unicef

DHIS DISTRICT HEALTH INFORMATION SYSTEM

Health Information System Punjab

Annual Report 2013

MIS Cell, Directorate General Health Services Punjab, Lahore

Message from the Director General Health Services

It is matter of greater pleasure for me to write this message. The importance of data directed decisions is immense. DHIS is a decision support system that will help managers at all levels to make evidence based decisions. It will help in planning & development, strategy management. Budgeting and forecasting about future needs. The MIS team is praise-worthy to implement the system in the whole province and bring reporting regularity to more than 95%. The working of the district management team and performance of the health facilities of the province will be available for security and evaluation through DHIS. The issue of data validity and data quality needs more effort and hard work. The doctors and paramedics should pay heed to the plight of data quality and accuracy.

Foreword

The raw data on a prescribed format from public health care facilities is regularly received on monthly basis in District MIS Cells where it is entered into DHIS Software in every district of the Punjab. This data is scrutinized and examined in detail by the Provincial MIS cell after transmitting electronically by Districts MIS Cells.

In the following paragraphs, analysis of some important indicators is being presented in the form of tables and graphs. It is an attempt to present the provincial situation followed by division and district wise status. We hope this report would be helpful in making decisions by provincial, divisional and district managers.

A special thanks to UNICEF for their support and co-operation.

Dr. Akhtar Rasheed
Director Health Services (MIS)

Table of Contents

Executive Summary

The provision of timely and effective healthcare services is the key objective of any country's health system. To maintain the health system in a good functioning status it is imperative to regularly monitor it through an efficient Health Information System. This system should be able to provide timely and qualitative information for evidence based decision making process. Realizing the impact of this very important factor especially in the public health sector government initiated a nationally standardized data generation system at all levels called Health Management Information System (HMIS) in early 90s.This system has been modified to District Health Information System (DHIS) in 2006DHIS now have a much wider scope than the old HMIS. The upgraded version of DHIS was implemented at district levels in 2009. But as this implementation was supposed to be carried out by the provincial health departments thus its timeframe varied from province to province. It was encouraging to note that Punjab Health Department took the lead to implement this program in all its 36 districts by September 2009.

In this report, different indicators are discusses. The data of teaching/tertiary care hospitals is also included. In first portion of report, the year wise comparison of important indicators is presented in the form of graphs. The overall trend in all the indicators have increased during 2013. The main reason behind this is that the 32 teaching/tertiary care hospitals have started reporting through DHIS since August 2013.

The detailed analysis of 2013 data is presented in this report. The overall reporting compliance of the health facilities in Punjab remained above the target since 2010 and in 2013 the reporting compliance was 99%. The total OPD in 2013 was 94.5 million. The per capita OPD in 2013 was 1.0 which had increased from the previous years. On average, per day OPD attendance in teaching/tertiary hospitals was 2,333. In DHQs 1,164, THQs 401, in RHCs 151 and in BHUs 47 visits per day per health facility were reported. In age and gender wise analysis, the percentage of female patients was higher (55%) and the highest number of patients was reported in age group 15-49 years in which female were 29% and male were18%.

Forty-three diseases are reported through DHIS. The patients of reported diseases constitute overall 49% of the total patients in 2013 while rest of the 51% was reported under the category of "others. Out of the 43 priority diseases, 19 are communicable and 24 are non-communicable. The proportion of communicable diseases was 56% while the non-communicable diseases were 44%. Top five disease were acute (upper) respiratory infection, fever due to other causes, scabies, peptic ulcer disease and Diarrhoea/Dysentery in <5 yrs. The incidence rate of top five diseases was calculated and presented in the form of graphs. The comparison of top ten diseases is presented in the form of graphs. The median index is calculated for 2010-2012 and it is compared with 2013 data.

Antenatal care coverage is an indicator of access and utilization of health care services during pregnancy. During 2013, the overall ANC-1 coverage in Punjab was 93% of the total expected population (3.4%). Out of the total ANC-1 women, 21% were reported with haemoglobin levels less than 10g/dl

Delivery coverage at health facility is an indicator of utilization of delivery services provided at public health facilities. The overall percentage of deliveries conducted in Punjab during 2013 was 28% of the total expected population (2.9%). An analysis was done to show the facility wise average number of deliveries conducted per month. The average number of deliveries was 680 per month per teaching/tertiary care hospitals, in DHQ hospitals 189, in

THQs 59, in RHCs 30 and in BHUs 8 deliveries per month. Out of the total deliveries, the deliveries with obstetric complications were only 8% and deliveries with C-section constitute 13% of the total deliveries. Out of the total live births, 4% babies were born with low birth weight (<2.5kg). Neonatal mortality rate was calculated and it was found 1.7% of the total live births.

Lab services utilization indicates utilization of laboratory services at the facility and also gives a measure of the proportion of patients receiving diagnostic services from the laboratory of the health facility. In 2013, of the total OPD patients (94.5 million), 11.3 million patients availed the lab services and in indoor, of the total admissions (3.8 million) 9.9 million patients availed the lab services.

Bed occupancy rate indicates utilization of hospital indoor services. It may also indicate quality of care. Annual BOR are used to evaluate or compare how hospitals or individual specialties are using their resources. The BOR during 2013 was 68%. Average length of stay is the measure of the average duration of hospital stay of admitted patients. This indicator reflects on the intensity of care delivered to hospitalized patients and the probable burden on hospital resources. The ALS was 2 in 2013.

Hospital death rate is the measure of the proportion of hospital deaths among admitted patients. During 2013, of the total admissions in indoor, 3% deaths were occurred.

Stock out status measures the percent of health facilities that experienced a stock-out of any tracer drugs/medicines for any number of days at any time of the year. The overall percentage of drugs out of stock was 25%.

During 2013, 12% eligible couples availed the family planning services from the public sector health facilities against the expected population (16% MCBA).

Immunization coverage estimates are used to monitor immunization services, to guide disease eradication and elimination efforts, and are a good indicator of health system performance. The overall immunization reported coverage in 2013 was 94%. TT-II coverage is a measure of the percentage of pregnant women protected against tetanus/neonatal tetanus. In 2013, 64% women were immunized against the expected population.

Number of pregnant women registered by LHWs indicator reflects the performance of LHWs and the extent to which pregnant women in the catchment area have come in contact with the public health system. In 2013, number of women registered per LHW was 20. The analysis of deliveries by SBAs is based on the information provided by the LHWs in their respective catchment population. 74% deliveries were reported by skilled birth attendant in 2013.

In Punjab TB Control Program was started in year 2000 and network of 537 diagnostic Centre / Basic Management Unit (BMU) have been established up till now. Targets Achieved during 2013 are as follows:

- Case Detection Rate NSS+ >77%
- Sputum Conversion Rate >91%
- Treatment Success Rate >92%
- Default Rate < 3%

Introduction

Overview of DHIS Program

District Health Information System (DHIS) is a mechanism of data collection, transmission, processing, analysis and information feedback to the first level care facilities & secondary level health care facilities. DHIS provides a baseline data for district planning implementation and monitoring on major indicators of disease pattern, preventive services and physical resources.

The revised system, unlike the previous system, would gather and collate information from Secondary level hospitals (District Headquarter Hospitals (DHQs) and Tehsil Headquarter Hospitals (THQs)).

Important Features of DHIS

DHIS is a district – based Routine Health Information System

- Responds to the information need of the District health system's performance monitoring function both at district and province levels
- DHIS provides minimum set of indicators
- Promotes / Supports evidence based decision- making at local level & provincial level
- Cater to the important routine health information needs of the federal & provincial levels for monitoring policy implementation
- DHIS is an improved version of HMIS as it incorporates many indicators from HMIS.

Salient Features of Report

DHIS is fully implemented and functional in all Districts of Punjab province since 2009, thus there is a regular need of data analysis for promoting evidence based decision making and improvement in data quality.

The overall purpose of this feedback report is to provide basic analyses of important performance indicators to the district managers and facility in-charges. This would then ensure the identification of problem areas or best practices, problem analysis and planning of solutions, implementation of the solutions, monitoring the implementation and evaluating the solutions.

This report shall assist the district, provincial & national health managers to analyse the health situation, their services (e.g. EPI, TB-Dots, Malaria, Hepatitis, MCH & Family Planning Services), availability of drugs/ supplies, essential equipment and utilities etc. Other users of this report would be the district, provincial and national managers who are some way or the other involved in improving the health services and have a role in the overall health care delivery system.

Importance of Record Keeping and Data Management

Knowledge is power and change into wisdom when knowledge is applied. When information is processed on scientific basis using statistical tools and appropriate methods on data new knowledge is generated. So data management is the core activity in production of new knowledge. Record keeping and data management are intertwined together to produce verifiable, reproducible and publishable knowledge.

Modern facilities of IT and communication have not only reduced distances among organization, institutions and learned academia but have also led to use of information in short and long decision making. On the basis of this relationship between academia and departments working in the field research has flourished. It has given immense opportunities to the human mind. The example of dengue epidemic of 2011 is an example of this relationship when all the departments of Punjab and academic institutions joined hands to help the government to face the dire situation.

Health is a huge subject consisting of diverse fields of which medicine is only a part. In Pakistan it has become imperative to strengthen the links between the departments working to improve health and prevent disease and to reduce morbidity, disability and death. It is essential to use IT and health for capturing data on health and indicators of health, process the data and produce information which can lead to use of this information for evidence based management.

DHIS is a humble beginning but has a capacity to become a full-fledged health information system which is being utilized in developed countries. If we can convince the medical academia of Punjab to join hands with MIS Cell (Directorate General Health Services) which is managing DHIS and start sending monthly reports about health and disease from teaching hospitals of Punjab we can fulfil the basic objective of DHIS. Only then it will be possible to give a complete picture of state of health and disease in the Province.

Number of Functional and Reporting Health Facilities by District & Type

Table 1:

Name of Districts	THOS		DHQ		THQ		Civil		RHC		BHU	
	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds
Bahawalnagar	0	0	1	253	4	220	0	0	10	200	102	204
Bahawalpur	1	1,410	0	0	4	232	1	410	11	220	73	146
R.Y Khan	1	760	0	0	3	240	0	0	20	392	103	206
D.G Khan	1	464	0	0	1	80	2	55	10	200	51	102
Layyah	0	0	1	280	5	200	0	0	3	60	39	78
Muzaffargarh	0	0	1	240	3	140	0	0	13	260	71	142
Rajanpur	0	0	1	133	2	132	1	40	6	125	32	64
Faisalabad	2	2,060	1	250	5	270	0	0	12	240	167	334
Jhang	0	0	1	275	2	108	0	0	9	180	58	116
T.T Singh	0	0	1	125	2	250	0	0	6	120	70	140
Chiniot	0	0	1	70	2	40	0	0	3	60	36	72
Gujranwala	1	450	0	0	3	160	0	0	10	200	92	184
Gujrat	1	322	0	0	1	40	2	40	10	200	90	180
Narowal	0	0	1	143	1	80	0	0	7	140	56	112
Sialkot	2	534	0	0	3	259	0	0	7	140	88	176
Hafizabad	0	0	1	125	1	60	0	0	6	120	31	62
M.B Din	0	0	1	100	1	40	0	0	9	180	49	98
Kasur	0	0	1	197	2	100	0	0	12	240	82	164
Lahore	16	10,219	1	150	2	25	0	0	6	120	36	72
Okara	0	0	2	290	2	100	0	0	10	200	96	192
Sheikhupura	0	0	1	470	1	60	0	0	9	216	79	158
Nankana	0	0	1	100	2	152	0	0	6	144	48	96
Khanewal	0	0	1	125	3	160	0	0	7	140	82	164
Lodhran	0	0	1	125	2	80	0	0	4	80	48	96
Multan	1	1,103	0	0	2	120	1	61	8	160	77	154
Pakpattan	0	0	1	125	1	60	1	0	5	80	53	106
Sahiwal	2	517	0	0	1	108	0	0	11	220	75	150
Vehari	0	0	1	300	2	120	0	0	14	280	74	148
Attock	0	0	1	175	5	320	0	0	5	100	62	124
Chakwal	0	0	1	125	3	130	0	0	10	200	66	132
Jhelum	0	0	1	259	2	100	1	20	5	100	45	90
Rawalpindi	3	1,887	0	0	4	242	0	0	10	200	98	196
Bhakkar	0	0	1	355	3	156	0	0	4	92	39	78
Khushab	0	0	1	125	4	260	8	0	5	100	41	82
Mianwali	0	0	1	233	3	120	0	0	10	200	41	82
Sargodha	1	450	0	0	6	260	0	0	12	240	121	0
Total	**32**	**20,176**	**27**	**5,148**	**93**	**5,224**	**17**	**626**	**305**	**6,149**	**2,471**	**4,700**

Name of Districts	Disp.		SHC		TBC		M.C.H		Any Other		Total	
	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds
Bahawalnagar	45	0	33	0	3	0	7	0	2	0	**207**	**877**
Bahawalpur	65	4	0	0	2	0	10	0	5	98	**172**	**2,520**
R.Y Khan	56	0	0	0	2	0	7	0	1	30	**193**	**1,628**
D.G Khan	30	4	30	0	1	36	5	0	0	0	**131**	**941**
Layyah	21	0	15	0	0	0	2	0	0	0	**86**	**618**
Muzaffargarh	21	21	12	0	0	0	3	3	0	0	**124**	**806**
Rajanpur	2	0	16	0	0	0	1	4	0	0	**61**	**498**
Faisalabad	35	0	5	0	0	0	14	0	0	0	**241**	**3154**
Jhang	28	0	31	0	1	0	6	0	0	0	**136**	**679**
T.T Singh	23	0	20	0	1	0	2	0	2	6	**127**	**641**
Chiniot	1	2	0	0	1	0	2	0	0	0	**46**	**244**
Gujranwala	77	0	31	0	1	0	10	0	0	0	**225**	**994**
Gujrat	22	0	31	0	0	0	8	8	6	152	**171**	**942**
Narowal	3	20	1	0	1	0	4	0	10	0	**84**	**495**
Sialkot	28	10	14	0	2	0	15	0	0	0	**159**	**1,119**
Hafizabad	12	4	11	0	0	0	4	8	0	0	**66**	**379**
M.B Din	10	8	15	0	0	0	5	0	1	20	**91**	**446**
Kasur	23	0	0	0	1	0	8	0	0	0	**129**	**701**
Lahore	68	0	0	0	21	149	60	0	7	38	**217**	**10,773**
Okara	23	0	0	0	1	0	11	0	0	0	**145**	**782**
Sheikhupura	5	0	15	0	1	0	4	0	49	0	**164**	**904**
Nankana	18	0	0	0	0	0	5	0	1	10	**81**	**502**
Khanewal	17	0	0	0	1	0	4	0	0	0	**115**	**589**
Lodhran	12	2	0	0	0	0	1	2	0	0	**68**	**385**
Multan	42	0	14	0	0	0	27	0	7	358	**179**	**1,956**
Pakpattan	12	0	8	0	1	0	2	0	0	0	**84**	**371**
Sahiwal	21	0	18	0	0	0	6	0	0	0	**134**	**995**
Vehari	37	0	23	0	0	0	8	0	0	0	**159**	**848**
Attock	21	0	2	0	1	0	9	0	3	0	**109**	**719**
Chakwal	6	0	0	0	0	0	2	0	0	0	**88**	**587**
Jhelum	23	0	6	0	0	0	6	0	3	21	**92**	**590**
Rawalpindi	6	24	0	0	1	360	13	0	0	0	**135**	**2,909**
Bhakkar	37	40	13	0	0	0	2	0	0	0	**99**	**721**
Khushab	23	0	0	0	0	0	7	0	0	0	**89**	**567**
Mianwali	15	0	0	0	2	0	5	0	0	0	**77**	**635**
Sargodha	7	0	0	0	1	100	6	0	0	0	**154**	**1,050**
Total	**895**	**139**	**364**	**0**	**46**	**645**	**291**	**25**	**97**	**733**	**4,638**	**43,565**

List of THQs/Civil Hospitals in Punjab

Table 2:

District	THQ Hospital	District	THQ Hospital
Bahawalnagar	THQ Hospital, Haroon Abad.	Okara	THQ Hospital Depalpur
	THQ Hospital, Chishtian.		THQ Hospital HavaliLakha
	THQ Hospital, Fort Abbas.	Sheikhupura	THQ Hospital Sharaqpur Sharif
	THQ Hospital, Minchinabad.		THQ Hospital Muridke
Bahawalpur	THQ Hospital, Ahmadpur East.	Nankana Sahib	THQ Shahkot
	THQ Hospital, Hasilpur.		THQ Sangla Hill
	THQ Khair Pur Tamewali	Khanewal	THQ Hospital Jahanian
	THQ Yazman		THQ Hospital KabirWala
Rahimyar Khan	THQ Hospital Liaquatpur		THQ Hospital Mian Channu
	THQ Hospital Sadiqabad	Lodhran	THQ Hospital KehrorPacca
	THQ Hospital Khanpur		THQ Hospital Dunya Pur
D.G Khan	Civil Hospital SakhiSarwar	Multan	Govt. Mushtaq Lang THQ Hosp.
	THQ Hospital Tauns		Govt. THQ Hospital Shujabad
	Civil Hospital Fort Munroo		Govt.Fatima Jinnah Women Hosp.
Layyah	THQ Hospital ChowkAzam		Govt. Civil Hospital Multan (Ss)
	THQ Kot Sultan	Pakpattan	THQ Hospital, Arifwala Arifwala
	THQ Hospital Karor	Sahiwal	THQ Hospital Chichawatni
	THQ Hospital FatehPur	Vehari	THQ. Mailsi
	THQ Hospital Choubara		THQ Burewala
Muzaffargarh	THQ Hospital Alipur	Attock	THQ Hospital Fateh Jang
	THQ Jatoi		THQ Hassan Abdal
	THQ Hospital KotAdu		THQ Hospital Hazro
Rajanpur	Civil Hospital Shah Wali		THQ Hospital Jand
	THQ Hospital Rojhan		THQ Hospital PindiGheb
	THQ Hospital Jampur	Chakwal	THQ Choa Saiden Shah
Faisalabad	THQ Hospital Jhumra		City Hospital Talagang
	THQ Hospital Jaranwala		THQ Talagang
	THQ Tandilianwala	Rawalpindi	THQ Hosp: Gujar Khan
	THQ Hospital Sumundri		THQ Hosp Kahuta
	Govt. General Hospital Samanabad		THQ Hosp: Murree
Jhang	THQ Hospital Shorkot		THQ Hospital Taxila
	THQ Ahmed PurSial	Bhakkar	THQ Hospital Kalurkot, Kalurkot
Toba Tek Singh	Govt. Eye-Cum-General Hosp.		THQ Hospital Mankera, Mankera
	THQ Hospital Kamalia		THQ Hospital, Daryakhan
Chiniot	THQ Lalian	Narowal	THQ Shakargarh
	THQ Bhowana	Hafizabad	THQ PindiBhattian
Gujranwala	THQ Hospital Wazirabad	Sialkot	Civil Hospital Daska
	THQ Hospital Kamoke		THQ Hospital Pasrur
	THQ Hospital Noshehra Vikran		THQ Sambrial

District	THQ Hospital	District	THQ Hospital
Gujrat	Civil Hospital Jalalpur Jattan	Jhelum	THQ Hospital Pd Khan
	Civil Hospital, Kotla Arab Ali Khan		THQ Hospital Sohawa
	THQ Hospital Kharian	Lahore	Govt. Hospital Shahdra
Kasur	THQ, Hospital Chunian		GmhPathi Ground
	THQ Hospital Pattoki		Govt. Mozang Hospital
Khushab	THQ Hospital Khushab Khushab		GmhChohan Road
	THQ Hospital Noor Pur Thal	Sargodha	THQ Hospital Bhalwal
	THQ Hospital Qaidabad		THQ KotMomin
	THQ Hospital Naushera		THQ Sahiwal
Mandi Bahauddin	THQ Hospital		THQ Hospital Chak No. 90/Sb
Mianwali	THQ Hospital Isa Khel		THQ Bhagtanwala
	THQ Level Hospital Kalabagh		Govt. Tb Hospital Sargodha
	THQ Hospital Piplan		THQ Hospital Shahpur

List of DHQs Hospitals in Punjab

Table 3:

DHQ Hospital, Bahawalnagar	DHQ Hospital Lodhran	DHQ Hospital Hafizabad
DHQ Hospital Layyah	DHQ Hospital Pakpattan	DHQ Hospital, M.B Din
DHQ Hospital Muzaffargarh	DHQ Hospital Vehari	DHQ Hospital Kasur
DHQ Hospital Rajanpur	DHQ Hospital Attock	Govt. Mian Munshi Hospital, Lahore
Govt. General Hospital G.M Abad	DHQ Hospital Chakwal	DHQ Hospital Okara
DHQ Hospital, Jhang	DHQ Hospital, Jhelum	DHQ Hospital (South City) Okara
DHQ Hospital Toba Tek Singh	DHQ Hospital Bhakkar	DHQ Hopital Sheikhupura
DHQ Chiniot Hospital	DHQ Khushab, Jahurabad	DHQ Hospital Nankana Sahib
DHQ Hospital Narowal	DHQ Hospital Mianwali	DHQ Hospital Khanewal

List of Teaching Hospitals in Punjab

Table 4:

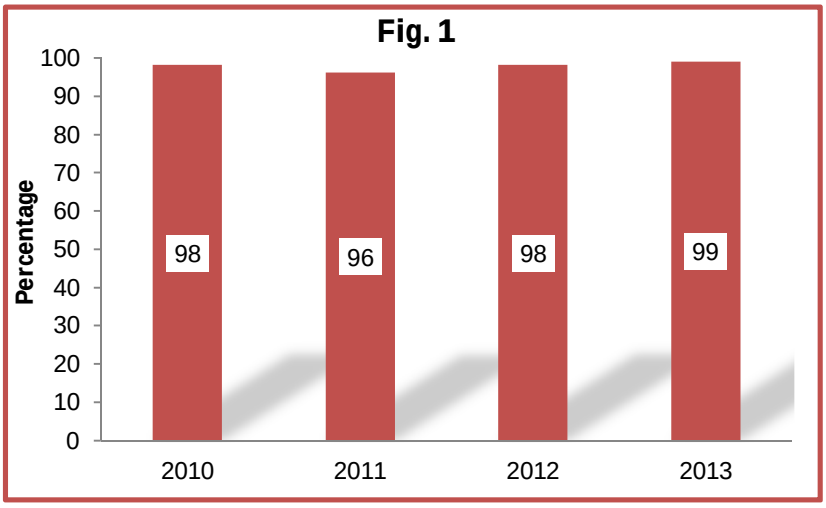
Allied Hospital, Faisalabad	Mayo Hospital, Lahore
DHQ Hospital, Faisalabad	Jinnah Hospital, Lahore
Govt Sardar Begum Hospital Sialkot	Sir Ganga Ram Hospital, Lahore
Allama Iqbal Mem. Hosp. Sialkot	Punjab Institute of Cardiology Hospital, Lahore
Govt. Haji Abdul Qayyum Teaching Hospital Sahiwal	Government Hospital for Psychiatric Diseases, Lahore
DHQ Teaching Hospital Sahiwal	Lady Aitchison Hospital, Lahore
Aziz Bhatti Shaheed (DHQ) Hospital, Gujrat	Sheikh Zayed Hospital, Lahore
Nishtar Hospital, Multan	Services Hospital, Lahore
Bahawalpur Victoria Hospital, Bahawalpur	General Hospital, Lahore
DHQ Teaching Hospital Gujranwala	Children Hospital, Lahore
Sheikh Zayed Hospital, Rahimyar Khan	Lady Willingdon Hospital, Lahore
Teaching Hospital D.G. Khan	Dental Hospital, Lahore
Holy Family, Rawalpindi	Govt. Kot Khawaja Saeed Hospital, Lahore
DHQ Hospital, Rawalpindi	Nawaz Sharif (Yaki Gate) Hospital, Lahore
Benazir Bhutto Hospital, Rawalpindi	Govt. Teaching Hospital Shahdara, Lahore
DHQ Hospital, Sargodha	Said Mitha Hospital, Lahore

Year-Wise Comparison of Important Indicators

Reporting Compliance

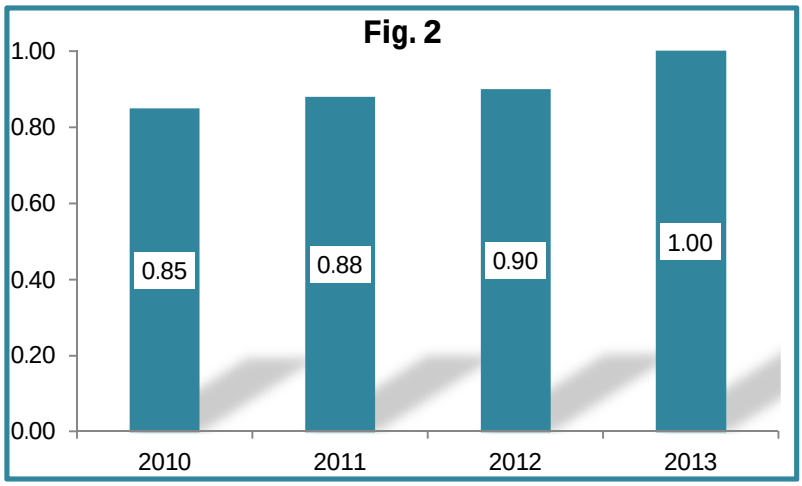
The graph shows the year wise comparison of reporting compliance. The target for reporting compliance is 95% and it can be seen that during previous four years, the reporting regularity of Province Punjab is above the target.

Fig. 1



Per Capita OPD Attendance

Fig. 2

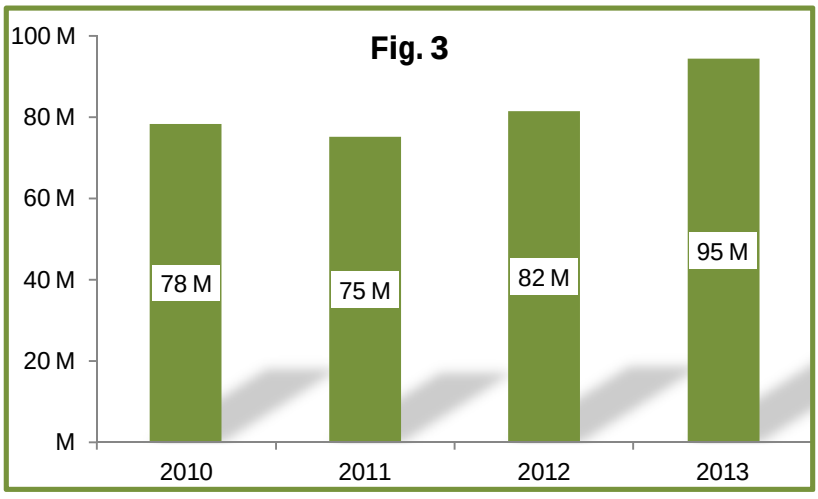


The year wise comparison of per capital OPD attendance is shown in fig. 2. It can be seen that there is improvement every year in Per capita OPD which implies that the population is satisfied by provision of services in these public health facilities.

Total OPD Visits

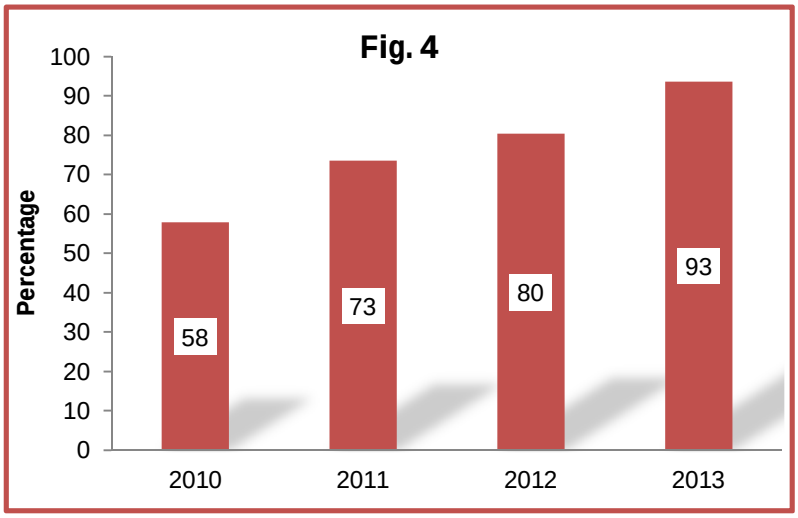
The graph shows the year wise comparison of total OPD visits. The no. of OPD visits has increased remarkably during 2013. The reason is that the tertiary care hospitals have started reporting through DHIS from August 2013.

