



WEEKLY EPIDEMIOLOGICAL REPORT

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Sexually transmitted infections (STIs) Part I

This is a first article of series of two articles.

Sexually transmitted infections (STIs) and diseases (STDs) in humans are as old as time¹. These were considered divine punishment for individual misdeeds and have been depicted in Mesopotamian clay tablets, Egyptian papyrus writings, erotic paintings, and mythology. In the first Testament of the Bible, writings of Greek, Roman, Indian and Chinese physicians have all described the presence of diseases in their writings. The European and Arabic physicians of the Middle Ages related the presence of lesions localized to the genital region such as urethral and vaginal discharge, erosions, pustules etc. with the local treatment and the association with sexual conduct².

In the book 'The scars of Venus' Author J. David Oriol describes a new and deadly disease called Morbus Gallicus, or syphilis, which appeared and spread rapidly throughout Europe in the last decade of the 15th century. According to his description "the effects of syphilis were so severe that it, and those suffering from it, were regarded with "horror and despair". Those suffering from these diseases were often condemned as victims of their own "sinful lust of the flesh"³. Records indicate that the first European Syphilis outbreak occurred in Naples among French troops during the Italian War of 1494-1498. The Columbian theory postulates that the origin of the disease may be the "Columbian Exchange" which was part of an intentional and inadvertent exchange of food, crops, populations, ideas and disease between the Old World and New following the discovery of the Americas by Christopher Columbus in 1492⁴. The explorers joined the military campaign and it is thought that they exposed the local prostitutes, amplified transmission and subsequent epidemic spread

via victorious military returnees⁴. In the absence of modern antibiotics and therapy syphilis was disfiguring, incurable and rapidly deadly. Other STIs also have similar and colourful histories including the records of Gonorrhoea in the 'La Clapiers' district in Paris, where prostitutes abounded to the discovery of AIDS and HIV through investigation of a case series of gay men in San Francisco presenting with opportunistic diseases affecting the immune-compromised. Travellers and sailors spread the diseases to previously naïve areas during their voyages.

Voluntary treatment for venereal diseases was initiated at the London Lock Hospital in the mid-18th century⁵. Subsequently, involuntary incarceration of symptomatic prostitutes at ports and army towns was authorized by a parliamentary Contagious Disease Act in 1864 with a mandatory period of seclusion. The Brussels Agreement passed in 1924 offered free/low-cost medical facilities for seamen infected with STI in ports. This was widely practised and helped improve the health of the seafaring population since its inception⁶. The scientific approach of contact tracing and non-judgmental treatment of infected patients was initiated by Dr Nora Wattie, the venereal Diseases Officer of Glasgow in 1929⁷. The World Health Organization (WHO) reports that STIs are associated with substantial morbidity, mortality, disability and adverse pregnancy outcomes thereby contributing to a major public health problem in South East Asia (SEA)⁸. Large-scale preventive measures aimed at sex workers in the SEA during the 1990s and early 2000s have succeeded in a substantial reduction of STIs and HIV infections.

In Sri Lanka according to data published by the National STD/ AIDS Control Programme (NSACP), control of venereal dis-

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eases dates back centuries with the first clinics opened in Colombo, Kandy and Galle in 1886⁹. The Vagrancy Ordinance No. 4 of 1841, the Contagious Disease Ordinance No. 17 of 1867 and the Brothels Ordinance of 1889 helped control STIs on the island. Sri Lanka became a signatory of the Brussels Agreement in 1928 with a functioning venereal disease clinic in the Colombo port since 1921. The Anti Venereal Disease (VD) Campaign was established in 1952 with WHO help in drafting a coordinated programme. Pre-natal and pre-employment blood screening for STIs was introduced since the inception of the Anti-VD campaign and is serving the country with due diligence even to date.

Epidemiology and burden

According to the WHO, “more than 1 million sexually transmitted infections (STIs) are acquired every day worldwide, the majority of which are asymptomatic”¹⁰. They are an important health priority due to their impact on the working population, women and infants. Certain infections are curable while others can cause chronic illness and complications such as pelvic inflammatory disease, infertility, tubal or ectopic pregnancy and cervical cancer.

