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E-Newsletter
State Institute of Health and Family Welfare (SIHFW), Jaipur, Rajasthan

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From the Desk of Director

Dear Readers,
Greetings from SIHFW, Rajasthan!
The November issue of our e-newsletter focuses on Diabetes. Over the last 50 years, changes in lifestyle have led to a dramatic increase in the prevalence of diabetes in virtually every society around the world.

Simplest of the lifestyle changes -being physically active, achieving and maintaining healthy body weight, eating healthy diet and avoiding tobacco use, have been shown to be effective in preventing or delaying the onset of type 2 diabetes. Please find lot more information about the disease in lead article of present issue of the e-newsletter.

Before I miss, I stand indebted to all the members of SIHFW family, all our patrons and benefactors for the support they had extended to me personally over last four and half years and shall love to place my gratitude on record for the same.

Hope the successors shall keep the flag high.

Good bye!

Good bye all

(Dr. Akhilesh Bhargava)

Health Days in November'12

World Pneumonia Day 12th November
World Diabetes Day 14th November
Children's Day in India 14th November
World Chronic Obstructive Pulmonary Disease Day 14th November
World Day of Remembrance for Road Traffic Victims 17th November
Universal Children's Day 20th November

Diabetes

Diabetes is a disease marked by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. Diabetes can lead to serious complications and premature death.

Key facts

366 million people have diabetes in 2011; by 2030 this will have risen to 552 million (*IDF's Diabetes Atlas, 5th edition, 2011)*

As per WHO's The World health statistics 2012 report, one in six adults is obese, one in 10 diabetic and one in three has raised blood pressure.

More than 80% of diabetes deaths occur in low- and middle-income countries. WHO projects that diabetes deaths will double between 2005 and 2030.

In India out of the total mortality, NCDs are estimated to account for 53% of all deaths of which 2% deaths are from Diabetes (Non communicable Diseases Country Profiles 2011)

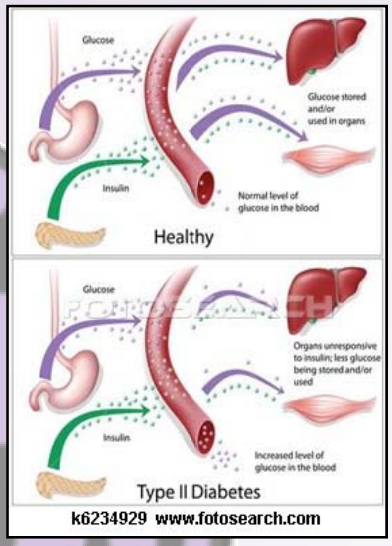
Types of diabetes

Type 1

Type 1 diabetes (previously known as insulin-dependent, juvenile or childhood-onset) is characterized by deficient insulin production and requires daily administration of insulin. The cause of type 1 diabetes is not known and it is not preventable with current knowledge.
Symptoms include excessive excretion of urine (polyuria), thirst (polydipsia), constant hunger, weight loss, vision changes and fatigue. These symptoms may occur suddenly.

Type 2

Type 2 diabetes (formerly called non-insulin-dependent or adult-onset) results from the body's ineffective use of insulin. Type 2 diabetes comprises 90% of people with diabetes around the world, and is largely the result of excess body weight and physical inactivity.



Symptoms may be similar to those of Type 1 diabetes, but are often less marked. As a result, the disease may be diagnosed several years after onset, once complications have already arisen. Until recently, this type of diabetes was seen only in adults but it is now also occurring in children.

Gestational diabetes (GDM)

Gestational diabetes is hyperglycaemia with onset or first recognition during pregnancy. Symptoms of gestational diabetes are similar to Type 2 diabetes. Gestational diabetes is most often diagnosed through prenatal screening, rather than reported symptoms.

Other types of diabetes result from specific genetic conditions (such as maturity-onset diabetes of youth), surgery, medications, infections, pancreatic disease, and other

illnesses. Such types of diabetes account for 1% to 5% of all diagnosed cases

How do I diagnose Diabetes?

