

**The First South Asian
American Health Conference
University of Medicine and
Dentistry of New Jersey**

June 3, 2005

WELCOME

S. JAY JAYASANKAR, MD

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UMDNJ

Pursuit of Excellence in:

Health Promotion

Disease Prevention

Health Care Delivery

Service to our communities

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Health Care Challenges

Access

Quality

Cost

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Health Care Challenges Quality

- Disparity
- Prevention- Lifestyle, Habits, Exercise, Food, Weight
- Health Literacy – Participate in care
- Professional competence
- System Performance

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**Much Evidence for Ethnic
Disparity in Health and Care**

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The South Asian Grouping

**Anthropology
Culture**

**Genetic “Distance”
Disease Burden
Diabetes, Heart Disease
Others**

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Why South Asian?

Poon-King T. *Lancet* 1968

Jackson WPU. *Metab Disrdrs* 1978.

Zimmet P. *Am J Epidemiol* 1983

McKeigue PM. *J Clin Epidemiol* 1989

McKeigue P. *Hlth Promotion*. 1994.

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Why South Asian?

Mather HM *BMJ* 1985

Samanta A. *Diab Res Clin Pract* 1987

Simmonds D. *BMJ* 1989

Dodson PM. *Eye* 1992

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Ethnic Disparity

- “Dispensation” Bias
- Identity/ Communication
 - Disease Burden
- Thresholds- Screening / Treatment
- Genetic Response Variation? (BiDiI)
 - Health Beliefs/ Behavior
 - Disease Behavior

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Health Disparities

**Institute of Medicine Report
March 2002**

**Ethnic Minorities = Lower Quality
Evidence of Bias and Stereotype**

Answer = Raise Awareness

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**“Nothing sucks like an
Electrolux”**

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Disease Burden

- Diabetes
- Heart Disease
 - Cancer
- Osteoporosis
- Mental Illness
- Low Birth Weight
- Domestic Violence

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Why High Disease Burden?

Raj Bhopal, Edinburgh

- Excess Exposure to Risk Factors
- Greater Susceptibility
- Newer Risk Factors
- Lack of Competing Causes

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DM and its risk factors ⇒ Heart Disease

Fontbonne *Diabetes Care* 1991

Pyorala *Circulation* 1998

Pyorala *Acta Med Scand Suppl* 1985

Despres *N Engl J Med* 1996

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Other DM related risk factors ⇒ Heart Disease

•Abate *J Clin Endocrino Metab* 2004

•Chandalia *J Clin Endocrino Metab*
2003

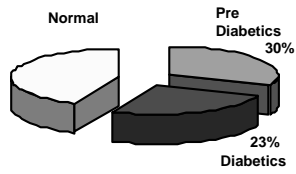
•Chatha *J Cardiovasc Risk* 2002

•Lemieux *Arterioscler Thromb Vasc*
Biol 2001

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New Castle Heart Project

Unwin N, et al. *Diabet Med* 1998



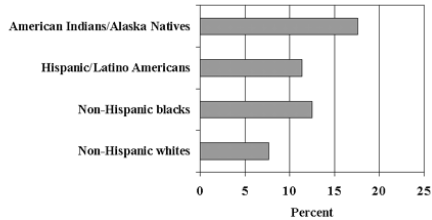
680 S. Asians

Age 25-74

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CDC: US Prevalence of DM by Race 02

Age-adjusted total prevalence of diabetes in people aged 20 years or older, by race/ethnicity—United States, 2002

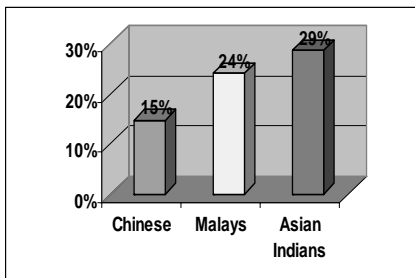


Source: 1999-2001 National Health Interview Survey, 1999-2000 National Health and Nutrition Examination Survey estimates projected to 2002, and 2002 outpatient database of the Indian Health Service.

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Metabolic Syndrome in S. Asians

Tan, et al. *Diabetes Care* 2004



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Risk Factors in S. Asian Children

(Whincup *BMJ* 2002) 8-11 year olds
227 S. Asians - 3415 Whites

Similar:

- Waist, Hip measurements
- Blood Glucose, HDL, LDL, Total Cholesterol

Different for S. Asian Children:

- Lower Ponderal Index, Yet
- Higher Insulin = Insulin Resistance**
- ↑ Heart Rate, BP, Fibrinogen, Triglyceride
- Stronger Adiposity-Insulin Relationship

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The Human Story

In Framingham, a 30 year old dies of MI

Do we know who is at risk?
How do we identify?

