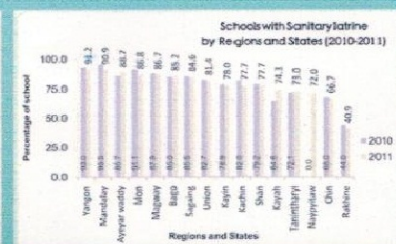
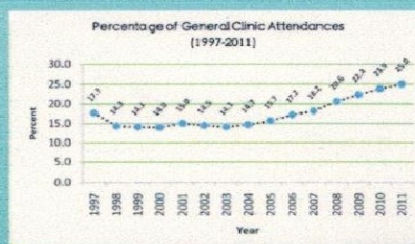
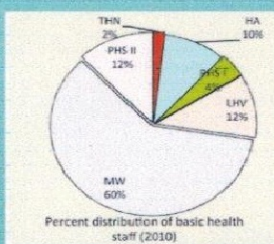
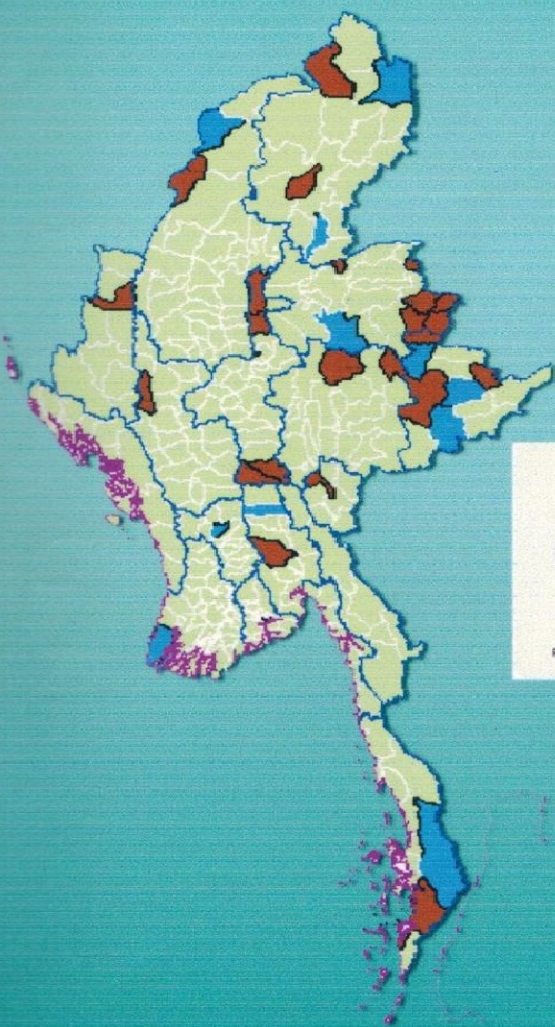




MINISTRY OF HEALTH
THE REPUBLIC OF THE UNION OF MYANMAR

PUBLIC HEALTH STATISTICS

2010-2011



Department of Health Planning in collaboration with Department of Health

May 2013, Nay Pyi Taw, Myanmar

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May 2013

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PREFACE

Information is becoming more important than before and health information is one of the building blocks of health system. Health information can be derived from various sources and it is useful for evidence based decision making in all aspects of health care delivery system.

Health management information system is one of the information sources and routinely collected by all basic health staffs who are working at the grass root level. They record immediately all services given to the community and report to rural health center, to station health unit and again to township health unit. At the township level, township monthly report is compiled and sent to the Department of Health Planning and one copy is also sent to respective region and state. In addition, such basic facts for infrastructure, manpower, community participation etc. are also collected and sent along the data flow. This report is the product of this process undertaken for the whole year.

For ensuring data quality and consistency, data dictionary was distributed to all basic health staff, those responsible for continuing medical education and feedback was given at the end of monthly meeting. Focal and assistant focal person were assigned to monitor as well as to carry out desk and field supervision. Interest and leadership of township medical officer, region and state statisticians and region and state health directors are important in strengthening routine health management information system. The concept, attitudes and practices of basic health staff and supervisors affect on quality of data. Utilization of data in decision making process is also one of the contributing factors to improve data quality.

The main thing necessary to fulfill the completeness of data depend on collaboration and coordination with health volunteers and community. Without their knowledge, understanding and efforts, data will not be completed. Data collection should be done from private health sector in order to achieve data quality in terms of completeness.

Department of Health Planning is working together with Department of Health to make right decision and right management in health care delivery system. Although this 2010-2011 was published at the end of 2012, the data collected are shared to all project managers quarterly for necessary use. All of us are trying together to get real situation of health status, performance of health staff and achievement of results.

I would like to acknowledge everyone who is participating in the whole process of data collection for this publication. I hope this publication would be useful for policy makers, decision makers, planners and all other users. This report can contribute to enhancing the health status of the community. We appreciate and welcome any comments and suggestions to improve this publication in future.

Htay win
Acting Director General
Department of Health Planning

SUMMARY

This report is to share the information on routine health services provided by basic health staff in nationwide during year 2010 and year 2011. The basic health staff delivered various kinds of services; those services are recorded, reported and transformed as national services indicators. This summary covered mainly the year 2011. The reporting status for the whole country wide was 97%.

One of the services provided by BHS is to look after the patients at the rural health centers and sub-RHCs as well as during the fields, the indicators for this service indicate the extent of utilization of health centers and reliance on BHS by community. During one year, one out of four household members suffered any type of illness and went to BHS at the community, and 25% target was achieved. One patient was expected to go to health care provider at least 2 visits for one episode of illness. The percentage of general clinic attendances ranged from 16.6(Nay Pyi Taw) to 37.6(Mon State). Average visit was 1.6 times. The BHS is focal point for supporting the health needs of the community. The capacities of the BHS were strengthened by supporting of adequate logistics and equipments.

The main duties and responsibilities of midwives are maternal and child health care. They had to provide antenatal care services, delivery services and postnatal care services as well as decision making of early referral. Antenatal care coverage and proportion of births attended by skilled health personnel, two of the MDG indicators were now 74% and 67.1% respectively at national level. The lowest value of the first indicator was seen in Sagaing(62.9%) and maximum value was (83.5%) in Kayah. The range; Rakhine(54.9%) to Kayah(80%) was observed for the second indicator (SBA%). Average antenatal visit was 3.5 times and postnatal visit was 6.7 times per women. Tetanus toxoid immunization was given 2 times during antenatal period; (83.4%) achieved in 2011; it was ranged from 46.8%(Chin) to 91.5%(Mon). The quality of maternal health care services was enhanced by adequate supply of Hb colour scale for screening anaemia in pregnancy, weighing machine, midwifery kit and other essential equipment for each and every midwives. Birth spacing is needed to prevent unwanted pregnancy and closed birth intervals of mothers. Over three percent(3.8%) of pregnant mother from Kayah state reported as having closed birth interval followed by Chin state(3%). Abortion rate was 5.3% in Kayin state followed by 5.1% in Tanintharyi.

Regarding nutrition promotion, immunization and child health care; growth monitoring in nutrition surveillance area was 92.9% for under one and 88.2% for

under three years of age. DPT3 coverage was lowest in Chin(58.4%) and highest in Mon(90.9%). Proportion of under one children immunized against Measles, also an MDG indicators, was 84.9% nationally. The range(51.8 to 94.2%) was seen in Table(8). Fever, diarrhoea and cough are common presenting symptom of childhood illnesses. ORT was vital in diarrhoea case. ORT was given to (99.6%) of diarrhoea cases in Chin state and even lowest(88.4%) seen in Kayah State. Four percents of pneumonia cases were in severe stage. Raising awareness of caretakers on danger sign of children was important to seek health care immediately.

School health service is one of the activities provided by BHS. Schools were examined for sanitation facilities and water source. (94.1%) of school were examined and (81.4%) of school had both standard ratio of sanitary latrines and water source. Percentage of school with sanitary latrines ranged from 40.9%(Rakhine state) to 91.2%(Yangon Region). Schools with water source was the same pattern as sanitary latrines; lowest in Rakhine state. Nutrition promotion is important for primary school children. More than half (55.3%) of schools showed nutrition promotion activities.

Surveillance of communicable disease in the jurisdiction and case detection of chronic communicable disease was also done by BHS together with public health supervisor(II). Diseases under national surveillance include (17) diseases. Morbidity and mortality of diseases per 100,000 population were shown in Table(7). About 668.4 cases were reported as diarrhoea per 100, 000 population. For under five children, about 5788 cases were ARI per 100,000 under five population. Regarding snake bite(poisonous), Ayeyarwady(195 deaths), Bago(110 deaths), Magway(92 deaths) and Sagaing(90 deaths) were reported to have large number of snake bite death in year 2011. Anthrax(12 cases) and Leptospirosis(32 cases), Dog bite(20007 cases) were also reported.

Regarding Tuberculosis, under five years contribute 10% of TB cases and 2% of TB deaths, (15-44) years age group involved 36% of cases and 40% of deaths. Male were more common than female in all types of tuberculosis cases and death: sputum positive, negative and extrapulmonary. The highest gender difference (42.6%) was seen in deaths of sputum positive category, the lowest gender difference (11%) in the cases of extra-pulmonary category.

New case detection rate of leprosy per 100,000 population was 9.3(Bago region) followed by 9(Nay Pyi Taw), 7.4(Sagaing) and 6.4(Magway).

Pregnant mothers undergo syphilis testing during antenatal care period, among them; the primigravida with syphilis testing was recorded and reported. Mothers from Yangon region was more accessible to laboratory test and reported 23.3% of registered AN, Kachin reported 12.8% and then Shan(11.3%).

Primary eye care services are given at community level by BHS; and early referral was done for prevention of blindness. Mandalay reported 4.8% of all patients were eye patients and Kayah had only 0.1%. Ophthalmia neonatorum was reported in 57 newborns and the number was highest in Sagaing and Mandalay.

Non communicable disease was rising now, hypertension was major cause. Blood pressure checking was common practice during patient visiting the clinic, the hypertension detected in clinic per 1000 population above 15 years of age was (3.9); Shan detected 5.5 per 1000 population followed by Kachin, Kayin and Mon(5.0) and Tanintharyi(4.9).

Accident and injury becomes major problems; the good attitude and practice of each and every person is also important to reduce the occurrence of accidents and injuries. About seventy thousand cases and two thousand deaths due to RTA were reported. Cases and deaths due to accidents and injuries in 2011 were higher than those in 2010.

Another rising problem was mental related disorders; alcoholic dependence case was highest problem among six mental disorders.

Proportion of population access to improved sanitation was 82.3% of population. The health education for practicing the use of sanitary latrines is still needed.

Health education was essential for improvement of health status of nation. BHS mainly educate the community in the area of environmental sanitation, family health, disease control and immunization. HE on immunization was more common than other topics. Each and every person need to gain knowledge and practice towards health.

ABBREVIATIONS

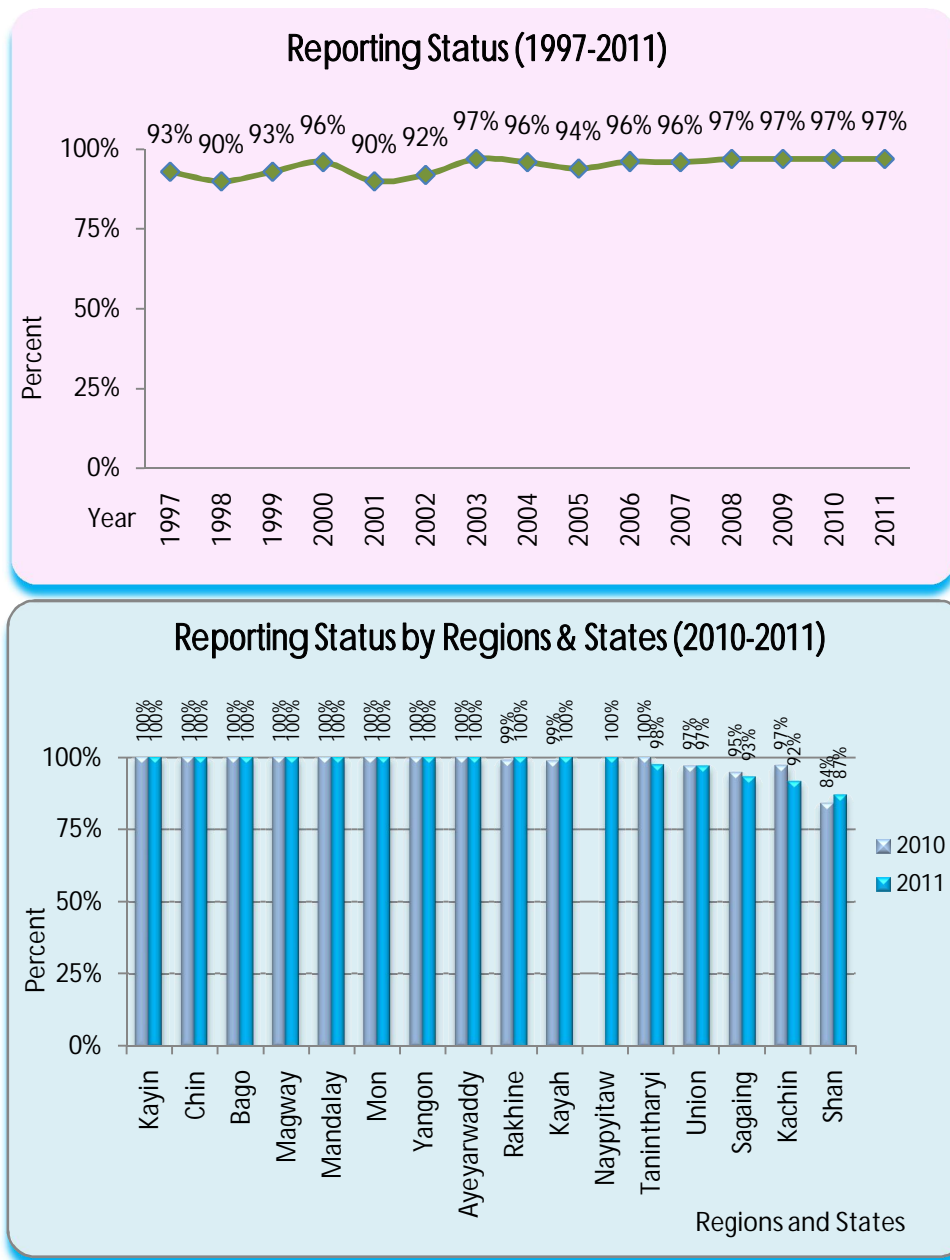
AIDS/STI	-	Acquired Immune Deficiency Syndrome/ Sexually Transmitted Infection
AMW	-	Auxiliary Midwife
AN	-	Antenatal
ARI	-	Acute Respiratory Tract Infection
BCG	-	Bacillus Calmette Guerin
BHS	-	Basic Health Staff
CHW	-	Community Health Worker
DPT	-	Diphtheria, Pertussis, Tetanus
DUNS	-	Diseases Under National Surveillance
EPI	-	Expanded Programme on Immunization
ES	-	Environmental Sanitation
HMIS	-	Health Management Information System
IEC	-	Information, Education and Communication
MCH	-	Maternal and Child Health
MDG	-	Millennium Development Goals
MW	-	Midwife
NHP	-	National Health Plan
OPD	-	Out Patient Department
ORT	-	Oral Rehydration Therapy
PN	-	Postnatal
RHC	-	Rural Health Center
RTA	-	Road Traffic Accident
SHU	-	Station Health Unit
TB	-	Tuberculosis
TT	-	Tetanus Toxoid
TTBA	-	Trained Traditional Birth Attendant
VDRL	-	Venereal Disease Research Laboratory
UHC	-	Urban Health Center

Health Management Information System

Reporting Status and Distribution of Basic Health Staff

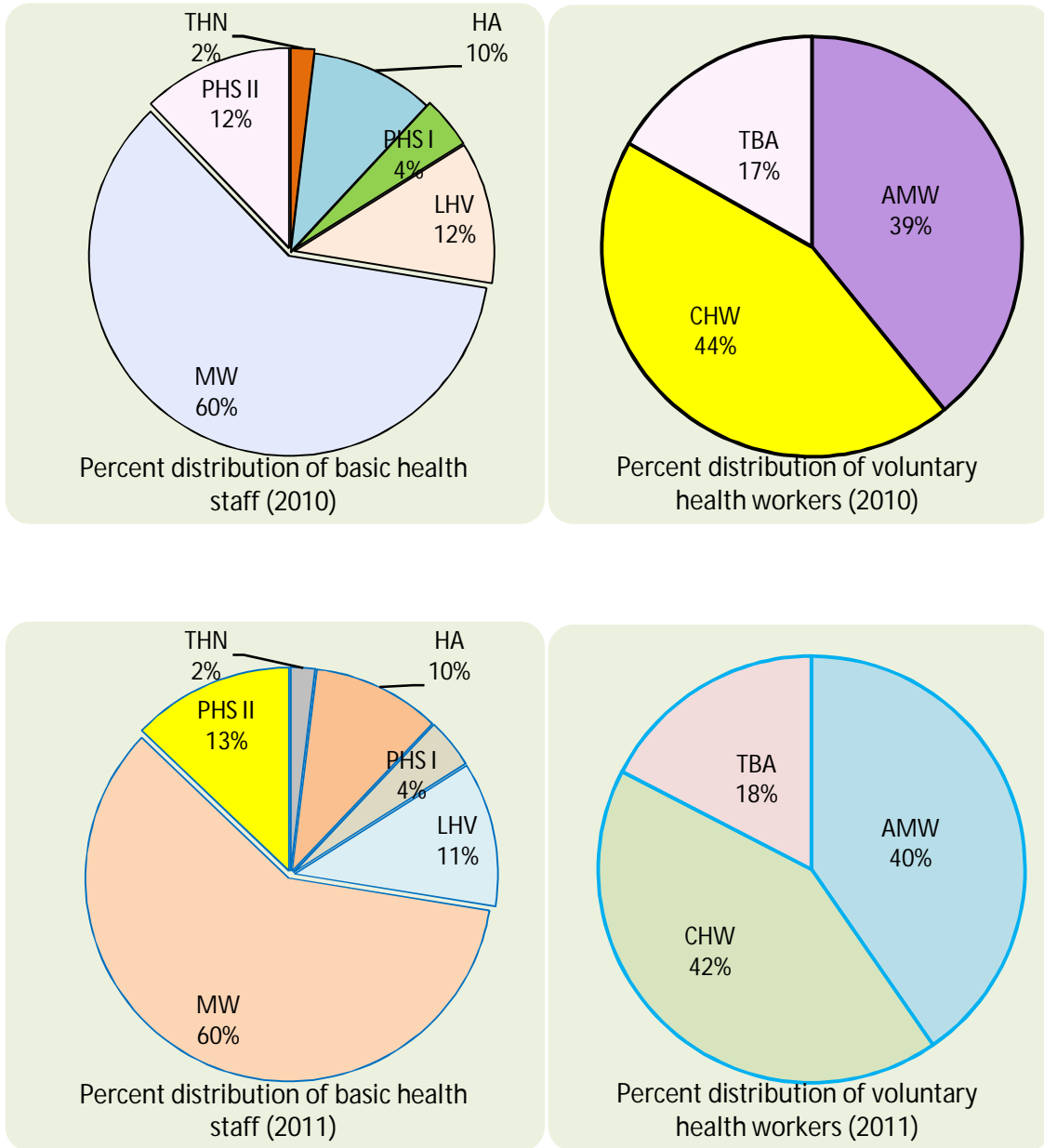
Health Management Information System was established since 1995. The data items related to health care services are collected by monthly report. Data compilation was started from sub-Rural Health Center/secondary health center to MCH/SHU/UHC/ Rural Health Center then to township health department.

Figure (1) Reporting Status



Reporting status (97%) was sustained for 4 consecutive years, 2008 to 2011. Regarding the reporting status of regions and states in 2011, Sagaing region, Kachin and Shan state were below the union level and Shan state has the lowest.

Figure(2) Distribution of basic health staff and voluntary health workers (2010-2011)

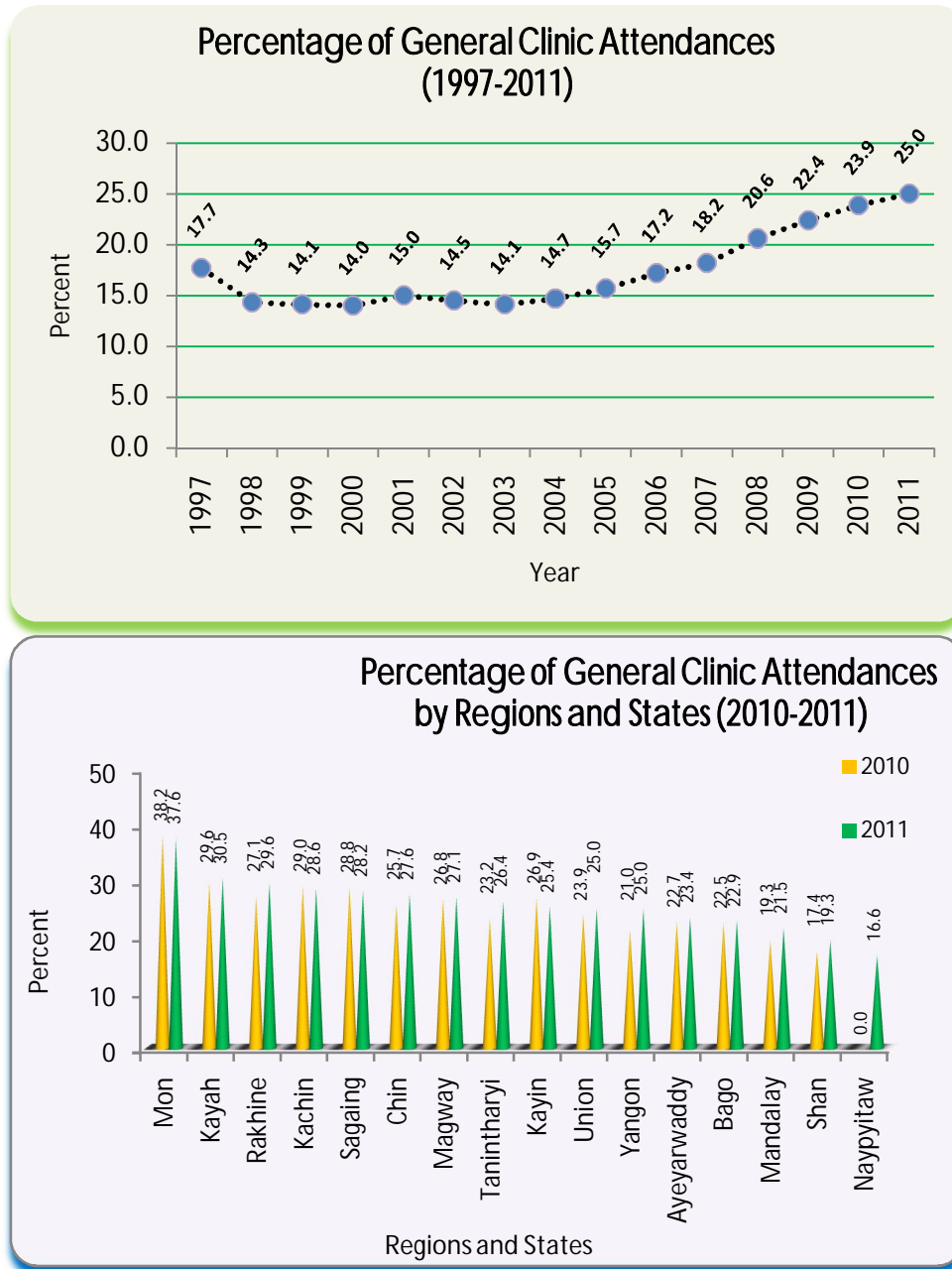


The distribution of health care providers and voluntary health workers in the community is one of the important factors to raise the health status of community. The main health care providers in rural area were midwives (60%). The public health supervisors grade (II) were trained to assist the midwives and the percentage of PHS II increased by 1% more in 2011 than that of 2010. Auxiliary midwives were also trained to aid the midwives in maternal and child health services.

