



# Prevention Awareness Counselling and Evaluation (PACE) Diabetes Project: A Mega Multi-pronged Program for Diabetes Awareness and Prevention in South India (PACE - 5)

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## Abstract

**Objective:** The Prevention Awareness Counselling Evaluation (PACE) Diabetes Project is a large scale community based project carried out to increase awareness of diabetes and its complications in Chennai city (population : 4.7 million) through 1) public education 2) media campaigns 3) general practitioner training 4) blood sugar screening and 5) community based “real life” prevention program

**Methods:** Education took place in multiple forms and venues over the three-year period of the PACE project between 2004 - 2007. With the help of the community, awareness programs were conducted at residential sites, worksites, places of worship, public places and educational institutions through lectures, skits and street plays. Messages were also conveyed through popular local television and radio channels and print media. The General Practitioners (GPs) program included training in diabetes prevention, treatment and the advantages of early detection of complications. Free random capillary blood glucose testing was done for individuals who attended the awareness programs using glucose meter.

**Results:** Over a three-year period, we conducted 774 education sessions, 675 of which were coupled with opportunistic blood glucose screening. A total of 76,645 individuals underwent blood glucose screening. We also set up 176 “PACE Diabetes Education Counters” across Chennai, which were regularly replenished with educational materials. In addition, we trained 232 general practitioners in diabetology prevention, treatment and screening for complications. Multiple television and radio shows were given and messages about diabetes sent as Short Message Service (SMS) through mobile phones. Overall, we estimate that we reached diabetes prevention messages to nearly two million people in Chennai through the PACE Diabetes Project, making it one of the largest diabetes awareness and prevention programs ever conducted in India.

**Conclusion:** Mass awareness and screening programs are feasible and, through community empowerment, can help in prevention and control of non-communicable diseases such as diabetes and its complications on a large scale. ©

## INTRODUCTION

Non-communicable diseases such as diabetes, cardiovascular diseases, chronic obstructive lung diseases, mental illness and cancer have already surpassed communicable diseases as the leading causes of death in India.<sup>1</sup> Indeed, diabetes has now become a major health problem in India with an estimated 40 million people having diabetes in 2007, accounting for

about 20% of the world’s diabetic population. Current projections are that without active intervention, these numbers will rise by another 29 million cases, reaching 69.9 million, by 2025.<sup>2</sup> Further, in developing countries like India, the brunt of diabetes and cardiovascular disease occurs among the economically productive age group (20-45 year olds).<sup>3</sup> Thus diabetes and cardiovascular disease can create a severe burden for the affected individuals, their families and the society as a whole. The monetary costs of managing diabetes drain between 5-25% of an average Indian family’s income.<sup>4</sup> Given this situation, it is imperative that urgent steps are taken to prevent diabetes and cardiovascular disease in India.

Chennai (formerly Madras) in southern India is the

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#Rapid Publication  
Received : 1.3.2008; Accepted : 3.5.2008

fourth largest city in India (population 4-7 million). Recent estimates suggest that the prevalence of diabetes is rapidly increasing in Chennai.<sup>5,6</sup> Data from the Chennai Urban Rural Epidemiology Study (CURES) revealed startling gaps in knowledge about diabetes in Chennai.<sup>7</sup> A quarter of people living in Chennai were unaware of a condition called 'diabetes' and 60% of people with diabetes did not know that their disorder could affect their organs. Many people did not know that diabetes was preventable or what steps could be taken to minimize the risk of developing the disorder. This underscored the urgent need to raise public awareness and thus promote prevention of diabetes through life style changes. This could also potentially help prevent cardiovascular disease and stroke and would thus fit in well with the National Program for Prevention and Control of Diabetes / Cardiovascular Disease and Stroke recently launched by the Government of India.<sup>8</sup>

It was with this background that the Prevention Awareness Counseling and Evaluation (PACE) Diabetes Project was initiated. PACE eventually grew to become one of the largest diabetes and non-communicable disease awareness screening and prevention projects carried out in India till date. We focused on three areas. First, we aimed to increase knowledge and awareness about diabetes through community education, general practitioner education and media outreach. We also made available educational materials about diabetes at selected outlets across Chennai. Second, we conducted large scale opportunistic blood glucose screening to screen for new cases of diabetes and prediabetes and to know the status of known diabetic subjects in Chennai on a scale never attempted earlier. Finally we undertook a "real life" community based prevention program in selected communities in Chennai.