Any one of the following tests can be used for diagnosis:*

- an **A1C** test, also called the hemoglobin A1c, HbA1c, or glycohemoglobin test
- a **fasting plasma glucose (FPG)** test
- an **oral glucose tolerance test (OGTT)**

Fasting Plasma Glucose (FPG)

The level of blood glucose level is measured in the morning (after 8 hours of fasting) before you eat or drink anything during this test. The test can help to diagnose diabetes and pre-diabetes. Diagnoses based on fasting plasma glucose are as follows:

FPG <99 mg/dl is considered normal.

FPG between 100 to 125 mg/dl indicates pre-diabetes (or impaired fasting glucose).

FPG >126 mg/dl indicates diabetes

Oral Glucose Tolerance Test (OGTT)

This test determines your blood glucose level after drinking 75 grams of glucose solution. Your doctor will recommend that you fast for at least 8 to 12 hours before doing this test. The test can help to diagnose diabetes and pre-diabetes. OGTT is more sensitive as compared to FPG test for diagnosis of pre-diabetes.

Diagnoses based on OGTT are as follows:
Normal response: In people with normal glucose, the 2-hour glucose level remains lower than 140 mg/dl, and all values between 0 and 2 hours remain lower than 200 mg/dl.

Impaired glucose tolerance: If your fasting plasma glucose is less than 126 mg/dl and the 2-hour glucose level is between 140 and 199 mg/dl you have impaired glucose tolerance test.

Diabetes: If your fasting plasma glucose is greater than 126 mg/dl and/or the 2-hour glucose level is greater repeatedly (done on different days), you have diabetes.

Gestational diabetes: A woman is diagnosed with gestational diabetes if she has any two of the following after 100g OGTT; fasting plasma glucose > 95 mg/dl, 1-hour glucose > 180 mg/dl, 2-hour glucose level > 155 mg/dl, or a 3-hour glucose level > 140 mg/

Complications of diabetes:

Type 1 and type 2 diabetes are chronic, life-long conditions that require careful monitoring and control. Without proper management they can lead to very high blood sugar levels which can result in long term damage to various organs and tissues.

Cardiovascular disease: affects the heart and blood vessels and may cause fatal complications such as coronary heart disease (leading to heart attack) and stroke. Cardiovascular disease is the major cause of death in people with diabetes, accounting in most populations for 50% or more of all diabetes fatalities, and much disability.

Kidney disease (diabetic nephropathy): can result in total kidney failure and the need for dialysis or kidney transplant. Diabetes is an increasingly important cause of renal failure, and indeed has now become the single most common cause of end stage renal disease, i.e. that which requires either dialysis or kidney transplantation, in the USA2, and in other countries.

Nerve disease (diabetic neuropathy): can ultimately lead to ulceration and amputation of the toes, feet and lower limbs. Loss of feeling is a particular risk because it can allow foot injuries to escape notice and treatment, leading to major infections and amputation.

Eye disease (diabetic retinopathy): characterized by damage to the retina of the eye, this can lead to loss of vision.

Women with gestational diabetes may have children who are large for their gestational age.

Risk Factors:
For Type 1diabetes:

- Genetic factors.
- Environmental factors,
- Increased height and weight development,
- Increased maternal age at delivery,
- and exposure to some viral infections

For Type 2 diabetes:

- Obesity
- Diet and physical inactivity
- Increasing age
- Insulin resistance
- Family history of diabetes
- Ethnicity

Warning Signs:

- Frequent urination
- Excessive thirst
- Increased hunger
- Weight loss
- Tiredness
- Lack of interest and concentration
- Vomiting and stomach pain (often mistaken as the flu)
- A tingling sensation or numbness in the hands or feet
- Blurred vision
- Frequent infections
- Slow-healing wounds

Management of Diabetes:

Physical Activity: 30 minutes of moderate physical activity per day (e.g. brisk walking, swimming, cycling, dancing) on most days of the week.

Body weight: weight loss improves insulin resistance, blood glucose and high lipid levels in the short term, and reduces blood pressure. It is important to reach and maintain a healthy weight.

Healthy Eating: avoiding foods high in sugars and saturated fats, and limiting alcohol consumption.

Avoid tobacco: tobacco use is associated with more complications in people with diabetes.

