2016

DISTRICT HEALTH INFORMATION SYSTEM (DHIS) **ANNUAL REPORT**



MIS Cell **DIRECTORATE GENERAL HEALTH SERVICES PUNJAB** 24 **Cooper Road Lahore**

Message from the Director General Health Services, Punjab



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 99%. 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.

Dr Faisal Zahoor

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.

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. The intention of this report, and those in future, is to speak to aspects of health in the population, as well as to a specific issue or theme. It will serve to define some key public health issues of the day and consider how they can be approached. We hope this report would be helpful in making decisions by provincial, divisional and district managers.

Dr Bashir Ahmed Siddiqi Director Health Services (MIS)

Table of Contents

Executive Summary	E
Introduction	
Overview of DHIS Program	8
Important Features of DHIS	
Salient Features of Report	
Importance of Record Keeping and Data Management	9
Challenges and issue	10
Highlights 2016 of District Punjab	
Number of Functional and Reporting Health Facilities with number of beds by District & Type	12
Proportion of Staff Position Filled	13
Year-Wise Comparison of Important Indicators	14
Reporting Compliance	
Per Capita OPD Attendance	
Total OPD visits	14
Antenatal Care Services	15
Deliveries Conducted at Health Facilities	
Caesarean Section	
Number of Anaemic Women Coming for ANC-1	16
Frequency of Low Birth Weight (LBW) Babies	
Stock out	16
Family Planning Visit	17
Lab Utilization (In-door)	
Lab Utilization (OPD)	
Epidemic Disease Cases	
Year wise Top Epidemic Disease Cases	
Comparison of Top Ten Diseases (2010-2015)	
Acute Respiratory Infection	
Fever due to other Causes	
Scabies	
Peptic Ulcer Disease	20
Diarrhoea/Dysentery in <5 yrs	
Diarrhoea/Dysentery in >5 yrs	
Hypertension	
Dental Caries	
Asthma	
Diabetes Mellitus	
Per Capita OPD Attendance in 2016	
District wise Per Capita OPD Attendance	
Facility Type wise Average Number of OPD Visits(per day per health facility)	
District wise Average new case per day of OPD visits	
Patients Distribution by Gender and Age	
Disease Pattern	
Number and Percentage of Priority Diseases Cases	
Communicable and Non-Communicable Diseases	
Number of Communicable and Non-Communicable Diseases	
District wise Incidence Rate (per 1,000 populations) of Top 5 Diseases	
Antenatal Care Coverage	
District wise Numbers of ANC-1 Visits(Out of expected population3.4%)	
Facility type wise of ANC-1 visits (per month per health facility)	32

Percentage of Anaemia among ANC-1 Attendance	33
Deliveries Conducted at the Health Facilities	
Facility type wise of Deliveries Conducted (per month per health facility)	
District wise Percentage of Deliveries Conducted at Health Facilities	34
Obstetric Complications	35
Types of Obstetric Complications	36
Caesarean Section	36
Frequency of Low Birth Weight (LBW) Babies	37
Neonatal Mortality Rate	37
Complications of Neonatal Deaths	38
Diagnostic Services Utilization	38
District wise Percentage of Diagnostic Services Utilization Outdoor	39
District wise Percentage of Diagnostic Services Utilization Indoor	40
Indoor Patients and Cured Patients	41
District wise Admission and Cured Patients	41
Facility Type wise admissions and Cured Patients	41
Bed Occupancy Rate	42
Facility type wise Bed Occupancy Rate	
Average Length of Stay	43
Facility type wise Average Length of Stay	43
District wise Percentage of Hospital Death Rate	44
Facility type wise Hospital Death Rate	
Family Planning Visits	
District-wise Number of Commodities Distributed	
Human Resource	
Comparison of Sanctioned vs. Filled posts of Health Personnel	
Immunization Coverage	
District wise Percentage of BCG Coverage	49
District wise Percentage of Measles – I	
District wise Percentage of Measles – II	
District wise Percentage of Preg. Woman TT – I	
District wise Percentage of Preg. Woman TT – II	
Stock out Status	
District wise Percentage of Stock out	
Annexed	53
Detail of Health Facilities of Punjab	53
List of THQs/Civil Hospital in Punjab	53
List of DHQs Hospital in Punjab	
List of Teaching/Specialized Hospital in Punjab	
Epidemic Diseases case	
Comparison of Malaria 2015 with 2016	
Comparison of Leishmaniasis 2015 with 2016	57

Executive Summary

The provision of timely and effective health care 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 2006. DHIS 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 discuss. 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. Almost overall trend in all indicators have increased during 2016.

The detailed analysis of 2016 data is presented in this report. The overall reporting compliance of the health facilities in Punjab remained above the target since 2010 and in 2016 the reporting compliance was above 99%. The total OPD in 2016 was 127 million. The per capita OPD in 2016 was 1.28 which had increased from the previous years. On average, per day OPD attendance in teaching/tertiary hospitals was 88046. In DHQs 36341, THQs 64294, in RHCs 56885 and in BHUs 121190 visits 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 were 18%.

Forty-three diseases are reported through DHIS. The patients of reported diseases originate overall 49% of the total patients in 2016 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 53% while the non-communicable diseases were 47%. 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 year wise comparison of top ten diseases is presented in the form of graphs. The median index is calculated for 2010-2015 and it is compared with 2016 data.

Antenatal care coverage is an indicator of access and utilization of health care services during pregnancy. During 2016, the overall ANC-1 reported coverage in Punjab was 3,962,396 of the total expected population (3.4%). Out of the total ANC-1 women, 20% were reported with hemoglobin 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 Health Facilities of Punjab during 2016 was 42% 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 457 per month per teaching/tertiary care hospitals, in DHQs hospitals 263, in THQs 75, in RHCs 71 and in BHUs 16 deliveries (in BHU24/7s 47 deliveries) per month. C-Section rate is 12% of total deliveries and obstetric complications 8% of total deliveries. Out of the total live births, 3% babies were born with low birth weight (<2.5kg). Neonatal mortality rate was calculated and it was found 1.0% 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 2016, total 49 million patients availed the lab services in which outdoor, 25 million patients and in Indoor, 24 million patients utilize 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 2016 was 84 in secondary and tertiary care hospitals. In teaching/tertiary hospitals was 89 .In DHQs 93, in THQs 74, in RHCs 44 and in BHUs 37 BOR were reported. Average length of stay is the measure of the average duration of hospital stay of admitted patients in hospitals. This indicator reflects on the intensity of care delivered to hospitalized patients in and the probable burden on hospital resources. The ALS was 2 in 2016. In teaching/tertiary hospitals was 2 .In DHQs 2, in THQs 2, in RHCs 2 and in BHUs 2 ALS were reported. It is clear from the figures that the ALS was consistent throughout the year.

Hospital death rate is the measure of the proportion of hospital deaths among admitted patients in hospitals. During 2016, (2%) deaths were occurred. Percentage of deaths in teaching/tertiary hospitals was 3.1 .In DHQs 1.6, in THQs 0.4, in RHCs 0.2 and in BHUs 0.1.

Stock out status measures the percentage 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 5%.

During 2016, 15,841,095 family planning visits were reported from the public sector health facilities against the expected population (16% MCBA).

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 analyze the health situation, their services (e.g. EPI, TB-Dots, Malaria, Hepatitis, MCH & Family Planning Services), availability of drugs/ supplies 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

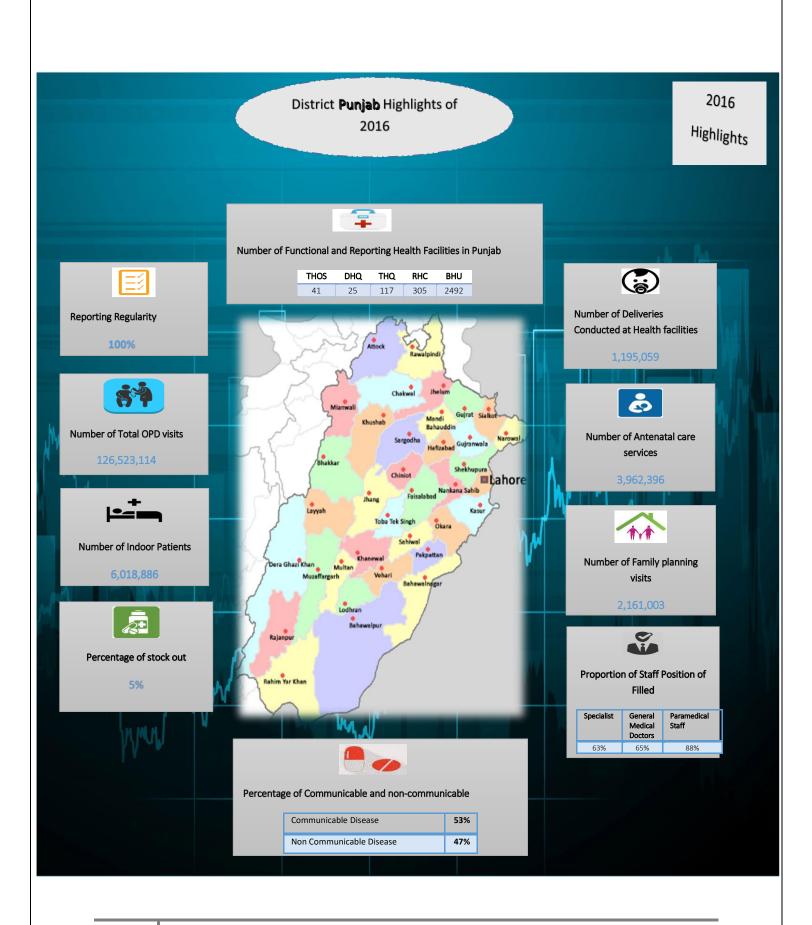
Knowledge is power and change into wisdom when knowledge is applied. When information is processed on scientific basis using statistical tools and appropriate methods on data new knowledge is generated. So data management is the core activity in production of new knowledge. Record keeping and data management 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.

Challenges and issue

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.



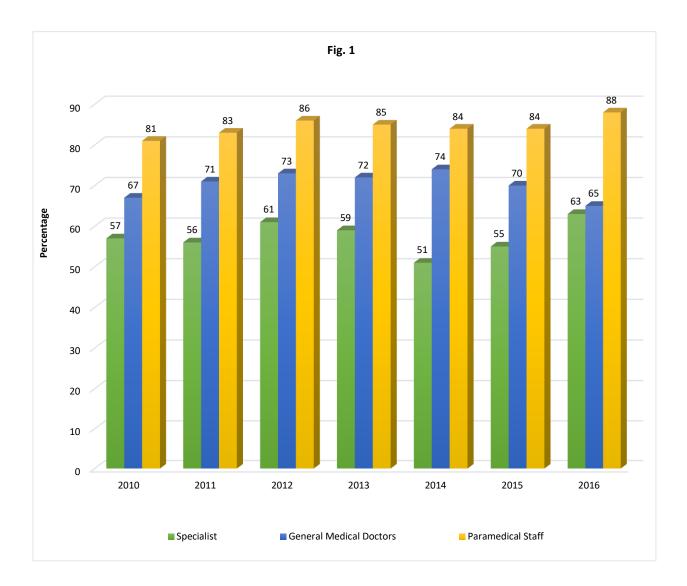
Number of Functional and Reporting Health Facilities with Number of beds

Table 1:

