

Quarterly Morbidity & Activity Report



Vol.III, Issue III (July-September 2010)

January 2011

EDITORIAL

Hello Readers,

In bidding goodbye to 2010-the male tiger year, it's worth remembering achievements we had in health sector. Of the many that stands out are:

IN THIS ISSUE:

EDITORIAL....-1-

Timeliness of the ReportError! Bookmark not de Ten most common diseases trends reportedError! Top ten mortality reportError! Bookmark not de Ante-Natal Care & Delivery ReportError! Bookmark not de Family Planning Methods ReportError! Bookmark Admissions.......Error! Bookmark not defined. Laboratory ExaminationsError! Bookmark not defined Surgical ProceduresError! Bookmark not defined Diagnostic ProceduresError! Bookmark not defined. Non-Bhutanese availing health services..-10-TB Report........Error! Bookmark not defined. Malaria Report...Error! Bookmark not defined.

- April 13, 2010, the Bachelors of Public Health (BPH) course for the in-service health workers was launched at the Royal Institute of Health Sciences. The first batch of 26 health workers including 2 females entered the country's first university level public health course. The program has a titanic expectation to strengthen the primary health care services, which Bhutan is deeply rooted upon through capacity development of the primary health care workers.
- April 30, 2010, Inauguration of Bhutan Institute of Medical Sciences (BIMs): The ceremonial plaque of BIMS was inaugurated by the Hon'ble Prime Ministers of Bhutan and India. This will pave way to establishing the country's first Medical College soon. As envisaged, country is now closer to easing the acute shortage of medical doctors and will ensure improvement in medical services in the near future.
- The Tobacco Control Act of Bhutan 2010 came into effect from June 6, 2010 after the endorsement of the parliament. The provisions of the act came to active
- enforcement from January 11, 2011. This is huge leap to prevent ill health related to tobacco use in our country.
- October 12, 2010, Special Consultation Services at the Jigme Dorji Wangchuck National Referral Hospital (JDWNRH): To provide the choice of services for the people who are willing and have the ability to pay for health services, one year special consultation services was piloted at the JDWNRH. This will provide

convenience for the service users to see their care provider on an appointment basis during the off hours of the outpatient services. If successful, the pilot will be continued as a separate functionary for the country's apex hospital.

On the other hand, during the past year we also observed public health events of national significance.

- Following public scare due to menningo-encephalitis deaths in 4 children during the early phase of introduction of pentavalent vaccine, use of pentavalent vaccination was suspended on October 23, 2009 through 2010. A detail investigation of the experts concluded that the deaths were coincidental and not vaccine caused. Pentavalent vaccine will be reintroduced in June 2011.
- Calamities whether natural or manmade are always around. Bumthang town
 was ravaged by fire on October 26, 2010 killing two persons and destroying 66
 shops and houses. Apart from enormous economic loss, we have not measured
 what psychosocial health impacts would result due to such events in the
 community.
- Road accidents and air crashes are not a disease and therefore it has been a less priority public health agenda. On December 15, 18 Bhutanese died in Air Crash in Nepal. A few days later, a bus accident at Lamperi in Thimphu killed nearly a dozen and injured many more in an overloaded passenger bus. These accidents brought the air and road safety in the forefront of public opinions. It is a grave reminder that road and air safety must be urgently integrated as the core of public health and safety promotion.

efficient in rendering our services to improve the health of the fellow citizens. I wish you a Healthy and Happy 2011.

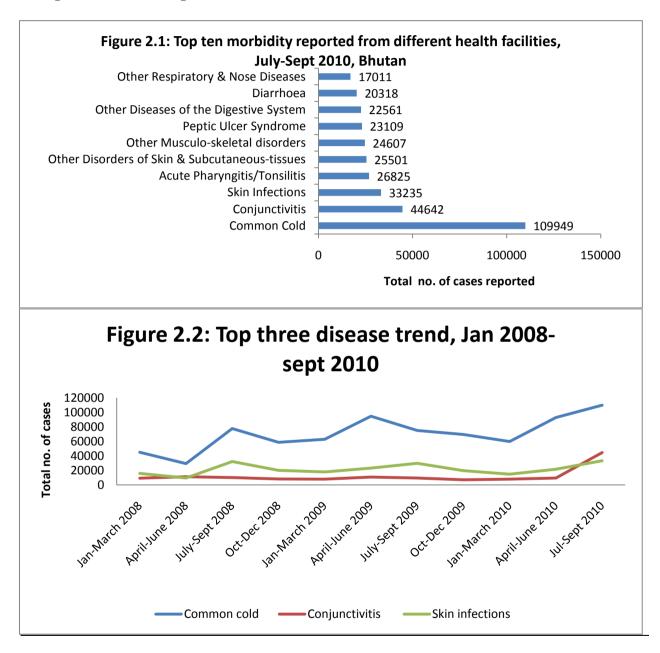
Gampo Dorji (MBBS, MPH)
Department of Public Health, MoH

