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

Quarterly Morbidity & Activity Report

Vol.II, Issue III (July – September 2009) **December 2009**

(In commemoration of World AIDS Day, in this issue QMAR brings article related to HIV/AIDS in Bhutan. The article is not edited to retain its originality)

Community Participation for HIV prevention and care – lessons learnt from Bhutan

(Dr. Gampo Dorji, Dr. Lungten Z. Wangchuk)

In this issue:

Abstract:

One of the basic principles enshrined in Alma-Ata declaration of 1978 can be interpreted as health for the community and by the community. This approach has been adapted to a varying degree across the health systems of the world. While Bhutan has embraced the community participatory process in primary health care, one of our unique experiences has been community mobilization for HIV prevention in the country. With high visibility of an exemplary leadership and a strong political commitment to address HIV prevention, multi-sectoral task forces (MSTFs) were formed across the country by 2002.

The years of implementation of the multi-sectoral approach, have critical experiences of community decision making for health. The key philosophy behind this approach is to make communities equal partners and not merely passive recipients of health programmes. The lessons learnt from Bhutan's multi-sectoral interventions for HIV/AIDS, delivered through the active participation of the community may have some relevance to other settings.

Introduction

The HIV epidemic in Bhutan started in 1993, marking the end of country's identity as the last HIV free nation in the South Asian region [1]. The mode of transmission is largely sexual and the male to female ration is 1:1. The proportion of children born with HIV is significant. HIV infection has been found in 17 out of 20 districts in Bhutan and the epidemic has not been completely abated, even though the pace of spread has remained slow. Sixteen years after the epidemic began, it is estimated that national prevalence is 0.02% and about 300 people are living with the HIV virus. While there is no scientific evidence or program evaluation data to establish causality for this limited spread, we suggest that a

contd. on page 16>>

EDITORIAL

Health Management Information System (HMIS) has been the key source for routine health data on morbidity, mortality and hospital activities for Bhutan. The main aim of publishing Quarterly Morbidity and Activity Report (QMAR) is to analyze the data from the HMIS to an easily interpretable health information for key audiences of health planners, district health officers and health workers to provide a snap shot of situation in the last quarter. The QMAR report is still nascent although we are into 7th Quarterly publication.

As we browsed the data in the HMIS, we become acutely aware of challenges collating meaningful information from it. HMIS provides rich information on episodes of care about wide ranging sicknesses. However, few of the major limitation of the data includes imprecise figure of individuals seeking care. As result we have been confronted with difficulty to adjust for the overlaps and double counting to do a proper trend analysis of health events. Hence, in the current QMAR Volume II, Issue III, most of the data have been restrictively presented in absolute figures. This is always not the ideal way to comprehend or make comparisons between times and events!

On the other hand, it is worth a caution for our readers that routinely available health facility based information must be used with a caveat that the information would represent only so called "health care ice burg". People included in the health facility care may represent the tip of the iceberg of all people who are in need of the services in the community.

The HMIS in the Ministry of Health has come a long way in collecting list of health information in accurate and timely manner. However, HMIS would still need to be more robust and adaptive to collect, collate and disseminate useful information.

One question that lingers as we proceed with the current QMAR is, should we look forward in future for a time when each individual seeking care could have a unique personal identifier for efficient record linkage?

(Dr. Gampo Dorji)
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For Editorial Team

I. Timeliness of the Report

In this report, descriptive analysis includes only 17 Dzongkhags. As per the policy directives of Health Ministry, all Dzongkhags should have sent the 3rd quarter data by 15th November 2009. However the following Dzongkhags has not sent the data as of 15th November 2009:

1. Haa
2. Lhuentse
3. Pemagatshel

This report will cover only the data received by Health Management and Information Unit, Policy and Planning Division that is namely the morbidity and activity report. 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.

II. Top ten Disease trend analysis from January 2008-September 2009

**Figure numbers are in accordance to the diseases' rank as per health facility records.*

Figure 1: Common Cold, January 2008-September 2009, Bhutan

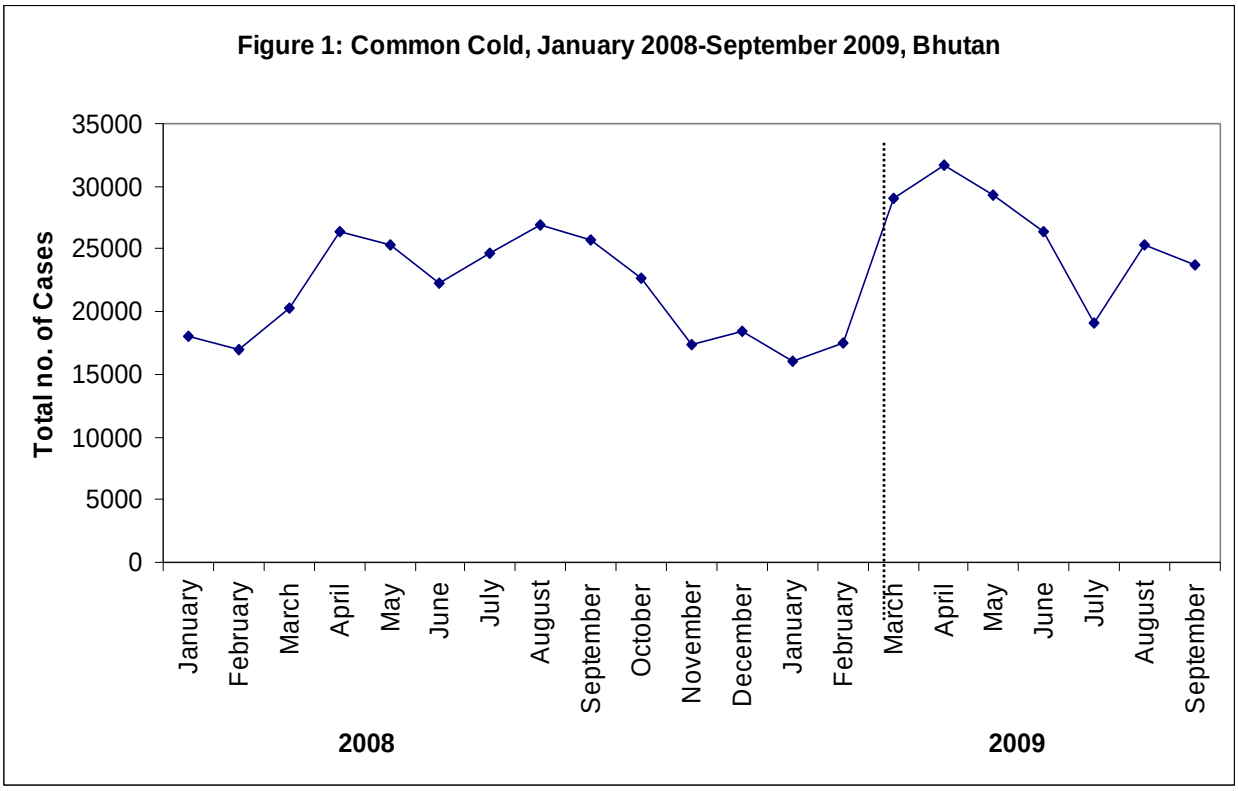


Figure 2: Other Disorders of Skin & Subcutaneous-tissues, January 2008-September 2009, Bhutan

