༄། ཟླ་ངོ་གསུམ་གྱི་ནད་རིགས་དང་བྱ་རིམ་གྱི་སྙན་ཞུ།

Quarterly Morbidity & Activity Report

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Thirty Years of Primary Health Care in Bhutan

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The year 2008 marked the 30 years of Alma Ata Declaration by the WHO on Primary Health care in achieving "Health for All" goal by the year 2000.

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Bhutan signed this declaration in 1979 and has chosen primary health care as the core strategy since the primary health care delivery system is effective in reaching health services to cover a wider segment of population in a rugged terrain country like ours. In Bhutan, primary health care has been the driving force ever since we became a signatory to this declaration. Now as a result, the health sector has been able to sustain the primary health care coverage at more than 90%.

Dr. Phanchung Lungten was the first person to be qualified as Licentiate Medical Fellow in 1930 and introduced the history of modern health services in Bhutan where he covered different parts of the country periodically from Bumthang. There was an immense development in the field of primary health care in the following decades.

In 1998, the Royal Institute of Health Sciences also received the WHO's 50th Anniversary Award for primary health care development in Bhutan. This is due to the farsighted vision of His Majesty, very commendable manner of Honourable Health Ministers and the relentless unselfish services rendered by the health workers in and around the country. The integrated health care system in Bhutan purely comprises of preventive, curative and rehabilitative services with special emphasis on primary health care services. The quality of health care in Bhutan is ***"the ability of our health services to meet the needs of our service users and providers, in an equitable and acceptable manner, within the resources available and in line with the policies of the Royal Government of Bhutan"***.

In early 1980s, the primary health care was unborn. "Initially, the people did not take an interest in primary health care since they

Contd. on page -21-

Defining Free Basic Public Health Care Services - *critical to its sustenance*

Within few decades after the introduction of modern system of medicine in the 1960s, Bhutan has made remarkable achievements in its overall national health outcomes - for e.g. the life expectancy has risen from 36.1 years in the early sixties to almost 66.1 years as of 2005. The outstanding accomplishments in health sectors can be primarily attributed to the pursuit of a balanced development path guided by the philosophy of Gross National Happiness which places equity and solidarity above all.

We can conclude that the present system of free health care developed through the years has worked very well for Bhutan. Yet, the escalating health care cost driven by unavoidable forces of changing disease patterns; new medical technologies; and the evolving healthcare needs of the populations among others is becoming monstrously heavy for Bhutan to bear. No doubt that the denial of basic health care services to a fellow Bhutanese based on his/her inability to pay will stir deep emotions and starkly contradict the national health goals founded on the principles of equity and Gross National Happiness.

Then the pressing question to ask would be how to sustain the provision of free basic health care services with our limited resources for years to come? One of the potential solutions would be NOT to distort the well-founded current health system BUT to explore ways to further strengthen its efficiency and effectiveness. We need to look for measures that could among others address universal disadvantages of a free health care system; minimize irrational medical prescriptions; check health care wastage by both provider and consumers; strengthen methods to improve productivity of the health care workers; educate general public on the unfavorable effects of not complying with health care referral system; generate a strong sense of collective national responsibilities toward sustenance of free health care provision; and ensure at least 10% of the five year plan budget allocation to health.

While the above measures are practical and vital to sustain the provision of universal access to free health care, they are only secondary to policy decisions that eventually determines which health services and medical interventions should constitute the gamut of 'the free basic public health care services'. Therefore, the task of defining the universal access to basic public health care services would be as important as upholding the article 9, sections 21 and 22 of the Constitution of Bhutan and the principles of GNH itself.

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1. Timeliness of the Report

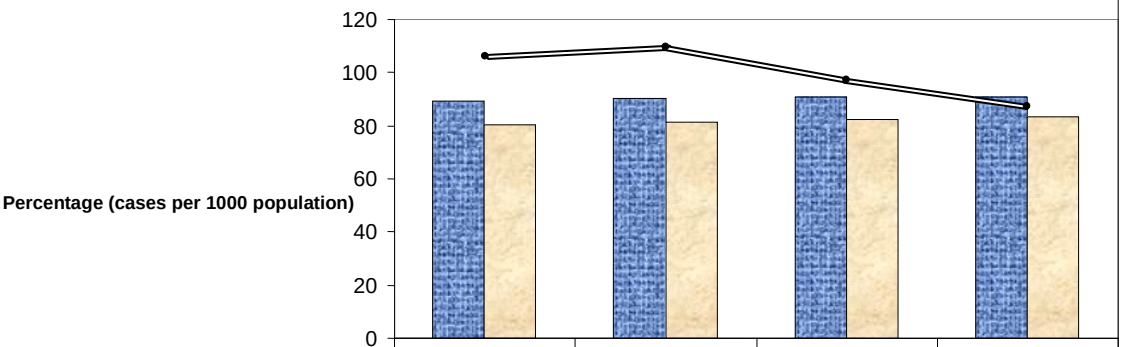
Unlike in the past issues of QMAR, all Dzongkhags have sent the data on time for this quarter. However, there are so many vertical reporting systems and the number varies from district to district. The data of such reporting system are not included as its reliability and consistency is not assessed. So, this report will cover only the data received by Health Management and Information Unit.

2. Diarrhoea cases vis-à-vis sanitary latrine and piped water supply coverage:

(**Data source**: Annual Health Bulletin, Monthly Activity and Morbidity Reports, Dzongkhag Population Projection 2006-2015 NSB, Population and Housing Census of Bhutan 2005 NSB.

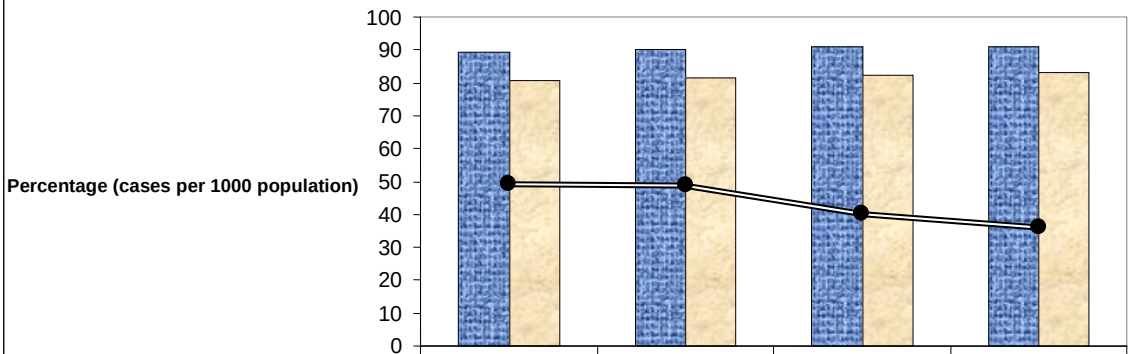
National level

Figure 1.1: Diarrhoea cases reported, access to sanitary latrine and Piped water supply, 2005-2008, Bhutan



	2005	2006	2007	2008
HH access to sanitary latrine (%)	89.2	90.2	90.9	90.8
HH Having piped water supply (%)	80.5	81.4	82.3	83.2
Diarrhoea (per 1000 Population)	106	110	97	87

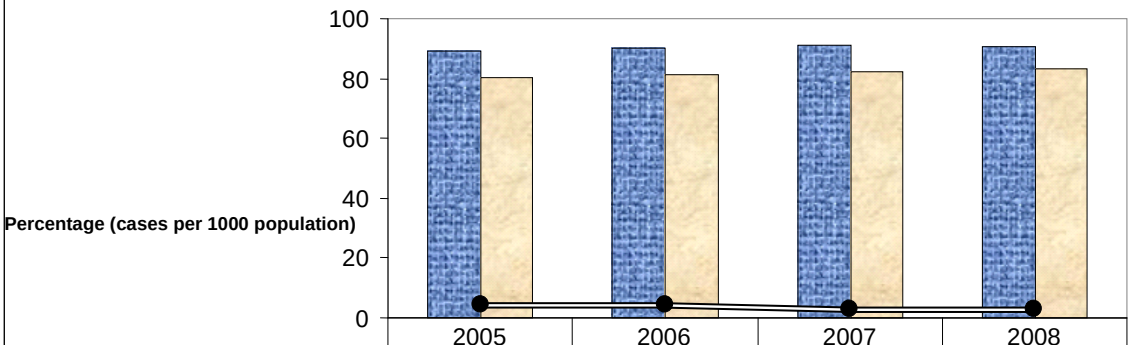
Figure 1.2: Dysentery cases reported, access to sanitary latrine and Piped Water supply, 2005-2008, Bhutan



	2005	2006	2007	2008
HH access to sanitary latrine (%)	89.2	90.2	90.9	90.8
HH Having piped water supply (%)	80.5	81.4	82.3	83.2
Dysentery (per 1000 Population)	49	49	40	36

