In the Name of ALLAH, Ever Beneficent, Infinitely Merciful
Current Status of Diabetes Care in Pakistan

Prof. Abdul Basit (FRCP)

- Director, Baqai Institute of Diabetology and Endocrinology (BIDE)
- Joint Secretary, Diabetic Association of Pakistan (DAP)
- Chair-elect IDF MENA Region
- Founder member, Diabetes in Asia Study Group (DASG)
- Founder, National Association of Diabetes Educators of Pakistan (NADEP)
- Chairman, Pakistan Working Group on Diabetic Foot (PWGDF)
Conflict of Interest Disclosure

• I have no conflict of interest to declare
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National Diabetes Survey Pakistan 2016-2017

• Ministry of National Health Services, Regulation and Coordination

• Pakistan Health Research Council

• Diabetic Association of Pakistan; WHO Collaborating Centre

• Baqai Institute of Diabetology and Endocrinology

Partners of Survey
Prevalence of Diabetes in Pakistan

National Diabetes Survey Pakistan 2016-2017

26.19% Type 2 Diabetes

7.14% new cases
19.05% known cases

This means on average, 1 in 4 person have type 2 diabetes in Pakistan

Diagnosis on the basis of 2-hours OGTT criteria
Diagnosis on the basis of 2-hours OGTT criteria

This means on average, 3 in 20 person is at risk of diabetes in Pakistan

Prevalence of Pre-Diabetes in Pakistan

14.47% Pre-Diabetes

National Diabetes Survey Pakistan 2016-2017

Screening and Prevalence

Diagnosis on the basis of 2-hours OGTT criteria
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IDF Consultative Sections

3 Top Most Priority Sections

1. Diabetes education
2. Diabetic foot
3. Diabetes and children
Diabetes Education

One year Diploma in Diabetes Education

165 Educators trained
National diabetic foot programme – Step by Step

115 Diabetic Foot Clinics

Amputation Rate Halved

ABCD
Advisory Board for the Care of Diabetes

National Diabetic Foot Advisory Board Meeting

Prof. Abdul Basit
Chairman ABCD in Pakistan
Director Baqai Institute of Diabetes & Endocrinology
Professor of Medicine – Karachi

Assoc. Prof. Qazi Masroor
Bahawal Victoria Hospital
Quaid-e-Azam Medical College – Bahawalpur

Prof. Jamal Zafar
Pakistan Institute of Medical Sciences
Islamabad

Asst. Prof. Abdul Waheed Iqbal
Tehseel Head Quarter Hospital
Dadyal
Benazeer Bhutto Medical College
District Mirpur Azad Kasmir

Assoc. Prof. Jehangir Khan
Ayub Medical College
Abbottabad

Asst. Prof. Salma Tanweer
Nishtar Hospital & Medical College – Multan

Assoc. Prof. Irshad Khoso
Bolan Medical Complex Hospital – Quetta

Prof. Zaman Shaikh
Liaquat University of Medical and Health Sciences – Hyderabad

Asst. Prof. Sobia Sabir
Lady Reading Hospital – Peshawar

Assoc. Prof. Irshad Khoso
Bolan Medical Complex Hospital – Quetta

7 December 2016

National Diabetic Foot Advisory Board Meeting

Multan
Prioritization Strategies

**Insulin my life**

- Centers established: 34
- Teachers sensitized: 318,600
- Subjects registered: 1900+
- Free insulin vials distributed: 20812

**34**

Type 1 diabetes model clinics

DAP- BIDE- WDF
Type 1 Diabetes Registry of Pakistan
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Diploma in Diabetology for Family Physicians