COMMUNITY HEALTH CARE SERVICES

1. Primary medical care and referral of patients

Figure (3) Percentage of General Clinic Attendances



The above figure showed the status of utilization of health centers at the grass root level. Basic health staffs have to open clinic at their respective health centers and taking care of minor ailments and also referring to higher centers if required. Clients with any complaints coming to clinic are registered in clinic register as general clinic attendances. Percentage of general clinic attendances was 25% in 2011.

Figure (4) Average frequency of field visits to village/ ward by Regions and States (2010-2011)

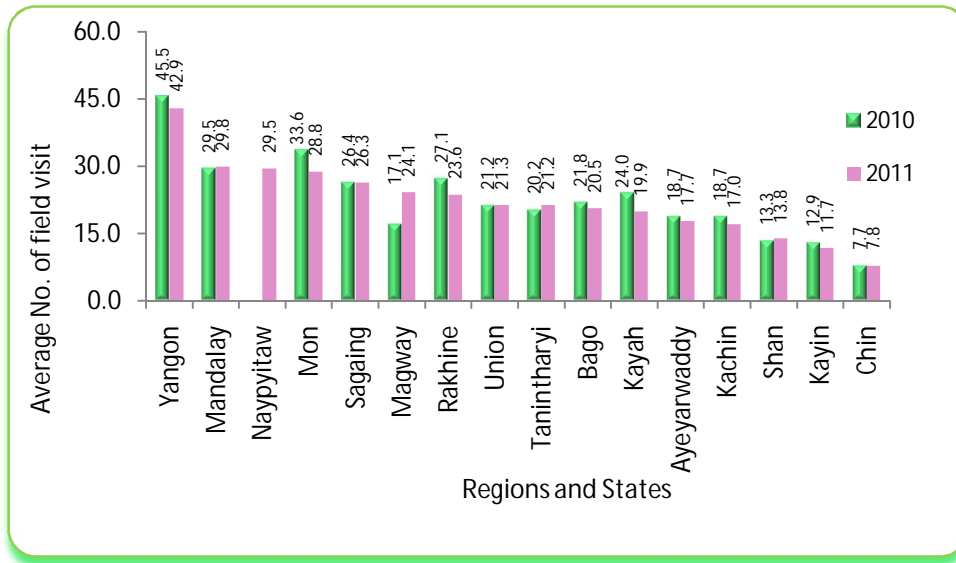
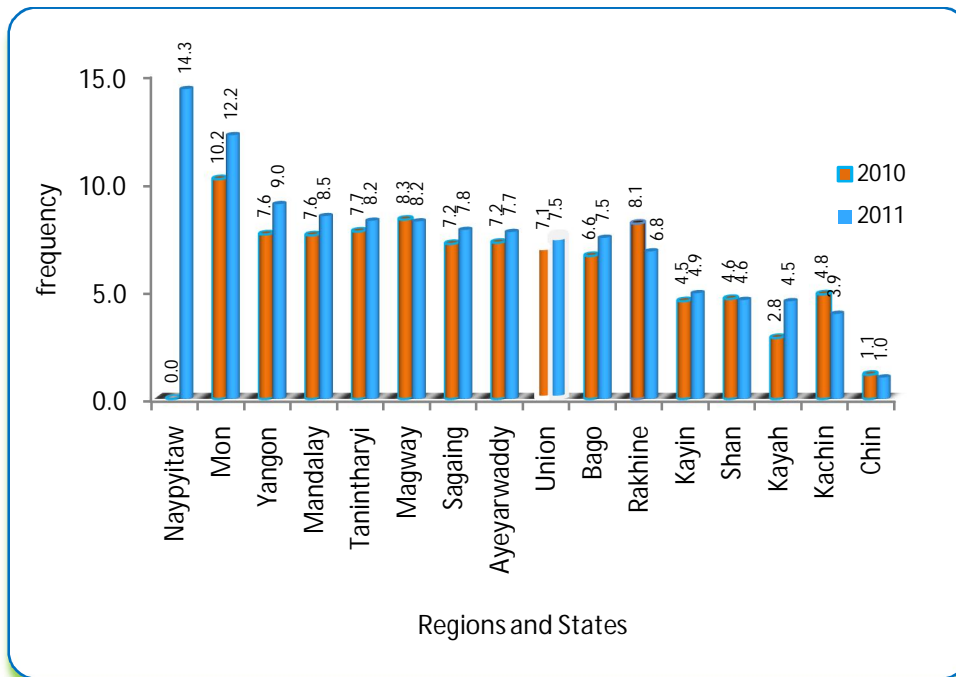


Figure (5) Frequency of joint activities of CHW & BHS by Regions & States (2010-2011)



The above figures described provision of health care services by basic health staff for the community away from the health center. Basic health staffs(BHS) have to visit to the villages and wards under Health Centers. Average frequency of field visits to village/ ward was 21.3 times in 2011; it showed basic health staff visits to one village/ward about 2 times per month; almost the same as last year (Figure-4). The community health workers (CHW) were volunteer health workers; they participated in health activities jointly with BHS for their community. The frequency of joint activities was 7.5 times in 2011 compared with 7.1 in 2010. (Figure 5).

Table (1.a) Indicators for Primary Medical Care and Referral of Patients (2010)

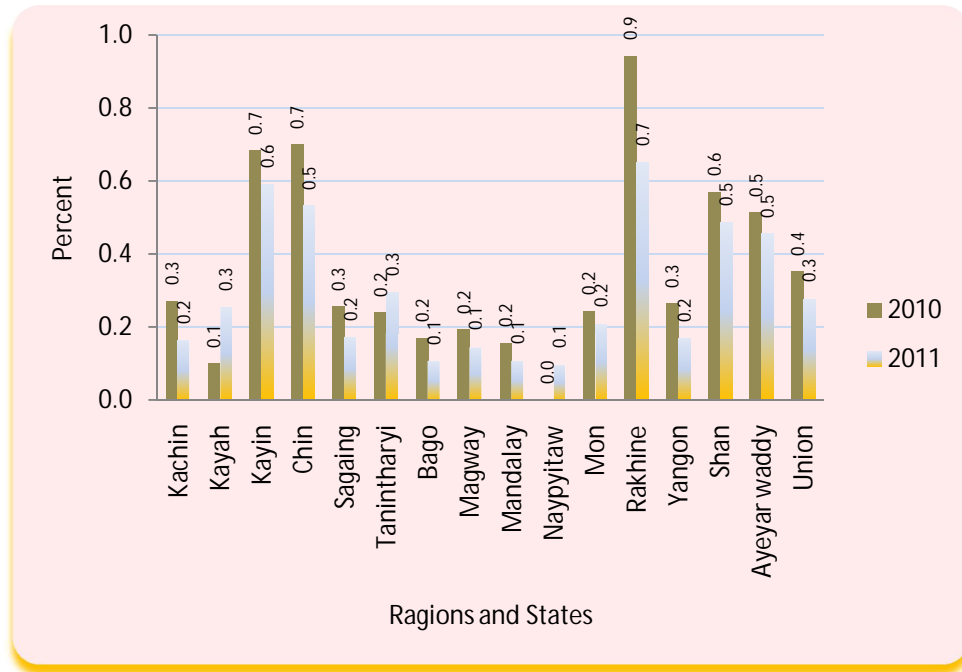
Primary Medical Care & Referral Project (2010)								
Regions and States	Activities of Basic Health Staff					Activities of Community Health Worker		
	% of Pop under jurisdiction of BHS attended general clinics	Average number of attendance by a patient	% of clinic attendances during field visits	No. of field visits to villages/ wards	% of referral out of total attendances	Number of joint activities with BHS	Number of Env: sanitation activities with local people	No. of participation in mass health education activities
Kachin	29.0	1.4	11.2	18.7	0.7	4.8	3.2	3.2
Kayah	29.6	1.4	20.8	24.0	0.5	2.8	2.5	1.7
Kayin	26.9	1.7	11.9	12.9	0.7	4.5	2.9	3.1
Chin	25.7	1.6	11.8	7.7	0.4	1.1	0.9	0.6
Sagaing	28.8	1.6	18.5	26.4	0.7	7.2	4.5	4.6
Tanintharyi	23.2	1.6	13.8	20.2	0.7	7.7	6.0	6.0
Bago	22.5	1.7	17.5	21.8	0.5	6.6	5.0	4.6
Magway	26.8	1.6	21.6	17.1	0.5	8.3	5.3	5.3
Mandalay	19.3	1.6	20.9	29.5	0.6	7.6	5.2	5.4
Mon	38.2	1.7	13.3	33.6	0.7	10.2	8.8	7.4
Rakhine	27.1	1.4	19.8	27.1	0.6	8.1	4.7	4.7
Yangon	21.0	1.9	22.3	45.5	0.5	7.6	6.1	5.5
Shan	17.4	1.6	14.5	13.3	0.7	4.6	2.3	2.7
Ayeyarwaddy	22.7	1.7	18.8	18.7	0.6	7.2	4.7	5.1
Union	23.9	1.6	18.4	21.2	0.6	7.1	4.8	4.8

Table (1.b) Indicators for Primary Medical Care and Referral of Patients (2011)

Primary Medical Care & Referral Project (2011)								
Regions and States	Activities of Basic Health Staff					Activities of Community Health Worker		
	% of Pop under jurisdiction of BHS attended general clinics	Average number of attendance by a patient	% of clinic attendances during field visits	No. of field visits to villages/ wards	% of referral out of total attendances	Number of joint activities with BHS	Number of Env: sanitation activities with local people	No. of participation in mass health education activities
Kachin	28.6	1.5	12.1	17.0	0.8	3.9	2.6	2.7
Kayah	30.5	1.4	20.3	19.9	0.5	4.5	3.0	1.8
Kayin	25.4	1.7	10.6	11.7	0.7	4.9	3.2	3.2
Chin	27.6	1.5	11.1	7.8	0.4	1.0	0.7	0.7
Sagaing	28.2	1.6	17.1	26.3	0.7	7.8	4.6	4.9
Tanintharyi	26.4	1.5	14.3	21.2	0.9	8.2	6.5	6.5
Bago	22.9	1.6	17.0	20.5	0.5	7.5	5.8	5.3
Magway	27.1	1.6	21.0	24.1	0.4	8.2	5.5	5.4
Mandalay	21.5	1.7	21.2	29.8	0.5	8.5	5.8	6.3
Naypyitaw	16.6	1.5	17.7	29.5	0.5	14.3	8.6	9.0
Mon	37.6	1.6	12.0	28.8	0.6	12.2	10.6	8.9
Rakhine	29.6	1.4	19.2	23.6	0.6	6.8	3.4	3.9
Yangon	25.0	1.8	21.9	42.9	0.4	9.0	6.8	6.5
Shan	19.3	1.7	14.0	13.8	0.6	4.6	2.5	2.7
Ayeyarwaddy	23.4	1.6	17.9	17.7	0.6	7.7	4.8	5.2
Union	25.0	1.6	17.8	21.3	0.6	7.5	5.0	5.1

2. Nutrition Promotion Programme

Figure (6) Severe underweight percent of under three children by Regions and States (2010-2011)



Growth monitoring is one of the activities of nutrition promotion programme. Basic Health Staffs have to weigh under three children; monthly for under one children and quarterly for 1-3 years old children under sentinel surveillance area. The children under yellow and red zone were detected and provided nutritional care services. In 2011, only 0.3% of under 3 weighing children were in red zone. All regions/states showed that percent of severe underweight under three children were lesser than previous years except in Kayah state and Tanintharyi region.

Table (2.a) Indicators for Growth Monitoring (2010)

Nutrition Development Services (2010)						
Regions and States	Within nutrition surveillance area					Growth Monitoring coverage in percentage within jurisdiction of midwife
	Under one year old		Under Three years old			
	Weighing coverage in percent	Under weight in percent	Weighing coverage in percent	Mild under weight in percent	Severe underweight in percent	
Kachin	88.3	3.0	84.3	3.0	0.3	31.5
Kayah	88.2	1.4	67.9	2.0	0.1	56.5
Kayin	88.3	4.3	84.2	5.1	0.7	23.6
Chin	77.2	4.9	71.5	4.0	0.7	51.9
Sagaing	97.8	4.7	91.9	6.5	0.3	33.6
Tanintharyi	91.6	2.9	68.4	2.6	0.2	33.0
Bago	96.0	2.6	92.8	2.3	0.2	30.8
Magway	98.5	3.7	96.6	3.7	0.2	39.8
Mandalay	96.5	3.7	94.9	3.3	0.2	22.4
Mon	94.8	2.8	93.7	3.1	0.2	25.1
Rakhine	90.0	4.9	83.1	4.3	0.9	21.3
Yangon	95.3	2.0	88.1	2.3	0.3	16.2
Shan	83.9	5.7	80.5	4.4	0.6	26.4
Ayeyarwaddy	93.8	4.8	93.4	4.2	0.5	25.2
Union	93.5	3.8	88.7	3.8	0.4	26.7

Table (2.b) Indicators for Growth Monitoring (2011)

Nutrition Development Services (2011)						
Regions and States	Within nutrition surveillance area					Growth Monitoring coverage in percentage within jurisdiction of midwife
	Under one year old		Under Three years old			
	Weighing coverage in percent	Under weight in percent	Weighing coverage in percent	Mild under weight in percent	Severe underweight in percent	
Kachin	87.4	2.0	78.7	2.4	0.2	29.9
Kayah	84.4	2.8	59.9	2.9	0.3	66.0
Kayin	88.6	4.2	84.8	4.4	0.6	26.2
Chin	76.6	3.4	76.0	2.7	0.5	33.2
Sagaing	97.7	4.2	92.3	5.9	0.2	37.9
Tanintharyi	87.0	1.9	68.8	2.2	0.3	34.0
Bago	96.4	1.5	93.2	1.5	0.1	37.5
Magway	97.6	2.8	95.3	2.9	0.1	46.8
Mandalay	96.7	2.5	95.3	2.6	0.1	29.0
Naypyitaw	94.9	1.4	90.9	1.0	0.1	19.2
Mon	96.2	2.4	95.3	2.6	0.2	30.5
Rakhine	90.0	4.4	81.3	3.9	0.7	24.4
Yangon	96.7	1.8	91.4	1.9	0.2	21.4
Shan	81.8	3.8	77.6	3.7	0.5	26.2
Ayeyarwaddy	94.6	3.7	92.7	3.6	0.5	29.2
Union	92.9	2.9	88.2	3.1	0.3	30.7

3. Maternal, Newborn and Child Health Care

Figure (7) Antenatal care coverage and Proportion of births attended by skilled health personnel (1996-2011)

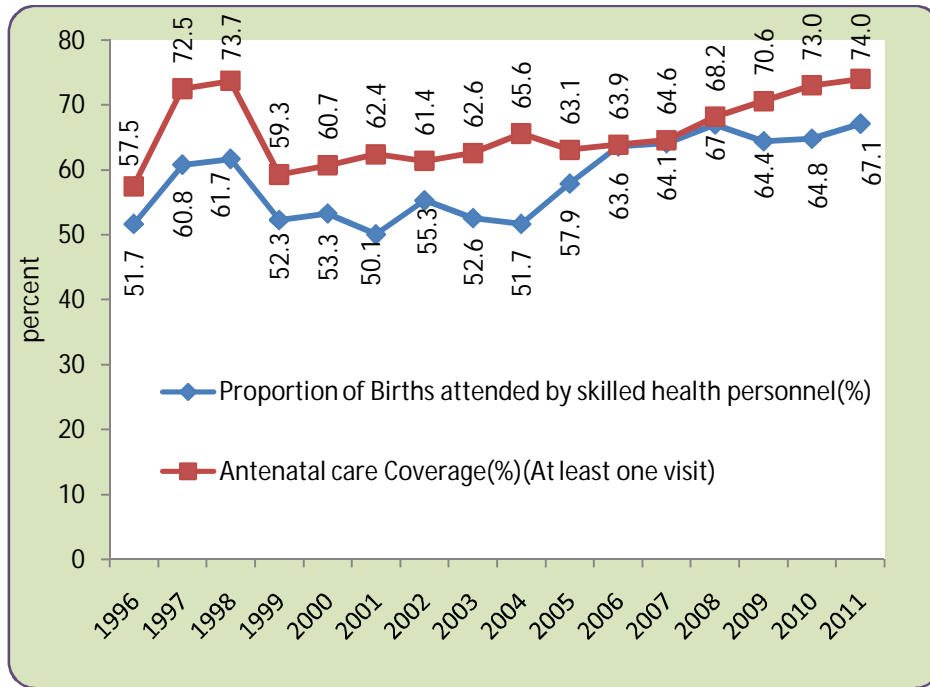
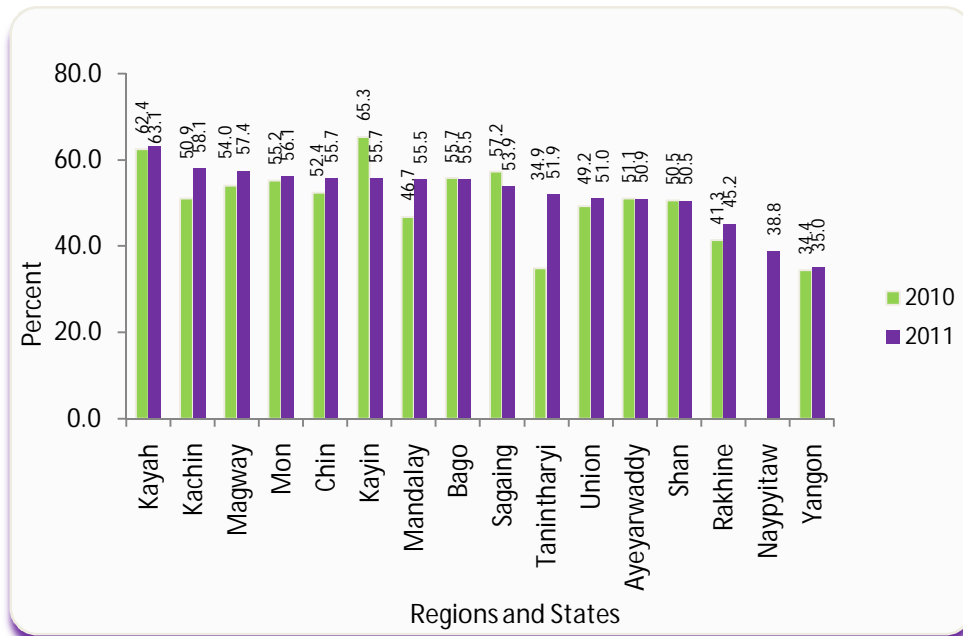


Figure (8) Percentage of deliveries attended by BHS (2010-2011)



Proportion of births attended by skilled health personnel and Antenatal care coverage(%) showed increasing trend towards Millennium Development Goal. Antenatal care coverage was 74% and proportion of births attended by skilled health personnel was 67.1% in 2011(Figure 7). Proportion of births attended by basic health staff was 51% (Figure 8).