Year

Figure 1.3: Typhoid cases reported, access to sanitary latrine and Piped water Supply, 2005-2008, Bhutan



	2005	2006	2007	2008
HH access to sanitary Latrine (%)	89.2	90.2	90.9	90.8
HH Having piped water Supply (%)	80.5	81.4	82.3	83.2
Typhoid (per 1000 Population)	5	4	3	3

Year

3. Ten most common diseases trends reported in the year 2008-2009

Figure 2.1 Common Cold cases reported at health facilities, Bhutan, 2008-2009

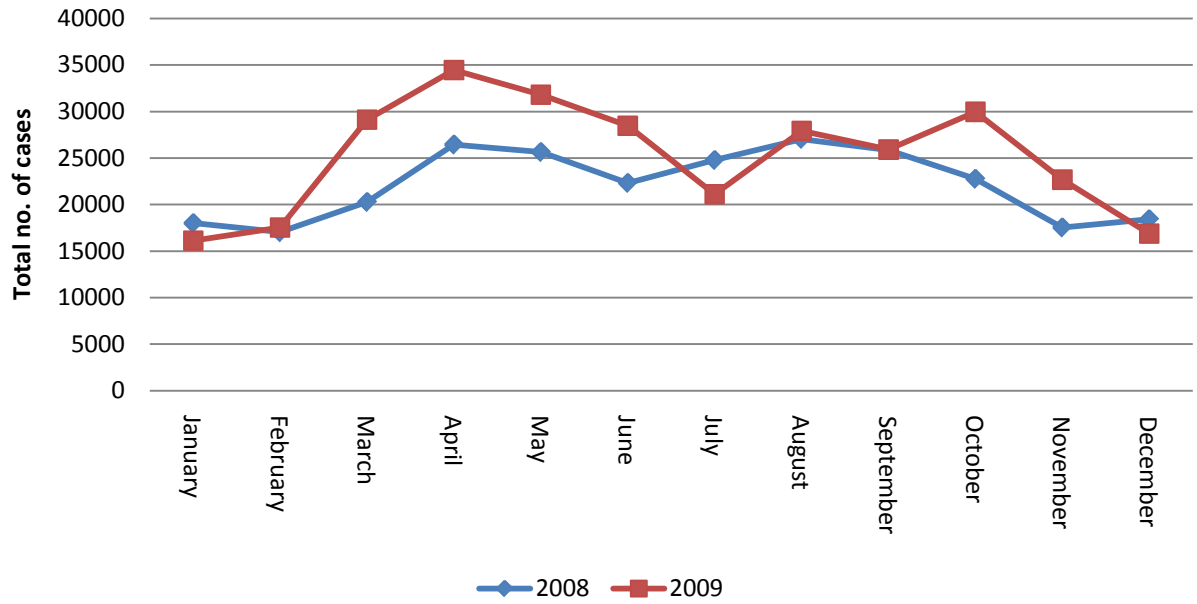


Figure 2.2 Skin Infections cases reported at health facilities, Bhutan, 2008-2009

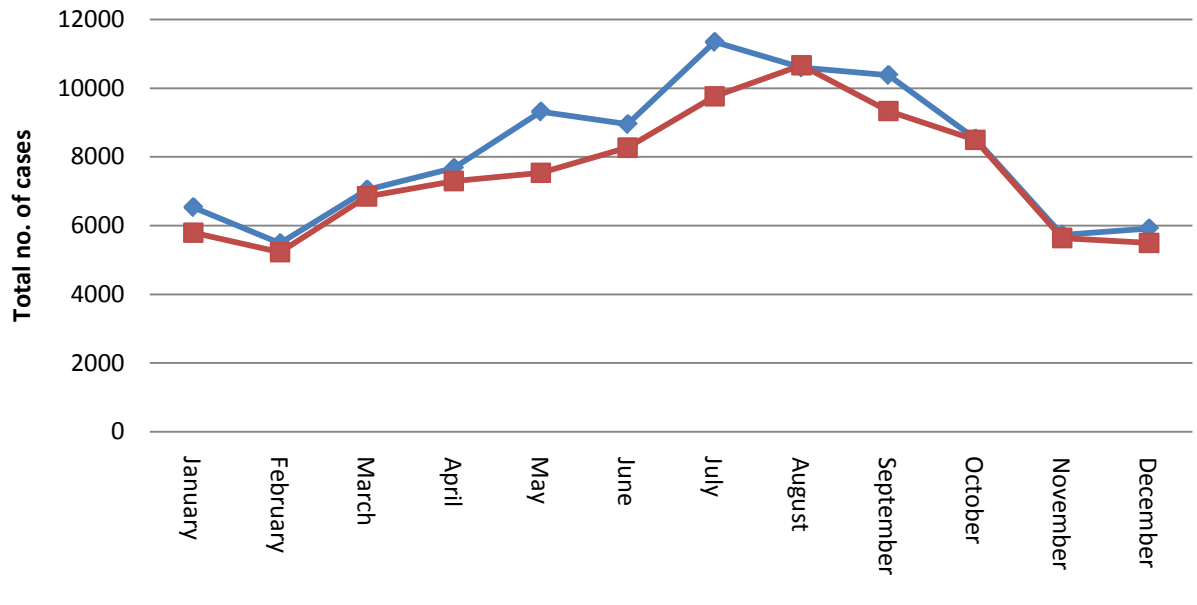


Figure 2.3 Peptic Ulcer Syndrome reported at health facilities, Bhutan, 2008-2009

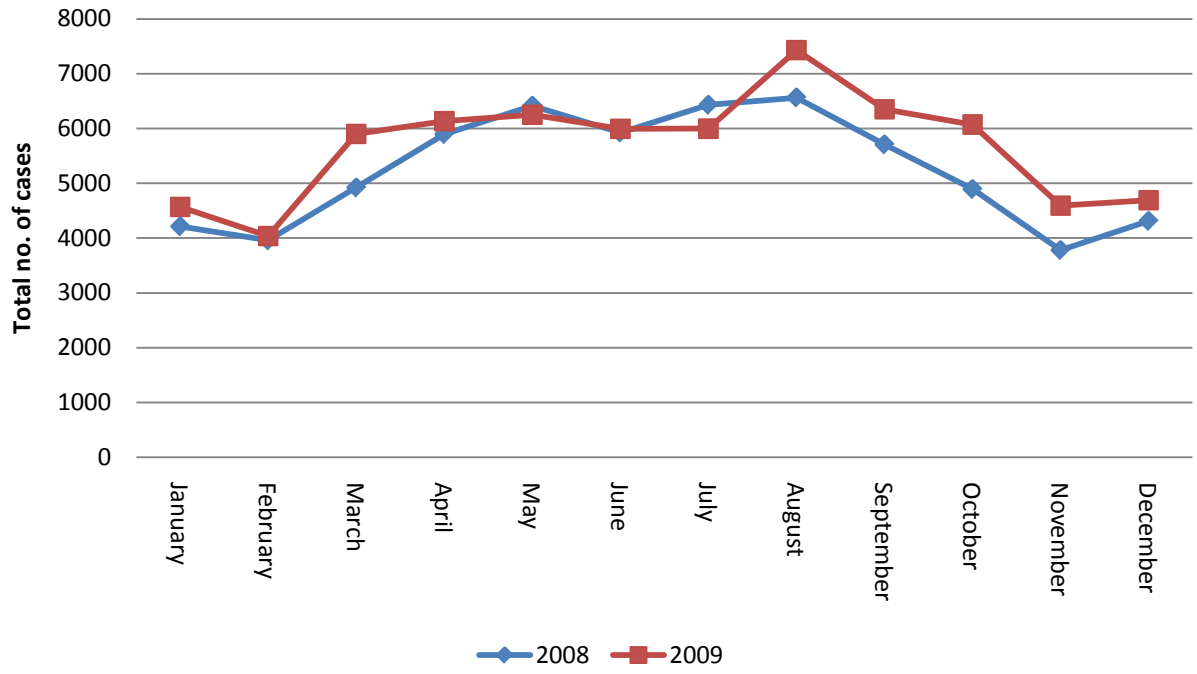


Figure 2.4 Other Musculo-skeletal disorders cases reported at health facilities, Bhutan, 2008-2009