Fig. 3

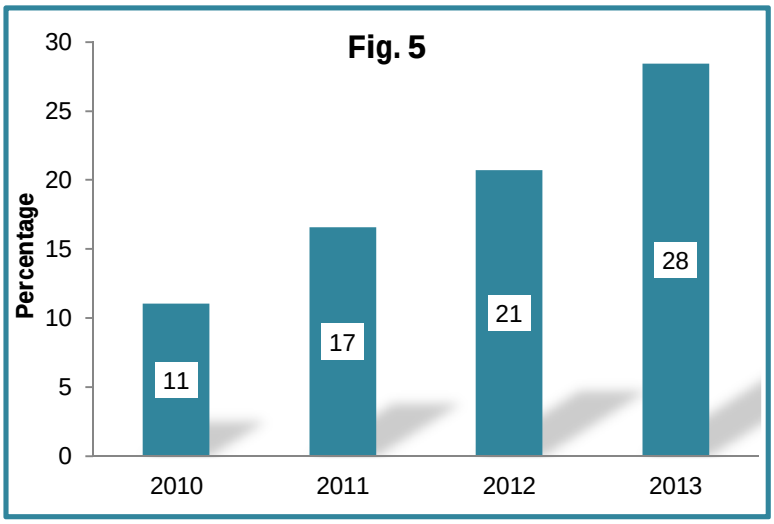


Antenatal Care Services

Fig. 4 shows the year wise comparison of percentage of ANC-1 visits. This percentage is calculated from the expected pregnancies during the year (3.4% of total Population). The percentage has improved from year to year.



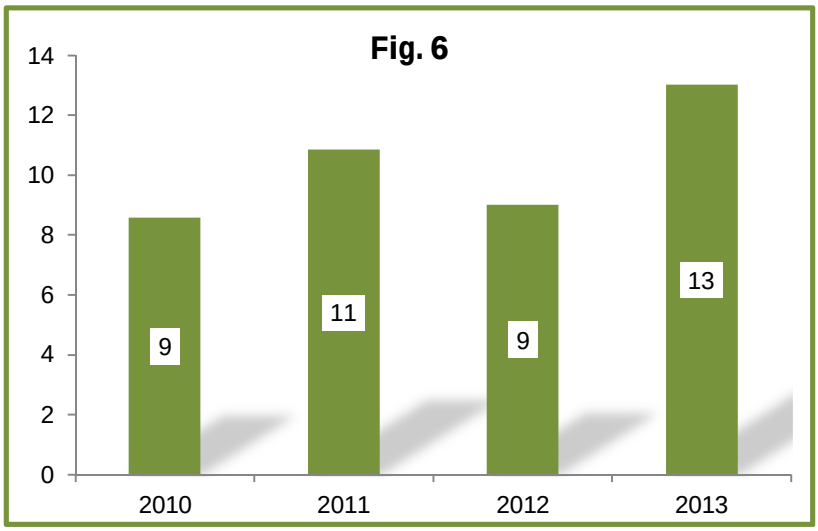
Deliveries Conducted at Health Facilities



The graph shows the year wise comparison of percentage of deliveries conducted at health facilities. There is improvement every year in percentage of deliveries conducted.

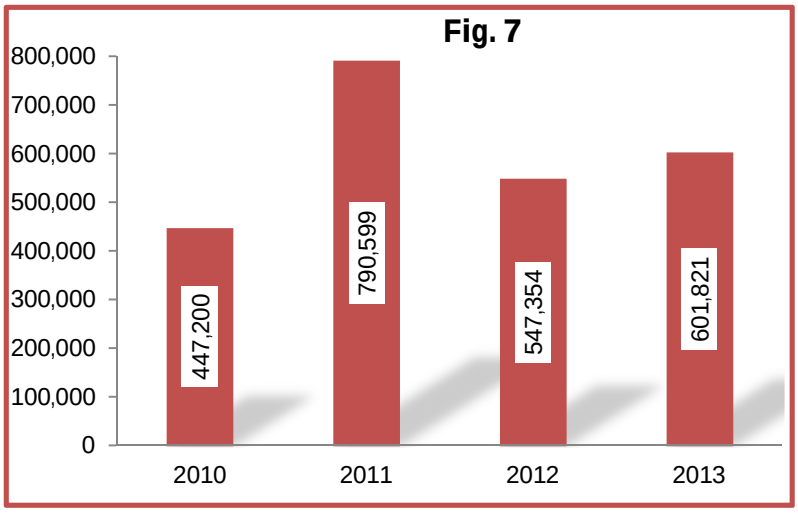
Caesarean Section

The graph shows the year wise comparison of C- Section performed. The percentage is calculated from the total deliveries conducted at health facilities. In 2013, the highest percentage is observed (13%).

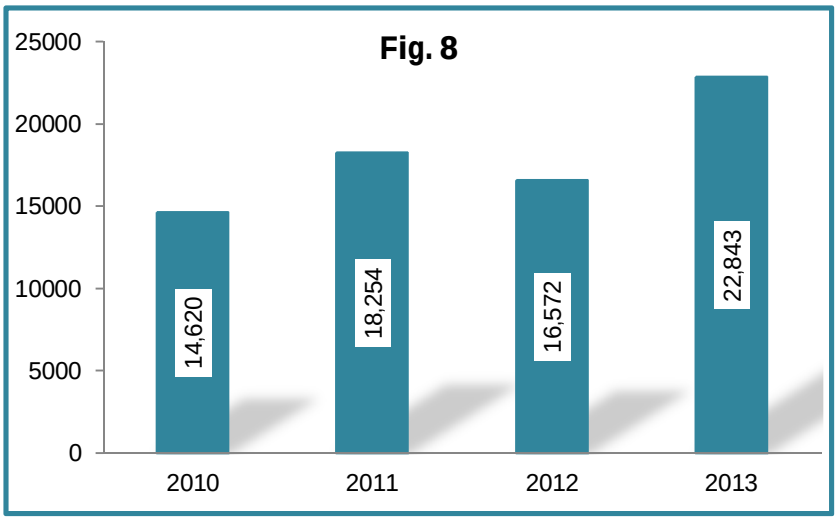


Number of Anaemic Women Coming for ANC-1

Fig. 7 shows the year wise comparison of number of anaemic women coming for ANC-1 at the health facilities. The highest number of anaemic women was reported in 2011.



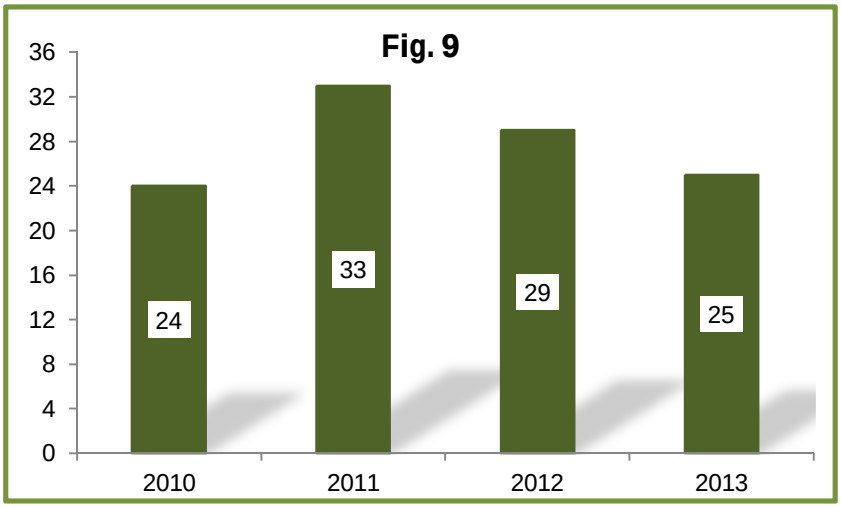
Frequency of Low Birth Weight (LBW) Babies



The graph shows the year wise comparison of number of babies with low birth weight delivered at health facilities. The highest number is reported in 2013 (922,834).

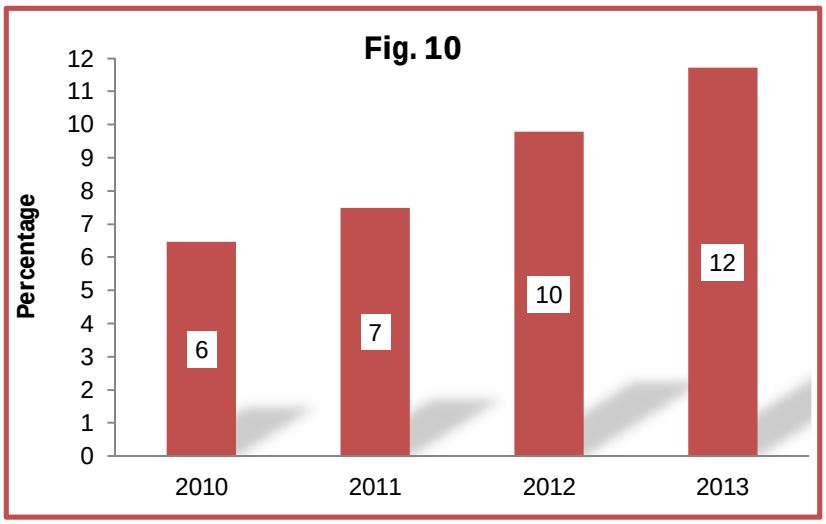
Stock-out Status

The graph shows the year wise comparison of stock-out status. In 2011, the highest percentage was observed (33%).

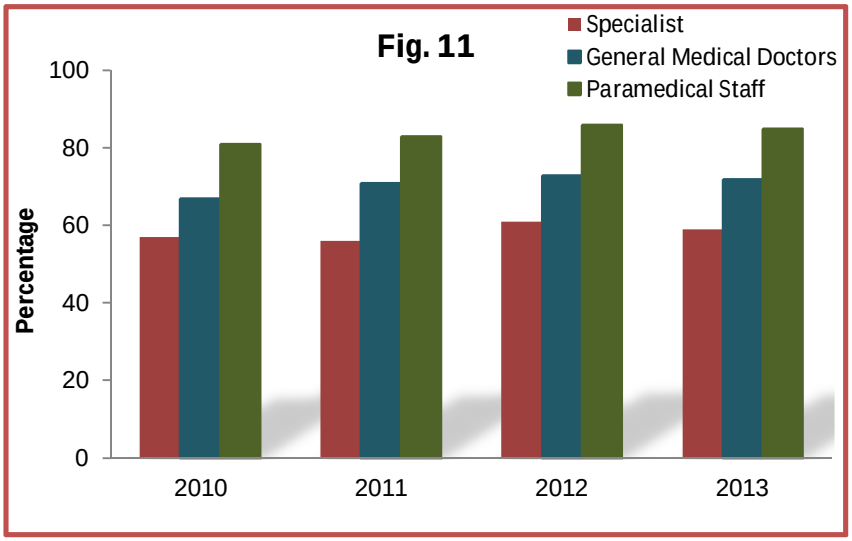


Family Planning Visits

Fig. 10 shows the year wise comparison of percentage of family planning visits calculated from the expected population (16% MCBA). It can be seen from the figure that the percentage of family planning visits is improving year to year.



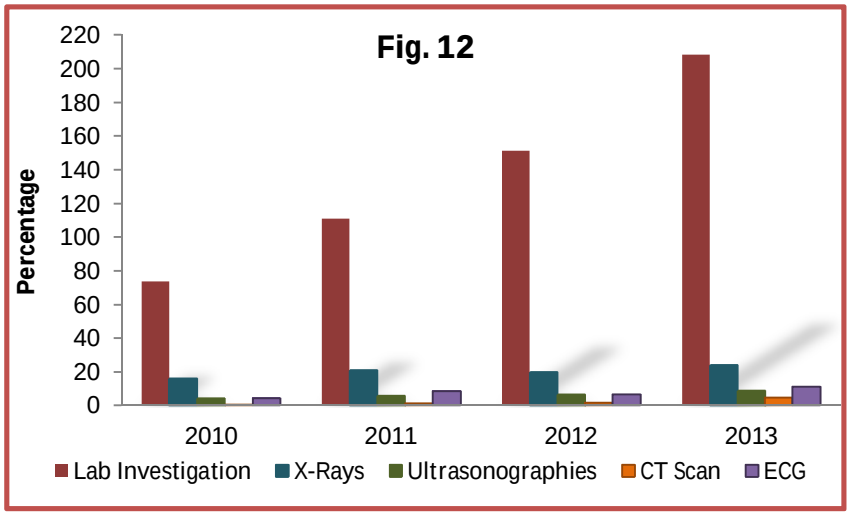
Proportion of Staff Position Filled



The graph shows the year wise comparison of percentage staff positions filled of specialists, general medical doctors and paramedical staff. The trend is almost same during previous all years.

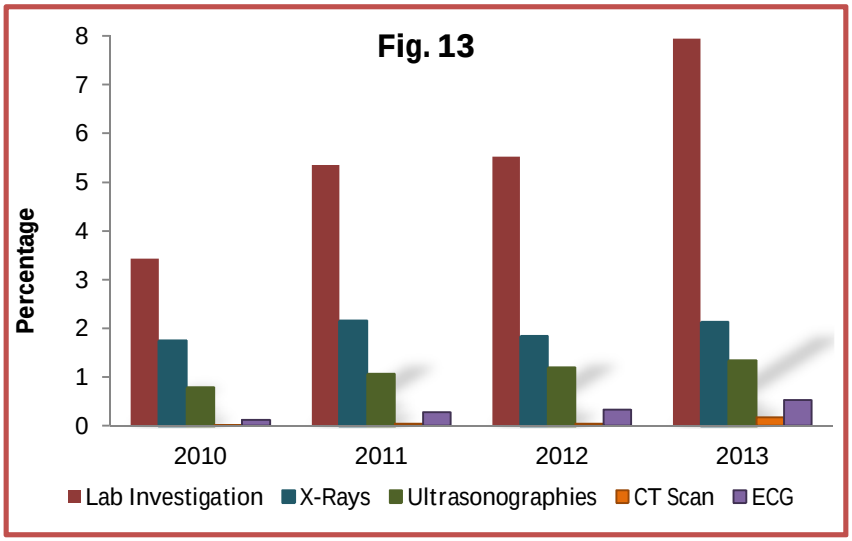
Lab Utilization (In-door)

The graph shows the year wise comparison of lab services in indoor. The percentage is calculated from the total admissions in indoor.



Lab Utilization (OPD)

The graph shows the year wise comparison of lab services in OPD. The percentage is calculated from the total OPD visits.



Epidemic Disease Cases

The following table shows the year wise number of epidemic diseases. The number of cases of Tb suspects has increased in 2013. The cases of Suspected Malaria and Suspected Meningitis are decreasing from year to year. There were a high number of Suspected Measles cases in 2013 due to the breakdown of epidemic. The cases of Suspected Viral Hepatitis are increasing year to year. There is a remarkable decrease in Suspected Neonatal Tetanus year to year. In 2010, a highest number of Cutaneous Leishmaniasis patients is reported which decreased during 2011 and 2013 and again increased in 2013. The highest number of cases of Acute Flaccid Paralysis was in 2010 and in 2013; it has decreased to a great extent. In 2011, the lowest number of cases of Suspected HIV/AIDS was reported.

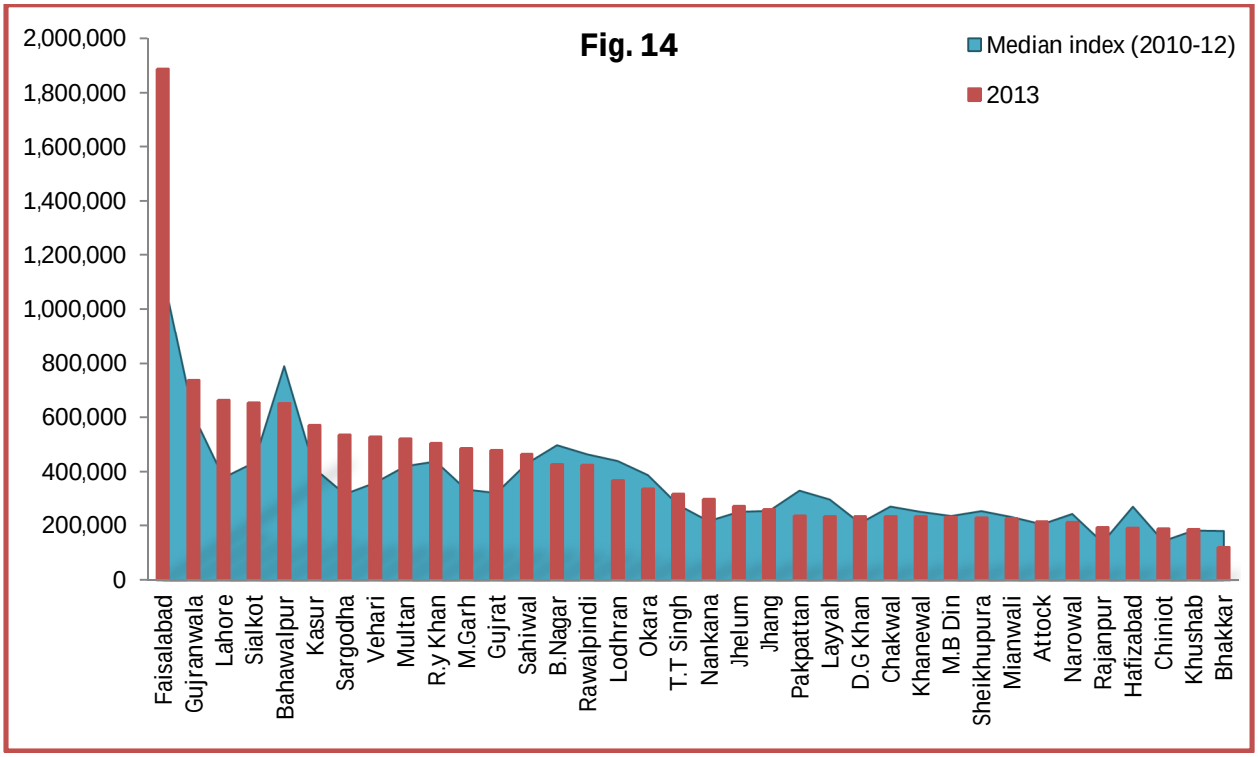
Table 5:

Diseases	2010	2011	2012	2013
TB Suspects	537,826	514,881	545,760	619,613
Suspected Malaria	854,062	829,364	861,120	802,436
Suspected Meningitis	17,112	4,357	4,197	3,450
Suspected Measles	13,355	2,961	2,802	16,592
Suspected Viral Hepatitis	179,239	192,010	265,168	288,658
Suspected Neonatal Tetanus	7,046	2,383	1,566	955
Cutaneous Leishmaniasis	11,849	5,397	2,778	4,631
Acute Flaccid Paralysis	8,282	1,377	2,801	726
Suspected HIV/AIDS	4,807	162	6,773	1,827

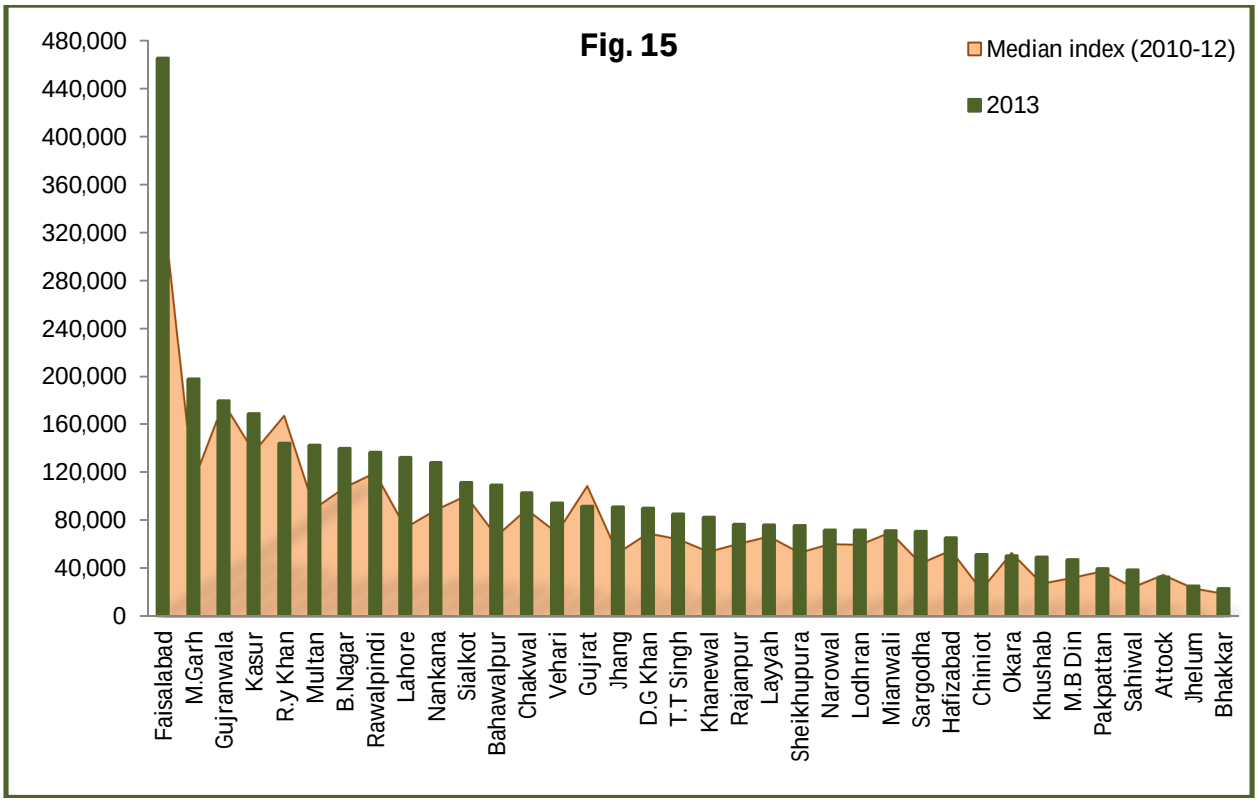
Comparison of Top Ten Diseases (2010-2013)

The following graphs show the comparison of top 10 diseases of 2013 with the median index of 2010-12. The median index is shown with area chart and 2013 data is shown in bars. As in 2013 all the teaching hospitals has started reported through DHIS, so the trend in 2013 is high as compared to median index of previous years.