Figure (9) Under 5 clinic attendance rate by Regions and States (2010-2011)

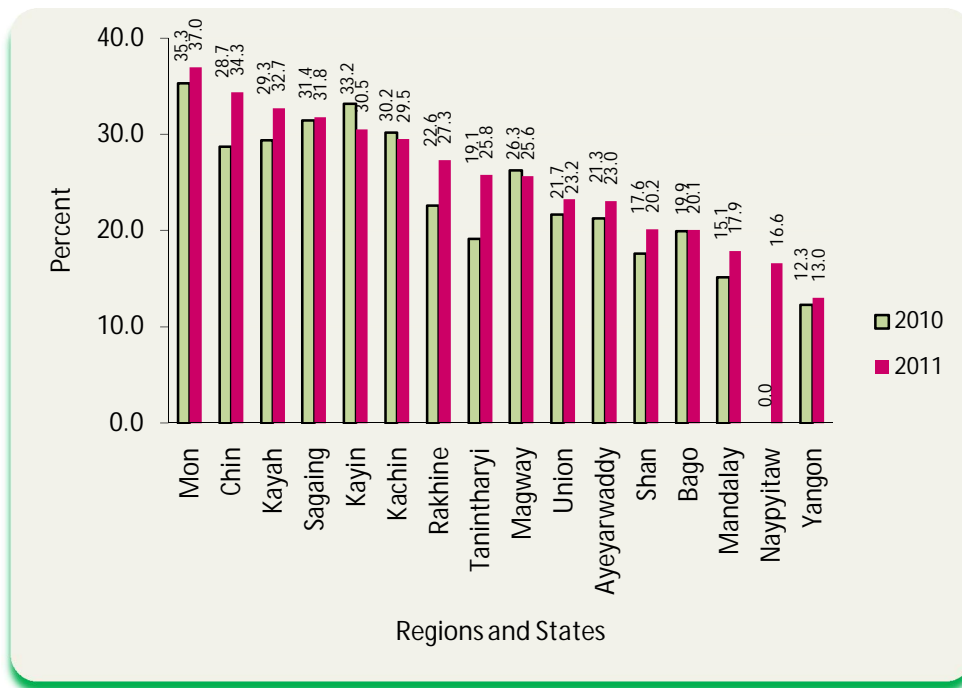
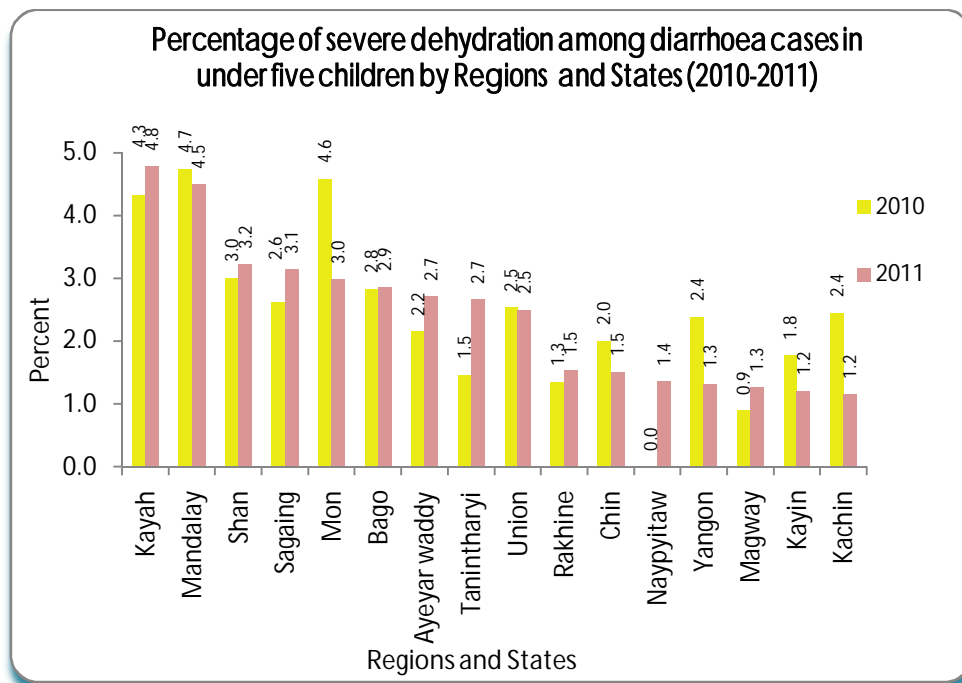


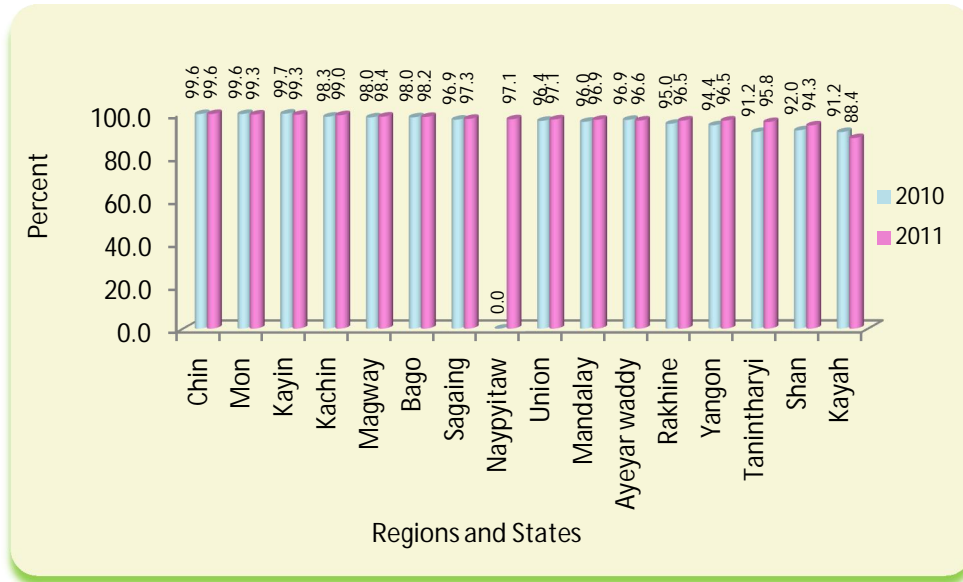
Figure (10) Percentage of severe dehydration among diarrhoea cases in under five children by Regions and States (2010-2011)



BHS had to take care of the under five children in clinic as well as during field visit, 23.2% of under five children were seen by the BHS for their illness in 2011; one out of four children got one episode of illness taking care by BHS within one year(Figure 9). Among under five children with diarrhoea episode, 2.5% of them had sign of severe dehydration at the time of visiting the BHS in 2011 which is nearly the

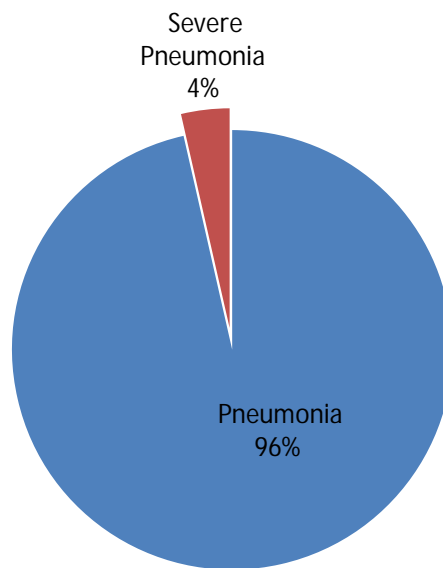
same as 2010 (Figure 10); It is necessary to raise the awareness of community to seek the service of BHS as early as possible.

Figure (11) Percent of utilization of ORT among total diarrhoea cases by Regions and States (2010-2011)



The utilization of Oral Rehydration Therapy(ORT) for diarrhoea case was key matter to prevent severe stage. ORT had been used in 97.1% of all diarrhoea cases in 2011 and Kayah State reported the lowest ORT rate and highest severe dehydration cases.

Figure (12)
Percent of severe pneumonia among ARI(pneumonia) Cases



Among under five children coming with ARI(pneumonia), 4% of them had sign and symptom of severe pneumonia and need referral. The awareness on danger sign for seeking immediate care is essential for child care taker. The community awareness is important for reduction of under five mortality.

Table (3.a) Indicators for Maternal and Child Health Activities by BHS (2010)

Maternal, Newborn and Child Health Care (2010)									
Maternal and Child Health Activities by BHS									
Regions and States	AN Care Coverage (%)	Average frequency of AN care	% of pregnant mothers with closed birth interval	% of deliveries attended by BHS	% of deliveries at RHC delivery room	% of newborn with low birth weight	% of Perinatal mortalities out of total deliveries	Average frequency of PN care	% of Referral among (AN + Delivery + PN) mothers
Kachin	80.2	3.2	2.3	50.9	1.1	1.1	1.3	6.0	7.1
Kayah	82.4	4.3	3.3	62.4	1.2	1.1	1.0	4.6	13.2
Kayin	72.5	3.0	0.9	65.3	7.0	1.4	0.8	4.5	9.6
Chin	58.8	3.7	2.7	52.4	0.3	0.4	0.6	4.1	3.1
Sagaing	69.0	4.0	1.3	57.2	4.9	1.0	1.0	7.3	16.2
Tanintharyi	83.3	3.2	1.1	34.9	3.8	0.9	0.5	6.8	5.3
Bago	72.0	3.4	0.6	55.7	0.8	1.3	1.1	6.0	11.0
Magway	71.1	4.0	0.7	54.0	1.5	1.1	1.0	6.5	10.1
Mandalay	72.8	3.6	0.6	46.7	1.8	0.9	1.0	7.4	9.1
Mon	84.5	3.8	1.0	55.2	5.8	1.9	1.1	8.4	13.3
Rakhine	78.0	2.8	2.0	41.3	0.2	1.1	0.8	4.8	4.5
Yangon	70.9	3.3	0.4	34.4	3.2	1.2	0.6	9.5	6.4
Shan	64.2	3.2	3.2	50.5	2.2	1.9	1.2	5.2	8.9
Ayeyarwaddy	74.8	3.1	0.8	51.1	2.3	1.4	1.5	5.7	7.7
Union	73.0	3.4	1.1	49.2	2.5	1.2	1.0	6.5	9.2

Table (3.b) Indicators for Maternal and Child Health Activities by BHS (2011)

Maternal, Newborn and Child Health Care (2011)									
Maternal and Child Health Activities by BHS									
Regions and States	AN Care Coverage (%)	Average frequency of AN care	% of pregnant mothers with closed birth interval	% of deliveries attended by BHS	% of deliveries at RHC delivery room	% of newborn with low birth weight	% of Perinatal mortalities out of total deliveries	Average frequency of PN care	% of Referral among (AN + Delivery + PN) mothers
Kachin	80.6	3.3	2.2	58.1	2.5	1.5	1.2	6.4	7.0
Kayah	83.5	3.9	3.8	63.1	2.2	1.2	0.8	5.4	7.9
Kayin	69.6	3.1	1.1	55.7	7.1	1.7	0.7	5.3	10.5
Chin	64.3	3.5	3.0	55.7	0.4	0.5	0.6	4.0	3.2
Sagaing	62.9	4.2	1.5	53.9	5.1	0.8	0.9	7.9	19.8
Tanintharyi	78.6	3.5	1.0	51.9	8.6	1.2	0.8	7.1	7.1
Bago	73.2	3.2	0.7	55.5	0.8	1.3	1.0	5.9	10.6
Magway	68.4	4.1	0.6	57.4	1.2	1.0	1.1	6.9	11.0
Mandalay	70.0	3.9	0.7	55.5	1.0	0.9	1.0	7.1	10.2
Naypyitaw	77.1	2.7	0.4	38.8	2.1	0.8	0.8	6.4	8.4
Mon	77.6	4.0	0.9	56.1	6.2	1.4	0.9	8.4	14.4
Rakhine	78.8	2.9	1.8	45.2	0.2	1.4	1.0	4.8	5.0
Yangon	73.9	3.4	0.6	35.0	3.9	1.2	0.4	10.3	6.8
Shan	65.9	3.2	2.6	50.5	2.4	2.0	1.1	5.3	8.6
Ayeyarwaddy	72.1	3.3	0.9	50.9	3.6	1.7	1.4	5.8	9.8
Union	74.0	3.5	1.1	51.0	2.9	1.3	1.0	6.7	10.1

Table (4.a) Indicators for Maternal and Child Health Activities by AMWs and TTBAAs (2010)

Maternal, Newborn and Child Health Care (2010)					
Regions and States	Activities by AMWs			Activities by TTBAAs	
	Home Delivery Rate	% of new-born with low birth weight	% of referral among (AN + Delivery + PN) mothers	Home Delivery Rate	% of referral cases (during delivery)
Kachin	10.6	0.7	11.2	7.9	2.9
Kayah	10.9	1.2	10.8	3.1	3.2
Kayin	16.5	0.9	7.0	13.1	1.9
Chin	19.5	0.4	4.6	3.1	0.0
Sagaing	14.3	1.1	13.9	3.7	6.5
Tanintharyi	11.3	0.5	4.9	3.2	0.5
Bago	11.3	0.5	5.5	11.5	2.6
Magway	23.7	0.5	7.7	5.3	1.8
Mandalay	13.1	0.9	7.9	4.6	1.7
Mon	5.3	1.9	13.2	5.1	4.0
Rakhine	8.0	1.6	4.5	21.2	1.8
Yangon	5.4	1.7	6.3	5.2	3.3
Shan	12.3	1.2	13.2	3.8	3.4
Ayeyarwaddy	13.1	1.0	6.2	13.6	2.1
Union	12.3	0.9	8.2	8.1	2.5

Table (4.b) Indicators for Maternal and Child Health Activities by AMWs and TTBAAs (2011)

Maternal, Newborn and Child Health Care (2011)					
Regions and States	Activities by AMWs			Activities by TTBAAs	
	Home Delivery Rate	% of new-born with low birth weight	% of referral among (AN + Delivery + PN) mothers	Home Delivery Rate	% of referral cases (during delivery)
Kachin	10.1	0.9	13.2	5.2	6.6
Kayah	10.4	1.7	15.5	3.9	1.3
Kayin	16.1	0.7	5.9	14.7	2.4
Chin	23.6	0.4	7.9	2.9	3.5
Sagaing	12.2	1.0	14.9	3.2	5.5
Tanintharyi	16.2	1.1	5.8	3.8	0.7
Bago	10.8	0.7	5.7	11.5	2.0
Magway	19.5	0.5	7.9	5.2	1.3
Mandalay	11.6	1.6	10.1	4.2	2.6
Naypyitaw	17.4	0.2	7.0		
Mon	5.1	1.3	11.1	4.5	3.4
Rakhine	8.6	1.1	6.6	22.6	3.6
Yangon	5.0	0.9	7.0	4.8	3.1
Shan	11.3	1.0	14.0	3.4	2.7
Ayeyarwaddy	13.1	1.8	6.1	13.8	2.5
Union	11.6	1.0	8.7	8.0	2.9

Table (5.a) Indicators for Child Health Activities (2010)

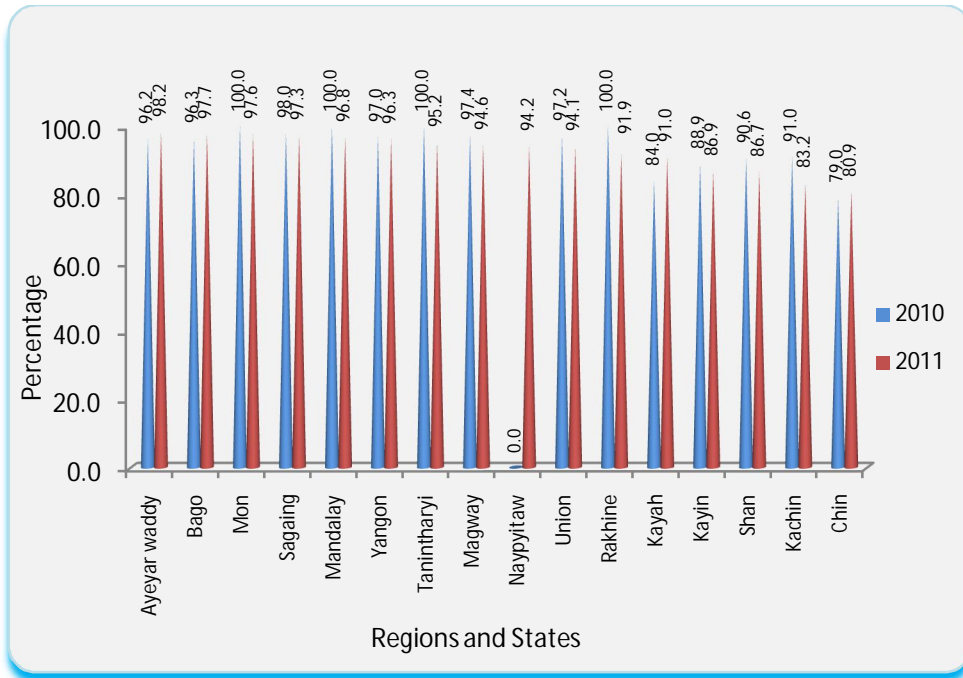
Maternal, Newborn and Child Health Care (2010)						
Regions and States	% of < 5 yr old children who attended clinics	% of <5 yr old children with diarrhoea who suffer severe dehydration	% of < 5 yr old children with diarrhoea who received ORT	% of < 5 yr old children with symptoms for pneumonia	% of < 5 yr old children with severe pneumonia	% of < 5 yr old children referred to higher levels
Kachin	30.2	2.4	98.3	6.9	0.2	0.8
Kayah	29.3	4.3	91.2	4.6	0.2	0.9
Kayin	33.2	1.8	99.7	4.5	0.2	0.9
Chin	28.7	2.0	99.6	9.3	0.3	0.3
Sagaing	31.4	2.6	96.9	7.6	0.5	1.6
Tanintharyi	19.1	1.5	91.2	5.2	0.2	1.1
Bago	19.9	2.8	98.0	3.6	0.1	0.8
Magway	26.3	0.9	98.0	7.7	0.1	0.9
Mandalay	15.1	4.7	96.0	3.2	0.2	1.6
Mon	35.3	4.6	99.6	3.8	0.2	1.6
Rakhine	22.6	1.3	95.0	6.3	0.1	0.9
Yangon	12.3	2.4	94.4	2.0	0.0	0.9
Shan	17.6	3.0	92.0	4.6	0.2	1.0
Ayeyarwaddy	21.3	2.2	96.9	4.4	0.1	0.8
Union	21.7	2.5	96.4	4.7	0.2	1.1

Table (5.b) Indicators for Child Health Activities (2011)

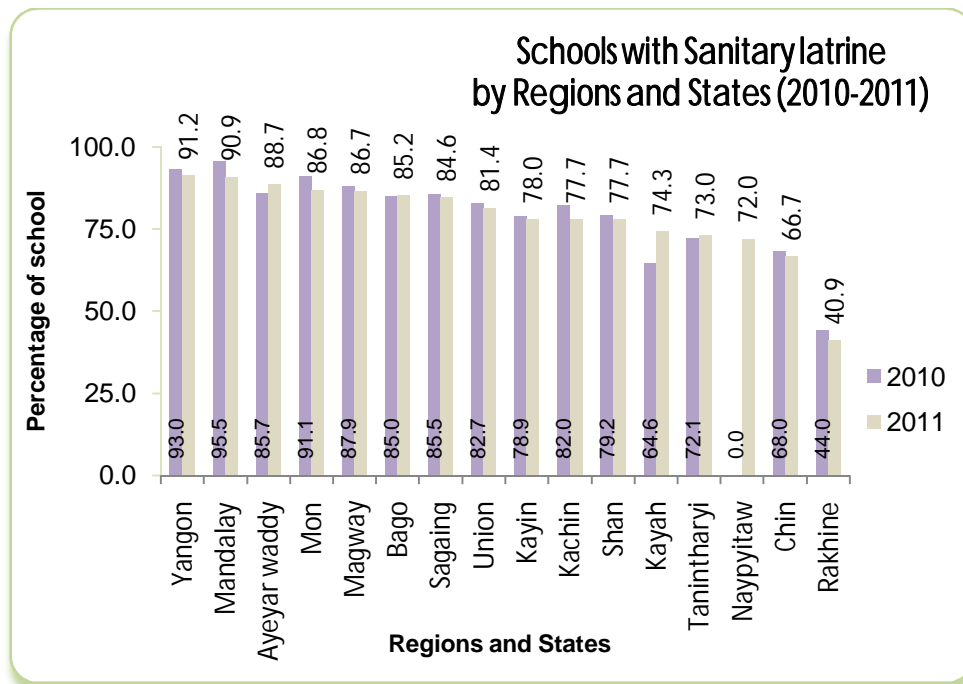
Maternal, Newborn and Child Health Care (2011)						
Regions and States	% of < 5 yr old children who attended clinics	% of <5 yr old children with diarrhoea who suffer severe dehydration	% of < 5 yr old children with diarrhoea who received ORT	% of < 5 yr old children with symptoms for pneumonia	% of < 5 yr old children with severe pneumonia	% of < 5 yr old children referred to higher levels
Kachin	29.5	1.2	99.0	7.4	0.2	1.0
Kayah	32.7	4.8	88.4	5.7	0.2	0.9
Kayin	30.5	1.2	99.3	4.7	0.2	0.9
Chin	34.3	1.5	99.6	11.8	0.5	0.3
Sagaing	31.8	3.1	97.3	8.1	0.4	1.7
Tanintharyi	25.8	2.7	95.8	7.6	0.2	1.2
Bago	20.1	2.9	98.2	3.5	0.1	0.7
Magway	25.6	1.3	98.4	7.4	0.2	0.9
Mandalay	17.9	4.5	96.9	3.5	0.2	1.5
Naypyitaw	16.6	1.4	97.1	4.2	0.1	0.7
Mon	37.0	3.0	99.3	4.3	0.2	1.2
Rakhine	27.3	1.5	96.5	8.4	0.2	0.8
Yangon	13.0	1.3	96.5	2.3	0.1	0.9
Shan	20.2	3.2	94.3	5.2	0.2	1.0
Ayeyarwaddy	23.0	2.7	96.6	5.4	0.2	1.0
Union	23.2	2.5	97.1	5.4	0.2	1.1

4. School Health Services

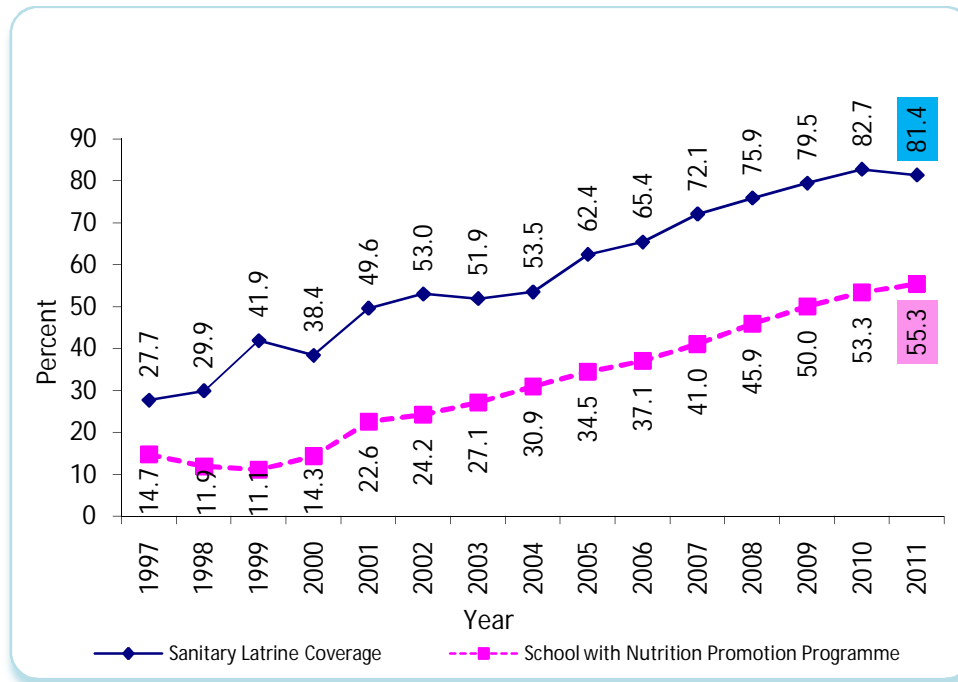
Figure(13) School Health Examination Coverage by Regions and States (2010-2011)



Figure(14) Schools with Sanitary latrine by Regions and States (2010-2011)



Figure(15) Percentage of Schools with sanitary latrine and nutrition promotion (1997-2011)



BHS also took in school health activities such as examining school for sanitation and water supply, examining for primary school children and also for nutrition promotion activities. More than 90% of schools were examined by BHS during 2010 and 2011(Figure 13). About (80%) of school had sanitary latrines with the standard ratio of 1 latrine to 75 school children and lowest coverage was seen in Rakhine State and Chin State(Figure 14). Development of school with sanitary latrines and nutrition promotion activities showed increasing trend from last 15 years. Although number of school with nutrition promotion activities were growing, only half the schools were found to be taking nutrition promotion activities. It is still necessary to promote nutrition knowledge and activities in school (Figure 15).