Alcohol consumption by diabetics can worsen blood sugar control in those patients. For example, long-term alcohol usein well-nourished diabetics can result in excessive blood sugar levels. Conversely, long-term alcohol ingestion in diabetics who are not adequately nourished can lead to dangerously low blood sugar levels. Heavy drinking, particularly in diabetics, also can cause the accumulation of certain acids in the blood that may result in severe health consequences. Finally, alcohol consumption can worsen diabetes-related medical complications, such as disturbances in fat metabolism, nerve damage, and eye disease.

Monitoring for complications: monitoring and early detection of complications is an essential part of good diabetes care. This includes regular foot and eye checks, controlling blood pressure and blood glucose, and assessing risks for cardiovascular and kidney disease

World Diabetes Day campaign themes since 1991:

- 1991: Diabetes Goes Public
- 1992: Diabetes: A Problem of All Ages in All Countries
- 1993: Growing Up with Diabetes
- 1994: Diabetes and Growing Older
- 1995: The Price of Ignorance
- 1996: Insulin for Life!
- 1997: Global Awareness: Our Key to a Better Life
- 1998: Diabetes and Human Rights
- 1999: The Costs of Diabetes
- 2000: Diabetes and Lifestyle in the New Millennium
- 2001: Diabetes and Cardiovascular Disease
- 2002: Your Eyes and Diabetes
- 2003: Diabetes and Kidneys
- 2004: Diabetes and Obesity
- 2005: Diabetes and Foot Care
- 2006: Diabetes and the Disadvantaged and Vulnerable
- 2007-2008: Diabetes in Children and Adolescents
- 2009-2013: Diabetes education and prevention

SIHFW in Action

(1)Trainings/Workshops/Meetings:

S. No.		Title	Total Participants	Sponsoring Agency
1.	**17-18 October**	Review Workshop on CBI-RI	16	UNICEF
2.	**17 Sept 2012 to 20 January 2013 (ongoing)**	LSAS training at District Medical Colleges (Jaipur, Jodhpur, Bikaner and Kota)	6	
3.	**12 September-20 November 2012 (ongoing)**	V Batch of Professional Development Course	17 (BCMO, SMO, MO)	NIHFW
4.	**3 October to 2 November 2012**	Integrated Foundation Course at SIHFW followed by sessions at districts-	30 (Newly recruited MOs)	NRHM
5.	**17 September to 16 October 2012**	Integrated Training for in-service medical officers at Janana Hospital Jaipur	6 (Newly recruited MOs)	RCH
6.	**25 October to 8 November 2012**	Integrated training for Health workers (without SBA) Jodhpur, Sriganganagar Barmer	79 (Health workers)	RCH
7.	**01 to 30 October 2012**	Integrated training for Health workers (with SBA) at Jaipur	16 (Health workers-ANM, GNM)	RCH
8.	**25 October to 25 November 2012**	Integrated training for Health workers (with SBA) at Pali	15 (Health workers-ANM, GNM)	RCH
9.	**10 October 2012 to 13 February 2013**	Integrated EmOC training at RNT Medical College, Udaipur	4 (MOs)	RCH
10.	**29-31 October 2012**	ToT on IYCF, HFWTC, Jaipur	28 (Health workers)	RCH
11.	**11 October 2012**	Workshop on International Girl Child Day	110 (Adolescent girls and NGO members)	Urmul and PLAN

(2.) Monitoring / Visits:

Workshop at Goa

Dr. Akhilesh Bhargava (Director, SIHFW) and Ms Nirmala peter participated at the 9th Heath care Executive Management Development Programme organised by AIIMS & WHO from 21-27 October 2012, at Goa.

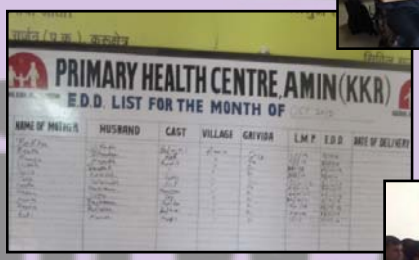
Monitoring of Integration training
Integrated foundation training of newly recruited MOs was monitored by Mr Hemant Yadav at Sriganganagar, Ms Nirmala Peter at Ajmer and Mr Ankur Asudani at Jodhpur during 10-11 October 2012.

