

# SIHFW Rajasthan

**Electronic Newsletter**  
**Vol. 3/Issue 3/March 2014**



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**From the Director's Desk**

**Date: 7.4.14**

Dear Readers,

Greetings from SIHFW!

*Festival of Holi, colours and festive food, all we relished in the month of March. The first month of new financial year-April, 2014 bears great importance in developing work plans for the year 2014-15. Today is the most important day recognized in the sector of health-World Health Day, 2014.*

*Every year the day is celebrated on April 7 since 1948. The Day provides an opportunity for individuals in every community to get involved in activities that can lead to better health. The theme for World Health day 2014 is vector-borne diseases.*

*Mosquitoes, flies, ticks and bugs may be a threat to your health-and that of your family-at home and when travelling. This is the message of this year's World Health Day. The slogan for this year's theme is "Small Bite, Big Threat". This issue of our e-newsletter carries a lead article on the theme of World Health Day, 2014.*

*We solicit your feedback and suggestions.*



Director

## Inside:

- World Health Day
- Events at SIHFW
- Feedback
- Health News

## Health and Social Days in March and April 14

International Day for Ear and Hearing 3 March  
International Women's Day 8 March  
World Kidney Day 13 March  
World Sleep Day 14 March  
World Consumer Day 15 March  
National Vaccination Day 16 March  
National Disabled Day 19 March  
World Water Day 22 March  
World tuberculosis Day 24 March  
World Autism Awareness Day 2 April  
World Health Day 7 April  
World Hemophilia Day 17 April  
World Earth Day 22 April

## **Vector Borne Diseases- *Small Bite, Big Threat***

World Health Day is celebrated on 7 April every year to mark the anniversary of the founding of WHO in 1948. The topic for 2014 is vector-borne diseases.

### **What are vectors and vector-borne diseases?**

Vectors are organisms that transmit pathogens and parasites from one infected person (or animal) to another. Vector-borne diseases are illnesses caused by these pathogens and parasites in human populations. They are most commonly found in tropical areas and places where access to safe drinking-water and sanitation systems is problematic.

The most deadly vector-borne disease, malaria, caused an estimated 660 000 deaths in 2010. Most of these were African children. However, the world's fastest growing vector-borne disease is dengue, with a 30-fold increase in disease incidence over the last 50 years. Globalization of trade and travel and environmental challenges such as climate change and urbanization are having an impact on transmission of vector-borne diseases, and causing their appearance in countries where they were previously unknown.

In recent years, renewed commitments from ministries of health, regional and global health initiatives – with the support of foundations, nongovernmental organizations, the private sector and the scientific community – have helped to lower the incidence and death rates from some vector-borne diseases.

World Health Day 2014 will spotlight some of the most commonly known vectors – such as mosquitoes, sand flies, bugs, ticks and snails – responsible for transmitting a wide range of parasites and pathogens that attack humans or animals. Mosquitoes, for example, not only transmit malaria and dengue, but also lymphatic filariasis, chikungunya, Japanese encephalitis and yellow fever.



### **Goal: better protection from vector-borne diseases**

The campaign aims to raise awareness about the threat posed by vectors and vector-borne diseases and to stimulate families and communities to take action to protect themselves. A core element of the campaign will be to provide communities with information. As vector-borne diseases begin to spread beyond their traditional boundaries, action needs to be expanded beyond the countries where these diseases currently thrive.

More broadly, through the campaign, we are aiming for the following:

- families living in areas where diseases are transmitted by vectors know how to protect themselves;
- travelers know how to protect themselves from vectors and vector-borne diseases when travelling to countries where these pose a health threat;
- in countries where vector-borne diseases are a public health problem, ministries of health put in place measures to improve the protection of their populations; and
- in countries where vector-borne diseases are an emerging threat, health authorities work with environmental and relevant authorities locally and in neighbouring countries to improve integrated surveillance of vectors and to take measures to prevent their proliferation.

### **About vector-borne diseases**

Vectors are organisms that transmit pathogens and parasites from one infected person (or animal) to another, causing serious diseases in human populations.

These diseases are commonly found in tropical and sub-tropical regions and places where access to safe drinking-water and sanitation systems is problematic.

Vector-borne diseases account for 17% of the estimated global burden of all infectious diseases. The most deadly vector-borne disease, malaria, caused an estimated 660 000 deaths in 2010.

However, the world's fastest growing vector-borne disease is dengue, with a 30-fold increase in disease incidence over the last 50 years.