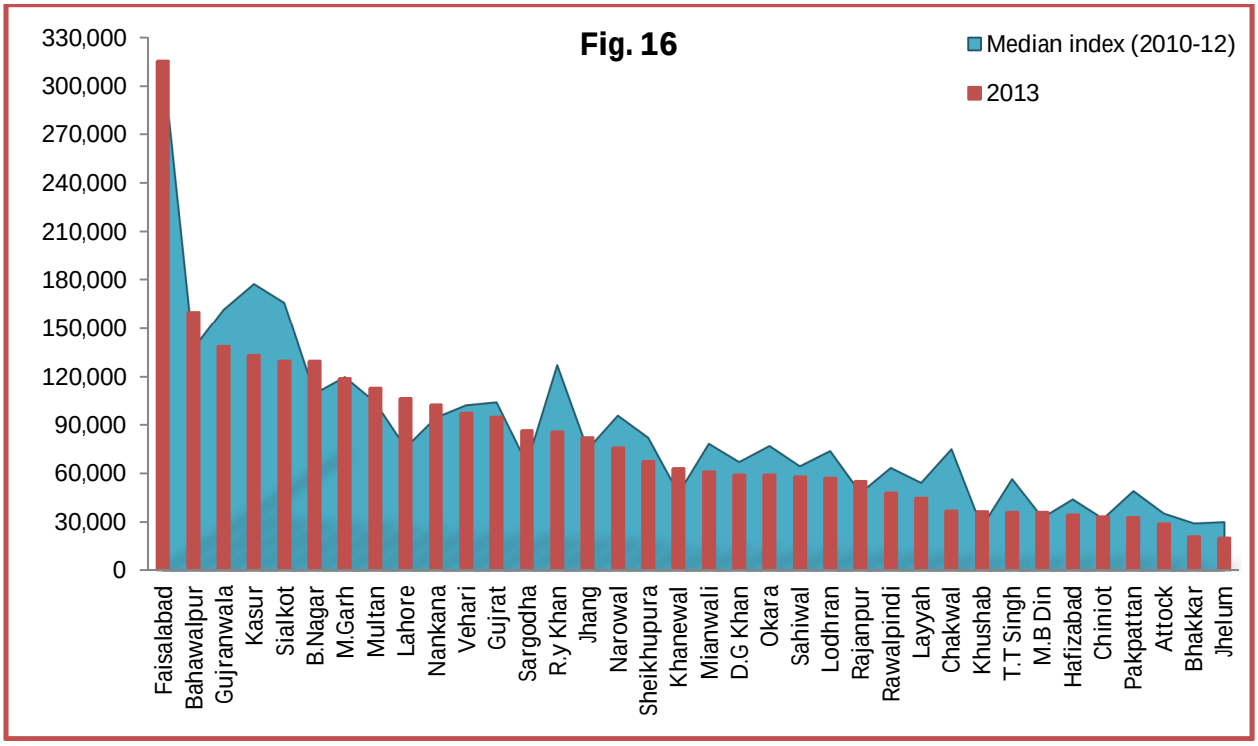
Acute Respiratory Infection



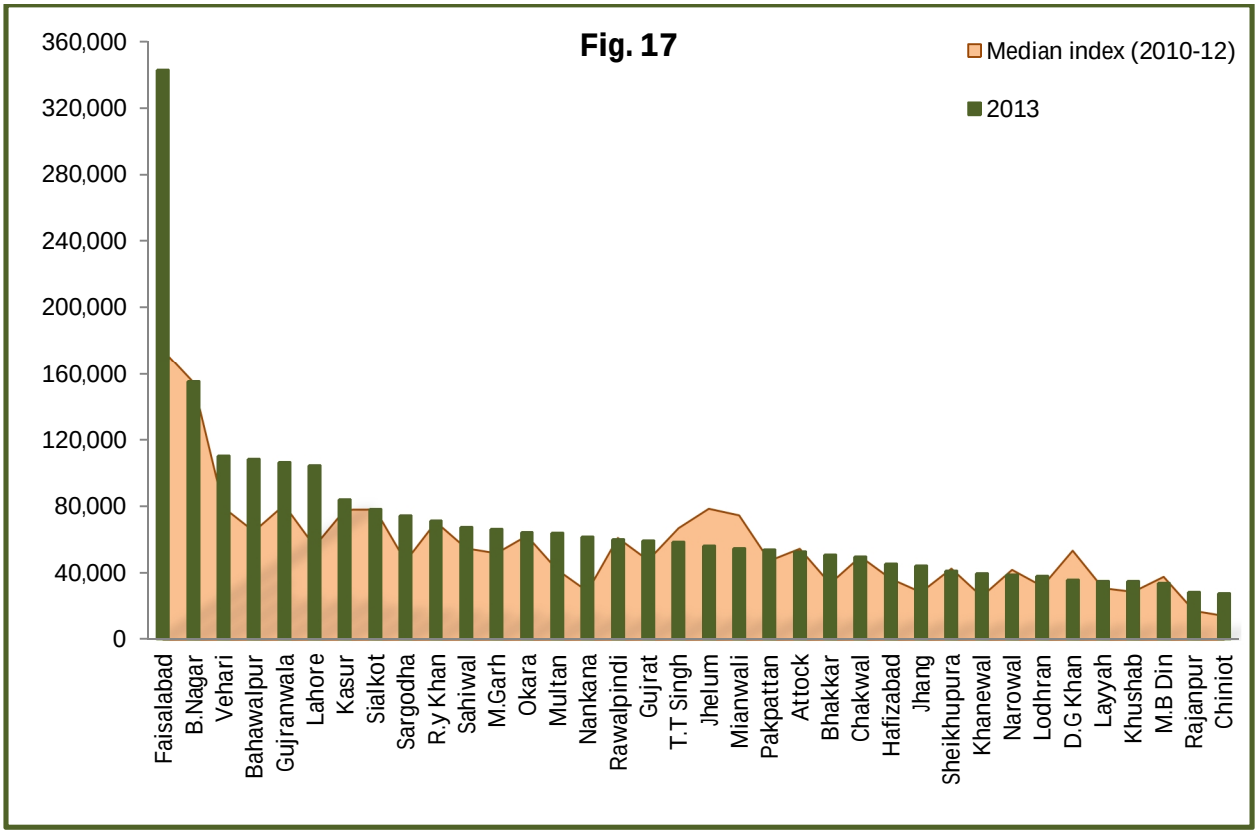
Fever due to other Causes



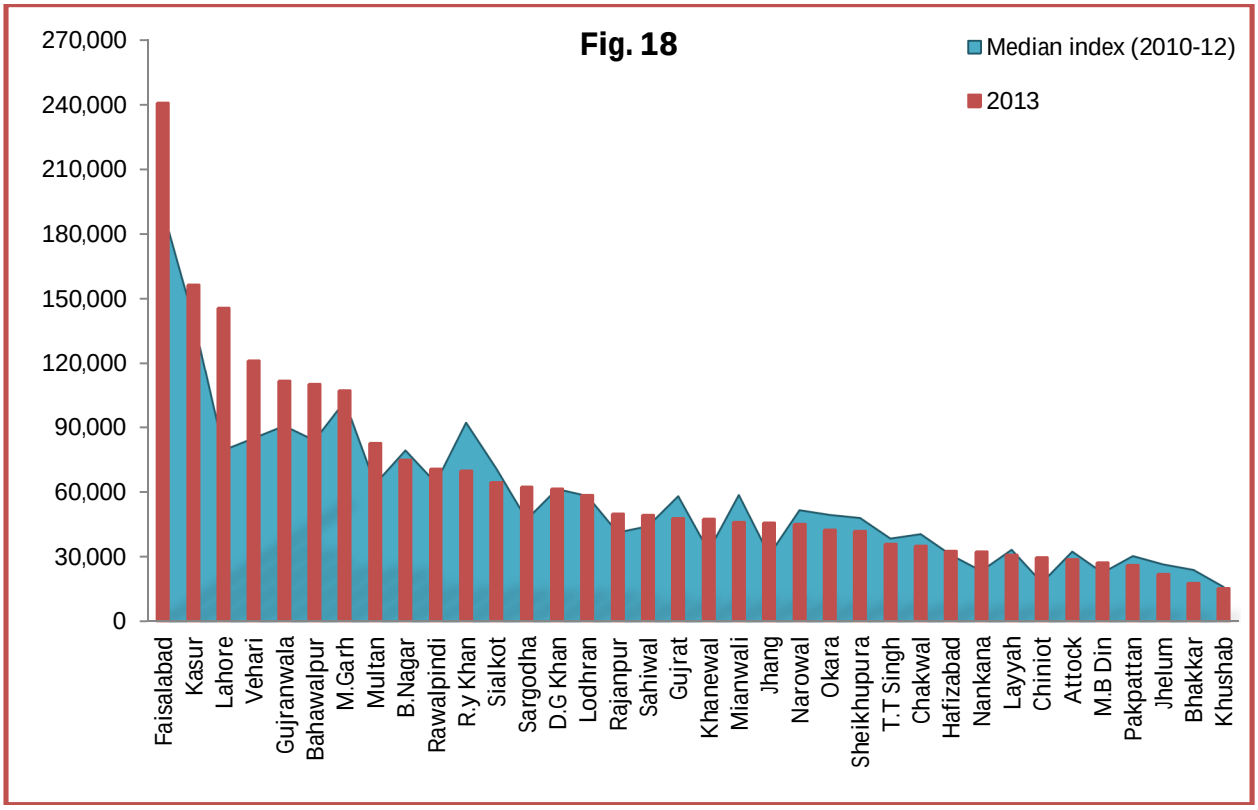
Scabies



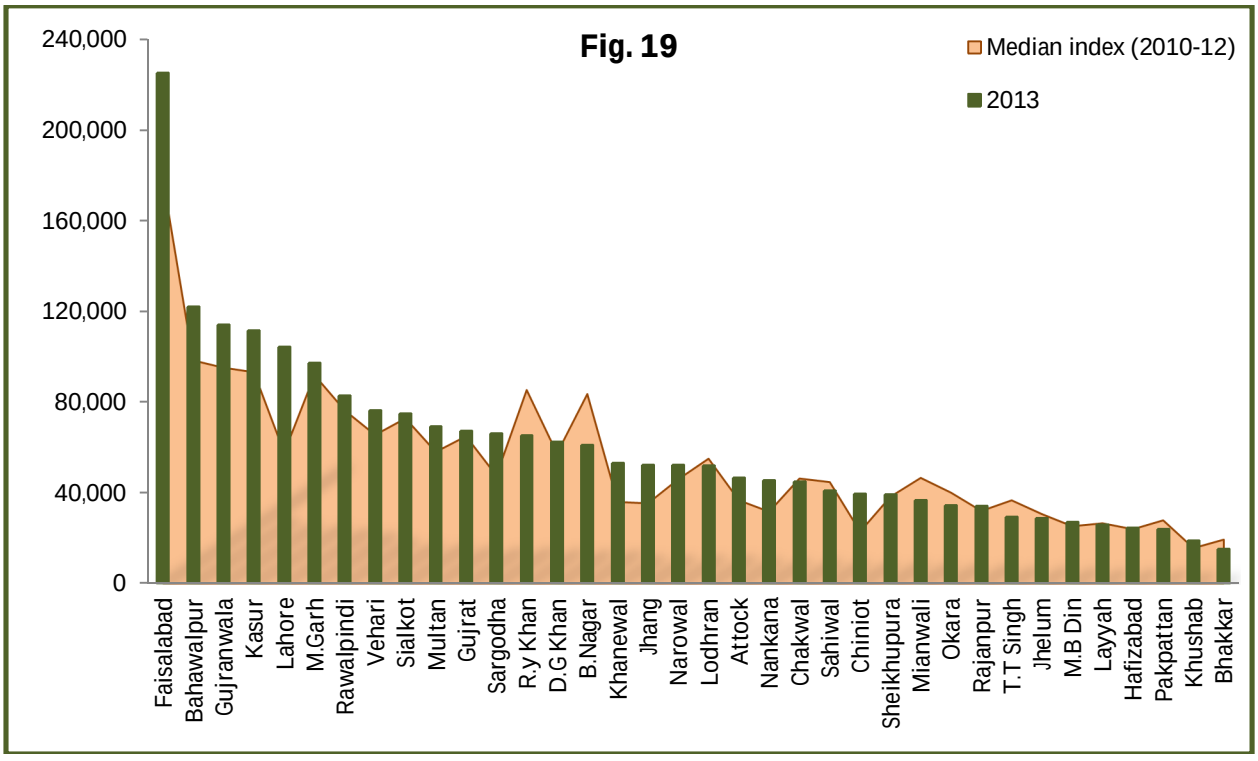
Peptic Ulcer Disease



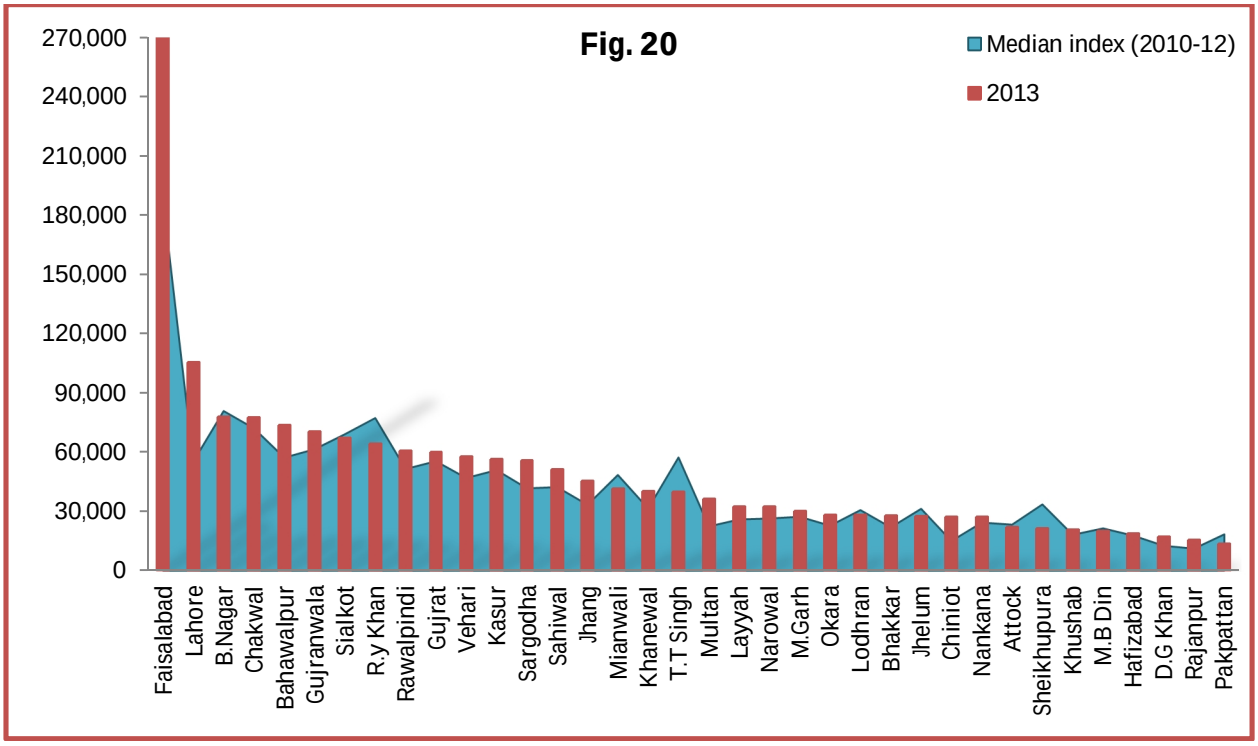
Diarrhoea/Dysentery in <5 yrs



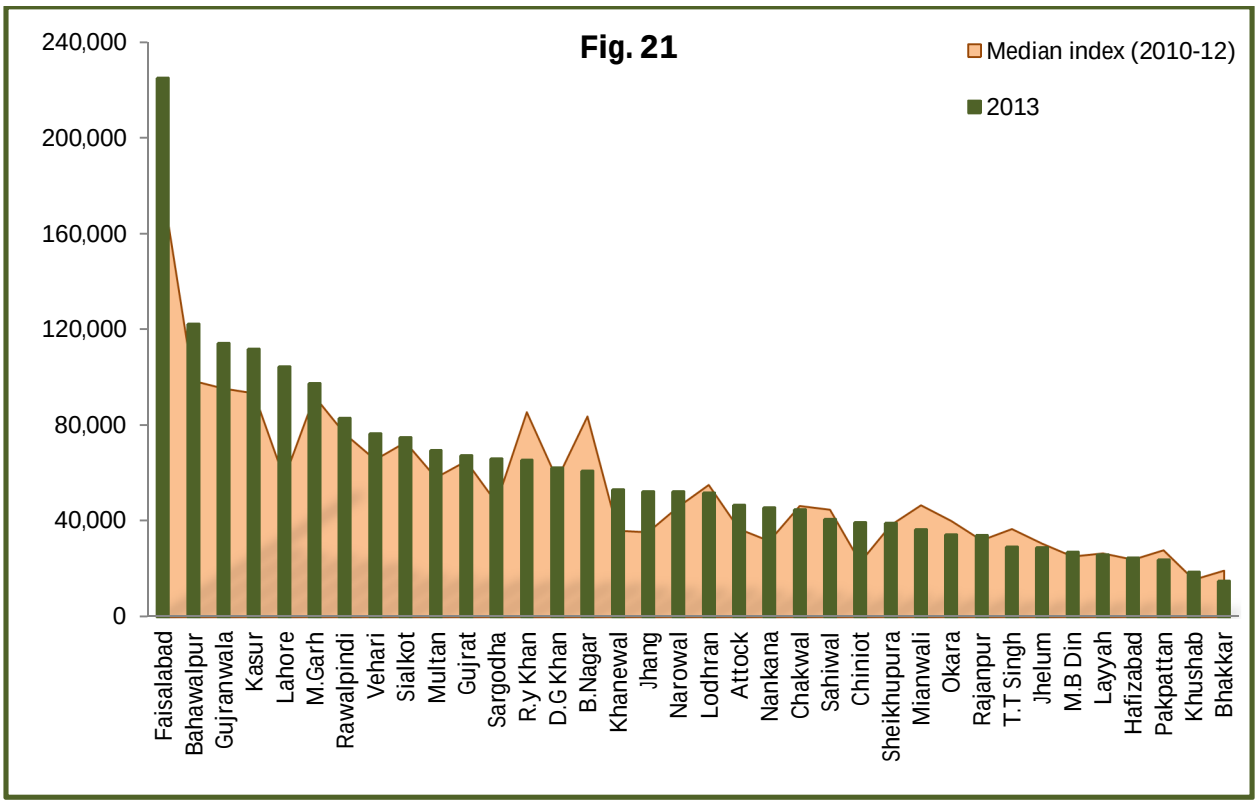
Diarrhoea/Dysentery in >5 yrs



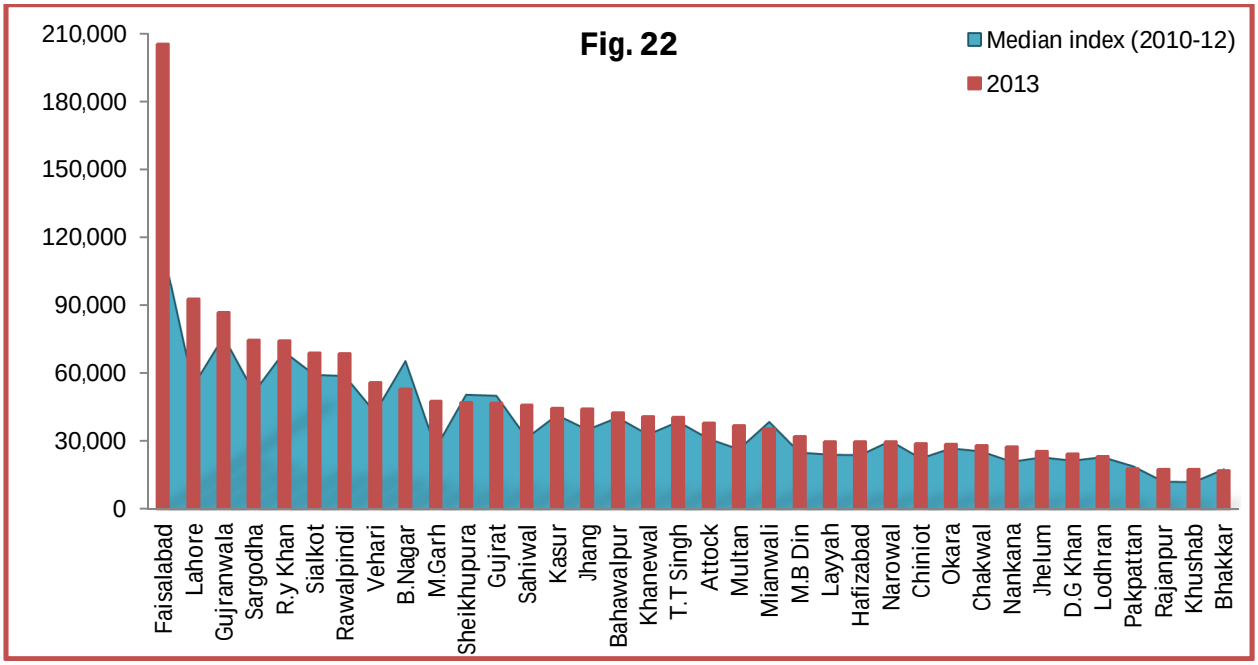
Hypertension



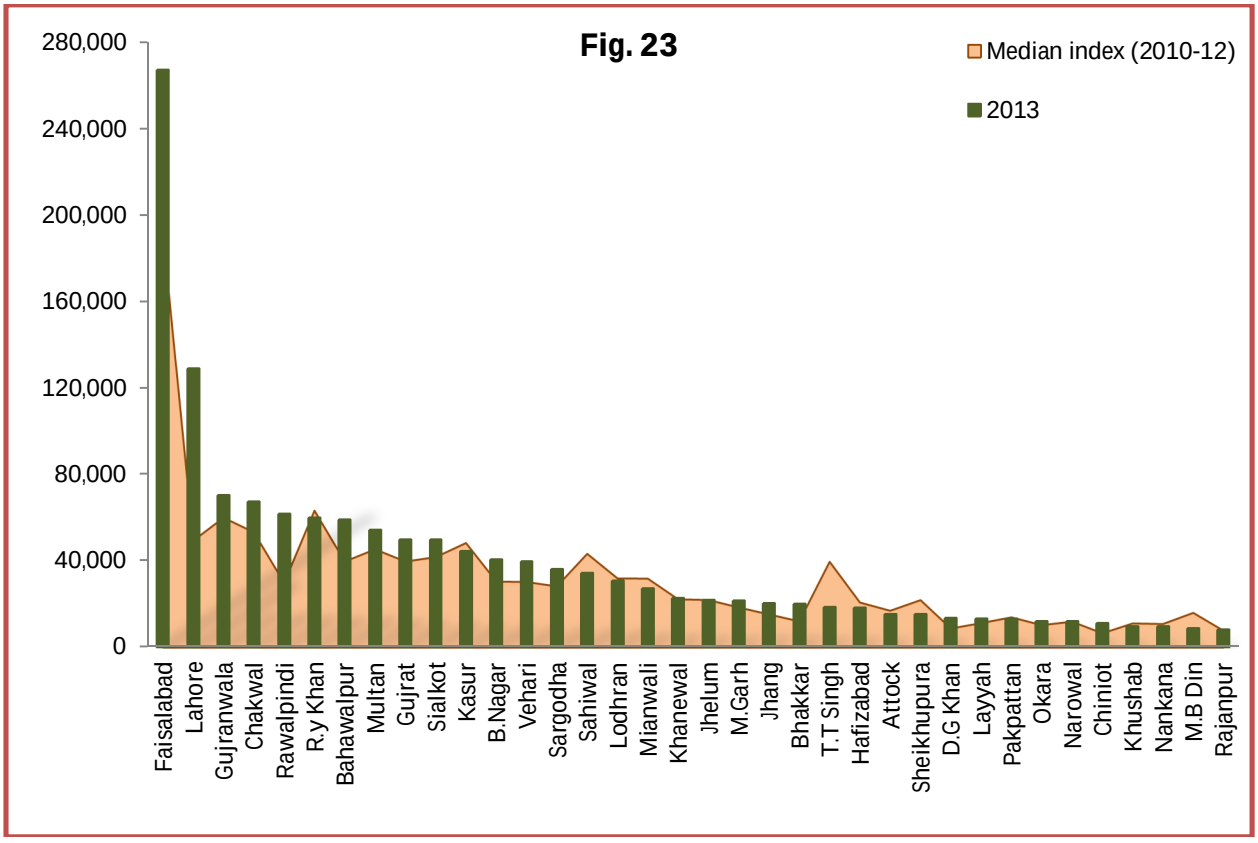
Asthma



Dental Caries

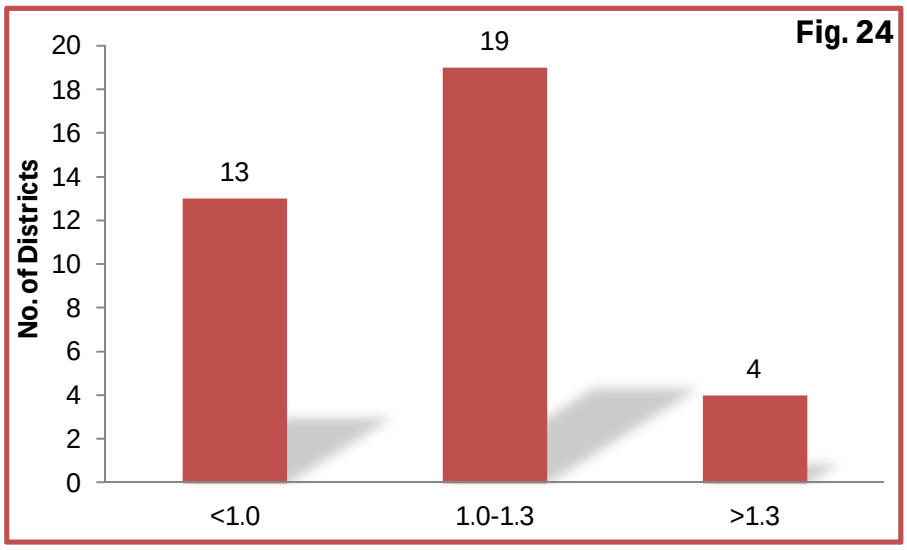


Diabetes



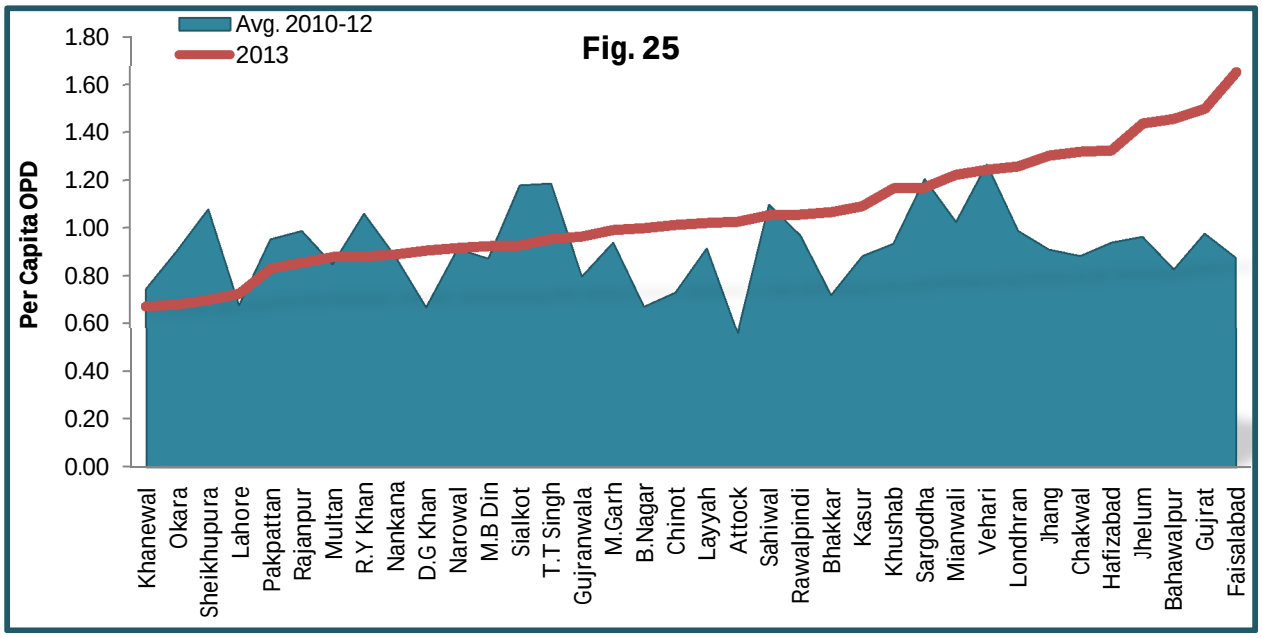
Per Capita OPD Attendance in 2013

One of the key indicators to assess performance on the provision of health services in Province Punjab is to understand the number of people attending and receiving services at health facilities during periods of illness. A good indicator of this is the outpatient attendance per capita. This indicator shows the extent of facility utilization by the population. If Out Patient Department (OPD) attendance is found to be high in the public health facilities, it implies that the population is highly satisfied by provision of services in these facilities.



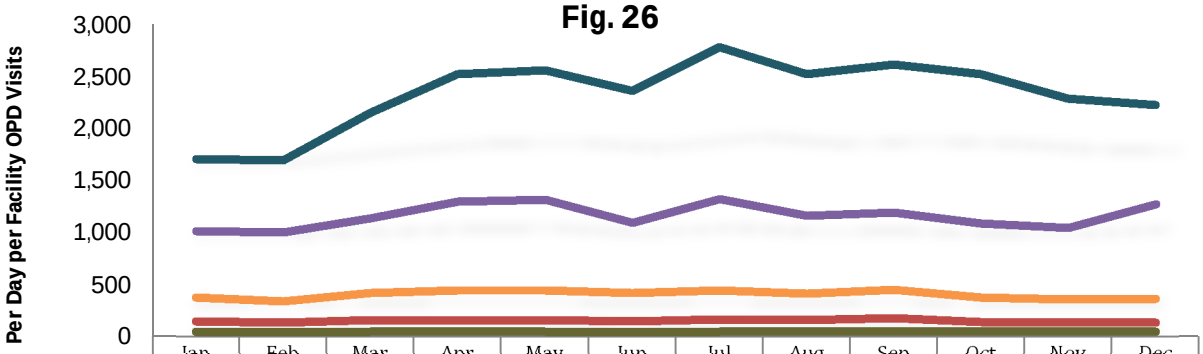
Per Capita OPD attendance gives an indirect indication of public trust on health services. Overall, in the province, per capita OPD attendance during 2013 was 1.0. There was a great variation across districts, which ranged from 0.7 to 1.7 visits per person during the year. Majority of the districts were under the category of 1.0-1.3 as shown in fig-24. Khanewal had the lowest Per Capita OPD attendance (0.7) while Faisalabad had the highest (1.7).

Year and District wise Comparison of Per Capita OPD Attendance



Facility Type wise Average Number of OPD Visits

Fig. 26

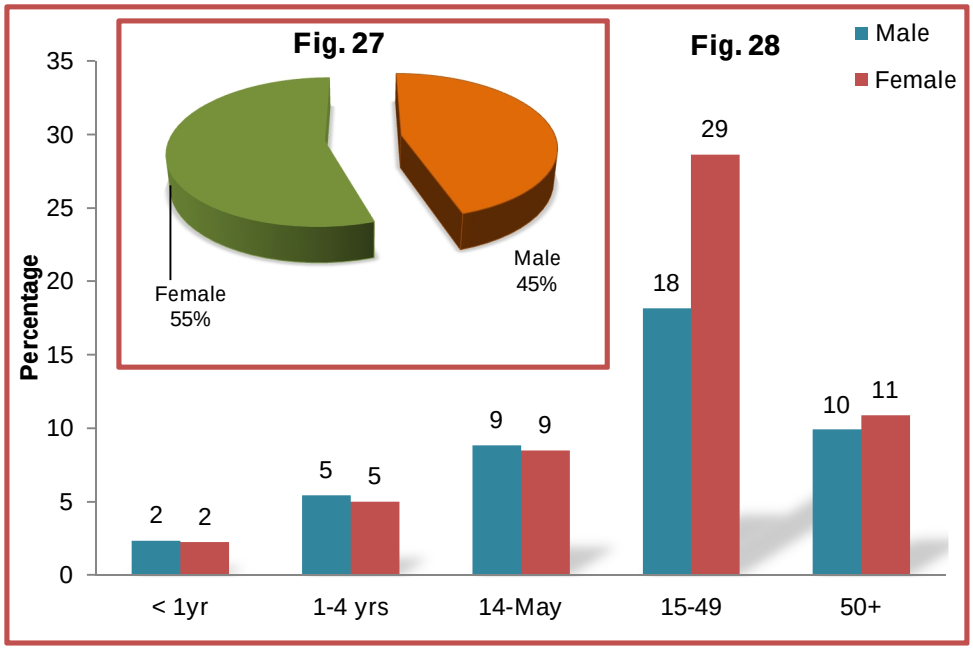


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
BHU	47	43	47	47	45	43	49	48	52	46	45	46
RHC	147	137	160	154	159	146	167	157	174	141	134	135
THQ	372	340	415	440	440	418	443	409	446	376	354	360
DHQ	1016	1005	1142	1301	1317	1097	1323	1165	1195	1090	1046	1274
THOS	1711	1701	2159	2528	2560	2367	2782	2527	2616	2525	2288	2228

This indicator is useful in understanding facility workload /utilization and to compare which facilities are well performing which are not. A benchmark may be used for comparison; or comparison among facilities or between monthly performances of same facility can be done. Fig. 26 is showing the monthly trend of per day per facility OPD Visits.

