

Report on the Sanitation and Health Condition of the Internally Displaced Persons Batticaloa District

The Epidemiology Unit is closely monitoring the sanitation and health condition of the internally displaced persons (IDPs) in the Batticaloa District. Recently, this unit had received reports of outbreak of infections such as chickenpox in some of the refugee camps. As instructed by the Chief Epidemiologist, Dr. N..Janakan visited the Batticaloa District on 20th – 22nd of April 2007 to assess the present situation there.

During his visit, following institutions were visited :

- DPDHS Office, Batticaloa
- MOH Office, Kaluwanchikudy
- Teaching Hospital, Batticaloa
- Base Hospital, Kaluwanchikudy
- District Hospital, Aaraiyampathy

Relevant officials attached to the above institutions (Annexure I) were met and detailed discussions regarding the current situation, disease surveillance, and prevention and control activities of outbreaks were held. Some of the refugee camps located in Saththurukondan and Kaluwanchikudy areas were also visited to collect first hand information personally.

Background

There are two groups of refugee population in the Batticaloa District. The influx of refugees from some parts of the adjacent Trincomalee District began in April, 2006. These people were settled in camps located mainly in Batticaloa, Chenkaladdy and Valaichchenai MOH areas (Annexure II). Some of these refugees are presently residing in a transit facility in Kiliveddy area before resettlement.

In addition to the above refugee population, there was a massive displacement of population within the Batticaloa District itself. This has been happening since January 2007. Presently, almost all the population from Pattipallai, Vavunatheevu and Vellavelli MOH areas were displaced, while the displacement from Chenkaladdy and

Valaichchenai MOH areas were partial. In Vaharai MOH area, which was virtually empty two months back, the resettlement process has started. The temporary shelters for these internally displaced were mainly located in Batticaloa, Kaluwanchikudy, Valaichchenai, and Chenkaladdy MOH areas.

According to the latest statistics available at the DPDHS Office, presently there were 70,274 people (19,134 families) taken refuge in 88 welfare centres in various parts of the Batticaloa District (Annexure III). They were looked after by the government, and the aid agencies and NGOs. In addition, there were 72,403 persons (19,520 families) staying with their relatives and friends. As of 12th April 2007, altogether there were 143,127 displaced persons (38,654 families) living in the Batticaloa District.

Observations

1. Shelters for the displaced

Most of the refugee camps were located in and around government buildings such as schools, and temples. Some camps consisted of makeshift tents were located in open land.

2. Water supply

Most of the camps were provided with water brought from outside. The source of water was mainly deep tube wells maintained by the Water Board and it is generally of good quality. After chlorination, water is distributed to refugee camps in bowsers and saved in plastic containers. However, shortage of water was noticed in almost all the camps visited. Field health staff reported shortage of TCL powder used for chlorination. According to the DPDHS, they were expecting a stock of TCL powder shortly, from Colombo.

3. Food supply

Dry rations, and in some places cooked food was provided. Cooked food was usually prepared in the camps itself by the occupants using the provisions given by the NGOs. The dry rations provided to the displaced by the government consisted of only rice, dhal and sugar. Fresh vegetables, fish and meat were out of reach to majority of these people. The high risk groups such as infants,

children, pregnant and lactating mothers are vulnerable to malnutrition, unless some remedial measures are taken.

4. Treatment of minor ailments

Mobile medical teams were visiting the refugee camps on a regular basis to treat minor ailments. There were 11 mobile teams organised by the DPDHS Office (each team consisted of a medical officer, 2 nursing officers and a dispenser). Most of the displaced health workers were engaged in this activity. In addition, there were 4 mobile teams from the Teaching Hospital, Batticoloa (each consisted of a medical officer, 2 nursing officers, a pharmacist and a minor employee). A mobile team from the Base Hospital, Kalmunai North provided services at the request of the DPDHS, Batticoloa in the early stages. There were also teams organised by the NGOs and the qualifications / experience of the members of these teams were mostly not known.