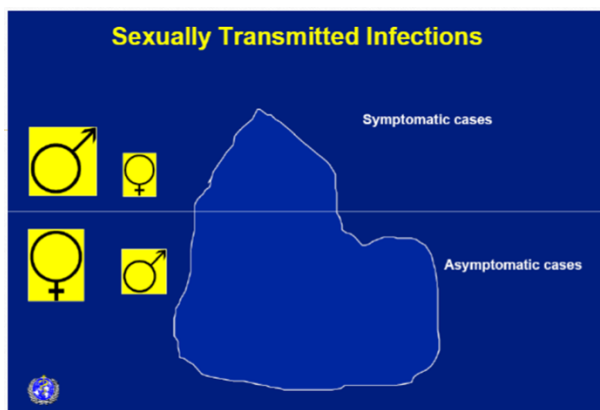


Figure 1. Symptomatology of STI. Source: NSACP

Definition, Pathophysiology, Diagnosis and Treatment

As per the definition forwarded by the CDC, the term “sexually transmitted infection” (STI) refers to a pathogen that causes infection through sexual contact, whereas the term “sexually transmitted disease” (STD) refers to a recognizable disease state that has developed from an infection.”¹¹.

The infection is usually transmitted through unsafe sexual practices involving the sex organs, the anus or the mouth and also through contact with blood during sexual activity. It can also be transmitted through other types of contact such as blood transfusion, organ transplant, body fluids or tissue; from an infected person to a healthy one. Needle sharing among intravenous drug addicts has also been identified to be a common route of transmission of infection¹¹.

The infection-causing organisms belong to all classes; the bacteria (*Neisseria gonorrhoea*, *Chlamydia trachomatis*, *Treponema pallidum*, etc.), viruses (human papillomavirus virus, human immunodeficiency virus, Hepati-

tis B and D, etc.) and protozoa (*Trichomonas vaginalis*)¹²etc.

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Table 1: Selected notifiable diseases reported by Medical Officers of Health 19th- 25th Nov 2022 (47th Week)