ToT of Infant and Young Child's Feeding practices, was monitored by Ms Divya during 29-30 October at HFWTC, Jaipur

Dr Richa Chaturvedy monitored EmOC training at RNT Medical College, Udaipur during 29-30 Udaipur. She also monitored LSAS Training at SMS Medical College, Jaipur on 18 October 2102.

PDC visit to NIHFW
Participants of the PDC V batch visited Panchkula during 1to 6 October 2012, accompanied by facilitators Ms. Bhumika Talwar and Mr Ravi Garg.

Participants visited RHC Amin at Kurukshetra, DH Kurukshetra, FRU unit at Kalka and Nadasahib Sub Centre. There were sessions on Schemes, Referral transport, BCC, Family welfare programme.



Mr. Ejaz and Ms. Aditi Sharma accompanied PDC participants to their visit to NIHFW, New Delhi during 29 October to 2 November 2012. The participants visited NAZ foundation, Mamta NGO visit, Trauma centre at AIIMS. They also visited the New Delhi Municipal Cooperation and National Documentation Centre at NIHFW. The participants visited Bhagwan Mahaveer Viklang Sahayata Samiti at Jaipur on 25 October 2012.

Planned Training/Workshop/Meeting/ Visits

- ToT on CAC, HFWTC, Jaipur – 1-3 November 2012
- Routine Immunization- 6-8 November 2012
- ToT on Third Module of Yashoda training (3 batches) 7-9, 19-20, 21-22 November 2012 at SIHFW, by NIPI.
- Professional Development Course- VI Batch from 5 December 2012 to 12 February 2013.
- Integrated foundation training for newly recruited MOs -19 November 2012.
- Integrated training for health workers (without and with SBA)-Bharatpur, Banswara, Jhunjunu, Dholpur, Dungarpur, Churu and Ajmer.
- Monitoring of integrated trainings at Jodhpur, Pali, Sriganganagar, Bikaner and Jaipur.

Other Highlights

Dr. S.S Yadav was relieved and a felicitation was held on 7 October 2012. His birthday was celebrated in the same month.

Birthday of Ms Rajni Singh and Ms Aditi Bhargava was celebrated on 23 October. *They shared the date of birth, cake and the icing too!*

The Guest reactions:

Ms. Krishna Puniya (Olympic medalist) graced workshop on Girl Child organised at SIHFW, by Plan-India on 11 October on occasion of International day of the Girl Child. About 100 adolescent girls participated at the event, which was chaired by Smt. Ladkumari Jain of Women's Commission, Rajasthan. Ms Puniya quoted '*Be yourself*' in SIHFW visitor's book.

Training Feedbacks:

1. Hostel facility and Staff cooperation-liked most.
2. Supportiveness from staff and services from the mess are excellent.
3. Environment of SIHFW is very close to nature.
4. Most liked sessions in PDC V batch –Dr Akhilesh Bhargava on Medical Ethics, Immunization by Dr S.S Yadav. (Source: Participants of trainings at SIHFW during October 2012)

Health in news

Global

20 million lives saved through TB care and control

An estimated 20 million people are alive today as a direct result of tuberculosis (TB) care and control, according to the WHO *Global tuberculosis report 2012*. "In the space of 17 years, 51 million people have been successfully treated and cared for according to WHO recommendations. Without that treatment, 20 million people would have died," said Dr Mario Raviglione, Director of the WHO Stop TB Department. "This milestone reflects the commitment of governments to transform the fight against TB."

The achievements have been secured by leadership in endemic countries and international support, but today WHO warned that the global fight against the disease remains fragile. "The momentum to break this disease is in real danger. We are now at a crossroads between TB elimination within our lifetime, and millions more TB deaths," said Dr Raviglione. New data in the WHO *Global tuberculosis report 2012* confirm that TB remains a major infectious killer today. The findings show:

- a continued decline in the number of people falling ill from TB, but still an enormous global burden of 8.7 million new cases in 2011;
- an estimated 1.4 million deaths from TB, including half a million women, underlining the disease as one of the world's top killers of women;
- reduced rates of new disease and deaths in all of WHO's six regions, although the African and European Regions are not yet on track to achieve goals to halve 1990 levels of mortality by 2015;
- a persistently slow progress in the MDR-TB response, with only 1 in 5 patients estimated to exist being diagnosed worldwide.