This paper reviews the methodology, goals, implementation and reach of the PACE Diabetes project.

## METHODOLOGY

### Goals of PACE Diabetes Project:

- To increase awareness in the general population about diabetes and its complications by reaching out to at least 1 million people.
- To identify undiagnosed subjects with diabetes and prediabetes through opportunistic screening.
- To train the general practitioners (GPs) in preventive diabetology and empower them to disseminate awareness messages to, and through, their patients.
- To motivate the community to take up walking and yoga singly or in combination and to look at their respective beneficial effects in reduction of cardiovascular risk factors in diabetic subjects.

### Components and resources of the project:

In PACE, we simultaneously utilized five main channels to disseminate knowledge to the public [Fig. 1]. These included direct education by the team at Dr. Mohan's Diabetes Specialities Centre (DMSC) and the Madras Diabetes Research Foundation (MDRF), print and electronic mass media and through general practitioners. The variety of channels allowed our effort to reach out to different age groups, points of access, literacy levels and stylistic preferences. We utilized low cost options wherever possible and all educational materials were prepared in-house. All of the staff involved in delivering the program underwent extensive training both in content and delivery of key messages. In addition, partnering with media and general practitioners helped to reach larger sections of the society.

### Component I:

**Direct public education:** Through educational camps, held at numerous locations across Chennai, we delivered diabetes knowledge directly to the public. Locations included residential sites and worksite locations (examples are petroleum refineries, bicycle and textile factories, small-scale industries like flour mills and software companies). Public places included supermarkets, beaches and parks and religious centres and places of worship including churches, mosques and temples. We delivered focused messages by way of lectures, posters, pamphlets and interactive sessions. Based on the knowledge gaps identified in CURES, we specifically addressed issues regarding awareness of diabetes, its spread, its risk factors and its effects on other organs of the body. Short and simple messages, taken from earlier successful campaigns, enhanced 'stickiness' and appeal of the knowledge imparted. Messages were conveyed both visually and verbally, accommodating a range of learning styles and literacy levels, both in English and in Tamil, the dominant local language.

At the end of each awareness program, whenever feasible, we facilitated role-plays to emphasize our key messages in a more informal and tangible way.

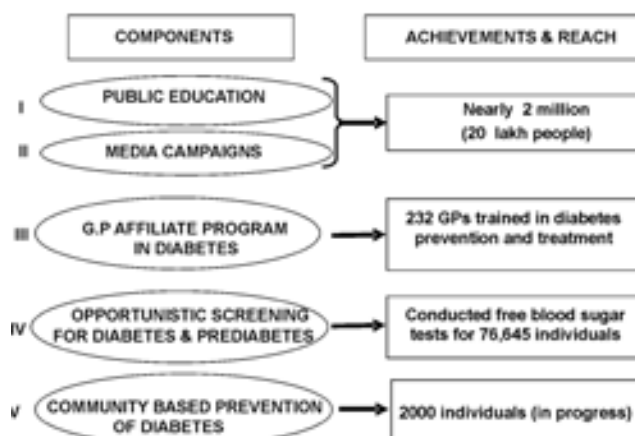


Fig. 1 : Components of the PACE Diabetes Project

Participants were encouraged to enact a small skit regarding diabetes and its complications with specific emphasis on healthy eating, increasing physical activity and reduction or cessation of smoking or other forms of tobacco and need for good control.

For younger school children, we organized drawing and quiz competitions, based on themes such as healthy diets and obesity prevention. For college students, we held essay competitions on topics like physical activity and diabetes prevention.