CME’s, Certificate courses are offered

Online

17 Batches completed

450 Diploma holders
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<th>Location</th>
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<td>Capacity Building</td>
</tr>
<tr>
<td>Baqai Institute of Diabetology &amp; Endocrinology</td>
<td>Diabetes Setup at Hyattabad Med Complex</td>
</tr>
<tr>
<td>Jinnah Postgraduate Medical Centre</td>
<td>Diabetes Unit at PIMS</td>
</tr>
<tr>
<td>Jinnah-Allama Iqbal Institute Of Diabetes &amp; Endocrinology</td>
<td></td>
</tr>
<tr>
<td>Jinnah Postgraduate Medical Centre</td>
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Concept of multidisciplinary team approach
National health network for diabetes control and prevention

NOMA programme
2005
M.Phil and Ph.D

Post fellowship fellowship
2009
Trained Faculty

One year diploma in diabetology
1999
400+ doctors trained

One year diploma in diabetes education
2008
150+ educators trained

4 weeks certified courses for doctors
Jan 2014
3000 doctors to be trained

4 weeks certified courses for health educators
Feb 2014
3000 health educators to be trained

Tertiary care diabetes centers
MSPH in NCDs
Aug 2018

Secondary care diabetes units

Primary care diabetes clinics

Capacity Building
Current Status of Diabetes Care in Pakistan

Screening and Prioritization Strategies

Capacity Building

Management updates

Future Directions
Low-cost and effective strategies
Self Monitoring of Blood Glucose (SMBG)

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**Table 1: Lowest Intensity**

Twice Weekly

- Days and timings are variable

- Controlled non-affording type 2 diabetes
- Women with controlled gestational diabetes on lifestyle modification
- Gestational patients aged >70 years controlled with or without controlled conditions

---

**Table 2: Moderate Intensity**

1-2 Times Daily Depending on control of blood glucose (7-14 points per week)

- Days and timings are variable

- Newly diagnosed or uncontrolled non-affording type 2 diabetes
- Controlled non-affording type 2 diabetes
- Controlled non-affording type 1 diabetes
- Women with controlled gestational diabetes on lifestyle modification
- Gestational patients aged >70 years controlled with or without controlled conditions

---

**Table 3: High Intensity**

4 Times Daily (28 points per week)

- Days and timings are variable

- Newly diagnosed or uncontrolled affording type 2 diabetes
- Newly diagnosed or uncontrolled non-affording type 1 diabetes
- Controlled affording type 1 diabetes
- Women with controlled gestational diabetes on insulin
- Pre-operative care (duration of 1 week)

---

**Table 4: Intensive SMBG**

4-6 Times Daily (28-42 points per week)

- Days and timings are variable

- Newly diagnosed or uncontrolled affording type 1 diabetes
- Type 2, type 1 or gestational diabetes with inter-current illness or hospitalisation
- Women with controlled gestational diabetes on insulin
FOREWORD

Diabetes is an important chronic disorder, both in terms of numbers of persons affected and the considerable associated morbidity and mortality. The management of Diabetes has completely revolutionised in the last two decades. Education holds a key position in the Diabetes Management Protocol, which is valid both for the health care professionals and the people with diabetes.

The World health Organization’s Expert Committee has declared education as the cornerstone of diabetes therapy. This applies not only to the people with diabetes but equally to health providers. A clinician with good knowledge of all aspects of diabetes will provide better care and support to his patients. Good metabolic control and prevention of both acute and chronic complications of diabetes is an integral part of Diabetes Management.

I am sure that the busy medical practitioners will find Dr Samad Shera’s book “Diabetes Mellitus Clinical Practice Guidelines” extremely helpful in managing diabetic patients. I am pleased to acknowledge that Dr Shera has packaged a lot of useful information in this very well written book. I highly commend him for his devotion and the efforts put into the preparation of this manuscript.