Table (6.a) Indicators for School Health Activities (2010)

School Health (2010)							
Regions and States	% of schools undergo school health examination	(%) of schools with sanitary latrines	(%) of schools with safe water supply	(%) of schools with nutrition promotion activities	(%) of students examined	(%) of health promoting schools	(%) of Ades Egypti free schools
Kachin	91.0	82.0	77.0	59.7	60.0	30.2	31.6
Kayah	84.0	64.6	60.7	36.9	74.0	24.5	26.1
Kayin	88.9	78.9	75.1	55.6	73.3	27.9	36.8
Chin	79.0	68.0	66.0	7.0	60.0	7.1	15.3
Sagaing	98.0	85.5	81.0	41.2	68.2	23.3	34.1
Tanintharyi	100.0	72.1	61.9	52.9	88.7	12.4	18.6
Bago	96.3	85.0	89.5	73.8	79.5	46.1	59.9
Magway	97.4	87.9	85.1	49.9	76.8	33.4	44.0
Mandalay	100.0	95.5	94.4	48.5	77.6	41.6	60.1
Mon	100.0	91.1	95.6	89.7	86.5	85.9	94.0
Rakhine	100.0	44.0	40.0	14.0	75.0	3.1	3.0
Yangon	97.0	93.0	95.0	85.2	86.0	79.8	91.0
Shan	90.6	79.2	74.3	51.4	68.3	34.1	41.1
Ayeyarwaddy	96.2	85.7	86.5	57.4	82.0	30.5	58.6
Union	97.2	82.7	81.1	53.3	75.9	35.3	48.1

Table (6.b) Indicators for School Health Activities (2011)

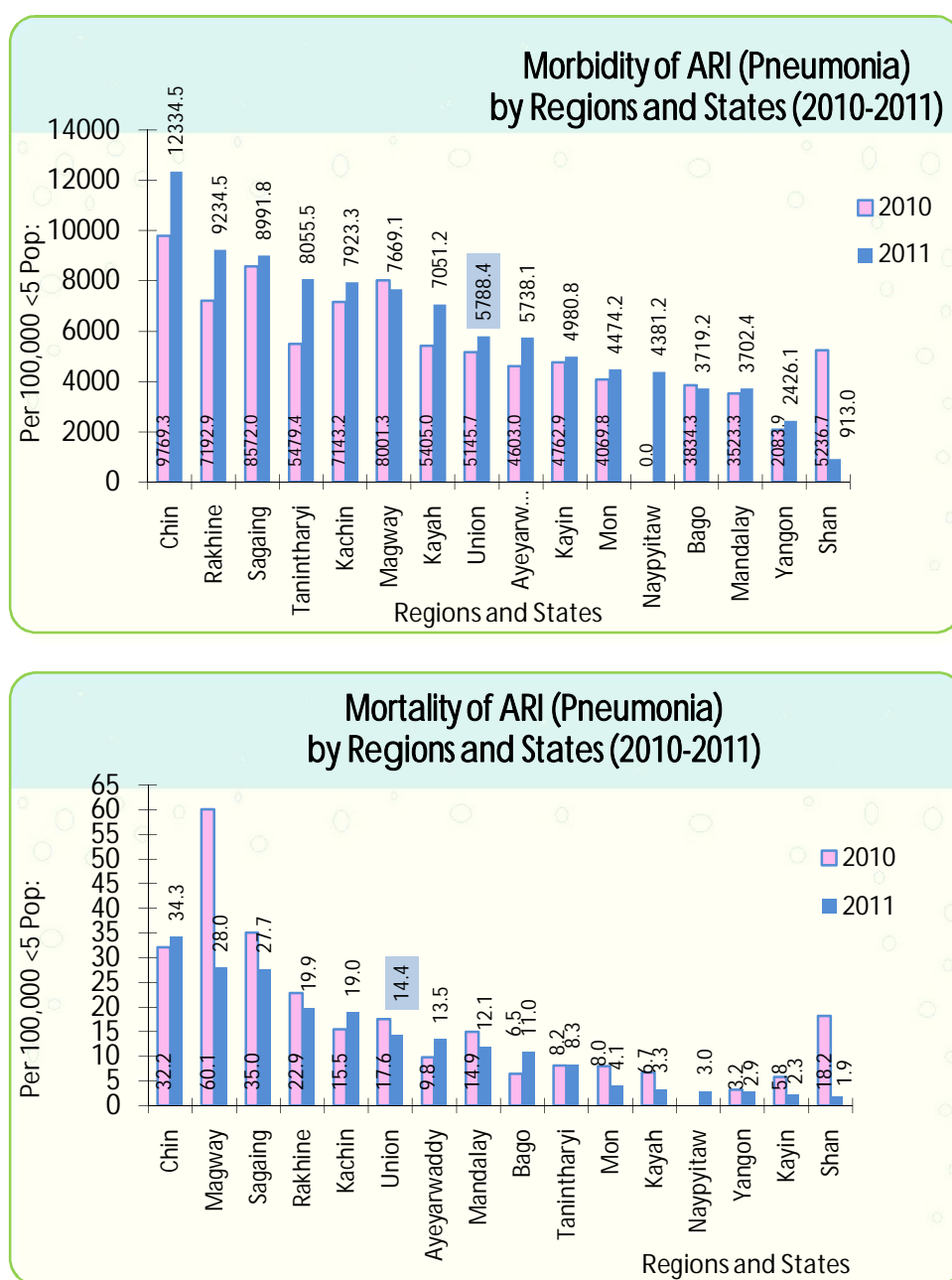
School Health (2011)							
Regions and States	% of schools undergo school health examination	(%) of schools with sanitary latrines	(%) of schools with safe water supply	(%) of schools with nutrition promotion activities	(%) of students examined	(%) of health promoting schools	(%) of Ades Egypti free schools
Kachin	83.2	77.7	76.0	66.5	53.4	30.1	34.1
Kayah	91.0	74.3	68.2	54.6	83.4	24.4	24.4
Kayin	86.9	78.0	76.0	54.9	74.5	28.5	33.2
Chin	80.9	66.7	61.1	12.5	56.6	2.4	17.4
Sagaing	97.3	84.6	81.0	42.1	66.1	23.8	33.2
Tanintharyi	95.2	73.0	72.5	58.6	83.7	26.7	26.0
Bago	97.7	85.2	92.4	76.7	79.3	49.8	59.7
Magway	94.6	86.7	84.8	51.0	74.1	30.8	39.2
Mandalay	96.8	90.9	90.3	46.8	85.8	35.9	54.5
Naypyitaw	94.2	72.0	80.0	61.1	71.0	42.2	43.0
Mon	97.6	86.8	93.0	82.6	82.5	74.9	88.8
Rakhine	91.9	40.9	38.0	16.8	67.0	4.2	2.4
Yangon	96.3	91.2	95.2	83.5	82.1	79.7	82.7
Shan	86.7	77.7	74.1	51.4	65.0	32.1	41.7
Ayeyarwaddy	98.2	88.7	89.6	62.6	80.6	41.5	66.8
Union	94.1	81.4	81.4	55.3	75.2	36.6	47.7

DISEASE CONTROL SERVICES

1. Diseases Under National Surveillance

The morbidity and mortality pattern of (17) diseases under national surveillance and number of deaths were mentioned in Table(7) in detail.

Figure(16) Morbidity and Mortality of ARI (Pneumonia) by Regions and States (2010-2011)



ARI (pneumonia) was the common cause of morbidity and mortality of under five children; union figure of 2011 on morbidity was higher and mortality was lower than 2010. About nearly six thousands cases of ARI (pneumonia), and 14 deaths occurred in each 100,000 under five populations.

Table (7.a) Indicators for Morbidity and Mortality of Diseases Under National Surveillance (2010)

i Epidemiological Surveillance and Response (2010)												
Regions and States	Diarrhoea		Dysentery		Food poisoning		Enteric Fever		Measles		Diphtheria	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(3)	(2)	(3)	(2)
Kachin	1092.0	23	394.7	1	22.7	6	7.8	0	0.0	0	0.0	0
Kayah	1328.0	27	580.8	0	4.5	0	3.7	0	0.0	0	0.0	0
Kayin	935.7	4	303.3	0	17.5	4	2.4	0	19.0	0	0.0	0
Chin	1694.9	21	673.5	1	18.1	9	50.4	2	0.0	0	0.0	0
Sagaing	869.7	24	333.8	1	8.2	7	16.5	0	0.0	0	0.0	0
Tanintharyi	715.4	3	306.1	0	43.2	3	5.8	0	4.1	0	0.0	0
Bago	595.4	10	275.8	0	13.0	10	8.6	0	0.0	0	0.0	0
Magway	846.9	8	435.8	1	7.1	4	8.4	2	0.3	0	0.0	0
Mandalay	477.5	17	234.5	2	8.1	10	7.6	0	0.6	0	0.0	0
Mon	974.6	11	295.7	0	16.5	5	2.8	1	0.0	0	0.5	1
Rakhine	1099.7	28	515.7	0	12.7	2	13.2	0	0.0	0	0.0	0
Yangon	195.1	3	103.4	0	4.1	0	1.7	0	2.4	0	0.2	0
Shan	702.7	99	270.7	2	12.2	19	5.3	11	0.0	0	0.0	0
Ayeyarwaddy	565.5	15	334.2	1	10.2	9	7.0	1	0.0	0	0.0	0
Union	680.1	293	303.5	9	11.2	88	8.0	17	1.2	0	0.0	1

(1) Number of cases per 100,000 Population

(2) Total number of death

(3) For vaccine preventable diseases and ARI, number of cases per 100,000 under five years children are mentioned in the table

Table (7.b) Indicators for Morbidity and Mortality of Diseases Under National Surveillance (2011)

i Epidemiological Surveillance and Response (2011)												
Regions and States	Diarrhoea		Dysentery		Food poisoning		Enteric Fever		Measles		Diphtheria	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(3)	(2)	(3)	(2)
Kachin	1116.8	17	395.4	0	28.8	15	6.7	0	24.5	0	0.0	0
Kayah	1178.7	10	521.2	0	6.8	1	1.4	0	0.0	0	0.0	0
Kayin	840.2	2	230.8	0	20.1	3	1.7	0	0.6	0	0.0	0
Chin	1800.0	21	654.8	3	15.8	0	44.7	2	8.6	0	0.0	0
Sagaing	854.7	25	306.1	0	6.2	8	14.1	1	17.8	0	0.0	0
Tanintharyi	917.3	18	290.2	0	52.7	15	3.1	1	16.6	0	0.0	0
Bago	498.0	13	200.5	0	13.1	7	8.6	0	12.9	0	0.0	0
Magway	728.3	6	345.8	0	6.6	0	8.6	0	20.3	4	0.0	0
Mandalay	556.3	17	236.5	0	6.3	4	8.9	1	14.1	0	0.6	0
Naypyitaw	490.1	3	186.8	0	10.6	1	1.0	0	87.7	0	0.0	0
Mon	754.5	6	212.9	0	18.6	6	4.6	0	2.6	0	2.6	5
Rakhine	1234.1	30	547.4	0	11.2	7	9.5	2	33.7	0	0.0	0
Yangon	186.4	4	83.0	0	6.6	0	1.0	0	29.3	3	0.0	0
Shan	715.6	45	271.1	1	12.5	20	5.2	2	0.3	0	0.0	0
Ayeyarwaddy	547.2	27	278.4	3	10.2	5	6.6	3	14.5	0	0.0	0
Union	668.4	244	269.7	7	11.6	92	7.3	12	18.0	7	0.2	5

(1) Number of cases per 100,000 Population

(2) Total number of death

(3) For vaccine preventable diseases and ARI, number of cases per 100,000 under five years children are mentioned in the table

ii Epidemiological Surveillance and Response (2010)												
Regions and States	Whooping cough		Neonatal tetanus		Tetanus		Meningitis		ARI		Viral Hepatitis	
	(3)	(2)	(4)	(2)	(1)	(2)	(1)	(2)	(1)	(2) *	(1)	(2)
Kachin	0.0	0	0.0	0	0.7	1	0.4	0	7143.2	15.5	18.9	5
Kayah	0.0	0	0.0	0	0.0	0	0.0	0	5405.0	6.7	6.0	0
Kayin	0.0	0	0.0	0	0.1	0	2.3	2	4762.9	5.8	17.5	1
Chin	1.7	0	0.0	0	0.0	0	1.5	0	9769.3	32.2	22.1	4
Sagaing	8.0	0	2.2	1	1.0	7	2.8	10	8572.0	35.0	26.3	14
Tanintharyi	1.8	0	0.0	0	0.1	1	1.9	0	5479.4	8.2	14.1	3
Bago	0.0	0	1.1	0	0.8	3	3.3	3	3834.3	6.5	25.7	9
Magway	0.3	0	0.0	0	0.3	3	0.6	1	8001.3	60.1	10.9	8
Mandalay	0.0	0	16.1	1	0.4	6	1.1	6	3523.3	14.9	14.4	10
Mon	0.0	0	13.7	0	0.3	0	3.2	3	4069.8	8.0	19.0	1
Rakhine	0.0	0	1.4	0	1.0	11	0.7	2	7192.9	22.9	8.0	5
Yangon	0.0	0	2.2	2	0.1	0	0.1	3	2083.9	3.2	4.5	4
Shan	0.2	0	1.4	1	0.2	1	1.4	5	5236.7	18.2	20.4	17
Ayeyarwaddy	0.0	0	0.9	1	0.8	7	1.5	4	4603.0	9.8	22.9	11
Union	0.9	0	3.8	6	0.5	40	1.5	39	5145.7	17.6	17.0	92

ii Epidemiological Surveillance and Response (2011)												
Regions and States	Whooping cough		Neonatal tetanus		Tetanus		Meningitis		ARI		Viral Hepatitis	
	(3)	(2)	(4)	(2)	(1)	(2)	(1)	(2)	(1)	(2) *	(1)	(2)
Kachin	1.2	0	0.0	0	0.5	3	1.0	0	7923.3	19.0	20.3	6
Kayah	0.0	0	0.0	0	0.0	0	18.7	0	7051.2	3.3	10.5	0
Kayin	0.0	0	0.0	0	0.1	0	1.4	4	4980.8	2.3	14.2	4
Chin	0.0	0	0.0	0	0.2	1	4.2	1	12334.5	34.3	21.0	2
Sagaing	0.9	0	5.8	4	0.4	4	3.9	9	8991.8	27.7	22.2	11
Tanintharyi	0.7	0	0.0	0	0.2	0	3.0	5	8055.5	8.3	8.1	2
Bago	0.0	0	4.6	2	0.6	4	3.4	11	3719.2	11.0	17.1	9
Magway	0.0	0	7.3	4	0.4	3	0.2	1	7669.1	28.0	6.0	4
Mandalay	0.4	0	4.0	1	0.3	3	0.9	1	3702.4	12.1	11.0	16
Naypyitaw	0.0	0	0.0	0	0.5	0	0.2	0	4381.2	3.0	10.5	1
Mon	0.0	0	8.3	2	0.1	1	2.3	2	4474.2	4.1	12.2	1
Rakhine	0.7	0	4.7	1	0.7	1	1.0	2	9234.5	19.9	10.6	4
Yangon	0.3	0	0.0	0	0.1	0	0.5	2	2426.1	2.9	3.5	2
Shan	0.0	0	0.1	2	0.3	2	1.3	9	5778.4	17.0	19.2	10
Ayeyarwaddy	1.0	0	0.9	1	0.5	7	1.2	1	5738.1	13.5	14.7	7
Union	0.4	0	3.4	17	0.4	29	1.7	48	5788.4	14.4	13.1	79

- (1) Number of cases per 100,000 Population
 (2) Total number of death
 (2) * Number of deaths per 100,000 Population under five years children
 (3) For vaccine preventable diseases and ARI, number of cases per 100,000 under five years children are mentioned in the table
 (4) For Neonatal Tetanus, number of cases per 100,000 live birth are mentioned in the table

iii Epidemiological Surveillance and Response (2010)														
Regions and States	Rabies		Malaria		Snake bite poisonous		TB: Sputum +ve		TB: Sputum -ve		TB: Extrapulmonary		Anthrax	
	(1)	(2)	(1)	(2) *	(1) *	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Kachin	0.9	13	7335.6	7.7	21	0	56.0	8	69.5	7	80.7	2	0.0	0
Kayah	0.0	0	3057.3	1.9	18	0	43.6	0	10.4	0	10.8	0	0.0	0
Kayin	0.4	5	1716.4	3.6	117	7	72.5	2	233.3	1	19.8	1	0.0	0
Chin	0.0	0	4615.4	5.7	50	3	17.2	0	47.9	2	88.3	0	0.0	0
Sagaing	0.9	44	2313.3	2.4	1579	78	42.0	7	32.3	14	46.2	1	0.7	0
Tanintharyi	0.2	3	2888.6	3.6	36	1	65.9	1	123.5	0	166.4	1	0.0	0
Bago	0.8	38	1001.3	1.0	1582	90	58.7	63	83.1	51	18.5	10	0.0	0
Magway	0.6	25	1010.3	0.5	1253	95	49.2	13	47.6	21	54.8	7	0.0	0
Mandalay	0.6	39	372.1	1.0	1433	100	56.6	50	52.5	57	49.0	10	0.6	1
Mon	0.6	12	1245.4	1.9	266	22	78.1	24	188.6	53	24.1	1	0.0	0
Rakhine	0.2	7	3727.7	1.5	51	2	61.1	13	90.6	16	22.0	9	0.0	0
Yangon	0.1	5	76.4	0.4	455	51	109.5	18	112.9	26	41.4	1	0.0	0
Shan	0.1	6	1421.4	3.5	274	0	46.4	12	60.9	9	30.9	3	0.2	0
Ayeyarwaddy	0.1	8	483.1	1.0	818	176	70.3	28	62.0	23	32.3	13	0.0	0
Union	0.4	205	1420.0	1.7	7953	625	63.7	239	79.0	280	42.0	59	0.2	1

iii Epidemiological Surveillance and Response (2011)														
Regions and States	Rabies		Malaria		Snake bite poisonous		TB: Sputum +ve		TB: Sputum -ve		TB: Extrapulmonary		Anthrax	
	(1)	(2)	(1)	(2) *	(1) *	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Kachin	0.3	5	3804.9	5.1	13	0	71.5	32	102.3	42	150.3	9	0.0	0
Kayah	0.4	1	2799.6	1.8	16	0	24.9	0	19.8	0	4.7	0	0.0	0
Kayin	0.1	2	1472.9	2.3	108	12	61.1	4	210.3	8	13.6	1	0.0	0
Chin	0.0	0	4584.2	7.4	46	0	24.0	0	69.1	0	104.2	0	0.0	0
Sagaing	0.8	42	1523.6	1.7	1457	90	52.4	8	38.4	18	57.0	3	0.2	0
Tanintharyi	0.3	4	3581.6	1.6	39	2	56.9	1	96.7	2	159.8	0	0.2	0
Bago	1.0	47	829.5	0.9	1680	110	69.4	40	123.0	59	20.3	7	0.0	0
Magway	0.7	27	526.7	0.2	1359	92	46.1	17	59.9	14	52.1	5	0.0	0
Mandalay	0.7	43	373.2	0.6	1150	71	56.3	37	51.9	28	43.8	16	0.0	0
Naypyitaw	0.7	7	368.7	0.5	124	8	45.7	0	37.5	0	33.5	0	0.0	0
Mon	0.4	8	905.1	1.2	203	10	72.9	34	182.0	70	20.5	1	0.0	0
Rakhine	0.1	4	2846.9	1.1	49	1	63.3	26	99.1	16	18.8	5	0.0	0
Yangon	0.3	20	38.3	0.1	568	67	120.1	28	138.8	27	50.6	2	0.0	0
Shan	0.1	6	1095.5	2.2	143	5	56.9	16	79.7	13	43.5	2	0.0	0
Ayeyarwaddy	0.5	29	585.5	0.7	863	195	76.5	36	85.5	31	40.9	9	0.0	0
Union	0.5	245	1082.9	1.2	7818	663	68.0	279	92.4	328	47.0	60	0.0	0

(1) Number of cases per 100,000 Population

(2) Total number of death

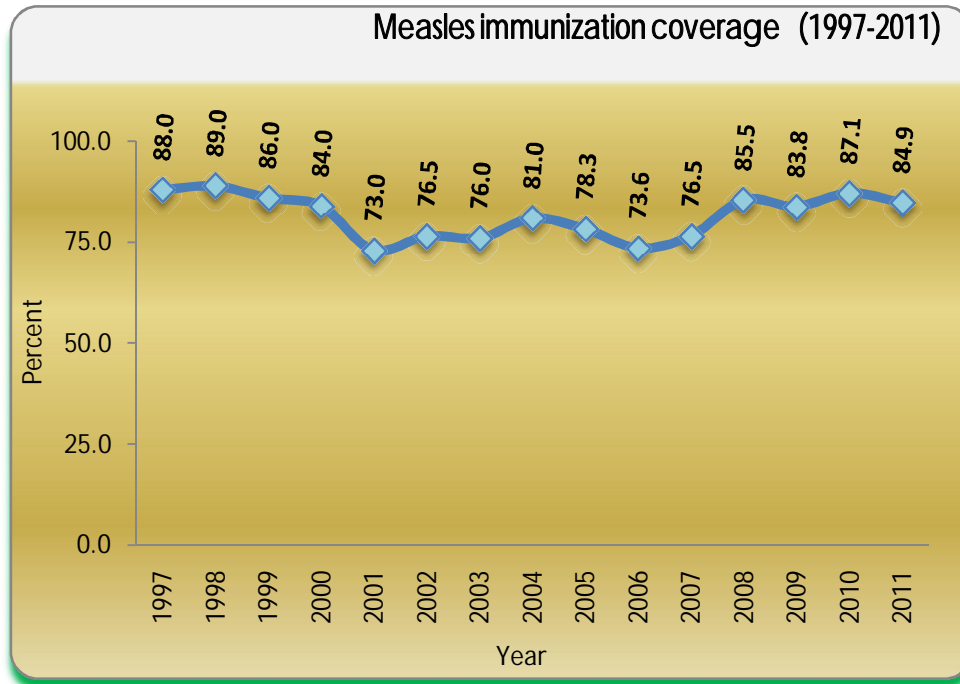
(1) * Number of cases

(2) * Number of deaths per 100,000 Population

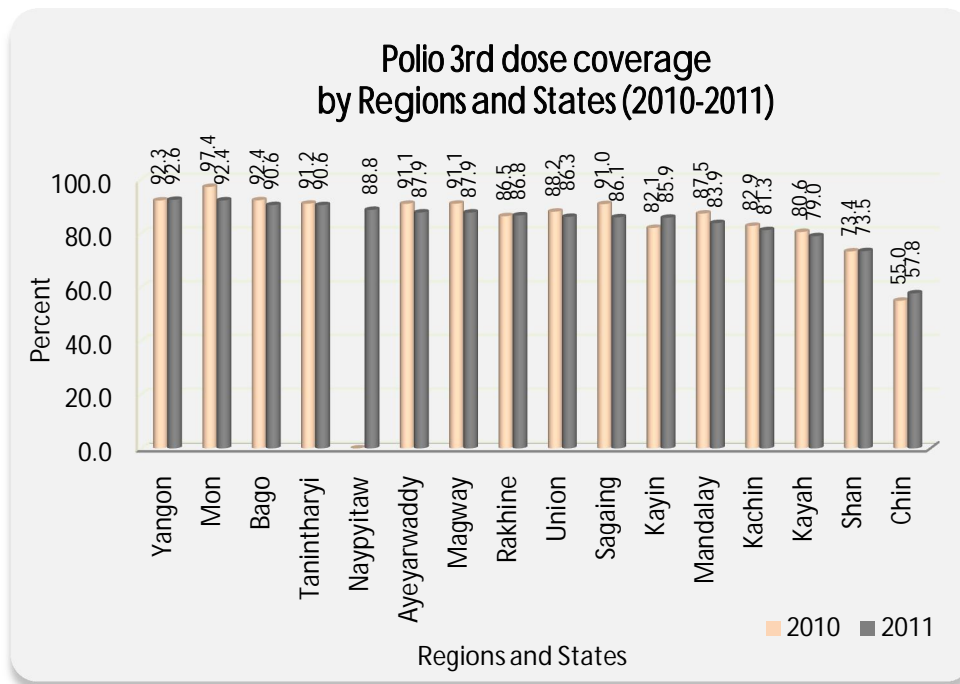
(3) For vaccine preventable diseases and ARI, number of cases per 100,000 under five years children are mentioned in the table