Lack of coordination in organizing the visits of these mobile teams to refugee camps has been observed. There were instances when one team was visiting a particular camp as planned, already another mobile team was providing services there.

According to the DPDHS and hospital sources, generally there was no major shortage of drugs. However, with the current outbreak of eye infection, shortage of eye drops chloramphenicol (0.5%) and gentamycin has been reported. Mobile teams from the Teaching Hospital, Batticoloa reported shortage of analgesics such as ibuprofen and diclofenac sodium, and paediatric paracetamol and chlorpheniramine syrups.

5. Field clinics

The field clinics including immunization clinics for the displaced were conducted in the nearby health centres. The displaced health workers were also assisting in conducting these clinics. There was no shortage of vaccines. However, in some MOH areas shortage of AD syringes was reported.

6. Control of outbreaks

Usually, there is an increase in the incidence of viral infections including chickenpox during the months between April and June every year. This time it happened to be an issue as many of the patients were in temporary shelters. In the early part of March 2007, Epidemiology Unit was informed about an outbreak of chickenpox from the camps located in the Valaichchenai MOH area and the MOH was advised about the control activities. Later cases were reported from other MOH areas also. It was not practical to isolate patients within the camps. Some of the chickenpox patients were taken to Kaluwanchikudy Base Hospital and Aaraiyampathi District Hospital for isolation and treatment. During the 1st and 2nd weeks of April, 24 cases of chickenpox were isolated from the camps and managed at a Clinic Centre (belonging to the MOH Office, Kaluwanchikudy) by the medical staff attached to the Base Hospital, Kaluwanchikudy (BHTs were issued from the hospital). In addition to symptomatic treatment, these patients were also given anti-viral drug acyclovir provided by a NGO. This drug is widely believed to reduce the infectivity and the severity of symptoms. Except for one or two patients in some camps, the spread of chickenpox has been controlled now and there were no patients in this isolation unit.

During the first three weeks of April, 11 cases of mumps were reported from the Kaluwanchikudy MOH area alone. Some of these cases were from the camps located in Kottaikallaru and Thuraineelawanai. A large number of cases of conjunctivitis were also observed in the camps located in Mamangam (Batticoloa MOH area) and Kaluwanchikudy MOH area.

The recent heavy rains were posing problems. Unless remedial action is taken, there is a possibility of outbreaks of food and waterborne diseases, and vector borne diseases. According to hospital sources, already there has been an increase in the number of patients seeking treatment for diarrhoea.

7. Disease surveillance

The practice of reporting and investigation of notifiable diseases continues as usual in unaffected MOH areas. The local public health authorities were requested to strengthen the disease surveillance activities further especially in refugee camps. A new reporting form which includes details of ailments

commonly seen among displaced population was given to the DPDHS and the SPHIs who attended a meeting held on 20th April 2007 for circulation to all MOH Offices (Annexure IV). A consolidated report is expected to be sent by the MOOH to the RE and the Epidemiology Unit from the current week onwards (Annexure V).

8. Environmental sanitation

Disposal of refuse: Garbage disposal was a problem in most of the refugee camps. There was no proper mechanism for the disposal of refuse in most places. There were plenty of breeding places for house flies and mosquitoes in the vicinity of camps.

Disposal of excreta: The toilet facilities in most of the camps were inadequate to cope up with the number of refugees. According to the field health workers, many did not use temporary latrines, especially following the recent rains and opted for open defecation.

Indiscriminate use of chemicals has been observed in some camps for the control of flies and mosquitoes. In the long run, it may result in environmental pollution.

9. Others

The government together with aid agencies and NGOs has been providing the basic needs of the displaced to some extent, but providing other needs such as clothing is a problem. There were also logistic issues which hindered the activities of the public health staff. For example, though the MOH, Kaluwanchikudy was provided with a vehicle, there was no driver employed.