On special occasions like "World Diabetes Day", "World Heart Day" and "World Health Day", the campaign was intensified with multiple events, including up to 15 camps/day, rallies, walks, debates, quiz programs, yoga demonstrations and special media campaigns.

To spread awareness among people who could not attend the formal educational sessions, we set up 176 "PACE Diabetes Education Counters" across Chennai in locations such as medical shops, showrooms, libraries, supermarkets and shopping complexes. Locations for counters were selected by their proximity and accessibility to the general public. Each counter included a series of educational materials such as pamphlets, posters, booklets, flash cards and compact disks (CDs) all of which focused on the risk factors and prevention of diabetes and other non-communicable diseases. We replenished these educational materials at regular intervals to ensure adequate supplies at all times.

The same print materials were also provided to the general practitioners who attended our training sessions. Many of these practitioners used these materials to establish PACE counters at their own clinics.

#### **Component II:**

**Media:** We utilized media in two ways: with scripted messages and through lectures, interviews or live discussions and question-answer sessions.

**Television:** A 45-minute, professional documentary covering a wide variety of diabetes-related topics was produced and aired on several popular local television channels, such as Sun TV, Star Vijay and Podhigai. The messages in the documentary were delivered by diabetes care providers, professional media anchors and also by patients or well known personalities such as popular filmstars or other key opinion leaders. We also screened the documentary during "break" sessions at the awareness camps to retain and attract people between the awareness and screening programs. In addition, two-minute spots with short crisp messages were repeatedly flashed in popular TV channels between popular "soap" serials or news bulletins which had the highest viewership.

**Radio:** Frequency Modulation (FM) radio is a popular medium in Chennai; people can receive FM stations through their cell phones (mobiles) particularly while

commuting to and from work. Messages about diabetes were delivered and broadcast on popular FM radio channels, like Radio Mirchi and FM channel of All India Radio during regular commuting hours. Live phone in programs were aired to educate people regarding diabetes prevention. This allowed people to have their questions clarified by diabetologists, ophthalmologists and other specialists from our centre.

**Short Message Service (SMS):** With the help of popular networks, SMS messages on diabetes were sent to subscribers all over Tamilnadu. The PACE project, to our knowledge, is the first effort in India to spread diabetes awareness through mobile phones.

**Hotline:** A telephone hotline allowed the public to call for information regarding diabetes or to put in requests for conducting awareness or screening camps.

**Cinema halls:** Short messages about diabetes and its complications were shown during the intermission in cinema halls particularly in those screening super-hit movies.

**Newspapers:** Educational articles on diabetes prevention and management or short messages were published in leading English and Tamil newspapers on a regular basis.

#### **Component III:**

**General practitioners (GP):** GPs are typically the first level health care providers (contact point) for people who feel unwell, or those who go for master health check-ups. We felt it was critical to develop a cadre of GPs who are well versed in diabetes treatment who could complement and spread diabetes awareness. We thus developed an innovative GP Affiliate Program in Diabetology and its complications, a short course involving three half-days of education organized every 4 months. This program, along with the educational materials, covered diabetes management at the primary level along benefits of early screening of complications and prevention modalities in diabetes. These physicians were later encouraged to conduct awareness programs at their own clinic as well as in other public places. They also received copies of the same print materials to set up PACE counters at their own clinics. A specially developed Indian Diabetes Risk Score (IDRS) kit which helps to identify individuals at high risk for diabetes and cardiovascular disease<sup>9,10</sup> in the community, was also gifted to all participants to help them to cost effectively screen for diabetes.

#### **Component IV**

**Opportunistic Screening:** As over 50% of people in the community do not know they have diabetes,<sup>5</sup> large scale screening for diabetes is essential. All the individuals who attended the awareness program were offered a free random capillary blood glucose screening at the camp site using a handheld glucose monitor (One Touch Ultra, LifeScan, Johnson and Johnson, USA). However

as many people with “known” diabetes also requested for a free blood sugar test, we extended the service to “known” diabetic subjects, as it would also provide data on the status of their diabetes control as well as improve compliance to the program among the public.