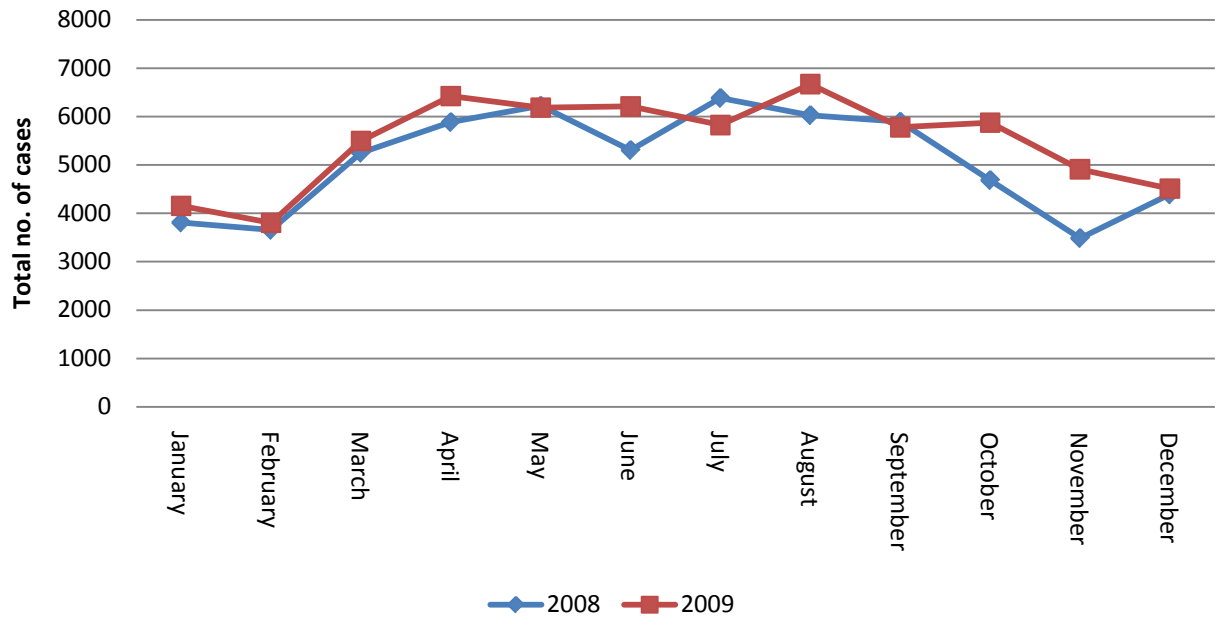


Figure 2.5 Acute Pharyngitis/Tonsilitis cases reported at health facilities, Bhutan, 2008-2009

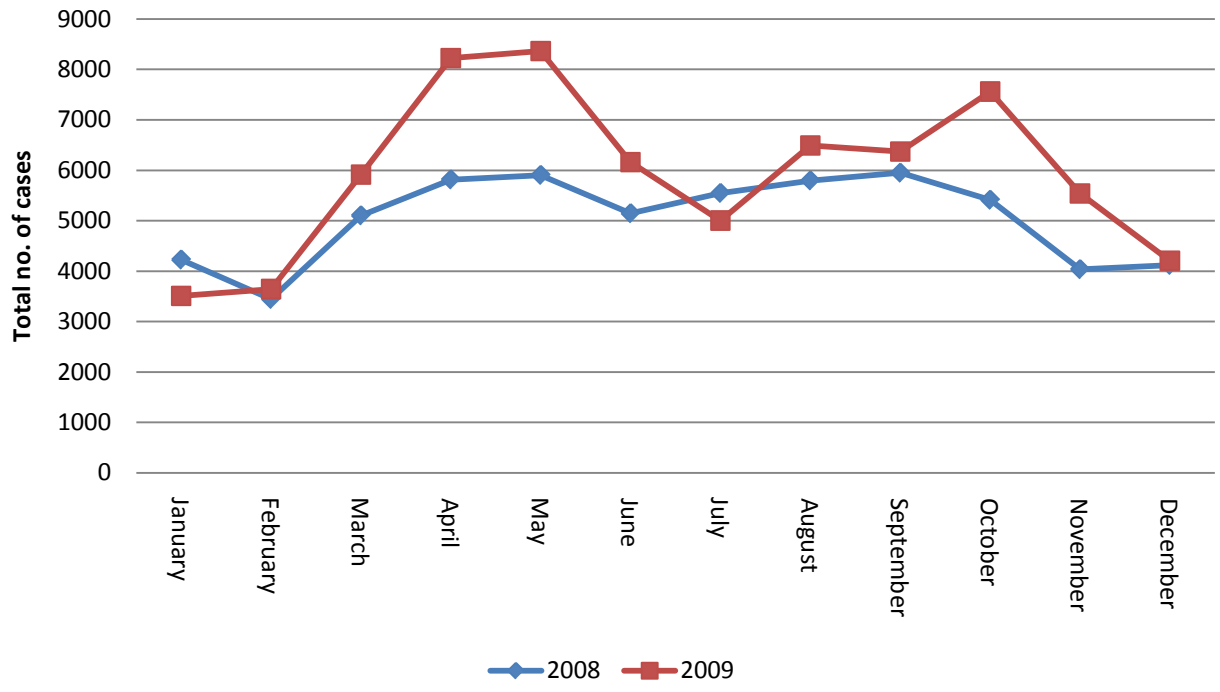


Figure 2.6 Diarrhoea cases reported at health facilities, Bhutan, 2008-2009

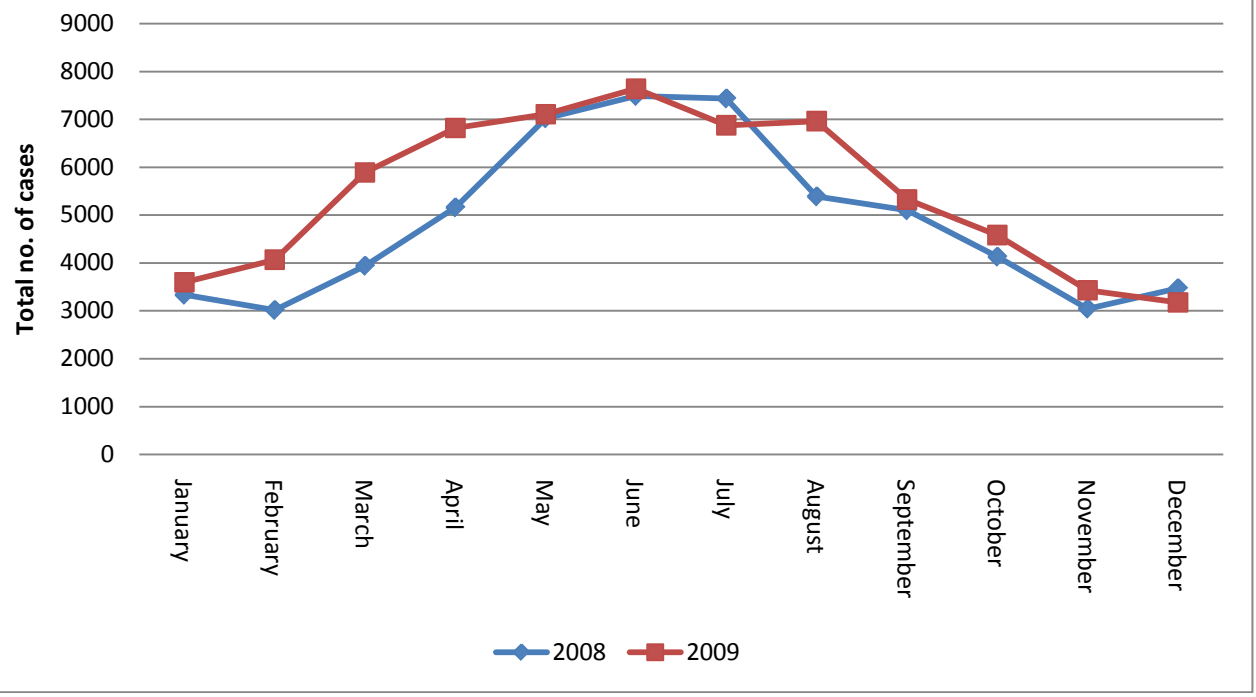


Figure 2.7 Other Disorders of skin & Subcutaneous-tissues cases reported at health facilities, Bhutan, 2008-2009