Editorial Board:	Data Analysist:	Web Edition:
Dr. Lungten Z. Wangchuk, HREU	Ms. Dorji Pelzom, HREU	Mr. Tashi, ICT
Dr. Gampo Gorji, DoPH		
	Contributors:	Desktop Publishing:
	Mr. Rahar Singh Das, HMIS	Mr. Mongal S. Gurung, HREU
	Mr. Dopo, HMIS	Ms. Dorji Pelzom, HERU

1. Timeliness of the report

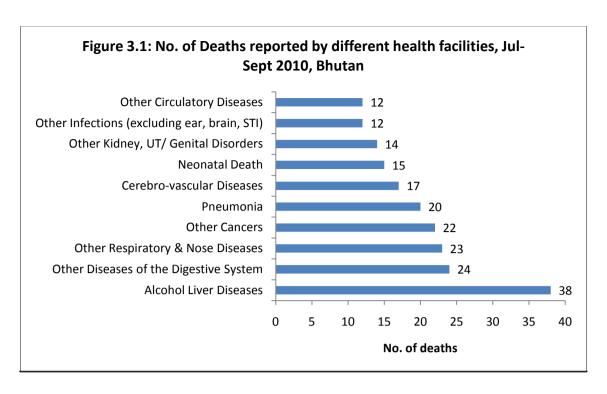
We are pleased to announce that all the districts have reported on time in this quarter (July-September 2010). This report will cover only the data received by Health Management and Information (HMIS) Unit, namely, the morbidity and activity reports. There are many vertical reporting systems and the number varies from district to district. The data of such reporting systems are not included as its reliability and consistency is not assessed.

2. Top Ten diseases reported



Among the top ten diseases reported, common cold reported the highest number of cases with 1,09,949 cases in the 3rd quarter (July-Sept 2010), followed by conjunctivitis and then by skin infections as indicated in figure 2.1. Figure 2.2 indicates that conjunctivitis, which till the 2nd Quarter of 2010 was not in the top-ten morbidities, is now reflected as one of the top-ten morbidities reported in the health facilities of Bhutan with 44,642 cases. We see a sharp increase of conjunctivitis cases in the 3rd quarter of 2010. From the total number of conjunctivitis cases reported from Jan 2008 to Sept 2010, 33% of cases were reported in the 3rd quarter of 2010, while in other quarters (Jan 2008-June 2010) the average percentage of cases reported were 6.7%.

3. Top Ten Mortality reported



Among the different morbidities reported, Alcohol Liver Diseases reported the highest number of deaths (38) in the 3rd quarter (July-Sept. 2010), followed by other diseases of the digestive system (24) and then by other respiratory & nose diseases (23) as indicated in figure 3.1.

4. Ante Natal Care, Post Natal Care and Attended Delivery Report

Table 4.1: ANC and PNC availed at the health facilities, July-September 2010

District	ANC1Visit	ANC2Visit	ANC3Visit	ANC4Visit	ANCMVisit	PNC1Visit	PNCMVisit
Bumthang	78	88	78	68	61	40	6
Chukha	363	425	390	317	635	182	91
Dagana	113	104	83	55	45	45	30
Gasa	8	5	8	5	2	1	4
Haa	40	40	37	31	54	26	31
Lhuentse	83	75	58	46	47	41	19
Mongar	198	177	197	172	192	163	89
Paro	180	200	171	166	284	125	22
Pemagatshel	101	105	99	93	113	29	22
Punakha	140	142	152	130	197	92	71
SJongkhar	188	185	162	121	132	86	23
Samtse	268	307	284	265	368	153	115
Sarpang	162	173	203	193	224	78	84
Thimphu	625	583	585	631	1249	311	219
Trashigang	229	245	214	163	112	143	83
TrashiYangtse	94	97	79	79	60	67	33
Trongsa	60	69	61	60	54	21	7