RDHS	Dengue Fever		Dysentery		Encephaliti		Enteric Fever		Food Poi-		Leptospirosis		Typhus		Viral Hepa-		Human		Chickenpox		Meningitis		Leishmania-		WRCD	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	T*	C**
Colombo	10	11914	0	8	0	4	0	1	1	9	26	251	0	1	0	5	0	2	1	52	0	13	0	4	17	99
Gampaha	31	8153	0	6	0	1	0	1	0	13	4	290	0	1	0	13	0	4	0	71	1	41	0	41	6	87
Kalutara	61	4043	1	38	0	1	0	2	0	6	25	507	0	4	0	9	1	5	9	126	0	32	1	4	3	74
Kandy	79	5087	1	25	0	1	1	5	0	13	6	193	0	35	1	9	0	0	1	88	0	14	1	47	13	99
Matale	25	1222	1	12	0	0	0	0	0	0	7	119	0	7	0	8	0	1	4	54	0	1	5	315	21	100
NuwareEliya	1	219	0	30	0	4	0	4	0	7	1	90	2	26	0	7	0	0	1	46	0	8	0	1	29	91
Galle	22	3351	1	15	0	1	0	1	0	1	14	528	1	41	0	6	0	0	6	91	1	28	0	0	15	100
Hambantota	18	1515	2	35	0	1	0	0	0	3	9	266	3	58	0	7	0	0	3	55	0	19	18	529	19	100
Matara	17	1639	0	14	0	2	0	1	0	9	10	307	0	18	0	3	0	0	1	57	1	9	1	239	35	100
Jaffna	86	3239	6	139	1	4	0	73	0	74	0	27	10	535	0	8	1	5	6	119	0	17	0	1	68	93
Kilinochchi	1	123	0	8	0	0	0	3	0	24	0	12	0	12	0	0	0	0	1	6	0	5	0	2	23	99
Mannar	6	243	1	7	0	0	0	1	0	0	2	36	0	8	0	2	0	0	0	7	0	19	0	0	14	100
Vavuniya	0	87	0	4	0	1	0	2	0	2	0	19	0	1	0	0	0	0	0	31	0	0	0	4	2	99
Mullaitivu	0	64	0	7	0	0	0	2	0	6	0	33	0	6	0	0	0	0	0	11	0	3	0	2	20	95
Batticaloa	12	1181	2	91	0	12	0	0	0	25	2	56	0	0	0	1	0	1	1	45	1	33	0	2	40	99
Ampara	2	166	0	17	1	3	0	0	0	22	3	109	0	1	0	2	0	0	0	52	2	43	0	15	10	100
Trincomalee	4	1109	0	26	0	0	0	1	0	2	0	37	0	3	0	4	0	0	0	51	0	10	0	8	14	97
Kurunegala	26	2531	1	26	0	4	0	0	1	5	13	263	0	37	0	6	0	3	8	119	0	48	0	457	11	100
Puttalam	86	2315	1	7	0	1	0	1	0	0	0	49	0	9	0	1	0	0	1	26	3	36	0	6	17	92
Anuradhapur	3	450	1	14	0	3	0	1	0	7	5	194	0	29	0	5	0	2	5	79	1	50	1	407	10	96
Polonnaruwa	3	146	0	8	0	1	0	0	0	2	7	116	0	1	0	5	0	0	1	26	0	5	4	484	18	94
Badulla	56	1232	2	31	0	3	0	1	0	14	7	260	2	66	3	158	0	0	2	69	0	21	1	30	23	100
Monaragala	8	492	0	10	0	2	0	4	0	22	20	303	0	35	0	62	0	0	1	69	3	70	1	155	13	100
Ratnapura	18	2752	0	53	0	6	0	3	1	36	8	990	1	25	0	29	0	1	1	83	0	74	1	196	15	95
Kegalle	22	2876	0	15	0	9	1	4	0	8	13	622	0	23	0	13	0	0	4	119	1	50	0	26	11	99
Kalmune	50	1245	0	31	0	1	0	3	0	6	0	31	0	1	0	1	0	0	0	75	1	37	0	0	30	99
SRI LANKA	74	57394	20	677	2	65	2	114	3	316	18	5708	19	983	4	364	2	24	57	1627	15	686	34	2975	19	97

Source: Weekly Returns of Communicable Diseases (esurveillance.epid.gov.lk). T=Timeliness refers to returns received on or before 25th Nov , 2022 Total number of reporting units 357 Number of reporting units data provided for the current week284 C**=Completeness

Table 2: Vaccine-Preventable Diseases & AFP

19th– 25th Nov 2022 (47th Week)

Disease	No. of Cases by Province									Number of cases during current week in 2022	Number of cases during same week in 2021	Total number of cases to date in 2022	Total number of cases to date in 2021	Difference between the number of cases to date in 2022 & 2021
	W	C	S	N	E	NW	NC	U	Sab					
AFP*	00	00	00	00	00	00	00	00	01	01	04	74	60	23.3 %
Diphtheria	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Mumps	00	00	00	00	00	00	00	00	00	00	01	85	64	31.2 %
Measles	01	00	00	00	00	00	00	00	01	02	02	34	13	138.4%
Rubella	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
CRS**	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Tetanus	00	00	00	00	00	00	00	00	00	00	01	05	05	0 %
Neonatal Tetanus	00	00	00	00	00	00	00	00	00	00	00	00	00	0 %
Japanese Encephalitis	00	01	00	00	00	00	00	01	00	02	00	12	04	- 75 %
Whooping Cough	00	00	00	00	00	00	00	00	00	00	00	01	00	0 %
Tuberculosis	00	01	00	09	11	04	13	04	06	48	83	6052	4481	35.0 %

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.
 RDHS 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, Neonatal Tetanus, Whooping Cough, Chickenpox, Meningitis, Mumps., Rubella, CRS,

Special Surveillance: AFP* (Acute Flaccid Paralysis), Japanese Encephalitis

CRS** =Congenital Rubella Syndrome

NA = Not Available

Number of Malaria Cases Up to End of November 2022,

02

All are Imported!!!

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@slt.net.lk. **Prior approval should be obtained from the Epidemiology Unit before publishing data in this publication**

ON STATE SERVICE

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