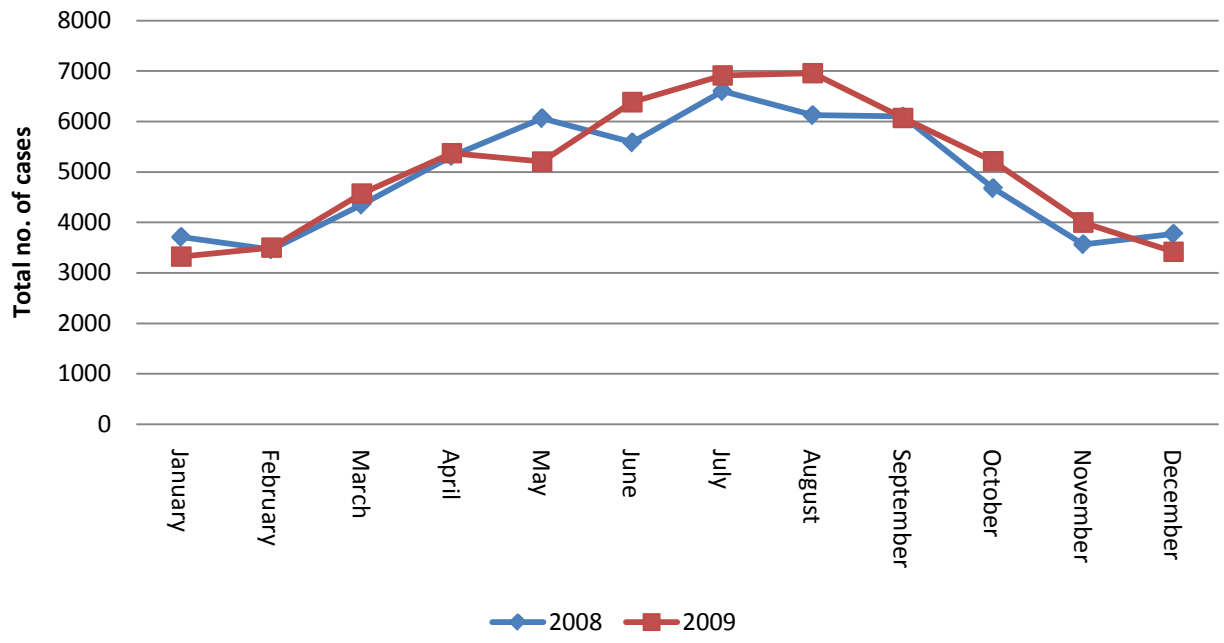


Figure 2.8 Other Disease of the Disgestive System reported at health facilities, Bhutan, 2008-2009

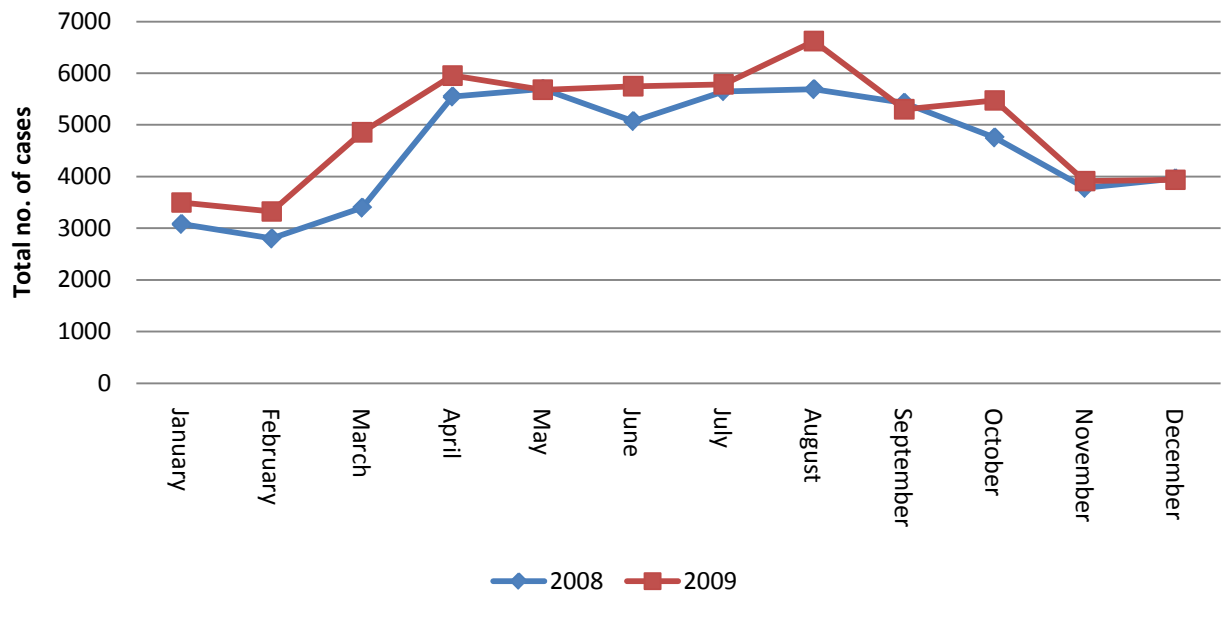


Figure 2.9 Other Resperiratory & Nose Diseases reported at health facilities, Bhutan, 2008-2009

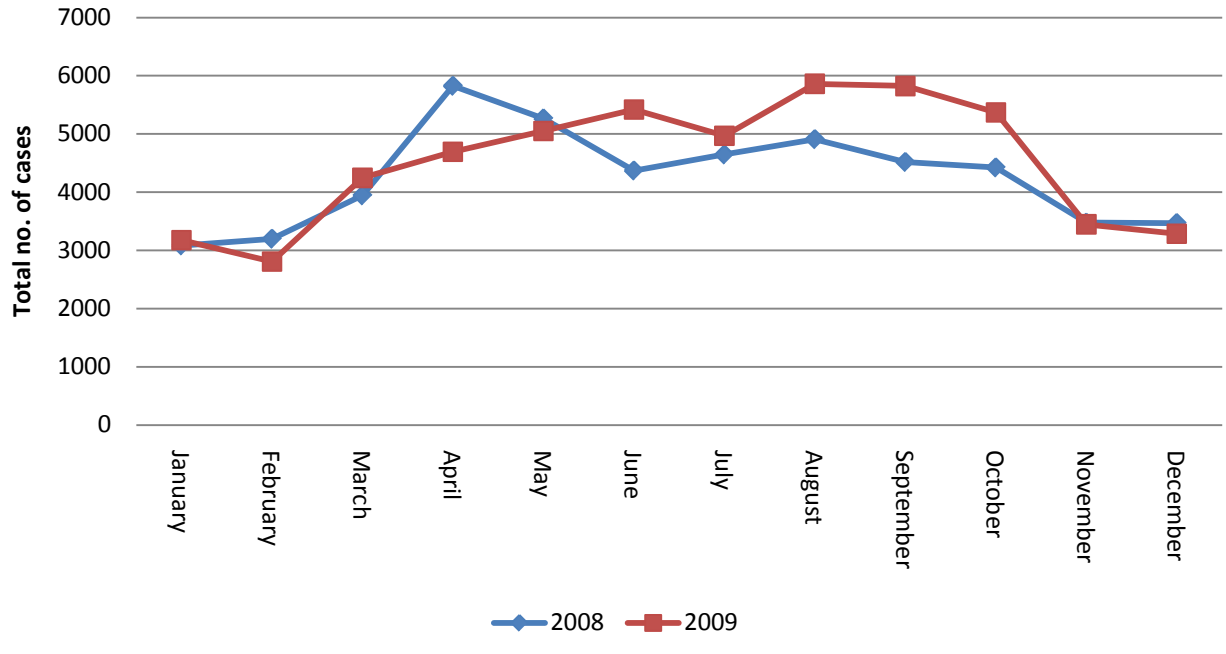
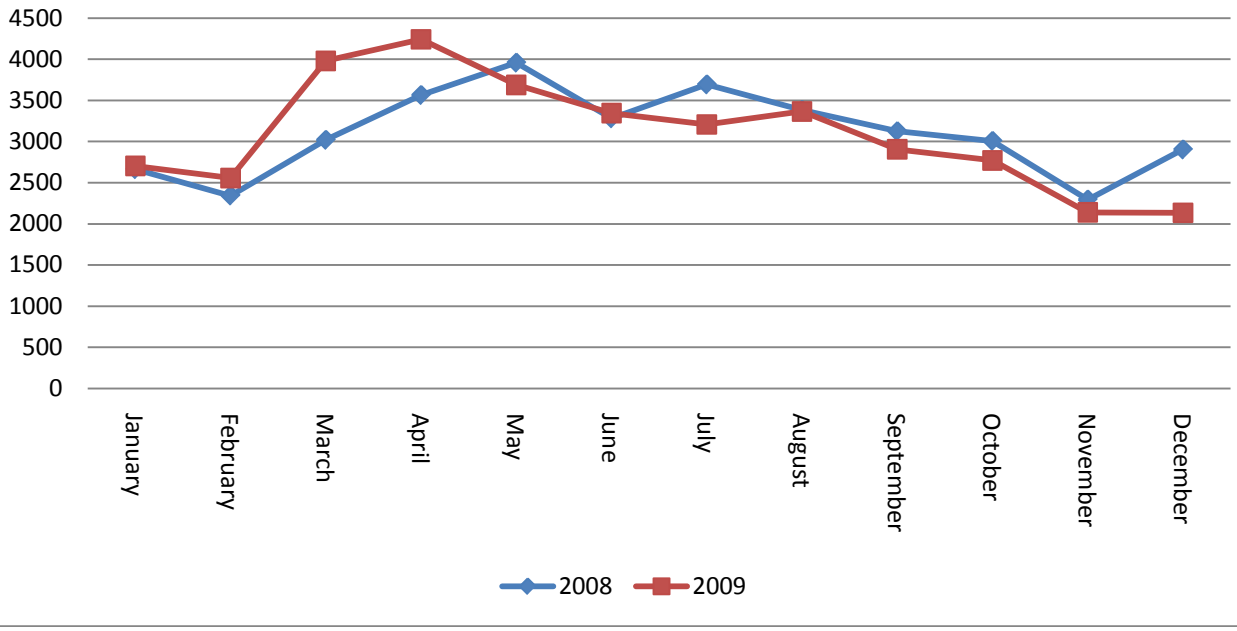