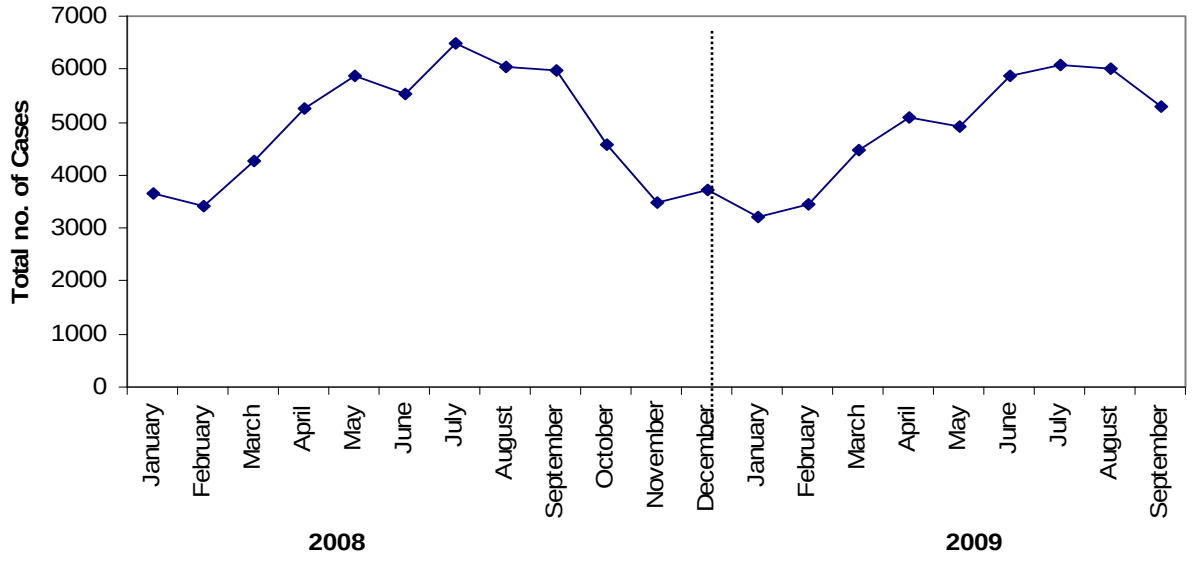


Figure 3: Acute Pharyngitis/Tonsilitis, January 2008-September 2009, Bhutan

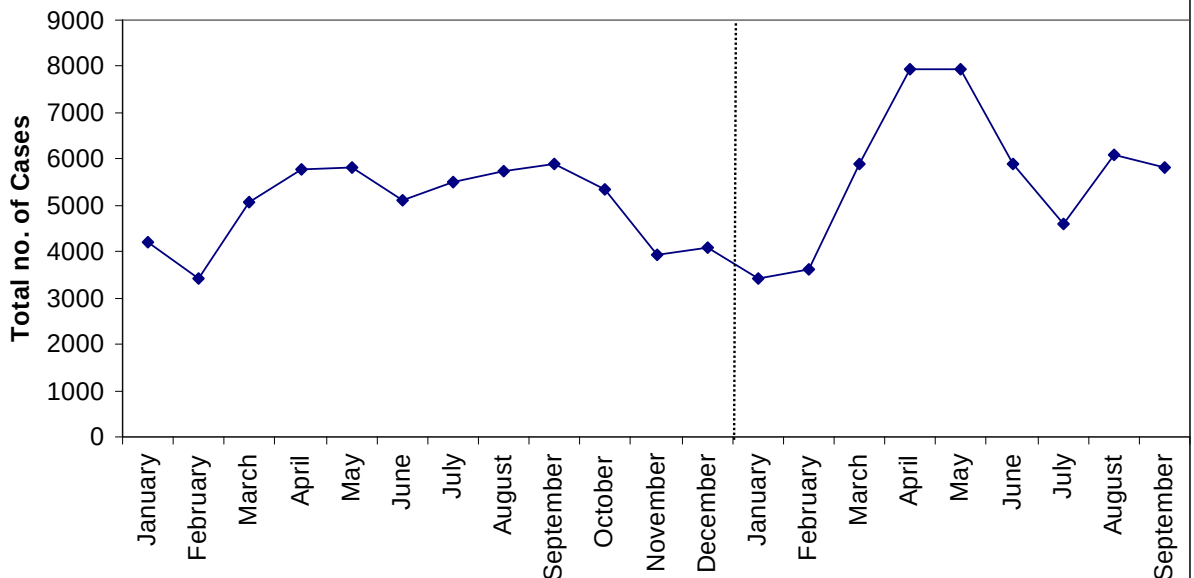


Figure 4: Diarrhoea, January 2008-September 2009, Bhutan

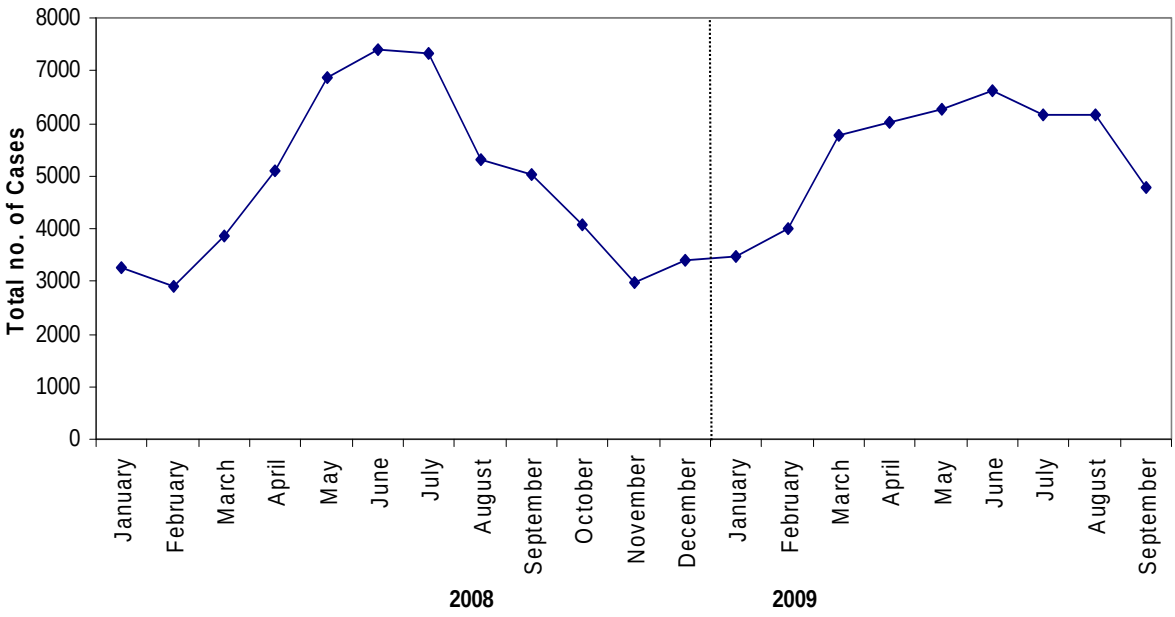


Figure 5: Peptic Ulcer Syndrome, January 2008-September 2009, Bhutan

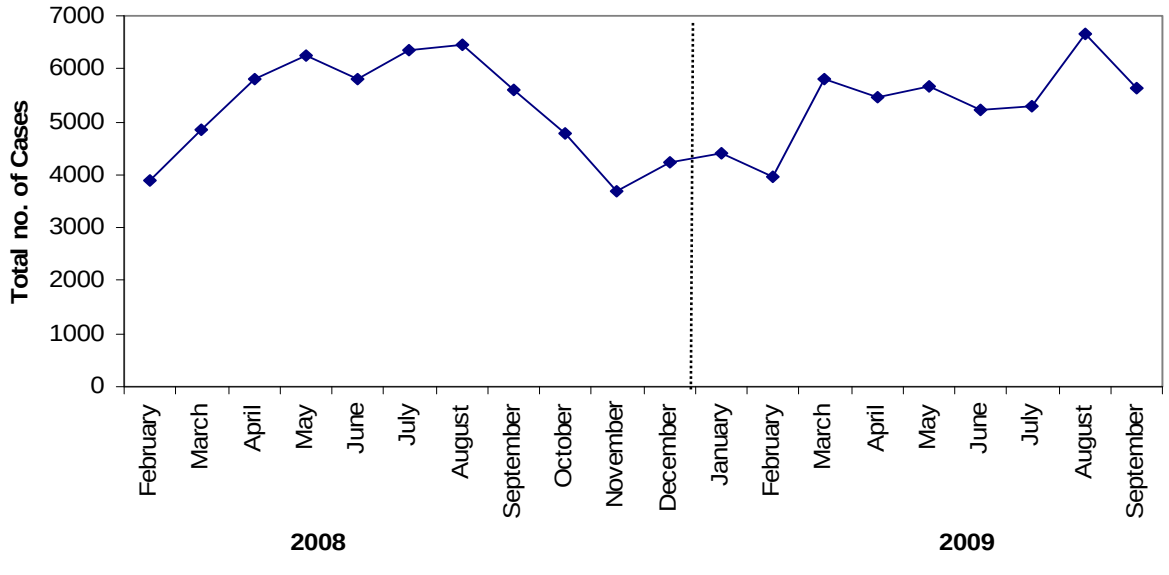


