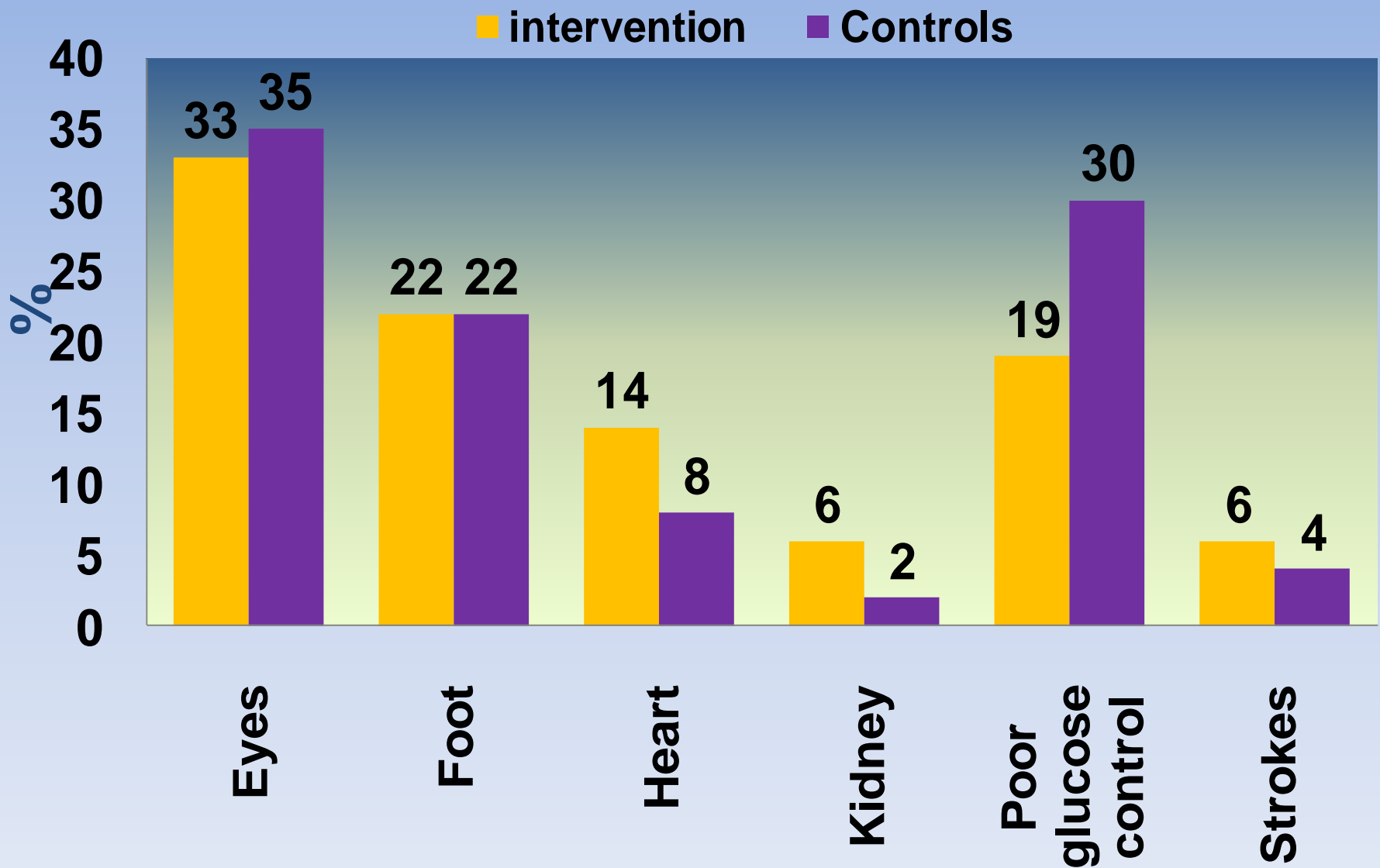
Difference of A1c within intervention group of – 0.6%



