

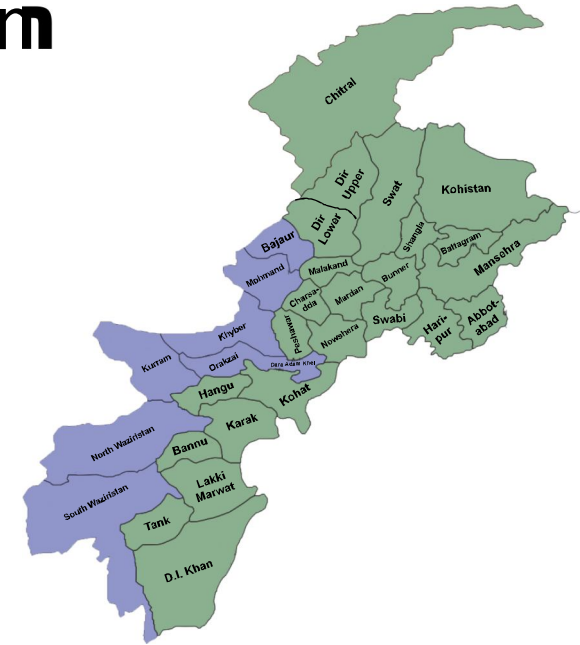
# District Health Information System

EVIDENCE BASED DECISION MAKING

[www.dhiskp.gov.pk](http://www.dhiskp.gov.pk)

ANNUAL  
REPORT

2017





## Director General Health Services, Khyber Pakhtunkhwa

The office of the Directorate General Health Services, Khyber Pakhtunkhwa, is the implementation arm of the Health Department. In 2016/17 the Department focused on strengthening the core functions in Directorate of Health, introducing performance management at all levels of service provision and integrating services focused on maternal and childcare.

One of the top priorities of the Department remained strengthening of Health Information System for future planning followed by restructuring of Directorate to introduce critical functions which were missing in the obsolete structure. The Department has streamlined the core functions through restructuring and introduced District Health Information System in place of HMIS to identify, enter the data into DHIS tools, analyze and report disease burden. In past years, inefficient information remained a core challenge for Health Department, which was a key hurdle in timely planning and budgeting towards quality services in Health Sector. The Health Department created DHIS cell to collect information at the district level and analyzed at the provincial DHIS Cell to support all the activities in the Department of Health. The support from DHIS cell has resulted in timely analysis and evidence based information during 2016/17.

The Department has also moved from traditional reporting performance mechanism to a robust automatic online performance mechanism based on Key Performance Indicators (KPIs) from all districts programs. Department conducts regular monthly reviews of DHOs and MS on KPIs and other health indicators. These monthly meetings serve as a platform for collection, analysis and presentation of DHIS data at district and provincial levels.

The launch of DHIS in 2006 (with HMIS in 1996) reiterates the commitment of Health Department towards improving maternal and child health services, vaccine-preventable/modifiable diseases to provide all possible health services to population with a focus on maternal and child health in the province.

In 2017/18 the Department of Health will continue the journey to improve service provision in all health facilities in the province and ensure collection and dissemination of evidence based information for quality reporting towards better planning and minimizing disease burden in Khyber Pakhtunkhwa.

**Dr. M. Ayub Rose Yousufzai**



## KHYBER PAKHTUNKHWA: PROFILE

<b>Capital</b>	Peshawar
<b>Largest City</b>	Peshawar
<b>Government</b>	Parliamentary system
<b>Type</b>	Province
<b>Body</b>	Provincial Assembly
<b>Governor</b>	Iqbal Zafar Jhagra (PMLN)
<b>Chief Minister</b>	Pervez Khattak (PTI)
<b>Legislature</b>	Unicameral (124)
<b>High Court</b>	Peshawar High Court
<b>Area</b>	74,521 km <sup>2</sup> , 28,773 miles <sup>2</sup>
<b>Population</b>	2017Provisional Results of 2017 Census: 30,523,371 <sup>3</sup>
<b>Density</b>	360/km (930/sq mi)
<b>Area zone</b>	9291
<b>ISO3166 code</b>	PK-KP
<b>Main Languages</b>	Urdu, Pashto, English, Other language (s) Hindko, Khowar, Kalami, Torwali, Maiya, Kalkoti, Chillisso, Gowro,Kalasha, Palula,Dameli, Gawar-Bati, Yidgha, Burushaski,Wakhi,Saraeki
<b>Assembly Seats</b>	124
<b>Districts</b>	25
<b>Union Councils</b>	986





## ACKNOWLEDGMENTS

DHIS Project acknowledges the services of its team and all the personnel who contributed in compilation of this reports, without whose efforts it would not have been possible to generate timely information; that in-turn serves as the basis for optimal decision making.

Mr. Hameed Bangash, Data Analyst, Mr. Ehtisham Siddiqui Database Administrator , Mr. Bilal Khalid Network Assistant & Muhammad Waseem Data Entry Operator Provincial Office DHIS are continuously putting efforts to publish quarterly and annual reports of DHIS along with colleagues.

Above all, the guidance provided by the Secretary Health & Director General Health Services served as a beacon in giving final touches to the report.



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## **Executive Summary**

DHIS compiles quarterly and annual report against established health indicators. All districts have achieved the compliance target. General OPD has increased phenomenally i-e 25,106,642 (25.1million). ARI and Diarrhoea are still leading causes of morbidity with regards to communicable diseases whereas amongst non-communicable diseases, UTI & hypertension are on the rise. Health facility utilization rate could be reviewed in detail in the report.

The report also reflects the number of deliveries conducted in the health facilities of the public sector, further family planning services and commodities utilized there-in gives a fair good idea of couples benefitting from these services. The report also encompasses immunization rates. Primary indicators pertaining to T.B & Malaria are also mentioned in the report.

Trend Analysis since 2012-13 up to 2016-17 provides vital information regarding trend of OPD at PHC & SHC levels. Disease patterns of communicable & non- communicable diseases emphasize double burden of disease in Khyber Pakhtunkhwa. Mortality rates are also reflected in the report.

Key performance indicators (KPIs) reflect the performance of the districts & DHQ hospitals and put these in competition with each other. Not only this but, this tools enables districts to further drill-down to facility level to assess the performance of each facility. All the district managers (DHOs & MSs) are provided with relevant dashboards at their desktops.

Last but not the least, on completion of 5 years term of the government, some key health statistics are shared to have a bird's eye view of the performance of the department in last couple of years.



# INTRODUCTION: A BRIEF ON DHIS

## **PURPOSE / MISSION OF DHIS:**

Collection, Analysis and dissemination of health related data in the public sector.  
Making organized data/information accessible to all especially policy makers & top Management for evidence based decision-making  
Provide basic tools & instruments (stationary) to all health facilities across the province for maintaining record



## **OUTLINE OF THE PROGRAM/PROJECT (Background):**

HMIS was launched in 1992 for generating information on different health indicators. Health Department in collaboration with JICA reviewed HMIS and started working on preparing software of DHIS which was piloted in 2006 in Swabi.

Till 2012: DHIS was implemented in 12 districts

Till 2016: DHIS was implemented in all districts of Khyber Pakhtunkhwa except certain Health Facilities

2016 - 2019: DHIS Phase II is launched as a PC I with the purpose to cover all Health Facilities in PHC and SHC levels and sustenance of regular reporting on 279 Health indicators under 79 sections.

Most of the DHIS staff has been regularized: DHIS is now part of the system.

## **CURRENT STATUS (Achievements):**

- DHIS is implemented country-wide (in all provinces); KP DHIS software and data is configured with Federal Level with relevant Ministry.
- Reporting 43 Diseases including Communicable and Non Communicable Priority Diseases.
- DHIS also reports 52 in-patients (hospital-admitted) disease-related-data from Secondary Health Care Level (DHQs/THQs etc)
- Health Indicators (279 in aggregate) are reported under 79 sub-section and; info collected via primary and secondary proformas (Proformas are standardized at country level) covering all health facilities except MTIs and 14 Health facilities at SHC level such as Police Hospital (details mentioned in PC I) etc
- Multiple users can access and work at a time around the province/country/globe as DHIS is a web based/online system.
- Reports regularly: 2012, 2013, 2014, 2015 and 2016 reports are available online; furthermore these reports are also printed and disseminated to different government offices for perusal and taking evidence-based decisions.
- Key Performance Indicators and other MIS such as LHW-MIS, MNCH-MIS, EPI etc are also being configured at DHIS Server.
- Database is available online and can be reached by anyone having login credentials
- DHIS has its own website which is also utilized by Directorate of Health.
- DHIS reporting is carried out from the primary and secondary care health facilities across the province.



DISTRICT HEALTH INFORMATION SYSTEM  
ANNUAL REPORT 2017

# REPORTING COMPLIANCE

# DISTRICT WISE PERCENTAGE OF REPORTING COMPLIANCE

This indicator represents the percentage of public health facilities that have submitted monthly reports.

The indicator reflects compliance of DHIS data.  
A target of 95% is set for the districts.  
Twenty four districts have achieved the target.

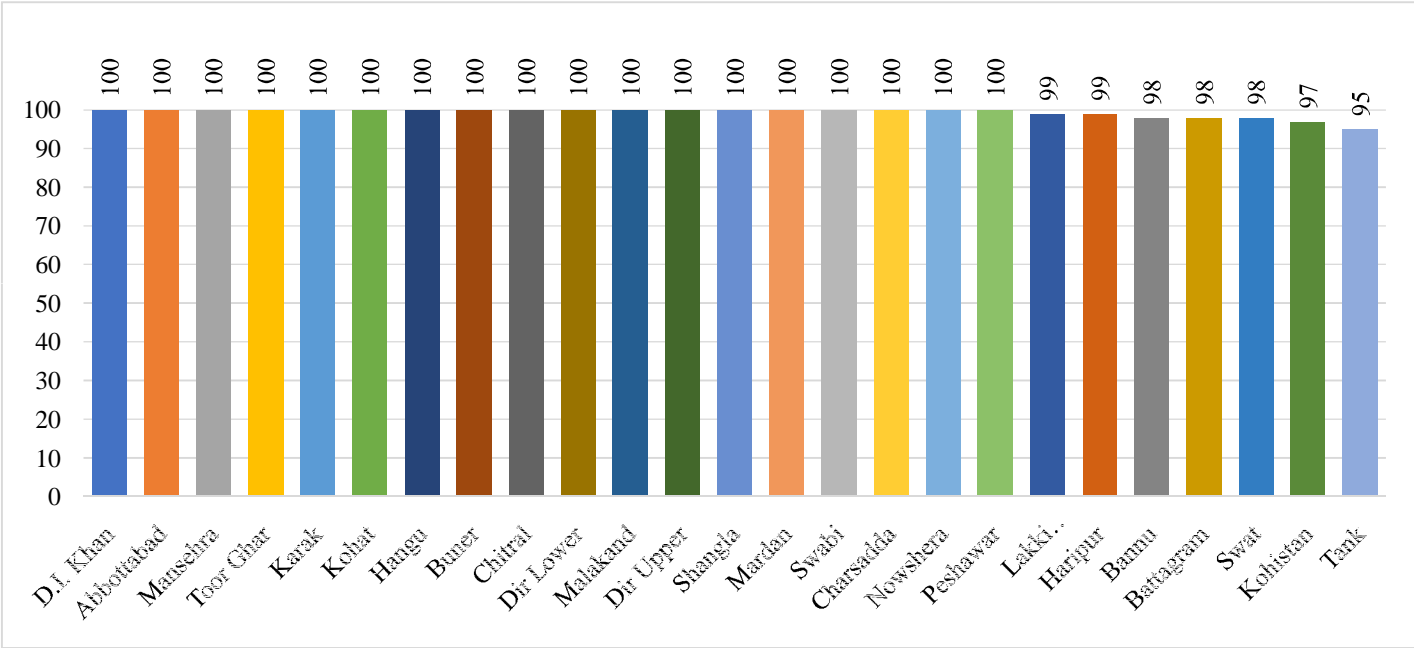


Figure shows the district-wise reporting compliance of all the districts of Khyber Pakhtunkhwa. 18 districts (D.I Khan, Abbottabad, Mansehra, Tor Ghar, Karak, Kohat,, Hangu, Buner, Chitral, Dir Lower, Malakand, Dir UPPER, Shangla, Mardan, Charsadda, Swabi, Nowshera, Peshawar), among 25 districts reported 100% performance. Performance of districts Lakki Marwat to Kohistan stands at (99% to 97%). Tank is the only district among all 25 districts which has just touched the target i.e 95%.