District	T	HOS		HQ	Т	HQ	R	НС	ВІ	HU	N	1CH	Di	sp.	To	tal
	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds	No.	Beds
Bahawalnagar	0	0	1	259	4	220	10	200	102	204	7	0	0	0	124	883
Bahawalpur	2	1820	0	0	4	232	11	220	73	146	10	0	5	4	105	2422
Rahimyar Khan	1	841	0	0	3	200	19	356	104	208	7	0	0	0	134	1605
D.G Khan	1	367	0	0	3	120	10	200	50	100	5	0	23	0	92	787
Layyah	0	0	1	280	6	240	3	60	39	78	2	0	21	0	72	658
Muzaffargarh	0	0	1	240	4	190	12	240	73	145	3	2	14	13	107	830
Rajanpur	0	0	1	133	3	172	6	125	33	66	1	4	2	0	46	500
Faisalabad	4	2308	0	0	5	270	14	260	168	336	6	0	5	0	202	3174
Jhang	0	0	1	276	3	146	10	180	58	116	6	0	8	0	86	718
Toba Tek Singh	0	0	1	125	2	266	9	180	70	140	2	2	0	0	84	713
Chiniot	0	0	1	70	2	40	3	40	36	72	2	4	2	4	46	230
Gujranwala	1	450	0	0	3	160	12	240	92	184	10	0	22	0	140	1034
Gujrat	1	322	0	0	3	160	9	180	90	180	8	8	1	0	112	850
Narowal	0	0	1	125	1	80	7	120	57	122	4	0	4	12	74	459
Sialkot	2	534	0	0	4	299	6	120	88	176	15	0	18	10	133	1139
Hafizabad	0	0	1	120	1	60	7	140	32	64	3	0	0	0	44	384
Mandi Bahauddin	0	0	1	100	2	100	8	160	49	98	4	0	1	0	65	458
Kasur	0	0	1	197	3	140	12	220	82	164	8	0	23	0	129	721
Lahore	18	10266	0	0	3	60	6	120	36	72	50	0	43	20	156	10538
Okara	0	0	2	335	2	100	10	182	96	192	3	0	1	0	114	809
Sheikhupura	0	0	1	648	4	296	7	168	79	158	4	4	4	1	99	1275
Nankana Sahib	0	0	1	120	2	188	6	144	47	94	0	0	6	0	62	546
Khanewal	0	0	1	125	3	180	7	140	83	166	4	0	17	0	115	611
Lodhran	0	0	1	125	2	80	4	80	48	96	1	0	6	2	62	383
Multan	4	1572	0	0	4	241	8	160	82	164	5	0	4	0	107	2137
Pakpattan	0	0	1	125	1	60	5	90	54	108	2	0	0	0	63	383
Sahiwal	2	513	0	0	1	108	11	220	76	152	2	0	16	0	108	993
Vehari	0	0	1	300	2	300	14	280	74	148	4	0	4	0	99	1028
Attock	0	0	1	176	5	320	5	100	63	126	5	0	2	0	81	722
Chakwal	0	0	1	205	3	140	10	190	63	126	1	0	4	0	82	661
Jhelum	0	0	1	258	2	100	6	120	46	92	6	0	8	0	69	570
Rawalpindi	4	1639	0	0	6	362	8	160	98	196	0	0	6	24	122	2381
Bhakkar	0	0	1	333	3	184	4	92	41	82	2	0	12	24	63	715
Khushab	0	0	1	125	4	260	5	60	43	86	6	0	7	12	66	543
Mianwali	0	0	1	313	3	142	10	200	40	80	5	0	14	0	73	735
Sargodha	1	731	0	0	9	340	11	220	125	250	4	0	7	0	157	1541
Grand Total	41	21363	25	5113	115	6556	305	5967	2490	4987	207	24	310	126	3493	44136

Proportion of Staff Position Filled

The graph shows the year wise comparison of staff positions filled of specialists, general medical doctors and paramedical staff percentage.

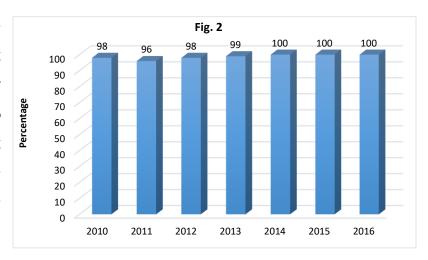


In 2016, percentage of specialists staff filled positions is 63, percentage of general medical doctors staff filled positions is 65 and percentage of paramedical staff filled positions is 88. The trend is almost same during previous all years.

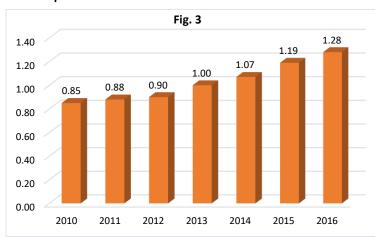
Year-Wise Comparison of Important Indicators

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 five years, the reporting regularity of Province Punjab is above the target.



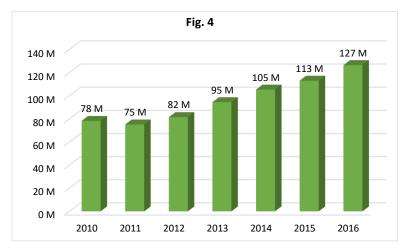
Per Capita OPD Attendance



The year wise comparison of per capital OPD attendance is shown in *Fig.* 3. 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 the 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.



Antenatal Care Services

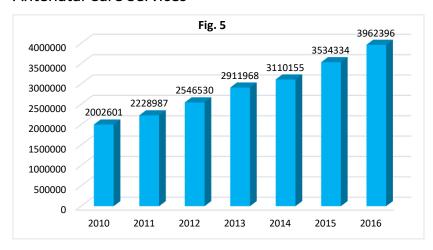
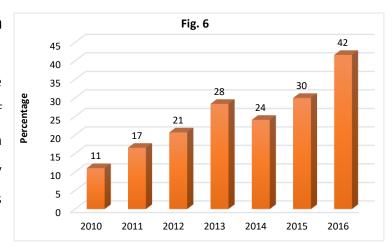


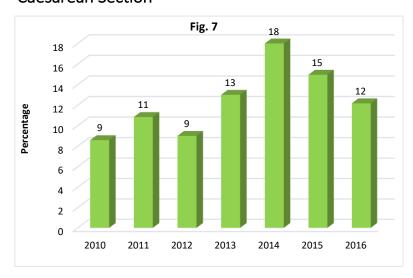
Fig. 5 shows the year wise comparison of numbers of ANC-1 visits. This numbers are calculated from the expected pregnancies during the year (3.4% of total Population). The numbers has improved from year to year.

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.



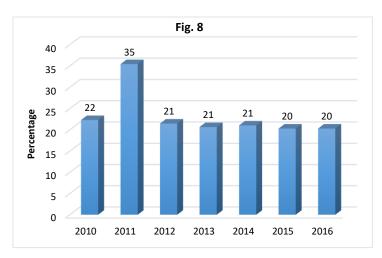
Caesarean Section



The graph shows the year wise of Section comparison Cperformed. The percentage is calculated from the total deliveries conducted at health facilities not calculated from obstetric complications deliveries. In 2014, highest percentage observed (18%). In 2016, the percentage was observed (12%).

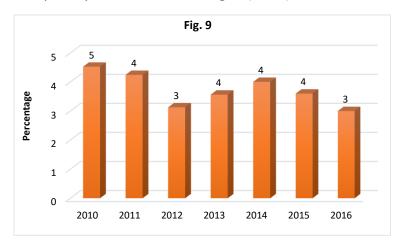
Number of Anaemic Women Coming for ANC-1

Fig. 8 shows the year wise comparison of anemic women percentage, coming from ANC-1 at the health facilities. The highest percentage of anemic women was reported in 2011. Anaemic Women coming for ANC-1 may be improving in



next visits of ANC but in DHIS just ANC-1 women with Hb. <10 g/dl indicator reported.

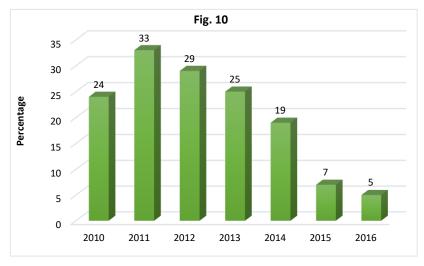
Frequency of Low Birth Weight (LBW) Babies



The graph shows the year wise comparison of number of babies with low birth weight percentage, delivered at health facilities. The percentage is calculated from the total deliveries conducted at health facilities. The highest percentage was reported in 2010 (5%).

Stock-out Status

The graph shows the year wise comparison of stock-out status. In 2011, the highest percentage was observed (33%). In 2016, the lowest stock out was observed (5%).



Family Planning Visits

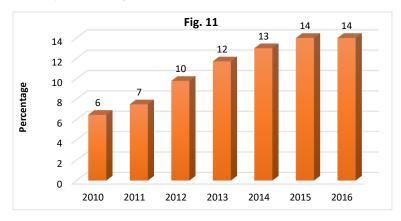
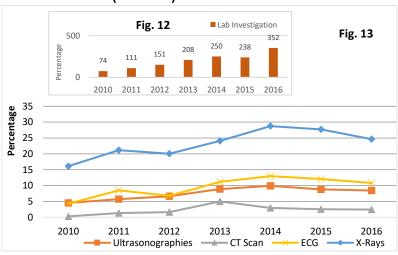


Fig. 11 shows the year wise comparison of family planning visits percentage, calculated from the expected population (16% MCBA). It can be seen from the figure that the percentage of family planning visits are improving year to year.

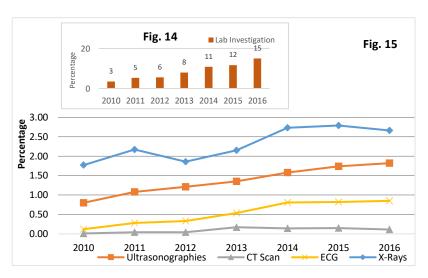
Lab Utilization (In-door)



The graph shows the year wise comparison of lab services in indoor. The percentage is calculated from the total admissions in indoor. Fig. 12 shows the lab investigation percentage. Fig. 13 shows X-Rays, ECG, CT Scan and Ultrasonography percentage.

Lab Utilization (OPD)

The graph shows the year wise comparison of lab services in OPD. The percentage is calculated from the total OPD visits. *Fig.* 14 shows the lab investigation percentage. *Fig.* 15 shows X-Rays, ECG, CT Scan and Ultrasonography percentage.



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 was reported which decreased during 2011, 2012 and again increased in 2013. The highest number of cases of Acute Flaccid Paralysis was reported in 2010 but it has decreased to a great extent. In 2011, the lowest number of cases of Suspected HIV/AIDS was reported.

Year wise Epidemic Disease Cases

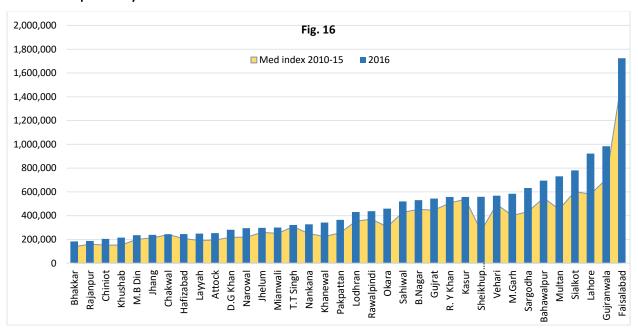
Table 5:

Diseases	2010	2011	2012	2013	2014	2015	2016
TB Suspects	537,826	514,881	545,760	619,613	687,122	734,325	740499
Suspected Malaria	854,062	829,364	861,120	802,436	714,950	797,648	801328
Suspected Meningitis	17,112	4,357	4,197	3,450	5,023	4,698	6226
Suspected Measles	13,355	2,961	2,802	16,592	2,792	7,750	4839
Suspected Viral Hepatitis	179,239	192,010	265,168	288,658	288,973	355,724	481122
Suspected Neonatal Tetanus	7,046	2,383	1,566	955	1,436	312	893
Cutaneous Leishmaniasis	11,849	5,397	2,778	4,631	5,366	8,470	4399
Acute Flaccid Paralysis	8,282	1,377	2,801	726	734	649	821
Suspected HIV/AIDS	4,807	162	6,773	1,827	3,306	3,875	9272

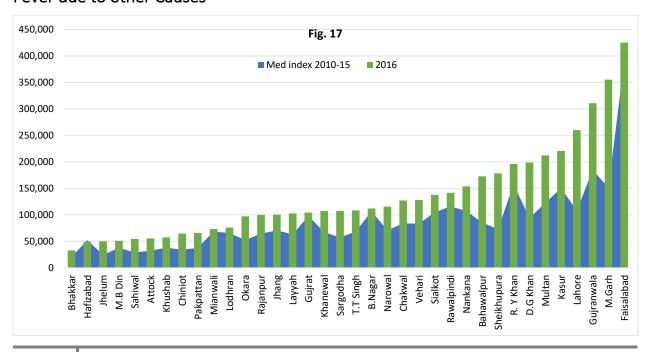
Comparison of Top Ten Diseases (2010-2015)

The following graphs show the comparison of top 10 diseases numbers of 2016 with the median index of 2010-15 numbers. The median index is shown with area chart and 2016 data is shown in bars.