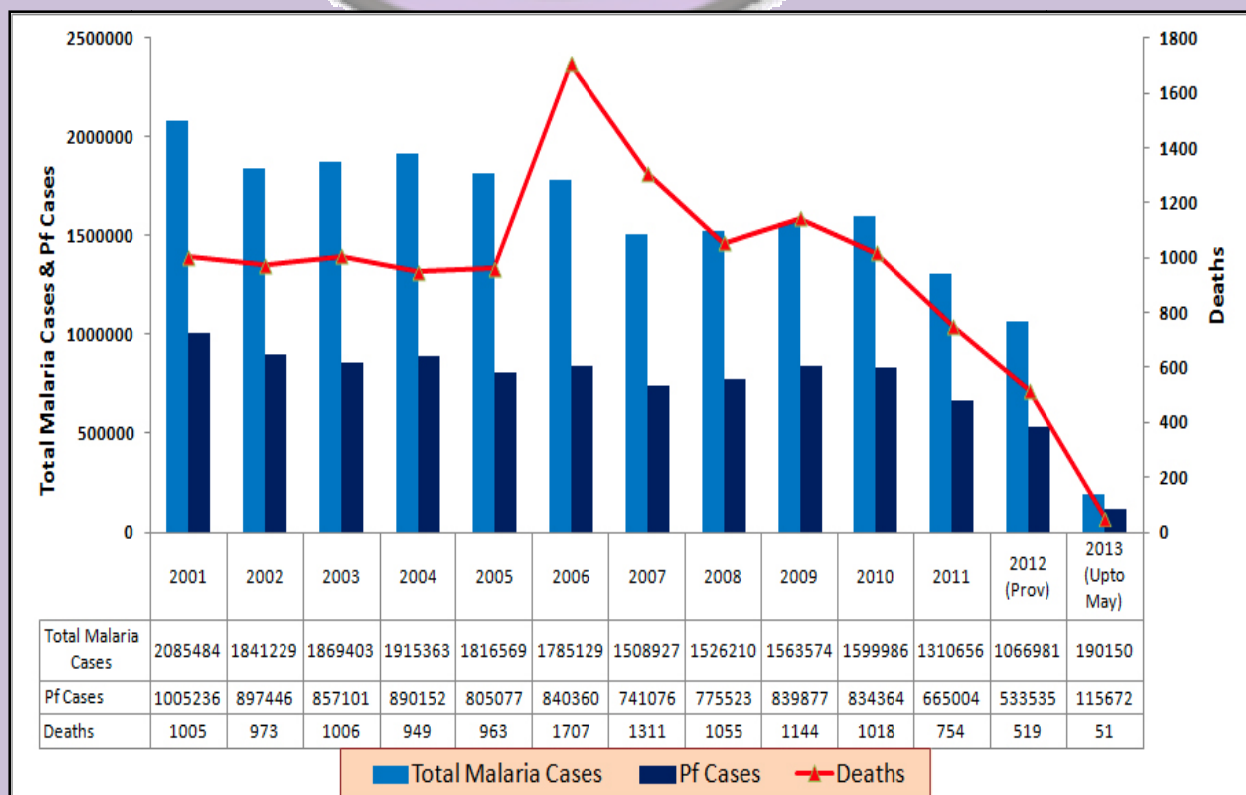
### **More information about vector-borne diseases**

- Dengue  
Mosquito-borne infection that may cause lethal complications
- Chagas disease  
Life-threatening condition transmitted through triatomine bugs, contaminated food, infected blood transfusion
- Chikungunya  
Viral disease transmitted to humans by infected mosquitoes
- Congo-Crimean haemorrhagic fever  
Severe illness caused by a number of viruses
- Human African trypanosomiasis  
*Glossina*-borne parasitic infection, fatal without prompt diagnosis and treatment
- Leishmaniasis  
Infection is caused if bitten by female sandflies
- Lymphatic filariasis  
Infection occurs when filarial parasites are transmitted to humans through mosquitoes
- Lyme disease  
Disease caused by infected ticks
- Malaria  
Disease caused by a parasite *plasmodium*, transmitted via infected mosquitoes
- Onchocerciasis  
Parasitic disease caused by the filarial worm *onchocerca volvulus*
- Schistosomiasis  
Parasitic disease caused by trematode flatworms of the genus
- Yellow fever  
Viral disease transmitted via *aedes* mosquitoes

**Vector-borne diseases (VBDs) account for 16 % of the estimated global burden of communicable diseases**

Vector control is an important component in the prevention and control of VBDs, especially for transmission control. VEM, as a cross-cutting activity, develops and promotes strategies, guidelines and standards for vector control, including sound management of pesticides. VEM promotes integrated vector management to improve efficacy, cost-effectiveness, ecological soundness and sustainability of vector control interventions for VBD control.

**Trend of Malaria in India 2001-2013**



### Epidemiological Indicators for Malaria in India (2001-12)

Year	Population in thousand	Blood Smear Examined	Positive cases	Pf Cases	ABER	API	SPR	SFR	Deaths
2001	984579	90,389,019	2,085,484	1,005,236	9.18	2.12	2.31	1.11	1005
2002	1013942	91,617,725	1,841,229	897,446	9.04	1.82	2.01	0.98	973
2003	1027157	99,136,143	1,869,403	857,101	9.65	1.82	1.89	0.86	1006
2004	1040939	97,111,526	1,915,363	890,152	9.33	1.84	1.97	0.92	949
2005	1082882	104,143,806	1,816,569	805,077	9.62	1.68	1.74	0.77	963
2006	1072713	106,725,851	1,785,129	840,360	9.95	1.66	1.67	0.79	1707
2007	1087582	94,928,090	1,508,927	741,076	8.73	1.39	1.59	0.78	1311
2008	1119624	97,316,158	1,526,210	775,523	8.69	1.36	1.57	0.80	1055
2009	1150113	103396076	1563,574	839,877	8.99	1.36	1.51	0.81	1144
2010	1167360	106040223	1495817	779549	9.21	1.37	1.41	0.74	1018
2011	1194901	109313294	1310656	665004	9.12	1.10	1.20	0.61	754
2012(P)	1211509	108989326	1066981	533535	9.00	0.88	0.98	0.49	519