## GENERAL OPD ATTENDANCE

(PRIMARY HEALTH CARE FACILITIES  
& SECONDARY HEALTH CARE FACILITIES)

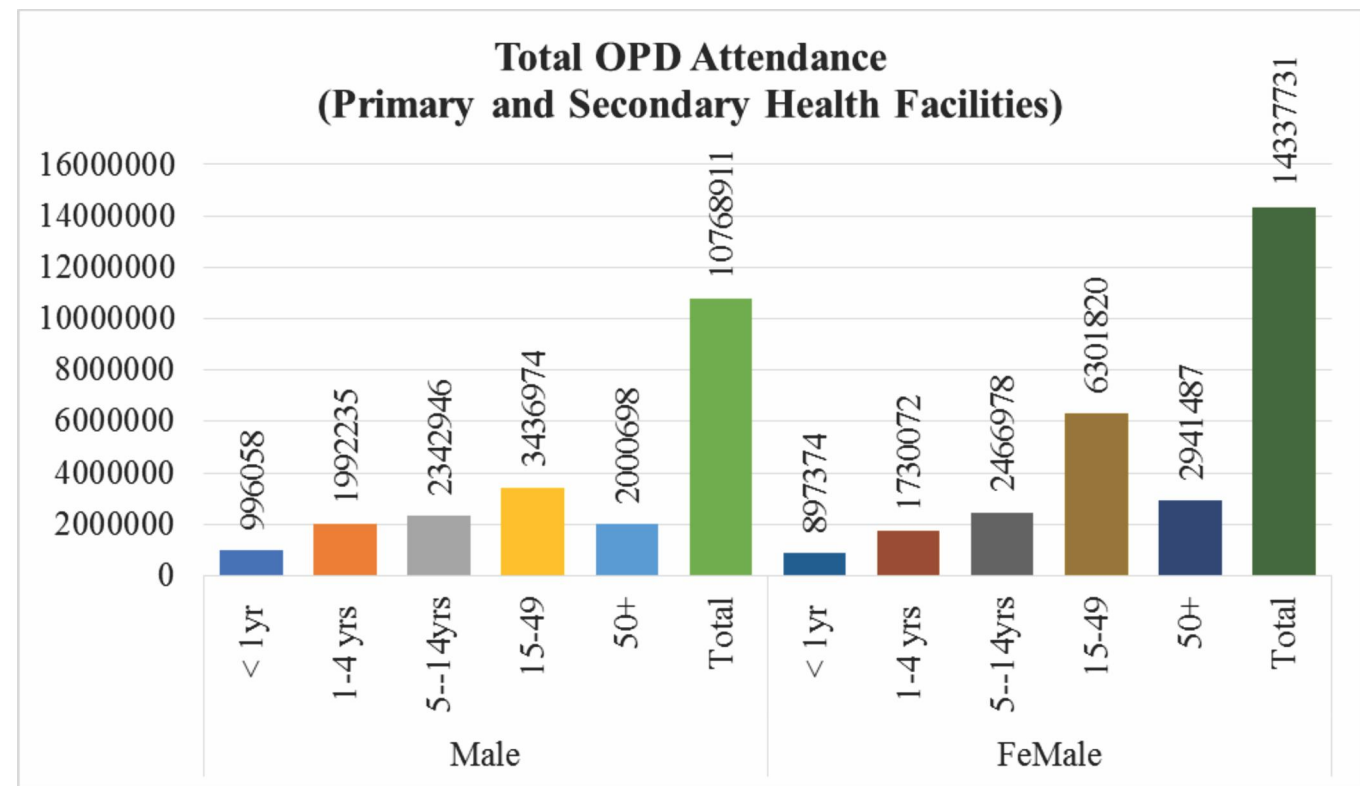
This is one of the key indicators to assess performance of the health services in Khyber Pakhtunkhwa Province. It refers to the number of people attending and receiving services at health facilities during illness.

Figure shows the General OPD in secondary and primary care health facilities with gender wise breakup of male and female patients of the province.

Age-wise breakup of patients visiting the OPDs is consistent in 2017, the figures shows that in the case of male OPD attendance of age group from 1 to 14 years is **(5,331,239)**, which is 49.51% of the total of male OPD **(10,768,911)**.

Similarly in case of female OPD attendance of age group from 1 to 14 age group **(5,094,424)** is 35.53% of the total OPD attendance female.

The overall picture depicts that more female patients are visiting health facilities as compared to male population. Hence more focus should be on providing healthcare services for female population.





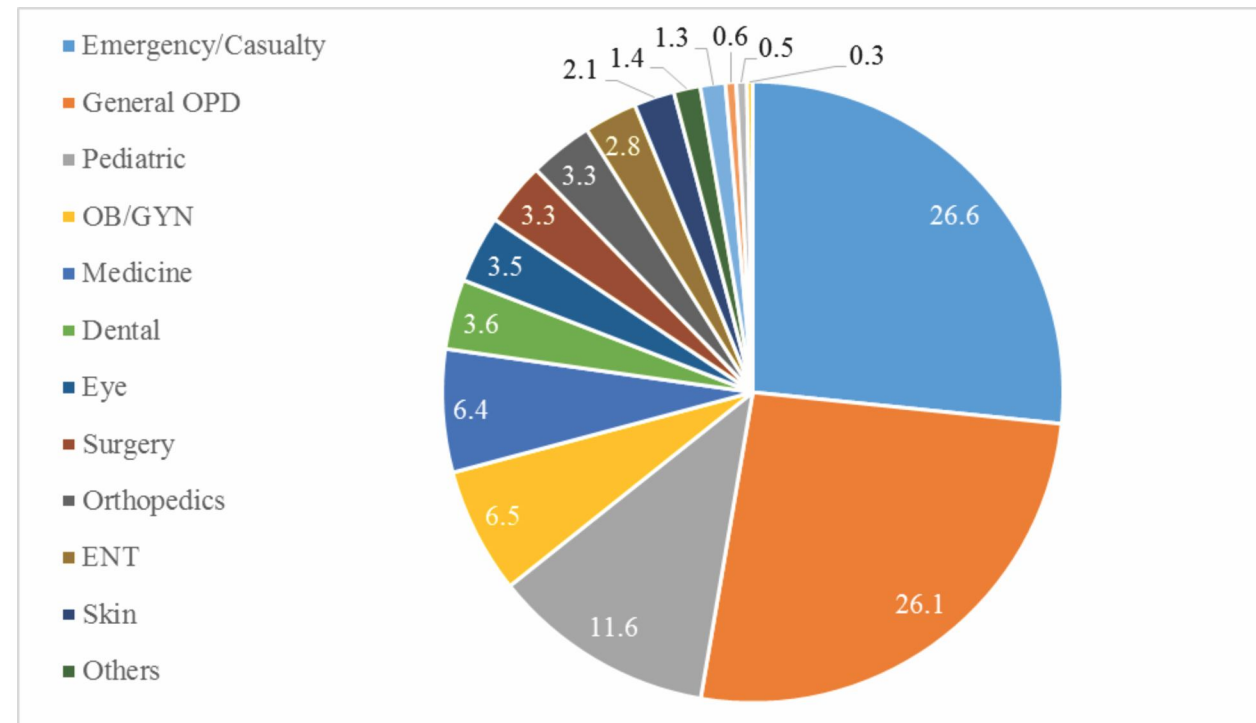
## SPECIALTY WISE PATIENTS BREAK UP

The indicator gives us an idea about the distribution of patients to different specialties enabling the reader to broadly categorize and assess the flow of patients to different specialties available in the health facilities

**Table and figure** of the indicator **OPD Attendance Specialty wise** shows the percentage of total new visits (Patients) of in the facility to different specialty (i.e General OPD, Medicine, Surgery, Pediatric etc).

Under the specialty Emergency/Casualty, the number and percentage of patients are on top and stands at **(3,933,358)** with **26.6%**, General OPD on second number and is **(3,851,081)** which is **26.1%**. Number of patients in the specialty of Pediatric **(1,714,442)** which is **11.6%**.

Total OPD/New Cases (SHC)		14774941	
Sr.#	Specialty	New Visits	%age
1	Emergency/Casualty	3933358	26.6
2	General OPD	3851081	26.1
3	Pediatric	1714442	11.6
4	OB/GYN	967324	6.5
5	Medicine	945494	6.4
6	Dental	538564	3.6
7	Eye	518089	3.5
8	Surgery	490733	3.3
9	Orthopaedics	490352	3.3
10	ENT	408908	2.8
11	Skin	310493	2.1
12	Others	205125	1.4
13	Cardiology	192798	1.3
14	Homeo Cases	82514	0.6
15	Psychiatry	80905	0.5
16	Tibb/Unani Shifa Khana	44761	0.3



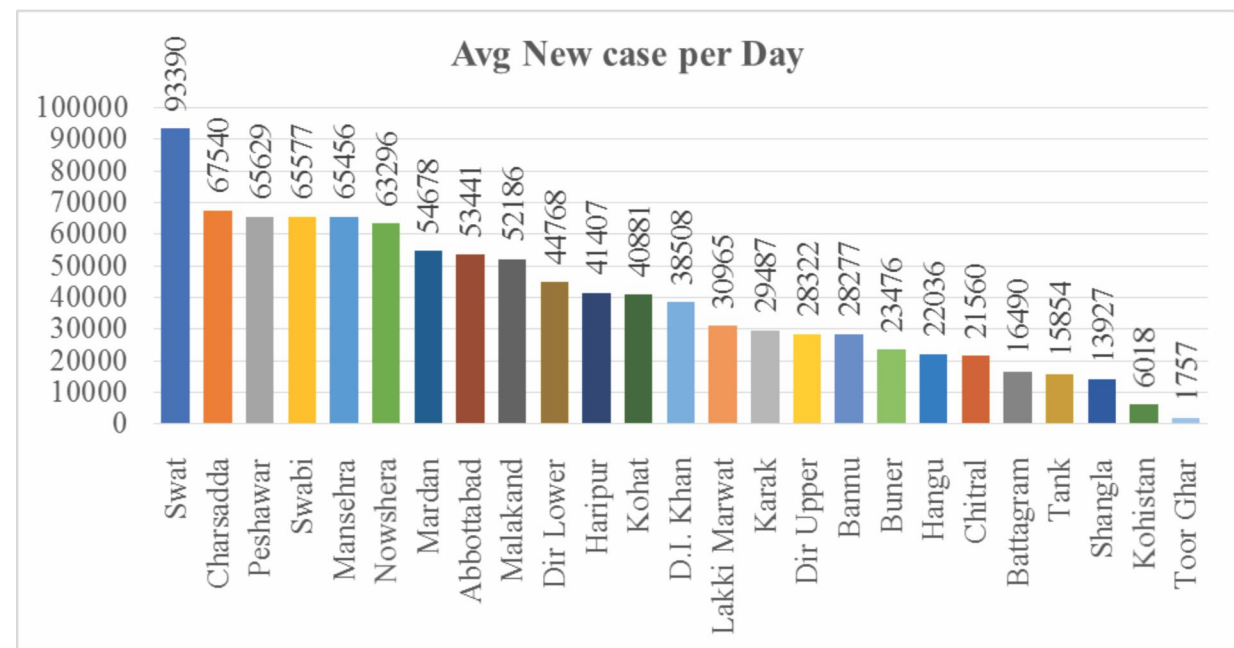
## AVERAGE NUMBER OF NEW CASES PER DAY

This indicator illustrates the frequency of the average number of new cases per day in the public health facilities.