Figure 6: Other Musculo-skeletal disorders, January 2008-September 2009, Bhutan

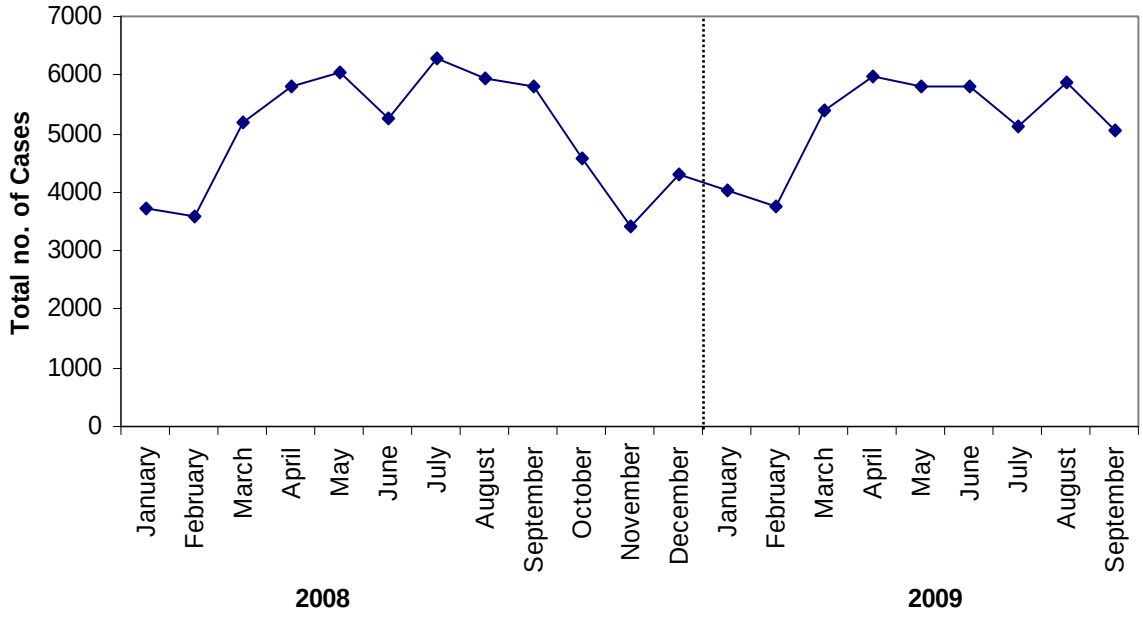


Figure 7: Other Disorders of Skin & Subcutaneous-tissues, January 2008-September 2009, Bhutan

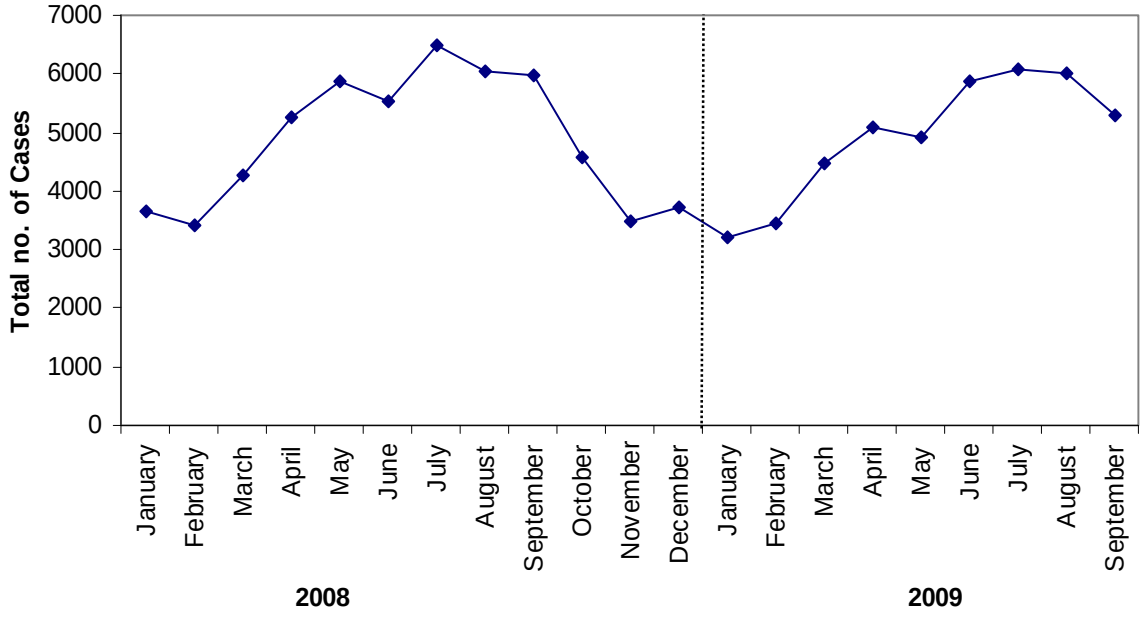


Figure 8: Other Diseases of the Digestive System, January 2008-September 2009, Bhutan