Screening was offered to all individuals aged 20 years and above who attended our awareness programs that included a screening component towards the latter part of the program. For effective resource utilization, the Indian Diabetes Risk Score (IDRS) scoring system was used, which helped to reduce over 50% of the cost of screening.<sup>9,11</sup>

#### Component V:

**Community based prevention of diabetes:** The effect of lifestyle modification in preventing diabetes at the community level is currently being studied in selected colonies in Chennai as part of a “Real Life Community Diabetes and Cardiovascular Disease Prevention Program”. Two residential colonies were identified for the purpose. Residents were randomly selected for the interventions involving yoga, walking or combined yoga and walking with a fourth arm with no intervention which served as the control group. Participants were encouraged to adhere to the advised lifestyle modification throughout the study period. Additionally, counselling was given to eat healthier diets. Constant motivation was provided to continue the specified interventions during the entire period of the study.

## RESULTS

#### Program reach and community acceptance:

A total of 774 public awareness and screening programs were conducted over a three-year period. We identified various youth organizations and residential colonies and contacted the president or head of the organization to arrange a program. Locations were selected to represent all ten of Chennai’s geographic zones, as well as all economic strata (Fig. 2). Special efforts were made to include slums and other underprivileged populations.

In the chosen locations, we explained to the leaders the importance of raising awareness about diabetes and the opportunity to serve as a model for others in the fight against obesity and diabetes in Chennai. These community leaders were involved actively in organizing the camps and often themselves participated in the programs. Once our program was underway, we received numerous requests, via our hotline, to conduct awareness camps in additional locations. These were considered based on geographic representation, location type and staff availability. Camps were conducted on both weekdays and weekends and also, if necessary, on holidays when more people would be at home. The specific location of the camp depended on the

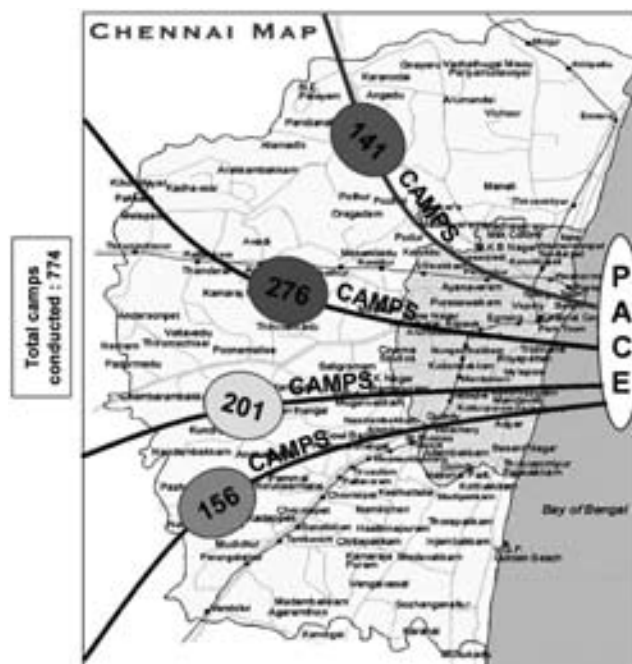


Fig. 2 : Map of Chennai showing the number and distribution of PACE awareness and screening camps

availability of space and the cooperation received.

In residential locations, the community leader would inform the residents prior to the camp about the importance of attending and availability of free blood sugar testing, and in addition, banners were displayed to remind people about the program. At worksites, the human resources personnel organized the awareness and screening programs for their employees. At places of worship, we requested religious leaders to deliver messages about diabetes and healthy lifestyles in order to get them involved and also to increase acceptance by their community. In other locations, such as supermarkets, fairs and exhibitions, a manager or organizer served as the contact person and facilitator of the program. Tables 1 and 2 summarize the locations, response rates and numbers of individuals who participated in the awareness and screening camps. Below, we describe the response rates of various organizations approached to host camps as well as the number of people reached through each venue.