Table illustrate, the average number of new case per day in 2017.

S#	District	Total Visits	Avg New case per Day
1	Swat	2535582	93390
2	Charsadda	1690770	67540
3	Peshawar	1650961	65629
4	Swabi	1661999	65577
5	Mansehra	1645658	65456
6	Nowshera	1588652	63296
7	Mardan	1437073	54678
8	Abbottabad	1344137	53441
9	Malakand	1310734	52186
10	Dir Lower	1165073	44768
11	Haripur	1174707	41407
12	Kohat	1075737	40881
13	D.I. Khan	976774	38508
14	Lakki Marwat	807560	30965
15	Karak	737713	29487
16	Dir Upper	709039	28322
17	Bannu	737380	28277
18	Buner	643017	23476
19	Hangu	552133	22036
20	Chitral	563999	21560
21	Battagram	423935	16490
22	Tank	401139	15854
23	Shangla	350029	13927
24	Kohistan	150476	6018
25	Toor Ghar	44576	1757
<b>Total</b>		<b>25378853</b>	<b>984925</b>

District Swat is on top of the list and on average **93390** new cases are reported in all public health facilities of the district. District Charsadda is on 2<sup>nd</sup> position and reported **67540** patients per day in all health facilities.



DISEASES PATTERN  
IN OUT PATIENT DEPARTMENT  
(OF THE TOTAL 43 PRIORITY DISEASES)

HEALTH FACILITIES' UTILIZATION RATE

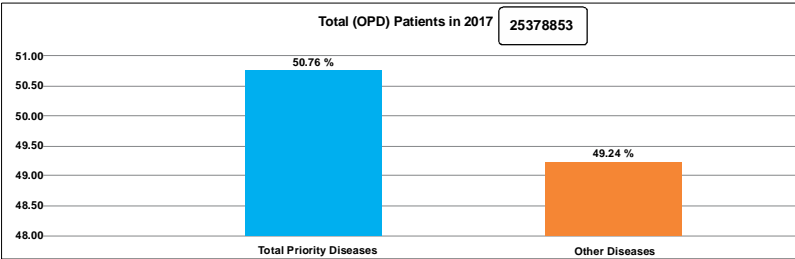
The indicator can trigger a response in terms of additional resources allocation or redistribution of resources according to the disease pattern, or initiating specific preventive, promotive and or curative services at specific area/catchment population.

For the purpose of the DHIS 43 diseases have been selected as “Priority Diseases” in consultation the other stakeholders, the Government of Khyber Pakhtunkhwa has adopted these enlisted priority diseases in continuation to the national decision.

These diseases are listed in table no. 3, which present the numbers of patients provided care at Primary and Secondary Level Health Facilities.

Total new Patients in 2017		25378853
S. No	Disease Name	Total
1	Acute (upper) Respiratory Infections (ARI)	3352404
2	Diarrhoea/Dysentery in under 5 yrs	1106129
3	Fever due to other causes	1010877
4	Diarrhoea/Dysentery in >5 yrs	900216
5	Urinary Tract Infections	816496
6	Hypertension	615362
7	Dental Caries	588247
8	Peptic Ulcer Diseases	501305
9	Suspected Malaria	494411
10	Diabetes Mellitus	367753
11	Scabies	365144
12	Worm infestation	325707
13	Otitis Media	240802
14	Dermatitis	235375
15	Asthma	226183
16	Road traffic accidents -	225326

This indicator will help to understand which disease/cases were attended at the health facilities in a district



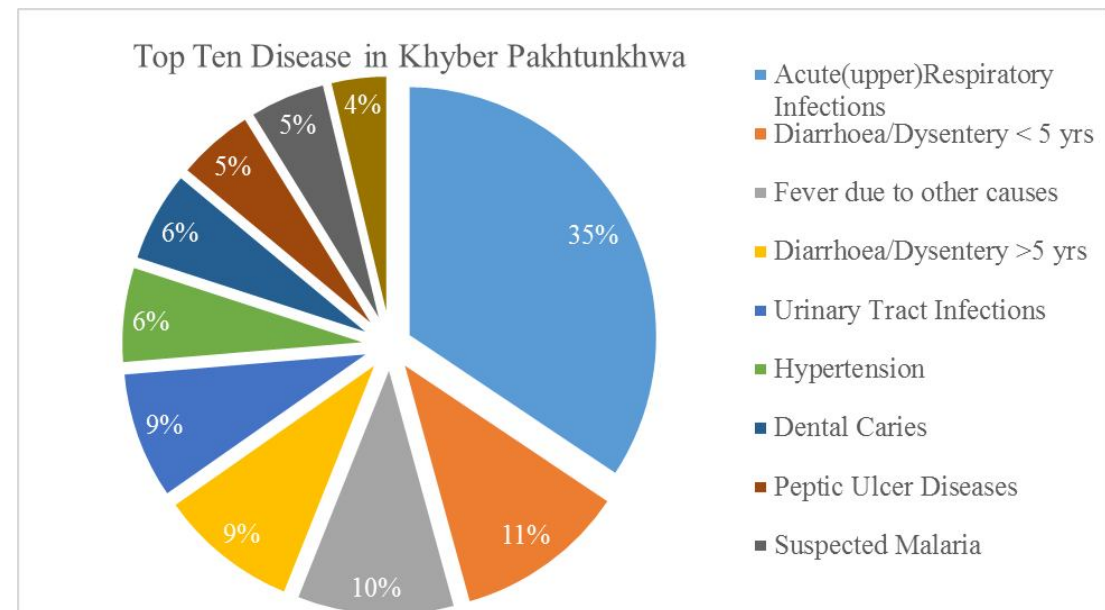
17	Enteric / Typhoid Fever -	224865
18	Depression -	203508
19	Pneumonia under 5 years -	189149
20	Pneumonia >5 years -	134958
21	TB Suspects -	116164
22	Suspected Viral Hepatitis -	78310
23	Fractures -	77369
24	Cataract -	77010
25	Dog bite -	67086
26	Ischemic Heart Disease -	64758
27	Chronic Obstructive Pulmonary Diseases -	51760
28	Suspected Measles -	33448
29	Trachoma -	29592
30	Glaucoma -	27163
31	Burns -	21632
32	Epilepsy -	20539
33	Drug Dependence -	19232
34	Benign Enlargement of Prostrate -	19076
35	Nephritis/Nephrosis -	14236
36	Sexually Transmitted Infections -	13295
37	Cirrhosis of Liver -	11702
38	Suspected Meningitis -	6064
39	Cutaneous Leishmaniasis -	6012
40	Suspected Neonatal Tetanus -	2632
41	Snake bits (with signs/symptoms of poisoning) -	1443
42	Acute Flaccid Paralysis -	349
43	Suspected HIV/AIDS -	42
Total Priority Disease		12883131

## TOP TEN DISEASES (OF THE TOTAL 43 PRIORITY DISEASES)

Acute Respiratory Infections stands at **3,352,404** which is **13.21%** of these patients. Diarrhoea/Dysentery in under and over 5 year's stands at **1,106,129** with **4.36%** and **900,216** with **3.55%** of the total in 2017. Fever due to other causes stands at **1,010,877 (3.99%)** patients in 2017.

Cases of Urinary Tract Infections and Hypertension disorders are **816,496** which are **3.22%** and **615,362 (2.42%)** of the total patients. Dental Caries and Peptic Ulcer Diseases are **588,247** with **2.32%** and **501305** with **1.98%** in 2017.

S. No	Disease Name	Total	%age
1	Acute(upper)Respiratory Infections	3352404	13.21
2	Diarrhoea/Dysentery < 5 yrs	1106129	4.36
3	Fever due to other causes	1010877	3.98
4	Diarrhoea/Dysentery >5 yrs	900216	3.55
5	Urinary Tract Infections	816496	3.22
6	Hypertension	615362	2.42
7	Dental Caries	588247	2.32
8	Peptic Ulcer Diseases	501305	1.98
9	Suspected Malaria	494411	1.95
10	Diabetes Mellitus	367753	1.45



Suspected Malaria cases reported are **494,411** with **(1.95%)** Diabetes Mellitus having **367,753** with **1.45%** percent in 2016. The department should adopt programmatic approach to control the disease.



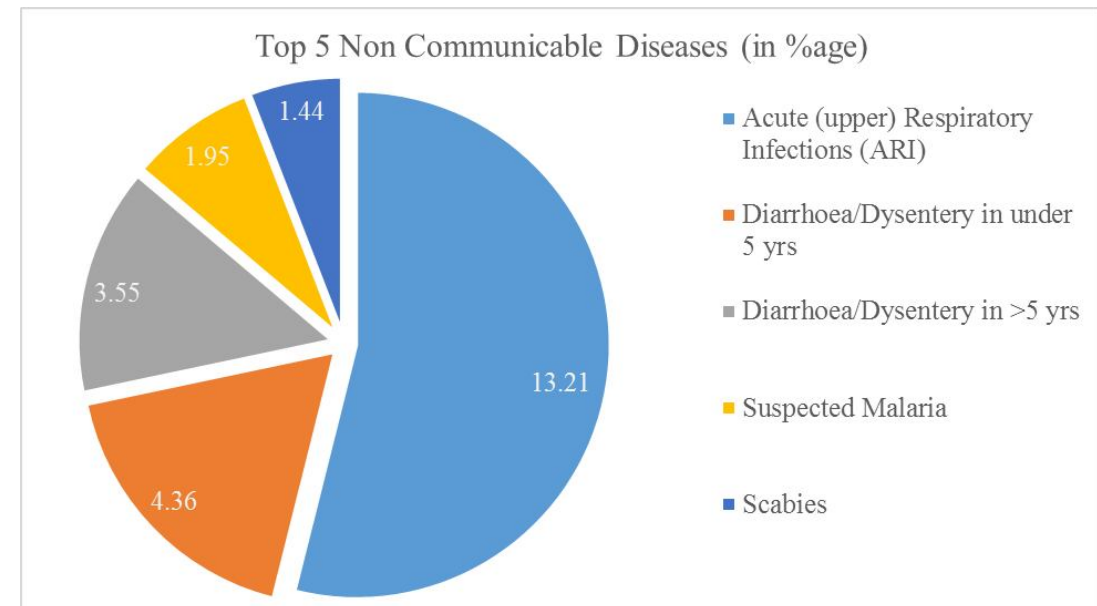
## COMMUNICABLE AND NON COMMUNICABLE DISEASES

Out of 43 priority diseases, 19 are communicable and 24 are non-communicable diseases. Subsequent analysis shows the most common diseases and disease-wise breakup. In 2017, total number of communicable diseases are **7,378,891 (29.07%)**, whereas non-communicable diseases are **5,504,240 (21.69%)**.

### COMMUNICABLE DISEASES

Acute Respiratory Infections and diarrhea/dysentery under and over 5 years constitute **21.12%** of these patients. Prevalence of Scabies stands at 365144 with **1.44%** patients in 2017. Suspected Malaria cases are reported as 494411 in figures and 1.95I% in percentage in 2017.