Recommendations

1. All the IDP camps should be visited by the relevant area PHII on a daily basis to ensure environmental sanitation and to strengthen disease surveillance. A daily return of communicable diseases (Annexure IV) should be prepared for each camp separately by the PHI after inspection and they should be sent to the MOH

- daily. Copies of the consolidated return (Annexure V) for the week will be sent by the MOOH to the RE and the Epidemiology Unit.
2. Steps should be taken by the relevant MOOH to ensure proper refuse and excreta disposal with the cooperation of local government authorities.
 3. Use of all types of chemicals, irrespective of the purpose should be carried out according to proper instructions. The MOOH should contact the Anti Malaria Campaign / Directorate, Environmental & Occupation Health for advice.
 4. The MOOH should take action to coordinate the visit of mobile health teams in their respective areas. This is important in times when the resources are limited. This will also help to avoid maldistribution and misuse of medicines. The cost effectiveness of continuing mobile services especially in areas close to hospitals should be studied by the DPDHS and his team.
 5. The DPDHS should communicate with the Medical Supplies Division, Ministry of Health and take steps to rectify reported shortage of medicines e.g. eye drops chloramphenicol (0.5%) and gentamycin, analgesics ibuprofen and diclofenac sodium, and paediatric paracetamol and chlorpheniramine syrups.
 6. Both public health and curative sector staff in the District of Batticaloa have amply demonstrated their commitment in ensuring the wellbeing of the displaced. From the central level, they should be supported with adequate supply of medicines, necessary logistics, and other technical inputs.

25 April 2007

**Dr. N. Janakan
Epidemiology Unit
Ministry of Healthcare & Nutrition
Colombo**

Annexure I

List of officials, who were met during the visit

1. Dr. S. Sathurmugam, Deputy Provincial Director of Health Services, Batticaloa
2. Dr. Thatchanamoorthy, Regional Epidemiologist, Batticaloa
3. Dr. M. Thamilthasan, Medical Officer (Planning), DPDHS Office, Batticaloa
4. Dr. K. Arulanandem, Medical Officer (Public Health), TH, Batticaloa
5. Dr. J. C. P. Rajendra, Consultant Physician, Teaching Hospital, Batticaloa
6. Dr. S. Gajan, Medical Officer of Health, Kaluwanchikudy
7. Dr. K. Vaseekaran, District Medical Officer, Base Hospital, Kaluwanchikudy
8. Dr. S. Anbuthasan, District Medical Officer, District Hospital, Aarayampathi
9. Mr. Namonithi, Coordinator, Mobile Teams, TH, Batticaloa
10. Ms. Rajaratnam, Chief Pharmacist, Teaching Hospital, Batticaloa
11. Mr. P. Thevarajah, Senior Public Health Inspector, DPDHS Office, Batticaloa
12. Mr. S. Krishnapillai, Senior Public Health Inspector, Chenkalady
13. Mr. S. Chandramohan, Senior Public Health Inspector, Vakarai
14. Mr. R. Nanthakumar, Senior Public Health Inspector, Batticaloa
15. Mr. M. A. M. Rafeek, Senior Public Health Inspector, Aarayampathi
16. Mr. K. Jayaranjan, Senior Public Health Inspector, Kaluwanchikudy
17. Mr. V. C. Sahathevan, Senior Public Health Inspector (Acting), Vavunathevu
18. Mr. S. Chandrasri, Senior Public Health Inspector (Acting), Pattipalai
19. Mr. S. Rajendra, Senior Public Health Inspector (Acting), Vellaveli
20. Mr. S. Yogeswaran, Public Health Inspector, Kaluwanchikudy