2. Expanded Programme on Immunization

Figure(17) Measles Immunization Coverage(1997-2011)

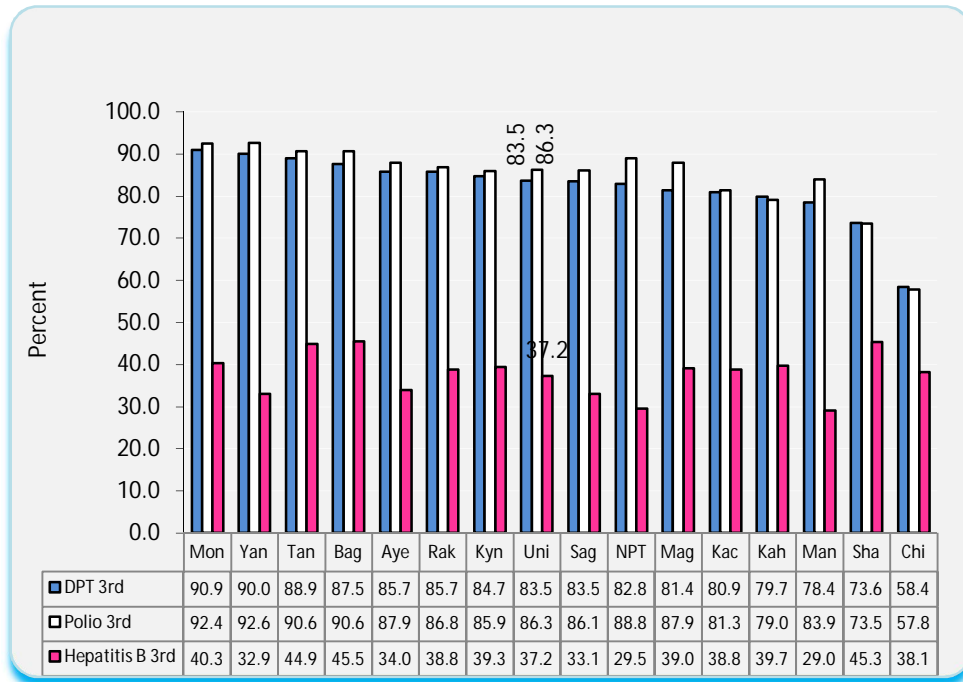


Figure(18) Polio 3rd dose coverage by Regions and States(2010-2011)

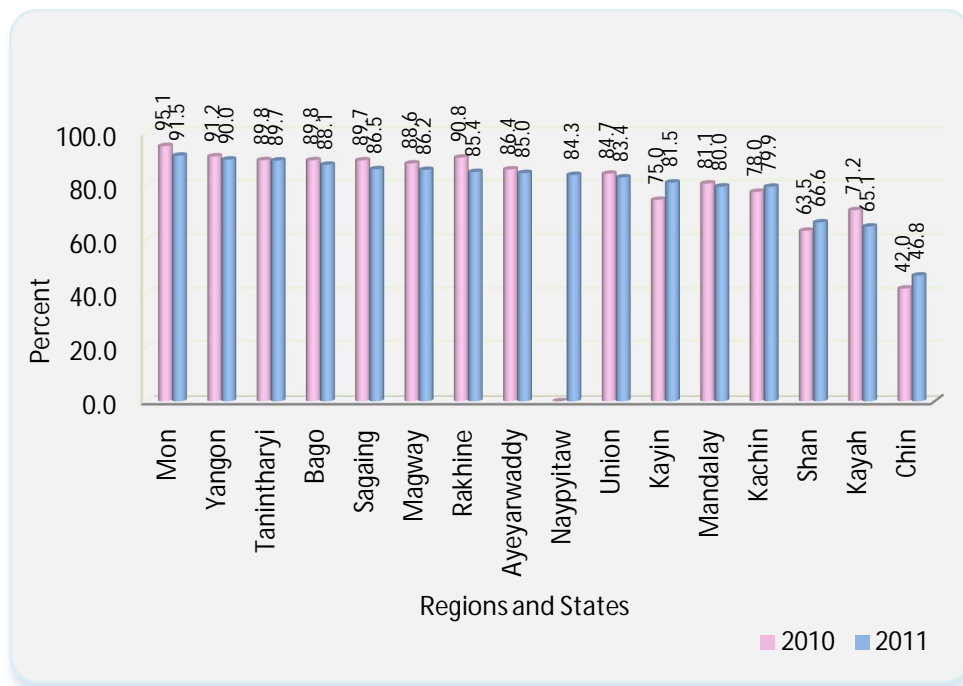


Proportion of under one children protected against measles is one of the MDG indicators; 84.9% of children were protected in 2011(Figure 17). Polio 3rd dose coverage was 86.3% compared with 88.2% in 2010. Chin reported lowest 57.8% and second lowest was 73.5% in Shan State(Figure 18). DPT 3rd dose coverage(83.5%), Polio 3rd dose coverage(86.3%) and Hepatitis B 3rd dose coverage(37.2%) had been achieved in 2011 and they were compared by regions and states in figure-19.

Figure(19) DPT 3rd, Polio 3rd and Hepatitis B 3rd dose coverage by Regions and States(2011)



Figure(20) Tetanus Toxoid 2nd dose coverage by Regions and States(2010-2011)



Two doses of Tetanus toxoid immunization were given to pregnant mother during antenatal period. The second dose coverage was 83.4% in 2011 compared with 84.7% in 2010. Reported newborn death due to neonatal tetanus was 6 cases in 2010 and 17 cases in 2011(Table 7-ii).

Table (8.a) Indicators for Immunization Coverage (2010)

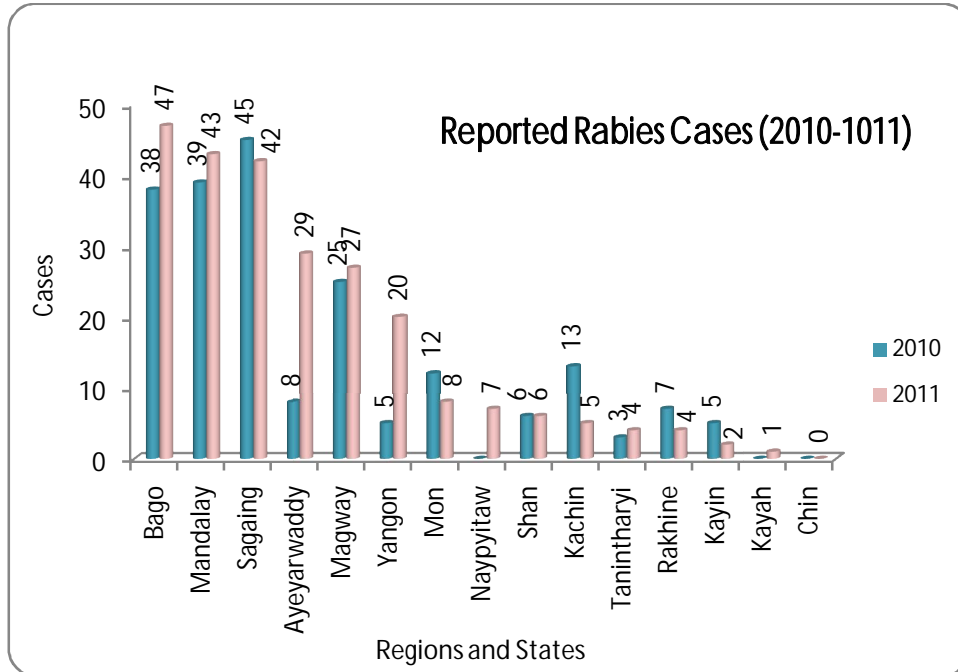
Expanded Programme on Immunization (2010)													
Regions and States	DPT Coverage (%)			Polio Coverage (%)			Hepatitis B Coverage (%)			BCG	Measles	TT Coverage (%)	
	1 st Dose	2 nd Dose	3 rd Dose	1 st Dose	2 nd Dose	3 rd Dose	1 st Dose	2 nd Dose	3 rd Dose	Coverage (%)	Coverage (%)	1 st Dose	2 nd Dose
Kachin	93.8	87.7	82.8	93.6	87.6	82.9	93.6	87.2	82.5	87.0	82.0	91.2	78.0
Kayah	84.7	83.0	80.8	84.9	82.8	80.6	81.3	81.6	80.1	84.3	77.0	74.5	71.2
Kayin	86.3	84.2	82.3	86.3	84.2	82.1	86.3	84.3	82.3	86.3	77.9	78.7	75.0
Chin	72.6	59.3	55.0	72.2	59.1	55.0	72.4	59.3	55.0	60.0	57.0	45.1	42.0
Sagaing	91.0	92.7	91.1	91.0	91.5	91.0	89.9	92.8	91.0	90.3	89.0	89.7	89.7
Tanintharyi	94.2	90.9	91.2	94.2	92.0	91.2	93.9	91.5	90.8	94.2	90.1	92.0	89.8
Bago	95.3	94.3	92.4	95.2	94.0	92.4	95.1	93.8	92.1	95.2	91.0	91.3	89.8
Magway	93.4	91.7	90.7	93.3	92.3	91.1	93.0	92.3	91.0	93.4	89.7	89.7	88.6
Mandalay	90.3	88.7	87.5	90.3	88.7	87.5	92.0	88.5	87.4	90.1	86.1	82.7	81.1
Mon	99.1	98.3	97.4	99.1	98.3	97.4	99.0	94.5	97.2	99.1	96.2	96.7	95.1
Rakhine	92.2	89.8	86.4	92.7	89.7	86.5	92.8	89.6	86.3	92.4	85.1	95.2	90.8
Yangon	96.2	94.4	92.7	95.5	93.7	92.3	97.9	94.2	92.9	96.2	96.2	93.8	91.2
Shan	77.9	75.5	73.3	77.9	75.5	73.4	76.2	75.5	72.7	77.8	70.3	67.4	63.5
Ayeyarwaddy	92.8	92.9	91.8	92.8	92.0	91.1	93.3	92.8	91.5	93.1	88.9	88.0	86.4
Union	91.4	89.9	88.2	91.3	89.6	88.2	91.6	89.7	88.1	91.2	87.1	86.8	84.7

Table (8.b) Indicators for Immunization Coverage (2011)

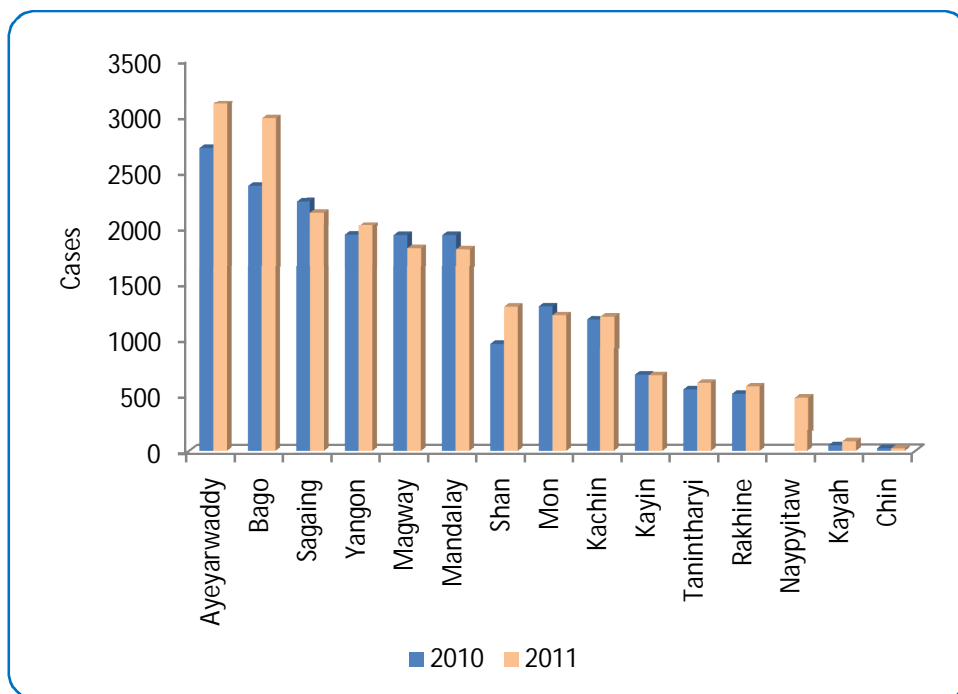
Expanded Programme on Immunization (2011)													
Regions and States	DPT Coverage (%)			Polio Coverage (%)			Hepatitis B Coverage (%)			BCG	Measles	TT Coverage (%)	
	1 st Dose	2 nd Dose	3 rd Dose	1 st Dose	2 nd Dose	3 rd Dose	1 st Dose	2 nd Dose	3 rd Dose	Coverage (%)	Coverage (%)	1 st Dose	2 nd Dose
Kachin	84.6	83.0	80.9	85.3	83.6	81.3	38.4	38.5	38.8	86.1	79.7	83.7	79.9
Kayah	81.7	82.3	79.7	81.7	81.7	79.0	40.1	40.1	39.7	82.2	75.7	69.7	65.1
Kayin	89.7	87.5	84.7	90.9	88.6	85.9	41.4	40.5	39.3	90.8	83.8	84.7	81.5
Chin	59.2	59.9	58.4	58.7	59.6	57.8	39.4	39.6	38.1	58.0	51.8	47.6	46.8
Sagaing	83.2	84.2	83.5	87.7	87.8	86.1	32.3	33.2	33.1	88.5	86.0	87.4	86.5
Tanintharyi	90.5	90.3	88.9	92.8	92.0	90.6	45.8	45.6	44.9	92.9	86.5	91.5	89.7
Bago	90.0	89.1	87.5	93.1	91.9	90.6	46.3	45.9	45.5	92.9	89.4	90.7	88.1
Magway	83.7	82.6	81.4	90.2	88.6	87.9	39.6	39.3	39.0	90.1	87.2	87.6	86.2
Mandalay	79.6	78.7	78.4	86.0	85.1	83.9	29.3	29.1	29.0	84.8	82.3	81.6	80.0
Naypyitaw	85.5	84.7	82.8	90.4	90.1	88.8	29.9	30.9	29.5	91.1	84.5	87.5	84.3
Mon	91.8	91.8	90.9	94.2	93.1	92.4	40.1	38.0	40.3	96.2	94.2	93.7	91.5
Rakhine	90.7	88.6	85.7	92.6	89.9	86.8	36.7	39.5	38.8	92.0	86.7	90.0	85.4
Yangon	88.1	86.7	90.0	95.6	94.2	92.6	35.8	33.7	32.9	95.8	92.8	92.6	90.0
Shan	77.8	76.0	73.6	78.3	75.8	73.5	46.5	46.2	45.3	78.3	70.6	70.6	66.6
Ayeyarwaddy	86.7	86.6	85.7	89.9	89.4	87.9	33.3	33.9	34.0	90.4	84.8	87.6	85.0
Union	85.2	84.4	83.5	89.1	87.9	86.3	37.6	37.5	37.2	89.2	84.9	85.9	83.4

3. Zoonotic Diseases Control

Figure(21) Reported Rabies Cases(2010-2011)



Figure(22) Reported Cases of dog bites(2010-2011)



The above figures showed that the rabies was reported commonly from Bago, Mandalay and Sagaing regions (Figure-21), the Ayeyarwaddy region showed higher rabies and dog bite case compared to 2010.

Table (9.a) Indicators for Zoonotic Disease (2010)

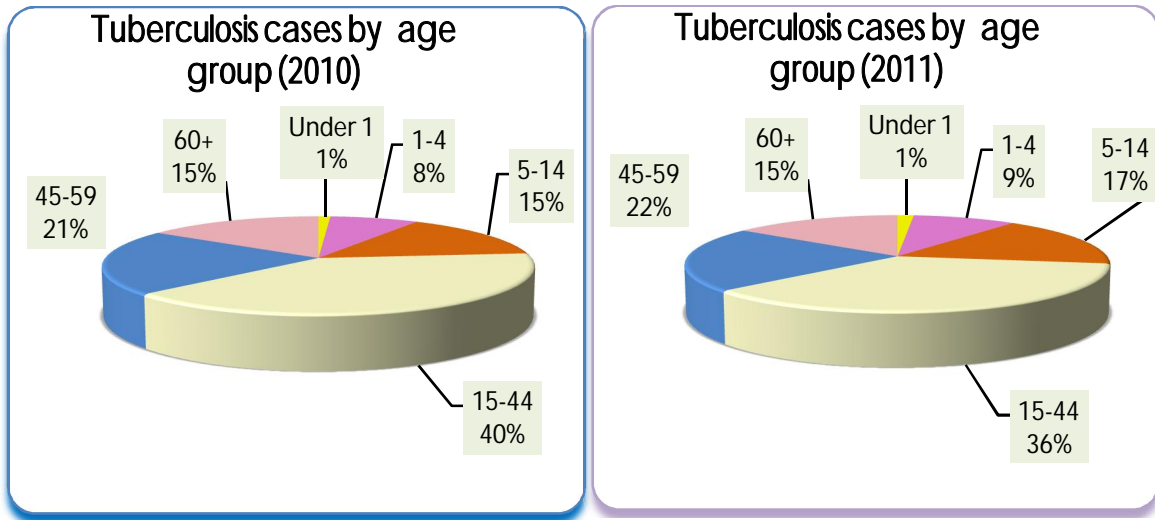
Zoonotic Diseases Control (2010)				
Regions and States	1. Number of dog bite cases	2. Number of Anthrax cases	3. Number of leptospirosis cases	4. Number of organized control of stray
Kachin	1176	0	1	21
Kayah	49	0	0	0
Kayin	680	0	1	2
Chin	23	0	0	1
Sagaing	2236	37	10	85
Tanintharyi	549	0	0	3
Bago	2376	0	0	31
Magway	1932	0	0	1
Mandalay	1932	22	6	9
Mon	1292	0	36	8
Rakhine	510	0	0	6
Yangon	1935	0	0	34
Shan	957	0	0	1
Ayeyarwaddy	2713	0	3	26
Union	18360	59	57	228

Table (9.b) Indicators for Zoonotic Disease (2011)

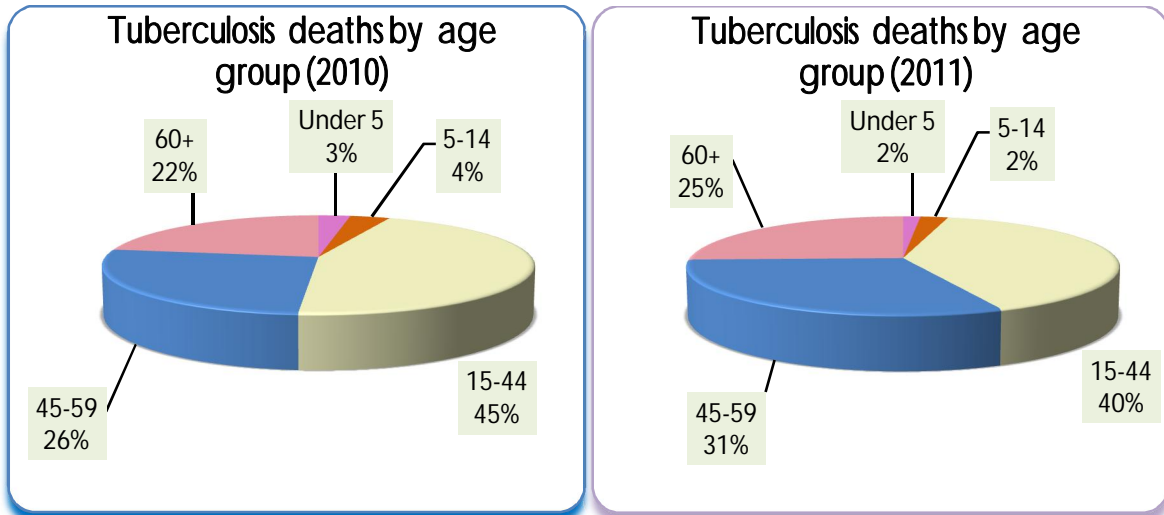
Zoonotic Diseases Control (2011)				
Regions and States	1. Number of dog bite cases	2. Number of Anthrax cases	3. Number of leptospirosis cases	4. Number of organized control of stray
Kachin	1201	0	0	0
Kayah	84	0	0	0
Kayin	675	0	0	1
Chin	21	0	0	0
Sagaing	2135	8	15	2
Tanintharyi	607	3	0	7
Bago	2979	0	3	1
Magway	1817	0	0	5
Mandalay	1807	0	7	1
Naypyitaw	472	0	4	5
Mon	1213	0	0	0
Rakhine	576	0	0	5
Yangon	2020	0	1	7
Shan	1290	1	0	0
Ayeyarwaddy	3110	0	2	2
Union	20007	12	32	36

4. Tuberculosis Control Programme

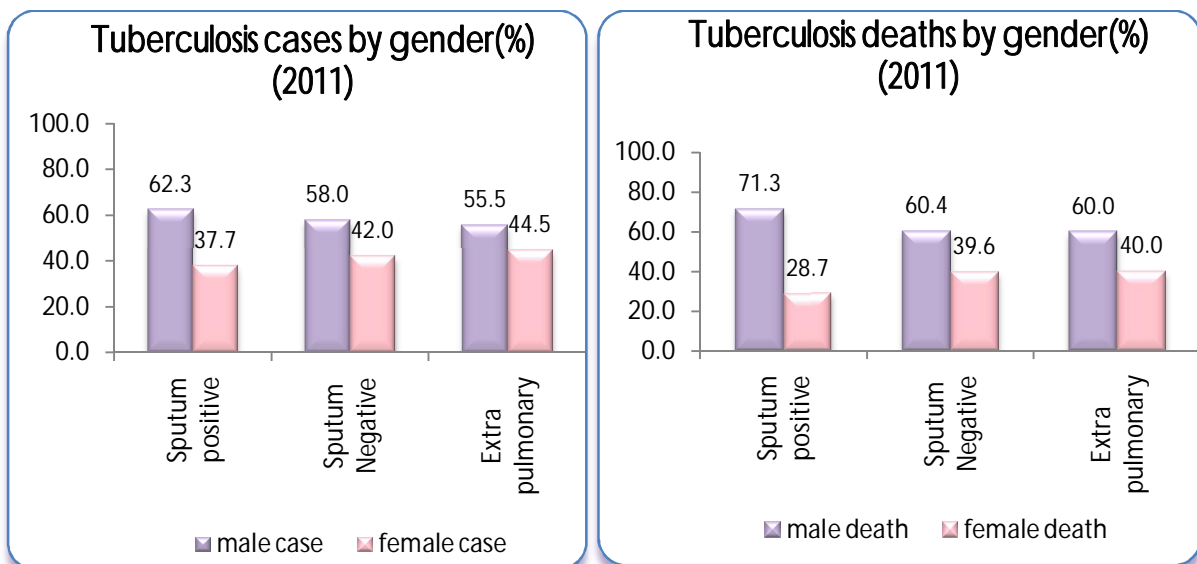
Figure(23) Tuberculosis Cases by age group (2010-2011)