Total new Patients in 2017			%age
S. #	Disease Name	Total	
1	Acute (upper) Respiratory Infections (ARI)	3352404	13.21
2	Diarrhoea/Dysentery in under 5 yrs	1106129	4.36
3	Diarrhoea/Dysentery in >5 yrs	900216	3.55
4	Suspected Malaria	494411	1.95
5	Scabies	365144	1.44
6	Worm infestation	325707	1.28
7	Enteric / Typhoid Fever	224865	0.89
8	Pneumonia under 5 years	189149	0.75
9	Pneumonia >5 years	134958	0.53
10	TB Suspects	116164	0.46
11	Suspected Viral Hepatitis	78310	0.31
12	Suspected Measles	33448	0.13
13	Trachoma	29592	0.12
14	Sexually Transmitted Infections	13295	0.05
15	Suspected Meningitis	6064	0.02
16	Cutaneous Leishmaniasis	6012	0.02
17	Suspected Neonatal Tetanus	2632	0.01
18	Acute Flaccid Paralysis	349	0.0014
19	Suspected HIV/AIDS	42	0.00017
Total		7378891	29.07



## COMMUNICABLE AND NON COMMUNICABLE DISEASES

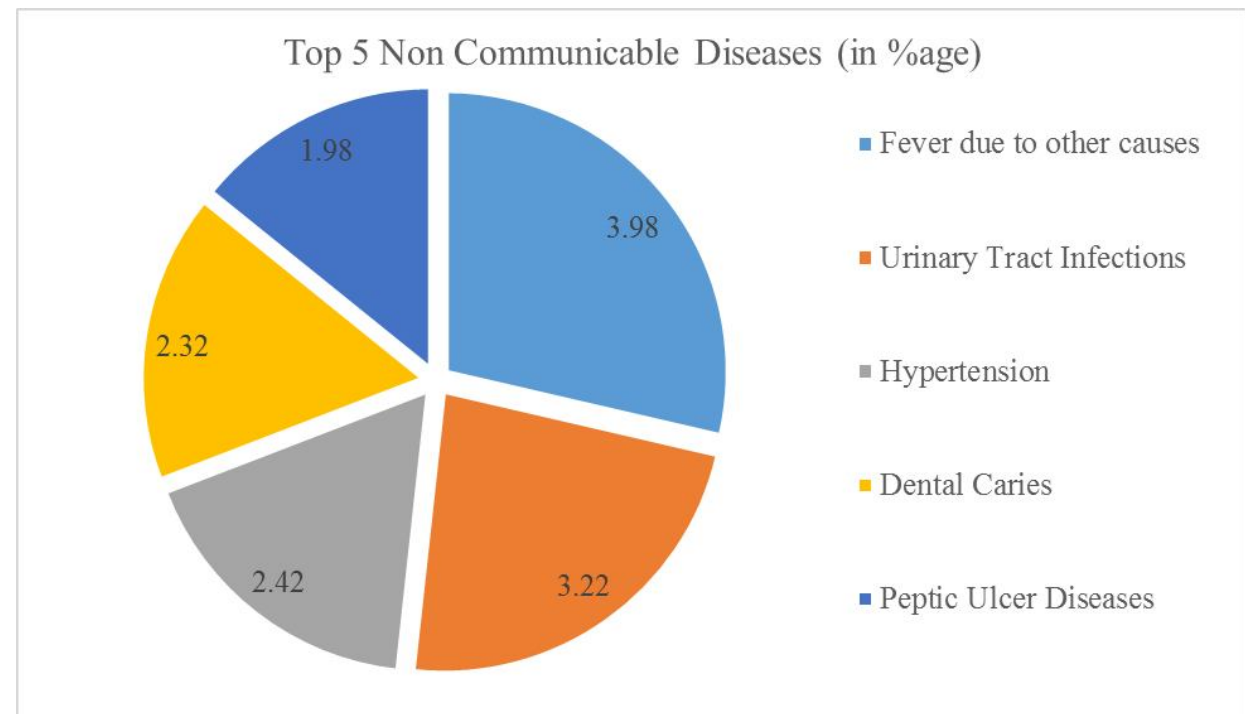
Out of 43 priority diseases, 19 are communicable and 24 are non-communicable diseases. Subsequent analysis shows the most common diseases and disease-wise breakup. In 2017, total number of communicable diseases are **7,378,891 (29.07%)**, whereas non-communicable diseases are **5,504,240 (21.69%)**.

### NON-COMMUNICABLE DISEASES

The **Table and Figure** illustrates non-communicable diseases in Khyber Pakhtunkhwa province during 2017

HEALTH FACILITIES' UTILIZATION RATE

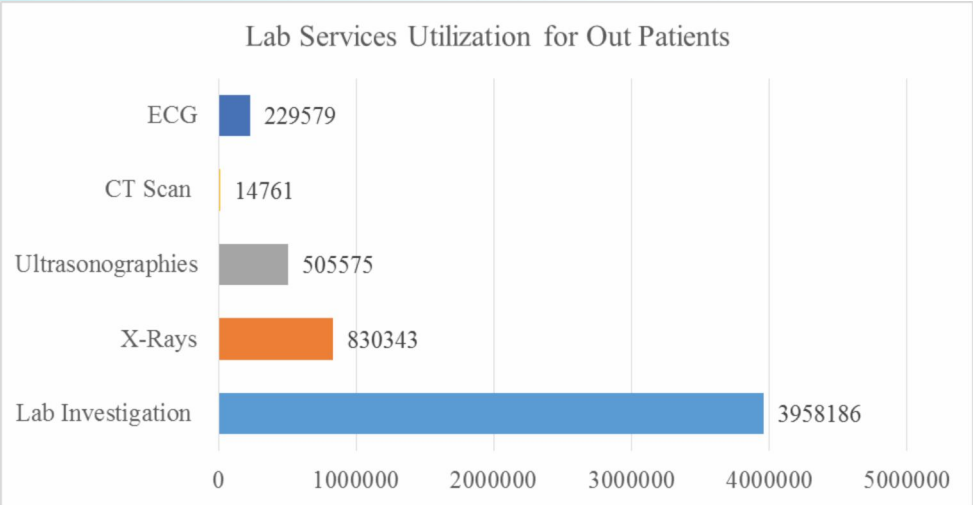
Total new Patients in 2017		25378853	%age
S. #	Disease Name	Total	
1	Fever due to other causes	1010877	3.98
2	Urinary Tract Infections	816496	3.22
3	Hypertension	615362	2.42
4	Dental Caries	588247	2.32
5	Peptic Ulcer Diseases	501305	1.98
6	Diabetes Mellitus	367753	1.45
7	Otitis Media	240802	0.95
8	Dermatitis	235375	0.93
9	Asthma	226183	0.89
10	Road traffic accidents	225326	0.89
11	Depression	203508	0.80
12	Fractures	77369	0.30
13	Cataract	77010	0.30
14	Dog bite	67086	0.26
15	Ischemic Heart Disease	64758	0.26
16	Chronic Obstructive Pulmonary	51760	0.20
17	Glaucoma	27163	0.11
18	Burns	21632	0.09
19	Epilepsy	20539	0.08
20	Drug Dependence	19232	0.08
21	Benign Enlargement of Prostrate	19076	0.08
22	Nephritis/Nephrosis	14236	0.06
23	Cirrhosis of Liver	11702	0.05
24	Snake bites (with signs/symptoms of poisoning)	1443	0.01
Total		5504240	21.69



LAB SERVICES UTILIZATION  
FOR OUT DOOR PATIENTS

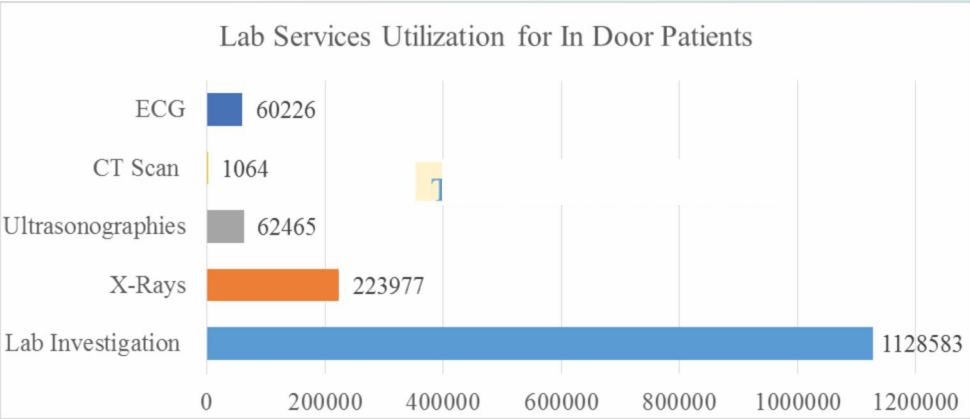
This indicator indicates the utilization of laboratory services at the facility and also gives a measure of the proportion of outdoor patients receiving diagnostic services from health facility.

The graph reflects the figures and show quality of care in terms of utilization of investigation services.



LAB SERVICES UTILIZATION  
FOR IN DOOR PATIENTS

This indicator indicates the utilization of laboratory services at the facility and also gives a measure of the proportion of indoor patients receiving lab services from the laboratory of the health facility. In addition statistics are gathered for other diagnostic investigations



The graph reflects the figures and show quality of care in terms of utilization of investigation services.

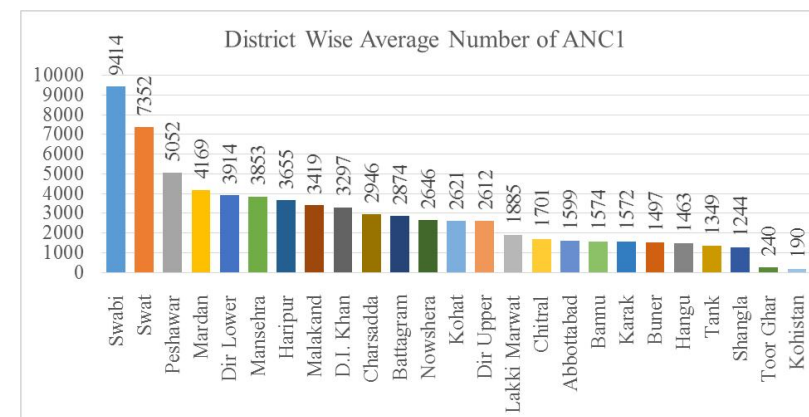
## AVERAGE NUMBER OF ANTENATAL CARE SERVICES IN THE FACILITY

Antenatal care 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 government health facility at least once during their current pregnancy.

HEALTH FACILITIES' UTILIZATION RATE

District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg ANC1
Swabi	3049	3007	4259	4363	4812	3181	3639	2841	2463	3136	75819	2399	9414
Swat	6892	6893	7277	7341	7919	4737	8891	7800	6946	8220	7986	7318	7352
Peshawar	5077	4135	5345	5210	5927	2710	4686	8048	4367	6198	4768	4157	5052
Mardan	3033	3044	4058	3677	3682	3731	6131	4584	3927	5167	3938	5058	4169
Dir Lower	3580	3944	4750	4290	4881	2846	4805	3559	3056	3417	3782	4055	3914
Mansehra	3165	4363	4301	4311	3058	1867	3588	5823	4121	3660	3853	4122	3853
Haripur	3900	4022	3624	1978	4937	3514	3468	2909	2839	3392	3647	5635	3655
Malakand	4059	2662	2935	5959	1785	1602	5648	2276	3545	3744	4286	2532	3419
D.I. Khan	3807	1685	4180	3461	4033	3514	5220	4620	2376	2220	2010	2443	3297
Charsadda	2960	2852	2283	2808	2826	3030	4274	3233	3295	3363	1925	2501	2946
Battagram	1832	3353	2886	2557	2875	1910	2877	2843	2502	5191	3701	1964	2874
Nowshera	2860	3492	2734	2511	3051	1287	3056	2909	2348	2899	2409	2192	2646
Kohat	2705	2644	2333	2348	2490	2129	4167	2526	1960	2931	2578	2639	2621
Dir Upper	2422	3517	2940	2483	2725	1594	2750	2474	2377	2437	2898	2724	2612
Lakki Marwat	1837	1486	1806	1677	2026	1929	1928	2531	2041	1949	1955	1451	1885
Chitral	1276	1382	1486	1533	1701	1123	1940	1722	2020	1752	2366	2107	1701
Abbottabad	1088	1604	1627	1496	1281	992	2620	2015	1507	1723	1697	1541	1599
Bannu	1668	1524	1494	1464	1576	1234	1744	1620	1721	1908	1454	1475	1574
Karak	1647	1563	1796	1470	1572	955	1647	1693	1437	1705	1644	1736	1572
Buner	1202	1746	1726	1476	1710	1055	1600	1677	1125	1489	1627	1525	1497
Hangu	1935	809	1269	1683	1884	1177	1502	1689	1229	1420	1616	1344	1463
Tank	1790	1441	1436	1398	1671	595	1481	1315	929	1291	1335	1505	1349
Shangla	1259	1361	1057	1223	1220	930	1497	1573	1222	1472	1061	1056	1244
Toor Ghar	207	287	317	290	268	194	296	170	164	145	279	268	240
Kohistan	402	185	57	216	112	127	154	190	139	261	191	250	190
Total	63652	63001	67976	67223	70022	47963	79609	72640	59656	71090	138825	63997	72138

This indicator indicates that how many pregnant women in the catchment area population are covered through the facility for antenatal care services. It reflects 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 government health facilities and or the trust of the community on the public health facilities/providers. It will also provide information about the registration of pregnant women in health facilities for availing the ANC-1 services.