Source: <http://www.nvbdc.gov.in>

BSE: Blood Smear Examined

ABER: Annual Blood Smear Examination Rate (percentage of blood smears examined in a year of total population)

Source: <http://www.nvbdc.gov.in>

### WHAT IS DENGUE?

- Dengue is a viral disease
- It is transmitted by the infective bite of Aedes Aegypti mosquito
- Man develops disease after 5-6 days of being bitten by an infective mosquito
- It occurs in two forms: Dengue Fever and Dengue Haemorrhagic Fever(DHF)
- Dengue Fever is a severe, flu-like illness
- Dengue Haemorrhagic Fever (DHF) is a more severe form of disease, which may cause death
- Person suspected of having dengue fever or DHF must see a doctor at once





**Dengue/DHF Situation In India**

**Dengue Cases and Deaths in the Country since 2008**

Sl. No.	Affected States/UTs	2008		2009		2010		2011		2012		2013*		2014**	
		C	D	C	D	C	D	C	D	C	D	C	D	C	D
1	Andhra Pradesh	313	2	1190	11	776	3	1209	6	2299	2	910	1	36	0
2	Arunachal Pradesh	0	0	0	0	0	0	0	0	346	0	0	0		
3	Assam	0	0	0	0	237	2	0	0	1058	5	4526	2	10	0
4	Bihar	1	0	1	0	510	0	21	0	872	3	1246	4		
5	Chattisgarh	0	0	26	7	4	0	313	11	45	0	52	1		
6	Goa	43	0	277	5	242	0	26	0	39	0	198	2		
7	Gujarat	1065	2	2461	2	2568	1	1693	9	3067	6	6170	15	85	0
8	Haryana	1137	9	125	1	866	20	267	3	768	2	1784	5		
9	Himachal Pd.	0	0	0	0	3	0	0	0	73	0	86	2	0	0
10	J & K	0	0	2	0	0	0	3	0	17	1	1837	3	0	0
11	Jharkhand	0	0	0	0	27	0	36	0	42	0	161	0		
12	Karnataka	339	3	1764	8	2285	7	405	5	3924	21	6408	12	101	0
13	Kerala	733	3	1425	6	2597	17	1304	10	4172	15	7911	25	380	2
14	Madhya Pd.	3	0	1467	5	175	1	50	0	239	6	1255	9	17	0
15	Meghalaya	0	0	0	0	1	0	0	0	27	2	46	0	0	0
16	Maharashtra	743	22	2255	20	1489	5	1138	25	2931	59	5432	48	132	0
17	Manipur	0	0	0	0	7	0	220	0	6	0	9	0	0	0
18	Mizoram	0	0	0	0	0	0	0	0	6	0	7	0		
19	Nagaland	0	0	25	0	0	0	3	0	0	0	0	0		
20	Orissa	0	0	0	0	29	5	1816	33	2255	6	7132	6		
21	Punjab	4349	21	245	1	4012	15	3921	33	770	9	4114	11		
22	Rajasthan	682	4	1389	18	1823	9	1072	4	1295	10	4413	4		
23	Sikkim	0	0	0	0	0	0	2	0	2	0	38	0		
24	Tamil Nadu	530	3	1072	7	2051	8	2501	9	12826	66	6122	0	339	0
25	Tripura	0	0	0	0	0	0	0	0	9	0	0	0	0	0
26	Uttar Pradesh	51	2	168	2	960	8	155	5	342	4	1409	5	1	0
27	Uttrakhand	20	0	0	0	178	0	454	5	110	2	54	0		
28	West Bengal	1038	7	399	0	805	1	510	0	6456	11	5920	6	31	0
29	A & N Island	0	0	0	0	25	0	6	0	24	0	67	0	2	0
30	Chandigarh	167	0	25	0	221	0	73	0	351	2	107	0		
31	Delhi	1312	2	1153	3	6259	8	1131	8	2093	4	5574	6	0	0
32	D&N Haveli	0	0	0	0	46	0	68	0	156	1	190	0	6	0
33	Daman & Diu	0	0	0	0	0	0	0	0	96	0	61	0		
34	Puduchery	35	0	66	0	96	0	463	3	3506	5	2215	0	63	0
	<b>Total</b>	<b>12561</b>	<b>80</b>	<b>15535</b>	<b>96</b>	<b>28292</b>	<b>110</b>	<b>18860</b>	<b>169</b>	<b>50222</b>	<b>242</b>	<b>75454</b>	<b>167</b>	<b>1203</b>	<b>2</b>

\* Provisional till 31st December | \*\* Provisional till 28th February 2014

C=Cases | D=Deaths

## **MALARIA CONTROL STRATEGIES**

### **1. Early case Detection and Prompt Treatment (EDPT)**

- EDPT is the main strategy of malaria control - radical treatment is necessary for all the cases of malaria to prevent transmission of malaria.
- Chloroquine is the main anti-malaria drug for uncomplicated malaria.
- Drug Distribution Centres (DDCs) and Fever Treatment Depots (FTDs) have been established in the rural areas for providing easy access to anti-malarial drugs to the community.
- Alternative drugs for chloroquine resistant malaria are recommended as per the drug policy of malaria.