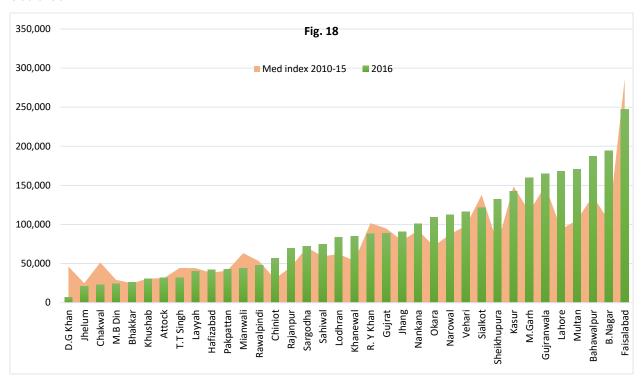
Acute Respiratory Infection



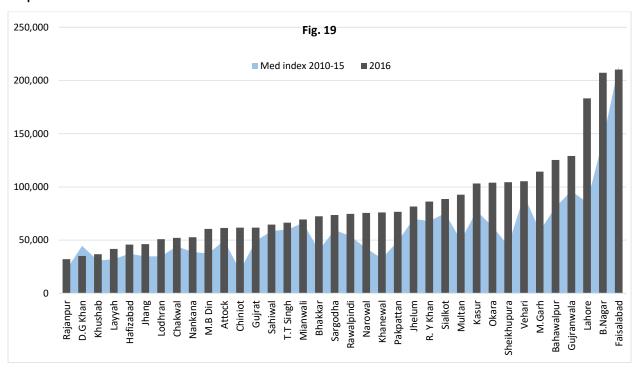
Fever due to other Causes



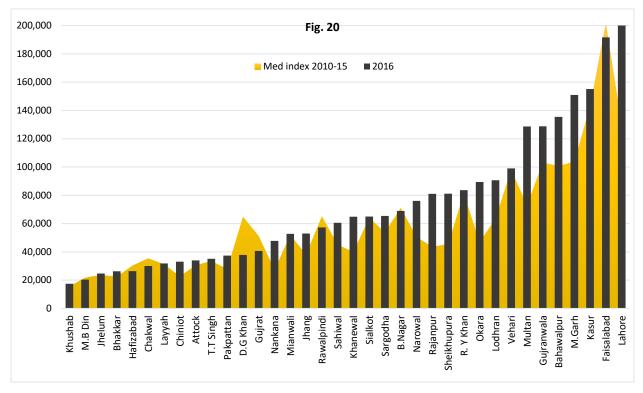
Scabies



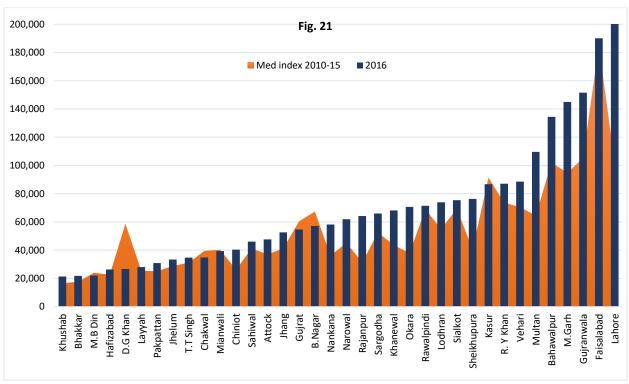
Peptic Ulcer Disease



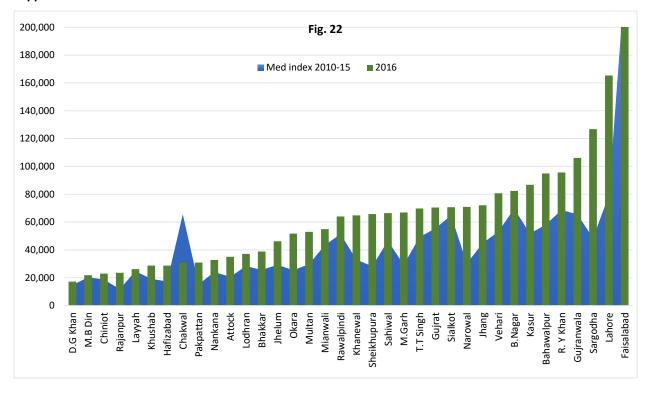
Diarrhoea/Dysentery in <5 yrs



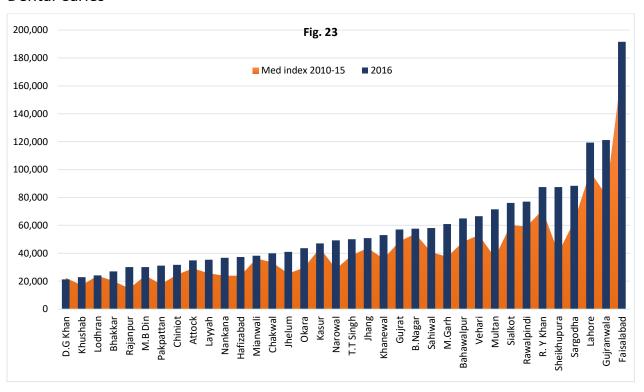
Diarrhoea/Dysentery in >5 yrs



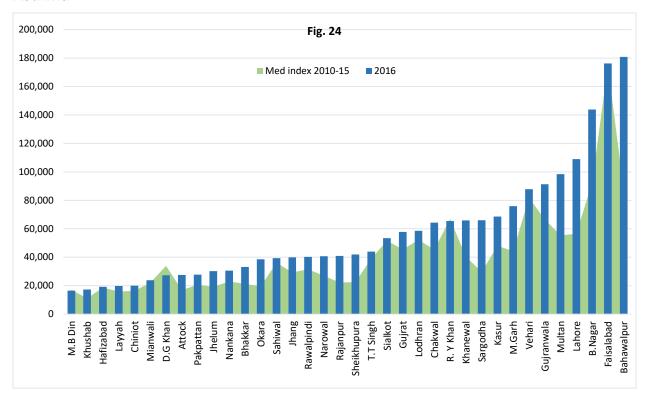
Hypertension



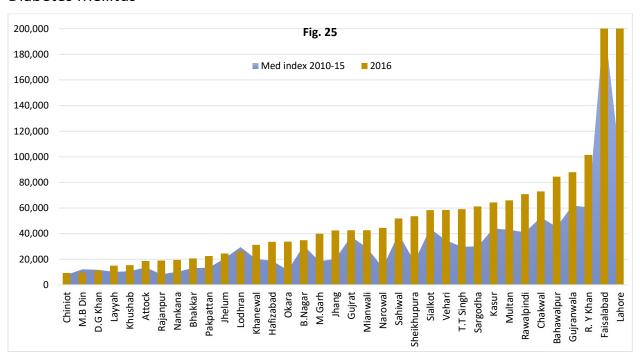
Dental Caries



Asthma

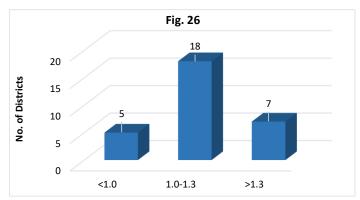


Diabetes Mellitus



Per Capita OPD Attendance in 2016

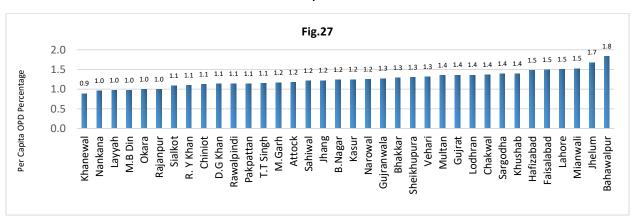
One of the key indicators to assess performance on the provision of health services in Province Punjab is to understand the number of people attending and receiving services at health facilities during periods of illness. A good indicator of this is the outpatient attendance per capita. This indicator shows the extent of facility utilization by the population. If Out Patient Department



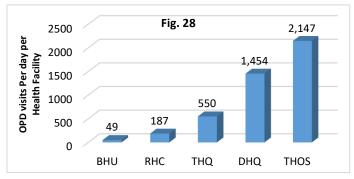
(OPD) attendance is found to be high in the public health facilities, it implies that the population is highly satisfied by provision of services in these facilities.

Per Capita OPD attendance gives an indirect indication of public trust on health services. Overall, in the province, per capita OPD attendance during 2016 was 1.28. Majority of the districts were under the category of 1.0-1.3 as shown in *Fig*.26 Khanewal had the lowest Per Capita OPD attendance (0.9) while Bahawalpur had the highest (1.8).

District wise Per Capita OPD Attendance



Facility Type wise Average Number of OPD Visits (Per day per Health Facility)



facility during 2016.

This indicator is useful to 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 facility. *Fig.* 28 is showing the facility type wise average number of OPD visits per day per health

District wise Average new case per day OPD Visits

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.

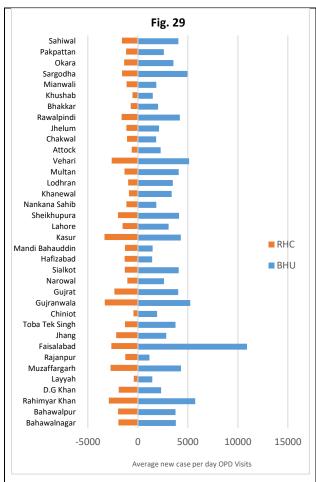


Fig. 29 indicate the District wise Average new case per day OPD visits in BHUs and RHCs.

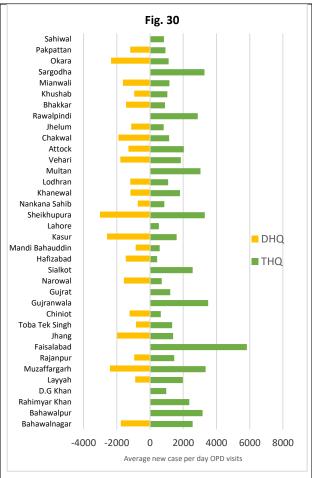


Fig. 30 indicate the District wise Average new case per day OPD visits in DHQs and THQs Hospitals.

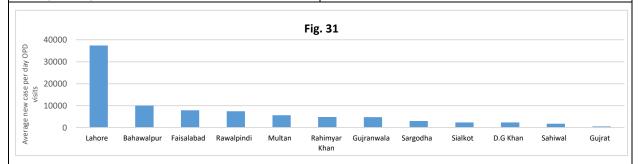


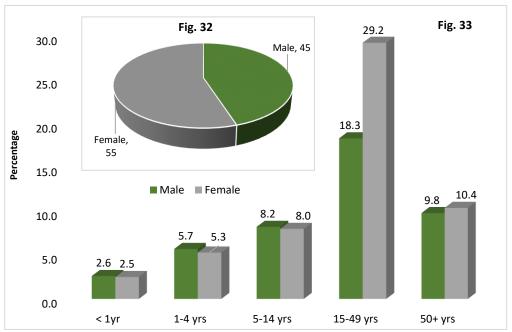
Fig. 31 indicate the District wise Average new case per day OPD visits in Teaching Hospitals and useful to understand facility workload /utilization.

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. 32, pie chart shows the gender wise percentage of male and female patients during 2016. It can be seen that the percentage of

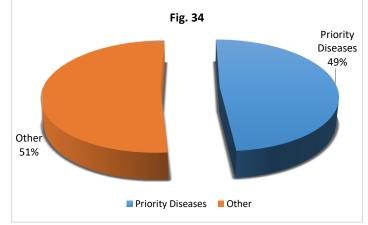


female (55%) patients is more than the male patients (45%). In bar chart (Fig. 33), age and gender wise analysis is shown. It is clear from figure that the maximum number of patients belonging to age group 15-49 availed the health services. The percentage of female patients in this age group attending the OPD was 29.2% while the male were 18.3%. The minimum number of patients availing the services belonged to age group <1 year (5.1%), male patients being 2.6% and female 2.5%. 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 to 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.