Figure 2.10 Conjunctivitis cases reported at health facilities, Bhutan, 2008-2009



4. Non-Communicable Diseases reported at the health facilities, Bhutan, 2009

Table 3.1 Selected Non-communicable Diseases reported at the health facilities of Bhutan, 2009

Disease	Total no. of cases	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Injuries & Poisoning	28509	2061	1789	2188	1965	2342	2831	2817	3155	2685	2420	2097	2159
Hypertension	21177	1748	1540	2011	2038	1954	1851	1778	1624	1890	1787	1455	1501
Arthritis & Arthrosis	12409	947	891	1017	1067	1242	1009	1204	1513	954	943	839	783
Nutritional Anemia	11853	726	700	876	1068	1122	1161	1263	1307	1217	922	781	710
Work Related Injuries	10577	708	723	879	891	929	810	977	1151	1081	872	780	776
Bites & Stings	7112	501	526	493	639	590	662	731	721	652	573	500	524
Burns and Corrosions	3824	374	359	369	333	310	263	302	292	237	303	284	398
Diabetes	2605	235	188	339	249	154	217	300	239	251	185	123	125
Other Nutritional & Metabolic Disorders	1868	155	120	151	179	155	171	243	206	160	129	99	100
Alcohol Liver Diseases	1602	109	104	146	121	146	165	105	132	132	170	115	157
Rheumatic Heart Disease	1494	142	131	100	102	113	88	102	438	101	67	61	49
Blood & Immune Disorders	995	60	43	53	61	59	124	88	97	99	152	38	121
Cataract	768	124	93	55	78	37	98	51	76	63	57	16	20
Other Cancers	693	69	0	69	49	47	61	69	54	64	71	63	77
Depression	621	88	72	55	53	45	40	35	52	53	53	34	41
Acute Appendicitis	571	31	17	56	40	40	47	48	50	100	77	34	31
Anxiety	513	22	21	40	34	39	45	44	46	54	57	50	61
Ischemic Heart Diseases	215	17	7	15	11	47	10	11	58	10	16	3	10
Cervical Cancer	90	8	0	6	12	5	5	8	6	7	8	13	12

5. Ante-Natal Care & Delivery Report

Table no 4.1 sum of ANC visits made by pregnant women at health facilities of Bhutan (Oct-Dec2009).

District	1st Visit	2nd Visit	3rd Visit	4>= Visit
Bumthang	101	54	52	69
Chukha	343	328	346	791
Dagana	82	99	71	81
Gasa	14	13	9	6
Haa	38	36	43	58
Lhuentse	56	62	49	114
Mongar	221	161	159	256
Paro	235	191	163	331
Pemagatshel	105	86	74	118
Punakha	136	158	165	261
SamdrupJongkhar	136	117	121	183
Samtse	259	255	297	549
Sarpang	166	178	203	359
Thimphu	634	618	538	897
Trashigang	180	185	166	232
TrashiYangtse	111	80	79	139
Trongsa	53	38	44	69
Tsirang	68	71	73	55
Wangdi	172	177	133	128
Zhemgang	81	62	70	97

Table no 4.2 Trained delivery & BCG, OPV0 vaccinated at health facilities of Bhutan (Oct-Dec 2009)

District	Attended delivery	BCG	Polio0
Bumthang	44	65	55
Chukha	311	352	340
Dagana	26	93	77
Gasa	1	11	5
Haa	11	31	26
Lhuentse	49	71	60
Mongar	204	289	259
Paro	168	167	167
Pemagatshel	43	107	88
Punakha	98	89	91
SamdrupJongkhar	111	178	143
Samtse	114	242	208
Sarpang	215	268	252
Thimphu	559	962	949
Trashigang	157	209	185
TrashiYangtse	31	93	67
Trongsa	15	31	29
Tsirang	49	67	63
Wangdi	105	126	94
Zhemgang	46	81	58

6. Family Planning Methods Report

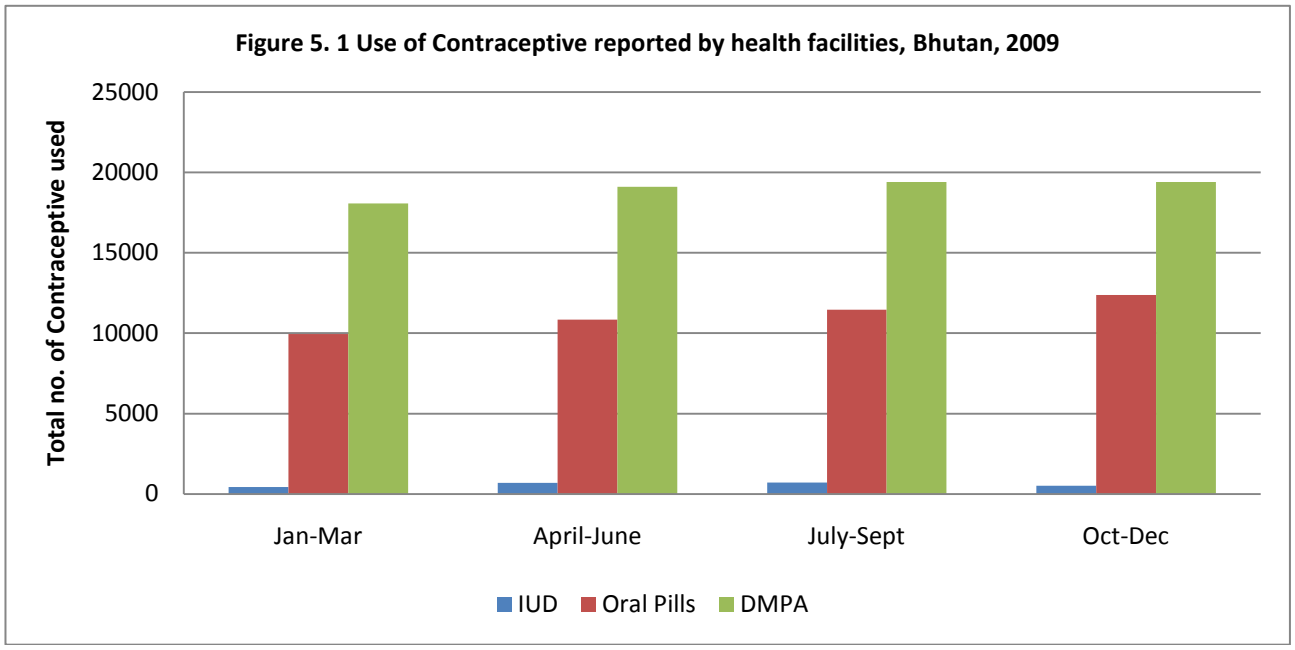
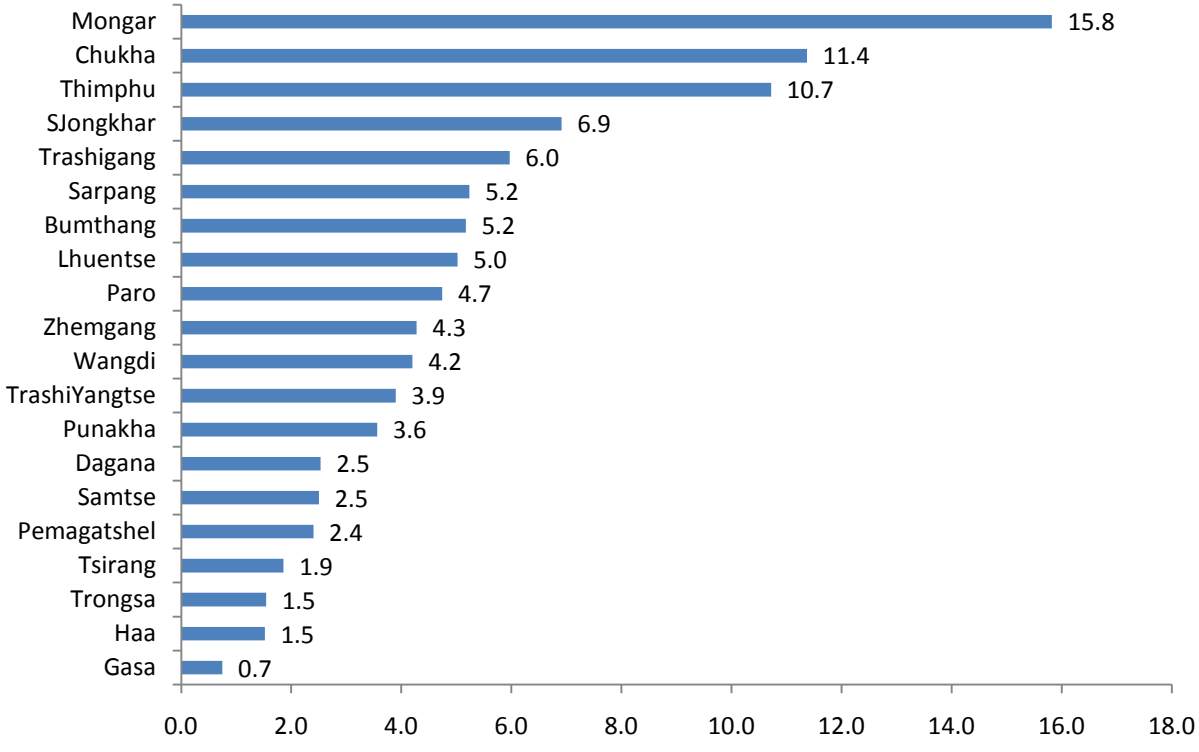