**Table and figure** illustrate the statistical analysis about data regarding First Antenatal care services (ANC-1) in government health facilities. District Kohistan stands at the bottom of the list and worst performance with an **average of 190** ANC-1 coverage in 2017.



## DISTRICT WISE NUMBER OF DELIVERIES

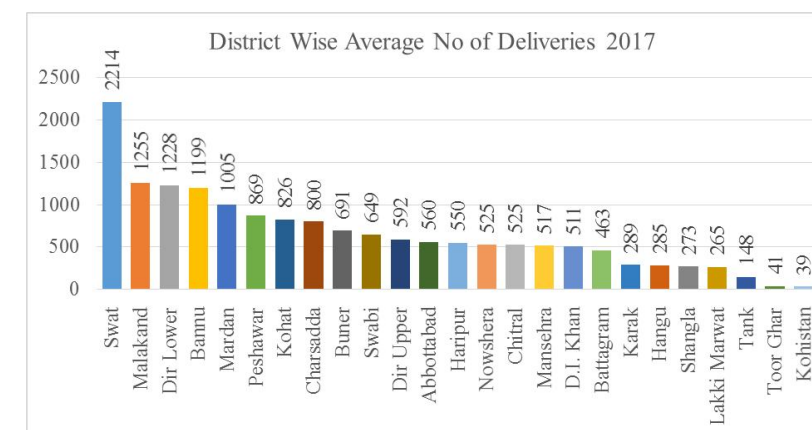
This indicator is reflective of the confidence shown by the general public in the government health facilities for carrying out normal deliveries.

S#	District	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg No. Deliveries
1	Swat	2240	2074	2034	2222	2378	2242	2397	2173	2055	2270	2196	2288	2214
2	Malakand	1151	1177	1140	1169	1230	1242	1234	1402	1301	1477	1382	1158	1255
3	Dir Lower	1188	1384	1306	1179	1316	1285	1311	1258	1154	1082	1098	1170	1228
4	Bannu	1755	482	1655	1161	1258	697	945	1184	1071	1467	1168	1547	1199
5	Mardan	991	862	847	737	827	976	1070	1125	1093	1152	1159	1220	1005
6	Peshawar	914	874	718	622	675	771	829	894	835	1276	1026	999	869
7	Kohat	1087	924	909	912	902	1034	964	87	969	1079	970	72	826
8	Charsadda	987	994	930	873	725	844	1147	948	1012	897	122	123	800
9	Buner	696	662	593	631	676	673	722	699	670	727	735	804	691
10	Swabi	685	518	729	680	722	748	843	866	468	557	461	507	649
11	Dir Upper	534	642	691	626	674	650	613	618	432	562	512	550	592
12	Abbottabad	583	507	614	547	533	542	553	406	573	556	534	773	560
13	Haripur	583	461	510	53	392	404	718	674	640	824	673	666	550
14	Nowshera	830	583	533	544	606	228	625	529	327	649	419	430	525
15	Chitral	488	410	508	626	562	602	582	587	531	491	479	436	525
16	Mansehra	433	449	435	487	535	588	588	566	524	571	496	533	517
17	D.I. Khan	735	649	677	549	715	702	758	800	100	119	156	168	511
18	Battagram	446	495	559	474	530	480	505	402	379	370	492	427	463
19	Karak	314	257	320	233	253	186	235	326	278	372	334	358	289
20	Hangu	320	252	301	294	311	364	327	301	252	234	233	233	285
21	Shangla	253	272	319	310	312	300	260	270	298	216	233	227	273
22	Lakki Marwat	248	332	199	200	320	278	153	350	169	356	406	173	265
23	Tank	184	146	133	115	121	106	142	127	133	156	220	189	148
24	Toor Ghar	33	54	42	49	47	46	58	32	36	24	38	32	41
25	Kohistan	57	23	5	27	15	31	59	55	32	65	37	62	39
Total		17735	15483	16707	15320	16635	16019	17638	16679	15332	17549	15579	15145	16318

District Swat **2214** is ahead of all 25 districts in government health facilities. Districts Malakand and Dir Upper reported **1255**, and **1228** number of deliveries conducted in the government health facilities thereby giving satisfactory performance.

Districts Tank, Tor Ghar and Kohistan reports **148**, **41** and **39** number of deliveries in 2017.

The Table and fig. shows a district wise breakup of the total number of deliveries conducted in government health facilities and reported in 2017 through DHIS.

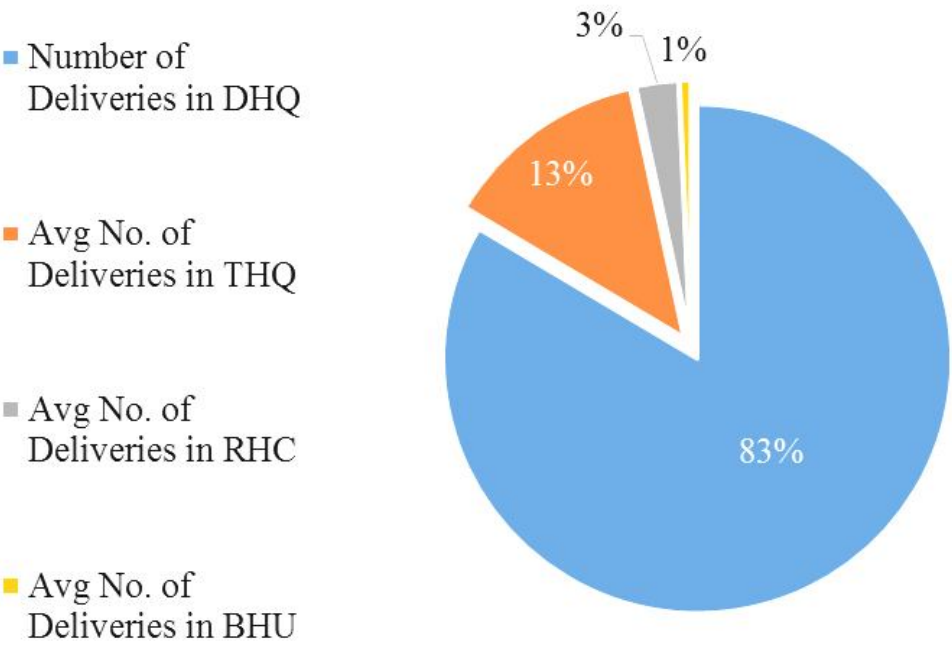


The poor arrangement in primary and secondary health facilities in government sector and tertiary care hospitals needs to be improved. Figures from tertiary hospitals are not added to these figures; if added, these figures will change significantly. Furthermore, private sector is also providing good services in this regards. Health Care Commission should ensure optimal services in this regards across the province.

HEALTH FACILITY-WISE  
NUMBER OF DELIVERIES

Number of Deliveries in DHQ	Avg No. of Deliveries in THQ	Avg No. of Deliveries in RHC	Avg No. of Deliveries in BHU
81279	12732	2611	685

District - Wise Average Number of Deliveries

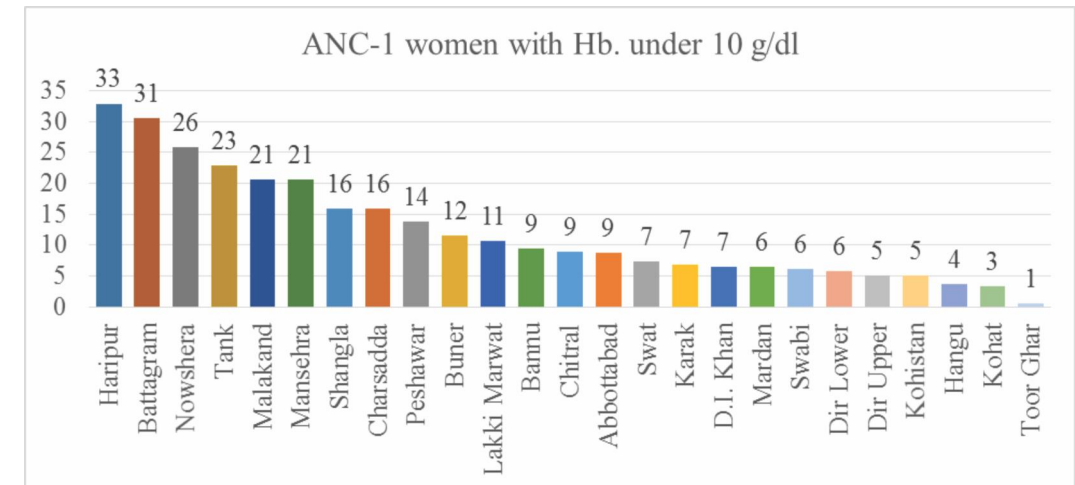


This indicator reflects health facilities wise number of deliveries. In DHQs number of deliveries conducted are **81279** which is **83%** of the total, in THQs **12732 (13%)**, RHCs report **2611 (3%)**, and BHUs report only **685 (1%)** deliveries.

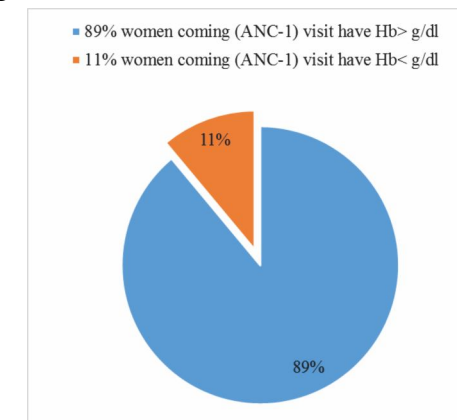
## ANEMIA AMONG WOMEN COMING FOR ANC-1 (%AGE)

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

S.#	DISTRICT	First Antenatal care visits (ANC-1)	ANC-1 women with Hb. under 10 g/dl	%age
1	Haripur	43865	14429	33
2	Battagram	34491	10521	31
3	Nowshera	31748	8187	26
4	Tank	16187	3700	23
5	Malakand	41033	8491	21
6	Mansehra	46232	9543	21
7	Shangla	14931	2375	16
8	Charsadda	35350	5604	16
9	Peshawar	60628	8373	14
10	Buner	17958	2087	12
11	Lakki Marwat	22616	2413	11
12	Bannu	18882	1776	9
13	Chitral	20408	1810	9
14	Abbottabad	19191	1669	9
15	Swat	88220	6502	7
16	Karak	18865	1281	7
17	D.I. Khan	39569	2593	7
18	Mardan	50030	3224	6
19	Swabi	112968	6871	6
20	Dir Lower	46965	2757	6
21	Dir Upper	31341	1621	5
22	Kohistan	2284	118	5
23	Hangu	17557	665	4
24	Kohat	31450	1078	3
25	Toor Ghar	2885	18	1
<b>Total</b>		<b>865654</b>	<b>107706</b>	<b>12</b>



This indicator shows the frequency of Anemia among women coming for ANC-1 in the government health facilities. First ANC in the facilities is 89% with greater than 10 gm/dl Hb and the women with Hb under 10g/dl are 11%.



