WEEKLY EPIDEMIOLOGICAL REPORT

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Ministry of Health

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Hepatitis: Know it. Confront it (Part III)

This is the last article in a series of three articles on Hepatitis. This article describes Hepatitis C

Hepatitis C

Hepatitis C is a contagious liver disease that results from infection with hepatitis C virus (HCV). It can range in severity from a mild illness lasting a few weeks to a serious lifelong illness. HCV is usually spread when blood from a person infected with HCV enters the body of someone who is not infected. HCV is among the most common viruses that infect the liver.

It is estimated that 3 to 4 million people are infected with HCV each year. Some 130 to170 million people are chronically infected with HCV and are at risk of developing liver cirrhosis and/ or liver cancer. More than 350 000 people die from HCV related liver diseases each year.

HCV infection is found worldwide. Countries with high rates of chronic infection are Egypt 22%),Pakistan (4.8%) and China (3.2%). The main mode of transmission in these countries is attributed to unsafe injections using contaminated equipment.

Transmission

The virus is most commonly transmitted through exposure to infectious blood. This happens commonly due to contaminated blood transfusions, blood products and organ transplants; injections given with contaminated syringes, needle stick injuries in health care settings; injection drug use; mother to child. It is less commonly transmitted through sex with an infected person and sharing of personal items contaminated with infectious blood.

Hepatitis C is not spread through breast milk, food, water or by casual contact such as hugging, kissing and sharing food or drinks with an infected person.

Getting tested

Knowing one's infection status can prevent health problems that may result from HCV infection and prevent transmission to family and close contacts. Some countries recommend screening for individuals who may be at risk of infection.

Key facts Hepatitis C

- Hepatitis C is a liver disease caused by the hepatitis C virus (HCV).
- HCV infection sometimes results in an acute symptomatic illness. It can range in severity from a mild illness lasting a few weeks to a serious lifelong chronic condition that can lead to cirrhosis of the liver and liver cancer.
- HCV is transmitted through contact with the blood of an infected person.
- About 130–170 million people are chronically infected with hepatitis C virus, and more than 350 000 people die from hepatitis C-related liver diseases each year.
- HCV infection is curable using increasingly effective antivirals.
- There is currently no vaccine to prevent hepatitis C virus infection, despite ongoing researches.
- to unsafe injections using contaminated equipment.

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These include:

- Individuals who received blood, blood products or organs before screening for HCV was implemented or where screening was not yet widespread
- Current or former injecting drug users (even those who injected drugs once many years ago)
- Patients on long term hemo-dialysis
- Health care workers
- People having HIV
- Individuals with abnormal liver tests or liver disease
- Infants born to infected mothers

Prevention

Primary prevention

No vaccine exists to prevent HCV infection, unlike those for hepatitis A and B virus. The risk of infection can be reduced by avoiding:

- Unnecessary and unsafe injections
- Unsafe blood products
- Unsafe sharps waste collection and disposal
- Use of illicit drugs and sharing of injection equipment
- Unprotected sex with HCV infected persons
- Sharing of sharp personal items that may be contaminated with infected blood

Tattoos, piercings and acupuncture performed with contaminated equipment

Secondary and tertiary prevention

If a person is infected with HCV, they should:

- Receive education and counseling on options for care and treatment
- Be immunized with hepatitis A and B vaccine, to prevent co -infection from these hepatitis viruses, to protect their liver
- Get early and appropriate medical management including antiviral therapy if appropriate

Get regular monitoring for early diagnosis of liver disease.

Diagnosis

Diagnosis of acute infection is often missed because the infected person shows no symptoms. Common methods of antibody detection cannot differentiate between acute and chronic infection. The presence of antibodies against HCV (anti-HCV) indicates that a person is or has been infected. HCV recombinant immunoblot assay (RIBA) and HCV RNA testing are used to confirm the diagnosis of HCV infection.

Diagnosis of chronic infection is made when anti HCV is present for more than 6 months. Similar to acute infections, diagnosis should be confirmed with an additional test. Specialized tests are often used to evaluate patients for liver disease including cirrhosis and liver cancer.

Disease progression

Following initial infection, approximately 80% of people do not exhibit any symptoms. Those people who are acutely symptomatic may exhibit fever, fatigue, decreased appetite, nausea, vomiting, abdominal pain, dark urine, grey coloured faeces, joint pain, and jaundice. When a chronically infected person develops symptoms, it may indicate advanced liver disease.

Statistically, 60–70% of chronically infected persons develop chronic liver disease, 5-20% develop cirrhosis and 1–5% die from cirrhosis or liver cancer.