Table no. 5.1 Type of Family Planning methods used reported by Health facilities, Bhutan (Oct-Dec 2009)

District	IUD	Oral Pills	DMPA
Bumthang	3	835	621
Chukha	39	1143	2021
Dagana	0	787	1050
Gasa	5	89	130
Haa	1	249	373
Lhuentse	1	236	538
Mongar	18	508	1726
Paro	16	550	1000
Pemagatshel	2	275	535
Punakha	32	623	715
SJongkhar	9	810	1044
Samtse	2	1624	1489
Sarpang	13	995	1581
Thimphu	329	897	2064
Trashigang	11	728	1618
TrashiYangtse	13	130	405
Trongsa	4	236	393
Tsirang	1	740	1036
Wangdi	12	312	367
Zhemgang	3	617	709

Figure 5.2 Percentage of Condom Distributed by the health facilities, Bhutan, October-December 2009

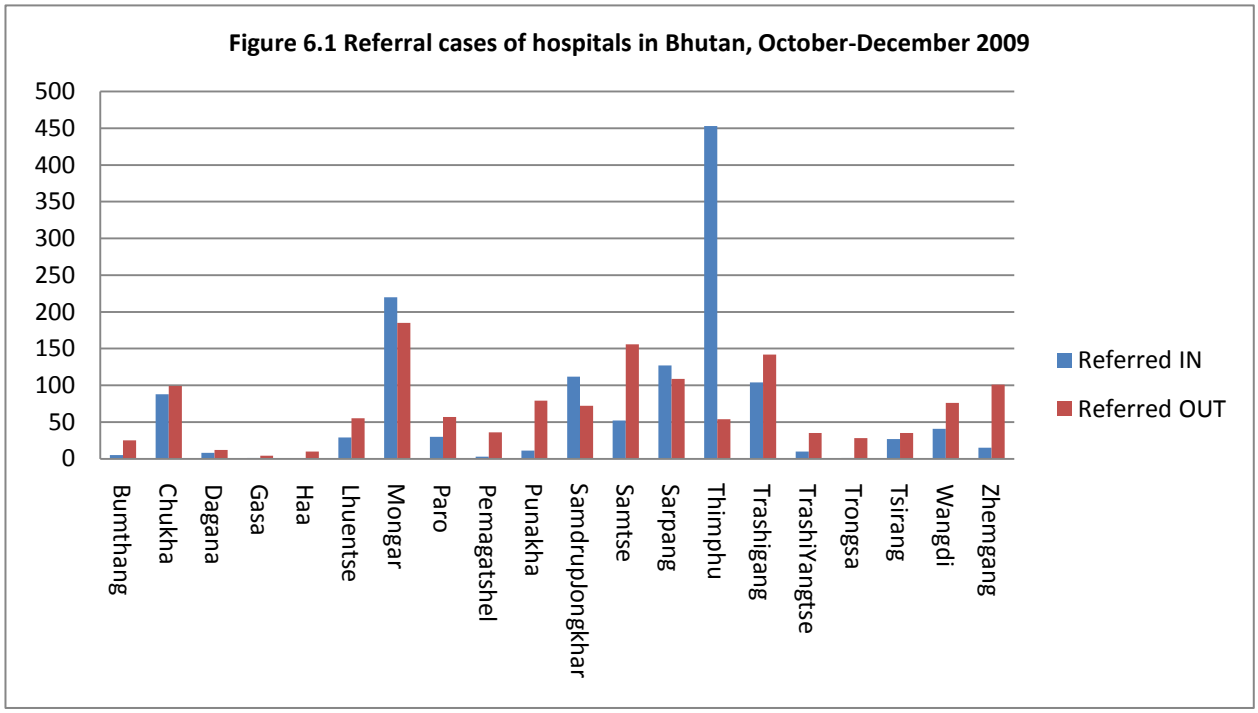


Fourth quarter (October-December) of 2009 indicates that out of reported 370519 condoms distributed, 15.8% of it were distributed in Mongar dzongkhag followed by Chukha with 11.4% and Thimphu 10.7%.

7. Admissions

Table no. 6.1 Average Patient Days at different hospitals of Bhutan, October-December 2009

Health Facility	Total no. of admission	Sum of Patient Days	Average Patient Days
GIDAKOM HOSPITAL	108	4121	38.2
SJONGKHAR HOSPITAL	74	1204	16.3
YANGTSE HOSPITAL	117	809	6.9
DEOTHANG HOSPITAL	263	1786	6.8
MONGAR HOSPITAL	839	5506	6.6
SAMTSE HOSPITAL	428	2650	6.2
LUNGTENPHU RBA HOSPITAL	225	1165	5.2
WANGDI RBA HOSPITAL	51	264	5.2
YEBILAPTSA HOSPITAL	232	1170	5.0
TRASHIGANG HOSPITAL	651	3200	4.9
GAYLEGPHUG HOSPITAL	886	4281	4.8
RISERBOO HOSPITAL	207	974	4.7
GOMTU HOSPITAL	110	500	4.5
PEMAGATSHEL HOSPITAL	119	471	4.0
PUNAKHA HOSPITAL	450	1752	3.9
GEDU HOSPITAL	310	1142	3.7
DAMPHU HOSPITAL	224	810	3.6
TSIMALAKHA HOSPITAL	140	493	3.5
LHUNTSE HOSPITAL	199	688	3.5
SIBSOO HOSPITAL	250	810	3.2
SARPANG HOSPITAL	128	360	2.8
PARO HOSPITAL	678	1881	2.8
TRONGSA HOSPITAL	180	451	2.5
PHUNTSHOLING HOSPITAL	620	6	*6
BUMTHANG HOSPITAL	0	0	0.0



8. Laboratory Examinations

Table no. 7.1 Laboratory Examinations (No.) done at different hospitals of Bhutan (Oct-Dec 2009).

District	Haemoglobin	Blood Grouping	Malaria slides	TB Sputum	Urine	Stool	HIV
Bumthang	707	174	16	31	565	14	119
Chukha	6057	1986	2616	322	5833	66	535
Dagana	587	176	508	32	973	8	74
Gasa	36	14	0	2	34	0	10
Haa	426	112	20	19	674	0	46
Lhuentse	316	120	13	14	1012	15	39
Mongar	1819	7339	94	338	2511	319	266
Paro	798	276	55	215	1388	14	229
Pemagatshel	355	268	57	19	723	7	136
Punakha	837	405	45	83	1439	20	259
SJongkhar	889	190	894	202	1619	18	91
Samtse	2164	681	1709	123	1731	23	245
Sarpang	2164	951	4528	173	2306	104	575
Thimphu	6800	1762	640	207	7642	615	346
Trashigang	1265	1211	66	91	2357	47	135
TrashiYangtse	404	150	8	19	399	3	31
Trongsa	312	141	19	11	220	21	41
Tsirang	801	200	348	15	311	5	55
Wangdi	1067	335	117	34	1185	12	216
Zhemgang	554	121	549	54	682	22	36

9. Surgical Procedures

Table no.8.1 Surgical Procedures used in different hospitals of Bhutan (Oct-Dec 2009).