October, 1999 Islamabad

Hasan Raza Pasha
Secretary Health
Government of Pakistan
Prof. Abdul Basit

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Prof. Zaman Shaikh  Karachi
Prof. Sobia Sabir  Peshawar
Prof. Jamal Zafar  Islamabad
Prof. Qazi Masroor  Bahawalpur
MENA Regional Council Meeting

20th August, 2016
Karachi- Pakistan

IDF Regional Council meeting during IDEC 2016 takes important decisions

National Clinical Practice Guidelines prepared by BIDE likely to form the basis for Regional Guidelines for MENA Region after approval by Regional Council
The PROMPT document has been approved by the MENA RC in Khartoum in Dec 2016.

It has been finalized and submitted in Alexandria in May 2017.
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Footwear For Every Diabetic (FED) group
2016-2019

A joint Project of WDF – BIDE (BMU), Karachi, Pakistan

Establishment of 10 risk assessment clinics
Low cost and durable footwear manufacturing technique
10 foot care assistants and 10 cobblers from BIDE to be trained
1 foot care assistant and 1 cobbler from each of the 10 project centres will be trained
Insoles Development Machines

Footwear For Every Diabetic (FED) group – 2016 to 2019
A joint Project of WDF – BIDE (BMU), Karachi, Pakistan
Future Directions
GDM project with WDF

• No. of women screened 12473

• Frequency of GDM (approx.) 12 %
## Risk assessment of Pakistani individuals for diabetes (RAPID)

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<tr>
<th>Age</th>
<th></th>
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<tbody>
<tr>
<td>Less than 40 years</td>
<td>0</td>
</tr>
<tr>
<td>Between 40 to 50 years</td>
<td>1</td>
</tr>
<tr>
<td>Greater than 50 years</td>
<td>3</td>
</tr>
</tbody>
</table>

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<thead>
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<th>Waist circumference - Males</th>
<th></th>
</tr>
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<tbody>
<tr>
<td>Less than 90 cm (35.5 inches)</td>
<td>0</td>
</tr>
<tr>
<td>90 cm (35.5 inches) or greater</td>
<td>2</td>
</tr>
</tbody>
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<th>Waist circumference - Females</th>
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</tr>
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<tr>
<td>Less than 80 cm (31.5 inches)</td>
<td>0</td>
</tr>
<tr>
<td>80 cm (31.5 inches) or greater</td>
<td>2</td>
</tr>
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<table>
<thead>
<tr>
<th>Family history of diabetes</th>
<th></th>
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<tbody>
<tr>
<td>No family history of diabetes</td>
<td>0</td>
</tr>
<tr>
<td>Any parent and/or siblings</td>
<td>1</td>
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A score of 4 or more predicts high risk of developing Type 2 diabetes

Future Directions

- Diabetes Education
- Diabetic Foot
- Diabetes Registry
- Gestational Diabetes
- Diabetes Guidelines
- Diabetes and Ramadan
- Primary Prevention Program
International associations and collaborations

- University of Oslo
- University of Manchester
- University of Birmingham
- Foundation of European nurses for diabetes
- Diabetes and Ramadan - DAR
- M.V Hospital for Diabetes – India
- IDF Regional Council MENA Region
- Diabetes in Asia Study Group DASG
- University of Manchester
- Bangladesh University of Health Sciences
- Bangladesh University of Health Sciences
- Qatar Diabetes Association
- Life for a Child

Future Directions

- GIFTS EU collaboration
- IDF centres of education D-Net
- Diabetes Specialist Center India
- Dr. Mohan’s Diabetes Specialities Centre
- M.V Hospital for Diabetes (P) Ltd.
- XLPAD Excellence in Peripheral Arterial Disease
- PAD registry XLPAD
- Diabetes in Asia Study Group DASG
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Acknowledgements

National associations and collaborations

Pakistan Nursing Council PNC

PMDC CPSP HEC

Pakistan Endocrine Society PES

Pakistan Working group on diabetic foot PWGDF

Pakistan Nutrition and Dietetics Society PNDS

Pakistan Society of Health Systems Pharmacist PSHSP

Pakistan Hypertension League PHL

Pakistan Cardiac Society PCS

Diabetic Association of Pakistan DAP
Thank You...