Figure(24) Tuberculosis Deaths by age group (2010-2011)

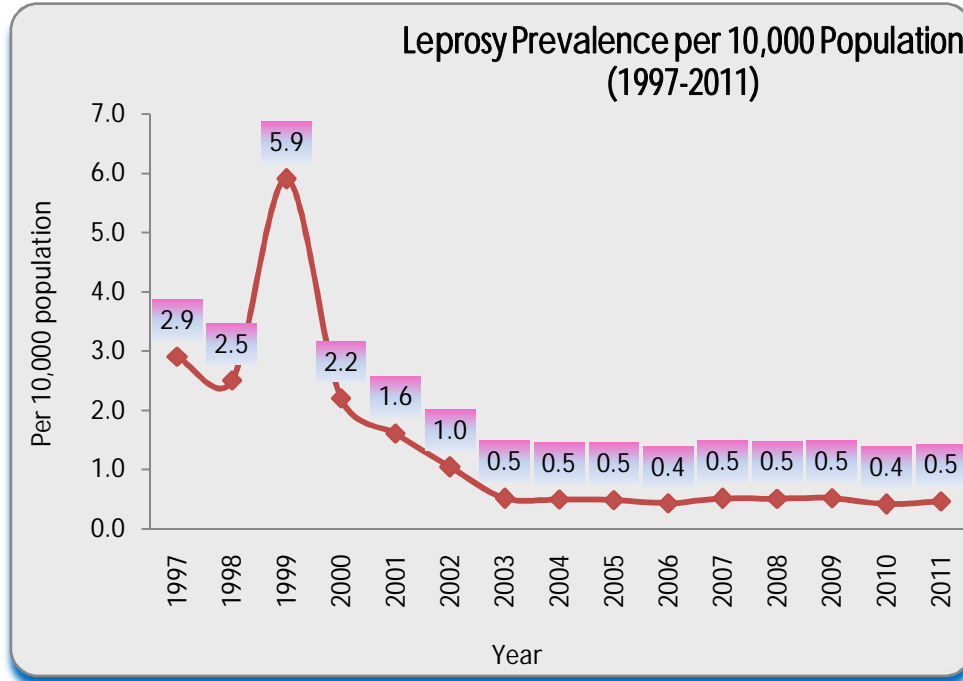


Figure(25) Tuberculosis Cases and Deaths by gender(%) (2011)

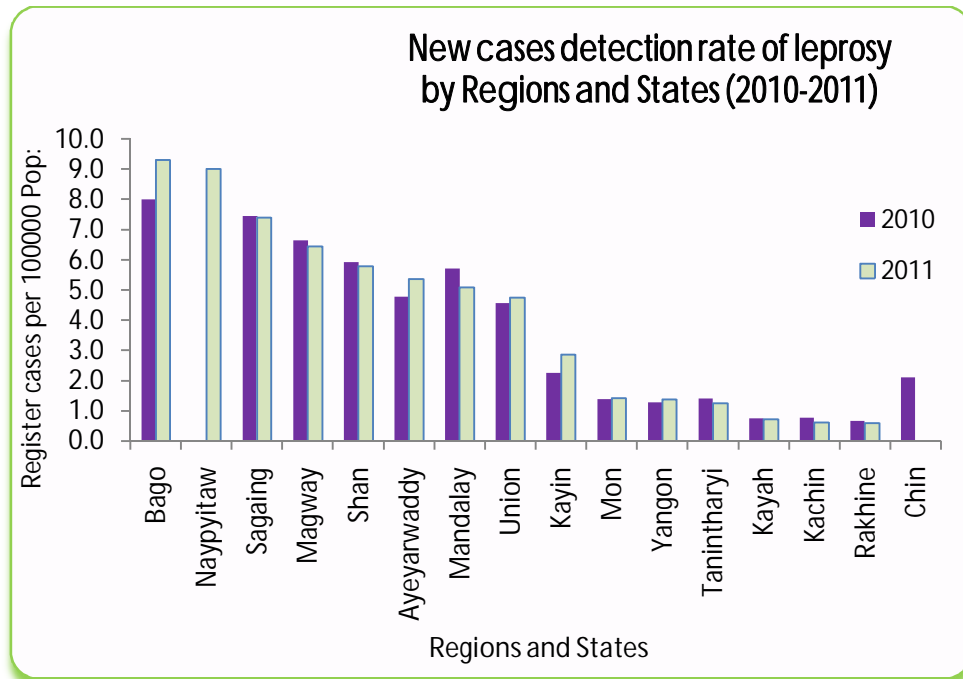


5. Leprosy Elimination Activities

Figure(26) Leprosy Prevalence per 10,000 population(1997-2011)



Figure(27) New cases detection rate of leprosy by regions and States (2010-2011)



Prevalence of leprosy per 10,000 population was 0.5 for national figure in 2011. New cases detection rate of leprosy was highest in Bago region followed by Nay Pyi Taw area and Sagaing region. Chin state had not found new case in 2011. (Figure-27 and Table-10)

Table (10.a) Indicators for Leprosy (2010)

Leprosy Elimination Activities (2010)					
Regions and States	Registered Leprosy cases per 10000 Population	New case detection rate per 100,000 Population	No: of cases released from treatment	Percentage of Disability Grade 2 among new cases	Prevalence Detection Ratio
Kachin	0.07	0.8	15	63.6	0.9
Kayah	0.07	0.7	1	0.0	1.0
Kayin	0.19	2.2	58	15.6	0.8
Chin	0.08	2.1	0	0.0	0.4
Sagaing	0.60	7.4	373	15.4	0.8
Tanintharyi	0.20	1.4	27	0.0	1.5
Bago	0.67	8.0	430	10.2	0.8
Magway	0.62	6.7	298	4.1	0.9
Mandalay	0.55	5.7	372	7.4	1.0
Mon	0.14	1.4	36	31.0	1.0
Rakhine	0.01	0.7	15	19.0	0.2
Yangon	0.14	1.3	113	11.7	1.1
Shan	0.48	5.9	267	12.0	0.8
Ayeyarwaddy	0.47	4.8	299	6.3	1.0
Union	0.4	4.6	2304	10.2	0.9

Table (10.b) Indicators for Leprosy (2011)

Leprosy Elimination Activities (2011)					
Regions and States	Registered Leprosy cases per 10000 Population	New case detection rate per 100,000 Population	No: of cases released from treatment	Percentage of Disability Grade 2 among new cases	Prevalence Detection Ratio
Kachin	0.06	0.6	10	0.0	0.9
Kayah	0.14	0.7	0	50.0	2.0
Kayin	0.24	2.9	35	12.2	0.8
Chin	0.04	0.0	9	0.0	0.0
Sagaing	0.72	7.4	341	2.9	1.0
Tanintharyi	0.21	1.2	29	0.0	1.6
Bago	0.80	9.3	410	10.0	0.9
Magway	0.60	6.4	295	5.3	0.9
Mandalay	0.53	5.1	266	9.2	1.1
Naypyitaw	0.96	9.0	60	17.9	1.1
Mon	0.13	1.4	27	20.0	0.9
Rakhine	0.06	0.6	17	5.3	1.1
Yangon	0.20	1.4	111	17.1	1.4
Shan	0.53	5.8	274	11.9	0.9
Ayeyarwaddy	0.54	5.4	309	8.6	1.0
Union	0.5	4.7	2193	8.8	1.0

6. AIDS/STI Prevention and Control Services

Figure(28) Primigravida mother who tested VDRL (syphilis) among registered pregnant mother(2010)

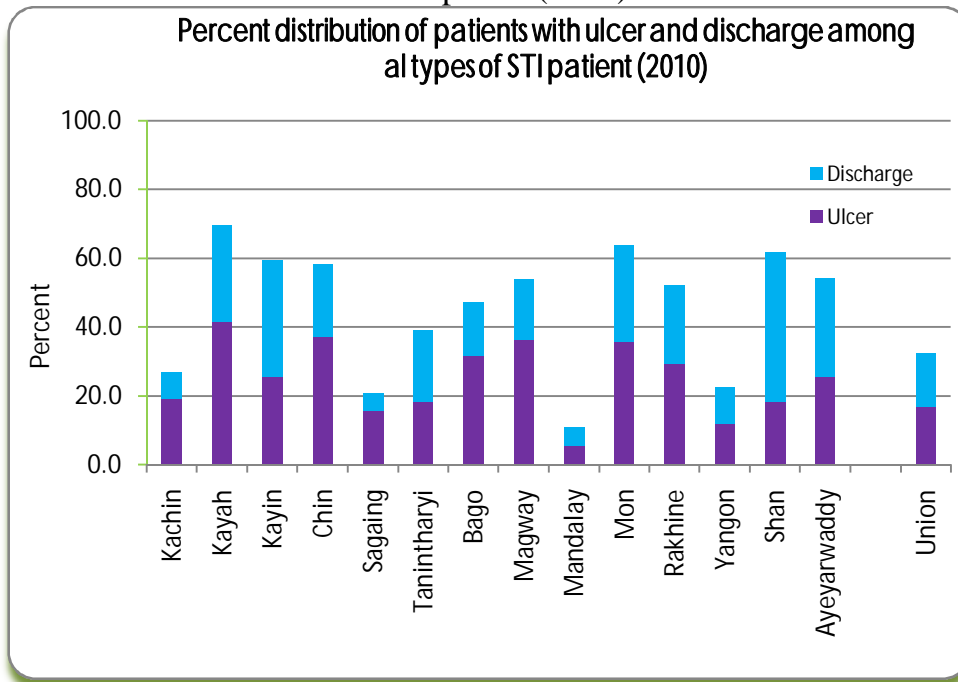
Region and State	Registered AN (New)	Number of primigravida who tested VDRL (syphilis)	Percent 2010
Kachin	31326	5405	17.3
Kayah	5976	289	4.8
Kayin	28182	2665	9.5
Chin	7556	273	3.6
Sagaing	96072	5952	6.2
Tanintharyi	34438	1849	5.4
Bago	98775	5493	5.6
Magway	77910	5560	7.1
Mandalay	125872	14369	11.4
Mon	47717	4015	8.4
Rakhine	67465	649	1.0
Yangon	116631	31789	27.3
Shan	80747	9510	11.8
Ayeyar waddy	128435	5794	4.5

Figure(29) Primigravida mother who tested VDRL (syphilis) among registered pregnant mother(2011)

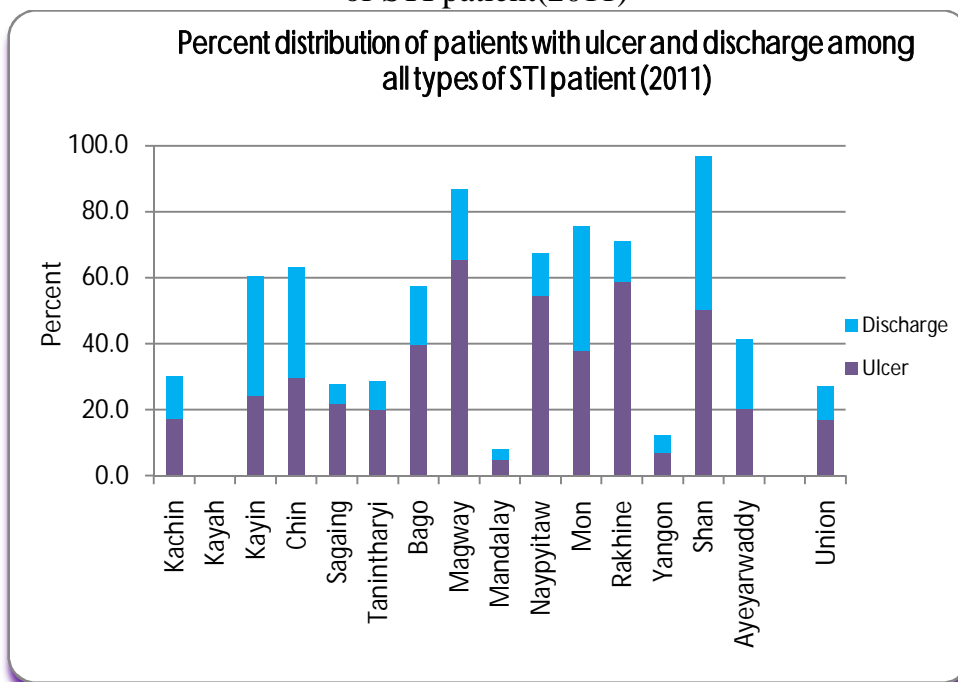
Region and State	Registered AN (New)	Number of primigravida who tested VDRL (syphilis)	Percent 2011
Kachin	32568	4157	12.8
Kayah	6484	2	0.0
Kayin	27918	2850	10.2
Chin	8575	35	0.4
Sagaing	90416	8931	9.9
Tanintharyi	30034	2805	9.3
Bago	99377	5562	5.6
Magway	78394	5978	7.6
Mandalay	110988	11301	10.2
Naypyitaw	20156	1430	7.1
Mon	45967	3547	7.7
Rakhine	71092	542	0.8
Yangon	123403	28698	23.3
Shan	82967	9377	11.3
Ayeyarwaddy	127489	7393	5.8

Among pregnant women registered, the primigravida who going for VDRL testing for syphilis was recorded, percentage distribution were seen in figure 28 and 29. The positive test in primigravida is important for determining spread of sexually transmitted infection.

Figure(30) Percent distribution of patients with ulcer and discharge among all types of STI patient(2010)



Figure(31) Percent distribution of patients with ulcer and discharge among all types of STI patient(2011)



STI patient were visiting the clinic presenting with ulcer and urethral discharges rather than other symptoms. BHS had to manage with syndromic management

approach. In 2010, Kayah, Mon and Shan states reported more than 60% of patients coming with ulcer and discharge. In 2011, Shan and Magway reported patients with ulcer and discharge were common (more than 80%).

Table (11.a) Indicators for Sexually Transmitted Infection (2010)

AIDS/ STI Prevention and Control (2010)				
Regions and States	VDRL positive rate in tested Primigravida (%)	Genital Ulcer Rate (per 100,000 Pop:)	Urethral discharge rate (male) (per 100,000 Pop:)	New STI Patient rate (%)
Kachin	0.78	6.7	2.7	0.2
Kayah	0.35	13.8	9.3	0.2
Kayin	0.23	10.4	13.9	0.3
Chin	0.73	10.7	6.1	0.2
Sagaing	0.54	1.9	0.6	0.1
Tanintharyi	1.51	25.8	29.0	1.0
Bago	0.80	3.9	2.0	0.1
Magway	0.31	5.9	2.8	0.1
Mandalay	0.36	3.8	3.7	0.6
Mon	0.50	7.3	5.7	0.1
Rakhine	1.85	5.2	4.0	0.1
Yangon	0.88	5.3	4.6	0.4
Shan	0.16	2.7	6.4	0.1
Ayeyarwaddy	1.07	5.0	5.6	0.1
Union	0.65	5.3	4.9	0.2

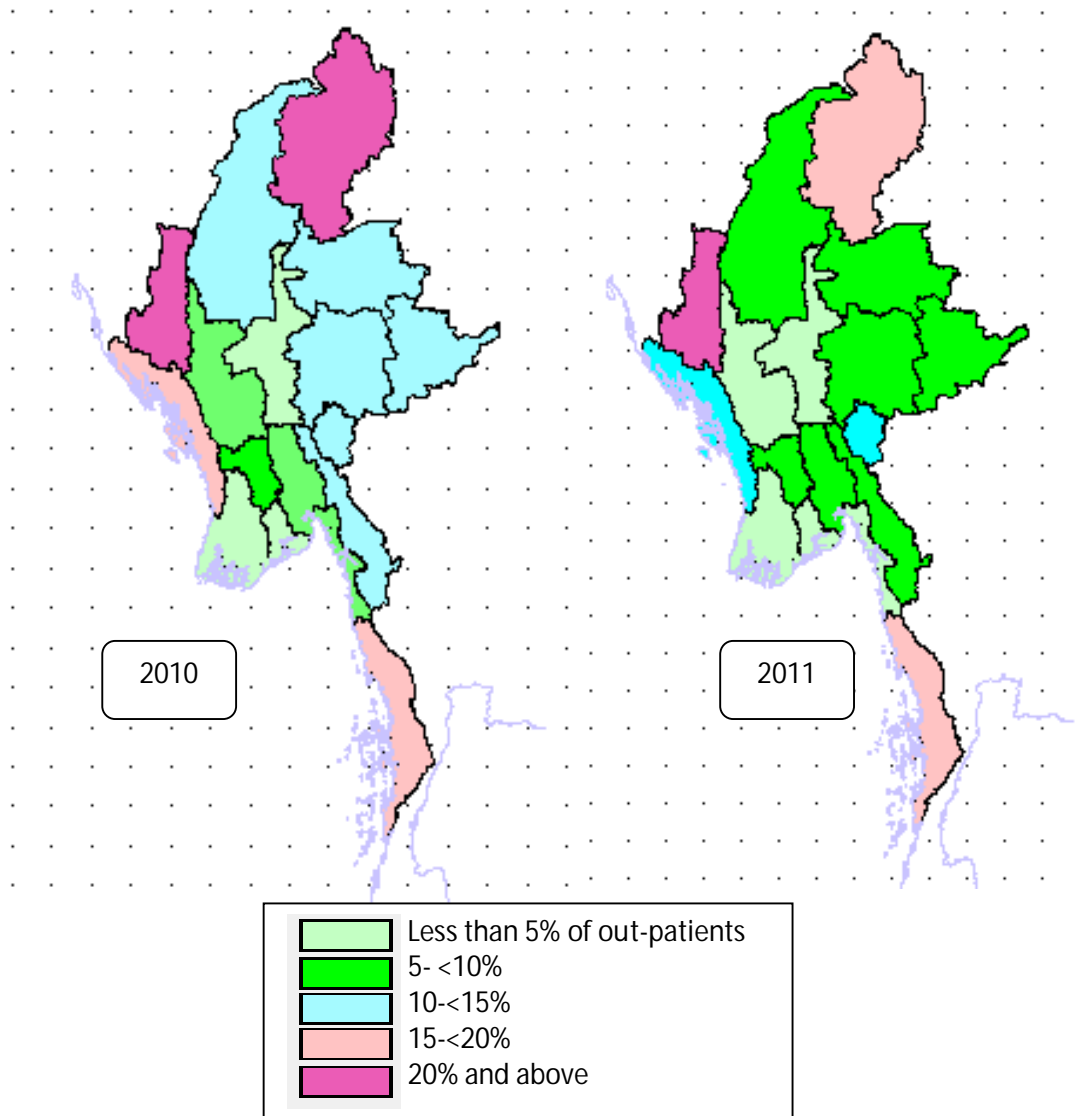
Remarks: Including data from STI teams in 2010

Table (11.b) Indicators for Sexually Transmitted Infection (2011)

AIDS/ STI Prevention and Control (2011)				
Regions and States	VDRL positive rate in tested Primigravida (%)	Genital Ulcer Rate (per 100,000 Pop:)	Urethral discharge rate (male) (per 100,000 Pop:)	New STI Patient rate (%)
Kachin	0.6	1.1	0.8	0.0
Kayah	0.0	0.0	0.0	0.0
Kayin	0.0	7.1	10.5	0.2
Chin	0.0	1.7	1.9	0.0
Sagaing	0.2	3.4	0.9	0.1
Tanintharyi	0.7	11.9	5.2	0.3
Bago	0.4	3.0	1.4	0.1
Magway	0.2	6.3	2.1	0.1
Mandalay	0.2	2.9	2.0	0.5
Naypyitaw	1.2	3.2	0.7	0.1
Mon	0.2	0.7	0.7	0.0
Rakhine	0.4	6.0	1.2	0.0
Yangon	0.9	2.5	2.0	0.3
Shan	0.04	3.0	2.7	0.1
Ayeyarwaddy	0.5	2.8	2.9	0.1
Union	0.5	3.6	2.2	0.1

7. Malaria Control Services

Figure(32)Percentage of Malaria cases among out-patients (2010-2011)



Malaria cases among out-patients were more than 20% in Chin State for 2 consecutive years. Most of the state/region showed lower malaria cases percent than previous year except Tanintharyi, Bago and Kayah.

Table (12.a) Indicators for Malaria (2010)

Institutional based Malaria (2010)		
Regions and States	% of Malaria cases among overall out patients	Case Fatality Rate (Inpatient) (%)
Kachin	34.6	1.8
Kayah	13.6	1.4
Kayin	10.2	2.1
Chin	27.3	1.4
Sagaing	12.1	1.7
Tanintharyi	18.4	1.2
Bago	6.7	1.0
Magway	5.9	1.3
Mandalay	2.8	1.6
Mon	5.1	1.8
Rakhine	18.7	3.2
Yangon	0.6	3.1
Shan	11.5	1.9
Ayeyarwaddy	3.1	1.4
Union	9.0	1.7

Table (12.b) Indicators for Malaria (2011)

Institutional based Malaria (2011)		
Regions and States	% of Malaria cases among overall out patients	Case Fatality Rate (Inpatient) (%)
Kachin	18.3	3.4
Kayah	11.9	3.1
Kayin	9.1	1.4
Chin	24.5	3.3
Sagaing	8.2	1.8
Tanintharyi	19.7	1.1
Bago	5.2	1.7
Magway	3.0	2.1
Mandalay	2.6	1.4
Naypyitaw	3.1	0.7
Mon	3.6	2.1
Rakhine	12.6	2.2
Yangon	0.2	4.5
Shan	8.1	1.8
Ayeyarwaddy	3.6	2.0
Union	6.5	2.0

Remarks: Inpatients data including the data from all hospitals

8. Trachoma Control and Prevention of Blindness

Figure(33) Percentage of eye patients cared by BHS among all patients(2010)

Region and State 2010	Eye patient (New)	General Clinic Attendances (New)	% of eye patients among all clinic attendances
Mandalay	42278	760942	5.6
Bago	12819	662759	1.9
Tanintharyi	3313	206807	1.6
Sagaing	14935	934278	1.6
Magway	7425	668814	1.1
Kayin	1555	220823	0.7
Rakhine	4030	617583	0.7
Kachin	1698	286077	0.6
Mon	2758	476313	0.6
Ayeyarwaddy	4943	869242	0.6
Shan	2644	483556	0.5
Yangon	1981	685157	0.3
Chin	196	76736	0.3
Kayah	59	56527	0.1

Figure(34) Percentage of eye patients cared by BHS among all patients(2011)

Region and State 2011	Eye patient (New)	General Clinic Attendances (New)	% of eye patients among all clinic attendances
Mandalay	35610	735021	4.8
Bago	15069	697134	2.2
Sagaing	15921	893937	1.8
Magway	5546	684581	0.8
Tanintharyi	1770	237077	0.7
Kayin	1543	210409	0.7
Shan	2989	524337	0.6
Naypyitaw	492	105409	0.5
Mon	2132	483287	0.4
Ayeyarwaddy	3332	913782	0.4
Kachin	953	281760	0.3
Chin	238	86188	0.3
Rakhine	1392	701965	0.2
Yangon	894	810283	0.1
Kayah	53	59105	0.1

The BHS had to care the eye patients with primary eye care approach and referred to higher level if needed. The percentages of eye patients among their out-patients are shown in the above figures.