QMAR						Volume 2, Issu	ue 4
Tsirang	82	104	100	75	26	37	18
Wangdi	226	199	180	150	167	105	58
Zhemgang	85	83	76	44	44	43	13
Total	3323	3406	3217	2864	4066	1788	1038

Table 4.2: TT dose given and attended delivery by the health personnel, July-September 2010

Attended Deliveries

D:-4:-4	TTADI	TTO41	TT	E914	V D-1!
District	TT2Plus	TTOthers	Home	Facility	Vaccum Delivery
Bumthang	72	462	5	43	0
Chukha	305	1119	29	286	11
Dagana	82	389	1	32	8
Gasa	10	16	1	2	0
Haa	25	141	1	12	0
Lhuentse	75	239	3	14	0
Mongar	195	414	17	195	5
Paro	176	784	4	101	6
Pemagatshel	56	227	14	29	0
Punakha	64	233	13	72	3
SamdrupJongkhar	147	312	16	110	0
Samtse	241	395	7	112	1
Sarpang	143	907	3	161	0
Thimphu	583	807	17	951	10
Trashigang	197	899	23	95	2
TrashiYangtse	75	170	1	31	0
Trongsa	69	190	5	22	0
Tsirang	78	360	5	6	0
Wangdi	160	613	23	82	0
Zhemgang	75	235	21	23	2
Total	2828	8912	209	2379	48

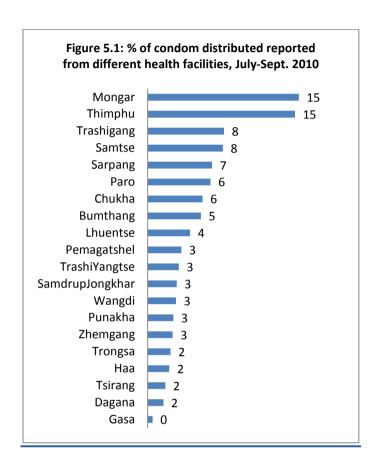
5. Family Planning Method Report

Among the different kinds of family planning methods used excluding condom shows that most preferred method is DMPA (22171) followed by oral pills (13246) and then IUD (738).

Table 5.1: Different family planning methods availed from the health facilities, July-Sept. 2010

District	IUD	Oral Pills	DMPA
Bumthang	0	479	646
Chukha	50	1292	2143
Dagana	1	965	1191
Gasa	3	27	160
Наа	4	272	407
Lhuentse	15	223	549
Mongar	47	636	1802
Paro	16	636	1077
Pemagatshel	9	407	745
Punakha	16	517	769
SamdrupJongkhar	3	880	1171
Samtse	39	1743	2586
Sarpang	21	1030	1559

Thimphu	334	966	2028
Trashigang	140	968	1694
TrashiYangtse	6	135	458
Trongsa	1	237	477
Tsirang	4	907	1089
Wangdi	4	298	866
Zhemgang	25	628	754
Total	738	13246	22171



From the total numbers of condom distributed (269344), highest was distributed by Thimphu and Mongar districts with 15% followed by Trashigang and Samtse districts with 8%.

6. Admissions

Table 6.1 Average patient days of different health facilities, July-September 2010

District_Name	Total no. of Patients	Absconded	Patient Days	Average Patient days
Bumthang	184	0	745	4.0
Chukha	1391	8	2456	1.8
Dagana	371	0	495	1.3
Gasa	0	0	0	0.0
Наа	104	1	353	3.4
Lhuentse	363	0	1119	3.1
Mongar	1170	1	4779	4.1
Paro	869	4	2054	2.4
Pemagatshel	385	0	898	2.3
Punakha	404	1	2990	7.4
SamdrupJongkhar	562	1	2191	3.9
Samtse	933	1	3793	4.1

Sarpang	1110	1	5159	4.6
Thimphu	3919	5	38491	9.8
Trashigang	1176	5	4843	4.1
TrashiYangtse	144	1	656	4.6
Trongsa	183	0	536	2.9
Tsirang	423	0	1152	2.7
Wangdi	384	2	1001	2.6
Zhemgang	400	0	1128	2.8
Total	14475	31	74839	5.2

7. Laboratory Examinations

Table 7.1 Laboratory examinations conducted at health facilities, July-September 2010