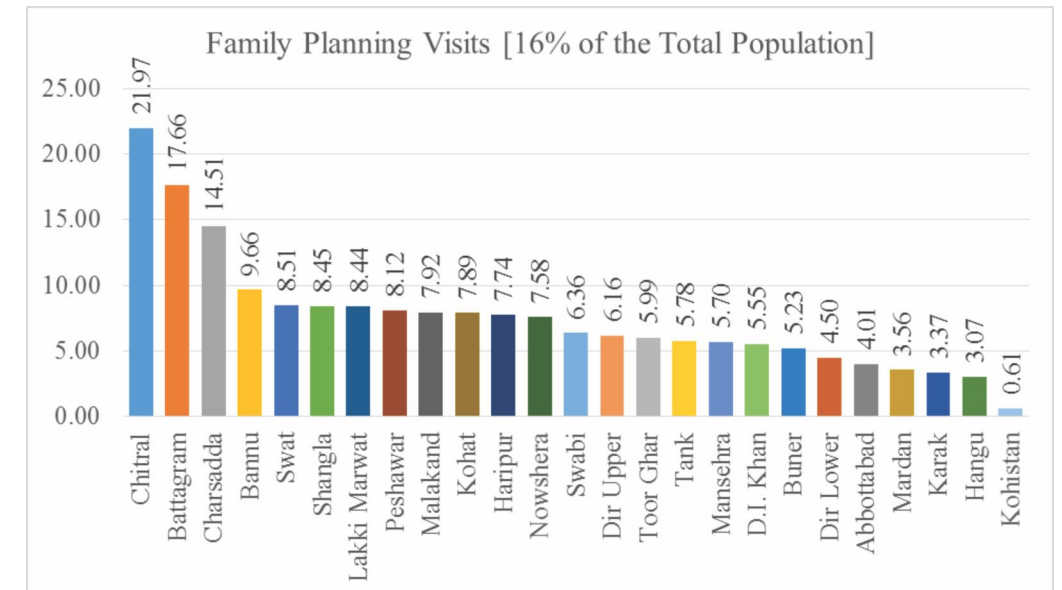
## FAMILY PLANNING VISITS 16% OF THE TOTAL POPULATION

**Family planning** refers to the factors that may be considered by a couple in a committed relationship and each individual involved in deciding if and when to have children.

HEALTH FACILITIES' UTILIZATION RATE

S. #	DISTRICT	Catchment Population	16% of total population	Total FP Visits	%age
1	Chitral	447362	71577.92	15724	21.97
2	Battagram	476612	76257.92	13465	17.66
3	Charsadda	1616198	258591.68	37518	14.51
4	Bannu	1167892	186862.72	18053	9.66
5	Swat	2309570	369531.2	31458	8.51
6	Shangla	757810	121249.6	10244	8.45
7	Lakki Marwat	876182	140189.12	11836	8.44
8	Peshawar	4269079	683052.64	55465	8.12
9	Malakand	720295	115247.2	9123	7.92
10	Kohat	993874	159019.84	12547	7.89
11	Haripur	1003031	160484.96	12423	7.74
12	Nowshera	1518540	242966.4	18410	7.58
13	Swabi	1624616	259938.56	16539	6.36
14	Dir Upper	946421	151427.36	9330	6.16
15	Toor Ghar	171395	27423.2	1644	5.99
16	Tank	391885	62701.6	3622	5.78
17	Mansehra	1556460	249033.6	14190	5.70
18	D.I. Khan	1627132	260341.12	14453	5.55
19	Buner	897319	143571.04	7507	5.23
20	Dir Lower	1435917	229746.72	10331	4.50
21	Abbottabad	1332912	213265.92	8550	4.01
22	Mardan	2373061	379689.76	13509	3.56
23	Karak	706299	113007.84	3810	3.37
24	Hangu	518798	83007.68	2545	3.07
25	Kohistan	784711	125553.76	761	0.61
<b>Total</b>		<b>30523371</b>	<b>4883739</b>	<b>353057</b>	<b>7.23</b>

During 2017, **353057 (7.23 %)** eligible couples availed the family planning services from the public sector health facilities against the expected population (16% CBA) **4883739**.



FAMILY PLANNING SERVICES  
&  
COMMODITIES PROVIDED

**Family planning** refers to the factors that may be considered by a couple in a committed relationship and each individual involved in deciding if and when to have children.

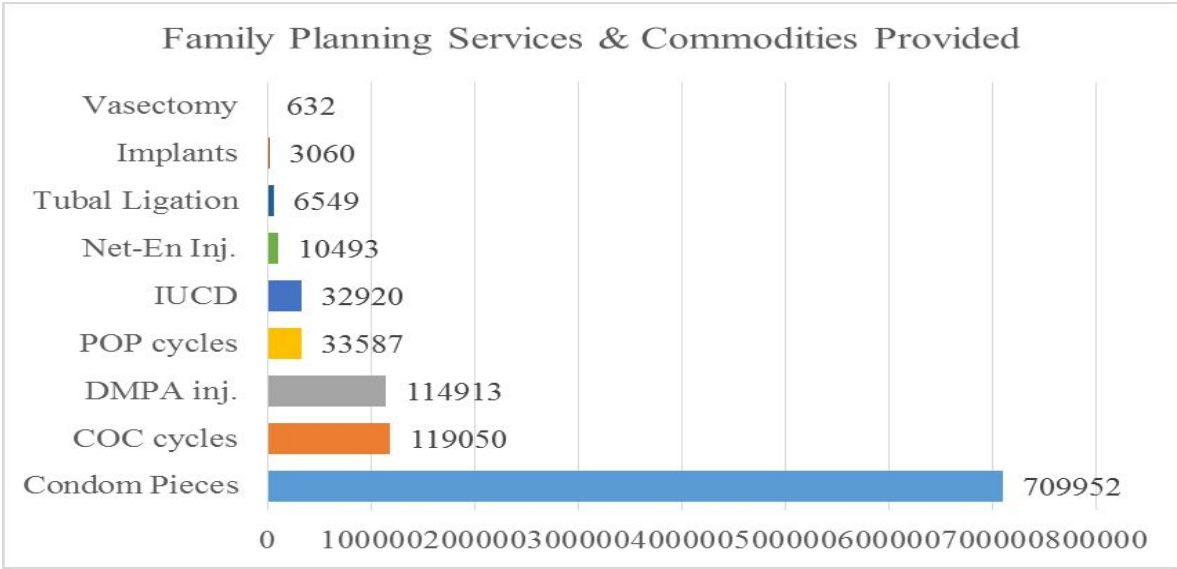
HEALTH FACILITIES' UTILIZATION RATE

DISTRICT	Total FP Visits	COC cycles	POP cycles	DMPA inj.	Net-En Inj.	Condom Pieces	IUCD	Tubal Ligation	Vasecto my	Implants
Bannu	18053	5842	1221	5536	400	33340	979	3	0	11
D.I. Khan	14453	2252	648	3053	405	27603	1280	630	1	22
Lakki Marwat	11836	3655	1285	4178	394	12641	1273	25	8	10
Tank	3622	2346	111	1357	129	6972	734	15	0	6
Abbottabad	8550	3562	298	3508	196	22113	1019	72	0	2
Haripur	12423	5178	1495	4021	110	51045	871	24	0	0
Kohistan	761	311	112	240	72	564	22	0	0	0
Mansehra	14190	4987	442	6035	299	41678	1691	74	0	18
Battagram	13465	6647	135	4293	8	26642	1328	1	0	0
Toor Ghar	1644	772	8	748	0	1356	22	3	0	0
Karak	3810	2070	685	1142	181	7707	679	25	0	0
Kohat	12547	5986	1705	4604	18	60120	2365	387	0	123
Hangu	2545	2458	6839	680	178	9016	149	6	0	0
Buner	7507	1261	362	3311	372	22488	868	46	0	9
Chitral	15724	4015	1513	5030	604	14525	308	129	49	16
Dir Lower	10331	466	592	2365	253	2279	211	0	0	57
Malakand	9123	4297	1331	5431	22	39826	955	55	0	17
Swat	31458	13288	927	14396	757	56593	3128	788	0	814
Dir Upper	9330	5920	909	3333	229	2193	545	12	0	3
Shangla	10244	7884	1544	4804	666	16015	764	10	0	0
Mardan	13509	5174	491	4606	464	23588	553	110	0	5
Swabi	16539	9946	842	5745	920	117973	1425	850	36	196
Charsadda	37518	10394	2234	11500	2316	48369	4359	2117	525	1097
Nowshera	18410	4544	917	6273	0	23530	5452	69	0	618
Peshawar	55465	5795	6941	8724	1500	41776	1940	1098	13	36
Total	353057	119050	33587	114913	10493	709952	32920	6549	632	3060

The indicator District-wise Family Planning Services & Commodities provided is one of the most important indicators in health services. This reflects the results of all of the districts and show that which family planning services has taken by the couple.

In the modern method of the family planning services, the condom is one of the most effective and simple method and couple preferred to take this services from health institutions. Some of the couple preferred to take other family planning services i.e. COC cycles, POP cycles or DPMA injections etc. Table illustrates the districts wise figures.

Condom Pieces	709952
COC cycles	119050
DMPA inj.	114913
POP cycles	33587
IUCD	32920
Net-En Inj.	10493
Tubal Ligation	6549
Implants	3060
Vasectomy	632





## IMMUNIZATION STATUS

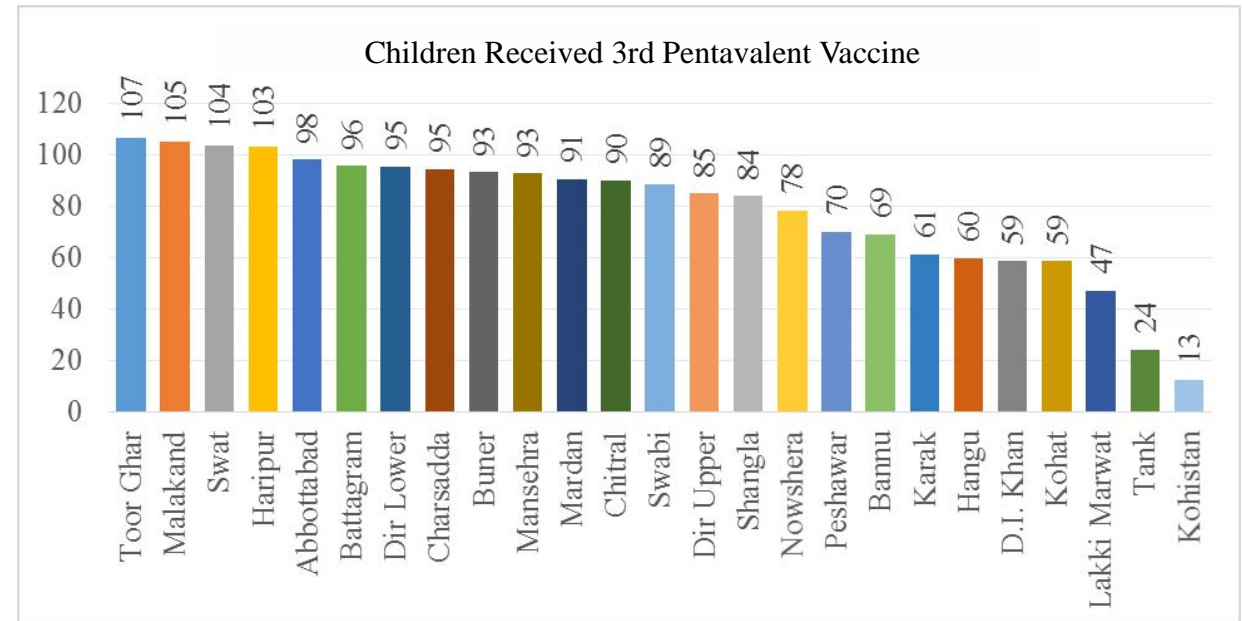
**Immunization** is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease.