### **2. Vector Control**

#### **(i) Chemical Control**

Use of Indoor Residual Spray (IRS) with insecticides recommended under the programme

- Use of chemical larvicides like Abate in potable water
- Aerosol space spray during day time
- Malathion fogging during outbreaks

#### **(ii) Biological Control**

- Use of larvivorous fish in ornamental tanks, fountains etc.
- Use of biocides.

#### **(iii) Personal Prophylactic Measures that individuals/communities can take up**

- Use of mosquito repellent creams, liquids, coils, mats etc.
- Screening of the houses with wire mesh
- Use of bed nets treated with insecticide
- Wearing clothes that cover maximum surface area of the body

### **4. Community Participation**

- Sensitizing and involving the community for detection of Anopheles breeding places and their elimination
- NGO schemes involving them in programme strategies
- Collaboration with CII/ASSOCHAM/FICCI

### **5. Environmental Management & Source Reduction Methods**

- Source reduction i.e. filling of the breeding places
- Proper covering of stored water
- Channelization of breeding source

### **6. Monitoring and Evaluation of the programme**

- Monthly Computerized Management Information System(CMIS)
- Field visits by state by State National Programme Officers
- Field visits by Malaria Research Centres and other ICMR Institutes
- Feedback to states on field observations for correction actions.

## **CONTROL OF MALARIA IN URBAN SITUATION**

Malaria in urban areas was considered to be a marginal problem restricted to mega towns only and was considered that local bodies are capable of handling it. Therefore while launching the National Malaria Eradication Programme in 1958, Urban Malaria was not included. By 1970s, incidence of rural malaria came down drastically i.e. 0.1 to 0.15 million cases per year but the urban town reported rising trend. Madhok Committee in 1970, investigated the problem and assessed that 10 to 12% of total cases were contributed by urban areas. The committee recommended anti larval measures for containment of urban malaria, because it was feared that proliferation from urban to rural may spread and nullify the gains already made.

The control of malaria in the urban areas was thought of an important strategy as a programme complimentary to the NVBDCP for rural areas. Modified Plan of Operation (MPO) was designed and submitted to the Cabinet to tackle the malaria situation in both urban and rural areas in the country simultaneously. Under MPO, it was decided to initiate anti-larval and anti-parasitic measures to abate the malaria transmission in urban areas. The proposal to control malaria in towns named as Urban Malaria Scheme was approved during 1971 and it was envisaged that 131 towns would be covered under the scheme in a phased manner. This scheme was sanctioned during November, 1971 and the expenditure on this scheme is treated as plan expenditure in centrally sponsored sector. The central assistance under this scheme was treated 100 per cent grant to the State Governments in kind.

At present, Urban Malaria Scheme is protecting 130.3 million population from malaria as well as from other mosquito borne diseases in 131 towns in 19 States and Union Territory.

### **OBJECTIVES**

The main aim is the reduction of the disease to a tolerable level in which the human population can be protected from malaria transmission with the available means.

The Urban Malaria Scheme aims at :

- a) To prevent deaths due to malaria.
- b) Reduction in transmission and morbidity.

### **NORMS**

The towns should have a minimum population of 50,000.

- a. The API should be 2 or above.
- b. The towns should promulgate and strictly implement the civic by-laws to prevent/eliminate domestic and peri-domestic breeding places

## Trainings, Workshops and Meetings

### Capacity Building of SIHFW Staff

A capacity building programme for SIHFW personnel was organised at Udaipur from March 27 to 29, 2014. This activity was supported by UNICEF. The training activity was organised under chairmanship and guidance of Dr M.L. Jain, Director SIHFW. Key resource persons from UNICEF included Dr Anil Agrawal, Dr Apoorva Chaturvedi and Mr. Vinod. A Quiz was played coordinated by UNICEF resource persons based on information and updates of the health scenario of the state.

Each SIHFW staff made a presentation on key programme areas and the session was moderated with suggestions and improvements in the skills executed in presentations. Later, there were sessions on Overview of Maternal Mortality, Overview of Infant mortality in view of rising institutional deliveries. There was a demonstration on access and utilization of ASSAN software and DATA representation on Maps with help of Devindia.com. There was experience sharing in session of supportive supervision. Participants were briefed about monitoring aspects of field-visit. The participants visited various facilities including CHCs, PHCs and Sub centres of Dungarpur and Banswara districts in 3 teams including resource person and Chairperson Dr M.L. Jain. Information was collected from service providers and users, as well as from community. Checklists were used for information collection.