Figure(35)Reported ophthalmia neonatorum(2005-2011)

Ophthalmia Neonatorum (New)							
Region and State	2005	2006	2007	2008	2009	2010	2011
Kachin	9	5	1	1	5	0	1
Kayah	0	0	0	0	0	0	0
Kayin	1	0	1	3	7	2	3
Chin	0	2	2	1	6	4	0
Sagaing	21	14	7	13	9	12	12
Tanintharyi	3	0	0	0	5	1	1
Bago	25	36	9	5	8	5	7
Magway	2	13	4	5	17	3	1
Mandalay	13	6	25	17	3	6	8
Naypyitaw	-	-	-	-	-	-	0
Mon	9	8	9	4	1	3	6
Rakhine	15	6	11	3	4	4	7
Yangon	7	14	13	10	5	17	1
Shan	7	60	10	24	1	2	7
Ayeyarwaddy	14	22	8	3	6	2	3
Union	126	186	100	89	77	61	57

The number of reported acute conjunctivitis cases among neonate was decreasing in figure 34.

Table (13.a) Indicators for Prevention of Blindness (2010)

Trachoma Control and Prevention of Blindness (2010)				
Regions and States	New case of eye diseases per 100,000 Population	Active trachoma rate among 10 year old children (%)	People with blindness per 100,000 population	New cases of ophthalmia neonatorum per 1000 Live Birth
Kachin	119.6	0.0020	0.0006	0.0
Kayah	22.0	0.0017	0.0000	0.0
Kayin	109.1	0.0000	0.0003	0.1
Chin	41.2	0.0073	0.0000	0.4
Sagaing	289.5	0.0057	0.0026	0.1
Tanintharyi	233.6	0.0003	0.0069	0.0
Bago	261.6	0.0010	0.0155	0.1
Magway	182.9	0.0044	0.0028	0.0
Mandalay	660.5	0.0015	0.0080	0.1
Mon	131.8	0.0002	0.0000	0.1
Rakhine	125.8	0.0008	0.0001	0.1
Yangon	32.8	0.0002	0.0002	0.2
Shan	58.9	0.0044	0.0002	0.0
Ayeyarwaddy	77.7	0.0004	0.0001	0.0
Union	210.9	0.0020	0.0035	0.1

Table (13.b) Indicators for Prevention of Blindness (2011)

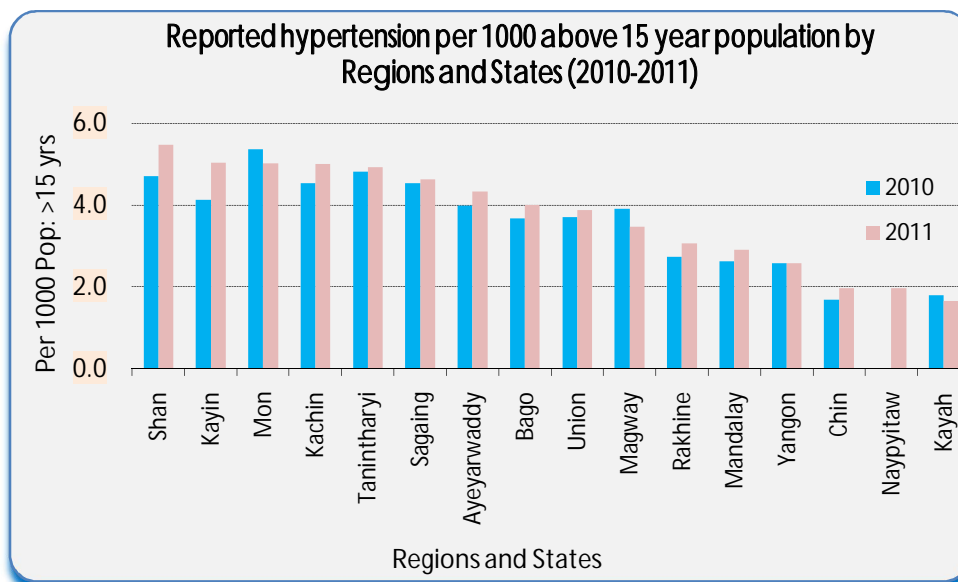
Trachoma Control and Prevention of Blindness (2011)				
Regions and States	New case of eye diseases per 100,000 Population	Active trachoma rate among 10 year old children (%)	People with blindness per 100,000 population	New cases of ophthalmia neonatorum per 1000 Live Birth
Kachin	66.1	0.0000	0.0006	0.0
Kayah	19.1	0.0000	0.0004	0.0
Kayin	107.8	0.0010	0.0001	0.1
Chin	50.0	0.0045	0.0000	0.0
Sagaing	310.2	0.0052	0.0016	0.1
Tanintharyi	129.6	0.0078	0.0010	0.0
Bago	310.8	0.0010	0.0180	0.1
Magway	135.5	0.0050	0.0029	0.0
Mandalay	618.3	0.0006	0.0148	0.1
Naypyitaw	52.7	0.0016	0.0001	0.0
Mon	100.8	0.0003	0.0000	0.2
Rakhine	43.2	0.0007	0.0003	0.1
Yangon	15.0	0.0000	0.0000	0.0
Shan	66.5	0.0011	0.0002	0.1
Ayeyarwaddy	52.7	0.0002	0.0002	0.0
Union	183.7	0.0016	0.0042	0.1

Note : Data obtained from Basic Health Workers who made diagnosis in the community

Non-Communicable Diseases

1. Prevention of Cardiovascular Diseases

Figure(36) Reported hypertension per 1000 above 15 year population by Regions and States(2010-2011)



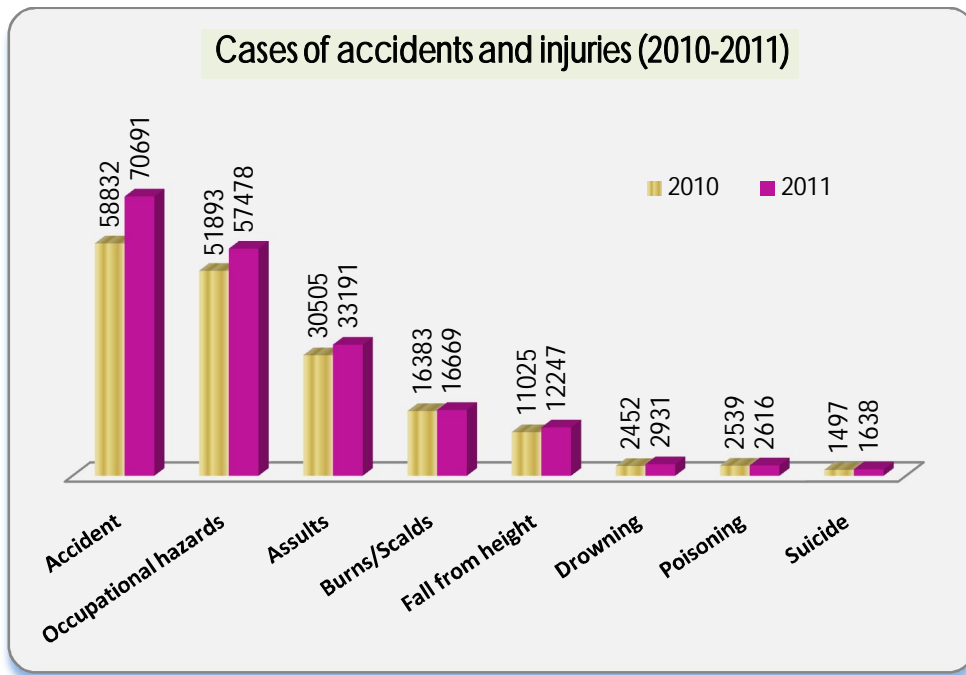
Basic Health Staff diagnosed the patients with hypertension among those coming to the clinic as well as patients cared in the field visits, those hypertension cases detected are depicted by regions and states. The rate for 2011 was more than that of 2010 except Mon, Magway and Kayah(Figure-36 and Table-14).

Table (14) Indicators for Prevention of Cardiovascular Disease (2010-2011)

Detection of Hypertension (2010-2011)		
Hypertension per 1000 Population (above 15 years)		
Regions and States	2010	2011
Kachin	4.5	5.0
Kayah	1.8	1.7
Kayin	4.1	5.0
Chin	1.7	2.0
Sagaing	4.6	4.6
Tanintharyi	4.8	4.9
Bago	3.7	4.0
Magway	3.9	3.5
Mandalay	2.6	2.9
Naypyitaw	-	2.0
Mon	5.4	5.0
Rakhine	2.7	3.1
Yangon	2.6	2.6
Shan	4.7	5.5
Ayeyarwaddy	4.0	4.3
Union	3.7	3.9

2. Accident and Injury Prevention

Figure(37)Cases of Accidents and Injuries (2010-2011)



Figure(38)Deaths of Accidents and Injuries (2010-2011)



Regarding to cases of accidents and injuries, RTA is the most common and suicidal cases is least common. However, according to deaths from accidents and injuries, RTA was followed by drowning and suicide. Mortality rate per 100,000 population for RTA in 2011 was highest in Nay Pyi Taw followed by Mon, Mandalay and Kachin(Table 15).

Table (15.a) Indicators for Prevention of Accidents and Injuries (2010)

i Prevention of Accident and Injury (2010)									
Regions and States	Road Traffic Accident injury		Occupational injury		Poisoning		Fall from height		
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
Kachin	3.27	6.27	2.35	4.23	0.09	0.49	0.34	1.55	
Kayah	1.22	1.12	0.55	1.12	0.03	0.37	0.12	0.74	
Kayin	2.27	3.02	1.28	0.49	0.07	0.14	0.34	1.54	
Chin	0.82	2.94	0.68	1.26	0.05	1.47	0.32	1.26	
Sagaing	1.43	4.50	1.68	1.88	0.05	0.41	0.32	1.76	
Tanintharyi	1.47	2.68	1.31	1.27	0.04	0.49	0.31	0.71	
Bago	1.38	6.59	1.07	0.76	0.10	0.49	0.28	1.14	
Magway	0.65	2.02	1.41	0.81	0.03	0.39	0.25	1.50	
Mandalay	1.46	5.16	0.88	1.06	0.06	0.62	0.21	1.30	
Mon	2.05	7.12	1.13	1.00	0.04	0.24	0.29	1.58	
Rakhine	0.38	0.47	1.04	0.44	0.05	0.69	0.24	0.28	
Yangon	0.55	2.00	0.40	0.36	0.04	0.25	0.10	0.28	
Shan	2.06	4.25	1.43	1.14	0.07	0.60	0.26	0.82	
Ayeyarwaddy	0.61	2.08	0.73	0.47	0.03	0.39	0.14	0.75	
Union	(3)	1.23	3.69	1.09	0.98	0.05	0.46	0.23	1.04
	(4)	58832	1762	51893	467	2539	219	11025	497

Table (15.a) Indicators for Prevention of Accidents and Injuries (2011)

i Prevention of Accident and Injury (2011)									
Regions and States	Road Traffic Accident injury		Occupational injury		Poisoning		Fall from height		
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
Kachin	4.16	7.07	2.67	4.58	0.11	0.62	0.33	1.59	
Kayah	1.66	2.88	0.86	3.96	0.01	0.00	0.18	0.72	
Kayin	2.45	2.79	1.44	0.56	0.06	0.42	0.28	1.47	
Chin	0.96	2.52	0.97	1.26	0.04	0.21	0.39	1.26	
Sagaing	1.70	6.35	1.90	1.87	0.04	0.41	0.34	1.73	
Tanintharyi	1.87	3.37	1.62	1.24	0.06	0.59	0.37	1.24	
Bago	1.68	6.39	1.16	0.97	0.11	0.74	0.34	0.93	
Magway	0.88	3.42	1.37	0.68	0.03	0.24	0.31	1.86	
Mandalay	1.86	8.36	0.99	1.18	0.06	0.59	0.27	1.27	
Naypyitaw	1.13	10.50	1.05	1.39	0.05	0.32	0.14	0.96	
Mon	2.19	8.84	1.09	0.76	0.05	0.47	0.28	0.99	
Rakhine	0.45	1.06	1.25	0.31	0.04	0.50	0.27	0.37	
Yangon	0.73	2.33	0.39	0.12	0.04	0.15	0.09	0.30	
Shan	2.46	4.74	1.59	1.14	0.07	0.60	0.00	0.67	
Ayeyarwaddy	0.66	1.74	0.82	0.54	0.03	0.47	0.14	0.60	
Union	(3)	1.48	4.68	1.20	1.00	0.05	0.46	0.26	1.00
	(4)	70691	2238	57478	478	2616	220	12247	480

- (1) Morbidity rate per 1000 Population
(2) Mortality rate per 100,000 Population
(3) Rate for Union
(4) Actual number for Union

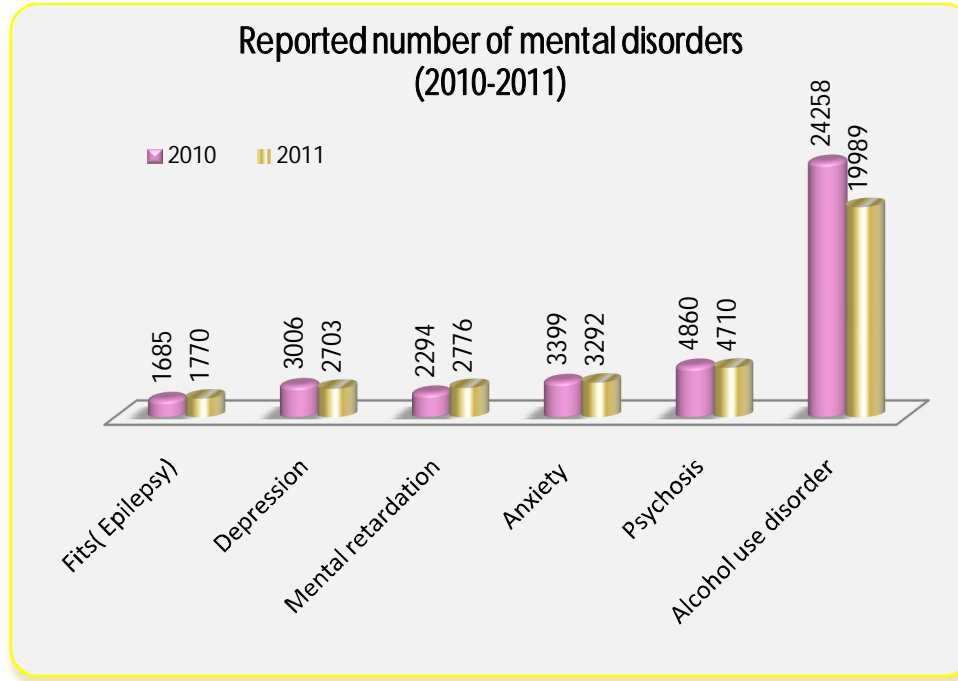
ii Prevention of Accident and Injury (2010)									
Regions and States	Thermal injury		Drowning		Suicide		Assault		
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
Kachin	0.41	0.35	0.08	6.48	0.04	1.83	0.77	1.76	
Kayah	0.11	0.37	0.01	0.37	0.01	0.74	0.11	0.37	
Kayin	0.46	0.00	0.05	3.72	0.07	3.86	0.57	0.56	
Chin	0.26	1.89	0.04	2.94	0.01	0.00	0.27	0.84	
Sagaing	0.50	0.29	0.06	3.61	0.04	1.94	0.53	0.95	
Tanintharyi	0.30	0.56	0.08	4.87	0.04	2.33	0.48	0.92	
Bago	0.37	0.29	0.07	4.96	0.04	1.59	1.10	2.20	
Magway	0.40	0.20	0.03	2.14	0.02	0.86	0.32	0.76	
Mandalay	0.28	0.33	0.04	2.94	0.05	1.92	0.73	1.08	
Mon	0.50	0.62	0.07	5.50	0.03	2.06	0.47	1.10	
Rakhine	0.42	0.09	0.09	3.75	0.03	1.37	0.56	1.44	
Yangon	0.14	0.15	0.03	2.12	0.01	0.76	1.08	0.50	
Shan	0.32	0.47	0.03	1.85	0.04	1.60	0.32	0.49	
Ayeyarwaddy	0.33	0.14	0.06	3.77	0.02	0.75	0.46	1.01	
Union	(3)	0.34	0.29	0.05	3.39	0.03	1.48	0.64	1.03
	(4)	16383	136	2452	1619	1497	705	30505	493

ii Prevention of Accident and Injury (2011)									
Regions and States	Thermal injury		Drowning		Suicide		Assault		
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	
Kachin	0.42	0.76	0.07	5.34	0.06	2.70	0.85	1.94	
Kayah	0.16	0.00	0.03	2.16	0.01	0.72	0.07	0.00	
Kayin	0.48	0.21	0.09	7.05	0.07	3.98	0.56	0.56	
Chin	0.25	0.00	0.03	1.68	0.01	0.42	0.36	0.63	
Sagaing	0.54	0.55	0.07	4.52	0.03	1.75	0.58	1.27	
Tanintharyi	0.34	0.73	0.10	6.37	0.04	2.42	0.57	1.03	
Bago	0.38	0.33	0.07	5.53	0.06	2.76	1.09	2.04	
Magway	0.37	0.10	0.05	3.35	0.02	1.12	0.40	1.32	
Mandalay	0.27	0.31	0.04	2.87	0.04	1.71	0.85	0.94	
Naypyitaw	0.27	0.32	0.07	4.50	0.04	2.14	0.72	1.93	
Mon	0.42	0.14	0.08	6.10	0.04	1.99	0.43	0.90	
Rakhine	0.46	0.25	0.12	6.14	0.04	1.43	0.63	1.24	
Yangon	0.15	0.08	0.04	2.99	0.02	0.72	1.18	0.45	
Shan	0.34	0.31	0.04	2.29	0.04	1.80	0.37	0.85	
Ayeyarwaddy	0.32	0.27	0.06	5.00	0.02	1.06	0.50	0.89	
Union	(3)	0.35	0.29	0.06	4.28	0.03	1.67	0.69	1.09
	(4)	16669	140	2931	2047	1638	799	33191	522

- (1) Morbidity rate per 1000 Population
(2) Mortality rate per 100,000 Population
(3) Rate for Union
(4) Actual number for Union

3. Mental Health

Figure(39)Reported number of mental disorders (2010-2011)



The common mental health problems are Psychosis, Depression, Anxiety disorders, alcoholic dependence, epilepsy and mental retardation. Alcoholic dependence was the most common (figure 39) and highest in 2011 are Kachin State followed by Kayin, Shan and Sagaing Region (Table 16).

Table (16.a) Indicators for Mental Health (2010)

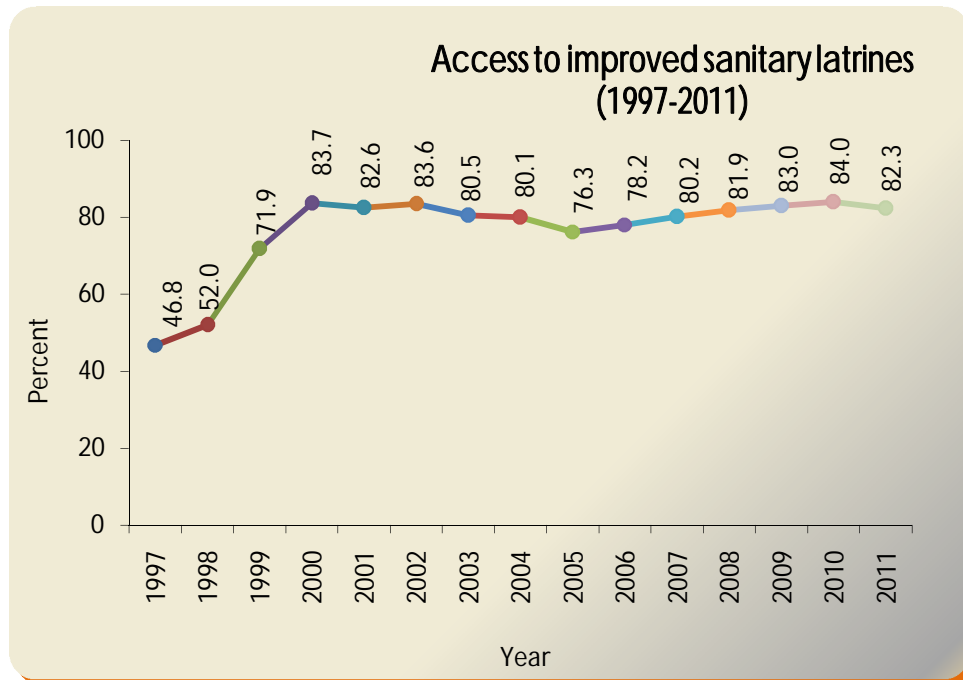
Mental Health (2010)						
Regions and States	Per 1000 population					
	Psychosis	Depression	Anxiety Neurosis	Alcoholic Dependence	Epilepsy	Mental retardation
Kachin	0.143	0.025	0.063	0.610	0.037	0.049
Kayah	0.242	0.015	0.000	0.045	0.004	0.000
Kayin	0.184	0.087	0.104	0.788	0.059	0.053
Chin	0.261	0.063	0.021	0.143	0.044	0.034
Sagaing	0.182	0.074	0.086	0.674	0.055	0.068
Tanintharyi	0.271	0.352	0.110	0.365	0.037	0.084
Bago	0.068	0.081	0.089	0.614	0.027	0.040
Magway	0.116	0.051	0.070	0.868	0.039	0.071
Mandalay	0.067	0.028	0.037	0.349	0.016	0.025
Mon	0.091	0.030	0.117	0.367	0.031	0.012
Rakhine	0.113	0.122	0.113	0.278	0.047	0.077
Yangon	0.040	0.035	0.047	0.316	0.024	0.027
Shan	0.083	0.059	0.076	0.881	0.053	0.072
Ayeyarwaddy	0.077	0.035	0.056	0.300	0.031	0.041
Union	0.102	0.063	0.071	0.508	0.035	0.048

Table (16.b) Indicators for Mental Health (2011)