Patients Distribution by Gender and Age

This indicator shows the age wise and gender wise percentage distribution of new OPD patients attending the health facility. The indicator can be used to understand whether the health facility is catering to specific age groups, e.g., children under 5 years or elderly patients, and to gender equity.



In fig. 27, pie chart shows the gender wise percentage of male and female patients during 2013. It can be seen that the percentage of female (55%) patients is more than the male patients (45%). In bar chart (fig. 28), age and gender wise analysis is shown. It is clear from figure that the maximum number of patients belonging to age group 15-49 availed the health services. The percentage of female patients in this age group attending the OPD was

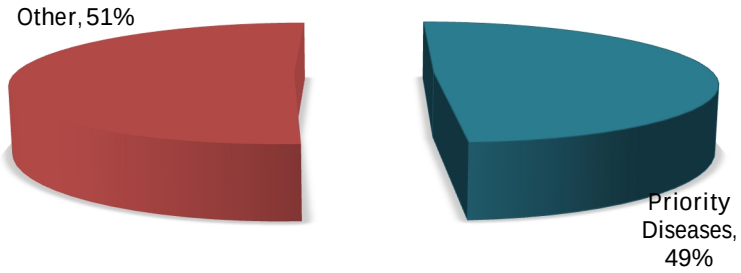
19% while the male were 18%. The minimum number of patients availing the services belonged to age group <1 year (4%), male patients being 2% and female 2%. It is observed that male patients use the health facilities more in <14 age group while female patients are more in >14 age group.

Disease Pattern

This indicator is a measure of the annual number of cases according to specified disease classification attending the OPD.

This indicator will help in understanding which diseases/cases were attended at the facility, at all health facilities in a tehsil or district, the changes in diseases trend over years or months of the same year and the difference among union councils, tehsil or districts. The indicator can trigger a response in terms of additional resource allocation or redistribution according to the disease pattern, or initiating/strengthening specific preventive, promotive and/or curative services at specific area/catchment population.

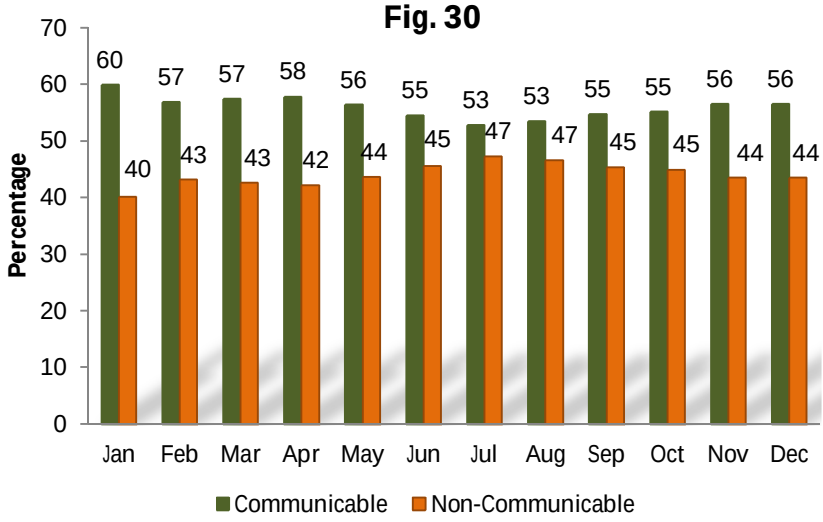
Fig. 29



Forty-three diseases are reported through DHIS. The patients of reported diseases constitute overall 49% of the total patients in 2013 while rest of the 51% was reported under the category of "others".

Communicable and Non-Communicable Diseases

Fig. 30



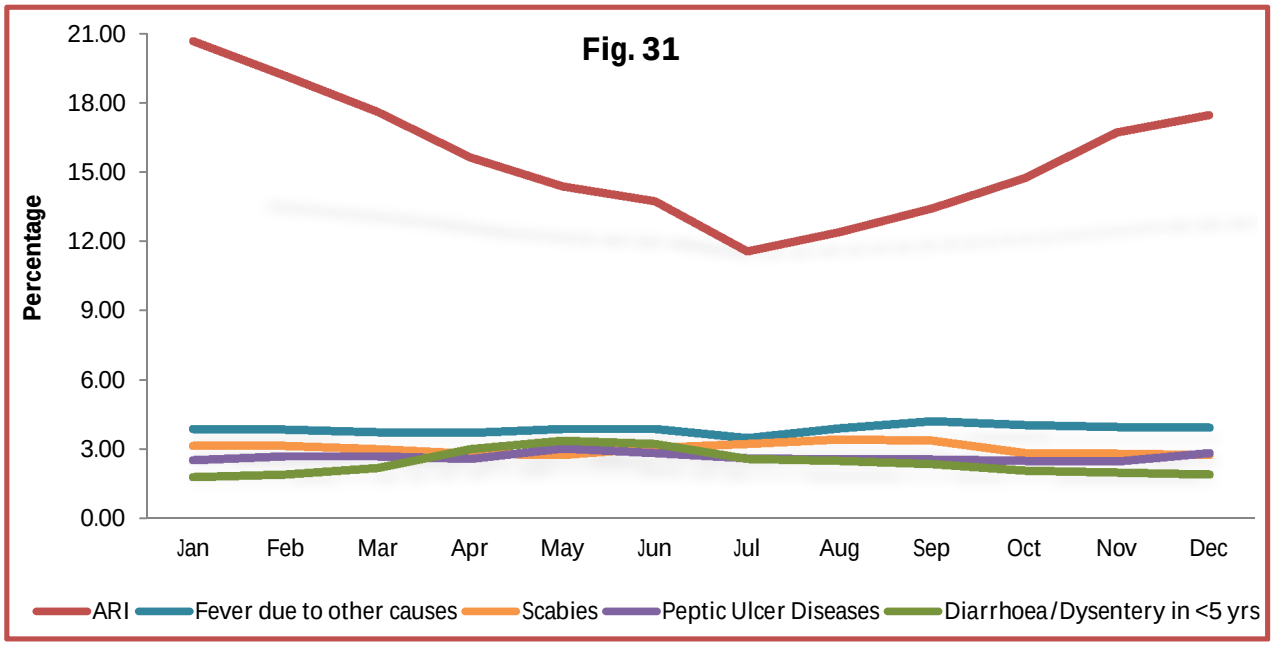
Out of the 43 priority diseases, 19 are communicable and 24 are non-communicable. The subsequent analysis shows the most common diseases and disease wise break up.

The proportion of communicable diseases was more than the non-communicable diseases out of 43 diseases throughout the year, which are reported through DHIS (Fig. 30). Total number of communicable disease patients was 25,696,161 (56%) and that of non-communicable diseases was 20,220,746 (44%) in year 2013.

Table 6: Number and Percentage of Disease Cases

Disease	No. of Patients	%age out of Total	Disease	No. of Patients	%age out of Total
ARI	14,614,781	15.46	Suspected Viral Hepatitis	288,658	0.31
Fever due to other causes	3,640,240	3.85	Pneumonia >5 years	285,443	0.30
Scabies	2,859,333	3.03	Fractures	193,933	0.21
Peptic Ulcer Diseases	2,505,238	2.65	Dog bite	155,269	0.16
Diarrhoea/Dysentery in <5 yrs	2,289,244	2.42	Trachoma	124,966	0.13
Diarrhoea/Dysentery in >5 yrs	2,167,901	2.29	Cirrhosis of Liver	124,511	0.13
Hypertension	1,869,274	1.98	Burns	104,443	0.11
Asthma	1,698,426	1.80	Glaucoma	66,412	0.07
Dental Caries	1,671,980	1.77	Epilepsy	57,201	0.06
Diabetes Mellitus	1,408,108	1.49	Nephritis/Nephrosis	53,445	0.06
Dermatitis	1,357,377	1.44	Benign Enlargement of Prostrate	53,157	0.06
Road traffic accidents	1,266,391	1.34	Sexually Transmitted Infections	53,049	0.06
Urinary Tract Infections	1,186,219	1.26	Drug Dependence	28,648	0.03
Otitis Media	950,833	1.01	Suspected Measles	16,592	0.02
Worm infestation	869,243	0.92	Snake bits	7,310	0.01
Suspected Malaria	802,436	0.85	Cutaneous Leishmaniasis	4,631	0.005
TB Suspects	619,613	0.66	Suspected Meningitis	3,450	0.004
COPD	572,289	0.61	Suspected HIV/AIDS	1,827	0.002
Cataract	481,229	0.51	Suspected Neonatal Tetanus	955	0.001
Depression	414,284	0.44	Acute Flaccid Paralysis	726	0.001
Pneumonia <5 years	368,592	0.39	**Total Patients of Priority Diseases**	**45,916,907**	**49**
Ischemic Heart Disease	354,529	0.38	**Other**	**48,589,110**	**51**
Enteric / Typhoid Fever	324,721	0.34	**Grand total**	**94,506,017**	**100**

Top Five Diseases



This indicator is a listing of the five most common cases of both communicable and non-communicable diseases attending OPD. It will indicate what type of patients mostly are attending the OPD so that appropriate measures/ resources can be focused, e.g., training of staff, equipment, medicines, lab facilities etc. In addition, it will suggest focus area for disease control and prevention.

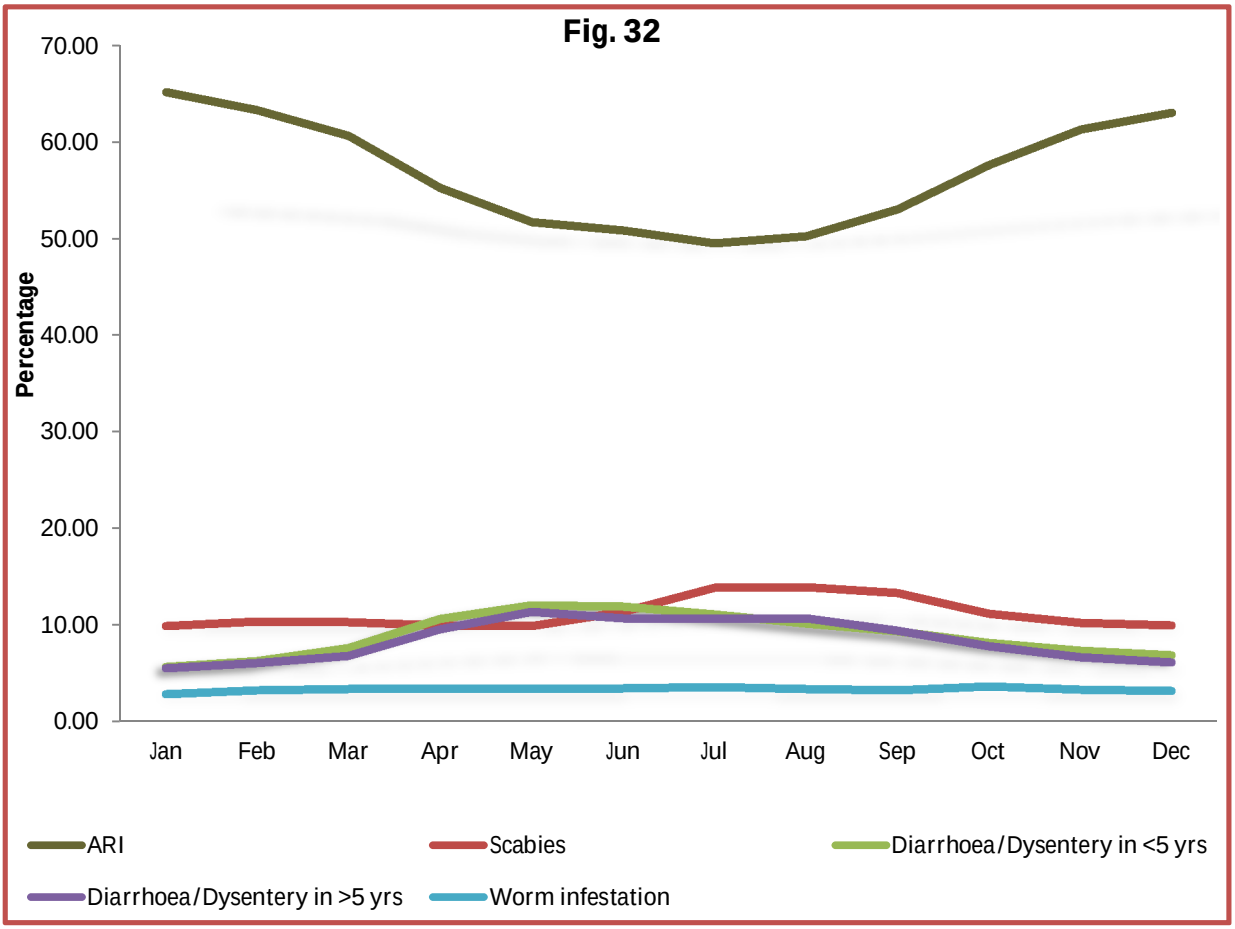
Fig. 31 shows the month-wise percentage of top five diseases in the province during the year 2013. Acute (upper) respiratory infection was the most common disease. During the mid of the year, there was a remarkable drop in the patients of Acute (upper) respiratory infection. All other disease showed almost same trend.

Top Five Communicable Diseases

A disease, the causative agents of which may pass or be carried from a person, animal, or the environment to a susceptible person directly or indirectly.

(The percentage of communicable diseases is calculated from the total of communicable diseases.)

Fig. 32

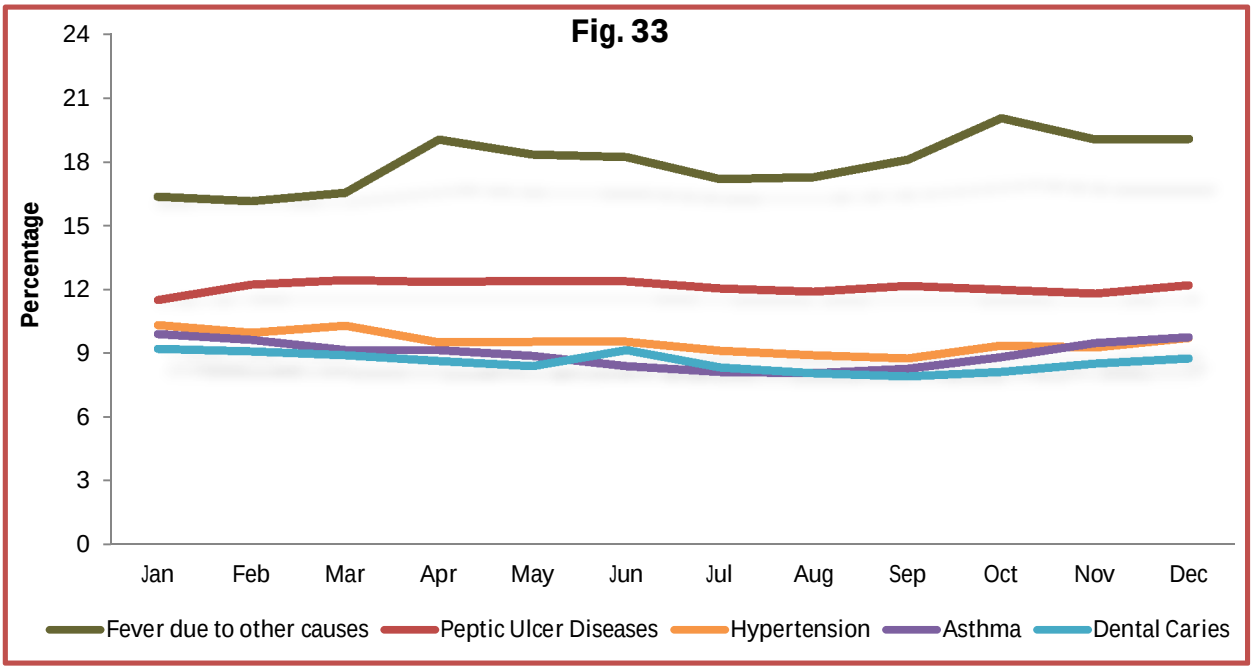


Top Five Non-Communicable Diseases

A non-communicable disease, or NCD, is a medical condition or disease, which is non-infectious. NCDs are diseases of long duration and generally slow progression.

(The percentage of non-communicable diseases is calculated from the total of non-communicable diseases.)

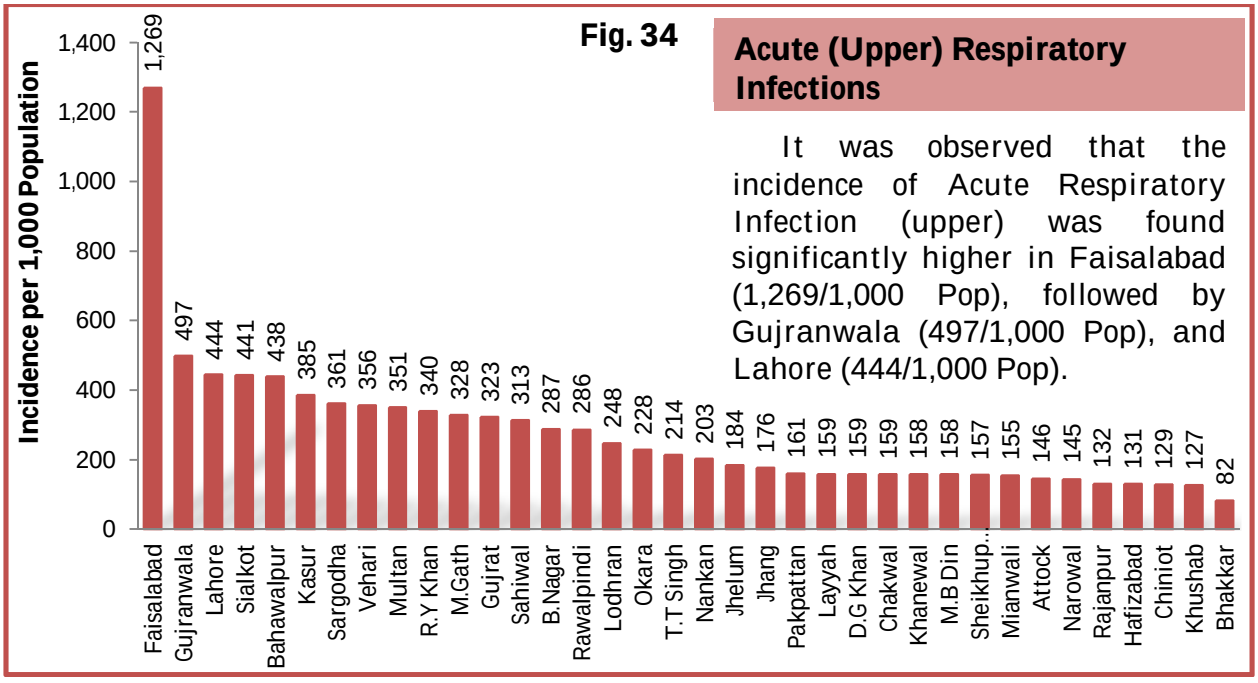
Fig. 33



District wise Incidence Rate (per 1,000 populations) of Top 5 Diseases

Incidence is a measure of the risk of developing some new condition within a specified period. Although sometimes loosely expressed simply as the number of new cases during some time, it is better expressed as a proportion or a rate with a denominator. Incidence rate is the probability of developing a particular disease during a given period; the numerator is the number of new cases during the specified time and the denominator is the population at risk during the period.

Fig. 34



Acute (Upper) Respiratory Infections

It was observed that the incidence of Acute Respiratory Infection (upper) was found significantly higher in Faisalabad (1,269/1,000 Pop), followed by Gujranwala (497/1,000 Pop), and Lahore (444/1,000 Pop).

Fig. 35

Fever due to Other Causes

It was observed that the incidence of Fever due to other causes (excluding pneumonia and malaria) was found significantly higher in Faisalabad (313/1,000 Pop), followed by Muzaffargarh (133/1,000 Pop), and Gujranwala (121/1,000 Pop).

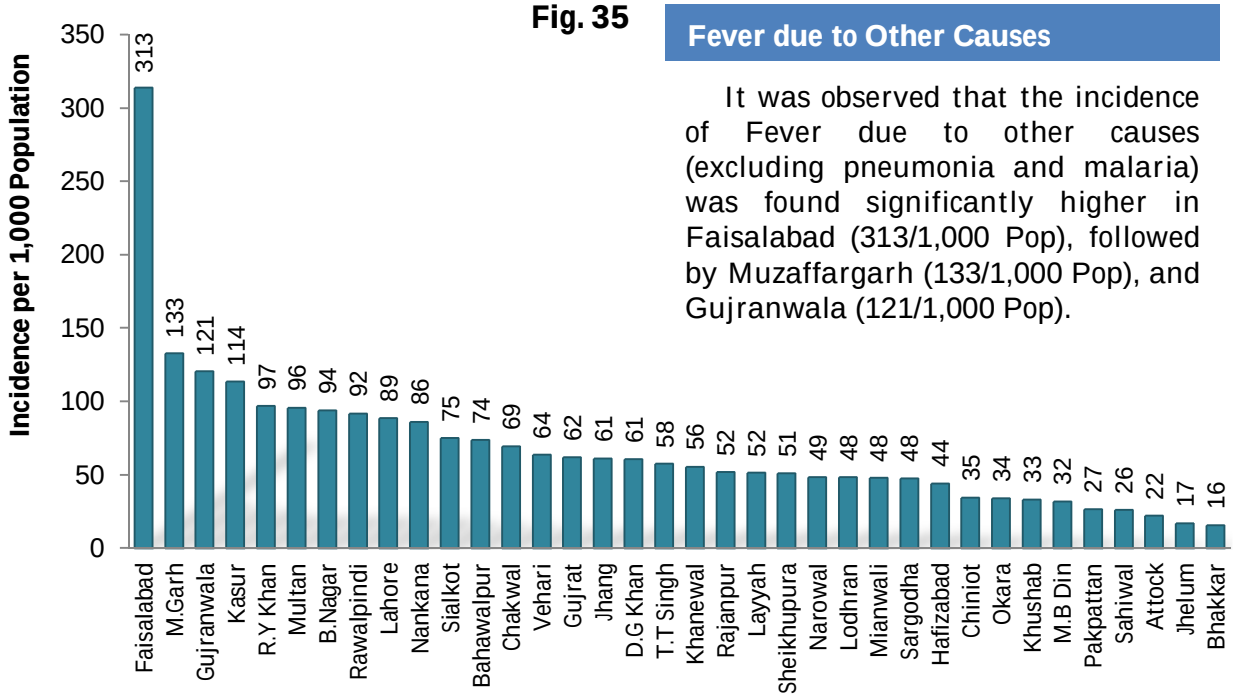


Fig. 36

Scabies

It was observed that the incidence of Scabies was found significantly higher in Faisalabad (212/1,000 Pop), followed by Bahawalpur (107/1,000 Pop), and Gujranwala (93/1,000 Pop).

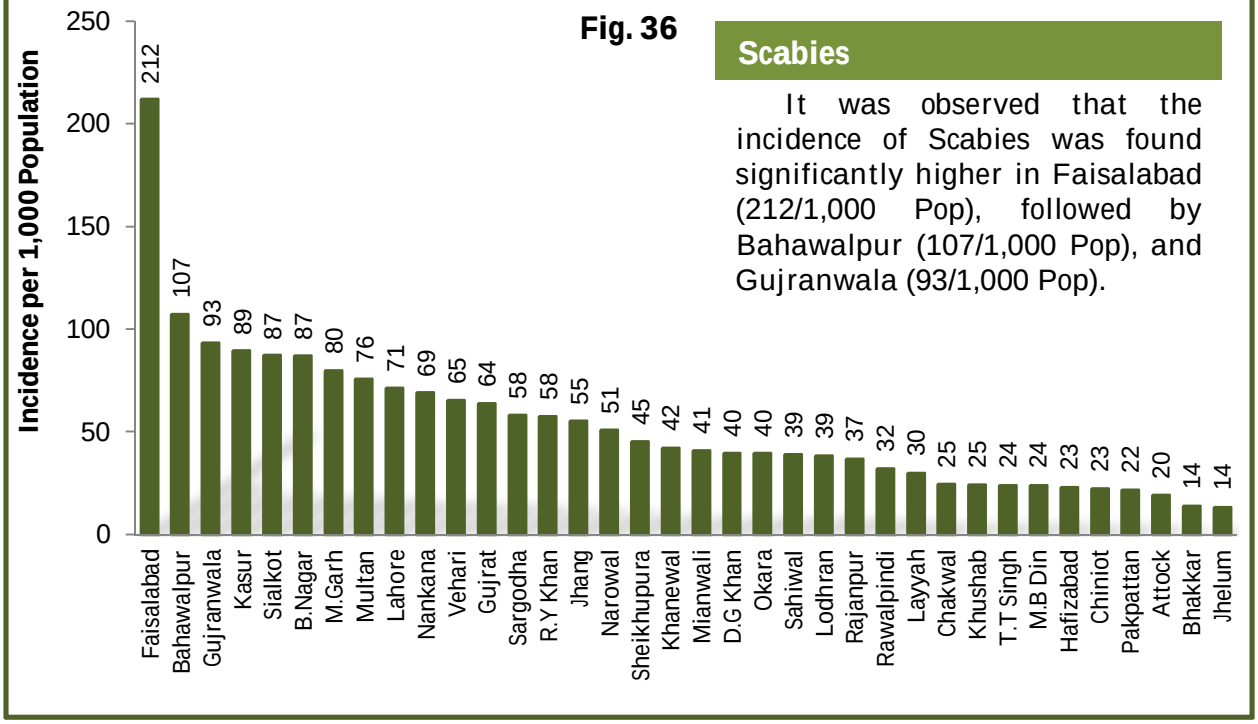


Fig. 37

Peptic Ulcer Diseases

It was observed that the incidence of peptic ulcer disease was found significantly higher in Faisalabad (231/1,000 Pop), followed by Bahawalnagar (104/1,000 Pop), and Vehari (74/1,000 Pop).