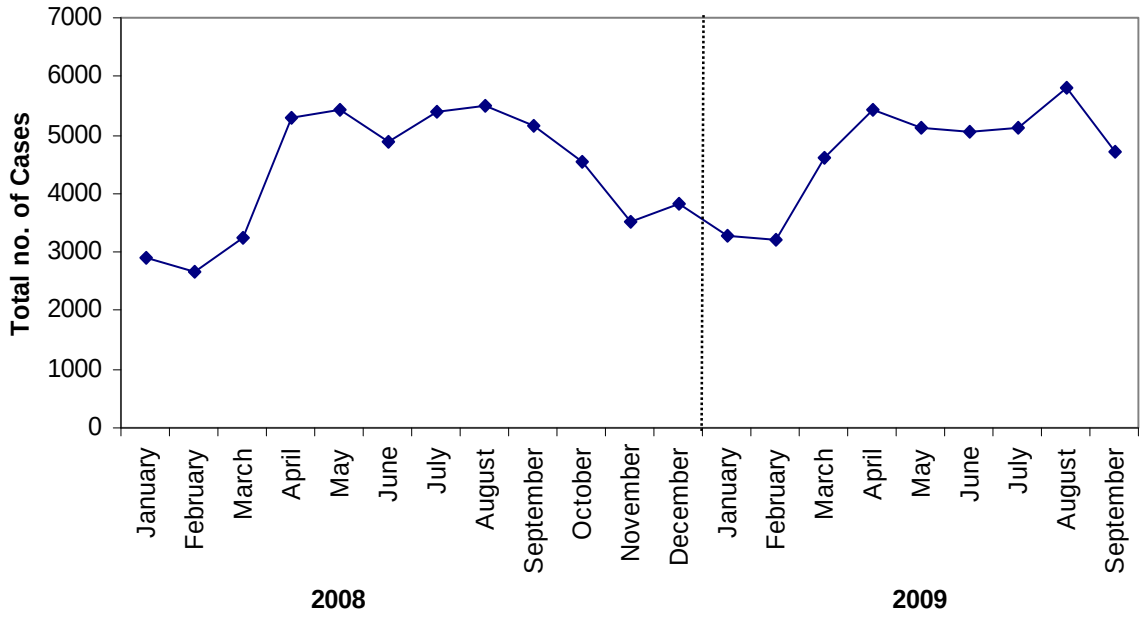


Figure 9: Other Respiratory & Nose Diseases, January 2008-September 2009, Bhutan

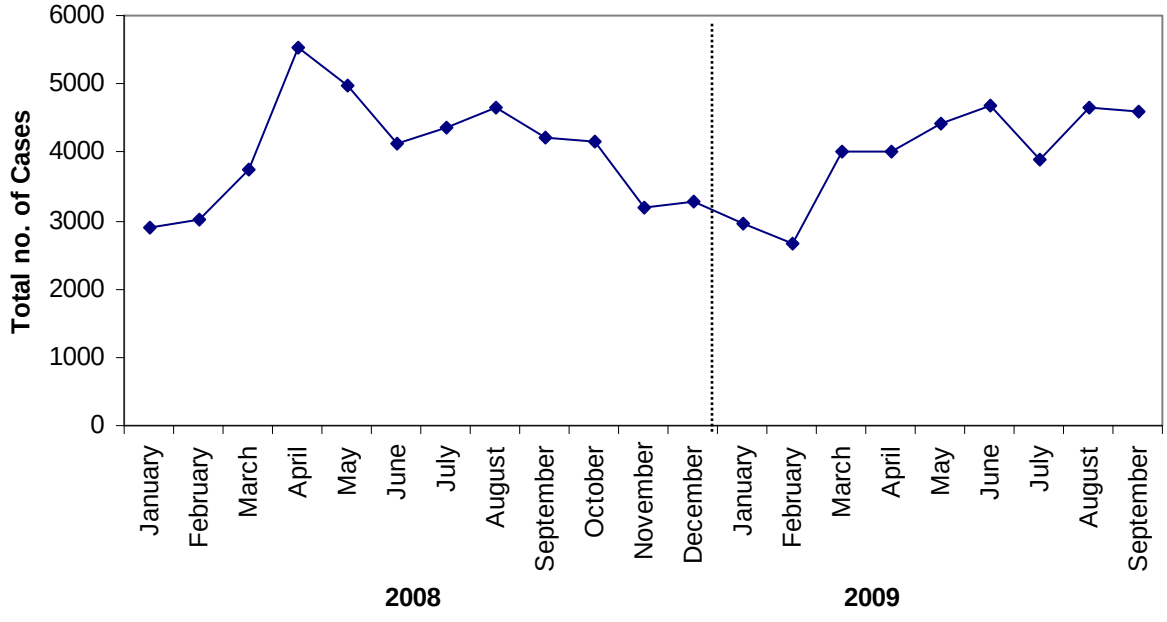
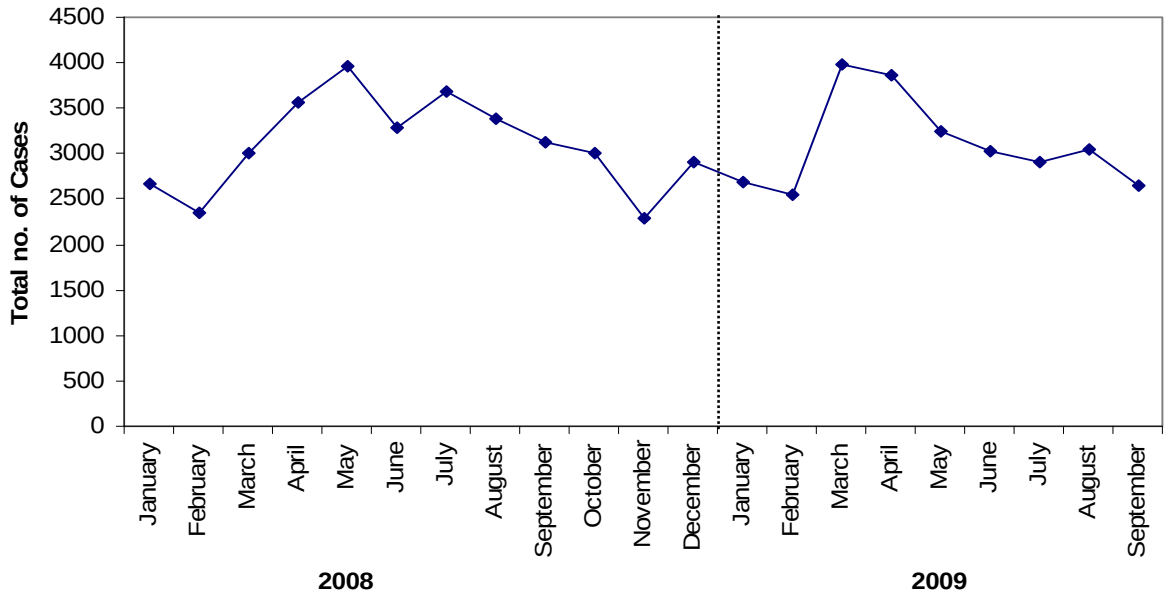


Figure 10: Conjuntivitis, January 2008-September 2009, Bhutan

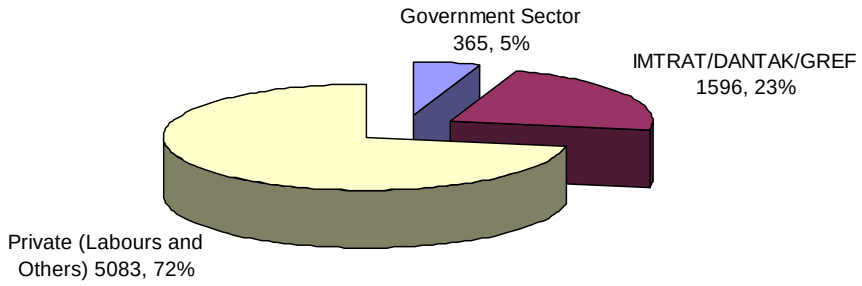


**under program request for any other diseases reported to HMIS, it can be analyzed by HREU.*

III. Health Services availed by Non-Bhutanese

Of the 7,044 Non-Bhutanese who availed health services in the quarter, 365 are working in the government organization, 1,596 are DANTAK/IMTRAT/GREF employees and 5,083 are working in the private sector.

Figure 11: Health Services availed by Non-Bhutanese, July-September 2009, Bhutan



Note: The figure does not include Non-Bhutanese who would have availed services from BHU.

IV. TB Report

Table I: TB Treatment outcome, January 2007-December 2008, Bhutan

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

Table II: TB Lab indicator smear positive and Case finding indicators, Jan 2008-September 2009, Bhutan

Indicators	New P Positive	Relapse	Failure	Default
Cure rate	86.74	87.5	50	-
Completed rate	1.204	0	0	-
Success rate	87.95	87.5	50	-
Mortality D/A	3.614	0	25	-
Failure rate	3.614	12.5	25	-
Default rate	0	0	0	-

Figure 12: Smear-Conversion from positive to negative, Jan 2008-June 2009, Bhutan