**General public:** The response was highest among

**Table 1 : Location and response rates of PACE awareness and screening camps**

Location	Numbers approached	Numbers responded	Response rate (%)
General public places	364	355	97.5
Work Places	207	193	93.2
Educational Institutions (Schools / Colleges)	73	63	86.3
Residential areas	97	94	96.9
Religious and other places	69	69	100
<b>Total</b>	<b>810</b>	<b>774</b>	<b>95.6</b>

**Table 2 : Number of individuals who participated in awareness and screening camps and response rates**

Location	Number of individuals invited (n)	Number of individuals who attended the awareness program (n, response rate %)	Number of individuals who underwent blood tests (n, response rate %)
General Public Places	33,840	29,276 (86.5)	28,535 (84.3)
Work Places	40,793	33,080 (81.1)	28,948 (70.9)
Educational Institutions (Schools / Colleges)	41,451	17,028 (41.1)	3,399 (8.2)
Residential areas	7,410	6,022 (81.3)	5,985 (80.8)
Religious and other places	25,340	18,472 (72.9)	9,778 (38.6)
<b>Total</b>	<b>148,834</b>	<b>103,878 (69.8)</b>	<b>76,645 (51.5)</b>

**Table 3 : Placement of PACE diabetes education counters and response rates**

Places	Approached	Responded	Response Rate (%)
Pharmacies	57	57	100
Libraries	17	17	100
Doctors clinic	56	52	92.9
Banks / Offices	8	7	87.5
Shopping malls	59	43	72.9
<b>Total</b>	<b>197</b>	<b>176</b>	<b>89.3</b>

the general public where we organized the camps in common places such as community halls, park and beaches, bus stands, railway stations, community and marriage halls, open grounds, supermarkets in addition to roadside programs in the early morning hours. Because of the lengthy procedures involved, we received permission to organize camps in 88% of parks and beaches we had selected. However, we were 100% successful in religious places, hospitals and transport places like bus stands and railway stations, fairs, supermarkets, shopping complexes. Overall, our outreach programme was delivered to 29,276 people in general public places.

**Worksites:** We had a high response rate from worksite locations. 100% of the industries and media places accepted our programs whereas 93.9% government offices and 90% of private offices and 87.5% of the banks responded to our program. Overall, we reached a total of 33,080 individuals attended our worksite camps.

**Schools and colleges:** Conducting such programs in schools and colleges proved to be more difficult with the formalities involved and the response rate was only 41.1%. Despite this, we reached 17,028 college and school students through the program. Moreover, because of ethical issues in sampling blood samples in

**Table 4 : Estimated numbers of individuals reached through PACE program\***

Modality	Estimated number of individuals reached
Through TV	800,000
Through Newspapers & Periodicals	450,000
Through Radio	250,000
Through PACE education counters	195,600
Through SMS	150,000
Through awareness and screening camps	103,878
<b>Total</b>	<b>1,949,478</b>

\* These numbers are approximate but conservative and based on information obtained by available sources

children, we restricted blood tests to teaching staff and attending parents (8.2%).

**Residential sites:** The response rate in residential areas varied by income groups. We obtained 100% acceptance for our camps in middle income, 98.3% in low income and 87.5% in the high income groups respectively. Overall, we reached 6,022 people through our residential camps.

**Religious places:** We had a 100% response rate in religious places like temples, churches and mosques and reached 18,472 people through such avenues.

**PACE Diabetes Education Counters:** Some locations were very receptive to maintain a PACE Diabetes counter. Thus, 100% of the pharmacies and libraries approached agreed, compared to 72.9% of the shopping malls (Table 3). Based on the frequency with which we replenished the counters, we estimate that we reached 195,600 people through our PACE counters (Table 4).

**Opportunistic blood glucose screening:** We screened a total of 76,645 individuals from the 103,878 people who attended the awareness and screening program (Table 2).