District	Total	Hemoglobin	Blood	Malaria	ТВ	Urine	Stool	HIV
	Lab test		Group	slide	Sputum			
Bumthang	486	608	209	29	15	643	19	116
Chukha	34072	3772	1102	2376	325	4190	95	406
Dagana	5667	722	255	974	40	1774	29	19
Gasa	100	40	9	1	4	35	0	10
Наа	2265	505	138	6	34	1054	12	14
Lhuentse	6055	576	164	67	16	867	15	26
Mongar	10344	4137	1186	723	423	3083	285	504
Paro	11440	1067	530	99	212	4170	38	110
Pemagatshel	3470	489	363	281	75	1221	15	110
Punakha	2665	1347	312	60	42	709	19	175
SamdrupJongkhar	6849	1257	386	1202	276	1582	46	228
Samtse	12280	6303	829	2406	448	2076	37	176
Sarpang	37872	4283	872	5931	190	3897	242	383
Thimphu	267646	18163	20155	3013	2395	17843	1569	3486
Trashigang	12706	1861	3058	215	228	2562	50	140
TrashiYangtse	999	512	132	15	33	468	7	30
Trongsa	1408	322	184	13	29	291	12	114
Tsirang	1686	655	199	441	18	401	6	27
Wangdi	3294	1119	395	235	65	1304	24	152
Zhemgang	8075	928	149	688	40	497	11	62
Total	429379	48666	30627	18775	4908	48667	2531	6288

8. Nutritional status of Children less than Five years of age reported

Table 8.1 Nutritional status of Children less than Five years of age reported at health facilities, July-September 2010

District	Over weight	Normal	Malnourish	Severely malnourish
Bumthang	16	1690	25	6
Chukha	151	4631	188	28
Dagana	95	1929	149	9
Gasa	14	188	12	3
Наа	15	811	39	2
Lhuentse	32	1202	104	13
Mongar	140	4241	252	35
Paro	86	3153	141	11
Pemagatshel	84	1951	219	9
Punakha	37	1413	45	4

SamdrupJongkhar	67	2556	198	28
Samtse	28	3791	253	40
Sarpang	106	2861	154	29
Thimphu	2172	7245	380	61
Trashigang	124	3667	271	27
TrashiYangtse	59	1488	136	13
Trongsa	57	1069	49	10
Tsirang	61	1550	153	5
Wangdi	105	2526	138	10
Zhemgang	81	1508	150	9
Total	3530	49470	3056	352

9. Surgical ProceduresTable 9.1 Surgical procedures conducted at different health facilities, July-September 2010

	General							
		Abdominal			Others			
District	Major	Minor	Laparoscopic	Major	Minor	Laparoscopic		
Bumthang	0	0	0	0	0	0		
Chukha	0	0	0	0	0	0		
Dagana	0	0	0	0	0	0		
Наа	0	0	0	0	0	0		
Lhuentse	0	0	0	0	0	0		
Mongar	0	0	0	0	0	0		
Paro	0	0	0	0	0	0		
Pemagatshel	0	0	0	0	0	0		
SamdrupJongkhar	0	0	0	0	696	0		
Samtse	0	0	0	0	0	0		
Sarpang	0	0	0	0	0	0		
Thimphu	0	0	0	0	4	0		
Trashigang	0	0	0	0	0	0		
TrashiYangtse	0	0	0	0	0	0		
Trongsa	0	0	0	0	0	0		
Tsirang	0	0	0	0	0	0		
Wangdi	0	3	0	0	522	0		
Zhemgang	0	0	0	0	0	0		
Total	0	3	0	0	1222	0		

			Orthop	edics		
		Extremities			Others	
District	Major	Minor	Laparoscopic	Major	Minor	Laparoscopic
Bumthang	0	0	0	0	0	0
Chukha	0	0	0	0	0	0
Dagana	0	0	0	0	0	0
Наа	0	0	0	0	0	0
Lhuentse	0	0	0	0	3	0
Mongar	0	0	0	0	0	0
Paro	0	0	0	0	0	0
Pemagatshel	0	0	0	0	0	0
SamdrupJongkhar	0	25	0	0	10	0
Samtse	0	0	0	0	0	0