**Immunization** is a proven tool for controlling and eliminating life-threatening infectious diseases. It is one of the most cost-effective health investments, with proven strategies that make it accessible to even the most hard-to-reach and vulnerable populations. It has clearly defined target groups; it can be delivered effectively through outreach activities; and vaccination does not require any major lifestyle change.

### Children Received 3rd Pentavalent Vaccine

Pentavalent vaccine is five individual vaccines conjugated in one intended to actively protect infant children from 5 potentially deadly diseases: Haemophilus Influenza type B (a bacteria that causes meningitis, pneumonia and otitis), whooping cough, tetanus, hepatitis B and diphtheria.

S#	DISTRICT	Total Population	Expected Children	Children received 3rd Pentavalent vaccine	%age
1	Toor Ghar	171395	4970	5305	107
2	Malakand	720295	20889	21965	105
3	Swat	2309570	66978	69409	104
4	Haripur	1003031	29088	30068	103
5	Abbottabad	1332912	38654	37913	98
6	Battagram	476612	13822	13239	96
7	Dir Lower	1435917	41642	39710	95
8	Charsadda	1616198	46870	44295	95
9	Buner	897319	26022	24257	93
10	Mansehra	1556460	45137	41859	93
11	Mardan	2373061	68819	62394	91
12	Chitral	447362	12973	11683	90
13	Swabi	1624616	47114	41788	89
14	Dir Upper	946421	27446	23319	85
15	Shangla	757810	21976	18449	84
16	Nowshera	1518540	44038	34547	78
17	Peshawar	4269079	123803	86728	70
18	Bannu	1167892	33869	23464	69
19	Karak	706299	20483	12581	61
20	Hangu	518798	15045	9013	60
21	D.I. Khan	1627132	47187	27730	59
22	Kohat	993874	28822	16937	59
23	Lakki Marwat	876182	25409	12025	47
24	Tank	391885	11365	2762	24
25	Kohistan	784711	22757	2890	13
Total		30523371	885178	714330	81



## IMMUNIZATION STATUS

**Immunization** is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease.

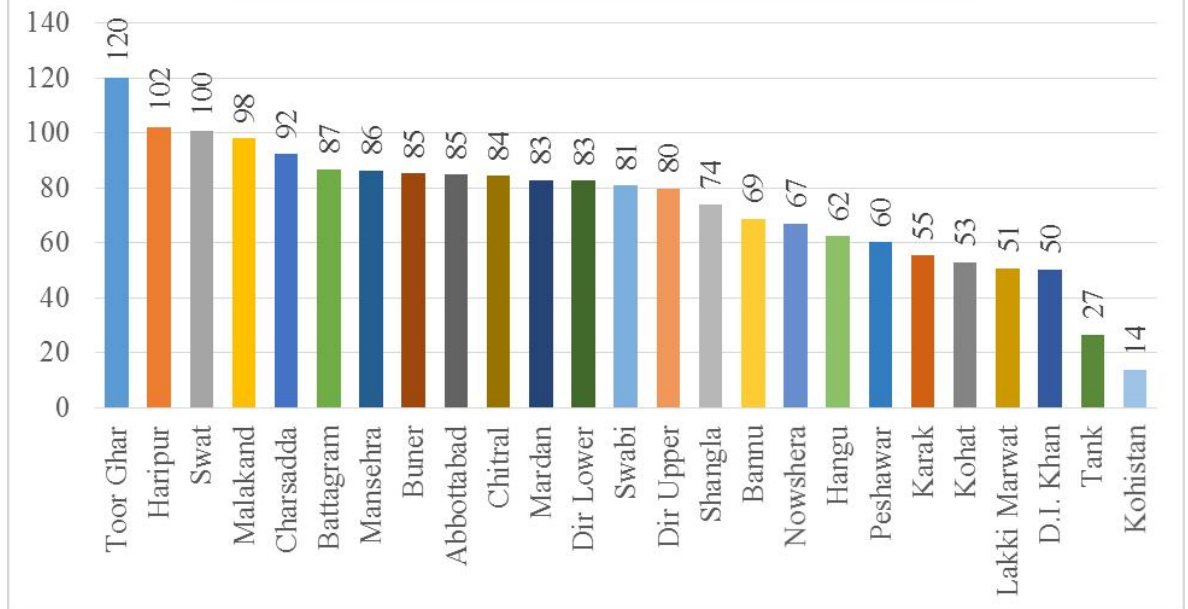
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### Children Received 1st Measles Vaccine

Measles, also known as morbilli, rubeola or red measles, is a highly contagious infection caused by the measles virus. Measles is an airborne disease which spreads easily through the coughs and sneezes of those infected. Testing for the virus in suspected cases is important for public health efforts.

S#	DISTRICT	Total Population	Expected Children	Children received 1st Measles vaccine	%age
1	Toor Ghar	171395	4970	5966	120
2	Haripur	1003031	29088	29725	102
3	Swat	2309570	66978	67312	100
4	Malakand	720295	20889	20451	98
5	Charsadda	1616198	46870	43255	92
6	Battagram	476612	13822	11974	87
7	Mansehra	1556460	45137	38987	86
8	Buner	897319	26022	22143	85
9	Abbottabad	1332912	38654	32788	85
10	Chitral	447362	12973	10927	84
11	Mardan	2373061	68819	56960	83
12	Dir Lower	1435917	41642	34356	83
13	Swabi	1624616	47114	38106	81
14	Dir Upper	946421	27446	21863	80
15	Shangla	757810	21976	16211	74
16	Bannu	1167892	33869	23264	69
17	Nowshera	1518540	44038	29444	67
18	Hangu	518798	15045	9365	62
19	Peshawar	4269079	123803	74392	60
20	Karak	706299	20483	11335	55
21	Kohat	993874	28822	15269	53
22	Lakki Marwat	876182	25409	12891	51
23	D.I. Khan	1627132	47187	23767	50
24	Tank	391885	11365	3026	27
25	Kohistan	784711	22757	3093	14
<b>Total</b>		<b>30523371</b>	<b>885178</b>	<b>656870</b>	<b>74</b>

Children Received 1st Measles Vaccine



## IMMUNIZATION STATUS

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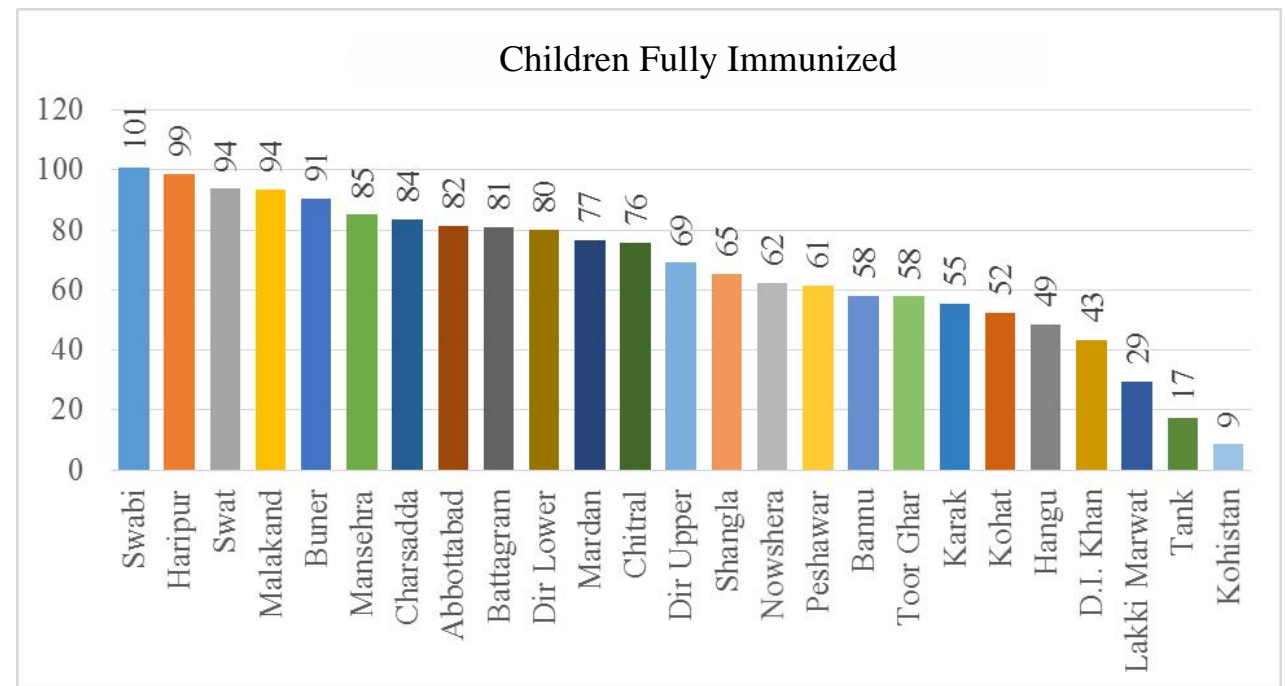
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### Children Fully Immunized

Fully Immunization Coverage is the measure of the percentage of children under two year age who have received all doses of BCG vaccine, three doses of polio and pentavalent vaccines and 2 doses of measles vaccine in a given year.

HEALTH FACILITIES' UTILIZATION RATE

S#	DISTRICT	Total Population	Expected Children	Children fully immunized	%age
1	Swabi	1624616	47114	47558	101
2	Haripur	1003031	29088	28713	99
3	Swat	2309570	66978	62744	94
4	Malakand	720295	20889	19535	94
5	Buner	897319	26022	23552	91
6	Mansehra	1556460	45137	38380	85
7	Charsadda	1616198	46870	39217	84
8	Abbottabad	1332912	38654	31510	82
9	Battagram	476612	13822	11201	81
10	Dir Lower	1435917	41642	33389	80
11	Mardan	2373061	68819	52710	77
12	Chitral	447362	12973	9809	76
13	Dir Upper	946421	27446	18947	69
14	Shangla	757810	21976	14338	65
15	Nowshera	1518540	44038	27426	62
16	Peshawar	4269079	123803	75986	61
17	Bannu	1167892	33869	19607	58
18	Toor Ghar	171395	4970	2873	58
19	Karak	706299	20483	11335	55
20	Kohat	993874	28822	15079	52
21	Hangu	518798	15045	7318	49
22	D.I. Khan	1627132	47187	20520	43
23	Lakki Marwat	876182	25409	7452	29
24	Tank	391885	11365	1968	17
25	Kohistan	784711	22757	1941	9
Total		30523371	885178	623108	70