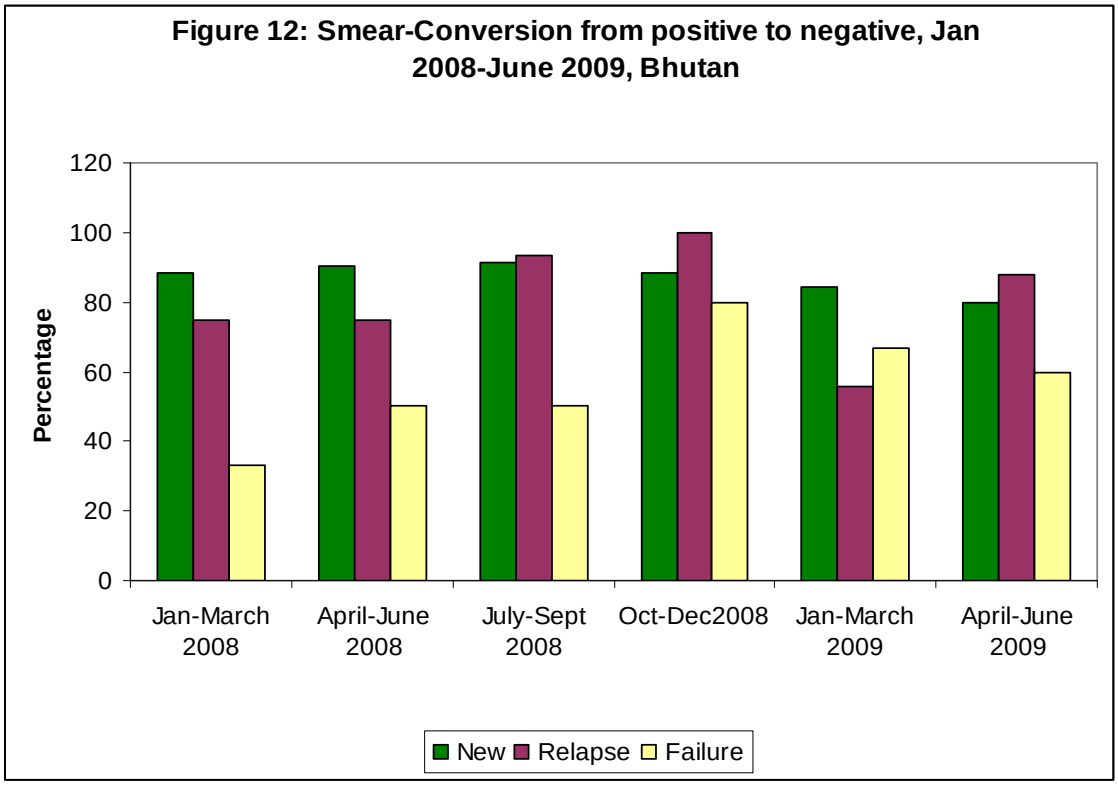
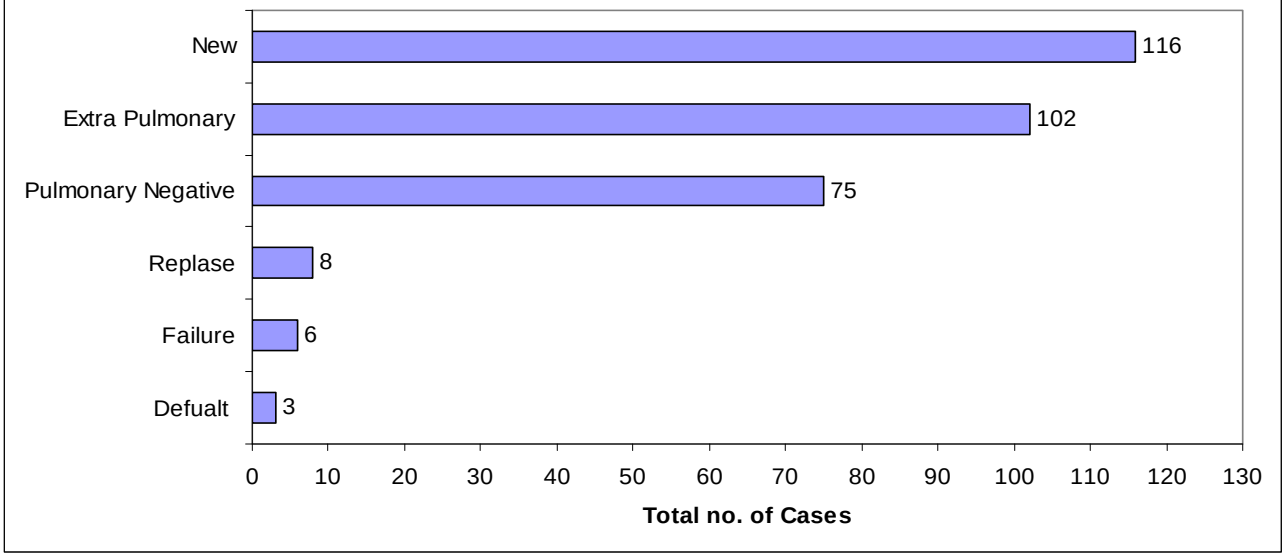
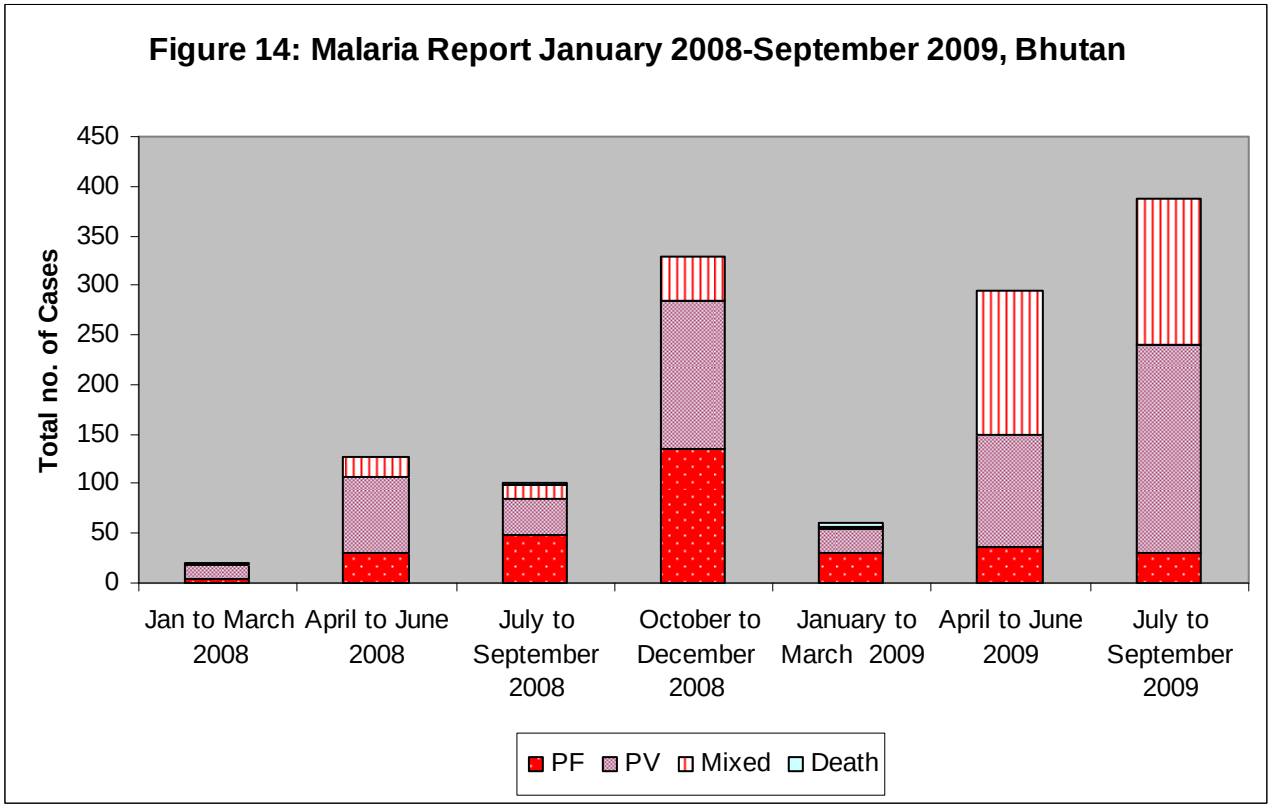


Figure 13: Quarterly Progress Report of TB, July 2009-September 2009, Bhutan



V. Malaria Report

Figure 14: Malaria Report January 2008-September 2009, Bhutan



VI: Hospital Admission and Laboratory Services

Table III: Average patient days in different hospitals of Bhutan, July-September 2009