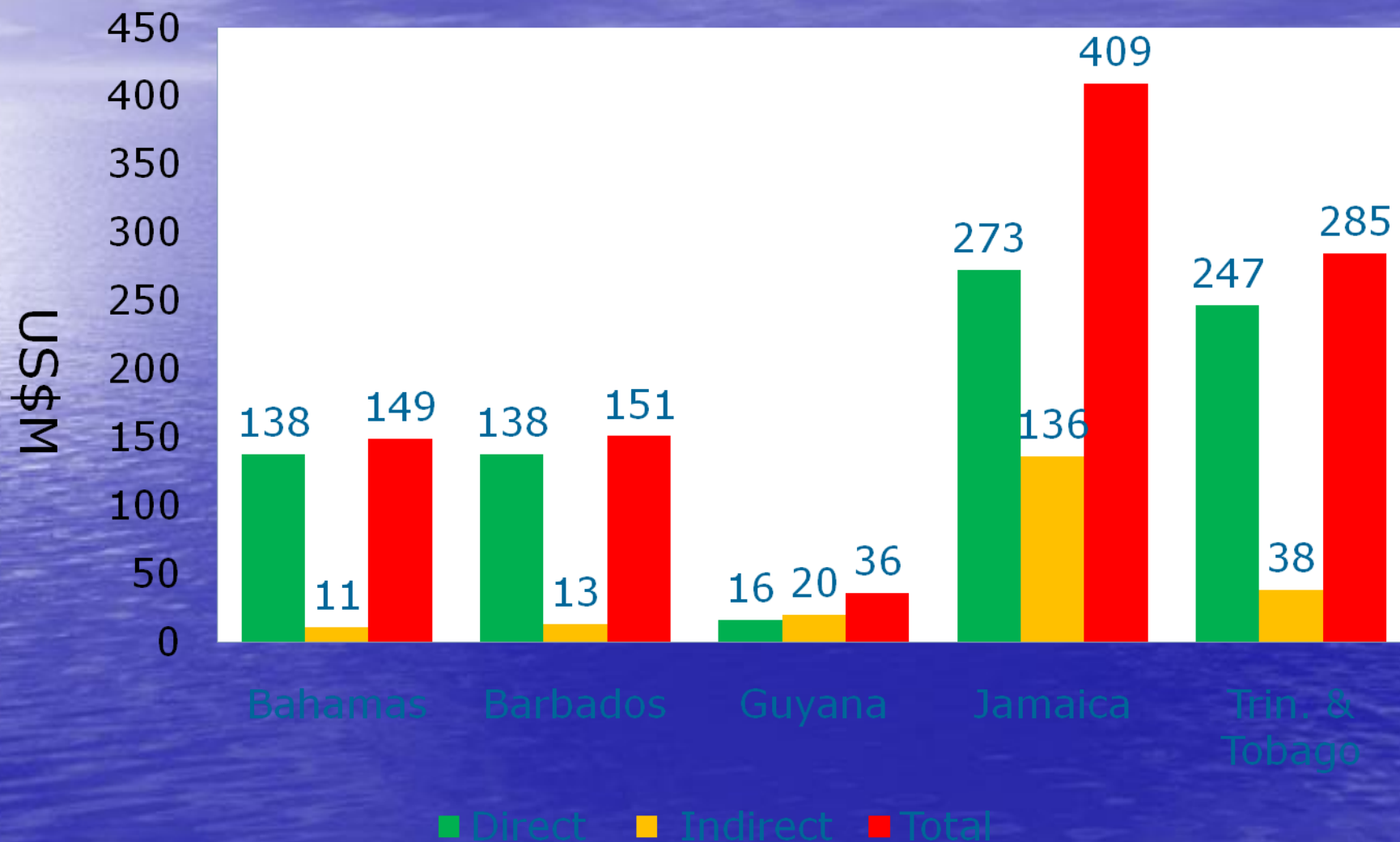


# ***Complications***

**Most common problems were with eyes and poor glucose control**



# ***Estimated National Cost of Diabetes 2000, (US\$M)***



## ***Burden of Diabetes Care***

- **An A1c reduction of 0.6% → 22.2% reduction in complications**
- **Cost associated with complications is due to 25% direct and 75% indirect**



# ***Theoretical Cost-Benefit Calculation***

**Total Annual Cost Savings  
from 0.6% reduction in A1c  
U\$37,962,000**

**Less Training costs                                 U\$  
412,000**

**Benefit to country  
US\$37,550,000  
per annum**

***Benefit to patient:  
Reduced morbidity and mortality  
and improved quality of life***



# Diabetes Care - Regional Partnerships

- **Diabetes Association of the Caribbean (DAC)**
- **International Diabetes Federation (IDF)**
- **Pan American Health Organization (PAHO)**
- **Declaration of the Americas on Diabetes (DOTA)**