QMAR					Volume 2, Issue	: 4
Sarpang	0	0	0	0	0	0
Thimphu	0	0	0	0	0	0
Trashigang	0	0	0	0	0	0
TrashiYangtse	0	0	0	0	0	0
Trongsa	0	0	0	0	0	0
Tsirang	0	0	0	0	0	0
Wangdi	0	1	0	0	5	0
Zhemgang	0	0	0	0	0	0
Total	0	26	0	0	18	0

		Gynecology			ENT	
District	Major	Minor	Laparoscopic	Major	Minor	Laparoscopic
Bumthang	0	0	0	0	0	0
Chukha	0	0	0	0	0	0
Dagana	0	0	0	0	0	0
Наа	0	0	0	0	0	0
Lhuentse	0	0	0	0	0	0
Mongar	0	0	0	0	0	0
Paro	0	0	0	0	0	0
Pemagatshel	0	0	0	0	0	0
SamdrupJongkhar	1	11	0	0	0	0
Samtse	0	0	0	0	0	0
Sarpang	0	0	0	0	0	0
Thimphu	0	0	0	0	0	0
Trashigang	0	0	0	0	0	0
TrashiYangtse	0	0	0	0	0	0
Trongsa	0	0	0	0	0	0
Tsirang	0	0	0	0	0	0
Wangdi	0	4	0	0	7	0
Zhemgang	0	0	0	0	0	0
Total	1	15	0	0	7	0

		Eye		Caesarean
District	Major	Minor	Laparoscopic	Major
Bumthang	0	0	0	0
Chukha	0	0	0	0
Dagana	0	0	0	0
Gasa	0	0	0	0
Lhuentse	0	0	0	0
Mongar	0	0	0	0
Paro	0	0	0	0
Pemagatshel	0	0	0	0
SamdrupJongkhar	0	0	0	28
Samtse	0	0	0	0
Sarpang	0	0	0	0
Thimphu	0	0	0	0
Trashigang	0	3	0	0
TrashiYangtse	0	0	0	0
Trongsa	0	0	0	0
Tsirang	0	0	0	0

Wangdi	0	3	0	0
Zhemgang	0	0	0	0
Total	0	6	0	28

10. Diagnostic Procedures

Table 10.1 Diagnostic procedures conducted at health facilities, July-September 2010

		X-Ray		J	Iltrasound	
District	Chest	Extremities	Others	Gynaecology	Abdominal	Others
Bumthang	89	157	45	0	0	0
Chukha	727	490	199	715	411	180
Dagana	32	38	16	0	0	0
Gasa	0	0	0	0	0	0
Наа	39	47	7	58	0	29
Lhuentse	57	58	25	0	0	0
Mongar	841	272	336	392	475	23
Paro	204	257	119	0	0	0
Pemagatshel	79	50	44	173	283	3
Punakha	182	138	42	413	288	1
SamdrupJongkhar	211	128	50	131	109	79
Samtse	489	205	180	472	128	114
Sarpang	595	219	169	720	575	0
Thimphu	3511	2468	1706	3325	3856	336
Trashigang	499	132	130	837	294	3
TrashiYangtse	45	14	14	0	0	0
Trongsa	35	21	13	0	0	0
Tsirang	113	109	43	0	0	0
Wangdi	107	141	89	219	299	5
Zhemgang	79	84	29	0	0	0
Total	7934	5028	3256	7455	6718	773

11. Dental Services

Table 11.1 Dental services availed by people at health facilities, July-September 2010

District	Prophylaxis	Scaling	Filling	Extraction	Others
Bumthang	15	0	234	346	315
Chukha	67	38	968	1057	1377
Dagana	33	1	214	247	381
Gasa	0	0	0	0	0
Наа	9	2	88	175	178
Lhuentse	1	4	88	62	109
Mongar	39	10	426	568	754
Paro	38	8	948	556	878
Pemagatshel	17	1	233	168	118
Punakha	80	4	139	256	327
SamdrupJongkhar	29	6	110	254	150
Samtse	126	0	219	145	278
Sarpang	18	0	991	618	1662
Thimphu	429	99	3908	3542	5993
Trashigang	9	0	394	769	655
TrashiYangtse	6	0	49	47	66
Trongsa	13	2	53	96	178