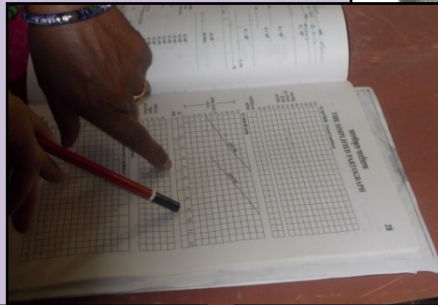
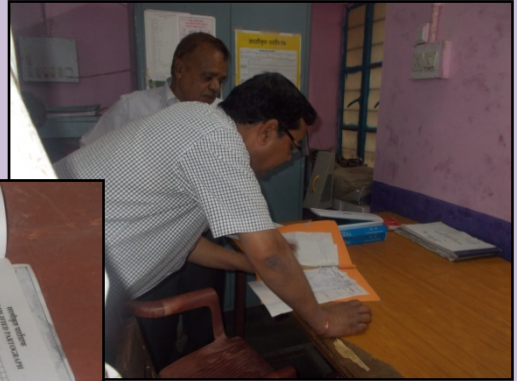
*Dr. M.L Jain, Director-SIHFW with SIHFW team at the capacity building.*

*Visit to CHC Partapur. Dr. M.L. Jain with Dr. H L Tambiyar, CMHO Banswara and facility staff with SIHFW team*





*Dr M.L. Jain, Director-SIHFV perusing the Partograph at the labour room, under supportive supervision.*



*Group Discussions at facilities, Mamta card and community feedbacks.*



*A basic skill test for supportive supervision, Blood Pressure of Dr M.L Jain, Director SIHFV being tested by a nursing staff during the field visit.*



In the valedictory session on March 29, 2014, Dr H L Tambiyar, CMHO Banswara, Dr Hanuman singh CMHO Dungarpur, Dr. Dr. R. K. Saxena, RCHO Banswara, Dr Dinesh Agrawal, Public Health Specialist and Dr S.M. Yadav also participated.

General observations were discussed and the teams made presentations on observations and experience associated with the supportive supervision exercise done in field trip, in the valedictory session.

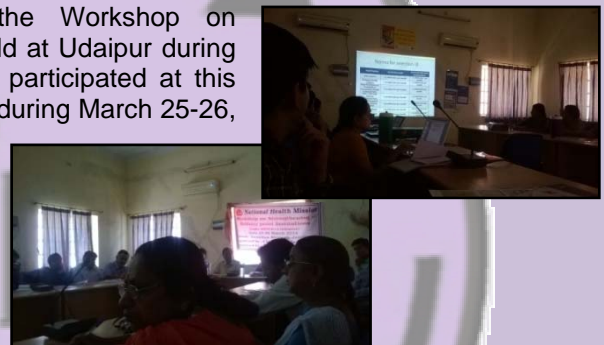
### **Training of Trainers on RBSK**

Training of Trainers on Rastriya Bal Swasthya Karyakram (RBSK) was held at SIHFW during March 5-9, 2014. The programme is being implemented under Child Health screening and early intervention services under NRHM. Operational guidelines of the programme were shared with the ToT participants.

Ms Richa Chhabra of SIHFW participated in this training. The training covered aspects of mobile health teams, roles and responsibilities, methodologies of screening and anthropometry exercise. There was detailed briefing on various diseases and disorders with help of pictures and discussions. The training also included demonstrations on various testing techniques. Role play were also done.

### **Workshop on Strengthening of Delivery Points**

Dr. M.L. Jain, Director SIHFW participated at the Workshop on Strengthening of Delivery points (DH/CHC/PHC/SC) held at Udaipur during March 10-11, 2014. Mr Ezaz Khan and Ms Aditi also participated at this workshop. Similar workshop was also held at Jaisalmer during March 25-26, 2014, wherein Ms Neha Awasthi and Mr Prithvi participated. There were sessions on orientation for Delivery Points, definition, list and analysis of the delivery points. Ms Neha also made a presentation on all the SBA Protocols. The workshops were organised by UNFPA.



### **Workshop on Perinatal Death Audit**

A workshop on perinatal death audit was held at SIHFW during March 25-26, 2014. It was organised by Unicef. Participants included Pediatricians, Gynecologists and Nurse Incharge of Labour Room and SNCU, posted at 6 delivery points. The workshop was chaired by Dir RCH, Dr M.L. Jain, Director SIHFW. Ms Poonam Yadav of SIHFW participated in this workshop. With the given stagnated decline of early neonatal mortality rate, it has been found necessary that a simplified system and tools are developed for conducting perinatal death audits in the local context which can generate information and evidence for perinatal death audits to facilitate programmatic and policy level decisions. Under this system the first step has been to pilot tools developed for perinatal audit in consultation with participants from identified facilities practiced on the tools at CHC Sanganer. Further tools were given to implement at their facilities and then filled formats will be collected and analysed for further planning.

### **ToT for MTC**

Training of Trainers on Counseling of Mothers of Severe Acute Malnourished (SAM) children at MTC was held at Udaipur during March 12-14, 2014. SIHFW staff including Dr Mamta Chauhan, Dr Richa Chaturvedy, Ms Neha Awasthi, Ms Aditi Sharma and Mr Aseem Malawat participated in the training.

The training objectives were to improve the skills of master trainers on Interpersonal Communication skills and use of Information, Education and Communication to further train the paramedical staff of MTCs, improving understanding about the importance of counseling of mothers on appropriate feeding practices for SAM Children and to enhance and develop a common pool of knowledge through the available participants from varied fields and disciplines.

Training methodologies included Participatory approach, Structured exercises, Group Discussions and Exercises and SMART and GATHER approach. The training was jointly organised by UNICEF and CHETNA (Centre for Health Education, Training and Nutrition Awareness).