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National Cholesterol Education Program



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National Cholesterol Education Program



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Are the Risk Thresholds Different for S. Asians?

Unwin *Diabet Med.* 1998

Lower threshold for weight

Tan et al. *Diabetes Care* 2004

Waist Circumference:

•Men 89 cms. vs. 102 ATP III

•Women 79cms. vs. 88 in ATP III

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Screening and Treatment Thresholds for S. Asians

ACE, AACE Guidelines- Lower Threshold for High Risk Groups

Enas- Aggressive Lipid Management

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S. Asian Beliefs, Behavior

- Overweight S. Asians perceive as Normal
- Normobaric Europeans perceive as being overweight
- Poor knowledge of cause and Prevention of DM

Lack of Exercise- Culture

McKeigue *J Clin Epidemiol* 1989

McKeigue *Hlth Promo Manual* 1994

Patel *J Epidem Comm Hlth* 2001

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Lower Utilization- Evidence

Whitemeans SI. *Health Serv Res* 1995

Hawthorne K. *Fam Pract* 1994

Ford ES. *Health Serv Res* 1995

Baker DW. *Ann Emerg Med* 1996

Ritch AES. *J R Coll Phys Lond* 1996

Mitchell AA. *J Nat Med Assoc* 1996

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Lower Utilization- Factors

- Denial e.g. Heart disease, Diabetes
- Stigma e.g. Mental Health
- Secrecy e.g. DV, HIV
- Hopelessness e.g. Cancer from ignorance

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S. Asian Disease Management

- ↓ Glucose Control, DM Management Awareness
- ↓ Knowledge of DM, Complications, Nutrition
- ↓ Importance for Appointments, Compliance, Control

Hawthorne *BMJ* 1997

Pradhan *Eye* 2004

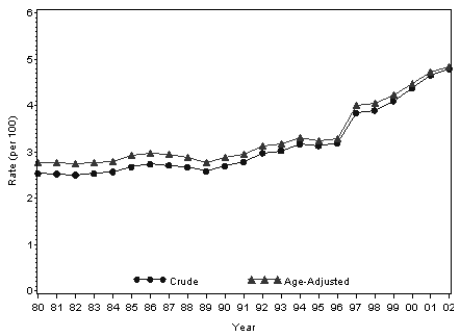
Hawthorne *Diab Med* 1999

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What is the Urgency?

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CDC: US Prevalence of DM Trend 80-02



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Lifetime Risk of Diabetes for Person Born in Year 2000

Narayanan, CDC Estimates. JAMA 2003

35% Chance of Developing Diabetes

If Hispanic, 48% Chance of Developing Diabetes

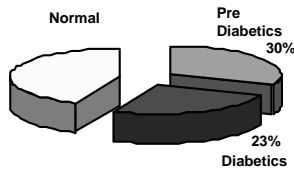
If S. Asian, No Figures Available

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New Castle Heart Project

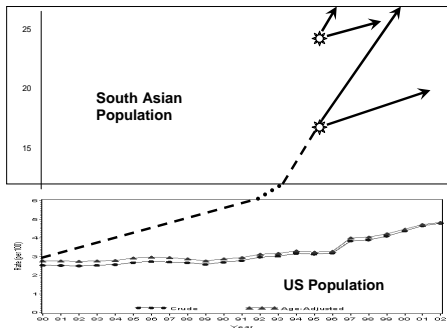
Unwin N, et al. *Diabet Med* 1998

680 S. Asians
Age 25-74



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CDC: US Prevalence of DM Trend 80-02 Singapore S. Asian data interpolated



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The Challenges

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The Challenges

- Lack of Existing Data (NHANES etc.)
- Paucity of Primary Research
- Educating Care Professionals
 - Educating the Community
 - Exploding the Myths

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AAPI Sponsored Research

- Mayo Clinic
- UT Southwestern, Dallas
- Arizona Heart Institute
- Texas A&M

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A Call To Action

- **Healthy Lifestyle**
- **Physical Activity, Exercise**
- **Nutrition- Quality, Quantity**
 - **Body Weight**
 - **Timely Treatment**
- **Train Children Young**

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A Call To Action
Educate Physicians / Professionals

- **High Prevalence in S. Asians**
 - **↓ Screening Thresholds**
 - **↓ Treatment Thresholds**
- **Prevention from Childhood**

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Start Today!
Train The Community!
Educate the Professionals

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THANK YOU!

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