**Media:** Over the course of three years, our scripted radio messages and our TV documentary was telecast frequently on various Tamil television channels. Our two-minute TV spots with repeated key messages were also aired regularly before the news and in between popular serials. In addition numerous articles were written in popular English dailies such as "The Hindu", Indian Express and Deccan Chronicle in addition to articles in several Tamil newspapers and periodicals (Table 4). Calculating the media dose received is difficult to measure in a developing country context. However, from the available media sources using conservative estimates we are confident that we reached over a million people through our media messages [TV (800,000), Radio (250,000) and newspapers and periodicals (450,000)].

**Short Message Service (SMS):** We estimate that by way of SMSs sent through mobile phones, we probably reached 150,000 people (Table 4).

**Table 5 : Participation of general practitioners in GP diabetes affiliate program**

Doctors From	Approached	Participated	Response Rate (%)
Private practice	240	199	82.9
Government Hospitals	40	25	62.5
Industries	15	8	53.3
Total	295	232	78.6

**General practitioners (GPs)/ Family physicians:**

We conducted a total of 8 rounds of our GPs Affiliate Course in Diabetology, which adds up to 90 hours of class time. Through this, we trained 232 GPs including doctors from 8 industries and 25 government hospitals (Table 5). This represented 78.6% of those invited to participate in our training program.

**Community Based Prevention Program:** This activity is still in progress and is beyond the scope of this article.

## DISCUSSION

The PACE Diabetes Project is, to our knowledge, one of the largest and most successful community based awareness and screening diabetes programs ever conducted in India. Based on the estimates predicted above, we believe that we may have reached nearly 2 million people thus exceeding our initial target of reaching 1 million people in Chennai.

One of the reasons for the very high success rate of the program could be the free blood sugar tests that we offered to the public. This was also a major attraction for getting people to attend our awareness programs. Some people expected that, if they screened positive for diabetes, they would also receive free treatment and medicines on a life long basis, which we unfortunately did not have the resources to offer except the very poor. We however did provide some basic advice regarding diet, and, where necessary, about drug treatment.

We found that the involvement of community leaders was crucial to attract large numbers of people to our programs. It was easier to reach people in the residential areas in the morning or evening hours, as well as on Sundays and holidays. However response rates went down when a popular movie or a cricket match was being telecast or during major festivals.

What were the major challenges we faced in the PACE Diabetes Project? We had a better response to our camps in the middle income areas compared to the high income group subjects, possibly because they could afford to get the blood glucose tests elsewhere, or the lower income groups possibly because many of the participants were labourers or daily wage earners and were also largely illiterate. People in office settings preferred weekdays and restricted the time duration of the program. Indeed, many office managers were

reluctant to participate because they felt the time used for a camp would decrease productivity in the office. They were also worried that if their staff screened positive, it would increase the costs of treatment to the company. We also had a lot of difficulty conducting camps in school settings, especially around time of examinations. An alternative approach could be to target and educate school children during the physical training session, delivering health messages designed for both the children and their parents. People in health care settings were often reluctant to participate because they were afraid that they would lose their patients to other hospitals. The lengthy formalities involved in holding a camp in a public place such as the beach or a park made these locations particularly challenging.

Overall, we estimate the PACE Diabetes Project reached out to nearly 2 million people in Chennai city representing a large percentage of the population of the city. These numbers are approximate, but conservative, based on information provided to us by media and other agencies. We acknowledge it is difficult to estimate the exact numbers of people such a program has reached except where we had direct contact programs. Also, as the mandate of the funding organization was to limit our activities to Chennai and its surroundings, we have not included the numbers reached through the media, for example television, to other parts of Tamil Nadu, India and even abroad. However based on the feedback we received from several parts of the Tamil speaking world about our program, we are confident that the PACE project has reached much larger numbers than stated in this paper. Thus the impact and reach of the PACE Diabetes Project is quite substantial. Also, several organizations and institutions have already adopted the "PACE Diabetes Model" and replicated this program, albeit in a smaller way, in different parts of India. Thus we expect the PACE Diabetes Project to snowball into a very large awareness prevention project in India and other developing countries. The PACE model could also be adopted in National Programs for Prevention of Diabetes in developing countries.