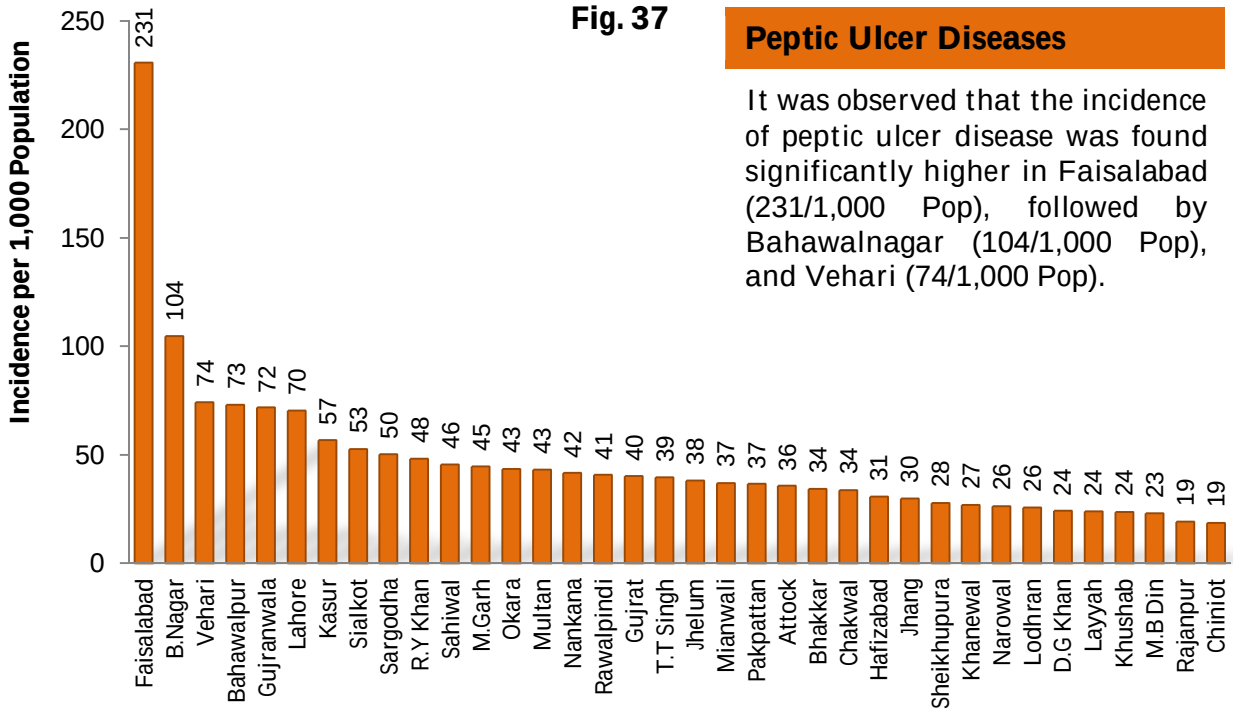
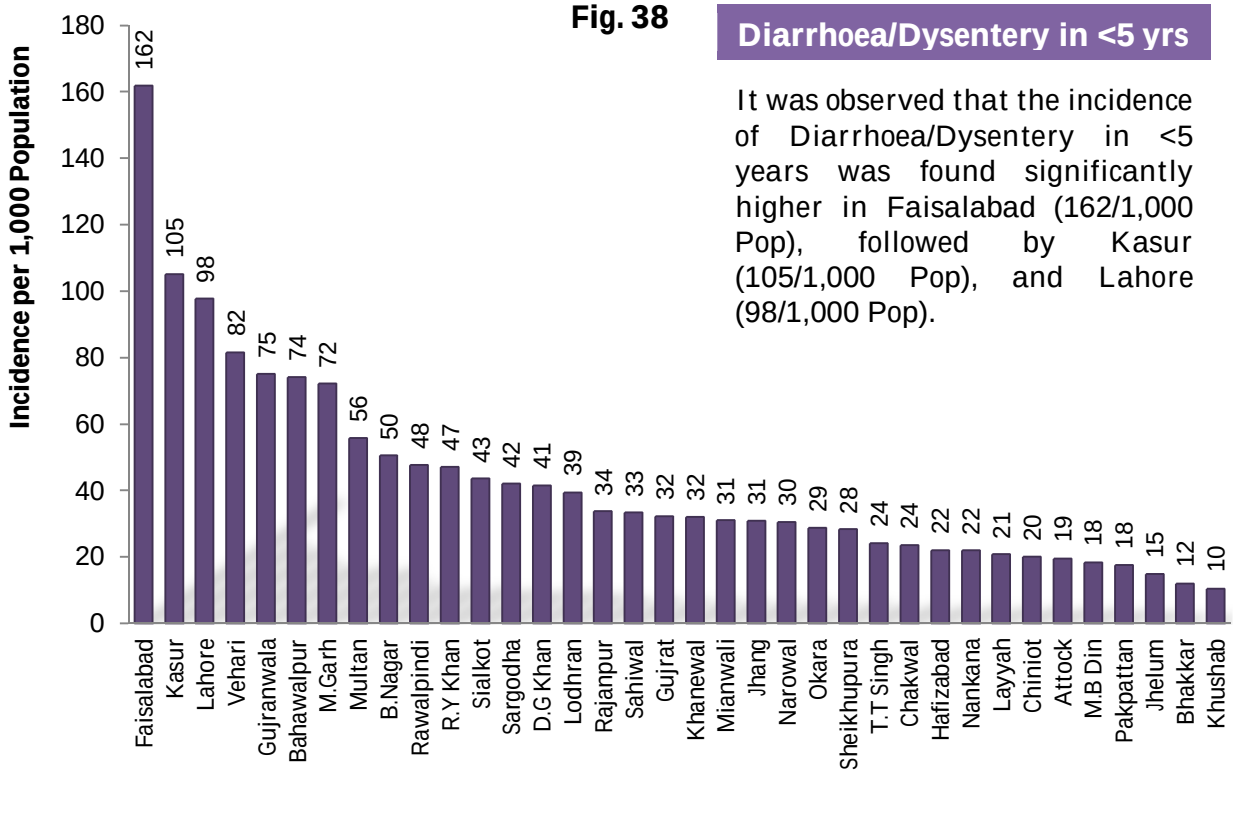


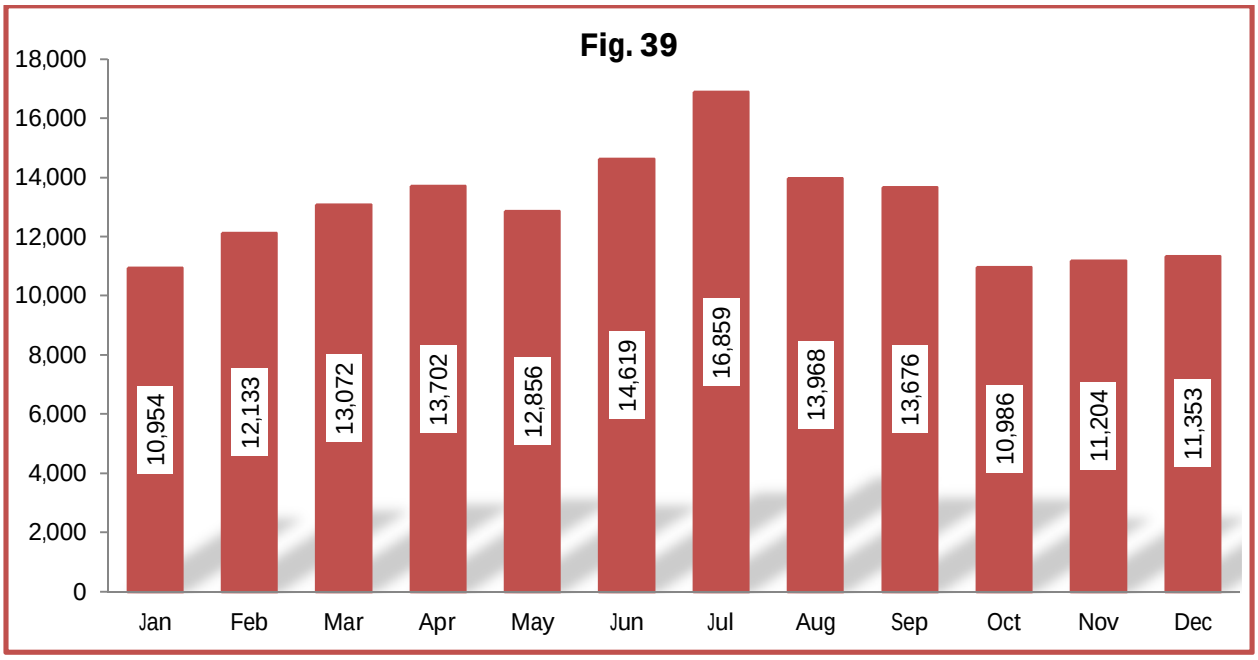
Fig. 38

Diarrhoea/Dysentery in <5 yrs

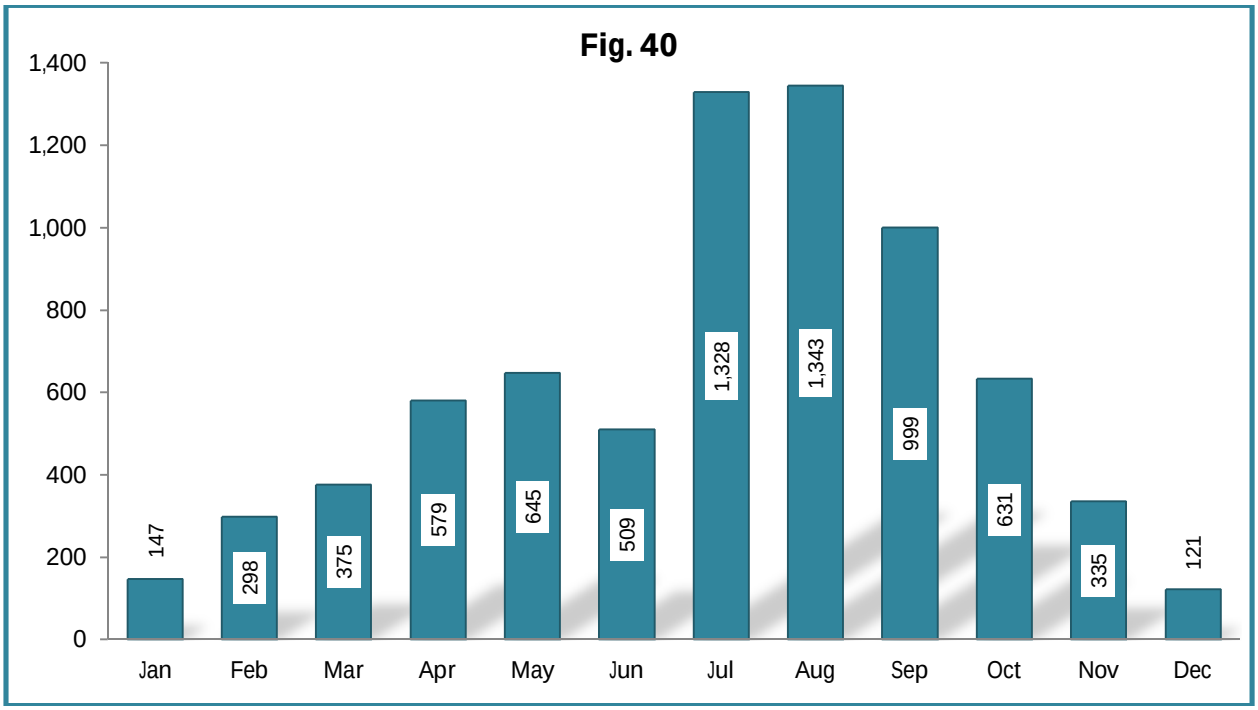
It was observed that the incidence of Diarrhoea/Dysentery in <5 years was found significantly higher in Faisalabad (162/1,000 Pop), followed by Kasur (105/1,000 Pop), and Lahore (98/1,000 Pop).



Month wise Cases of Dog Bite

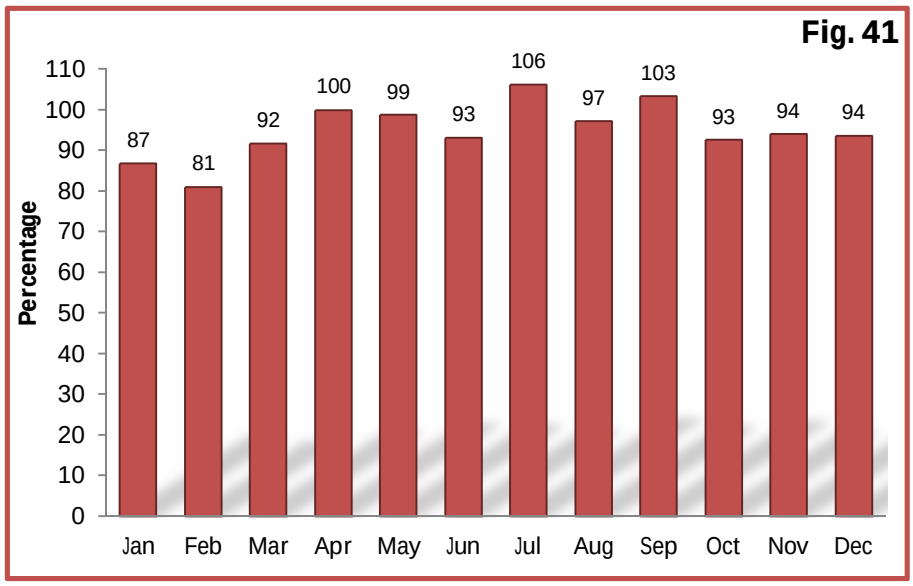


Month wise Cases of Snake Bite



Antenatal Care Coverage

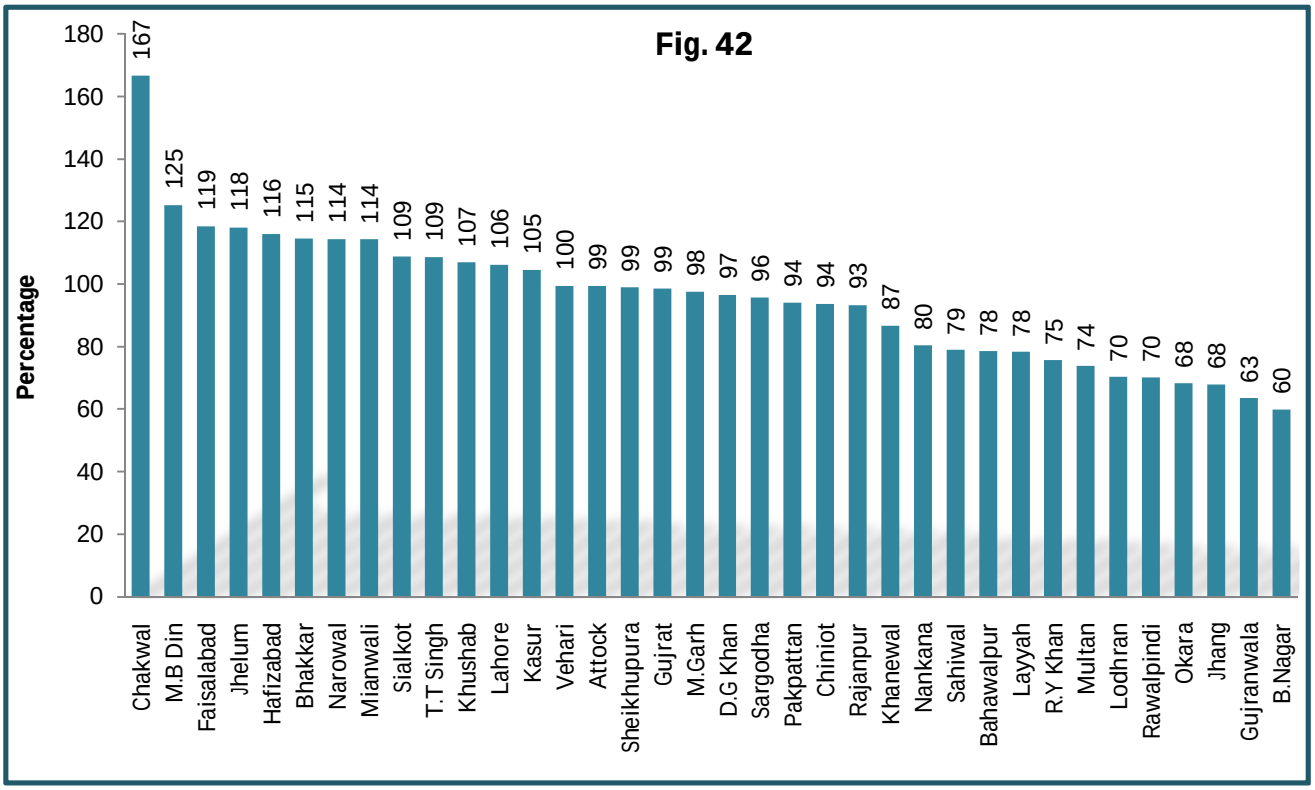
Antenatal care coverage is an indicator of access and utilization of health care services during pregnancy. It is a measure of the percent of pregnant women who utilize antenatal care services provided at the public health facility at least once during their current pregnancy.



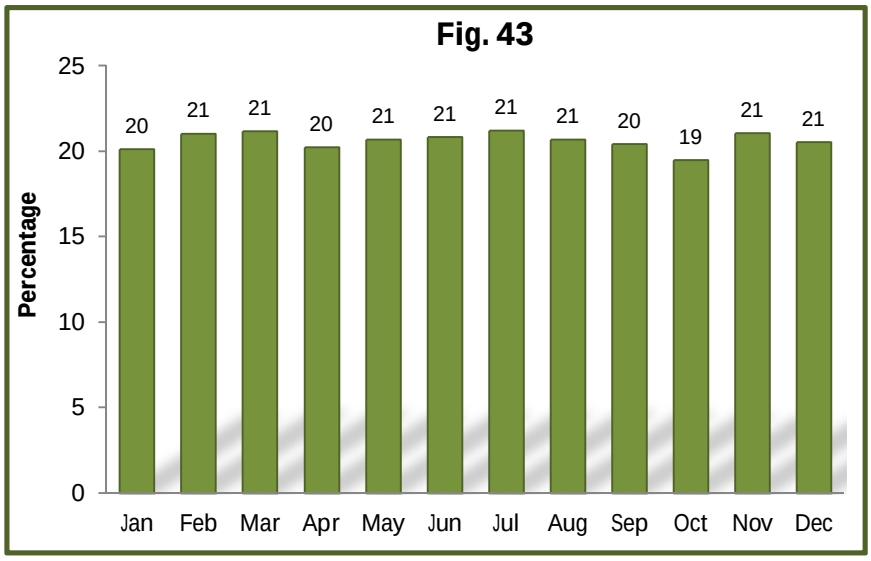
This indicator indicates how many of the pregnant women in the catchment area are covered through the facility for antenatal care services. In other words, it reflects the market share of the facility in providing antenatal services. When compared against previous performance or target, it will provide information on the current performance of the facility or facilities in the tehsil/district in catering to the antenatal care needs of the target population of pregnant women. It can reflect the integrity of referral linkages between LHW and the facility-based health care providers, the extent of mobilization of pregnant women or their families to utilize maternal health services from the public health facilities and/or the trust of the community on the public health facilities/providers.

During 2013, highest ANC-1 coverage was observed in July (106%) of the expected population) and lowest coverage was in February (81% of the expected population).

District wise Percentage of ANC-1 Visits



Percentage of Anaemia among ANC-1 Attendance

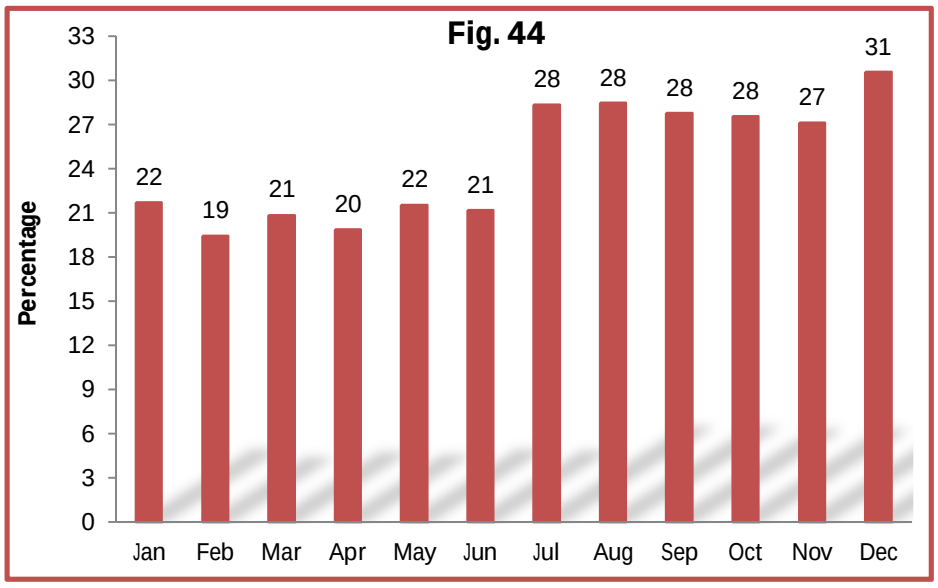


Percentage of pregnant women screened for haemoglobin levels at their first antenatal care visit to the facility with haemoglobin levels less than 10g/dl.

Pregnant women coming to the facility for antenatal care serve as a sample of women from the catchment population. The nutritional status among this sample of pregnant women from the catchment population. The nutritional status among this sample of pregnant women is suggestive of the nutritional status of women in the catchment population.

Twenty one percent (599,731) of the women coming for ANC-1 were reported as anaemic (haemoglobin <10g/dl) out of the total ANC-1 visits (2,910,314). Fig. 43 shows monthly trend of anaemic women.

Deliveries Conducted at the Health Facilities

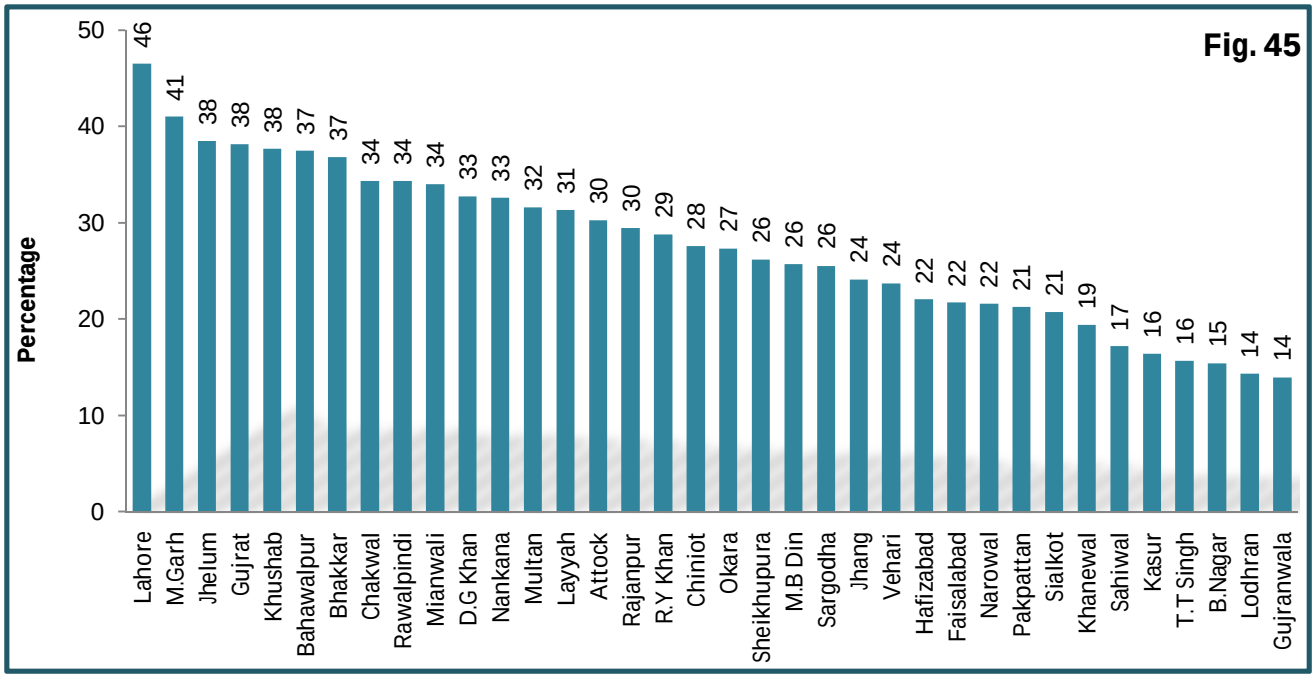


Delivery coverage at facility is an indicator of utilization of delivery services provided at public health facilities. It is a measure of the percent of mothers who are delivered at the public health facility.

This indicator is a proxy for deliveries by skilled health personnel. It indicates how much of the pregnant women population in the catchment area are covered through the public health facility for delivery services and, thus, reflects the market share of the facility in providing delivery services.

In fig. 44, percentage of monthly deliveries conducted at the facilities is shown. It is clear from the graph that there was a remarkable change in percentage of deliveries conducted during 2013. The reason is that after August 2013, the tertiary care hospitals started reporting through DHIS.

District wise Percentage of Deliveries Conducted at Health Facilities



Facilities wise Average Number of Deliveries Conducted (Per Month)

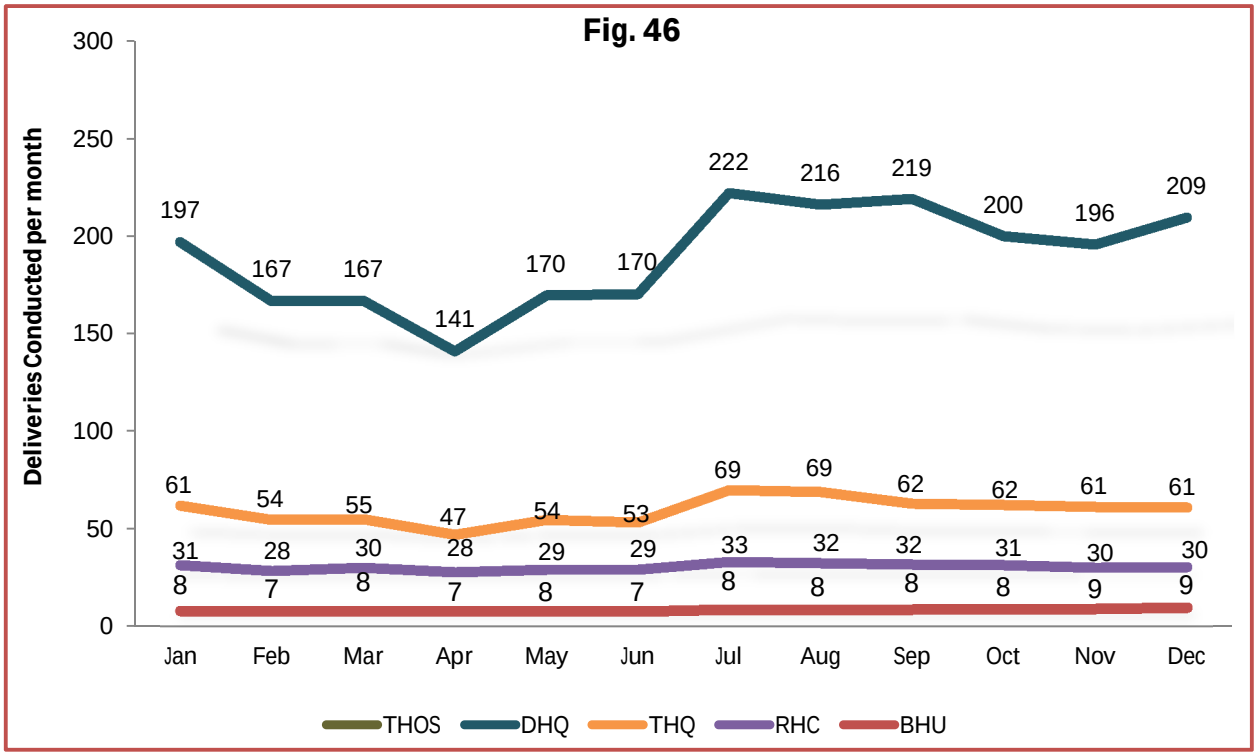
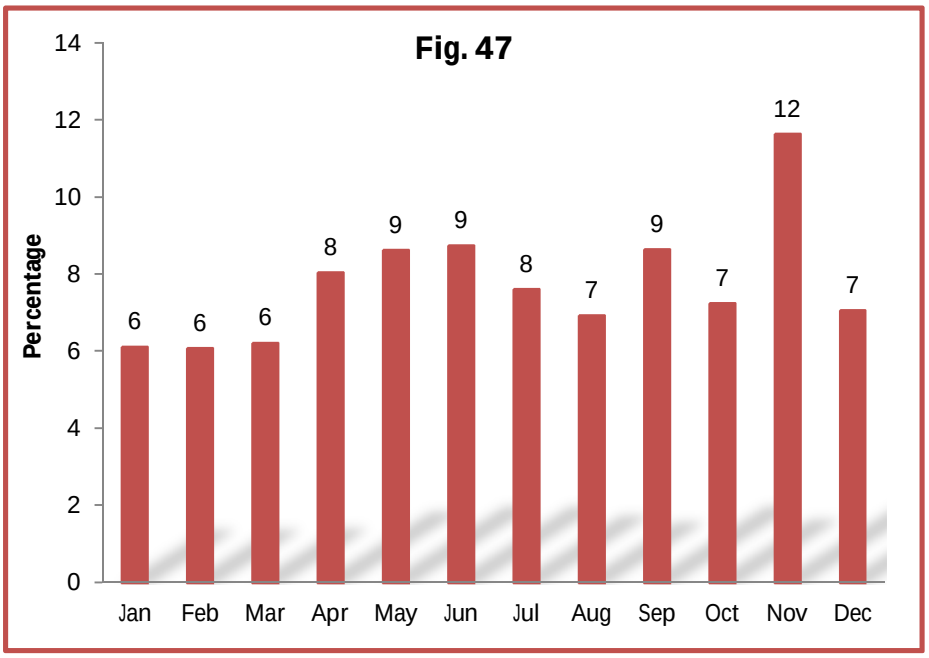


Fig. 46 shows the health facility type wise number of deliveries conducted per month. It can be seen in figure that the highest number of deliveries were conducted in July in Teaching hospitals.