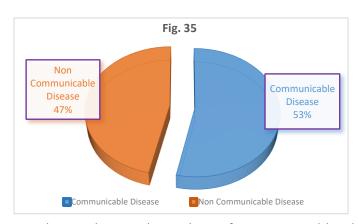
Forty-three diseases are reported through DHIS. The patients of reported diseases constitute overall 49% of the total patients in 2016 while rest of the 51% was reported under the category of "others".

Number and Percentage of Priority Diseases Cases

Table 6:

Disease	Total	%age	Disease	Total	%age
Acute (upper) Respiratory	17003824	13.4	Trachoma	141015	0.1
Infections (AURI)					
Fever due to other causes	4904336	3.9	Burns	108949	0.1
Scabies	3249882	2.6	Glaucoma	87271	0.1
Peptic Ulcer Diseases	3024619	2.4	Epilepsy	83017	0.1
Diarrhoea/Dysentery in <5 yrs	2671133	2.1	Benign Enlargement of	82126	0.1
			Prostate		
Diarrhoea/Dysentery in >5 yrs	2551774	2.0	Nephritis/Nephrosis	69930	0.1
Hypertension	2373485	1.9	Sexually Transmitted Diseases	69150	0.1
Asthma	2081906	1.6	Drug Dependence	48178	0
Dental Caries	2061612	1.6	Suspected HIV/AIDS	9272	0
Diabetes Mellitus	1915276	1.5	Snake bites (with	8457	0
			signs/symptoms of poisoning)		
Road traffic accidents	1787068	1.4	Suspected Meningitis	6226	0
Dermatitis	1643581	1.3	Suspected Measles	4839	0
Urinary Tract Infections	1513785	1.2	Cutaneous Leishmaniasis	4399	0
Worm infestation	1077455	0.9	Suspected Neonatal Tetanus	893	0
Otitis media	1074658	0.8	Acute Flaccid Paralysis	821	0
Chronic Obstructive	805475	0.6	Acute Watery Diarrhoea	0	0
Pulmonary Diseases					
Suspected Malaria	801328	0.6	Bloody Diarrhoea	116	0
TB Suspects	740499	0.6	Silicosis (Lung Disease)	24	0
Cataract	580466	0.5	Suspected Avian Flu	0	0
Ischemic Heart Diseases(IHD)	567703	0.4	Suspected Dengue Fever	4,459	0
Suspected Viral Hepatitis	481122	0.4	Suspected Diphtheria	46	0
Depression	466610	0.4	Suspected Pertussis	0	0
Enteric/Typhoid Fever	396704	0.3	Suspected Swine Flu	8	0
Pneumonia <5 years	336437	0.3	Suspected Viral Hemorrhagic	0	0
			Fever		
Fractures	277451	0.2	Priority Diseases Total	61462387	49
Pneumonia >5 years	256533	0.2	Others Diseases	65060727	51
Dog bite	188130	0.1	Grand Total	126523114	100
Cirrhosis of Liver	176929	0.1			

Communicable and Non-Communicable Diseases



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.*

35 shows the total number of communicable disease patients were 53% and the non-communicable disease patients were 47% during year 2016.

Number of Communicable and Non-Communicable Diseases

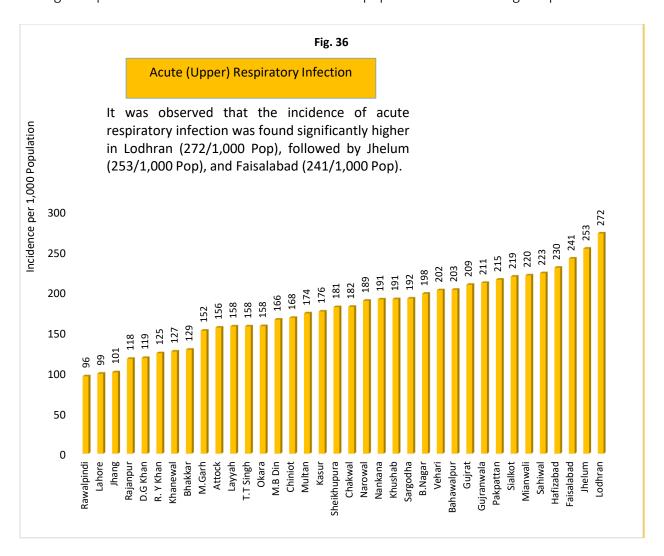
Table 7:

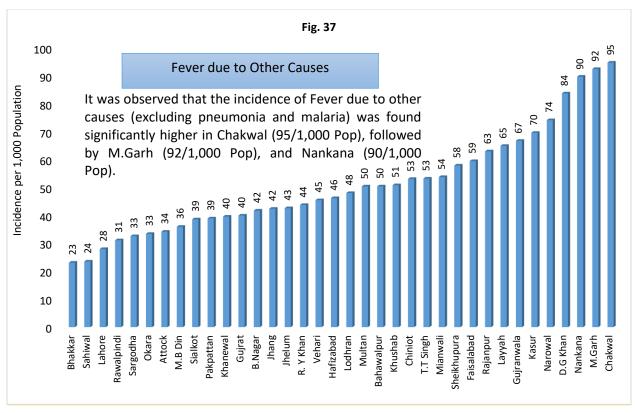
Sr.no	Non Communicable Disease	Total	Non Communicable Disease per day	Sr.no	Communicable Disease	Total	Communicable Disease per day
1	Fever due to other causes	4904336	16348	1 Acute (Upper) Respiratory Infections		17003824	56679
2	Peptic Ulcer Diseases	3024619	10082	2	Scabies	3249882	10833
3	Hypertension	2373485	7912	3	Diarrhoea / Dysentery < 5 yrs	2671133	8904
4	Asthma	2081906	6940	4	Diarrhoea / Dysentery > 5 yrs	2551774	8506
5	Dental Caries	2061612	6872	5	Worm Infestations	1077455	3592
6	Diabetes Mellitus	1915276	6384	6	Suspected Malaria	801328	2671
7	Road Traffic Accidents	1787068	5957	7	TB Suspects	740499	2468
8	Urinary Tract Infections	1513785	5046	8	Suspected Viral Hepatitis	481122	1604
9	Otitis Media	1074658	3582	9	Enteric / Typhoid Fever	396704	1322
10	Cataract	580466	1935	10	Pneumonia < 5 yrs	336437	1121
11	Ischemic heart disease	567703	1892	11	Pneumonia > 5 yrs	256533	855
12	Depression	466610	1555	12	Trachoma	141015	470
13	Fractures	277451	925	13	Sexually Transmitted Infections	69150	231
14	Dog bite	188130	627	14	Suspected HIV/AIDS	9272	31
15	Cirrhosis of liver	176929	590	15	Suspected Meningitis	6226	21
16	Burns	108949	363	16	Suspected Measles	4839	16
17	Glaucoma	87271	291	17	Cutaneous Leishmaniasis	4399	15
18	Epilepsy	83017	277	18	Suspected Neo Natal Tetanus	893	3
19	Benign Enlargement Prostrate	82126	274	19	Acute Flaccid Paralysis	821	3
20	Nephritis/ Nephrosis	69930	233		Total	29803306	99344
21	Drug Dependence	48178	161				
22	Snake bite(with signs/symptoms of poisoning)	8457	28				
23	Dermatitis	1643581	5479				
24	Chronic Obstructive	805475	2685				
	Pulmonary Diseases						
	Total	25931018					

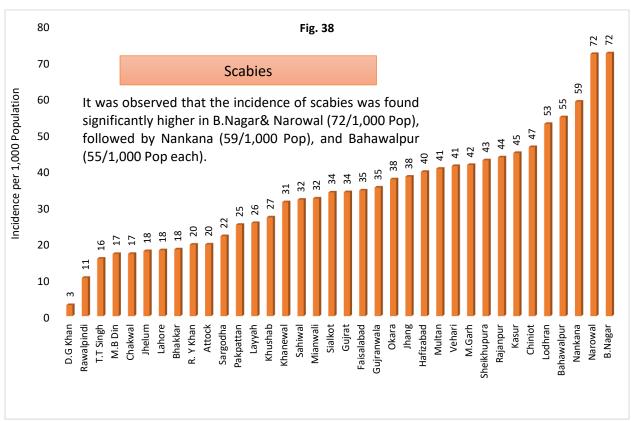
District wise Incidence Rate (per 1,000 populations) of Top 5 Diseases

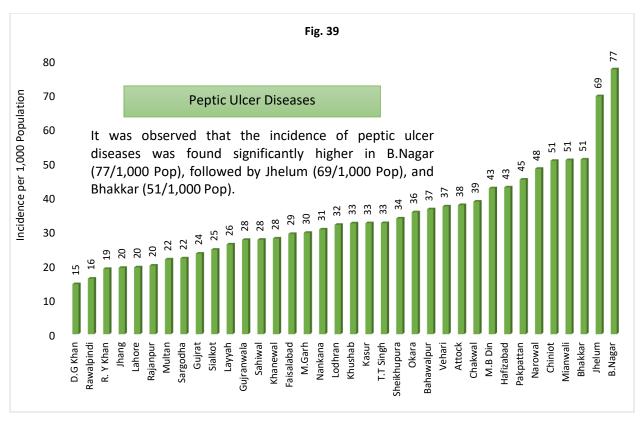
Incidence is a measure of the risk of developing some new condition within a specified period.

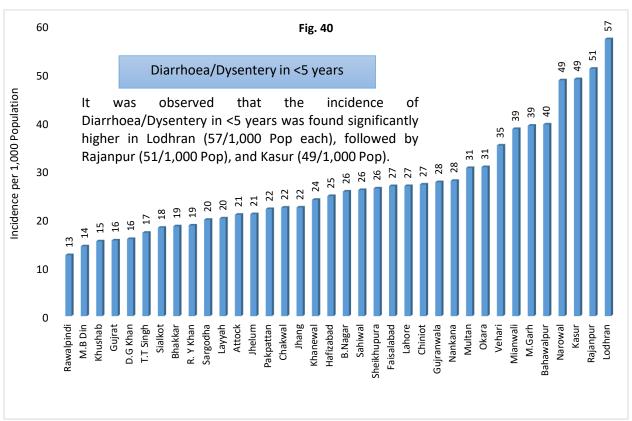
Although sometimes loosely expressed simply as the number of new cases during some time, it is better expressed as a proportion or a rate with a denominator. Incidence rate is the probability of developing a particular disease during a given period; the numerator is the number of new cases during the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







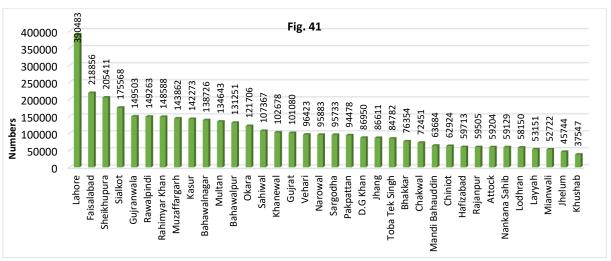




Antenatal Care Coverage

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

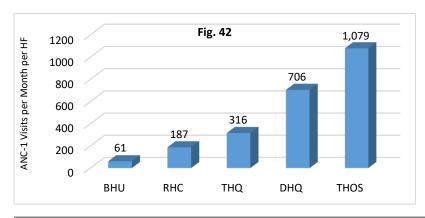
District wise Numbers of ANC-1 Visits (Out of expected population 3,366,235 (3.4%)



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 2016, highest ANC-1 coverage was observed in Lahore (390,483) of the expected population and lowest coverage was in Khushab (37,547) of the expected population).