Annexure II

Details of Internally Displaced Persons in the Batticaloa District

MOH Area	Current Location								Total No. of families	Total No. of persons
	From Trincomalee District				Within Batticaloa District					
	In Welfare Centres		With Relatives & Friends		In Welfare Centres		With Relatives & Friends			
Vaharai	76	261	1	4	297	1,089	-	-	374	1,354
Valaichchenai	986	3,454	303	1,058	44	254	2,767	10,955	4,100	15,721
Batticaloa	2,401	8,669	438	1,575	5,979	22,192	6,699	24,008	15,517	56,444
Chenkaladdy	1,311	4,471	85	294	4,276	16,734	2,065	8,392	7,737	29,891
Kaluwanchikudy	175	612	417	1,384	3,579	12,951	5,546	20,428	9,717	35,375
Others	-	-	18	64	10	37	30	111	58	213
Total	4,949	17,467	1,262	4,379	14, 185	53,257	18,258	68,024	38,654	143,127

(As of 12th April 2007)

Annexure III

Details of Internally Displaced Persons Staying in Welfare Centres / IDP Camps

MOH Area	Name of the refugee camp	No. of families	Total No. of persons
Vaharai (3)	Aankulam I	214	784
	Aankulam II	144	512
	Vaddavan	15	54
	Subtotal	373	1,350
Valaichennai (5)	Vinayahapuram	110	405
	Maruthanagar	166	619
	Kirimuddi Farm, Kiran	305	1,070
	Petrol Shed Land	101	426
	Parankiyamadu	348	1,188
	Subtotal	1,030	3,708
Batticaloa (50)	Warehouse, Kalliyankadu I	144	504
	Warehouse, Kalliyankadu II	106	405
	Kokuvil I	111	403
	Kokuvil II	154	498
	Kokuvil III	137	485
	Sathurukondal Welfare Centre I	134	557
	Sathurukondal Welfare Centre II	149	595
	Sathurukondal Welfare Centre III	442	1,797
	Sathurukondal Welfare Centre IV, Thiraimadu	439	1,518
	Sathurukondal Welfare Centre V	296	892
	Manpower Plan, Manchathoduwai I	125	468
	Manpower Plan, Manchathoduwai II	127	498
	Palameenmadu I	153	570
	Palameenmadu II	120	399
	Palameenmadu III	215	757
	Palameenmadu IV	259	941
	Cultural Hall, Navatkudah I	49	160
	Cultural Hall, Navatkudah II	64	226
	Panichchaiyadi	158	604
	St. Sebastian School	39	123

	Sinhala Maha Vidyalaya	136	480
	Sinna Urani Welfare Centre	56	192
	Zahira	182	663
	Navatkerny	49	185
	Saradha Vidyalayam, Manchanthoduwai	111	407
	Mamangam Welfare Centre I	127	423
	Mamangam Welfare Centre II, Vineshwara Vidyalaya	145	499
	Thiraimadu World Vision Set	515	1,951
	Veechchukalmunai Camp	94	329
	Shakthi Welfare Centre	36	121
	Selvanahar East	83	325
	Aaraiyampathy East	131	451
	Thalankudah	95	315
	RCTM School, Thalankudah	225	840
	Vinayagar Vidhyalaya, Thalankudah	210	733
	Moothathamby Vidhyalaya, Aaraiyampathy 2	60	234
	Kannaki Maha Vidhyalaya, Puthukudiyiruppu	231	878
	Vigneswara School, Mavilankathurai	242	893
	Kovikulam Camp	258	955
	Subramaniyam School	79	294
	Aathiviravar Camp, Aaraiyampathy South	364	1,451
	Navaratnarajah Vidhyalaya	85	313
	Almanar Vidhyalaya, Aaraiyampathy	172	631
	Siva Vidhyalaya, Selvanahar East, Aaraiyampathy	210	799
	Social are Centre, Vedakudiyiruppu	236	869
	NECDEP Building, Manmunai	173	664
	Pre School, Kirankulam South	89	368
	Saraswathy Vidhyalaya, Kirankulam	186	708
	RKM School, Aaraiyampathy Centre	179	676
	Kalkovil	200	814
	Subtotal	8,380	30,861
Chenkalady (16)	Private land, Siththandy 1	146	525
	Maniyapuram, Iyankerny	877	3,109
	Kaluwenkerny I (Camp I)	97	355
	Kaluwenkerny I (Camp II)	395	1,407
	Kaluwenkerny I (Camp III)	538	2,079
	Kaluwenkerny I (Camp IV)	798	3,063
	State land, Chavukaddy	260	942
	Multipurpose Society Building, Thalawai	59	198