Obstetric Complications

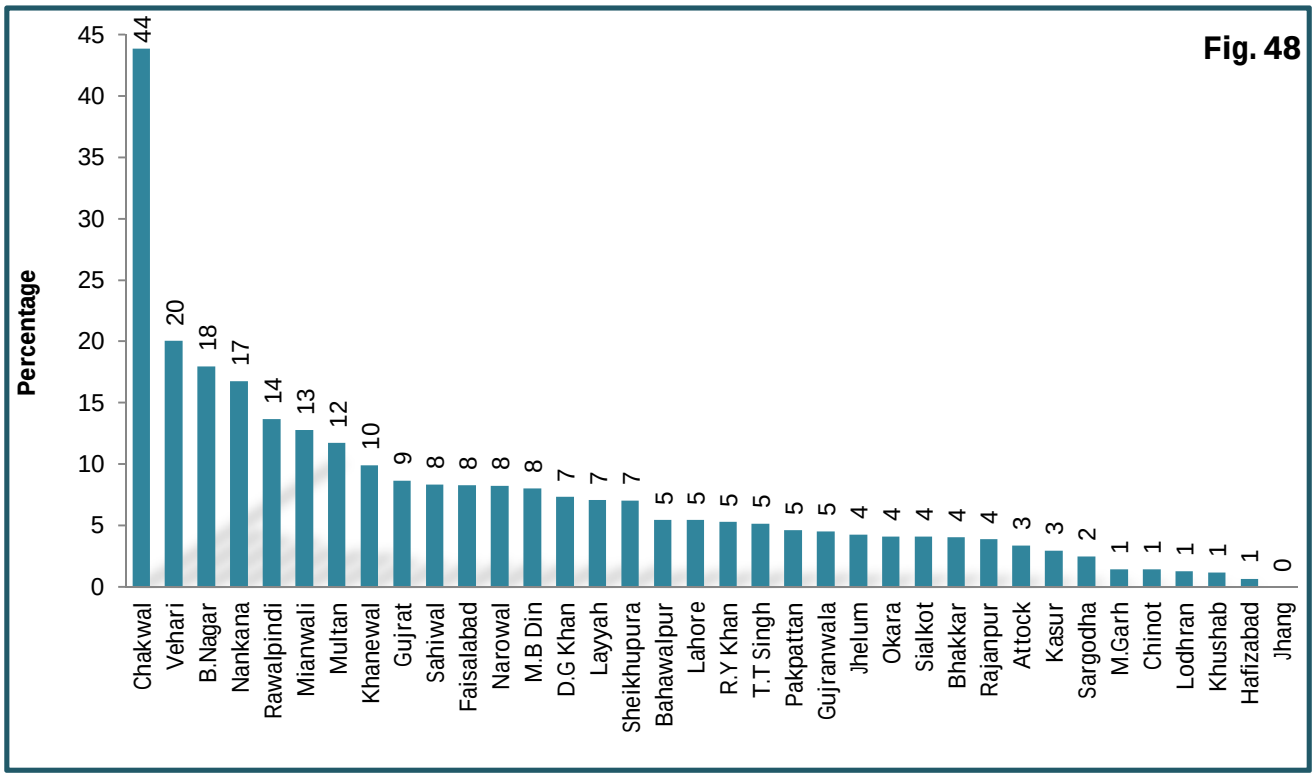
This indicator is a measure of the proportion of women estimated to have obstetric complications who are treated in the public health facilities.

This indicator will suggest how much of the complicated pregnancies are catered by the public health facility. Indirectly it also reflects the quality of services at the facility, the quality, and coverage of antenatal care services in the catchment area and the strength of the referral system.



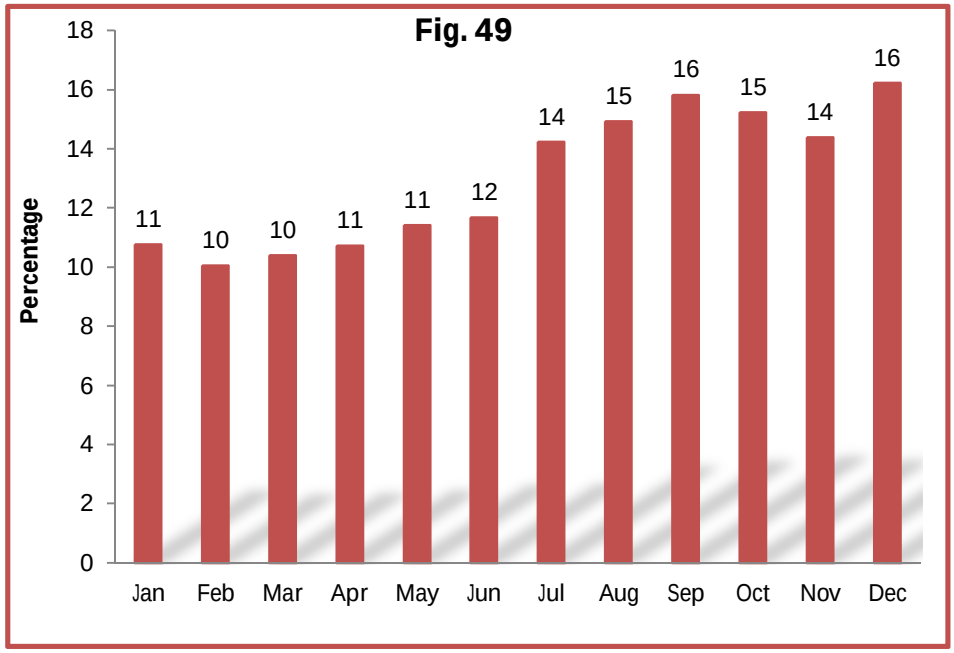
During 2013, total numbers of deliveries with complications were 81,898 (8%) of the total deliveries (528,933). The highest percentage was observed in June (9.3%).

District wise Percentage of Obstetric Complications



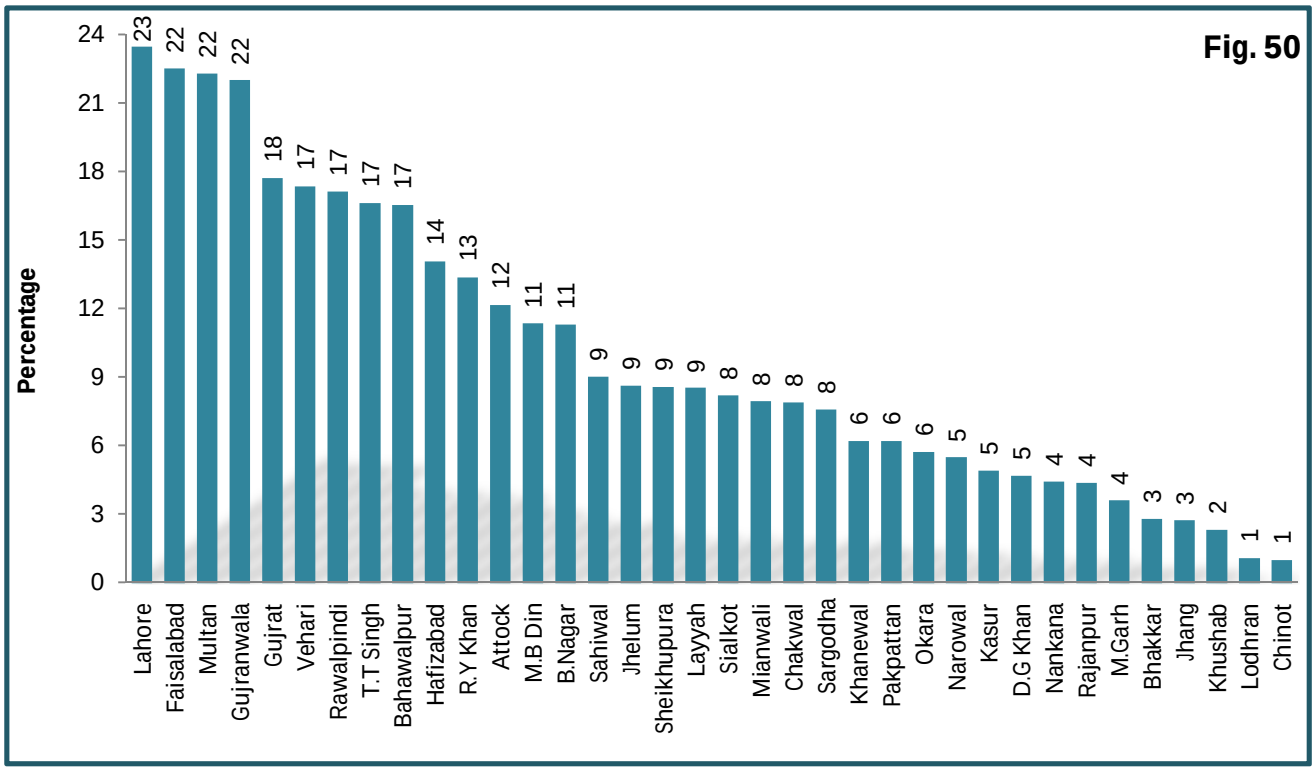
Caesarean Section

This indicator is a measure of Caesarean Sections as a percentage of all births in the population. This indicator will give an estimate of what proportion of C-sections are taking place in public health facilities. On the other hand, high proportion may indicate over-indulgence in C-sections.



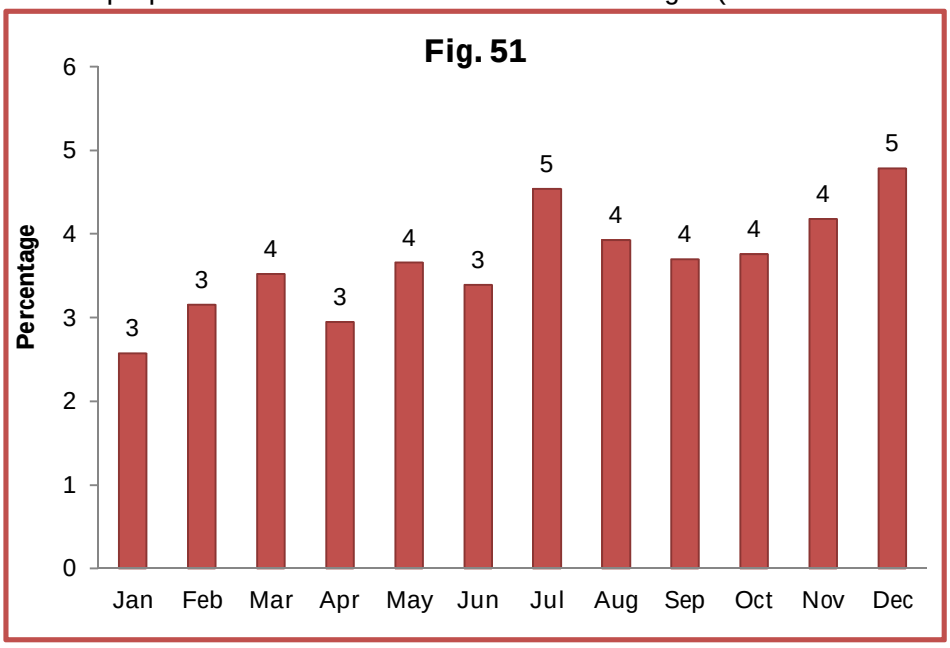
It was observed that in 2013 deliveries with C-section constitute 13% (85,754) of the total deliveries (642,997). The overall situation indicated that the higher number deliveries with C-section were conducted in January (10.27% of the total number of deliveries) and lowest percentage was observed in December (8% of the total deliveries).

District wise Percentage of Caesarean Section



Frequency of Low Birth Weight (LBW) Babies

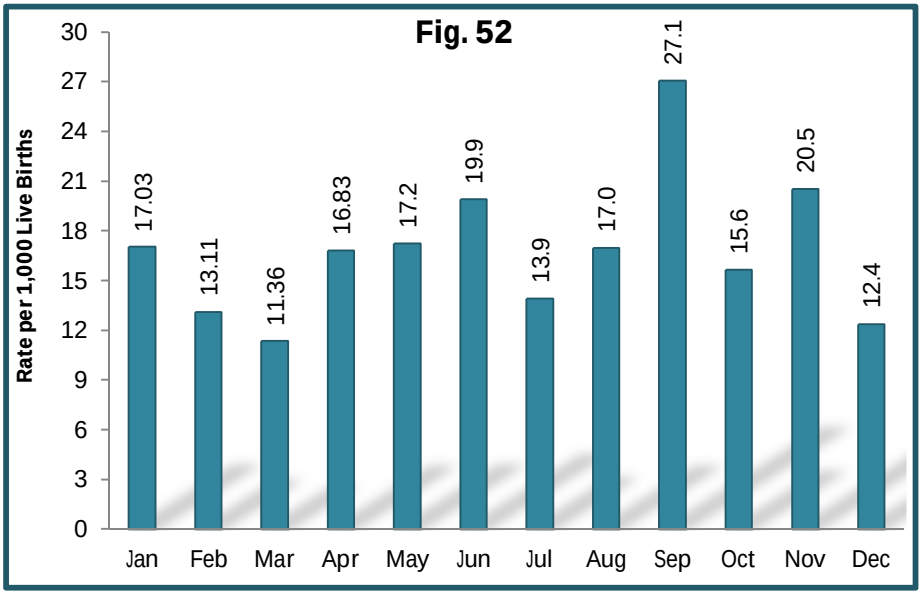
This indicator measures the proportion of live births with low birth weight (live born infants with birth weight less than 2.5 kg) among births in health facility in a given time period. LBW rate is a good indicator of a public health problem that includes long-term maternal malnutrition, ill health, and poor health care. On an individual basis, low birth weight is an important predictor of new-born health and survival. The facility-based statistics can provide a good estimate of LBW rate in the population. Monitoring changes in facility-based LBW rate can help in understanding changes in the population.



During the year 2013, out of 611,803 live births in the facilities, 22,889 (4%) babies were with LBW (<2.5kg). Fig.51 is showing the monthly trend of percentage of LBW babies during 2013.

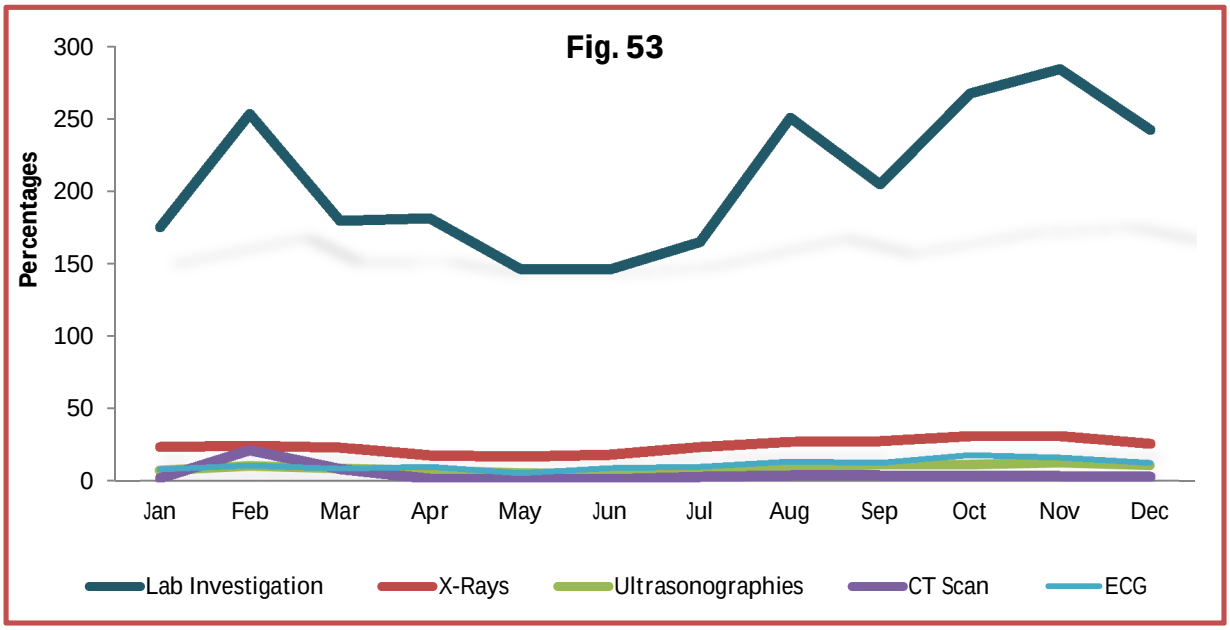
Neonatal Mortality Rate

This indicator refers to the proportion of early neonatal deaths (deaths within the first seven days of life) in the facility among live births occurring in the facility. The indicator is calculated from the data received from the health facilities. This indicator is suggestive of the quality of new born care, especially the immediate new born care and obstetric care in the facility. It may also reflect poor nutritional status of mothers and poor health care seeking behaviour in the community.

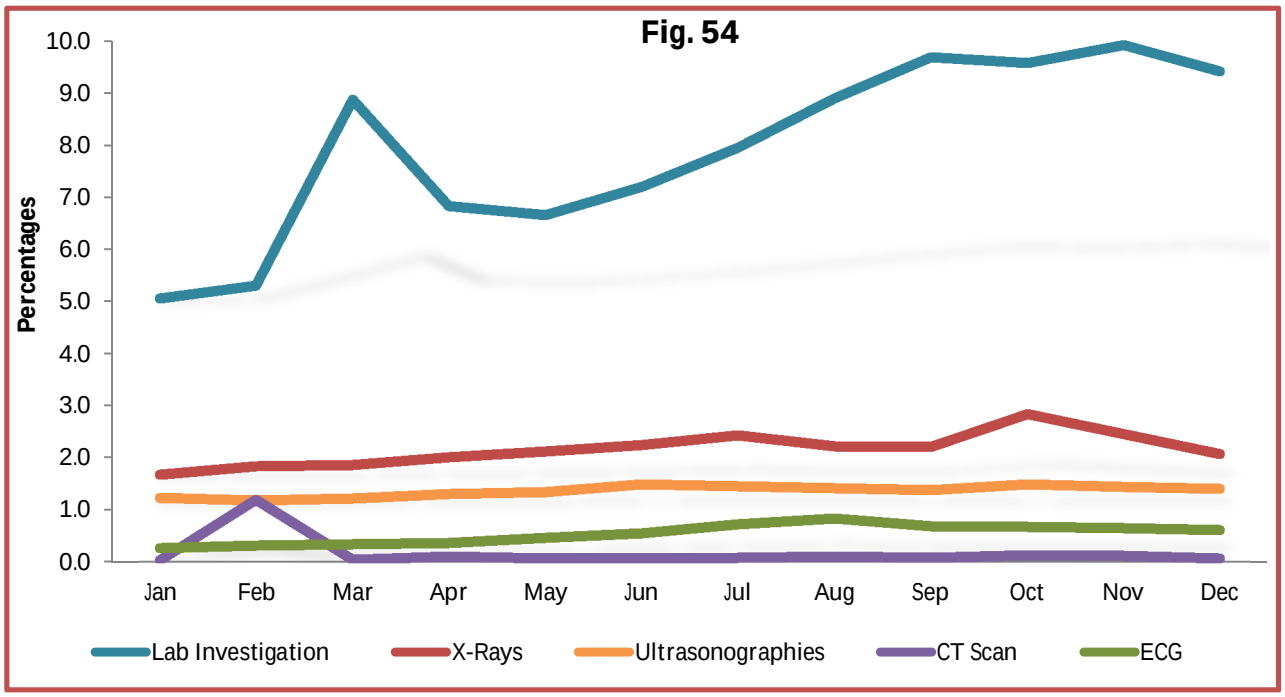


The total number of neonatal deaths during 2013 was 10,328 that is only 1.7% of the total live births (610,700). Fig. 52 shows the month wise neonatal mortality rate per 1,000 live births. The mortality rate was highest in September (27.1).

Lab Services Utilization

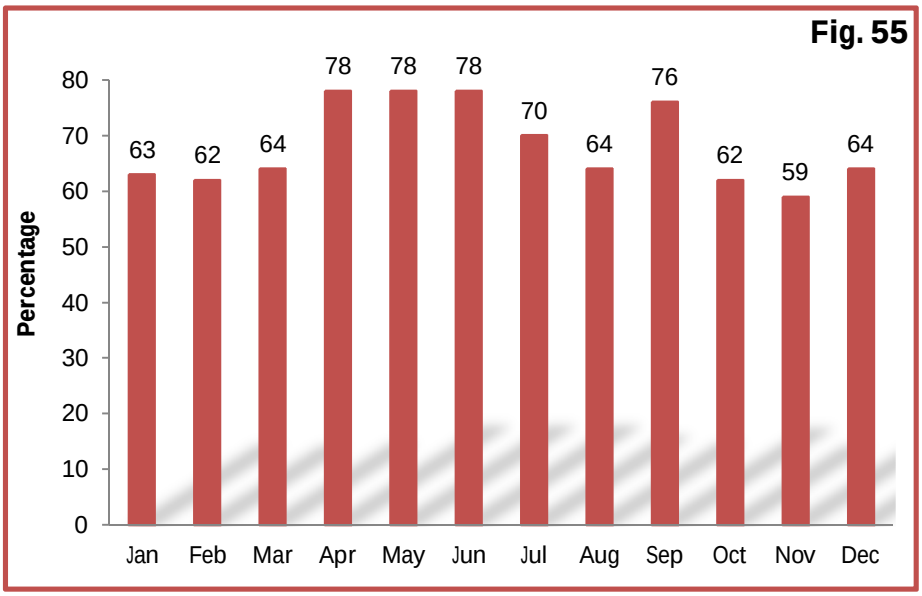


This indicator indicates utilization of laboratory services at the facility and also gives a measure of the proportion of patients receiving diagnostic services from the laboratory of the health facility. This indicator reflects the quality of care in terms of utilization of diagnostic services. It will also help to understand the need for resource allocation for laboratory services based on the utilization rate.



During 2013, of the total admissions (3,783,549), 9,868,278 patients avail the lab services (260%).Detail is shown in fig. 53. In OPD patients (94,506,017), 11,262,955 patients avail the lab services (12%). Detail is shown in fig. 54.

Bed Occupancy Rate



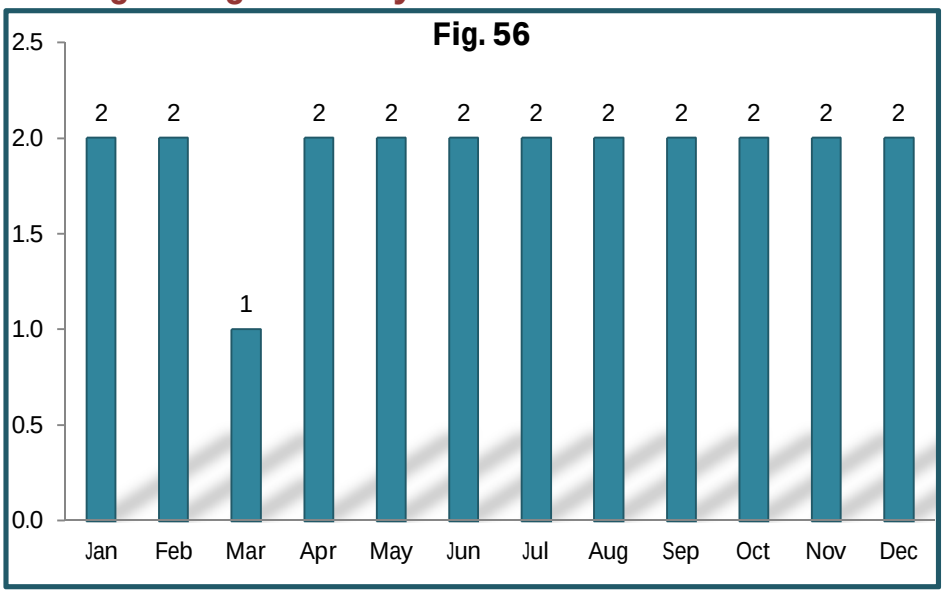
The bed occupancy rate (BOR) is the percentage of occupancy obtained by dividing the average daily census by the number of available beds.

BOR indicates utilization of hospital indoor services. It may also indicate quality of care.

Annual BOR are used to evaluate or compare how hospitals or individual specialties are using their resources. However, the hospital with a high average occupancy rate may not necessarily be running more effectively than the hospital with a low average. High occupancy rates can be due to longer lengths of stay rather than greater numbers of patients being treated. Furthermore since these averages are generally calculated based on an average number of available staffed beds for a year they frequently conceal bed borrowing by other.

Fig. 55 is showing the facility wise bed occupancy rate. The highest rate is in April to June (78%) and lowest in November 2013 (59%).

Average Length of Stay

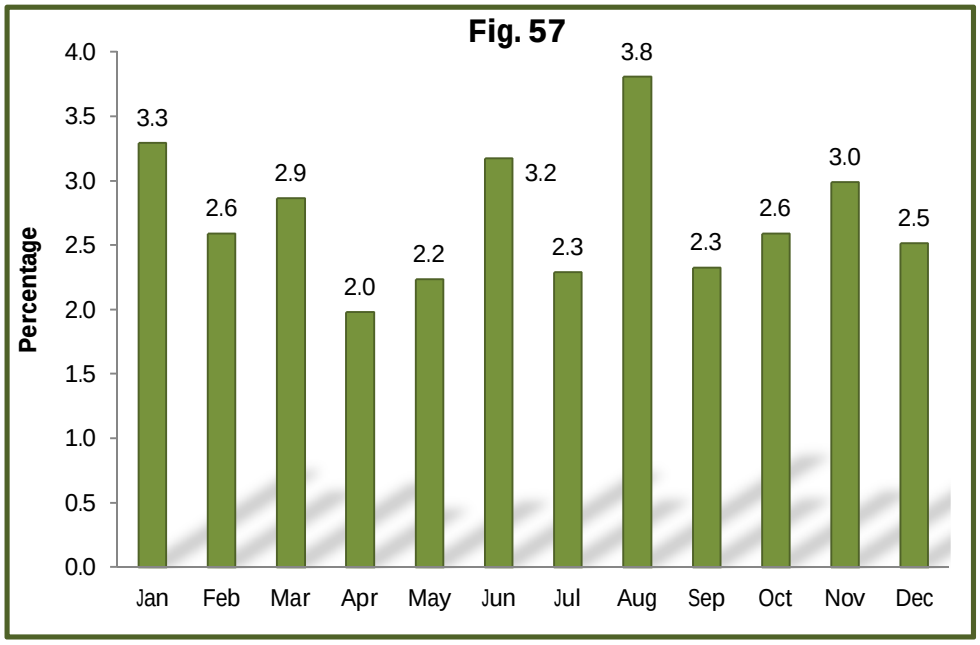


This indicator is the measure of the average duration of hospital stay of admitted patients. This indicator reflects on the intensity of care delivered to hospitalized patients and the probable burden on hospital resources. Like BOR, it is also influenced by factors like patient management practices, quality of care, case-mix and specialty-mix.