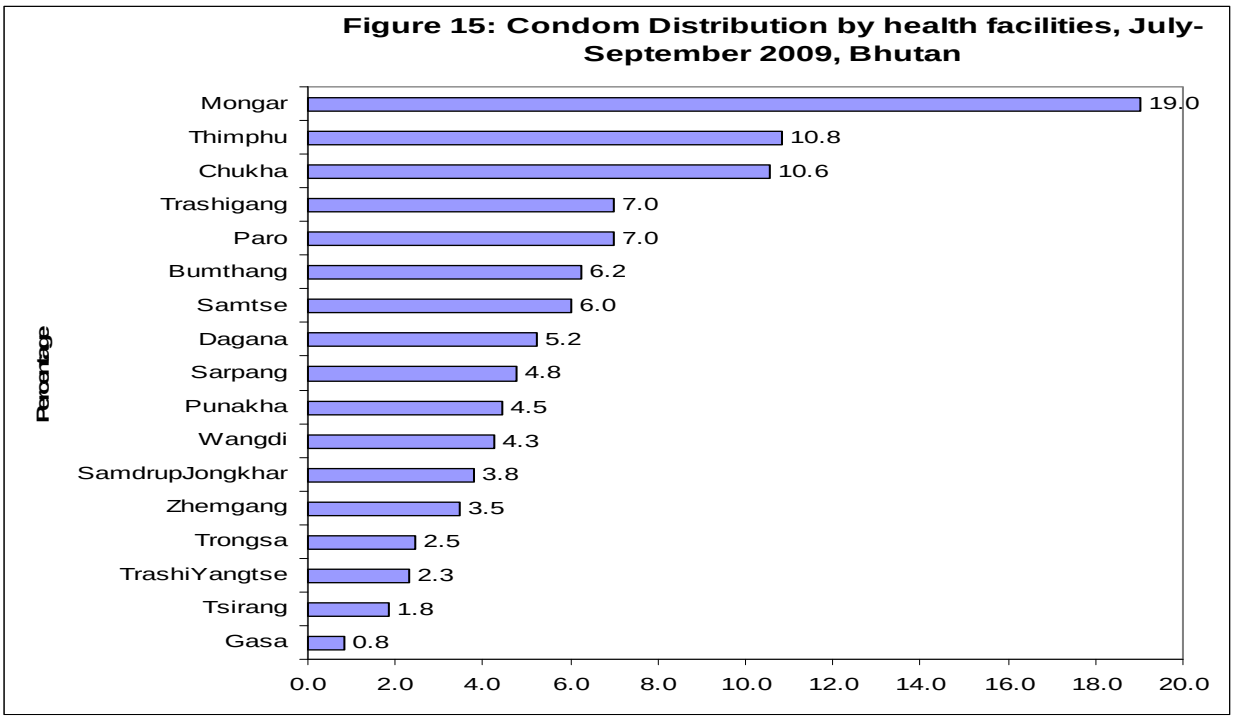
Facility Name	Total Admission	Patient Days	Average Length of Stay
BUMTHANG HOSPITAL	198	756	4
GEDU HOSPITAL	397	1449	4
PHUNTSHOLING HOSPITAL	969	*	3*
TSIMALAKHA HOSPITAL	86	246	3
MONGAR HOSPITAL	877	6248	7
PARO HOSPITAL	974	2500	3
PUNAKHA HOSPITAL	524	2402	5
DEOTHANG HOSPITAL	302	2197	7
SAMDRUB JONGKHAR HOSPITAL	235	1244	5
GOMTU HOSPITAL	109	414	4
SAMTSE HOSPITAL	434	2798	6
SIBSOO HOSPITAL	280	855	3
GAYLEGPHUG HOSPITAL	931	4008	4
SARPANG HOSPITAL	271	644	2
GIDAKOM HOSPITAL	129	5003	39
LUNGTENPHU RBA HOSPITAL	232	737	3
RISERBOO HOSPITAL	248	1221	5
TRASHIGANG HOSPITAL	637	2745	4
YANGTSE HOSPITAL	246	1294	5
TRONGSA HOSPITAL	121	326	3
DAMPHU HOSPITAL	283	852	3
WANGDI RBA HOSPITAL	73	272	4
YEBILAPTSA HOSPITAL	298	1653	6

* Not available- Average Patient days calculated by the Hospital

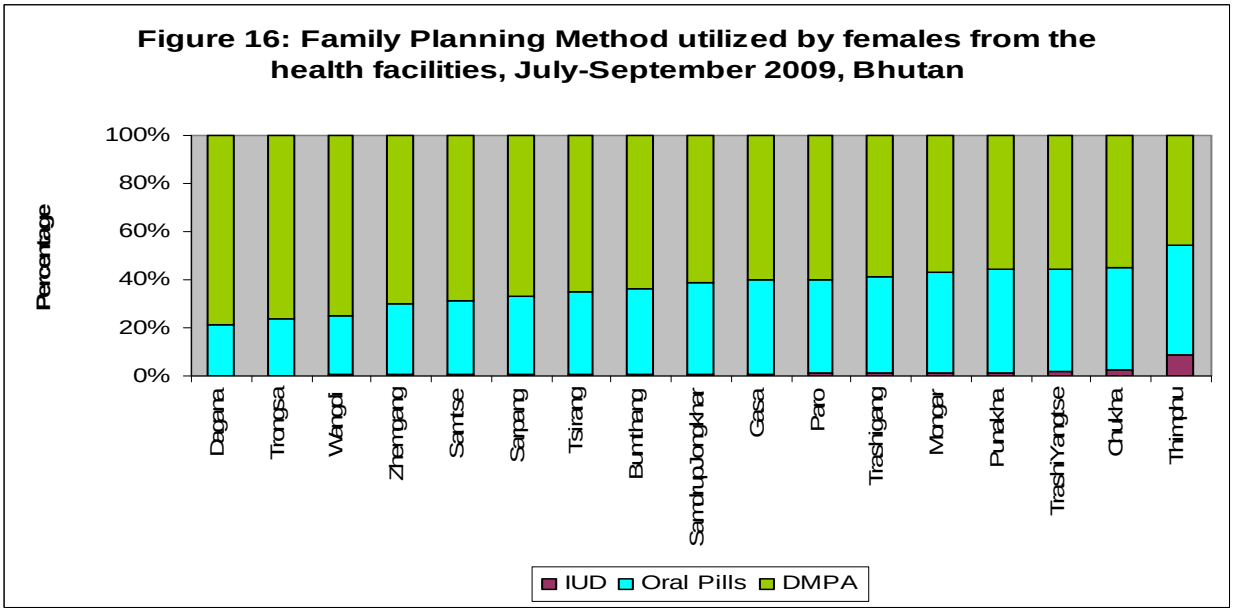
Table IV: Laboratory Services Provision by District (July - September 2009)

Sl. no	*District*	*Haemoglobin levels*	*Blood grouping*	*Malaria slides*	*TB Sputum*	*Urine*	*Stool*	*HIV*	*Total*
1	Bumthang	529	286	37	38	716	9	154	198
2	Chukha	7142	1156	4369	291	4153	134	535	1641
3	Dagana	808	208	999	15	1174	21	154	24
4	Gasa	57	18	0	2	37	0	8	0
5	Mongar	2647	787	150	329	2096	144	547	901
6	Paro	761	442	104	165	1740	21	231	974
7	Punakha	1103	462	108	70	1235	36	304	524
8	SamdrupJongkhar	1105	669	1817	279	1777	25	125	652
9	Samtse	2553	978	3501	242	2133	49	351	823
10	Sarpang	3173	893	6794	221	3741	134	406	1202
11	Thimphu	14075	7590	2002	551	17555	1003	2168	2391
12	Trashigang	1580	1048	112	105	2387	56	283	990
13	TrashiYangtse	462	191	34	26	542	8	61	246
14	Trongsa	331	224	23	12	264	20	104	121
15	Tsirang	731	235	685	23	376	17	263	283
16	Wangdi	1387	409	167	36	936	48	130	368
17	Zhemgang	841	201	787	24	1071	51	66	424
Total		**39285**	**15797**	**21689**	**2429**	**41933**	**1776**	**5890**	**11762**