	Private land, Siththandy 4	47	157
	Mawadivembu	285	1,079
	Palaicholai 1	11	417
	Palaicholai 2A	548	2,192
	Palaicholai 3A	616	2,283
	Mylampavey 1A – Private land	96	396
	Mylampavey 2A – Church land	170	595
	Mylampavey – Vipulanandapuram	544	2,408
	Subtotal	5,587	21,205
Kaluwanchikudy (13)	Kurukkalmadam Play Ground	229	811
	Chettipalayam Play Ground	114	420
	Eruvil Thottam	599	2,341
	Thettatheevu Play Ground	373	1,173
	Mankadu	115	449
	Kurukkalmadam ACC Church	121	450
	Kaluwanchikudy	162	578
	Oothachchimadam Mariamman Kovil	288	940
	Mahiloor Saraswathy Vidhyalaya	465	1,682
	Kurumanvelli	222	875
	Pattiruppu CTB Land	340	1,244
	Chettipalayam Murugan Kovil	270	1,020
	Kaluthavalai Pulavarmani Vidhyalaya	456	1,570
	Subtotal	3,754	13,563
Vellavelli (1)	Ganeshapuram GTMS	10	37
	Subtotal	10	37
Total No. of Camps 88	Grand Total	19,134	70,724

(As of 12th April 2007)

ASSESSMENT OF SANITARY FACILITIES AT TEMPORARY SHELTERS

MOH Area: PHI Area:

Name of the Camp/Shelter:

1. Distribution of the camp population by age and sex:

Sex	Number of people in each age group					Total
	0-4 years	5-14 years	15-59 years	60 years & more	Pregnant	
Males						
Females						
Total						

2. Water supply:

Water source	Availability		Adequate chlorination	
	Yes	No	Yes	No
Pipe water				
Well water				
Water bottles				
Bowser				

3. Food supply:

Source: Dry rations / Cooked food

Place of food preparation (comment on cleanliness etc.):

4. Method of waste disposal (specify):

5. Excreta disposal:

Permanent latrines: Temporary latrines: Total number of latrines:

6. Remarks:

.....

Signature:

Date:

(To be filled in three copies by the MOH and one copy to be kept with the MOH and one copy to be sent to the RE and one copy to the Epidemiology Unit, Colombo)

DISEASE SURVEILLANCE IN TEMPORARY SHELTERS

MOH Area:

PHI Area:

Name of Camp/Shelter:

Week: __/__/2007 to __/__/2007

Disease	No. of cases							Total No. of cases
	__/__/2006	__/__/2006	__/__/2006	__/__/2006	__/__/2006	__/__/2006	__/__/2006	
Watery diarrhoea								
Dysentery								
Enteric fever								
Viral hepatitis								
Chickenpox								
Measles								
Acute respiratory tract infections (RTI)								
Conjunctivitis								
Skin diseases								
Others								

Note:

- If there are any deaths, state the probable cause of death.
- The week starts on Saturday and ends on Friday.
- To be filled in duplicate by the PHI by visiting the camp daily. One form is to be kept in the camp and the other at the PHI office.

Signature:

Date:

DISEASE SURVEILLANCE IN TEMPORARY SHELTERS (CONSOLIDATED)

MOH Area:

Week: ___/___/2007 to ___/___/2007

Name of Camp/Shelter	No. of cases									
	Watery diarrhoe a	Dysente- ry	Enteric fever	Viral hepatitis	Chicken- pox	Measles	Acute RTI	Conjunc ti-vitis	Skin diseases	Others
Total										

Note:

- The week starts on Saturday and ends on Friday. This form should be filled each week in three copies and one to be kept at the MOH office and one to be sent to the RE and one to the Epidemiology unit.
- If there are any deaths, state the probable cause of death.