Facility Type wise Number of ANC-1 Visits (Per month per Health Facility)

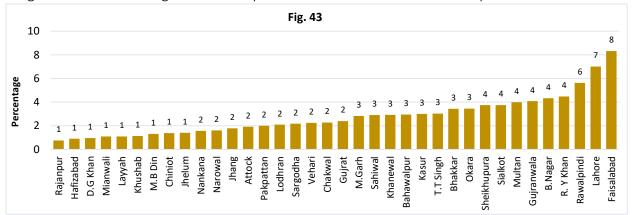


During the year 2016 total ANC-1 visits were 3,962,396 which was 118% of the expected population. *Fig.* 42 is showing the health facility type wise number of ANC-1 visits per month per health facility during 2016.

Percentage of Anaemia among ANC-1 Attendance

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

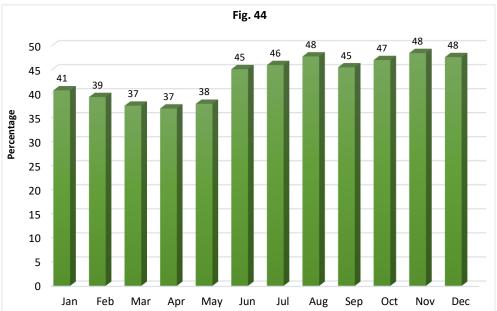
Pregnant women coming to the facility for antenatal care serve as a sample of women from the



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. 793,095 of the women coming for ANC-1 were reported as anemic (hemoglobin<10g/dl) out of the total ANC-1 visits 3,962,396.

Deliveries Conducted at the Health Facilities

Delivery coverage at health facility is an indicator of utilization of delivery services provided at



public health facilities. It is a measure of the percentage 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

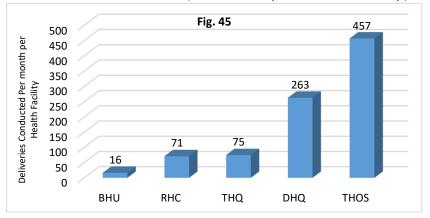
population in the catchment area are covered through the public health facility for delivery services and, thus, reflects the market share of the facility in providing delivery services.

In Fig. 44, percentage of monthly deliveries conducted at the facilities is shown. It is clear from the graph that there was no remarkable change in percentage of deliveries conducted month to month. The highest percentage was observed in November & December (48%) and lowest in March & April (37%).

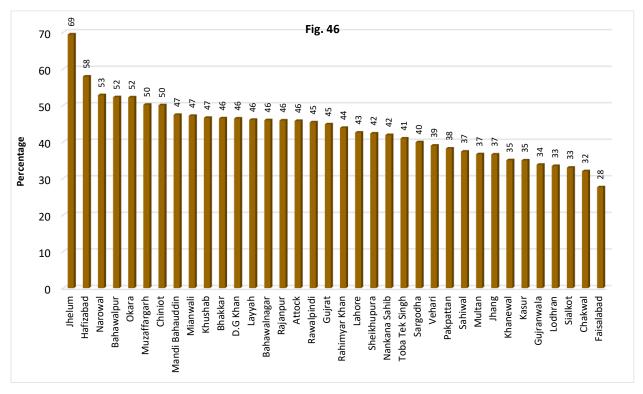
Facility Type wise Number of Deliveries Conducted (Per month per Health Facility)

During the year 2016 total deliveries conducted at health facilities were 1,195,059 which was 42% of the expected population.

Fig. 45 is showing the health facility type wise number of deliveries conducted per month per health facility during 2016.

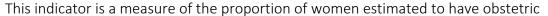


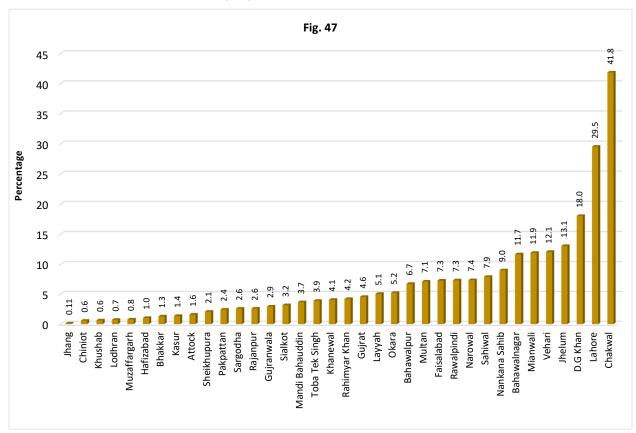
District wise Percentage of Deliveries Conducted at Health Facilities



In Fig. 46, percentage of district wise deliveries conducted at the facilities is shown. The highest percentage was observed in Jhelum (69%) and lowest in Faisalabad (28%).

Obstetric Complications



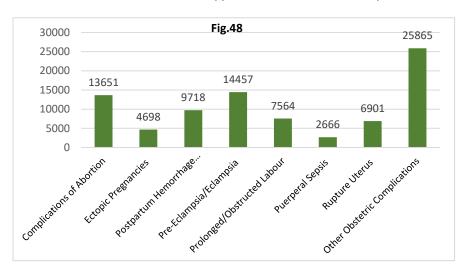


complications who are treated in the public health facilities of the total deliveries in secondary and tertiary care hospitals.

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.

The highest percentage was observed in Chakwal (41.8%).and lowest percentage was observed in Jhang (0.11%).

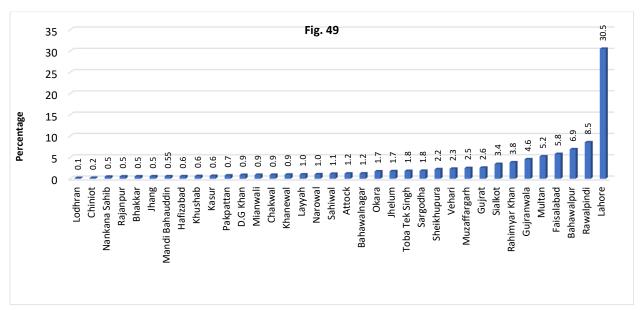
Types of Obstetric Complications



Types of obstetric Complications numbers are shown in *fig.*48. During 2016, total numbers of deliveries with complications were 96,315 of the total deliveries 423,840 of secondary and tertiary care hospitals.

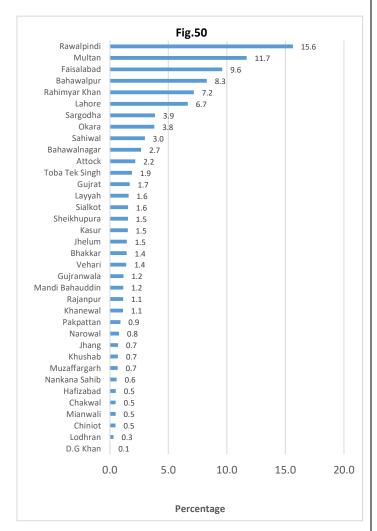
Caesarean Section

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 2016 deliveries with C-section constitute 12% (145,470) of the total deliveries (1,195,059). The overall situation indicated that the higher number deliveries with C-section were conducted in Lahore (30.5% of the total number of deliveries) and lowest percentage was observed in Lodhran (0.1% of the total deliveries).



Frequency of Low Birth Weight (LBW) Babies

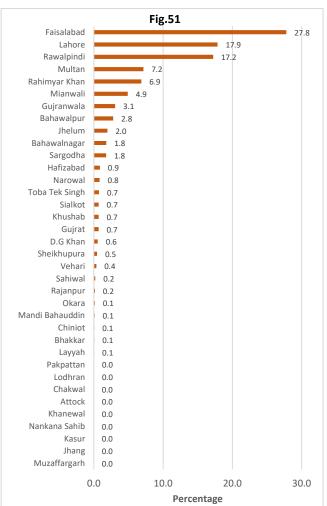
This indicator measures the proportion of live births with low birth weight (live born infants with birth weight less than 2.5 kg) among births in health facility in a given time period. LBW rate is a good indicator of a public health problem that includes long-term maternal malnutrition, ill health,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



During the year 2016, 3% babies were born with LBW (<2.5kg). The highest percentage was observed in Rawalpindi (15.6%).and lowest percentage was observed in D.G Khan (0.1%).

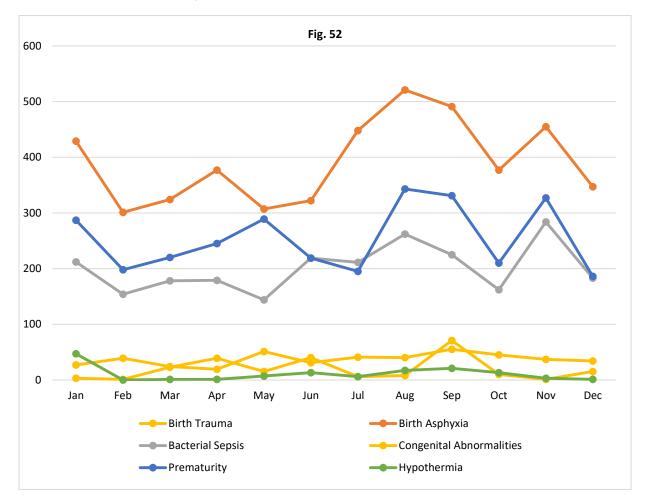
Neonatal Mortality Rate

This indicator is calculated from the data received from the health facilities in secondary and tertiary care hospitals. Neonatal Mortality rate 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 behavior in the community.



The neonatal deaths during 2016 in secondary and tertiary care hospitals that is only 1.0%. Fig. 51 shows the district wise neonatal mortality rate. The percentage of mortality rate was highest in Faisalabad (27.8%) and percentage of mortality rate was lowest in Muzaffargarh 0%.

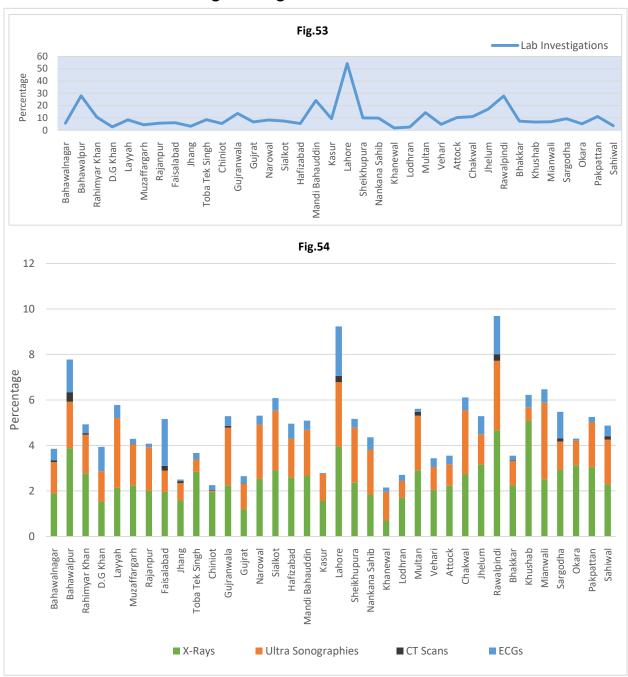
Complications of Neonatal Deaths



Diagnostic Services Utilization

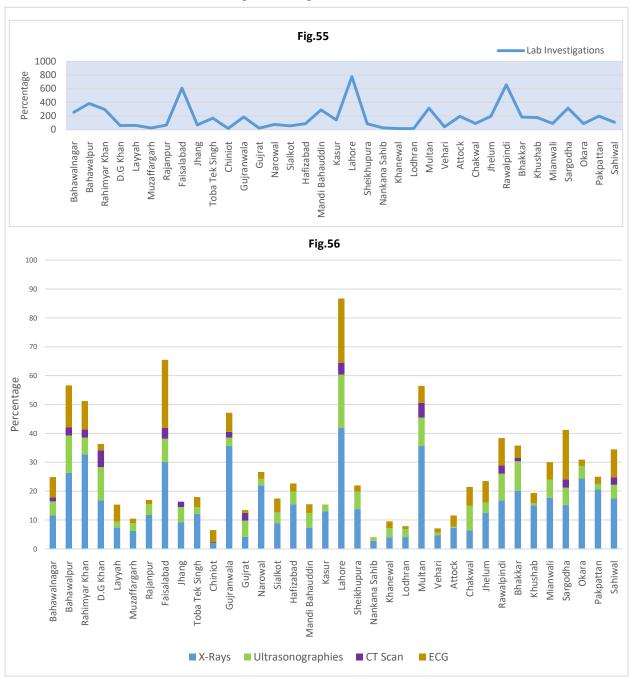
This indicator indicates utilization of Diagnostic services at the facility and also gives a measure of the proportion of patients receiving diagnostic services from the laboratory of the health facility. This indicator reflects the quality of care in terms of utilization of diagnostic services. It will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

District wise Percentage of Diagnostic Services Utilization Outdoor



In Outdoor Lab Services during 2016, *Fig.*53 show the district wise percentage of Lab Investigations. The overall percentage of Lab Investigations were 15. *Fig.* 54. Show the district wise percentage of X-Rays, Ultra Sonographies, CT Scans and ECGs. The overall percentage of X-Rays 3, Ultra Sonographies 2, CT Scans 0 and ECGs 1.