Treatment

Interferon and ribaviron based therapy has been the mainstay of HCV treatment. Unfortunately, interferon is not widely available globally and is not always well tolerated. Some genotypes respond better than others and many people who take it do not finish their treatment. While HCV is generally considered to be a curable disease, for many persons this is not a reality. Fortunately, scientific advances and intense research and development have led to the development of many new oral antiviral drugs for HCV infection. The future seems to hold great promise for HCV specific oral drugs that will be more effective and better tolerated. Much still need to be done to ensure that these advances lead to greater access and treatment globally.

Summary

Hepatitis is an inflammation of the liver, most commonly caused by 5 viral infections, called Hepatitis A, B, C, D and E. Hepatitis A and E are spread faeco –orally. Hepatitis B, C and D are usually spread as a result of parenteral contact with infected body fluids such as receipt of contaminated blood or blood products, invasive medical procedures using contaminated equipments and for hepatitis B transmission from mother to baby at birth, from family member to child, and also by sexual contact. Acute infection may occur with limited or no symptoms, or may include symptoms such as jaundice (yellowing of the skin and eyes), dark urine, extreme fatigue, nausea, vomiting and abdominal pain. Hepatitis B and C lead to chronic disease in hundreds of millions of people and, together, are the most common cause of liver cirrhosis and cancer. Vaccines against other types of viral hepatitis except Hepatitis C is available

Source

Hepatitis C fact sheet, available from

http://www.who.int/mediacentre/factsheets/fs164/en/index.html

Compiled by

Dr. Madhava Gunasekera of the epidemiology Unit

Table 1: Vaccine-preventable Diseases & AFP

30th July – 05th August 2011 (31st Week)

Disease	No. of Cases by Province									Number of cases during current week in 2011	Number of cases during same week in 2010	Total number of cases to date in 2011	Total number of cases to date in 2010	Difference between the number of cases to date in 2011 & 2010
	W	C	S	N	E	NW	NC	U	Sab					
Acute Flaccid Paralysis	01	02	00	00	00	00	00	00	00	03	02	56	58	- 03.4 %
Diphtheria	00	00	00	00	00	00	00	00	00	-	-	-	-	-
Measles	00	00	00	00	00	00	00	00	00	00	03	92	61	+ 50.8 %
Tetanus	00	00	00	00	00	01 PT=1	00	00	00	00	01	13	16	- 18.8 %
Whooping Cough	00	00	00	00	00	00	00	00	00	00	02	24	20	+ 20.0 %
Tuberculosis	00	00	00	00	00	00	00	00	00	00	174	5125	5484	- 06.5 %

Table 2: Newly Introduced Notifiable Disease

30th July – 05th August 2011 (31st Week)

Disease	No. of Cases by Province									Number of cases during current week in 2011	Number of cases during same week in 2010	Total number of cases to date in 2011	Total number of cases to date in 2010	Difference between the number of cases to date in 2011 & 2010
	W	C	S	N	E	NW	NC	U	Sab					
Chickenpox	09	09	03	02	0	01	07	04	05	43	39	2789	2123	+ 31.4 %
Meningitis	04 GM=4	00	03 GL=3	02 VU=2	00	01 KN=1	01 AP=1	00	03 KG=1 RP=2	14	20	547	1101	- 50.3 %
Mumps	07	07	14	06	08	14	03	07	02	68	22	1852	645	+ 187.1 %
Leishmaniasis	00	00	01 HB=1	00	00	00	10 AP=9 PO=1	00	00	11	07	438	181	+ 141.9 %

Key to Table 1 & 2

Provinces: **W**: Western, **C**: Central, **S**: Southern, **N**: North, **E**: East, **NC**: North Central, **NW**: North Western, **U**: Uva, **Sab**: Sabaragamuwa.

DPDHS Divisions: **CB**: Colombo, **GM**: Gampaha, **KL**: Kalutara, **KD**: Kandy, **ML**: Matale, **NE**: Nuwara Eliya, **GL**: Galle, **HB**: Hambantota, **MT**: Matara, **JF**: Jaffna, **KN**: Killinochchi, **MN**: Mannar, **VA**: Vavuniya, **MU**: Mullaitivu, **BT**: Batticaloa, **AM**: Ampara, **TR**: Trincomalee, **KM**: Kalmunai, **KR**: Kurunegala, **PU**: Puttalam, **AP**: Anuradhapura, **PO**: Polonnaruwa, **BD**: Badulla, **MO**: Moneragala, **RP**: Ratnapura, **KG**: Kegalle.

Data Sources:

Weekly Return of Communicable Diseases: Diphtheria, Measles, Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps.