Signature:

Date:

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My No. EPID/22/2007

19 April 2007.

Deputy Provincial Director of Health Services,
Batticaloa.

Provisional Guidelines for Emergency Management of Public Health Problems of the Internally Displaced People

The following provisional guidelines are recommended to minimize the adverse public health impact and to prevent the spread of communicable diseases of the displaced population living in temporary shelters.

1. Ensuring safety of water

- Ensure adequate supply of safe drinking water. If pipe-borne water is not available, water to be collected in tanks or barrels and chlorinated.
- Co-ordinate with the Divisional Secretary to ensure that water supplied by local authorities and other sources is properly chlorinated before distribution.

2. Ensuring safety of food

- Co-ordinate with the Divisional Secretary to ensure that food supplied by local authorities and other sources are hygienically prepared before distribution.
- Ensure all the food supplies to the displaced are hygienically stored, prepared and distributed.
- Strictly monitor the preparation of food in food handling establishments.

3. Safe disposal of excreta

- Ensure adequate sanitary facilities at all temporary camps for the displaced. Where necessary, make arrangements to construct adequate number of temporary latrines according to the guidelines.

4. Disposal of refuse

- Co-ordinate disposal of garbage by sanitary burial or burning in suitable adjacent areas of temporary shelters.
- Control flies, insects and rodents by proper use of physical and chemical methods (insecticides and TCL powder).
- If garbage is removed daily by the local authorities using tractors, ensure enough barrels (garbage bins) are available in the temporary shelters for collection of garbage.

5. **Treatment and management of minor ailments**
 - Co-ordinate with the local medical institutions/authorities to establish mobile medical teams to visit temporary shelters for the displaced daily and provide treatment.
 - Refer and transport those that require institutional care.
6. **Prevention and control of potential outbreaks**
 - In a case of diarrhoea in particular, prompt action must be taken to ensure early treatment and prevention of further spread.
 - In case of contagious diseases such as acute respiratory tract infections and chickenpox, these cases should be isolated and referred to hospitals if necessary.
 - Steps should be taken to control mosquito breeding to prevent and control mosquito borne diseases such as dengue, malaria and JE.
7. **Disease surveillance**
 - MOH/PHI should visit the camps daily to inquire into unusual occurrence of disease events/outbreaks.
 - Collect and report data related to health events in camps according to the format provided by the Epidemiology unit (annexure).
 - MOH should consolidate the above data weekly and send a consolidated report to RE with a copy to Epidemiology Unit (annexure).

The above guidelines should be carried out by Public Health Inspectors and other field health staff under the supervision of DDHS/MOH. It is of uttermost importance that the DDHS/MOH takes a personal interest in these activities. A satisfactory outcome will depend on the enthusiasm of the DDHS/MOH as well as his/her team.

In order to carry out the above, it is strongly recommended that a committee should be formed in each and every camp, comprising of selected responsible persons, village leaders and field level governmental and non-governmental officials.

In addition, RE would be responsible for overall monitoring and supervision of above activities carried out in the DPDHS division, with the guidance of PDHS, DPDHS and the Epidemiologist.

Dr. P. Palihawadana
Deputy Epidemiologist

CC: Addl. Secretary, Ministry of Healthcare & Nutrition
 Director General of Health Services
 Deputy Director General (Public Health Services)
 Provincial Director of Health Services, Eastern Province
 Regional Epidemiologist, Batticaloa
 MOH – Batticaloa, Chenkalady, Kaluvanchikudy, Valaichchenai, Kathankudy,
 Eravoor, Pattipalai, Vavunativu, Vakara, Vellaveli, Ottamavadi