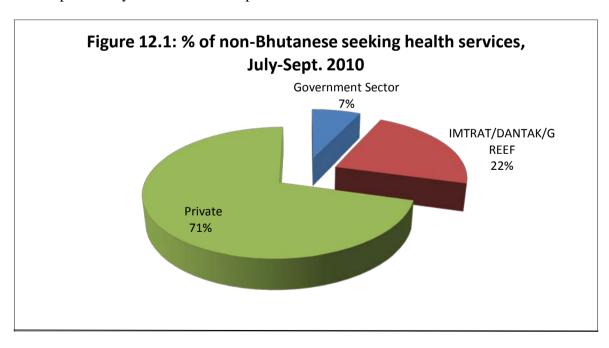
Tsirang	10	0	134	181	414
Wangdi	4	0	49	29	25
Zhemgang	11	3	85	118	148
Total	954	178	9330	9234	14006

12. Non-Bhutanese

Table 12.1 Health services availed by non-Bhutanese, July-September 2010

District	Government	IMTRAT/DANTAK/GREEF	Private
	Sector		
Bumthang	83	3	191
Chukha	91	884	289
Dagana	3	0	384
Gasa	0	0	0
Наа	0	0	0
Lhuentse	3	2	196
Mongar	54	0	371
Paro	18	438	581
Pemagatshel	11	0	57
Punakha	34	0	177
SamdrupJongkhar	12	251	447
Samtse	80	0	692
Sarpang	50	158	624
Thimphu	28	63	409
Trashigang	35	334	253
TrashiYangtse	6	0	43
Trongsa	152	0	231
Tsirang	0	0	0
Wangdi	9	5	1628
Zhemgang	12	0	226
Total	681	2138	6799

^{*}The report is only for the district hospitals



13. Malaria Report

Table 13.1 Malaria report, July-September 2010

Variables	0-4	lyears	5-14	yraes	15-49	9 years	>50	years	To	otal	G. Total
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Mix	0	0	0	1	1	0	1	0	2	1	3
Pf	1	0	1	3	6	2	0	0	8	5	13
Pv	1	0	3	1	20	5	2	1	26	7	33
Death	0	0	0	0	0	0	0	0	0	0	0

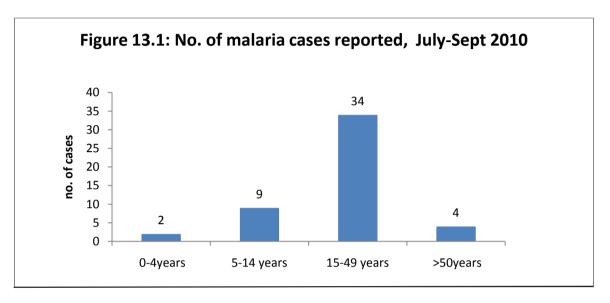


Figure 13.1 indicates that the most effected age group is 15-49; this however can also be because it is the largest group among all the age groups. Next most effected age group is 5-14 year. 67% of the malaria cases reported were PV followed by 26% of PF and 6% of mixed cases. There were no deaths reported due to malaria in the 3rd quarter of 2010.

14. TB Report

Table 14.1 Treatment outcome indicators July-September 2009

Indicators	New P Positive %	Relapse %	Failure %	Default %
Cure rate	83.62	75.0	66.66	33.33
Completed rate	8.62	12.5	16.66	66.66
Success rate	92.24	87.5	83.33	100
Mortality D/A	2.59	12.5	0	0
Failure rate	3.45	0	16.66	0
Default rate	1.72	0	0	0

Table 14.2 Laboratory report & Case finding of new and re-treatment cases, July-September 2010

Gender	No. of sputum examined	No. of sputum smear positive	Laboratory indicator smear positive (%)	Total no. of cases	Case finding indicator (%)
Male	1042	71	6.81	185	31.76
Female	894	66	7.38	170	34.81
Total	1936	137	7.08	355	33.23

Table 14.3 Smear conversions at 2/3 months for national level, April-June 2010

Types of cases	No. registered	Negative	Positive	No result	Smear- conversion (%)
New	123	98	14	11	79.67
Relapse	25	22	1	2	88.0
Failure	5	3	2	0	60.0
Default	2	1	0	1	50.0

The Policy and Planning Division would like to solicit reviews and feedbacks for the betterment of the publication. Suggestions, views and constructive criticism are always welcome.

Any queries may be forwarded to address given below.

Health Research & Epidemiology Unit Policy and Planning Division Ministry of Health PO Box no. 726 www.health.gov.bt/qmar.php

Phone: + 975 2 322602/328091/328092 Fax: + 975 2 322941

E-mail: hiru@health.gov.bt