Special Surveillance: Acute Flaccid Paralysis.

Leishmaniasis is notifiable only after the General Circular No: 02/102/2008 issued on 23 September 2008. .

Dengue Prevention and Control Health Messages

You have a duty and a responsibility in preventing dengue fever. Make sure that your environment is free from water collections where the dengue mosquito could breed.

Table 4: Selected notifiable diseases reported by Medical Officers of Health

30th July – 05th August 2011 (31st Week)

DPDHS Division	Dengue Fever / DHF*		Dysentery		Encephalitis		Enteric Fever		Food Poisoning		Leptospirosis		Typhus Fever		Viral Hepatitis		Human Rabies		Returns Received Timely**
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	%
Colombo	130	6069	2	135	0	6	5	96	1	48	3	274	0	6	4	41	0	2	**77**
Gampaha	107	2329	0	96	0	11	5	41	0	27	2	375	0	19	6	165	0	5	**87**
Kalutara	25	836	1	98	0	4	0	39	0	20	4	194	0	1	0	5	0	0	**75**
Kandy	25	525	10	293	0	6	0	22	0	36	5	123	0	80	1	43	0	0	**100**
Matale	4	224	3	118	0	3	2	22	0	18	0	148	0	13	1	6	0	0	**92**
Nuwara	1	127	3	283	0	3	2	39	0	89	0	34	0	51	0	15	0	1	**77**
Galle	31	521	7	66	0	6	0	9	0	6	5	114	1	29	0	8	0	5	**89**
Hambantota	1	308	1	34	0	4	0	3	0	20	0	418	0	45	0	7	1	1	**92**
Matara	8	321	1	56	0	2	0	10	0	27	0	202	0	51	0	14	0	1	**94**
Jaffna	5	202	4	146	0	3	3	186	3	68	0	2	1	189	0	19	0	1	**100**
Kilinochchi	0	39	0	12	0	3	0	8	0	12	0	2	0	8	0	3	0	0	**50**
Mannar	0	25	0	13	0	0	1	22	0	78	0	12	0	30	0	2	0	0	**100**
Vavuniya	1	63	0	24	0	10	0	2	0	39	1	39	0	2	0	1	0	0	**75**
Mullaitivu	0	15	0	36	0	1	0	3	1	9	0	5	0	1	0	2	0	0	**100**
Batticaloa	5	671	5	514	0	4	0	5	0	25	1	24	0	3	0	2	0	5	**86**
Ampara	0	79	4	83	0	1	0	8	0	28	0	54	0	1	0	7	0	0	**29**
Trincomalee	0	126	11	544	0	2	0	5	0	8	0	84	1	7	0	7	0	0	**75**
Kurunegala	28	607	4	239	0	9	1	69	0	68	5	1380	0	55	0	23	0	4	**83**
Puttalam	2	350	2	134	0	1	1	23	0	9	1	98	0	17	0	6	0	1	**67**
Anuradhapu	5	190	2	92	0	1	1	3	0	24	1	236	0	16	0	13	0	1	**79**
Polonnaruw	5	214	2	91	0	1	0	9	0	22	0	75	0	1	0	14	0	0	**86**
Badulla	13	403	14	243	0	5	0	44	0	7	0	54	3	57	5	43	0	0	**94**
Monaragala	2	157	1	63	0	4	1	23	0	10	1	170	3	53	1	43	0	0	**82**
Ratnapura	20	605	12	383	0	5	2	36	0	16	7	367	0	25	0	31	0	2	**78**
Kegalle	25	452	1	85	0	12	0	52	0	22	2	254	1	22	19	125	0	0	**82**
Kalmune	0	27	13	477	0	0	1	1	2	18	0	5	0	2	0	2	0	1	**77**
SRI LANKA	**443**	**15503**	**103**	**4358**	**00**	**107**	**25**	**786**	**07**	**754**	**38**	**4743**	**10**	**784**	**37**	**647**	**01**	**30**	**84**

Source: Weekly Returns of Communicable Diseases WRCD).
***Dengue Fever / DHF** refers to Dengue Fever / Dengue Haemorrhagic Fever.
****Timely** refers to returns received on or before 04th August , 2011 Total number of reporting units =327. Number of reporting units data provided for the current week: 274
A = Cases reported during the current week. **B** = Cumulative cases for the year.

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Comments and contributions for publication in the WER Sri Lanka are welcome. However, the editor reserves the right to accept or reject items for publication. All correspondence should be mailed to The Editor, WER Sri Lanka, Epidemiological Unit, P.O. Box 1567, Colombo or sent by E-mail to **chepid@sltnet.lk.**

ON STATE SERVICE

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