VII. Family Planning

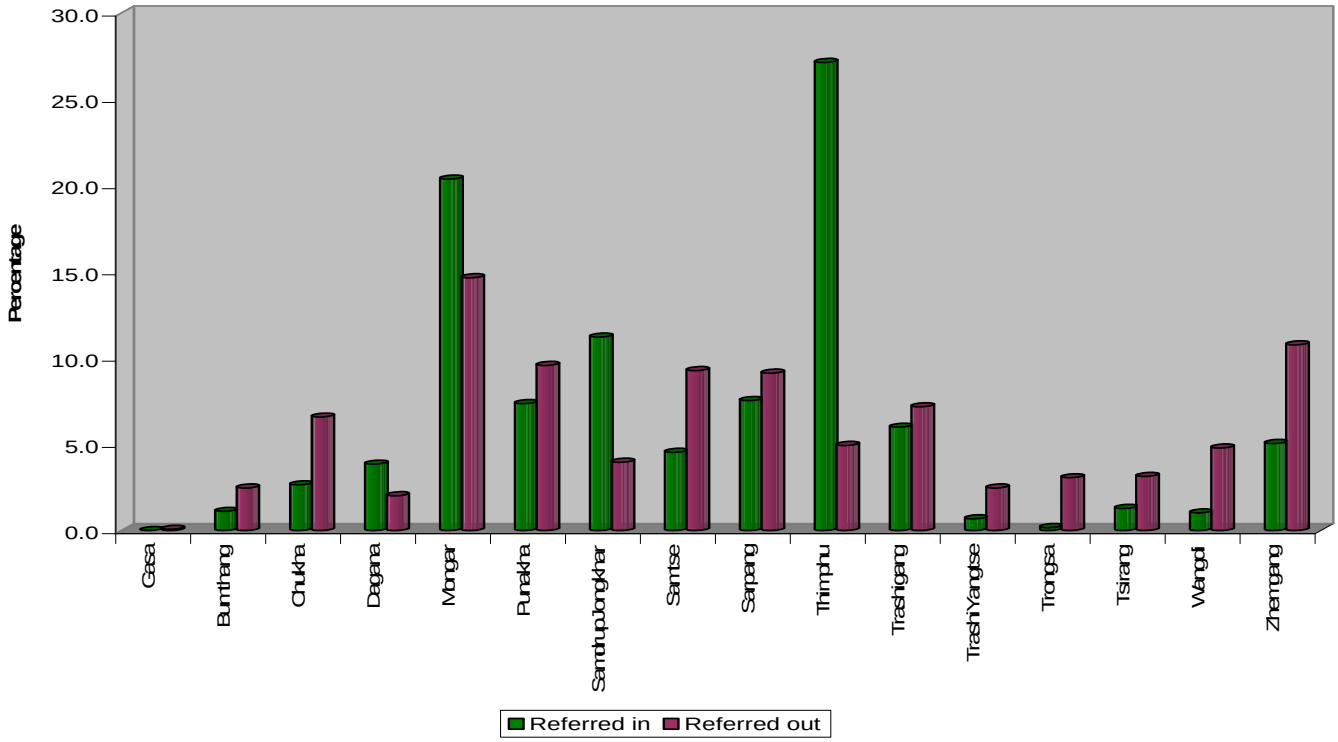


Third quarter (July-September) of 2009 indicates that out of reported 313269 condoms distributed, 19% were distributed by Mongar hospital followed by Thimphu Hospital 10.8% and Chukha hospital 10.6%.



Most of the women population in each Dzongkhag prefers to use DMPA and Oral Pills over IUD. Please note that Dzongkhags can't be compared to each other due to difference in number of women population over different Dzongkhags. However we can conclude that Women prefer DMPA over Oral pills and IUD.

Figure 18: Reported Referrals of Health facilities, July-Septermber 2009



From 1168 cases referred-in at different health facilities, maximum was referred- in at Thimphu health facilities, whereas Gasa has no referral-in cases. Next highest referred-in cases were at Mongar health facilities. Out of 1336 cases referred-out from different health facilities; highest was Mongar health facilities followed by Zhemgang health facilities.

VIII. Ante-natal check up report

Table V: Sum of ANC visits made by the pregnant women, July-September 2009, Bhutan

Sl. No	District Name	1st Visit	2nd Visit	3rd Visit	More visit
1	Bumthang	72	67	73	126
2	Chukha	354	392	373	743
3	Dagana	106	89	76	87
4	Gasa	15	13	8	15
5	Mongar	44	211	216	297
6	Paro	167	175	169	308
7	Punakha	156	130	128	243
8	SamdrupJongkhar	170	192	163	228
9	Samtse	277	304	266	464
10	Sarpang	181	196	173	300
11	Thimphu	505	493	525	973
12	Trashigang	261	218	174	247
13	TrashiYangtse	101	91	67	141
14	Trongsa	67	69	60	57
15	Tsirang	78	69	68	57
16	Wangdi	167	155	122	106
17	Zhemgang	96	95	78	87

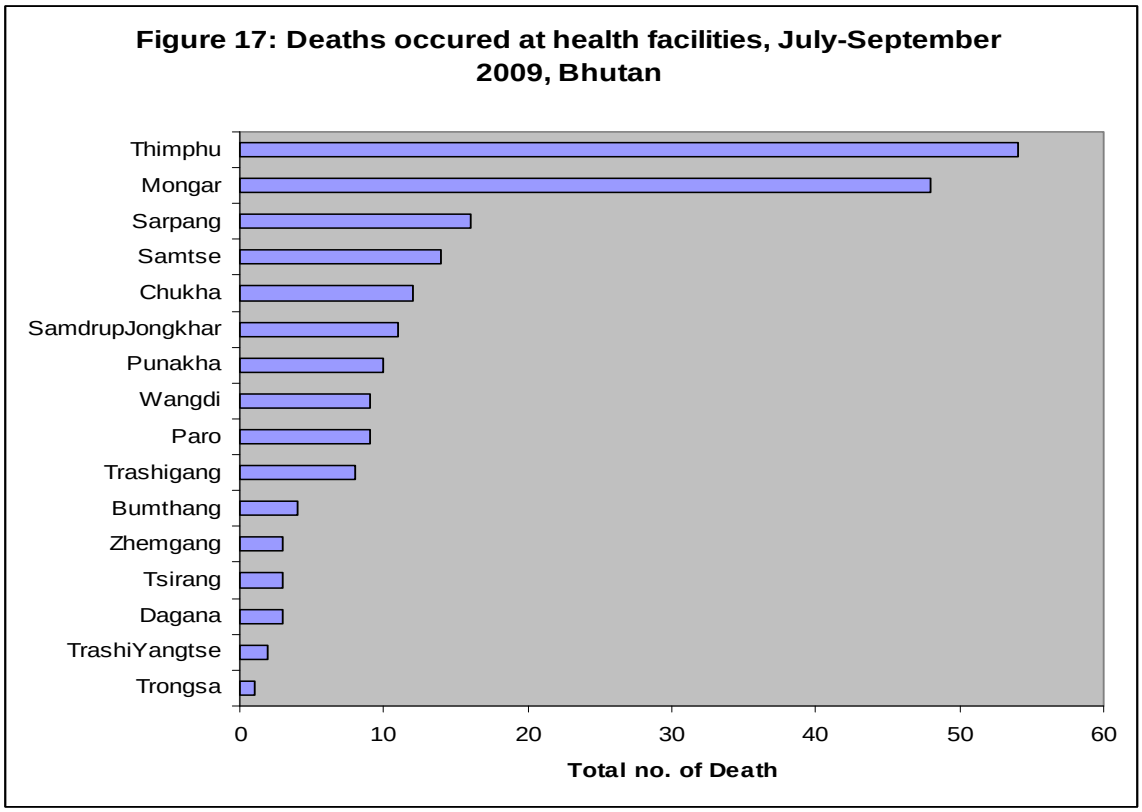
IX. Deliveries

Table VI: Trained delivery & BCG, OPV0 vaccinated (July - September 2009)

Sl. no	Dzongkhag	Trained delivery &BCG,OPV0 vaccinated		
		Attended delivery	BCG	OPV-0
1	Bumthang	32	60	45
2	Chukha	287	353	299
3	Dagana	27	73	62
4	Gasa	4	11	1
5	Mongar	203	268	250
6	Paro	125	181	171
7	Punakha	89	90	89
8	SamdrupJongkhar	102	171	168
9	Samtse	118	236	242
10	Sarpang	148	170	160
11	Thimphu	304	523	616
12	Trashigang	112	230	186
13	TrashiYangtse	24	85	92
14	Trongsa	29	49	44
15	Tsirang	64	69	62
16	Wangdi	62	117	95
17	Zhemgang	33	81	56

X. Hospital Mortality

Figure 17: Deaths occured at health facilities, July-September 2009, Bhutan



XI. Dental and diagnosis services (July - September 2009)

Table VII: Dental Services

Sl. no	*District*	*Dental Services*				
		Prophylaxis	*Scaling*	*Fillings*	*Extractions*	*Others*
1	Bumthang	3	0	56	60	88
2	Chukha	31	15	863	1007	1155
3	Dagana	5	2	61	78	130
4	Gasa	0	0	0	0	0
5	Mongar	36	13	361	533	646
6	Paro	20	3	824	546	873
7	Punakha	61	2	185	292	424
8	SamdrupJongkhar	26	5	110	183	140
9	Samtse	19	0	209	359	471
10	Sarpang	16	0	942	486	1674
11	Thimphu	317	87	1681	2334	3168
12	Trashigang	10	12	355	641	641
13	TrashiYangtse	2	0	82	143	137
14	Trongsa	16	3	63	117	138
15	Tsirang	21	0	254	308	387
16	Wangdi	6	2	244	197	94
17	Zhemgang	0	0	0	0	0
Total		**589**	**144**	**6290**	**7284**	**10166**

Table VIII: Diagnosis Services

Sl. no	District	X-Ray			Ultrasound		
		Chest	Extremities	Others	Gyn/Obs	Abdomen	Others
1	Bumthang	114	98	51	53	16	3
2	Chukha	777	416	220	652	473	31
3	Dagana	0	0	0	0	0	5
4	Gasa	0	0	0	0	0	0
5	Mongar	604	293	385	325	12	36
6	Paro	205	194	132	242	114	20
7	Punakha	28	51	4	645	4	61
8	SamdrupJongkhar	157	104	66	85	90	26
9	Samtse	471	238	236	0	0	19
10	Sarpang	417	195	178	246	4	16
11	Thimphu	2291	1638	1300	800	188	317
12	Trashigang	274	79	78	618	10	10
13	TrashiYangtse	90	33	30	0	0	2
14	Trongsa	30	27	18	0	0	16
15	Tsirang	22	32	10	175	14	21
16	Wangdi	130	189	120	0	0	6
17	Zhemgang	101	91	65	0	0	0

>> **contd. from page 1**

resilent primary healh care system, unique leadership, and ccommunity and social mobilization has contributed to effective HIV prevention in Bhutan.