Fig. 56 is showing the monthly Average Length of Stay. It is clear from the graph that the highest ALS is consistent throughout the year.

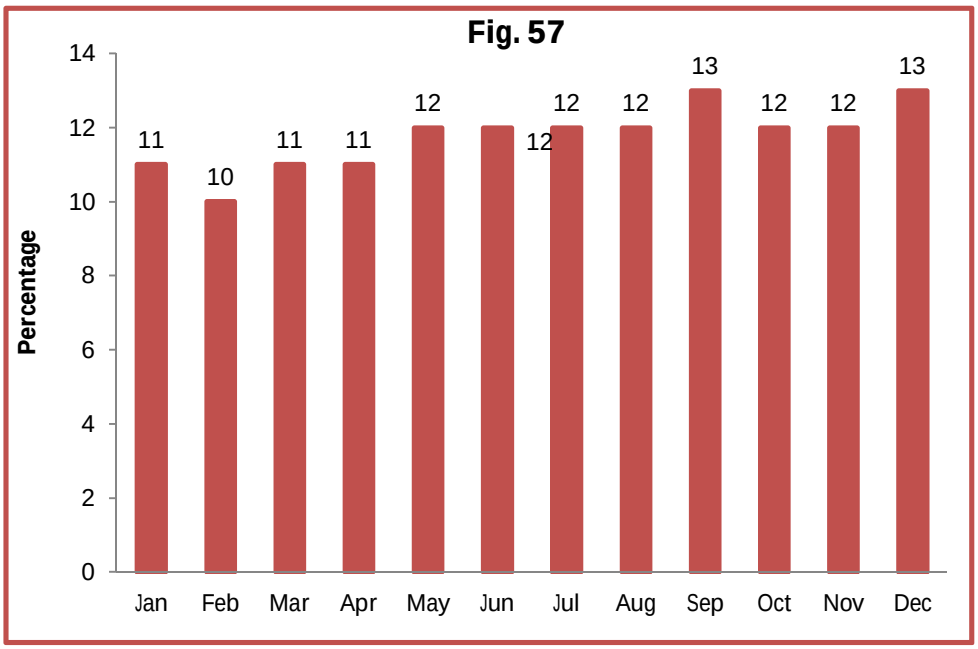
Hospital Death Rate

This indicator is the measure of the proportion of hospital deaths among admitted patients. This indicator is indicative of quality of care at the hospital indoors.



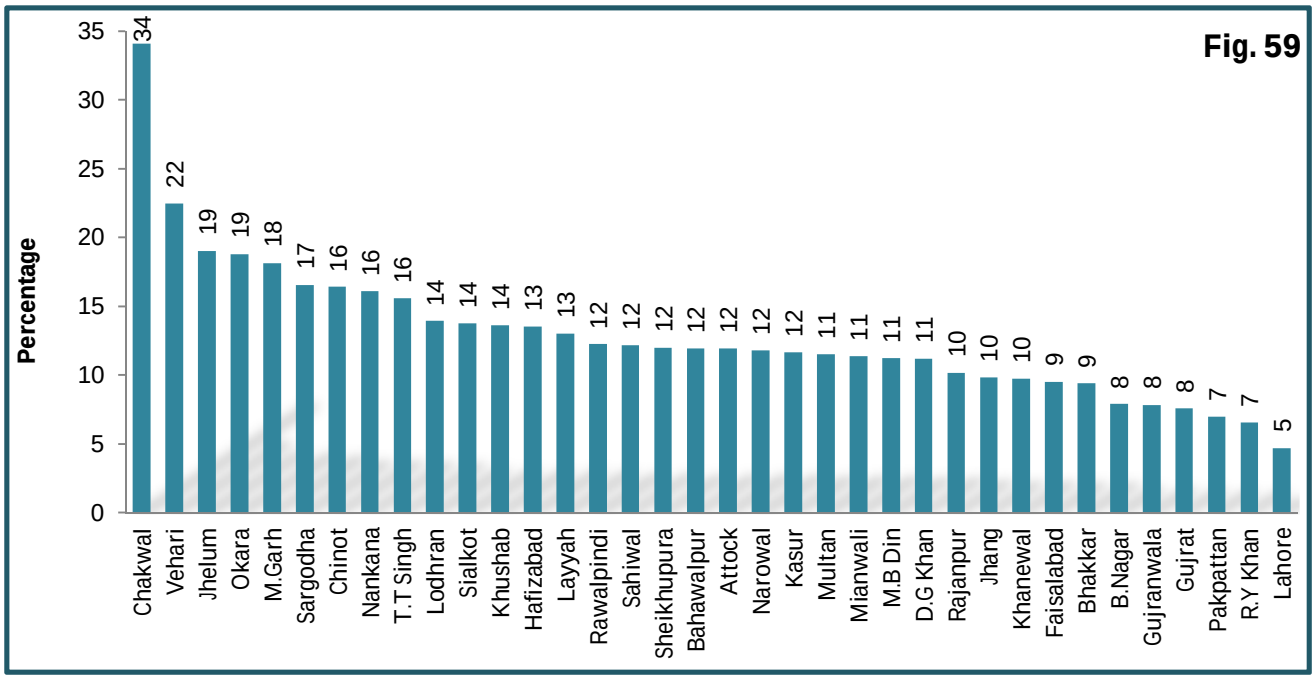
During 2013, of the total admissions in indoor in SHC and tertiary care hospitals (3,265,937), 88,136 (2.7%) deaths were occurred. It was noted that the percentage of deaths was highest in August (3.8%) and lowest in April (2%).

Family Planning Visits



During 2013, 1,742,360 (12%) eligible couples availed the family planning services from the public sector health facilities against the expected population (16% MCBA) 93,047,324. The percentage was highest in September and December.

District wise Percentage of Family Planning Visits



District-wise Number of Commodities Distributed

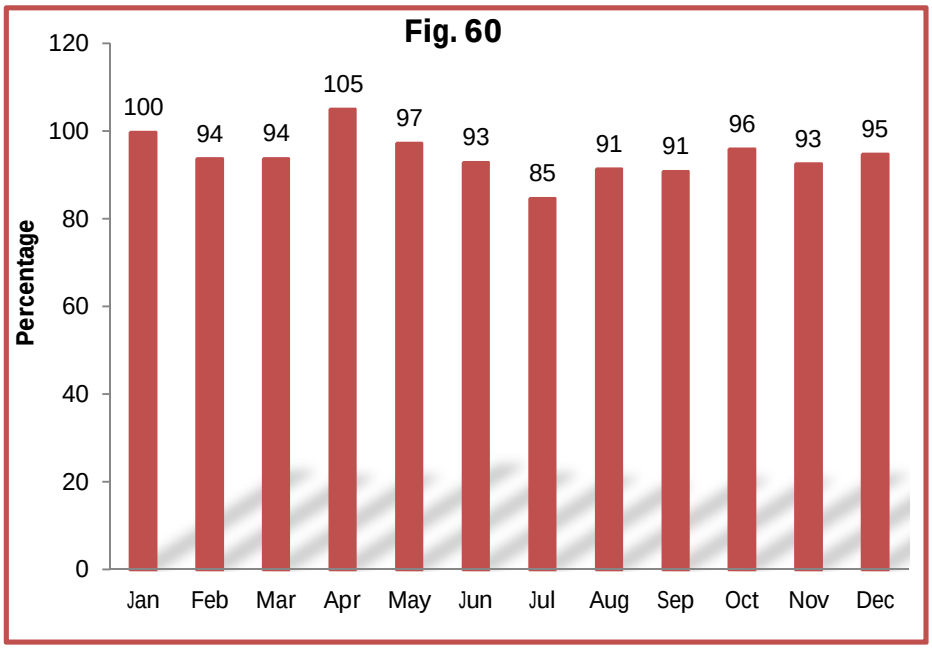
Table-7:

Districts	COC cycles	POP cycles	DMPA inj.	Net En Inj.	Condom Pieces	IUCD	Tubal Ligation	Vasectomy	Implants
Bahawalnagar	12,904	994	6,220	938	49,651	3,196	245	1	0
Bahawalpur	19,852	2,315	12,247	2,954	103,917	7,589	2,769	376	179
R.Y Khan	7,479	3,540	9,230	2,438	37,558	5,185	1,956	5	20
D.G Khan	10,242	3,049	8,705	2,352	37,484	6,032	1,162	156	10
Layyah	7,862	2,075	7,692	9,978	119,983	5,201	929	4	66
Muzaffargarh	29,940	5,839	21,077	5,952	460,800	11,754	2,167	2	64
Rajanpur	5,247	2,003	4,049	1,165	51,583	4,177	1,277	7	4
Faisalabad	48,822	5,615	15,052	1,430	252,052	14,493	5,444	540	442
Jhang	9,088	5,504	8,405	2,240	49,119	9,749	6,187	9	19
T.T Singh	8,349	1,427	6,479	4,619	47,548	3,854	990	47	26
Chiniot	7,106	1,262	5,190	833	12,184	4,059	249	61	80
Gujranwala	12,700	2,484	10,652	1,314	99,901	6,277	2,988	7	6
Gujrat	8,605	149	10,510	647	85,952	3,195	294	2	0
Narowal	6,743	2,062	4,811	874	59,153	3,265	374	0	5
Sialkot	24,734	1,009	12,216	3,910	140,327	9,572	981	0	22
Hafizabad	2,694	1,289	3,342	763	55,491	3,855	220	3	196
M.B Din	7,754	426	4,107	914	112,165	3,072	61	0	44
Kasur	8,602	1,226	4,730	1,744	101,691	6,057	2,248	88	331
Lahore	19,987	2,835	19,753	1,233	146,134	13,903	5,391	197	538
Okara	13,051	2,331	6,806	1,553	87,902	5,801	447	21	217

DISTRICT	COC cycles	POP cycles	DMPA inj.	Net En Inj.	Condom Pieces	IUCD	Tubal Ligation	Vasectomy	Implants
Sheikhupura	10,491	1,502	7,215	1,792	116,680	5,376	1,327	71	12
Nankana	6,763	1,058	2,550	502	60,593	1,984	146	0	244
Khanewal	7,916	1,757	9,103	2,658	66,133	6,313	4,586	24	79
Lodhran	8,466	1,801	5,676	2,422	35,927	3,165	478	16	113
Multan	23,707	2,662	13,171	1,966	166,737	8,600	2,051	142	200
Pakpattan	7,142	200	3,020	207	17,837	1,591	72	0	4
Sahiwal	10,283	1,854	8,373	751	65,952	6,141	3,270	80	53
Vehari	17,399	2,923	11,649	4,497	82,699	8,312	2,660	68	7
Attock	6,960	1,134	7,627	1,448	105,392	2,903	195	0	0
Chakwal	10,790	1,951	9,042	1,917	74,951	6,326	817	188	196
Jhelum	7,716	1,461	8,479	2,148	112,054	3,578	217	0	9
Rawalpindi	18,314	2,926	17,277	4,160	164,822	6,791	1,710	177	133
Bhakkar	5,426	929	4,530	757	10,813	1,598	503	65	203
Khushab	7,000	479	5,608	1,582	56,801	4,080	504	8	45
Mianwali	5,487	576	6,074	843	45,483	2,001	352	0	12
Sargodha	16,418	5,695	13,595	6,606	85,023	11,213	1,681	32	17
Total	**442,039**	**76,342**	**314,262**	**82,107**	**3,378,492**	**210,258**	**56,948**	**2,397**	**3,596**

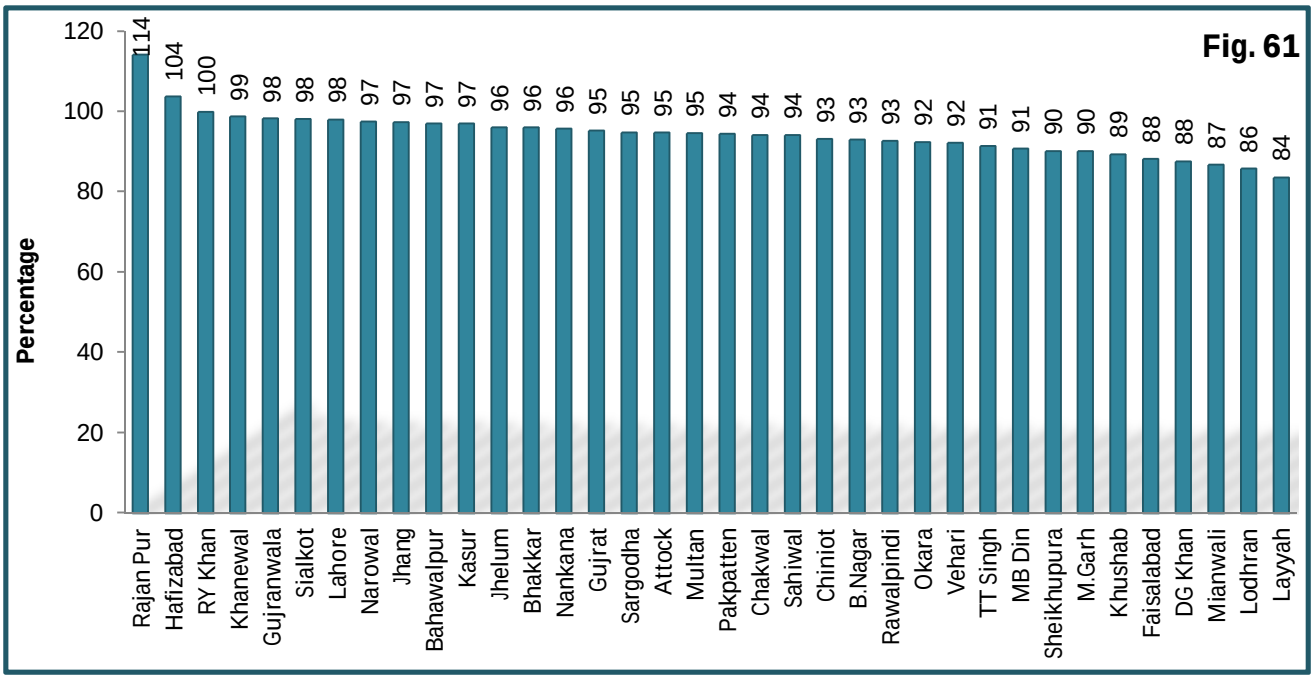
Immunization Coverage

The source of data regarding immunization coverage is "monthly EPI report of Provincial EPI cell" of Directorate General Health services.



This indicator is the measure of the percentage of children who have received the first dose of measles vaccine in a given year.Immunization coverage estimates are used to monitor immunization services, to guide disease eradication and elimination efforts, and are a good indicator of health system performance. Fig. 60 is showing the percentages of monthly trend Immunization coverage during 2013. Highest coverage was reported in April (105%) and in July the lowest coverage was reported (85%).

District wise Percentage of Immunization Coverage

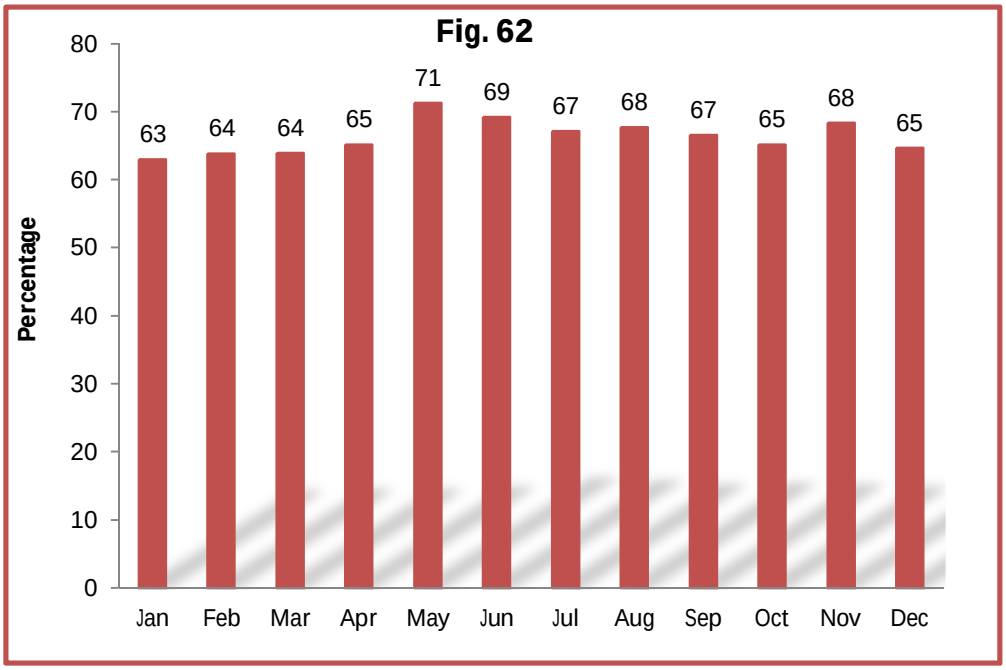


TT-II Coverage

This indicator is a measure of the percentage of pregnant women protected against tetanus/neonatal tetanus.

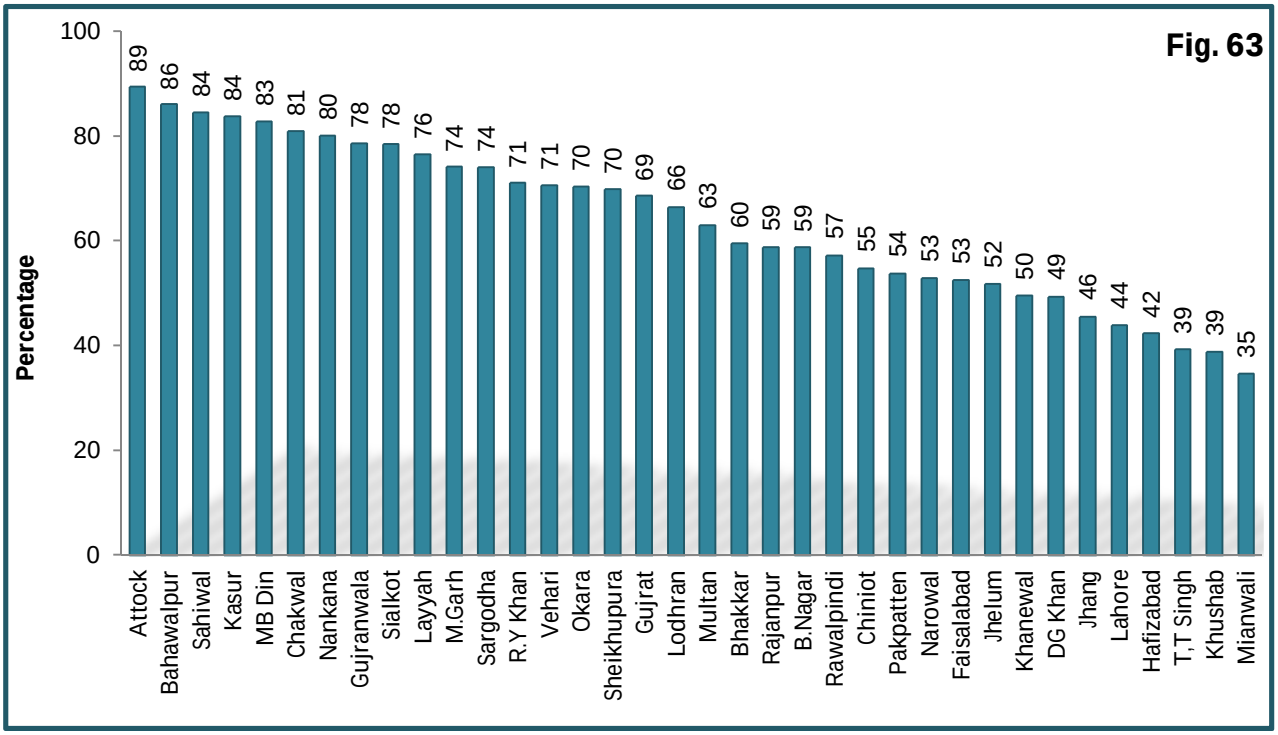
This indicator reflects the performance of the health system in achieving TT immunization coverage.

Comparison with district /tehsil /taluka /union council target will give indication of achievement against the target for that district/tehsil/union council.

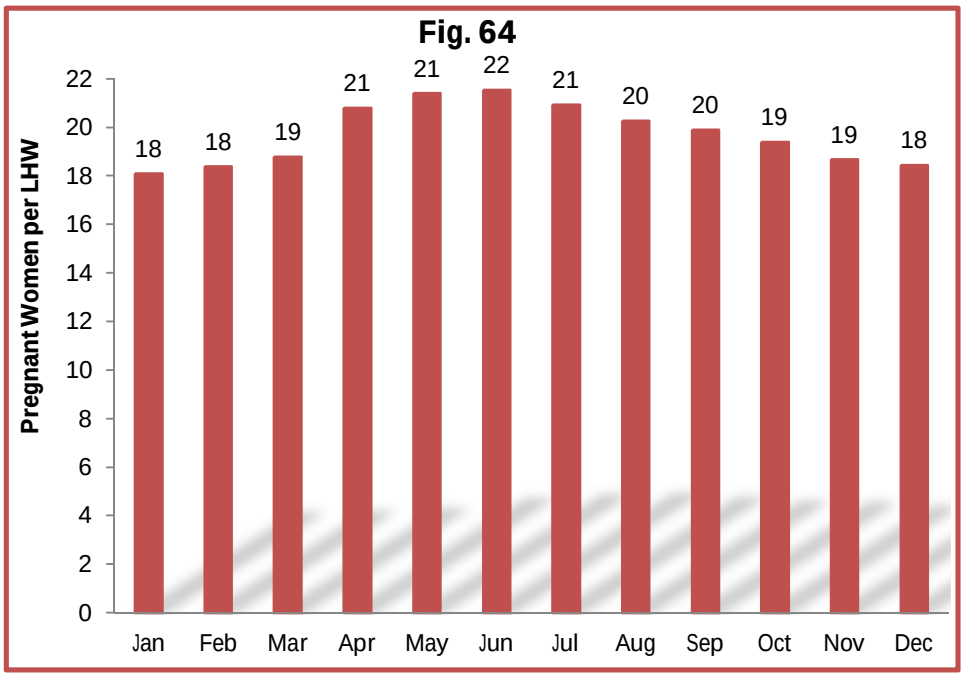


Month-wise percentages of TT-II coverage are shown in Fig. 62. The overall trend during the year was almost same. There was not much difference in percentages. However, the highest percentage was reported in May (71%) and lowest in January (63%).

District wise Percentage of TT-II Coverage



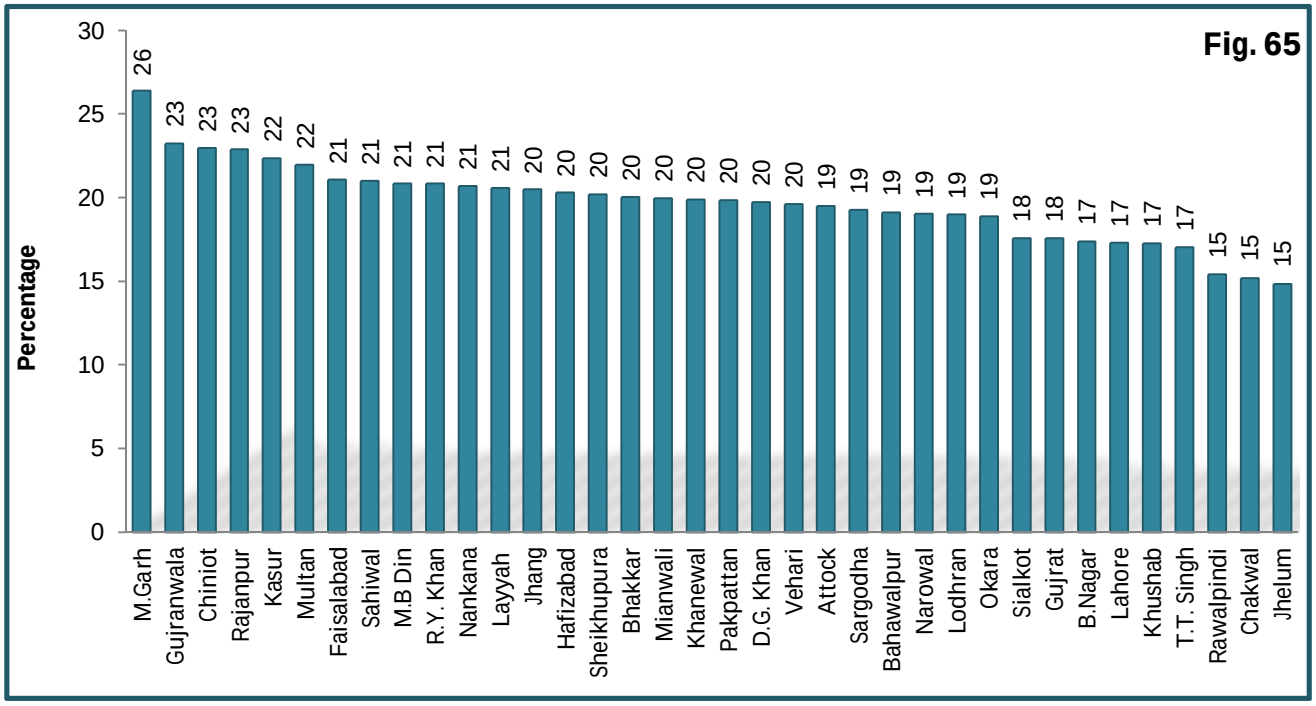
Number of Pregnant Women Newly Registered per LHW



The source of data regarding Number of pregnant women newly registered per HW and Delivery by skill birth attendants reported through LHW is "monthly report of National Program for family planning Services".

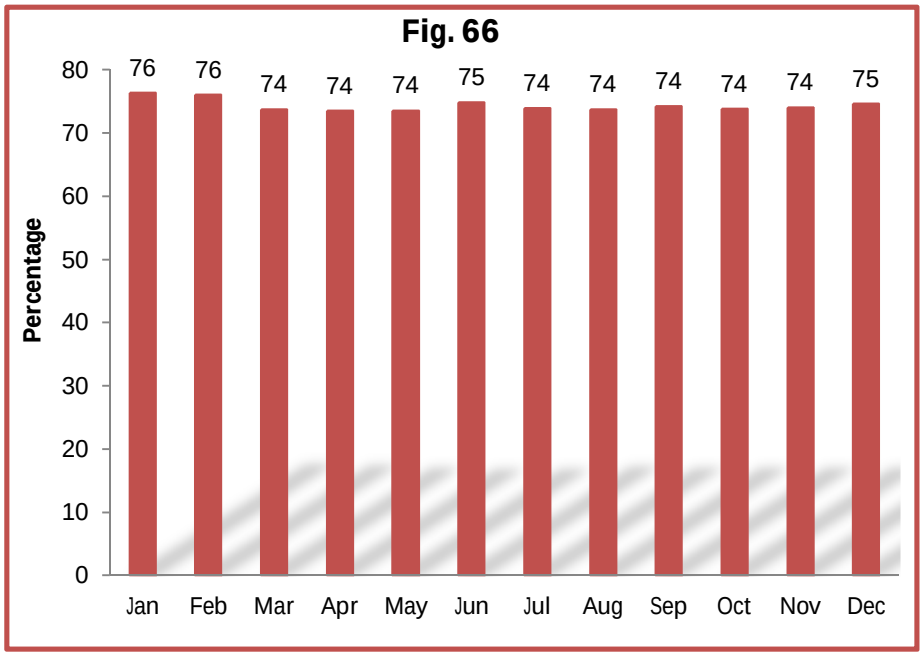
Fig. 64 shows the month wise average number of pregnant women registered per HW. It can be seen that the highest no. of pregnant women were registered in June (22).