The report also highlights country successes – among them Cambodia which has seen a 45% drop in TB prevalence between 2002 and 2011 – and, in all, it features data from 204 countries and territories and covers all aspects of TB, including multidrug-resistant TB (MDR-TB), TB/HIV, research and development (R&D) and TB financing. There is praise in the report for the worldwide roll-out of a new diagnostic device that can test patients for TB, including drug-resistant TB, in just 100 minutes. The fully automated nucleic acid amplification test (NAAT), which can diagnose TB and rifampicin-resistant disease, is now available in 67 low- and middle-income countries. Adoption of the 'while you wait' test is expected to further accelerate following a recent 41% fall in the price of the test.

The report also points to the promise of medical breakthroughs from new TB drugs – the first in over 40 years – which could be on the market as early as 2013. Indeed, tools to prevent, detect and treat all forms of TB are steadily advancing through the R&D pipeline, says the report.

Further down the line, progress means that a new TB vaccine and a 'point-of-care' diagnostic could be available within the next decade. But delivering new tools comes at a cost – and the report notes that there is a US$ 1.4 billion funding gap per year for research and development.

Source: http://www.who.int/mediacentre, 17 October 2012

India

Breastfeeding reduces breast cancer risk, study finds

Mother's milk is well known as the wonder meal for a new-born, with an exclusively breastfed child 14 times less likely to die in the first six months as against a non-breastfed child. However, breast-feeding has now been found to have clear benefits for even the mother.

Scientists have now found that breastfeeding greatly reduces the risk of a type of breast cancer that commonly affects younger woman, and is usually known to have poor prognosis.
According to a study conducted at Columbia University's Mailman School of Public Health that should come as an eye-opener for Indian women — less than half of whom breast-feed their child — breast-feeding has been found to reduce the risk for estrogen receptor-negative and progesterone receptor-negative breast cancer.

Researchers examined the association between reproductive risk factors — such as the number of children a woman delivers, breast feeding and oral contraceptive use - and found an increased risk for estrogen receptor and progesterone receptor (ER/PR)-negative breast cancer in women, who do not breast-feed. The results also indicated that having three or more children without breast-feeding was associated with an increased risk for ER/PR-negative breast cancer.

"Women who had children but did not breast-feed had about 1.5 times the risk for ER/PR-negative breast cancer," said Meghan Work, the study's lead author.

"If women breast-fed their children, there was no increased risk for ER/PR-negative cancer. This is particularly important as breast-feeding is a modifiable factor that can be promoted and supported through health policy," Work said.

The researchers used data from three sites of the Breast Cancer Family Registry, which includes women with and without breast cancer from the US, Canada and Australia. The study included 4,011 women with breast cancer, and 2,997 population-based controls.

Unicef says that despite compelling evidence that exclusive breast-feeding prevents diarrhea and pneumonia among children and also helps mothers, global rates of breast-feeding have remained relatively stagnant in the developing world, growing from 32% in 1995 to 39% in 2010.
The recent Lancet Nutrition Series also highlighted the remarkable fact that a non-breastfed child is 14 times more likely to die in the first six months than an exclusively breastfed child.

Experts say breast milk promotes sensory and cognitive development and protects the infant against infectious and chronic diseases.

Breast-feeding also contributes to the health being of mothers — it helps to space children and reduces the risk of ovarian cancer and breast cancer.
Studies show that women who breastfed their infants had up to a 12% reduced risk of type 2diabetes for each year they breastfed, decreased the risk of ovarian cancer by up to 21%, decreased the risk of breast cancer by up to 28% in those whose lifetime duration of breastfeeding was 12 months or longer.
Source: TOI, 21 October 12

20,000 more beds for maternal, child health care

To meet the growing demand for institutional deliveries, the government has enhanced the bed capacity of public health facilities exclusively for mother and child care by a whopping 20,000 beds.