District	Caesarian Section	General						Orthopaedic					
		Abdominal			Others			Extremities			Others		
		Major	Minor	Laparoscopic	Major	Minor	Laparo scopic	Major	Minor	Laparo scopic	Major	Minor	Laparo scopic
Bumthang	0	0	0	0	0	0	0	0	0	0	0	0	0
Chukha	53	35	63	0	16	16	0	7	6	0	12	13	0
Dagana	0	0	0	0	0	0	0	0	0	0	0	0	0
Gasa	0	0	0	0	0	0	0	0	0	0	0	0	0
Haa	0	0	0	0	0	0	0	0	0	0	0	0	0
Lhuentse	0	0	0	0	0	13	0	0	0	0	0	0	0
Mongar	37	21	10	0	14	35	0	56	34	0	5	2	0
Paro	10	0	0	0	6	35	0	0	0	0	0	0	0

Pemagatshel	0	0	0	0	0	3	0	0	0	0	0	1	0
Punakha	1	1	0	0	0	5	0	0	0	0	0	0	0
SamdrupJongkhar	21	0	0	0	0	584	0	10	45	0	7	14	0
Samtse	1	2	11	0	0	151	0	0	0	0	0	32	0
Sarpang	50	10	4	0	0	80	0	0	1	0	0	0	0
Thimphu	144	43	72	46	61	72	0	54	59	0	0	0	0
Trashigang	45	10	1	0	0	50	0	0	0	0	0	0	0
TrashiYangtse	0	0	0	0	0	0	0	0	0	0	0	0	0
Trongsa	0	0	0	0	64	0	0	0	0	0	0	0	0
Tsirang	0	0	0	0	0	0	0	0	0	0	0	0	0
Wangdi	0	0	0	0	0	65	166	0	0	0	0	28	0
Zhemgang	0	0	0	0	0	10	0	0	2	0	0	4	0

10. Diagnostic Procedures

Table no. 9.1 Diagnostic Procedures used at different hospitals of Bhutan (Oct-Dec 2009).

District_Name	X-ray			Ultrasound		
	Chest	Extremities	Others	Gyn/Obs	Abdomen	Others
Bumthang	62	80	30	0	0	1
Chukha	725	396	261	870	330	45
Dagana	0	0	0	0	0	7
Gasa	0	0	0	0	0	0
Haa	34	24	2	135	37	6
Lhuentse	67	39	29	0	0	3
Mongar	571	203	240	502	23	112
Paro	192	187	92	0	0	28
Pemagatshel	28	17	24	0	0	9
Punakha	170	122	71	649	4	175
SamdrupJongkhar	168	84	42	68	90	2
Samtse	429	248	216	0	0	82
Sarpang	403	219	176	529	0	17
Thimphu	2689	1994	987	1853	194	367
Trashigang	275	114	77	557	3	11
TrashiYangtse	11	6	2	0	0	5
Trongsa	20	20	9	0	0	8
Tsirang	0	0	0	213	18	7
Wangdi	76	83	78	78	2	1
Zhemgang	74	59	43	0	0	4

11. Dental Services

Table no. 10.1 Dental Services given by hospitals of Bhutan, (Oct-Dec 2009).

District	Prophylaxis	Scaling	Fillings	Extractions	Others
Bumthang	1	0	70	87	117
Chukha	45	20	674	896	981
Dagana	7	0	116	81	200
Gasa	0	0	0	0	0
Haa	6	0	103	167	164
Lhuentse	3	1	132	70	116
Mongar	112	7	286	275	432
Paro	28	4	593	488	1024
Pemagatshel	9	0	86	118	70
Punakha	175	3	265	405	424
S.Jongkhar	2	0	24	72	62
Samtse	82	0	198	217	267
Sarpang	17	0	681	548	1490
Thimphu	367	123	1542	2900	4198
Trashigang	11	8	253	584	368
Yangtse	5	0	88	109	144
Trongsa	8	0	55	77	151
Tsirang	7	0	217	170	385
Wangdi	1	5	185	183	85
Zhemgang	4	1	24	24	22

12. TB Report

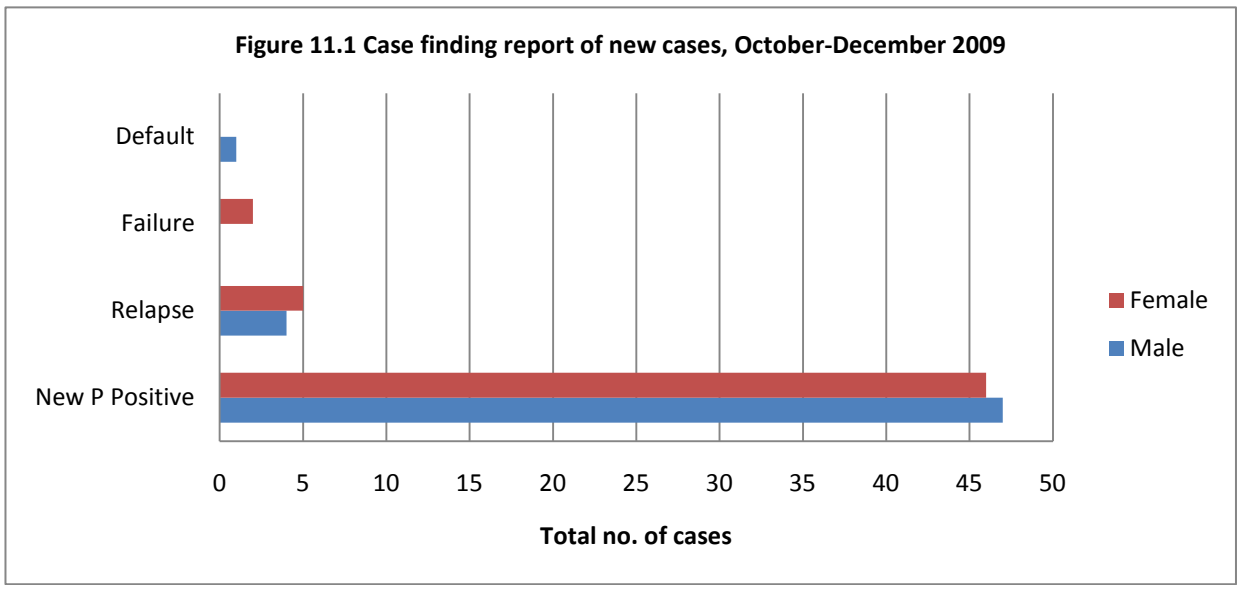


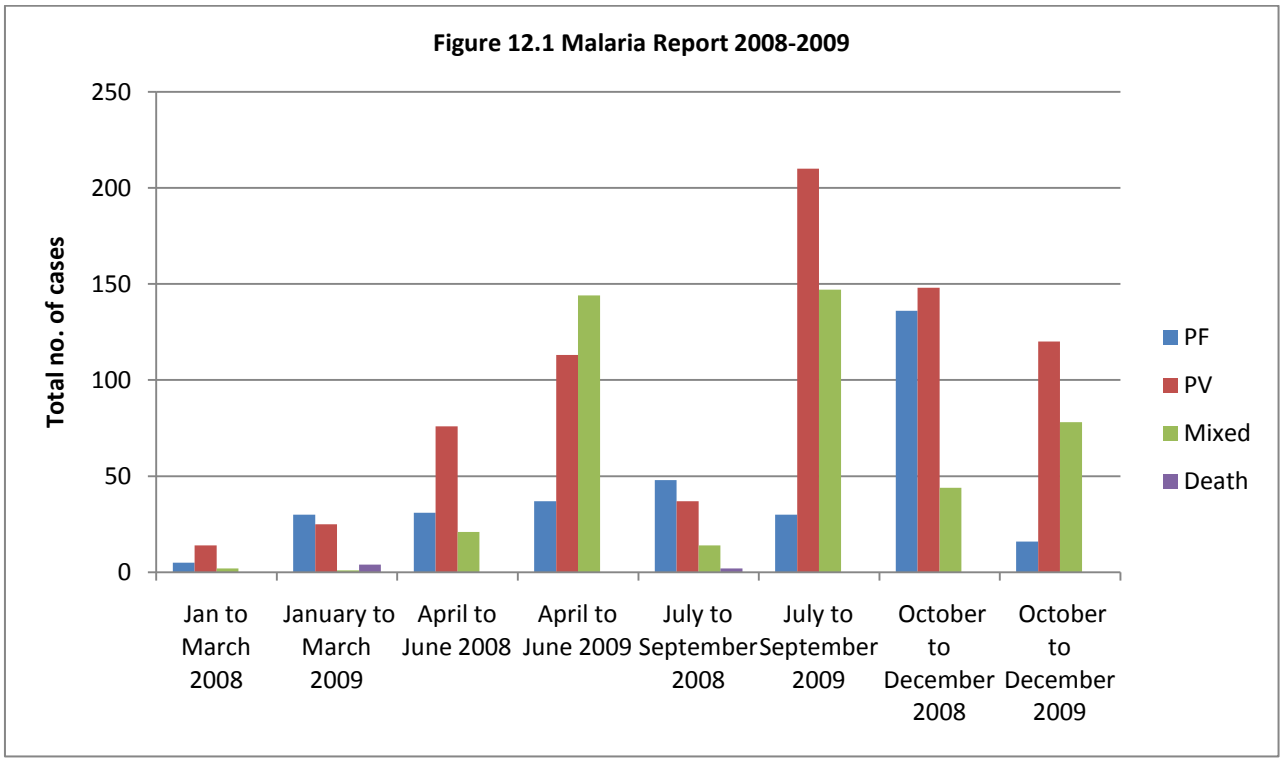
Table no. 11.1 Laboratory Report and Case finding indicators, 2008-2009