Although we have seen very positive outcomes from our program, replicating it in full, or in other locations in India, is not without its challenges. Socio-cultural behaviors and customs vary from one state to another. These would have to be considered while planning such programs in other places in India. PACE was conducted in a large metropolitan city. In smaller towns and rural areas, the approach might have to be modified slightly. A fairly large monetary input is necessary both for the manpower as well as for the blood glucose screening. The cost benefit analysis of such programs therefore needs to be analysed. Our centre is probably different from other health care institutions in that it has an additional research arm with staff dedicated solely to research and outreach efforts. Nevertheless we hope

that the lessons learnt through our efforts in the PACE project would help its replication, in part or full, in other parts of India or other developing countries.

Indeed, the success of the PACE Diabetes Project augurs well for the success of the recently launched National Program for Prevention and Control of Diabetes, Cardiovascular Disease and Stroke of the Government of India.<sup>8</sup> We hope that PACE Diabetes Project will serve as a model for the conduct of additional carefully planned, implemented and evaluated programs for the prevention of diabetes and its complications and other non-communicable diseases, in India.

### Acknowledgements

The PACE Diabetes project was funded by the Chennai Willingdon Corporate Foundation, a non governmental organization (NGO) based in Chennai. This is the 5th paper from PACE (PACE – 5). We thank the entire PACE team for tirelessly working for the success of this project. We thank Mrs. M. Muthu Valli Nayaki for the secretarial support.

### REFERENCES

1. Reddy KS, Shah B, Varghese C, Ramadoss A. Responding to the threat of chronic diseases in India. *Lancet* 2005;366:1744-9.
2. Sicree R, Shaw J, Zimmet P. Diabetes and impaired glucose tolerance. In: Gan D, editor. *Diabetes Atlas. International Diabetes*

*Federation*. 3rd ed. Belgium: International Diabetes Federation; 2006:15-103.

3. World Health Organization. Improving the built environment in India. Preventing chronic diseases: a vital investment. *WHO report 2005*, Geneva.
4. Bjork S, Kapur A, King H, Nair J, Ramachandran A. Global policy: aspects of diabetes in India. *Health Policy* 2003;66:61-72.
5. Mohan V, Deepa M, Deepa R, Shanthirani CS, Farooq S, Ganesan A, Datta M. Secular trends in the prevalence of diabetes and impaired glucose tolerance in urban south India – the Chennai Urban Rural Epidemiology Study (CURES-17). *Diabetologia* 2006;49:1175-8.
6. Ramachandran A, Mary S, Yamuna A, Murugesan N, Snehalatha C. High prevalence of diabetes and cardiovascular risk factors associated with urbanization in India. *Diabetes Care* 2008;31:893-8.
7. Deepa M, Deepa R, Shanthirani CS, Manjula D, Unwin NC, Kapur A, Mohan V. Awareness and knowledge of diabetes in Chennai – The Chennai Urban Rural Epidemiology Study (CURES – 9). *J Assoc Physicians India* 2005;53:283-7.
8. <http://www.igovernment.in/site/pilot-project-to-fight-diabetes-cardio-vascular-diseases-launched/>. Accessed on April 4, 2008.
9. Mohan V, Deepa R, Deepa M, Somannavar S, Datta M. A simplified Indian Diabetes Score for screening for undiagnosed diabetic subjects. (CURES-24). *J Assoc Physicians India* 2005;53:759-63.
10. Mohan V, Sandeep S, Deepa M, Gokulakrishnan K, Datta M, Deepa R. A diabetes risk score helps identify metabolic syndrome

### Announcement

## 8<sup>th</sup> International Symposium on Diabetes

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Date: 24<sup>th</sup> & 25<sup>th</sup> January 2009

Theme : Diabetes Update 2009

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