To be implemented under the RCH scheme, the increase in the bed numbers will benefit 10 states that have bad health indicators but a heavy patient load for institutional deliveries. The Ministry of Health

and Family Welfare has set a target of two to two and a half years for the additional infrastructure to become functional.

In many cases, the beds will be added as health sings to the District Hospitals. Once fully functional, common sites like women sharing beds before and after delivery or having to recuperate in the corridors will no more be seen. “There has been a high demand for institutional deliveries after the Janani Suraksha Yojana was initiated which has gone up exponentially with the Janani Shishu Suraksha Yojana launched in 2010”. However, the infrastructure has not kept pace with the demand.

The Ministry has identified 267 public health facilities in these 10 states where mother and child health wings would be established. At the other identified facilities at the level of CHCs and PHCs 30 to 50 beds would be added.

The scheme of providing additional beds involves a cost of about Rs 3,000 crore of which Rs 1,206 crore has been released. The additional facilities were added to the existing facilities as the supporting infrastructure like blood bank, pathology laboratories and imaging facilities are already there. The district hospitals have enough space for expansion,

Chhattisgarh has been provided additional bed strength in 35 health facilities, Rajasthan in 22, Orissa and Madhya Pradesh in 10 each respectively, Andhra Pradesh in 31, Assam in 34, Uttarakhand in 2, Uttar Pradesh in 50 and West Bengal in 10. In States like Punjab and Rajasthan where road connectivity is good and distances less, only district hospitals were identified for additional beds, said Ms. Anuradha Gupta, Additional Secretary in Ministry of Health and Family Welfare.
Source: The Hindu 31 October 2012

Rajasthan

Government takes measures to make state polio-free

The state government has stepped up efforts to ensure that not even a single polio case should be reported in the state. Administering polio drops to children would continue at Munabao railway station for those travelling by the Thar Express, which runs between India and Pakistan, said medical, health and family welfare department, two days after celebrating World Polio Day on October 24.

In Rajasthan, no new case of polio has been detected since 2009. The last case in the state was detected on November 27, 2009 in Bharatpur. In the same year, two more new cases of polio were detected before the last case reported in November. In 2010, 2011 and 2012 so far, there was no fresh case of polio.

Project director (immunization) R P Jain said, "The polio vaccination will continue at Munabao railway station for every child travelling from Pakistan to India and from India to Pakistan."

Every week on Saturday, around 300 people arrive at Munabao railway station from Pakistan and similar number of passengers travel from India to Pakistan by Thar Express. Around 14% of the total 600 passengers are children below 5 years. The department administers polio vaccine to all the children below 5 years as Pakistan is still in the polio-endemic country list while India in 2012 was removed from the list of such countries.

Besides, Alwar and Bharatpur are in the list of high risk districts. The children below 5 years of age in Alwar and Bharatpur are being administered polio vaccine five times in a year while in other districts the polio vaccines are administered only twice a year. The health department launches campaign for polio vaccination at every alternate month in Alwar and Bharatpur.

Also, the health department claimed that the surveillance of acute flaccid paralysis (AFP) cases has been intensified. In the last financial year, the health department found 1,500 cases of AFP. Jain said, "In the last financial year, we found over 1,500 AFP cases in the state and the samples were sent to Ahmedabad virology laboratory to find out the reason of paralysis among AFP cases. But all the samples tested negative for polio virus. The reasons for paralysis among children can be many. But, in all the cases, we found that there was not a single case which tested positive for polio virus."

The department claimed that the routine pulse polio programme has also been strengthened. The pulse polio vaccines are administered to children at the age of 1.5 month, 2.5 month, 3.5 month and at the age of 1.5 year.

City's health experts say continued efforts on both local and national level will make India a polio-free country. The WHO grants polio free-status to countries where no polio cases have been reported in past three years.

Dr Deepak Shivpuri, senior consultant and head of department, pediatrics & neonatology, of a private hospital, said, "No polio case in the last year and a half makes it imperative for us to continue efforts in this direction. Pediatricians across India have shown confidence in the protective efficacy of sequential administration of injectable polio vaccine and oral polio vaccine to achieve the polio free status in 2014."
Source: TOI, 27 October 2012

We solicit your feedback:

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