### Monitoring for SBA Training

The SBA training at Jaisalmer was monitored during March 25-26, 2014 by Ms Neha Awasthi. The training was being held at ANMTC Jaisalmer. The following observations were made regarding the training.

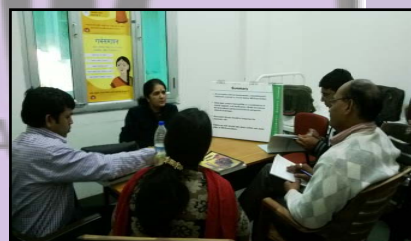
1. The participants were informed well in advance before the training along with schedule of the trainings.
2. Training was conducted in ANMTC at district head quarter.
3. The training started at around 10:00 am and all the trainers were on time.
4. MoHFW guidelines were adhered to during the training
5. Audio Video aids were required but were not available.



### Monitoring of CAC Training

Training for Comprehensive Abortion Care (CAC) was monitored by Ms Neha Awasthi during March 6-8, 2014 at Zanana and Gangori Hospital, Jaipur. Following observations were made for the training:

1. The participants were informed well in advance before the training along with schedule of the CAC trainings.
2. Training was conducted at the room attached to the labor room in the hospital premises and four or five cases of Manual Vacuum Aspiration technique (MVA) the participant got to do under supervision. Participants were encouraged to practice MVA independently with assistance of other participants and under supervision of the Trainer.
3. The training started at around 9:30 am. Timeliness was maintained at all times. The audio visual aids were available.
4. The theory sessions were scheduled in the morning followed by hands on session in the LR/OT for practical training of Medical termination of pregnancy using the Manual Vacuum Aspiration technique.



### Monitoring/ Visits done by SIHFW personnel

S.no	Name	Place/District	Activity/Training
1	Dr.Richa Chaturvedy	Sikar (March 24-26,2014)	Integrated Training of Health Workers with SBA(Plan 4)
		Sikar (March 24-26,2014)	SBA Training for Ayush MOs
		Tonk (March 19-21,2014)	Integrated Training of Health Workers with SBA(Plan 4)
2	Mr Aseem Malalwat	Ajmer (March 7-8, 2014)	MTC monitoring
		Ajmer (March 7-8, 2014)	RI
		Ajmer (March 18-22, 2014)	F-IMNCI
		Churu (March 24-26, 2014)	SBA Plan

## IEC BCC workshop at -Bhubaneswar

Government of India organised national level IEC BCC workshop at at Bhubaneswar during March 13 - 14, 2014 where a prototype of IEC/BCC comprehensive template was discussed and developed with the state representatives and Communication experts. Dr Vishal Singh, Faculty, SIHFW participated in the workshop at Bhubaneswar, Odisha.

During the workshop, state representatives developed a comprehensive IEC / BCC plan containing a mix of mid media and IPC over the thematic areas of RMNCH+A including PNDT awareness generation about the availability of health services including the ongoing cash incentives scheme and communicable and non communicable diseases. The plans were developed through a group work which were presented later by each group. Dr Vishal Singh made a presentation of group work on IEC / BCC plan for Maternal health (joint plan of Rajasthan and Haryana).

### Training Feedbacks

- Excellent training
- Properly schedules and all topics covered
- Way of teaching by faculty was very interactive
- Teaching methodology and explanation was most liked
- Well organised training, properly planned and very well executed
- Two way communication with active involvement of every trainee
- All aspects covered by both theoretical and practical approaches
- Government Institute that is so well planned and managed, was liked the most
- Very neat and beautiful campus

Source: Participants of trainings held at SIHFW

### Health News

#### Global

#### Gene therapy may offer 'functional' cure for HIV

Strategy to genetically modify cells from people infected with HIV could become a way to control the virus that causes AIDS without using antiviral drugs, according to results from an early-stage trial that were published on Wednesday.

Data from the small study of the Sangamo BioSciences therapy, known by the code name SB-728-T, were issued in the New England Journal of Medicine, the first publication of data from a human trial of a technology called "gene editing."

The technique is designed to disrupt a gene, CCR5, used by HIV to infect T-cells, the white blood cells that fight viral infections. A patient's cells are removed and processed to alter the DNA that codes for the CCR5 receptor. The altered cells are multiplied and tested, then infused back into the patient.

The Phase 1 trial, led by the University of Pennsylvania, enrolled 12 HIV patients. The study's main goal was safety, but it also showed that the modified T-cells persisted and the presence of HIV DNA decreased, the researchers said.

"It's very solid, elegant science," said Dr Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases. "There is a strong suggestion that cells that are generated are less susceptible to dying."

Sangamo plans to release more trial results this week in Boston at the Conference on Retroviruses and Opportunistic Infections. It will also discuss strategies to improve patient outcomes.

The gene editing technique seeks to mimic the resistance to HIV observed in the small number of people who have inherited CCR5 mutations from both parents. A patient in the trial who carried a naturally occurring mutation in one copy of the CCR5 gene saw the presence of HIV drop to undetectable levels.



"The target we are going after, CCR5, is the most advanced and most promising approach for a functional cure for HIV," said Sangamo Chief Executive Officer Edward Lanphier.