District wise Percentage of Diagnostic Services Utilization Indoor

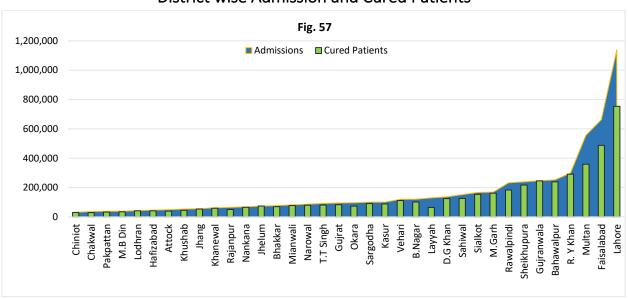


In Indoor Lab Services during 2016, *Fig.*55 show the district wise percentage of Lab Investigations. The overall percentage of Lab Investigations were 352. *Fig.* 56. Show the district wise percentage of X-Rays, Ultra Sonographies, CT Scans and ECGs. The overall percentage of X-Rays 25, Ultra Sonographies 8, CT Scans 2 and ECGs 11.

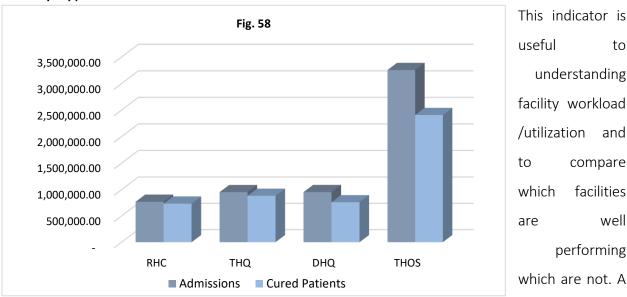
Indoor Patients and Cured Patients

In Punjab, total admissions were 6,018,886 in which 4,868,387 patients were cured. The percentage of cured patients was 81% in which 3.0% patients were LAMA and 5.4% patients were Refered. Fig. 57 show district wise admission and cured patients.

District wise Admission and Cured Patients



Facility Type wise Admissions and Cured Patients



performing which are not. A

to

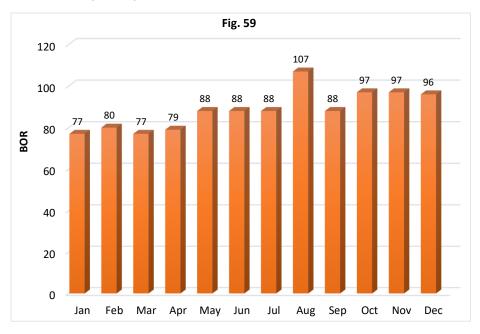
compare

facilities

well

benchmark may be used for comparison; or comparison among facility. Fig. 58 is showing the facility type wise admissions and cured patients numbers in health facilities during 2016.

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 in secondary and tertiary care hospitals. 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.

Fig. 59 is showing the monthly bed occupancy rate during 2016. The highest rate is in August (107) and lowest in January (77). The overall bed occupancy rate during 2016 was 84.

Facility type wise Bed Occupancy Rate

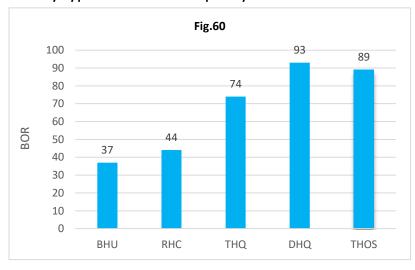
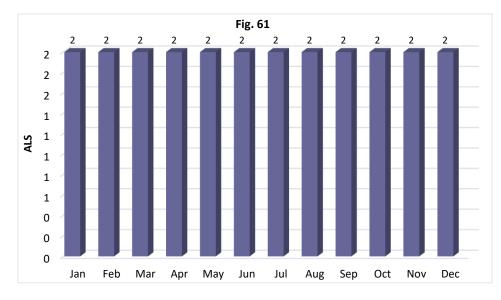


Fig. 60 is showing the health facility type wise bed occupancy rate during 2016. Furthermore since these averages are generally calculated based on an average number of available staffed beds for a year they frequently conceal bed borrowing by other.

Average length of Stay



This indicator is the of measure the average duration of hospital stay admitted patients in secondary and tertiary care hospitals. 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. 61 is showing the monthly Average Length of Stay. It is clear from the graph that the ALS was consistent throughout the year.

Facility type wise Average Length of Stay

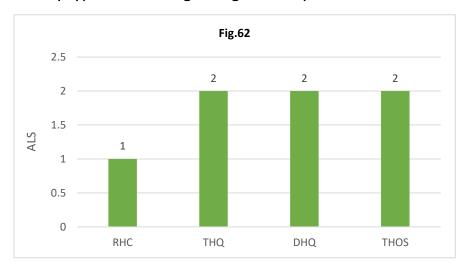


Fig. 62 is showing the health facility type wise Average Length of Stay during 2016. It is clear from the graph that the ALS was consistent throughout the year in all health facility types.

Hospital Death Rate

This indicator is the measure of the proportion of hospital deaths among admitted patients in hospitals.

District wise Percentage of Hospital Death Rate

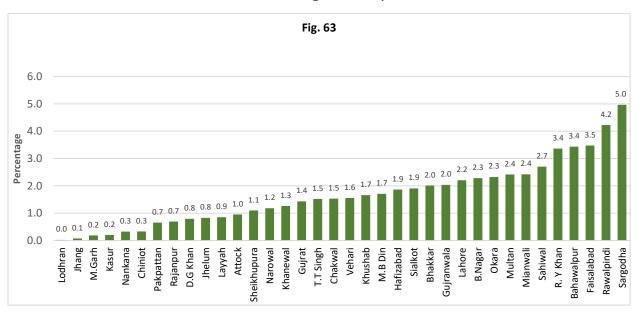


Fig.63 show district wise percentage of deaths. It was noted that the percentage of deaths was highest in Sargodha (5.0%) and lowest in Lodhran (0%).

Facility type wise Hospital Death Rate

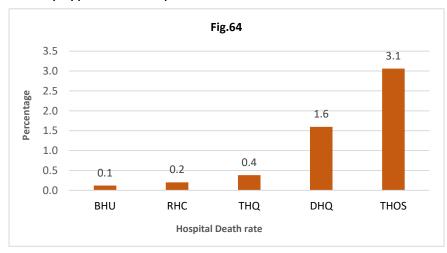
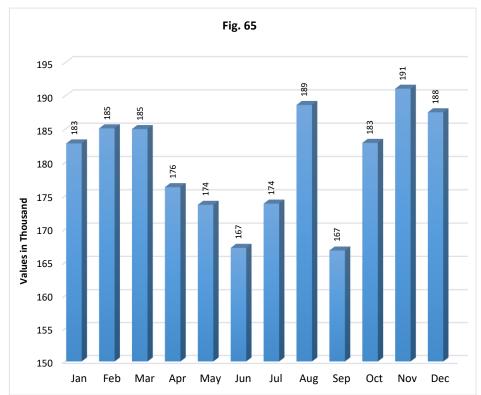


Fig. 64 is showing the health facility type wise Percentage of Hospital Death during 2016. This indicator is indicative of quality of care at the hospital indoors.

Family Planning Visits

Family planning allows people to attain their desired number of children and determine the of spacing pregnancies. lt is achieved through use of contraceptive methods and the treatment of infertility (this fact sheet focuses on contraception). 2016, During



15,841,095 family planning visits were reported from the public sector health facilities against the expected population (16% MCBA).

District-wise Number of Commodities Distributed

Table-8:

Table-0.									
DISTRICT	COC cycles	POP cycles	DMPA inj.	Net-En Inj.	Condom Pieces	IUCD	Tubal Ligation	Vasectomy	Implants
Bahawalnagar	18838	169	13132	1325	120197	8707	282	0	0
Bahawalpur	20628	1563	15479	1556	166477	7374	1733	2	700
Rahimyar Khan	13996	2648	19804	1195	46964	7920	1497	20	105
D.G Khan	17808	2198	14208	1002	97265	3777	950	178	352
Layyah	7340	1104	9675	2743	101186	4161	165	0	28
Muzaffargarh	42529	4005	32781	1905	656713	16499	1808	27	513
Rajanpur	12460	1226	8679	2763	127404	7624	720	40	14
Faisalabad	69964	5142	14190	1748	265191	8811	2823	640	254
Jhang	17141	4034	11634	2741	102141	10666	6261	10	39
Toba Tek Singh	12952	1719	11046	2051	59808	4575	700	11	57

Chiniot	9906	4851	7530	1500	53672	6708	45	0	80
Gujranwala	18990	652	13718	553	232530	9413	2316	32	253
Gujrat	12070	586	16630	1755	104803	5181	213	3	0
Narowal	9769	88	8606	323	115151	3624	126	1	44
Sialkot	25777	1432	14348	1777	156981	8095	1081	11	221
Hafizabad	5982	1730	5158	1530	89428	4530	251	9	25
Mandi Bahauddin	6984	146	6555	453	91346	5126	53	4	0
Kasur	15363	1693	7557	1320	181753	7600	1182	7	112
Lahore	23623	4253	16952	4104	374315	10683	6444	128	1571
Okara	22991	447	16885	189	122010	9088	139	437	18
Sheikhupura	20264	2522	13325	2100	372426	12474	1239	20	335
Nankana Sahib	10478	97	5524	1059	96169	3702	9	0	540
Khanewal	13889	4174	10467	3230	84262	8932	1858	120	637
Lodhran	17651	1471	11655	1164	43798	3660	297	18	128
Multan	32826	569	25917	1487	193041	13476	1267	62	999
Pakpattan	7348	200	8331	57	61564	3563	13	0	4
Sahiwal	14412	2013	24595	685	99161	3989	2828	9	105
Vehari	19274	1487	9483	3405	136289	8007	2059	73	1459
Attock	7281	202	8696	845	90359	2279	351	0	0
Chakwal	9470	924	9082	2053	84512	6280	429	337	4712
Jhelum	9268	1184	12107	1492	122227	4936	249	1	18
Rawalpindi	21762	2090	20003	1550	164488	5348	2132	116	1635
Bhakkar	9055	470	9907	1291	44540	3489	572	60	160
Khushab	11609	701	11212	551	110481	6930	723	22	219
Mianwali	10245	1284	8748	507	98369	2049	573	0	637
Sargodha	36878	2305	12736	3099	120054	9254	1309	137	1168
Total	636821	61379	466355	57108	5187075	248530	44697	2535	17142

Human Resource

Table 9:

DISTRICT	Spec	ialist	Surg	geon	Doct	ors	Nur	rses	Assistar	nt/Techs	LH	Vs	Dispe	enser
	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled
Bahawalnagar	66	32	19	15	298	135	215	164	204	140	219	219	235	204
Bahawalpur	127	71	36	28	757	567	1044	806	233	186	183	162	289	274
Rahimyar Khan	69	35	29	25	625	466	530	415	267	178	157	140	258	251
D.G Khan	35	28	19	17	265	214	135	80	135	109	87	81	139	133
Layyah	58	33	17	11	197	155	147	121	106	87	66	61	127	113
Muzaffargarh	50	40	23	20	402	267	206	190	137	108	109	102	200	180
Rajanpur	29	19	12	12	181	150	126	97	74	73	51	50	105	105
Faisalabad	157	80	43	35	1356	811	1449	1187	324	271	337	301	492	469
Jhang	54	30	27	21	251	184	230	224	133	115	141	129	160	151
Toba Tek Singh	37	25	15	13	199	150	146	126	118	108	96	93	139	138
Chiniot	14	7	6	4	182	41	68	59	74	62	84	82	71	65
Gujranwala	51	34	23	18	337	299	345	334	190	165	211	197	264	257
Gujrat	50	31	16	13	228	145	149	118	177	111	152	119	201	178
Narowal	25	12	11	10	223	138	149	148	99	62	123	113	112	106
Sialkot	72	37	20	12	283	174	231	148	165	111	216	195	208	188
Hafizabad	22	17	12	8	166	67	127	109	69	54	74	70	110	101
Mandi Bahauddin	29	11	15	12	201	86	124	110	97	53	95	73	123	101
Kasur	36	20	18	15	218	160	182	179	114	101	152	152	202	200
Lahore	444	254	73	50	2524	1961	4163	3782	566	494	152	146	355	329
Okara	49	34	19	16	331	169	195	186	160	123	219	211	199	191
Sheikhupura	61	40	19	17	383	234	316	224	144	96	177	149	181	159
Nankana Sahib	36	19	13	10	166	73	137	130	100	80	137	117	119	114
Khanewal	40	25	13	12	318	167	105	98	132	86	138	123	158	152
Lodhran	27	18	8	7	228	132	115	99	80	74	64	64	102	99
Multan	150	93	51	42	855	693	1165	1005	291	239	175	160	280	274
Pakpattan	28	16	9	8	144	75	122	118	89	82	78	77	100	97
Sahiwal	25	13	15	12	173	114	134	103	131	94	132	127	160	149
Vehari	38	27	21	17	278	189	226	179	145	130	114	110	225	214
Attock	68	27	14	12	378	184	189	172	127	89	137	133	141	139
Chakwal	41	28	16	13	284	152	156	134	115	73	146	132	143	137
Jhelum	42	23	12	10	279	91	165	138	91	65	121	105	121	118
Rawalpindi	122	82	32	23	639	480	923	794	325	175	198	151	255	226
Bhakkar	45	33	13	11	162	100	182	180	114	92	77	74	142	133
Khushab	58	16	14	9	360	65	138	106	84	67	121	114	135	128
Mianwali	45	24	20	15	321	175	202	181	111	86	83	72	139	123
Sargodha	83	36	29	27	414	224	373	337	236	206	173	161	235	222
Total	2383	1370	752	600	14606	9487	14609	12581	5757	4445	4995	4565	6625	6218

DISTRICT	EPI Vaco	cinator	Sanitary inspectors		Midwives		LHWs		CDC Sup	ervisor	Others	
	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled	Sanc.	Filled
Bahawalnagar	89	77	104	103	200	184	1122	1109	89	59	1027	889
Bahawalpur	95	91	75	66	190	128	1498	1434	56	49	1048	926
Rahimyar Khan	13	13	106	5	221	111	1506	1296	4	4	659	491
D.G Khan	60	49	38	26	170	128	905	841	55	42	187	170
Layyah	46	45	42	41	126	114	810	759	36	34	766	586
Muzaffargarh	88	83	75	66	298	189	1908	1760	71	62	742	575
Rajanpur	37	37	32	30	73	70	552	552	32	32	366	365
Faisalabad	19	19	150	78	408	351	2233	2166	15	15	4689	3774
Jhang	67	62	56	55	171	125	118	103	59	54	586	459
Toba Tek Singh	68	65	69	42	125	109	996	971	55	46	101	89
Chiniot	37	36	36	30	58	50	498	330	36	26	322	166
Gujranwala	99	98	101	96	294	230	1510	1400	84	67	1052	968
Gujrat	97	91	92	41	364	173	1960	1411	82	71	774	555
Narowal	60	58	57	54	119	92	1121	994	58	56	957	647
Sialkot	21	20	87	81	160	128	520	449	22	16	878	794
Hafizabad	38	35	28	20	88	74	349	328	31	25	135	111
Mandi Bahauddin	60	51	47	39	135	74	993	951	54	45	204	144
Kasur	27	27	76	67	191	183	168	132	28	28	354	264
Lahore	89	85	67	64	166	157	1121	1116	38	36	3710	3123
Okara	121	115	97	96	176	148	1480	1277	93	74	1120	1011
Sheikhupura	90	74	82	75	155	126	831	793	81	69	420	360
Nankana Sahib	57	50	47	43	86	70	589	535	44	30	645	482
Khanewal	92	86	82	79	137	91	568	520	87	68	459	410
Lodhran	53	52	48	42	78	68	978	973	51	51	459	432
Multan	166	165	87	79	241	160	1821	1805	77	64	4204	4028
Pakpattan	1	1	53	40	141	115	878	870	36	34	171	138
Sahiwal	86	82	76	71	220	108	41	36	74	64	684	430
Vehari	77	72	74	63	167	145	807	806	67	63	600	533
Attock	63	53	67	64	107	70	1035	736	62	47	502	409
Chakwal	61	54	35	8	123	94	824	774	61	50	222	194
Jhelum	50	44	57	55	133	124	713	652	43	33	800	708
Rawalpindi	127	91	78	52	220	112	65	56	91	47	754	619
Bhakkar	42	40	39	39	135	118	0	0	38	36	566	530
Khushab	2	2	46	38	125	88	0	0	1	1	563	388
Mianwali	44	43	46	38	104	92	714	706	37	28	502	367
Sargodha	146	132	130	115	338	288	1732	1718	140	115	1457	1099
Total	2388	2198	2482	2001	6243	4687	32964	30359	1988	1641	32685	27234

Comparison of Sanctioned vs. Filled posts of Health Personnel

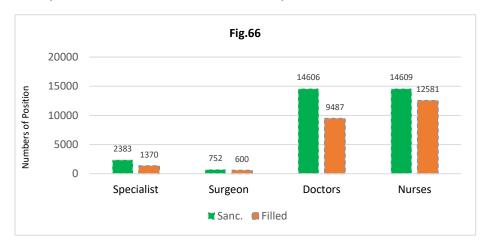


Fig. 66 provides a comprehensive situation analysis of Specialists, Surgeons, Doctors and Nurses positions in district Punjab.

Immunization Coverage

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

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.

District wise Percentage of BCG Coverage

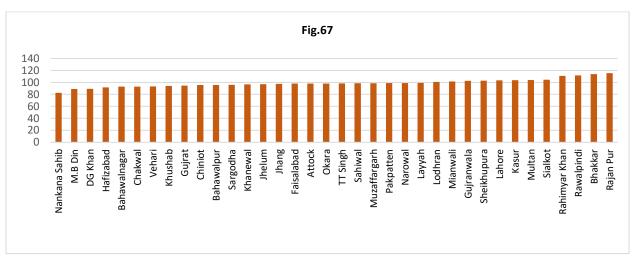


Fig. 67 is showing the district wise percentages of BCG coverage during 2016. Highest coverage was reported in Rajanpur (115%) and in Nankana Sahib the lowest coverage was reported (83%).

District wise Percentage of Measles - I

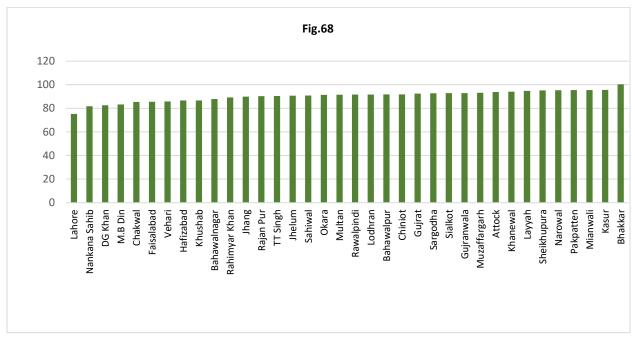


Fig. 68 is showing the district wise percentages of Measles - I during 2016. Highest coverage was reported in Bhakkar (100%) and in Lahore the lowest coverage was reported (75%).

District wise Percentage of Measles – II

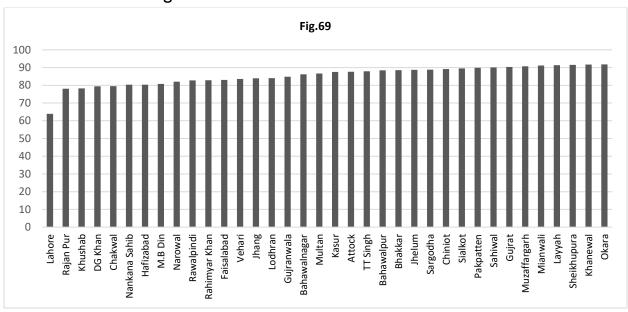


Fig. 69 is showing the district wise percentages Measles – II during 2016. Highest coverage was reported in Bhakkar (100%) and in Lahore the lowest coverage was reported (75%).

District wise Percentage of Preg. Woman TT - I

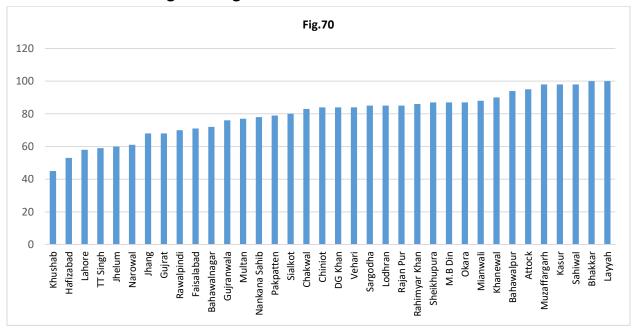


Fig. 70 is showing the district wise percentages of Preg. Woman TT - I during 2016. Highest coverage was reported in Layyah (100%) and in Khushab the lowest coverage was reported (45%).

District wise Percentage of Preg. Woman TT – II

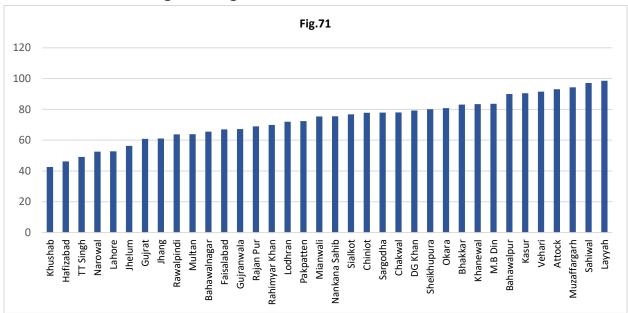


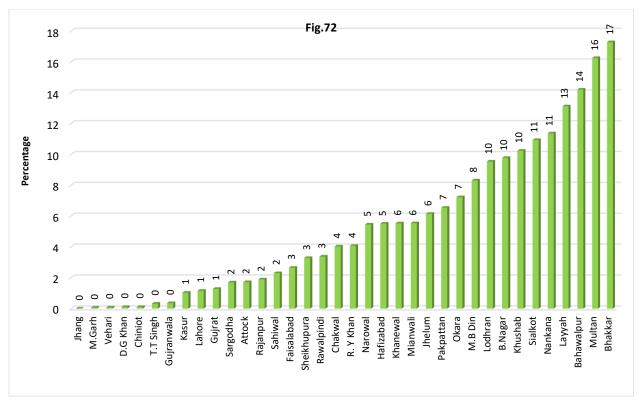
Fig. 71 is showing the district wise percentages of Preg. Woman TT – II during 2016. Highest coverage was reported in Layyah (99%) and in Khushab the lowest coverage was reported (43%).

Stock out Status

This indicator measures the percentage 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.

District wise Percentage of Stock out



It can be seen in *Fig.* 72 that the percentage of out of stock medicines was highest in Bhakkar (17%).

Annexed

Detail of Health Facilities of Punjab

The data in Table 2, 3 and 4 provides a detail of Health Facilities of Punjab and all mentioned tables relate with table 1.