District wise Percentage of Pregnant Women Newly Registered per LHW

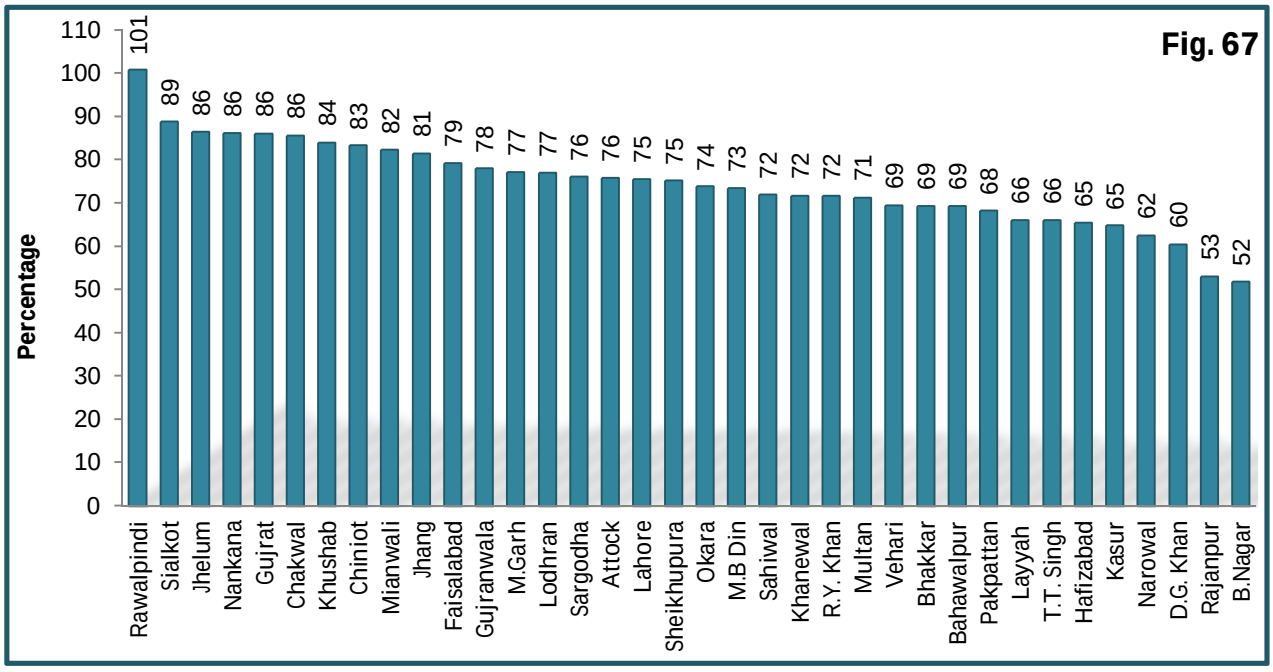


Delivery by Skilled Birth Attendants Reported through LHWs

This analysis is based on the information provided by the LHWs in their respective catchment population. Fig. 66 is showing the month-wise percentages of deliveries by skilled birth attendants. It is clear from the graph that the percentage of delivery by skilled birth attendants remained static throughout the year. The highest percentage was in the month of Jan and Feb (76%).



District wise Percentage of Delivery by Skilled Birth Attendants Reported through LHWs



TB Control Program

The source of data regarding Pulmonary Tuberculosis Patients is "National TB Control Program".

I. TB Control Program in 36 districts of Punjab

In Punjab TB Control Program was started in year 2000 and network of 537 diagnostic Centre / Basic Management Unit (BMU) have been established up till now.

II. Targets Achieved 2013

- Case Detection Rate NSS+ >77%
- Sputum Conversion Rate >91%
- Treatment Success Rate >92%
- Default Rate < 3%

III. Case Notification (2013)

YEAR	NEW SS+	Relapse	Treatment Failure & Default	NEW SS-	Extra Pulmonary	All Types
2013	66,095	3,207	1,102	83,033	26,035	182,446

IV. Project Intervention

1. Core DOTS

- Implemented in all 36 Districts
- All Indicators achieved since Q2 2008 in Punjab
- Implementation of DOTS in 32 Prisons
- Uninterrupted supply of ATT drugs.

2. PPM

- Implemented in 32 districts
- Regular reporting from PPM districts

- Uninterrupted supply of ATT drugs & Lab items.

3. **E-Surveillance**
   - Data entry of TB-DMIS started in 14/36 districts
   - MIS started in12 Districts
4. **HDL**

- Hospital DOTs referral linkages developed
- HIV screening of all type TB patients at 6 sentinel Sites
- Implementation of Childhood TB:
  - ✓ Training in 16 districts complete.
  - ✓ Districts Reporting Childhood TB: 28
  - ✓ Tertiary Care Hospitals reporting; 16

5. **Childhood TB**
   - Implemented in 16 districts
   - Now being expanded in all districts
6. **Multi Drug Resistance TB (MDR-TB)**

Programmatic Management of Drug Resistance TB **(PMDT)**

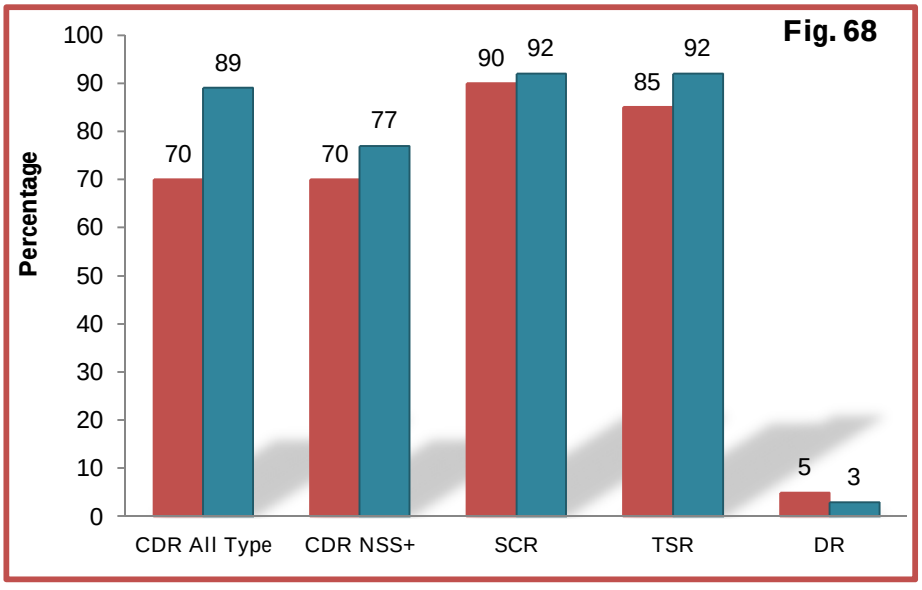
- Gulab Devi Hospital, Lahore
- Leprosy Hospital, Rawalpindi
- Nishtar Hospital , Multan
- Mayo Hospital, Lahore
- Samli Sanatorium Hospital, Muree
- Jinnah Hospital Lahore
- DHQ Hospital Sargodha

7. **Gene Expert machine for rapid diagnosis of Drug Resistant TB were installed in six Sites**
   - Gulab Devi Hospital, Lahore
   - Nishtar Hospital , Multan
   - Mayo Hospital, Lahore
   - Jinnah Hospital Lahore
   - Allied Hospital Faisalabad
   - Sheikh Zayed Hospital Rahimyar Khan

In 2013, the performance indicators/targets of Punjab are as under

- CDR All TYPE 89% (desired value 70% or more)
- CDR NSS+ 77% (desired value 70% or more)
- SCR 92% (desired value 90% or more)
- TSR 92% (desired value 85 % or more)
- DR 3% (desired value less than 5%)

5 out 5 desired indicators/targets were achieved in this year.



The number of the districts achieving 5 desired targets is mentioned below. 5 targets were achieved by 13 districts

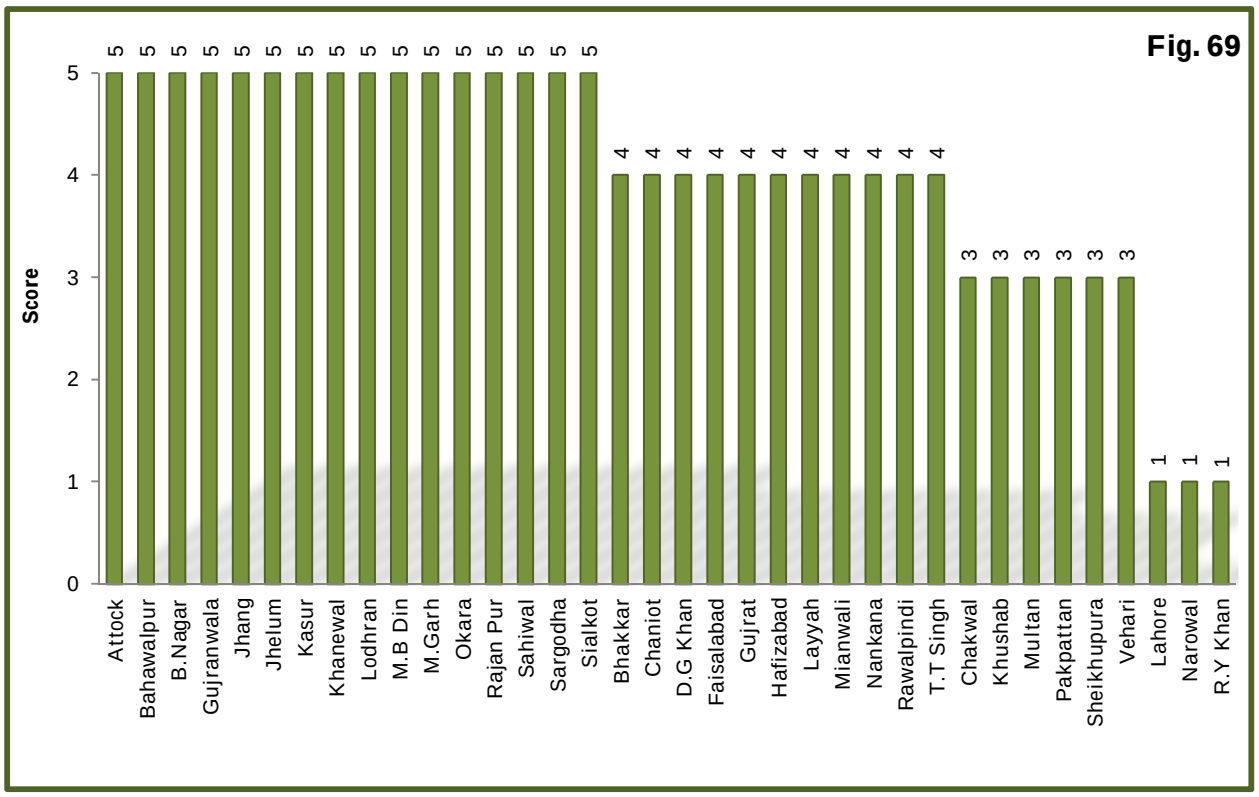
- 5 targets were achieved by 16 districts
- 4 targets were achieved by 11 districts
- 3 targets were achieved by 6 districts
- 1 target was achieved by 3 districts

The reason for not achieving indicator/target of CDR NSS+ is as under

- ✓ Low turnout of value in the OPD making the SIR Low as well.
- ✓ Bad weather conditions.
- ✓ Weak performance of Partners like ASD in Mega Tertiary Care Hospitals.
- ✓ Low contribution of Public Private Mix.
- ✓ Turnover of trained DOTS staff in Districts

In brief it can be said that in spite of all the odds the performance of PTP Punjab was good & almost all the 5 desired indicators/ indicators were achieved.

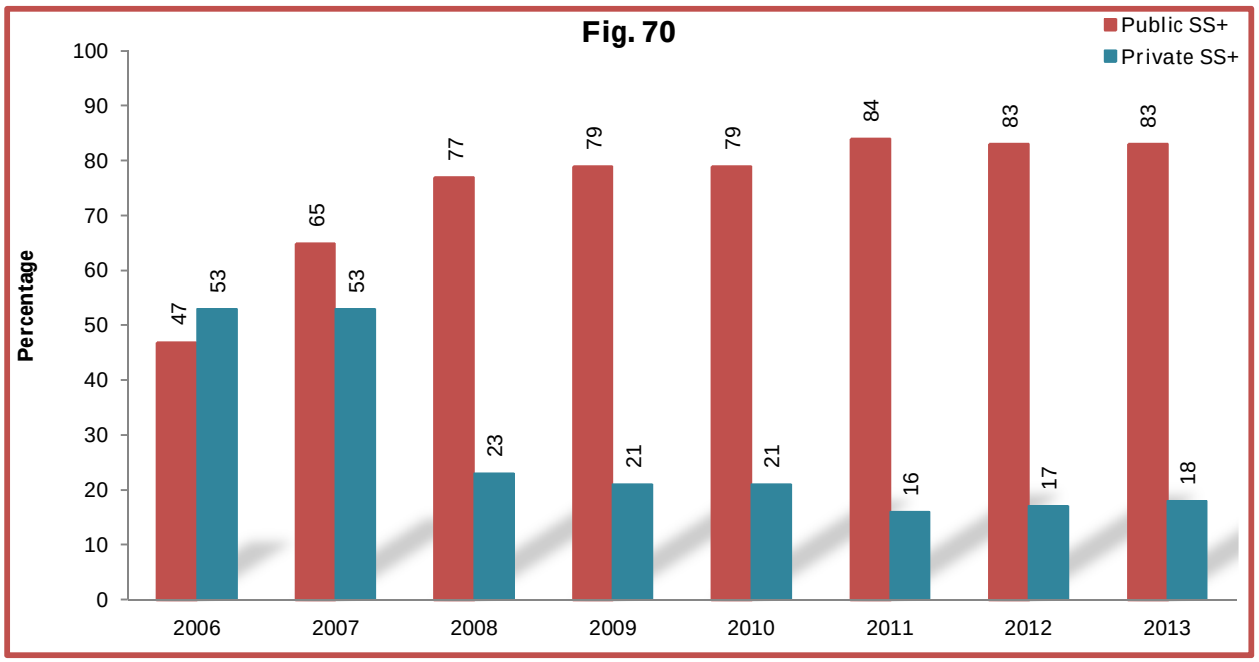
District wise Scores



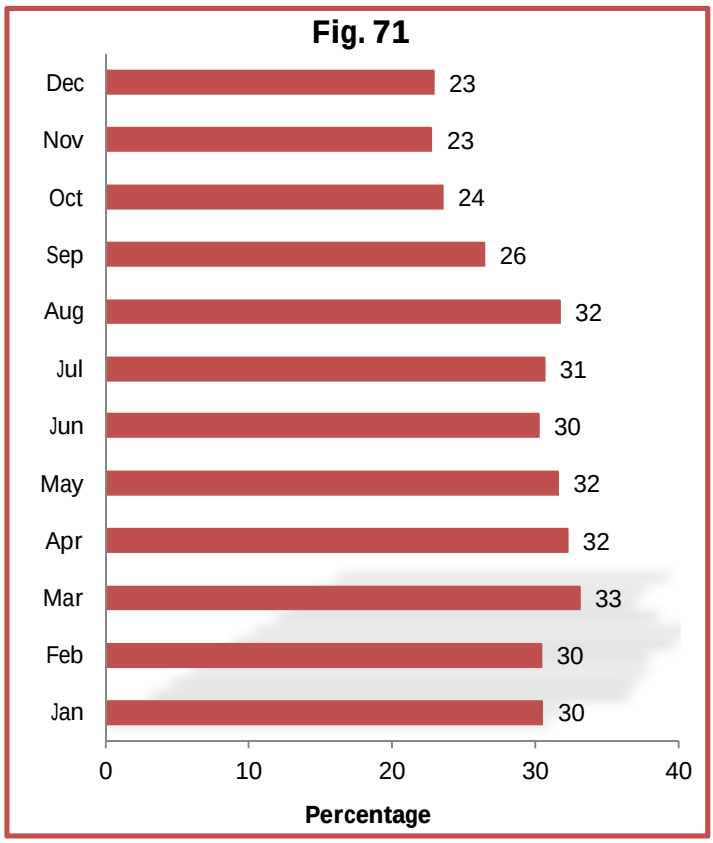
Public Private Mix (PPM):

- Tertiary Care Hospitals.
- Parasternal Hospitals.
- Pakistan Anti TB Associations.
- General Practitioners in 30 districts
- Green Star Social Marketing.
- Association for Social Development.
- Mercy Corps.

Year wise comparison of Public and Private SS+



Stock out Status



This indicator measures the percent of health facilities that experienced a stock-out of any tracer drug/medicine for any number of days at any time of the year.

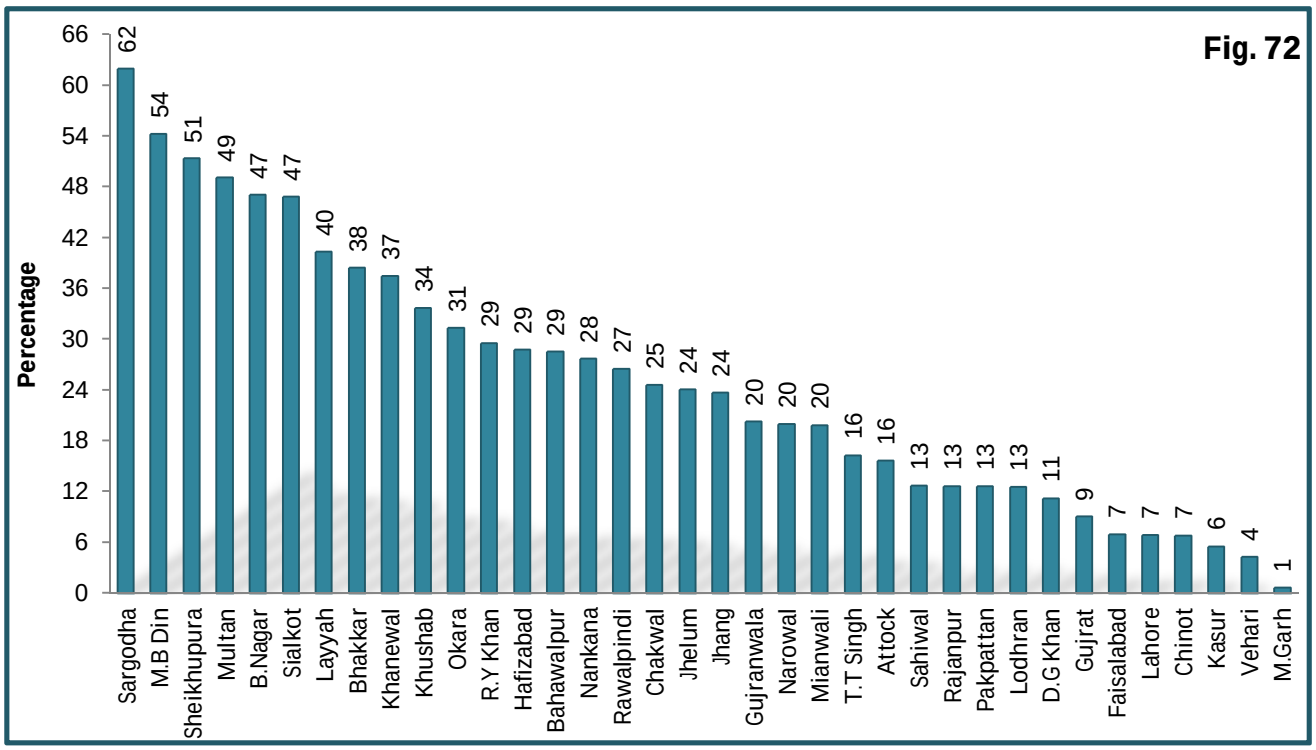
Ideally, there should not be any stock-out situation in the facilities. Occurrence of stock-out of any tracer drug for any number of days in a year will indicate that there is a breakage anywhere in the logistic system.

By analyzing this indicator the district manager can identify whether breakdown in the logistic supply system in the district is a wide-spread phenomenon involving many health facilities or only occurring sporadically; whether such breakages are occurring regularly throughout the year or only occur occasionally. In this way the probable site of fault in the supply line can be identified and appropriate measures can be taken to improve the situation.

It can be seen in fig. 71 that the percentage of out of stock medicines was highest in March (33%). The main medicines which

remain out of stock were Syp. Anthelminthic (38%), Syp. Salbutamol (35%), Tab. Cotrimoxazole (33%), Inj. Ampicillin (31%) and Syp. Cotrimoxazole (33%).The data of outlier districts need to be read carefully and should be validated.

District wise Percentage of Stock-out

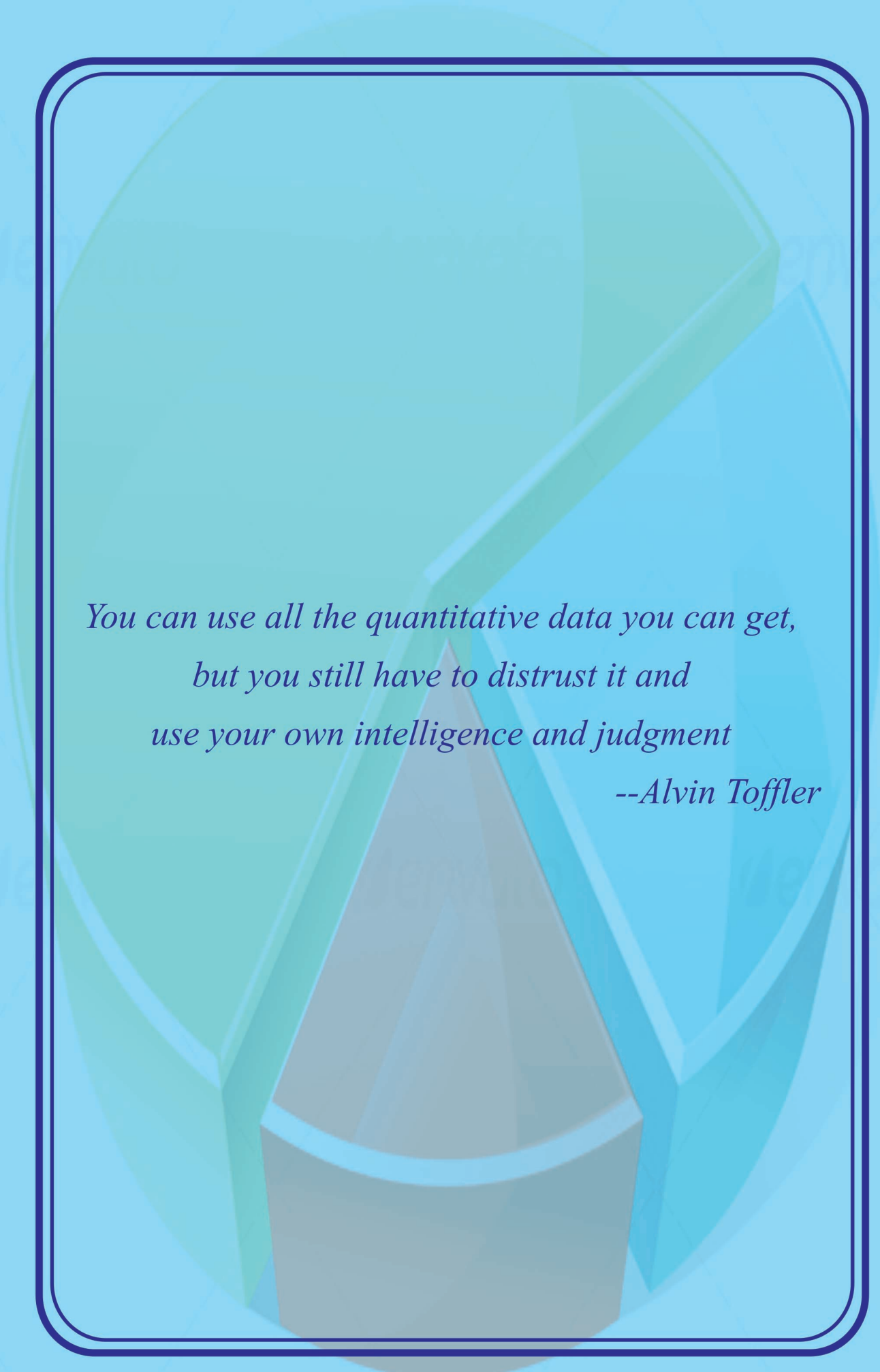


Human Resource

Table 8:

District	Specialists		Surgeon		Doctors		Nurses		Vaccinators		LHV	
	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled
Bahawalnagar	57	31	8	6	122	60	116	107	0	0	7	7
Bahawalpur	113	69	24	11	372	333	490	406	13	13	7	7
R.Y Khan	69	18	10	7	324	293	400	342	1	1	6	6
D.G Khan	34	27	9	8	103	84	87	75	3	2	8	8
Layyah	55	28	14	8	115	80	133	111	8	8	11	11
Muzaffargarh	50	46	14	14	66	66	77	77	0	0	6	6
Rajanpur	26	19	7	7	52	45	57	48	0	0	5	5
Faisalabad	182	91	22	18	467	442	1179	1153	3	3	21	20
Jhang	39	19	8	6	41	26	106	105	1	1	2	2
T.T Singh	38	22	6	5	70	39	53	52	13	13	4	4
Chiniot	13	5	4	3	59	24	36	35	0	0	8	8
Gujranwala	51	38	10	8	172	157	219	218	2	2	11	11

Districts	Specialists		Surgeon		Doctors		Nurses		Vaccinators		LHV	
	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled
Gujrat	48	32	8	6	94	69	154	141	9	7	11	10
Narowal	22	9	4	2	41	33	65	48	0	0	2	2
Sialkot	72	37	13	10	157	76	158	152	1	1	10	10
Hafizabad	21	10	5	4	86	26	65	62	0	0	5	5
M.B Din	21	5	5	2	29	17	37	30	1	1	2	2
Kasur	29	15	5	3	73	42	53	53	0	0	4	4
Lahore	292	214	35	26	988	913	1857	1742	6	5	16	16
Okara	47	30	9	3	94	35	88	87	1	0	5	5
Sheikhupura	35	18	7	5	114	48	140	124	0	0	5	5
Nankana	34	6	7	4	23	22	68	66	5	5	7	7
Khanewal	47	26	6	6	67	40	58	54	1	1	4	4
Lodhran	25	19	5	4	71	43	66	38	1	1	4	4
Multan	117	66	27	23	350	346	587	511	0	0	7	7
Pakpattan	25	14	4	3	47	25	71	56	53	53	3	3
Sahiwal	37	25	9	9	100	74	160	155	0	0	5	3
Vehari	35	25	6	6	71	69	83	81	0	0	4	4
Attock	63	21	9	6	105	84	129	116	0	0	4	4
Chakwal	27	18	5	4	26	17	32	26	0	0	3	3
Jhelum	41	15	5	4	81	27	91	80	0	0	4	4
Rawalpindi	104	48	21	11	238	203	518	448	0	0	5	5
Bhakkar	41	24	7	6	48	26	100	96	1	1	9	9
Khushab	48	17	6	2	86	28	73	68	1	1	6	6
Mianwali	39	17	8	3	94	63	91	79	1	1	8	8
Sargodha	61	51	14	13	76	53	242	234	6	6	15	15



You can use all the quantitative data you can get,
but you still have to distrust it and
use your own intelligence and judgment

--Alvin Toffler