The human immunodeficiency virus, or HIV, surfaced more than 30 years ago and now infects more than 34 million worldwide. Prevention measures have helped check its spread, while early detection and new antiretroviral drugs can control the disease for decades, meaning it is no longer death sentence.

But the complexity of the virus has stymied scientists seeking a cure. Antiviral drugs are less than ideal due to factors including cost, side effects and drug resistance.

"You've always got this hanging over your head ... If you could get rid of the virus completely, you could get rid of the concern," said Jay Johnson, a trial participant and Philadelphia volunteer coordinator who was diagnosed with HIV in 1991.

Johnson had a bad reaction to the reinfusion of his altered immune system cells, but reported no side effects afterward. His viral load dropped but then crept back up, prompting him to resume antiretroviral therapy. To control his HIV infection, the 53-year-old takes two pills twice a day, an improvement over his 1990s regimen of five pills three times daily.

"Some of my new cells are being made without the CCR5 receptor and that is promising," he said. "Becoming HIV negative would be wonderful."

Treatment with SB-728-T in the early-stage trial was found to be generally safe, researchers said. Safety is key, and "they still have to do better with durability," Dr Fauci said. "They've got to try and get to the point where when they stop therapy, the virus doesn't rebound."  
Source: The Financial Express, March 7, 2014

### **Energy drinks lead to substance use among kids**

Teens who drink high-caffeine energy beverages are more likely to use alcohol, drugs and cigarettes, a new study has warned.

The uplifting effects of energy drinks are well advertised, but the new report finds consumption among teenagers may be linked with poor mental health and substance use.

The finding of the report has prompted researchers to call for putting limits on teen's access to the drinks and reduction in the amount of the caffeine in each can.

Researchers at the University of Waterloo and Dalhousie University found that high school students prone to depression as well as those who smoke marijuana or drink alcohol are more likely to consume energy drinks than their peers.

"While it remains unclear why these associations exist, the trend is a concern because of the high rate of consumption among teenagers," said Sunday Azagba, lead author on the research paper.

"These drinks appeal to young people because of their temporary benefits like increased alertness, improved mood and enhanced mental and physical energy," said Azagba.

Among the 8210 high school students surveyed, nearly two thirds reported using energy drinks at least once in the past year, with more than 20 per cent consuming them once or more per month.

Younger high school students were more likely to consume energy drinks than older ones.

"Marketing campaigns appear designed to entice youth and young adults. It's a dangerous combination, especially for those at an increased risk for substance abuse," said Azagba.

Energy drinks have been associated with a number of negative health effects, including cardiovascular symptoms, sleep impairment and nervousness and nausea, researchers said.

The side effects are caused by the beverages' high concentration of caffeine, they said.

"Given the negative effects of excessive caffeine consumption as well as the coincident occurrence of the use of energy drinks and other negative behaviours in teens, the trends we are seeing are more than cause for concern," said Azagba.

"In our opinion, at the very least steps should be taken to limit teens' access to energy drinks, to increase public awareness and education about the potential harms of these drinks and to minimize the amount of caffeine available in each unit," said Azagba. The study was published in the journal Preventive Medicine. Source: The Financial Express, PTI, Toronto, March 7, 2014

### **E-cigarette use linked to higher smoking odds**

E-cigarette use among US youths doubled in just one year, and those who tried the unregulated devices were more likely to smoke conventional cigarettes as well, a study said today.

Commonly sold at convenience stores and gas stations, e-cigarettes are battery powered gadgets that deliver nicotine through a vapor that may be fruit or candy-flavored.

Just over three percent of US adolescents had ever tried an e-cigarette in 2011, and that more than doubled to 6.5 per cent in 2012, said the research in JAMA Pediatrics, a journal of the American Medical Association.

Similarly, 1.1 per cent of middle and high school students said they currently used e-cigarettes in 2011, a figure that rose to two per cent in 2012.

Youths who had tried e-cigarettes were more likely to experiment with conventional cigarettes, and were more likely to be current cigarette smokers than kids who had not tried them, said the study.

The research was based on middle and high school students who filled out the National Youth Tobacco Survey, including more than 17,500 in 2011 and some 22,500 in 2012.

The nature of the study did not allow researchers to determine whether kids were trying e-cigarettes first and then moving on to conventional cigarettes.

However, "our results suggest that e-cigarettes are not discouraging use of conventional cigarettes," said the study, led by Lauren Dutra and Stanton Glantz of the Center for Tobacco Research and Education at the University of California, San Francisco.

Since e-cigarettes are not subject to the same advertising and marketing restrictions as tobacco, some health experts are concerned that they could be tempting a new generation of addicts.

The US Food and Drug Administration, which gained oversight of tobacco products in 2009, is currently considering whether to regulate e-cigarettes.

"While much remains to be learned about the public health benefits and/or consequences of ENDS (electronic nicotine delivery systems) use, their exponential growth in recent years, including their rapid uptake among youths, makes it clear that policy makers need to act quickly," said an accompanying editorial by Frank Chaloupka of the University of Illinois at Chicago.