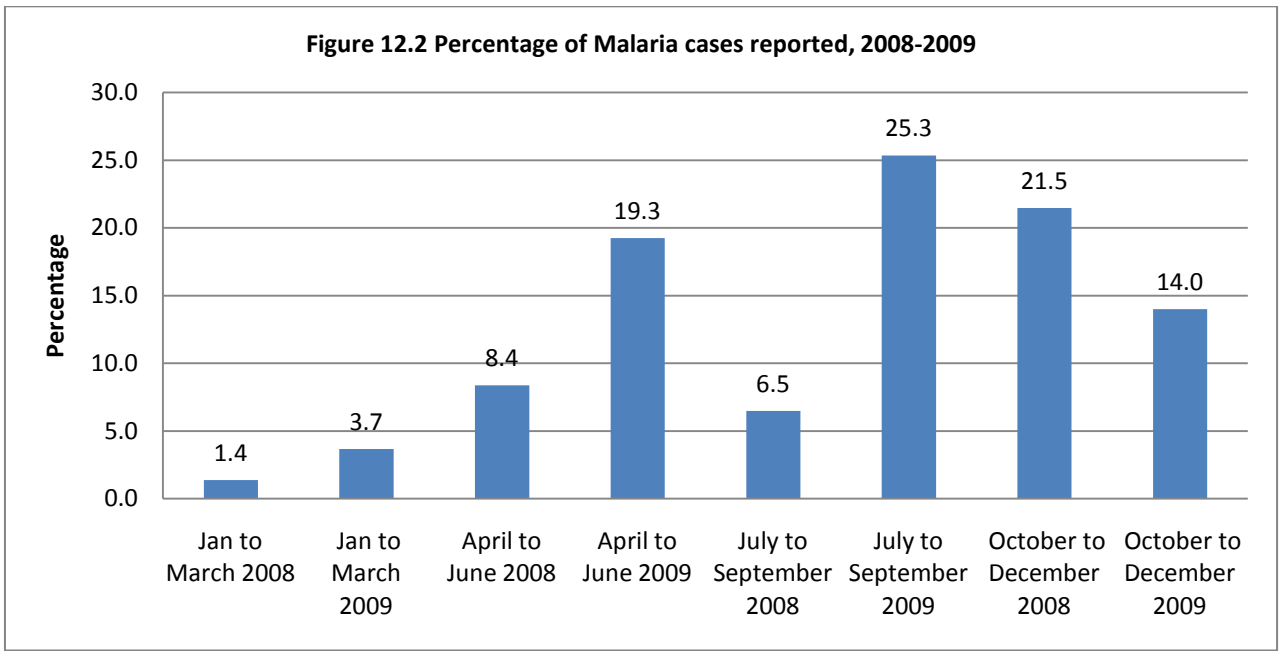
Quarter	Laboratory indicator smear positive	Case finding Indicators
Jan-March 2008	6.411	36.61
April-June 2008	6.866	39.54
July-Sept 2008	5.895	37.38
Oct-Dec2008	7.284	39.81
Jan-March 2009	7.49	43.77
April-June 2009	7.707	43.46
July-Sept 2009	8.338	39.59
Oct-Dec2009	7.181	35.09

Table no. 11.2 Treatment outcome indicators, October-December 2008

Indicators	New P Positive	Relapse	Failure	Default
Cure rate	88.37	83.33	60	50
Completed rate	3.488	0	0	50
Success rate	91.86	83.33	60	100
Mortality D/A	2.325	0	0	0
Failure rate	1.162	16.66	40	0
Default rate	0	0	0	0

13. Malaria Report





From 1527 cases of Malaria reported in the years 2008 and 2009; highest percentage i.e. 25.3% was reported during the period July to September 2009 followed by October to December 2008 (21.5%).

Cont…-1-

were unaware of its importance." There were only few health workers with 54 BHUs and 12 District Hospitals. Each PHC worker needed to cater to the health services of four or five geogs. The availability of the drugs was of poor and questionable quality. The case loads in BHUs were also increasing by over 15% annually. There were also high mortality and morbidity rates. In my childhood days, I could also remember my parents fetching drinking water from possibly polluted pond about a kilometer away from home. Toilets were hardly seen and there was open defecation near houses.

In July 2002, when I graduated from RIHS and was posted to Bjurugang BHU in Dagana Dzongkhag as a Health Assistant, I could see considerable improvements in the way of life of the people. Households had simple pit latrines with separate animal sheds, with drinking water supplied to each village. More than 90% of the population was within three hours walk to the health facility, with service users seeking medical help even for minor ailments. However, it was sad to observe that the constructed pit latrines were not being used. Every time I visited the villages, I have made it a point to teach the community on personal hygiene, immunization, pre-natal checkups, family planning, water supply and sanitation etc. Having served for more than 6 years in three BHUs I found that educating the rural people was a big challenge. In the villages I visited, I formed sanitation committees to promote hygiene. Having availed training in water testing, I once went to Zomina village with the testing kits to test their drinking water sources. I then had a hard time convincing the villagers of the dangers of the polluted water source which was nearer to their home. Based on my experiences, I think that strengthening advocacy, community and social mobilization will enhance informed and willing participation in the promotion of primary health care in the community.

Gradually, the health sector in Bhutan introduced MCH clinic days which are a PHC element in line with the Alma Ata Declaration. However, all health centers are now mandated to provide regular ANC sessions everyday in light of the high maternal mortality rate and in line with the millennium development goals. There are also monthly mobile health services in ORCs for immunization, ANC, family planning and to treat minor OPD supported by the Village Health Workers (VHW). The VHW and Water Caretakers play a vital role in promoting health activities in the community. In every clinic session, I usually take the opportunity to teach the mothers on immunization, ANC, breast feeding, family planning and others. In the BHUs, the Health Workers spend a large part of their time in primary clinical care (preventive) aspects to treat the patients. Since health sector believes prevention is not only better but cheaper. In every aspect, the patients are treated with compassion as *a joyful heart is a good medicine*, which in turn is an essential component for achieving Gross National Happiness, the vision of the country.

Today, there are 1752 Health Workers working in 176 BHUs and hospitals covering all 20 districts with fully functioning referral system from periphery to the national level. In early 1980s, the crude death rate was 13.4 per 1000 population and now it has gone to below 7 in 2005 and Infant Mortality Rate has also declined from 102.8 per thousand to 40 in 2006.Today in my geog, every household has a water tap stand at their door step. The provision of essential drugs which is one of the eight primary health care elements of the Alma Ata Declaration is properly and abundantly distributed to the health centers. Bhutan declared Universal Children Immunization on 13th February 1991 so that our children are fully protected from six vaccine preventable diseases. In 2006, the immunization coverage had reached 90% from just a mere 3% in the 1980s. The leprosy elimination goal was achieved with new cases of 33 or less in a year. The IDD was eliminated in 2003. Caseload in the BHUs has been steadily increasing at about 5% annually compared to 15% in the 1980s.

In conclusion, the health sector has already achieved many of its national goals and objectives like UCI, reduction of IDD, IMR and many more while entering a new era of "democratic" governance in Bhutan.

Nevertheless, there are still underlying challenges. In the clinical aspect, diseases like diarrhoea, respiratory tract infection, skin diseases etc. are still in the top ten health problems affecting the majority of the population. On the other hand, there is a rising trend of HIV/AIDS in Bhutan, affecting us both socially and economically. The non-communicable (lifestyle related) diseases like diabetes, hypertension, depression and anxiety are invading the more populous and urban population. Also, some rural villages like Laya and Lunana have low RWSS coverage because of difficult terrain and scattered settlements. The patient waiting time and queue in the hospitals are increasing, which can to some extent be mitigated through the primary health care. The primary health care workers around the country are serving unlimited time working at odd hours and walking in difficult terrains and climate for the well being of the country's population. With the adoption of the Bhutan Medical and Health Council Act (2002) and the Medicines Act in 2003, and with the aim of poverty reduction as the main target of the 10th Five Year Plan, the Health Ministry looks forward to the coming years with optimism and with the reiteration of the health workers in trying to achieve the MDG+ goals.

(Editor's note:
This article has not been edited to maintain its originality)

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.

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