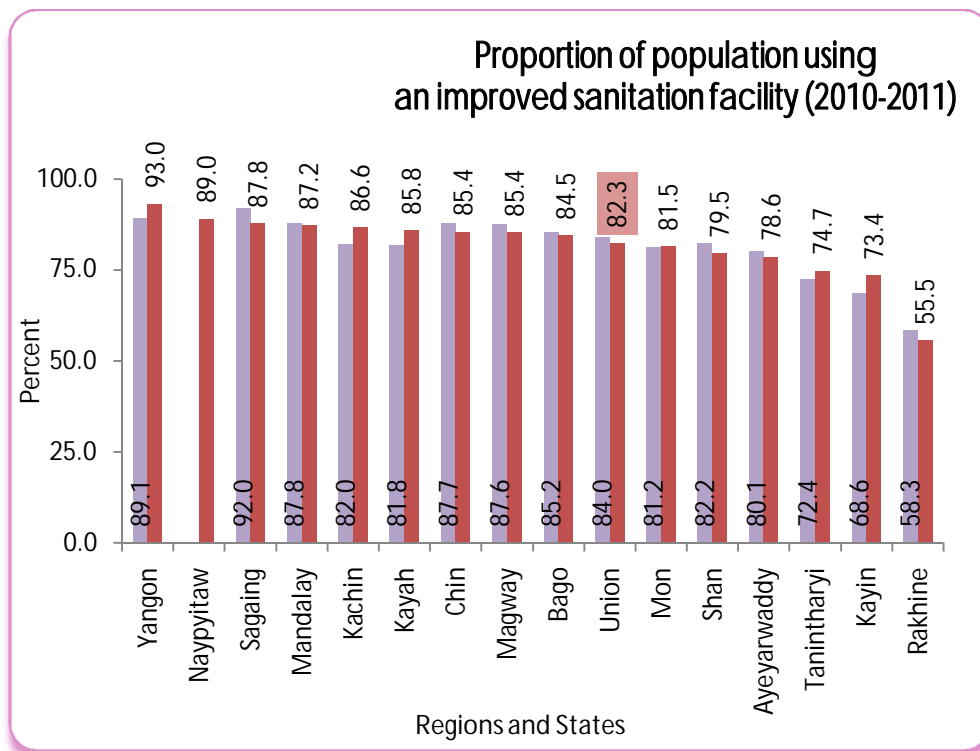
Mental Health (2011)						
Regions and States	Per 1000 population					
	Psychosis	Depression	Anxiety Neurosis	Alcoholic Dependence	Epilepsy	Mental retardation
Kachin	0.070	0.035	0.084	0.860	0.039	0.044
Kayah	0.342	0.000	0.004	0.079	0.014	0.032
Kayin	0.136	0.126	0.133	0.818	0.068	0.059
Chin	0.179	0.063	0.065	0.095	0.019	0.053
Sagaing	0.157	0.092	0.126	0.637	0.062	0.095
Tanintharyi	0.248	0.335	0.059	0.175	0.034	0.040
Bago	0.063	0.045	0.074	0.347	0.033	0.045
Magway	0.097	0.041	0.060	0.450	0.036	0.071
Mandalay	0.126	0.022	0.027	0.329	0.029	0.092
Naypyitaw	0.183	0.004	0.016	0.165	0.015	0.005
Mon	0.071	0.041	0.081	0.297	0.026	0.020
Rakhine	0.127	0.106	0.122	0.317	0.039	0.058
Yangon	0.038	0.025	0.041	0.332	0.026	0.033
Shan	0.067	0.053	0.077	0.730	0.054	0.083
Ayeyarwaddy	0.064	0.029	0.046	0.242	0.027	0.033
Union	0.098	0.056	0.069	0.418	0.037	0.058

ENVIRONMENTAL HEALTH SERVICES

Figure(40) Access to improved sanitary latrines (1997-2011)



Figure(41) Proportion of population using an improved sanitation facility (2010-2011)



National figure for sanitary latrines coverage was 82.3% in 2011. Yangon Region has 93% coverage (highest) and Rakhine state has lowest(55.5%).

Table (17.a) Indicators for Environmental Sanitation (2010)

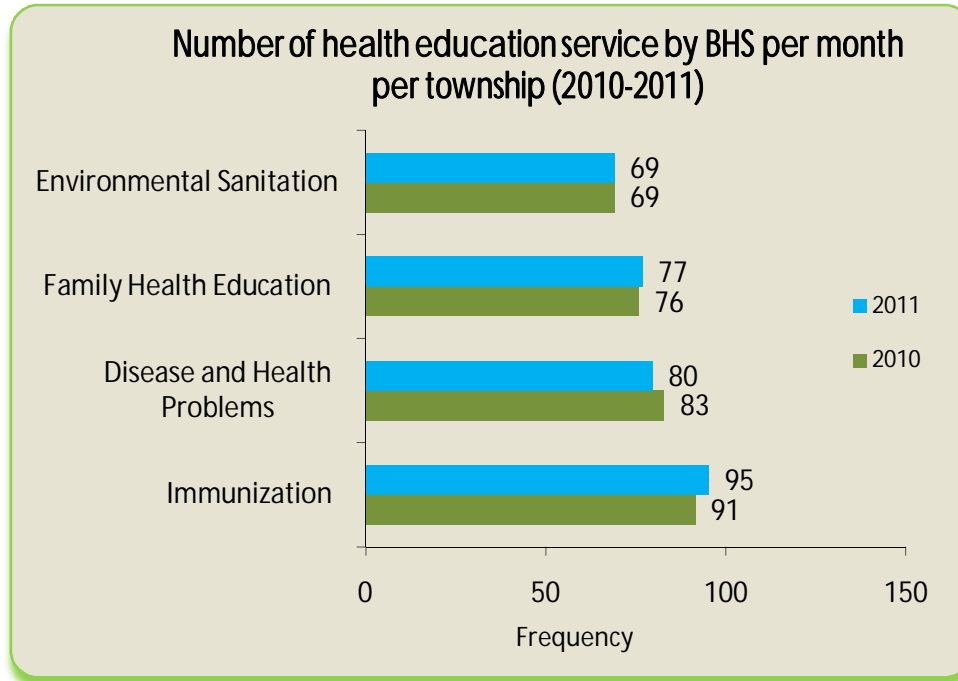
Environmental Sanitation (2010)					
Regions and States	No. of mass Environmental Sanitation activities per ward and village	Access to improved sanitary latrines (%)			Freq: of food stalls inspection in a year
		Union	Urban	Rural	
Kachin	2.9	82.0	84.1	81.2	2110
Kayah	1.2	81.8	93.6	76.4	26
Kayin	2.2	68.6	81.5	66.0	524
Chin	1.0	87.7	92.3	86.7	91
Sagaing	3.2	92.0	92.7	91.8	2292
Tanintharyi	5.7	72.4	79.5	70.2	2574
Bago	4.0	85.2	95.7	83.0	3423
Magway	2.7	87.6	92.0	86.8	2103
Mandalay	3.7	87.8	82.7	90.1	2468
Mon	13.9	81.2	87.3	79.4	4989
Rakhine	2.9	58.3	56.6	58.8	2492
Yangon	8.4	89.1	89.6	88.1	4237
Shan	1.1	82.2	91.4	79.4	1997
Ayeyarwaddy	2.6	80.1	81.2	79.9	3778
Union	3.1	84.0	86.2	83.2	33104

Table (17.b) Indicators for Environmental Sanitation (2011)

Environmental Sanitation (2011)					
Regions and States	No. of mass Environmental Sanitation activities per ward and village	Access to improved sanitary latrines (%)			Freq: of food stalls inspection in a year
		Union	Urban	Rural	
Kachin	2.4	86.6	88.5	85.9	1635
Kayah	0.9	85.8	92.6	82.7	25
Kayin	1.9	73.4	89.9	70.2	332
Chin	1.6	85.4	92.5	83.9	91
Sagaing	3.1	87.8	96.9	86.3	2724
Tanintharyi	6.1	74.7	78.4	73.5	2563
Bago	4.0	84.5	92.6	82.8	2768
Magway	3.9	85.4	98.1	83.2	2575
Mandalay	3.4	87.2	89.7	86.0	1630
Naypyitaw	3.0	89.0	96.6	85.1	564
Mon	11.7	81.5	87.8	79.5	4245
Rakhine	2.6	55.5	75.2	51.8	3608
Yangon	9.4	93.0	93.1	92.8	6745
Shan	1.1	79.5	88.4	76.9	2103
Ayeyarwaddy	2.4	78.6	87.3	76.8	4450
Union	3.2	82.3	90.5	79.6	36058

HEALTH EDUCATION ACTIVITIES

Figure(42)Number of Health Education Service by BHS per month per township(2010-2011)



Health education activities were important for raising awareness of community concerning their health. Morbidity and mortality of disease mostly depend on their health educational status. BHS provide health education to the community by means of advocacy meeting, production and distribution of IEC materials and health talks. The health education on immunization was most common activities by BHS per month in each township.

Table (18.a) Indicators for Health Education (2010)

Health Education Services (2010)								
Regions and States	Family Health		Immunization		Disease and Health Problem		Environmental Sanitation	
	Average number of talk per month	Average number of talk per BHS	Average number of talk per month	Average number of talk per BHS	Average number of talk per month	Average number of talk per BHS	Average number of talk per month	Average number of talk per BHS
Kachin	59	24	51	21	57	24	49	20
Kayah	11	4	18	6	17	6	12	4
Kayin	49	9	71	13	55	10	54	10
Chin	24	7	19	5	20	6	23	6
Sagaing	64	16	92	24	82	21	57	15
Tanintharyi	66	19	78	23	72	21	71	21
Bago	100	19	115	22	104	20	93	18
Magway	66	12	131	25	80	15	72	14
Mandalay	98	21	133	28	99	21	83	17
Mon	154	26	116	20	157	27	157	27
Rakhine	84	23	95	26	87	24	79	22
Yangon	69	29	56	24	89	38	66	28
Shan	54	23	56	24	54	23	37	16
Ayeyarwaddy	130	20	187	29	132	21	121	19
Union	76	20	91	24	83	21	69	18

Table (18.b) Indicators for Health Education (2011)

Health Education Services (2011)								
Regions and States	Family Health		Immunization		Disease and Health Problem		Environmental Sanitation	
	Average number of talk per month	Average number of talk per BHS	Average number of talk per month	Average number of talk per BHS	Average number of talk per month	Average number of talk per BHS	Average number of talk per month	Average number of talk per BHS
Kachin	58	23	55	21	59	23	48	19
Kayah	12	4	18	7	21	7	14	5
Kayin	48	9	75	15	57	11	50	10
Chin	31	8	20	5	25	6	28	7
Sagaing	67	0	96	0	74	0	54	0
Tanintharyi	66	18	74	21	74	20	74	20
Bago	102	20	116	23	97	19	92	18
Magway	59	11	134	25	79	14	74	14
Mandalay	104	23	134	29	110	24	83	18
Naypyitaw	33	13	83	32	57	22	54	21
Mon	143	24	117	20	147	25	151	26
Rakhine	115	26	110	25	100	23	86	19
Yangon	63	27	61	26	71	30	63	27
Shan	58	24	58	25	53	22	41	17
Ayeyarwaddy	123	19	187	28	121	18	115	17
Union	77	19	95	24	80	20	69	17

Township Level Analysis

Primary medical care and referral of patients

Percentiles	1. % of general clinic attendances	2. Average frequency of clinic attendances	3. % of field attendances
20	14.9	1.4	10.7
40	20.7	1.5	14.8
60	26.3	1.6	19.1
80	35.1	1.8	24.4

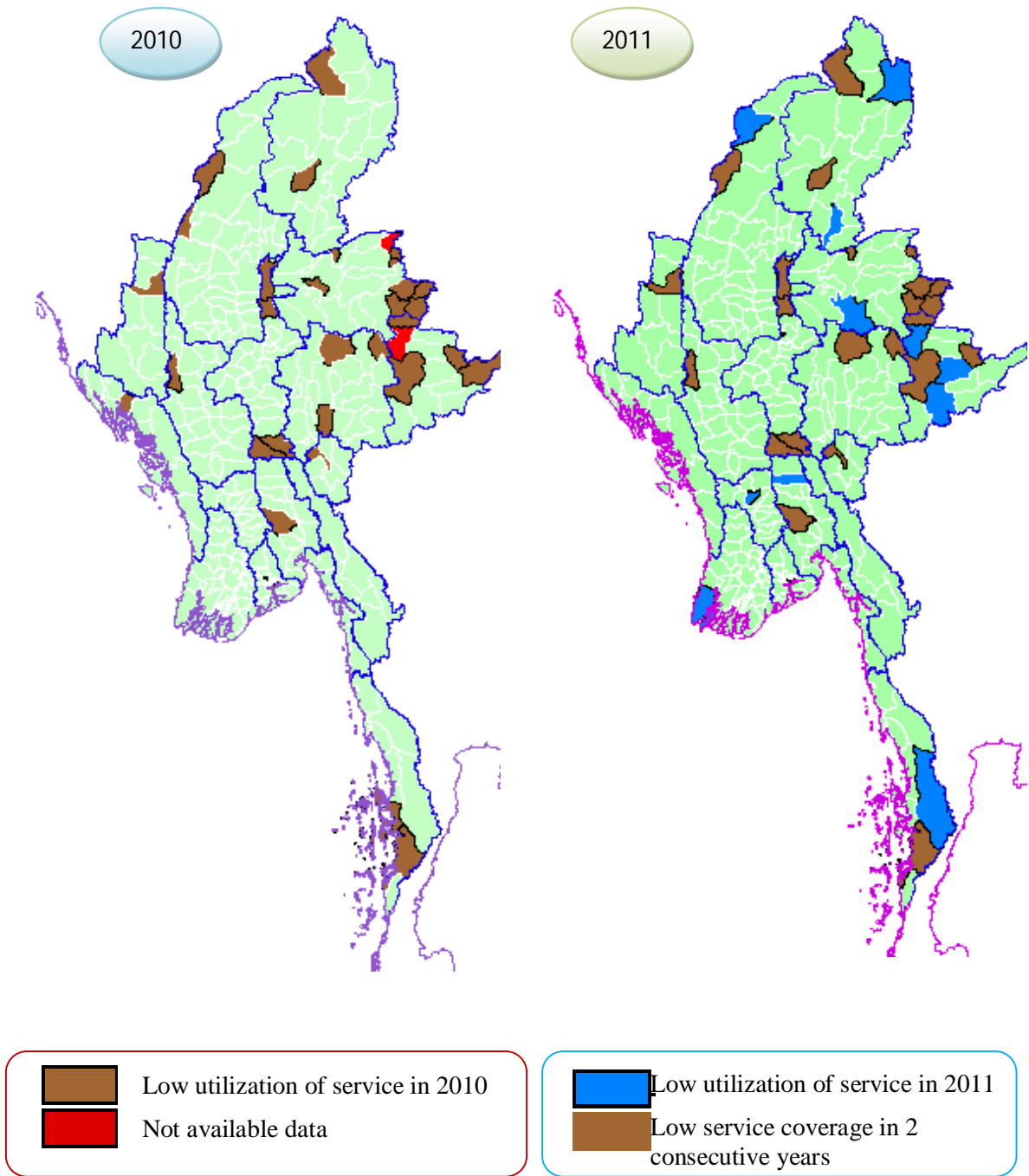
2010

Percentiles	1. % of general clinic attendances	2. Average frequency of clinic attendances	3. % of field attendances
20	15.7	1.4	10.2
40	21.8	1.5	14.2
60	26.5	1.6	18.6
80	34.3	1.8	23.7

2011

For primary medical care and referral of patients, the townships were categorized into less than 40 percentiles in 3 main indicators as low utilization of services for primary medical care. There are 35 townships as low service coverage for primary medical care in 2010 and 38 townships in 2011; among those townships, 25 townships had low utilization for both years. The name of townships and geographic distribution are depicted in the following table and map.

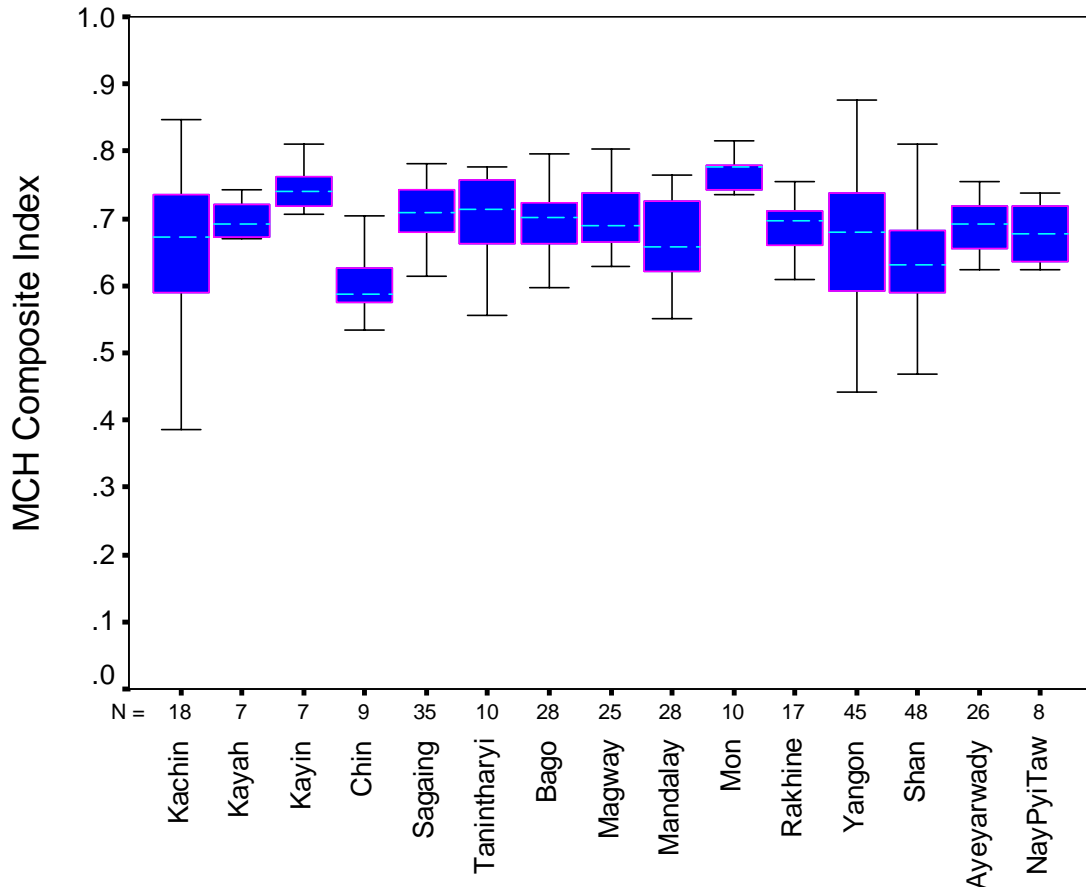
Kyauktaga	Pyin mana	Mongmao
Falam	Singu	Namphan
Mogaung	Thabeik kyin	Pangsan
Putao	Lashi	Pangwine
Deemawsoe	Monglar	Monghshu
Saw	Mongpying	Mongkung
ChanMyaThaZi	Laukkaing	Bokepyin
Lewe	Manton	Dagon Myothit(seikkan)
PyiGyi TaGun		



Figure(43)Composite index of 3 indicators for primary medical care(2010-2011)

MCH Composite Index

Antenatal care coverage(%), skilled birth attendants(%), TT 2nd dose coverage(%), under five children care(%) and ORT utilization rate(%) in diarrhoea cases are selected as main indicators of maternal and child health care. The composite index was used as “1” if all 5 main indicators reached 100%.



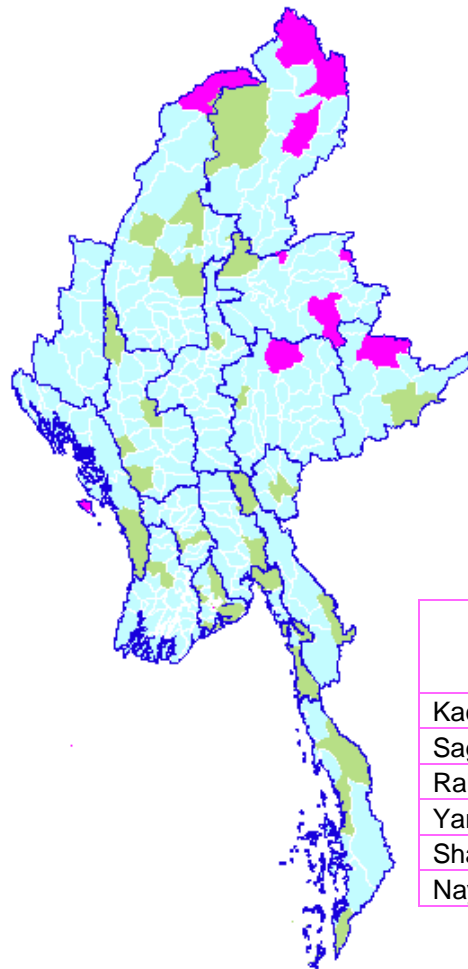
Figure(44)Box-Plot of MCH Composite Index(2011)

Two townships from Sagaing region and 7 townships from Shan state were excluded as outliers. The above figure showed median line for index was within 0.6 and 0.8. Kachin and Yangon had highest range. Mon state showed highest index(0.78) and the lowest was found in Chin(0.59).(Figure-44, Table-19)

There were 46 townships with high MCH performance index (more than 0.75) and 16 townships with low performance index(less than 0.5) were shown in figure 45.

Table(19) MCH composite index by Regions and States

Regions and States	Number of townships	Mean	Std. Deviation	Median	Minimum	Maximum
Kachin	18	0.64	0.12	0.67	0.39	0.85
Kayah	7	0.72	0.12	0.69	0.59	0.98
Kayin	7	0.74	0.05	0.74	0.64	0.81
Chin	9	0.61	0.06	0.59	0.53	0.71
Sagaing	35	0.70	0.06	0.71	0.42	0.78
Tanintharyi	10	0.70	0.07	0.71	0.55	0.78
Bago	28	0.70	0.05	0.70	0.60	0.80
Magway	25	0.70	0.05	0.69	0.63	0.80
Mandalay	28	0.66	0.06	0.66	0.55	0.76
Mon	10	0.76	0.03	0.78	0.69	0.81
Rakhine	17	0.68	0.07	0.70	0.48	0.83
Yangon	45	0.66	0.10	0.68	0.44	0.88
Shan	48	0.63	0.10	0.63	0.36	0.83
Ayeyarwady	26	0.69	0.04	0.69	0.62	0.76
NayPyiTaw	8	0.66	0.09	0.68	0.47	0.74
Union	321	0.68	0.09	0.69	0.36	0.98



	MCH composite index Less than 0.5 (16 townships)
Kachin	3
Sagaing	1
Rakhine	1
Yangon	4
Shan	6
NayPyiTaw	1

■ Less than 0.5 (16 townships)

■ More than 0.75(46 townships)

Figure(45)MCH composite index by townships(2011)