Immediately after the first case of HIV was diagnosed, the Royal Government of Bhutan formed the national AIDS committee comprising of representatives from other sectors under the Director General of the Ministry of Social Service to guide the national response to AIDS pandemic. Anticipating that the global AIDS pandemic was inevitable, the National STD/AIDS Control Program was instituted in 1988 to coordinate public education and HIV screening programmes.

Bhutan's evolution of modern health system is relatively a short history. In 1962, the baseline of health services was small comprising of three doctors, two nurses and twelve compounders, who worked in few dispensaries in the country [3]. By the end of 9th five year plan (2003-2007), outcome of half a century of planned socioeconomic development since the first five year plan (1961-1965) is indeed commendable. Primary health care forms an integral part of the country's comprehensive health system. This is provided through a well-distributed network of 176 Basic Health Units and 29 hospitals, managed by an adequately trained health workforce.

The Basic Health Units are the primary health centers managed by 2-3 health workers. The health teams at these health centers are bridge to community. They provide basic categorical services focusing on maternal and child health, family planning, immunization, sanitation and safe water supply in addition to basic curative services. HIV prevention is integrated within the framework of primary health care as with rest of the public health interventions. The hospital services provide care and treatment, screening through voluntary counseling and testing. HIV messages are imparted at every opportunity of interaction with the health workers. At the antenatal clinics, community visits, and selected events of the community. The health teams at the primary health care facilities therefore play a central role to reach health services and health education including HIV messages to the households and communities surrounding them.

Community oriented health care was initiated through a small scale in Bhutan during the pre-Alma Ata era around the same time when the approach was advancing in parts of South Africa, the Indian State of Kerala and China [4]. There were good prospects for facilitating changes in cultural orientation and beliefs relating to health, which would help in the introduction of preventive measures for health [5]. HIV prevention in Bhutan builds on the doctrines of primary health care of health equity, reducing social disparity and provision of preferential attention to those in more need [5] such as minority sections of society and those most at risk.

Apart from a strong and functioning primary health care system, strong political leadership has been the cornerstone of success for public health interventions in Bhutan. The Royal Decree on HIV prevention of the Fourth King, His Majesty Jigme Singye Wangchuck issued on May 24, 2004 underlines the duties of citizens to participate in HIV prevention and respect the right of HIV infected and affected people. Further, the public health actions for HIV prevention have been accelerated under the patronage of Her Majesty the Queen Ashi Sangay Choden Wangchuck, an acclaimed public health advocate.

The National AIDS Commission was revitalized in February 2004 to advise the government on HIV policies. So far 12 meetings had been conducted from which

conclusive policies such as provision of free ARV drugs, greater involvement of people living with infections and multi-sectoral duties were formulated.

Similarly, leadership and commitment to engage in HIV is growing across the communities and individuals resulting into an effective social mobilization among Bhutanese.

Social Mobilisation and community organization through HIV multi-sectoral task forces

Social and community mobilization are the key components for ensuring self reliance and self financing with health services. This approach uses a greater emphasis on increasing the capacity of people to solve their own problems and promote behavior change [5]. In Bhutan, social mobilization was formally initiated under Her Majesty's patronage. Multi-sectoral task forces (MSTFs) was initiated in 1998 in two demonstration sites: Thimphu, the capital city and Phuntsholing, the commercial hub at the Indo-Bhutan border, the largest cities with less than one hundred thousand people. The aim was to engage partners from both formal and informal sectors at the local level as equal partners of the Health sector. The two demonstration project were a success and provided "renewed strength and clarity within the process of decentralization towards prevention and care for HIV/AIDS" [6]. In 2002, The MSTF approach was expanded in all the 20 districts of the country and forms the key strategy for population based HIV prevention and care.

Each MSTF functions under the chair of the *dzongdag,* the executive head of the district administration. The main role of the MSTF is to coordinate different players at the local level sectors and ensure sectoral participation in prevention and care of HIV/AIDS. The size of the MTSF varies, ranging from 20-100 depending upon the size of the district. Executive board members of the MSTF approve and monitor the sector plans, while the working committees implement the prevention activities. The MSTFs of all twenty districts in Bhutan had been implementing their annual work plan since 2004. The Government of Bhutan has secured financial grants from World Bank and GFATM to fund these work plans.

The MSTF approach has enabled the engagement of the communities at the block (geog) level. Each block is formed by a cluster of community. A *Gup* is the head of the block and is an elected member of the community. Over 50% of the 206 blocks have established MSTFs since 2005 under the chair of the *Gup*. Block development committee reviews the work plan and monitor the implementation in the villages and communities. Examples of activities that are implemented at the block level are: propagation of HIV/AIDS messages during religious and festive events in the communities. Condom distribution is enhanced through outlets of community volunteers and existing net work of village health workers.

Lessons learnt

Public health interventions are effective when adapted to the local culture, and are designed with an understanding of the social forces that shape the health seeking behavior of the community. MSTFs have created a platform not only for community engagement, but also for people living with HIV/AIDS and other vulnerable groups. Four district MSTFs have members represented from people living with HIV/AIDS. Sex workers are also participating as committee members in Phuntsholing. In highlighting

some key changes, 75.4% reported easy access to condoms and 3.2% reported did not know where condoms are available. 73.6% used condoms in the extramarital sex in the last 6 month [8].

The involvement of multi-stakeholders is primarily to ensure individual and collective participation of people, focusing on both their right to achieving the highest standard of health and their responsibility for involvement in planning and implementing activities relating to for their health and social development [8]. The greatest achievement of the MSTFs approach is indeed in empowering the community with right and responsibility for HIV prevention.

In the absence of NGO's, a multi-sectoral task force coordinated within the government system is effective in bringing about providing HIV prevention services. Working with the communities through MSTFs provided opportunity to identify their potentials and values actions could be synergized for the social good. A MSTFs approach will be useful to supplement even in other settings where NGOs are active.

Challenges

While MTSFs have been very successful in raising the social commitment to address HIV/AIDS prevention and care, there is still little spontaneity of action among the communities. This could be due to a lack of full realization, and competence in the community to handle HIV prevention issues. Adequate support should be provided to the communities to help increase ownership.

Success is more readily achieved when people concerned "own" the activity rather than having to follow orders or instructions [10]. Communities must be empowered to take on responsibilities and have the commensurate resources (financial and technical know how) to build the skills and plan their activities. Current mechanism which allow for full optimization of community engagement are still inadequate and in some cases the community may remain a passive recipient of information and services.

Conclusions

HIV prevention must move beyond an ill health and disease model, to incorporate broad based approach to address interlink between poverty, improving the livelihood through the maximum feasible participation of the community.

The members of the MSTFs and the health teams must consider them as partners rather than beneficiaries of the program. The community must also see the health centers as permanent community institutions of their own and not temporary dispensers of the government health programmes [(6,9)]. To this end, the current MSTFs should be further expanded to all the blocks, and build proactive community health associations that are supported with minimal resources to enhance health of and by the community. A key aspect of strengthening community ownership is ensuring the active membership and real participation of people living with HIV and members of groups who are the most vulnerable to HIV infection.

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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.

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