Table 2: List of THQs/Civil Hospitals in Punjab

S. no.	Facility Name	S. no.	Facility Name	S. no.	Facility Name
Dist	rict: 111 Bahawalnagar	41	THQ Hospital Kamoke	80	GOVT.Civil Hospital Multan (Ss)
1	THQ, Hospital, Haroon Abad.	42	THQ Hospital Noshehra Vikran	Dis	strict: 164 Pakpattan
2	THQ Hospital, Chishtian	District: 142 Gujrat		81	THQ Hospital, Arifwala Arifwala
3	THQ Hospital, Fort Abbas	43	Tehsil Level Hospital Kunjah	Dis	strict: 165 Sahiwal
4	THQ Hospital, Minchinabad	44	THQ Hospital Kharian	82	THQ Hospital Chichawatni
Dist	rict: 112 Bahawalpur	45	THQ Hospital Sarai Alamgir	Dis	strict: 166 Vehari
5	THQ Hospital, Ahmadpur East	46	Civil Hospital Jalalpur Jattan	83	THQ. Mailsi
6	THQ Hospital, Hasilpur	47	Civil Hospital, Kotla Arab Ali Khan	84	THQ Burewala
7	THQ Khair Pur Tamewali	48	Civil Hospital Dinga	Dis	strict: 171 Attock
8	THQ Yazman	Dist	rict: 143 Narowal	85	THQ Hospital Fateh Jang
Dist	rict: 113 Rahimyar Khan	49	THQ Shakargarh	86	THQ Hassan Abdal
9	THQ Hospital Liaquatpur	Dist	rict: 144 Sialkot	87	THQ Hospital Hazro
10	THQ Hospital Sadiqabad	50	Civil Hospital Daska	88	THQ Hospital Jand
11	THQ Hospital Khanpur	51	THQ Hospital Pasrur	89	THQ Hospital Pindi Gheb
Dist	rict: 121 D.G Khan	52	THQ Kotli Loharan	Dis	strict: 172 Chakwal
12	THQ Hospital Tauns	53	THQ Sambrial	90	THQ Choa Saiden Shah
13	CIVIL Hospital Fort Munroo	Dist	rict: 145 Hafizabad	91	City Hospital Talagang
14	CIVIL Hospital Sakhi Sarwar	54	THQ Pindi Bhattian	92	THQ Talagang
Dist	rict: 122 Layyah	Dist	rict: 146 Mandi Bahauddin	Dis	strict: 173 Jhelum
15	THQ Hospital Chowk Azam	55	THQ Hospital Malakwal	93	THQ Hospital PD Khan
16	THQ Hospital Kot Sultan	56	THQ Hospital	94	THQ Hospital Sohawa
17	THQ Thal (Mian Nawaz Shareef)Hospital Layyah	Dist	rict: 151 Kasur	Dis	strict: 174 Rawalpindi
18	THQ Hospital Karor	57	THQ, Hospital Chunian	95	THQ Hosp: Gujar Khan
19	THQ Hospital Fateh Pur	58	Govt.Aziz Bibi, Roshan Bheela Hospital	96	THQ Hosp Kahuta
20	THQ Hospital Choubara	59	THQ Hospital Pattoki	97	THQ Kotli Sattian
Dist	rict: 123 Muzaffargarh	Dist	rict: 152 Lahore	98	THQ Hosp: Murree
21	THQ Hospital Alipur	60	Govt. Hospital Shahdra	99	THQ Hospital Taxila
22	THQ Jatoi	61	GMH Pathi Ground	100	THQ Hospital Kallar Syedan
23	THQ Hospital Kot Adu	62	GMH Chohan Road	Dis	trict: 181 Bhakkar
24	THQ Chowk Sarawar Shaheed	Dist	rict: 153 Okara	101	THQ Hospital Kalurkot, Kalurkot
Dist	rict: 124 Rajanpur	63	THQ Hospital Depalpur	102	THQ Hospital Mankera, Mankera

25	Civil Hospital Shah Wali	64	THQ Hospital Havali Lakha	103	THQ Hospital, Daryakhan
26	THQ Hospital Rojhan	Dist	rict: 154 Sheikhupura	Dis	strict: 182 Khushab
27	THQ Hospital Jampur	65	THQ Hospital Ferozewala	104	THQ Hospital Khushab Khushab
Dist	rict: 131 Faisalabad	66	66 THQ Hospital Sharaq Pur Sharif		THQ Hospital Noor Pur Thal
28	THQ Hospital Chak Jhumra	67	THQ Hospital Muridke	106	THQ Hospital Qaidabad
29	THQ Hospital Jaranwala	68	THQ Hospital Safdarabad	107	THQ Hospital Naushera
30	THQ Hospital Tandilianwala	Dist	rict: 155 Nankana Sahib	Dis	strict: 183 Mianwali
31	THQ Hospital Sumundri	69	THQ Shahkot	108	THQ Hospital Isa Khel
32	Govt. General Hospital Samanabad	70	THQ Sangla Hill	109	THQ Level Hospital Kalabagh
Dist	rict: 132 Jhang	71	Civil Hospital Sangla Hill	110	THQ Hospital Piplan
33	THQ Hospital Shorkot	Dist	rict: 161 Khanewal	Dis	strict: 184 Sargodha
34	THQ Ahmed pur Sial	72	THQ Hospital Jahanian	111	THQ Hospital Bhalwal
35	THQ Hospital 18-Hazari	73	THQ Hospital Kabir Wala	112	THQ Kot Momin
Dist	rict: 133 Toba Tek Singh	74	THQ Hospital Mian Channu	113	THQ Sahiwal
36	GOVT.Eye-Cum-General Hospital Gojra	Dist	rict: 162 Lodhran	114	THQ Sillanwali
37	THQ Hospital Kamalia	75	THQ Hospital Kehror Pacca	115	THQ Hospital Chak no. 90/sb
Dist	rict: 134 Chiniot	76	THQ Hospital Dunya pur	116	THQ Bhagtanwala
38	THQ Lalian	Dist	rict: 163 Multan	117	GOVT. TB Hospital Sargodha
39	THQ Bhowana	77	GOVT. Mushtaq Lang THQ Hosp.Jalalpur Pirwala	118	THQ Hospital Shahpur
Dist	rict: 141 Gujranwala	78	GOVT.THQ Hospital Shujabad	119	THQ Bhera
40	THQ Hospital Wazirabad	79	Govt. Mian Muhammad Shahbaz Sharif General Hospital Multan		

Table 3: List of DHQs Hospitals in Punjab

	Table 3. List of Prings Hospitals III anjub								
S. no.	Facility Name	S. no.	Facility Name	S. no.	Facility Name				
1	DHQ:Hospital, Bahawal Nagar	10	DHQ Hospital	19	D.H.Q Hospital Vehari				
2	DHQ Hospital Layyah	11	DHQ Hospital Kasur	20	Isfandyar Bukahri Hospital Attock				
3	DHQ Hospital Muzaffargarh	12	DHQ Hospital Okara	21	DHQ Chakwal				
4	DHQ Hospital Rajanpur	13	DHQ Hospital (South City) Okara	22	DHQ Hospital Jhelum				
5	DHQ Hospital, Jhang	14	DHQ Hopital Sheikhupura	23	DHQ Hospital Bhakkar, Bhakkar				
6	DHQ Hospital Toba Tek Singh	15	DHQ Hospital Nankana Sahib	24	DHQ Khushab At Jahurabad				

7	DHQ Hospital	16	DHQ Hospital Khanewal	25	DHQ Hospital Mianwali
8	DHQ Narowal	17	DHQ Hospital Lodhran		
9	DHQ Hospital Hafizabad	18	DHQ Hospital Pakpattan		

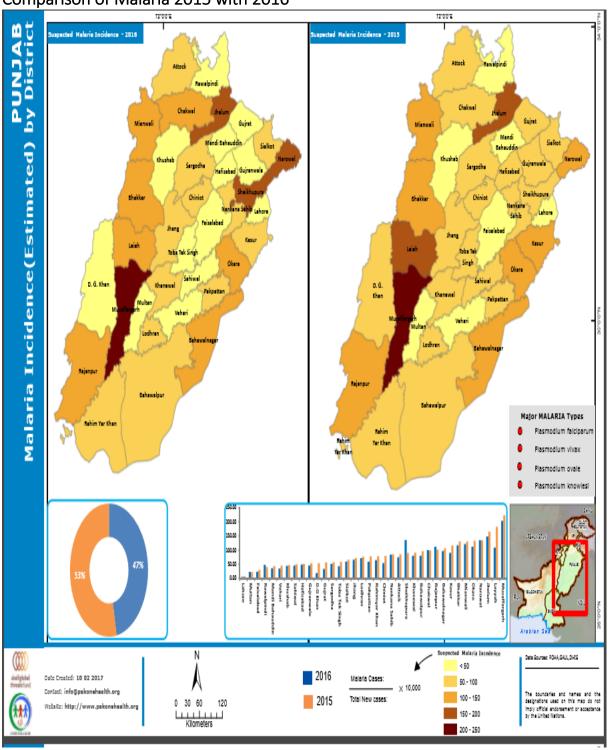
Table 4: List of Teaching/Specialized Hospitals in Punjab

C	Table 4. List of Teaching/Specialized Hosp		•
S. no.	Facility Name	S. no.	Facility Name
1	D.V. Haarital Dahassalassa	22	Company
1	B.V. Hospital Bahawalpur	22	General Hospital Lahore
2	CIVIL Hospital Bahawalpur	23	Mayo Hospital
_	orriz risopitar bariarrarpa.		ayo noopita.
3	Teaching Hospital Sheikh Zayed RYK	24	Service Hospital
	T 1: 11 12 0 14	0.5	
4	Teaching Hospital D.G. Khan	25	Jinnah Hospital
5	District Head Quarter Hospital Faisalabad	26	Punjab Institute of Cardiology Hospital
	District Floor Quarter Floorpria Floorpria		, anjug metreute et eurarenegy mespreur
6	Faisalabad Institute of Cardiology Faisalabad	27	Govt Teaching Hospital Shahdra
7	Govt. General Hospital G.M Abad	28	Govt Nawaz Sharif Hospital Yakki Gate
,	Cove. Centeral Prospital C.W. Abdu	20	Sovernawaz sharii riospicar rakki sace
8	Allied Hospital Faisalabad	29	Shaikh Zayed Hospital
9	DHQ/Teaching Hospital Gujranwala	30	Children Hospital
10	Aziz Bhatti Shaheed (DHQ) Hospital, Gujrat	31	CH. Pervaiz Illahi Institute Of Cardiology
10	Aziz Briatti Shariccu (Brig) Hospital, Guji at	31	Cri. i Crvaiz main matitute of cardiology
11	Allama Iqbal mem. Hosp. Sialkot	32	GOVT.Fatima Jinnah Women Hosp. Multan
			(ss)
12	GOVT Sardar Begum Hospital Sialkot	33	Children Hospital Complex Multan
13	Institute of Mental Health	34	Nishter Hospital Multan
14	Punjab Dental Hospital Lahore	35	DHQ Teaching Hospital Sahiwal
1-7	r drijab bentar Hospitar Ednore	33	Brig reaching riospital samwar
15	Govt. Mian Munshi Hospital	36	GOVT. Haji Abdul Qayyum Teaching
			Hospital Sahiwal
16	Govt. Mozang Hospital	37	Rawalpindi Institute of Cardiology,
			Rawalpindi
17	Siad Mitha Hospital Lahore	38	Holy Family Hospital Rawalpindi
10	Cout Kat Khawaia Sagaad Haspital	20	Danazir Dhutta Hasnital
18	Govt. Kot Khawaja Saeeed Hospital	39	Benazir Bhutto Hospital
19	Lady Aitchison Hospital Lahore	40	DHQ Hospital Rawalpindi
	,		
20	Lady Wallingdon Hospital,Lahore	41	DHQ Teaching Hospital Sargodha
0.1			
21	Sir Ganga Ram Hospital Lahore		

Epidemic Diseases case

These charts are relate with Table 5, year wise Epidemic diseases case.

Comparison of Malaria 2015 with 2016



Comparison of Leishmaniasis 2015 with 2016