Source: The Financial Express, March 7, 2014

## **India**

### **Ahead of Women's Day, 78% working women suffer from health disorder: Survey**

Three out of four working women in India suffer from lifestyle, chronic or acute ailments due to the pressure from trying to balance their personal and professional lives, according to an Assocham survey. The survey findings, released ahead of International Women's Day on March 8, reveals that 42 per cent of working women suffer from lifestyle diseases like backache, obesity, depression, diabetes, hypertension and heart ailments.

Besides, twenty-two per cent of women surveyed suffered from chronic diseases while 14 per cent had acute ailments.

"Working women have to double up as valued employees at their work place and home-makers after office hours. This takes a toll on their health," Assocham Secretary General D S Rawat said.



The survey was conducted on 2,800 working women aged between 32-58 years from 120 companies across 11 sectors of the economy in 10 cities – Ahmedabad, Bangalore, Chennai, Delhi-NCR, Hyderabad, Jaipur, Kolkata, Lucknow, Mumbai and Pune.

Source: The Financial Express, New Delhi, March 7, 2014

## **Rajasthan**

### **Screening of Diseases in school and free treatment**

National School Health Programme under National Health Mission has initiated facility of screening diseases at Government schools. Children of 0 to 18 years will get benefitted by screening of 30 diseases. Teams at Block level are being formed for screening and diagnostics. After the screening referrals shall be made to hospitals of Medical college level, DH, Sub-district, Satellite, CHC and PHC level. Each team will comprise of one female and male Ayush Medical Officer, Nursing staff and Pharmacist.

Children will be screened for congenital anomalies, growth retardation and physical handicap. Newborns will also be screened for the same disorders and referred to relevant health centre. Infants of 6 months to children of 6 years will be screened by Mobile Health Team and screening of children from 6 to 8 years will be done by Ayush Medical Officer and Nursing staff.

Trainings of health personnel is in process at Block level. District level Early Intervention Centres will be established with staffing of Paediatrician, Medical Officer, Dentist, Physiotherapist, Audio and Speech Therapist, Psychologist and Lab technician. Under the scheme, each referred child will be given a Unique Identification Number. Team will fill Child Health Screening cards and the Nodal Officer will be responsible for maintaining all records and data. Parents will also be educated for protection and care of children from the diseases.

Source: Dainik Bahaskar, March 11, 2014

### **Hygiene a major concern in Government Schools: Report**

A recently released medical check-up report of 60 lakh school children in the state showed that there are 45,453 kids suffering from dental problems and over 60,000 school children found suffering from different kinds of skin disorders.

Less attention on hygiene is one of the major causes of health-related issues among government school children.

The officials, who conducted the check up, pointed out various health issues the children have, which are related to hygiene. More than 3.45 lakh children were found suffering from different health problems. A health department official said unhygienic condition is one of the major causes of skin disorders among children.

The officials, who conducted the survey, claimed that these are not major health issues like heart ailment or chronic disease but such health problems affect concentration of children in schools. "Such health problems can be avoided if the skin is cleansed properly and the environment is kept clean and hygienic," a health department official said.

Various government departments conduct programmes to spread awareness on hygiene and cleanliness like washing hands before eating food. During the medical check-ups of the school children, the other health related issues that came into light are vision error, speech problems, night blindness, hearing problem and mental disorder.

There were 4,288 children, who have problem in speaking, 6,574 have vision error, 4,212 suffer from hearing problems, 4,134 are the patients of night blindness and 6,208 suffer from psychological disorders.

The health department conducted the medical check-up under the school health programme in the current academic session 2013-14 in the entire state. The health check up was conducted in more than 96,000 schools in the state with the basic aim of identifying children with health problems and providing them with proper medical treatment so that they could concentrate on studies for a better future and national development.

The health department also referred children to hospitals, who required immediate medical attention. The children would be provided free medical treatment in the government-run hospitals.

Source: TOI, March 10, 2014

### **Penalty on attendants without entry passes in SMS hospital**

Sawai Man Singh (SMS) hospital has started imposing a penalty of Rs 50 on patients' attendants when caught without passes issued by the hospital for entry. The unique step has been taken to decongest the hospital premises.

The passes are not required by the out-patient department patients and attendants but it is necessary for the attendants visiting the hospital to meet patients.

The hospital authorities claimed that the decision had already been approved in the Rajasthan Medical Relief Society meeting. SMS hospital additional superintendent Dr Ajit Singh said, "With the increase in the number of patients coming to the hospital, their attendants have also increased. Because of that the doctors face problems while providing treatment to the patients. It is beneficial for the patients too, as they will get proper care when there is lesser crowd."

Moreover, the hospital authorities have strengthened security at the hospital. Earlier, also the guards demand passes for entry but now they would also demand the attendants to show the passes inside the hospital. Also, the rules were not as strict as they are now for the attendants' entry inside the hospital.

The hospital officials claimed that with the implementation of free medicine and free diagnostic test schemes, the number of patients being admitted to the hospital has also increased significantly. Also, the number of referred cases from other government-run hospitals has also increased

Post a comment

Source: TOI, March 4, 2014

*We solicit your feedback:*

State Institute of Health & Family Welfare  
Jhalana Institutional Area, South of Doordarshan Kendra Jaipur (Raj)  
Phone-2706496, 2701938, Fax- 2706534  
E-mail:-sihfwraj@ymail.com; Website: www.sihfwrajasthan.com