## IMMUNIZATION STATUS

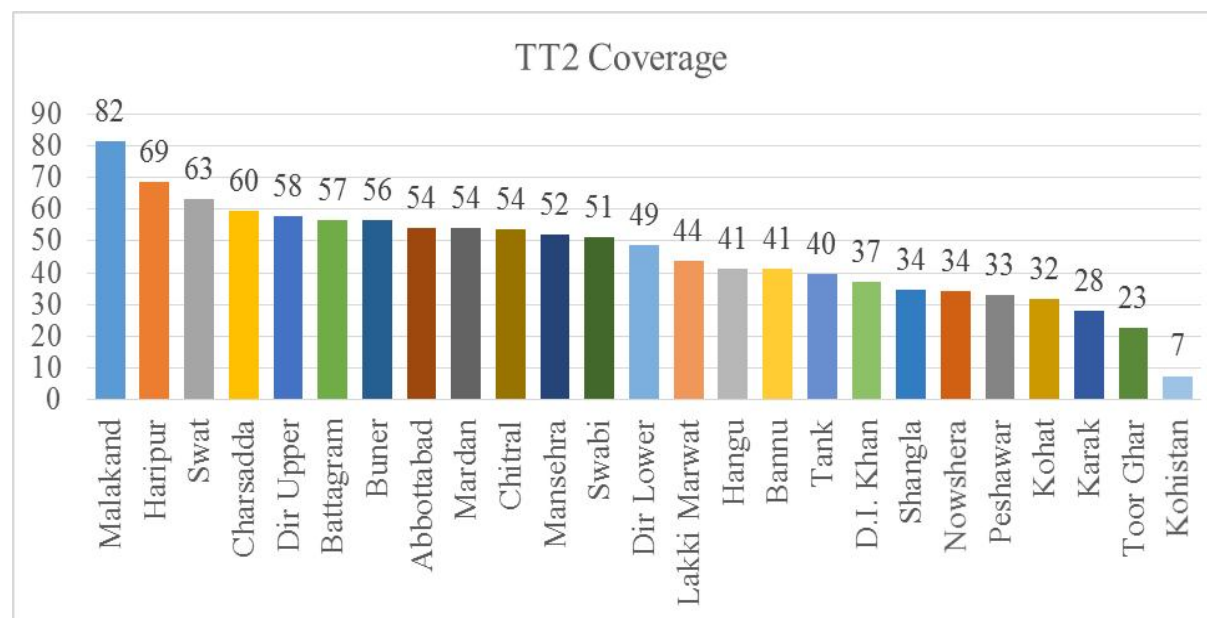
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### Pregnant Women Received TT-2 Vaccine

During 2017, out of **1037795** expected pregnant women, **484683 (47%)** women received TT-2 vaccination. Among districts there is a variation that ranges from 82% to 7%. Most of the districts fall under 30% to 82%.

S#	DISTRICT	Total Population	Expected Children	Pregnant women received TT-2 vaccine	%age
1	Malakand	720295	24490	19990	82
2	Haripur	1003031	34103	23376	69
3	Swat	2309570	78525	49764	63
4	Charsadda	1616198	54951	32792	60
5	Dir Upper	946421	32178	18577	58
6	Battagram	476612	16205	9157	57
7	Buner	897319	30509	17228	56
8	Abbottabad	1332912	45319	24513	54
9	Mardan	2373061	80684	43587	54
10	Chitral	447362	15210	8152	54
11	Mansehra	1556460	52920	27587	52
12	Swabi	1624616	55237	28234	51
13	Dir Lower	1435917	48821	23868	49
14	Lakki Marwat	876182	29790	13066	44
15	Hangu	518798	17639	7309	41
16	Bannu	1167892	39708	16386	41
17	Tank	391885	13324	5293	40
18	D.I. Khan	1627132	55322	20626	37
19	Shangla	757810	25766	8875	34
20	Nowshera	1518540	51630	17581	34
21	Peshawar	4269079	145149	47917	33
22	Kohat	993874	33792	10749	32
23	Karak	706299	24014	6748	28
24	Toor Ghar	171395	5827	1318	23
25	Kohistan	784711	26680	1990	7
Total		30523371	1037795	484683	47





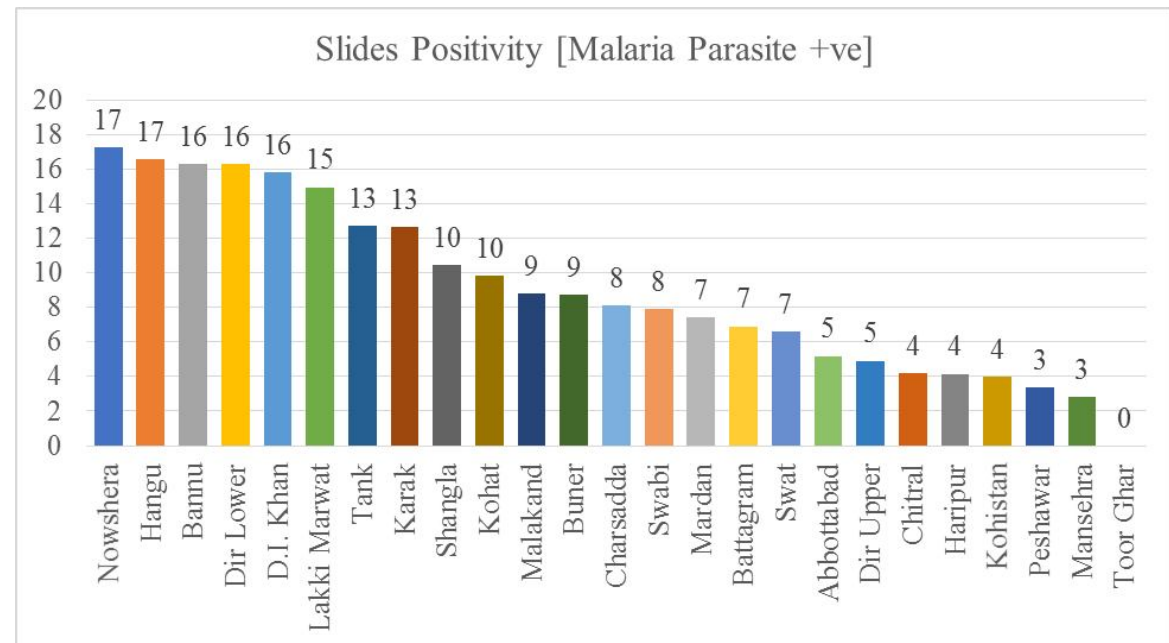
## MALARIA CASES SLIDE POSITIVITY RATE

The slide positivity rate (SPR), as the number of laboratory-confirmed malaria cases per 100 suspected cases examined, provides an alternative method for estimating temporal changes in malaria incidence.

### Malaria Parasite

This indicator measure the proportion of blood slides tested positive for Malaria.

S#	DISTRICT	Slides examined	Slides MP +ve	%age
1	Nowshera	17485	3022	17
2	Hangu	10919	1812	17
3	Bannu	53600	8749	16
4	Dir Lower	30173	4921	16
5	D.I. Khan	49681	7874	16
6	Lakki Marwat	32789	4909	15
7	Tank	17890	2279	13
8	Karak	21604	2733	13
9	Shangla	6326	661	10
10	Kohat	19138	1881	10
11	Malakand	26514	2344	9
12	Buner	38118	3343	9
13	Charsadda	80310	6525	8
14	Swabi	11537	916	8
15	Mardan	43067	3204	7
16	Battagram	838	58	7
17	Swat	37968	2520	7
18	Abbottabad	2808	146	5
19	Dir Upper	16221	798	5
20	Chitral	7630	320	4
21	Haripur	1224	51	4
22	Kohistan	50	2	4
23	Peshawar	29338	987	3
24	Mansehra	2398	68	3
25	Toor Ghar	0	0	0
<b>Total</b>		<b>557626</b>	<b>60123</b>	<b>11</b>





## MALARIA CASES SLIDE POSITIVITY RATE

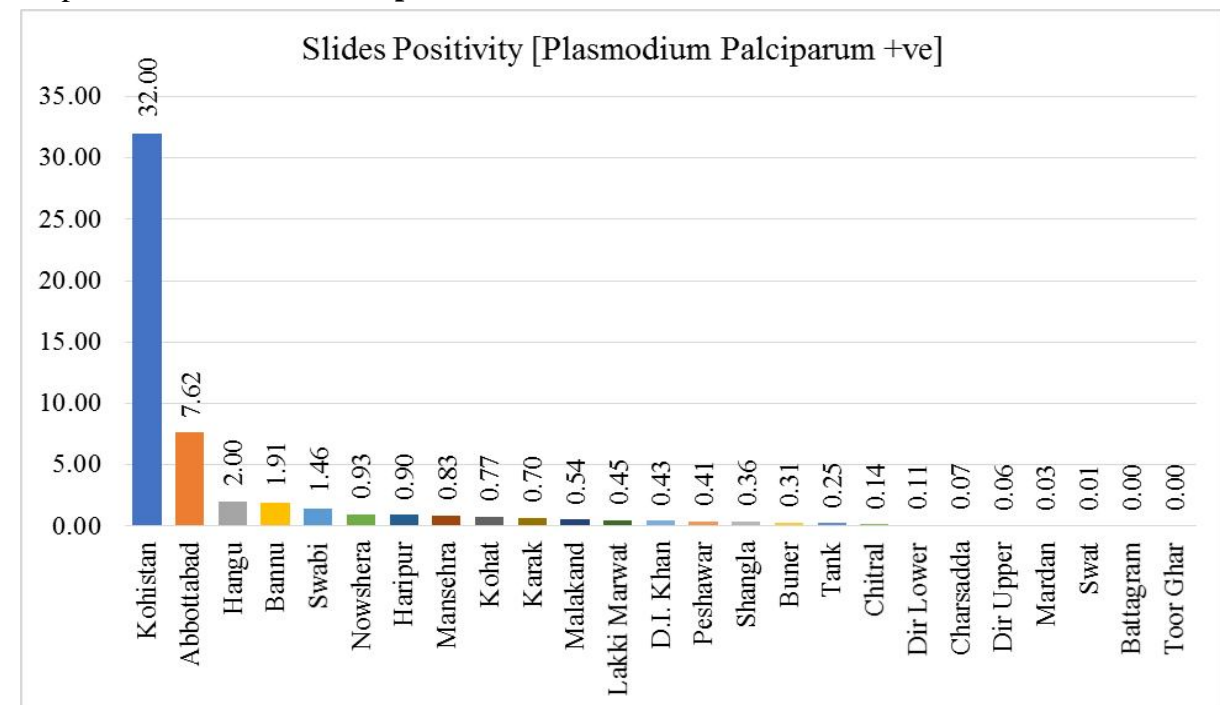
The slide positivity rate (SPR), as the number of laboratory-confirmed malaria cases per 100 suspected cases examined, provides an alternative method for estimating temporal changes in malaria incidence.

### Plasmodium Falciparum Rate

This indicator measure the proportion of Plasmodium Palciparum among blood slides tested Positive for malaria.

S#	DISTRICT	Slides examined	Slides P. Falciparum +ve	%age
1	Kohistan	50	16	32.00
2	Abbottabad	2808	214	7.62
3	Hangu	10919	218	2.00
4	Bannu	53600	1025	1.91
5	Swabi	11537	169	1.46
6	Nowshera	17485	163	0.93
7	Haripur	1224	11	0.90
8	Mansehra	2398	20	0.83
9	Kohat	19138	148	0.77
10	Karak	21604	151	0.70
11	Malakand	26514	142	0.54
12	Lakki Marwat	32789	149	0.45
13	D.I. Khan	49681	214	0.43
14	Peshawar	29338	120	0.41
15	Shangla	6326	23	0.36
16	Buner	38118	120	0.31
17	Tank	17890	45	0.25
18	Chitral	7630	11	0.14
19	Dir Lower	30173	33	0.11
20	Charsadda	80310	59	0.07
21	Dir Upper	16221	9	0.06
22	Mardan	43067	12	0.03
23	Swat	37968	4	0.01
24	Battagram	838	0	0.00
25	Toor Ghar	0	0	0.00
Total		557626	3076	0.55

District Kohistan stands on top position among the all 25 districts and reports **16** positive cases of **P. Falciparum** of **50** slides that have been examined with **32.00%**.



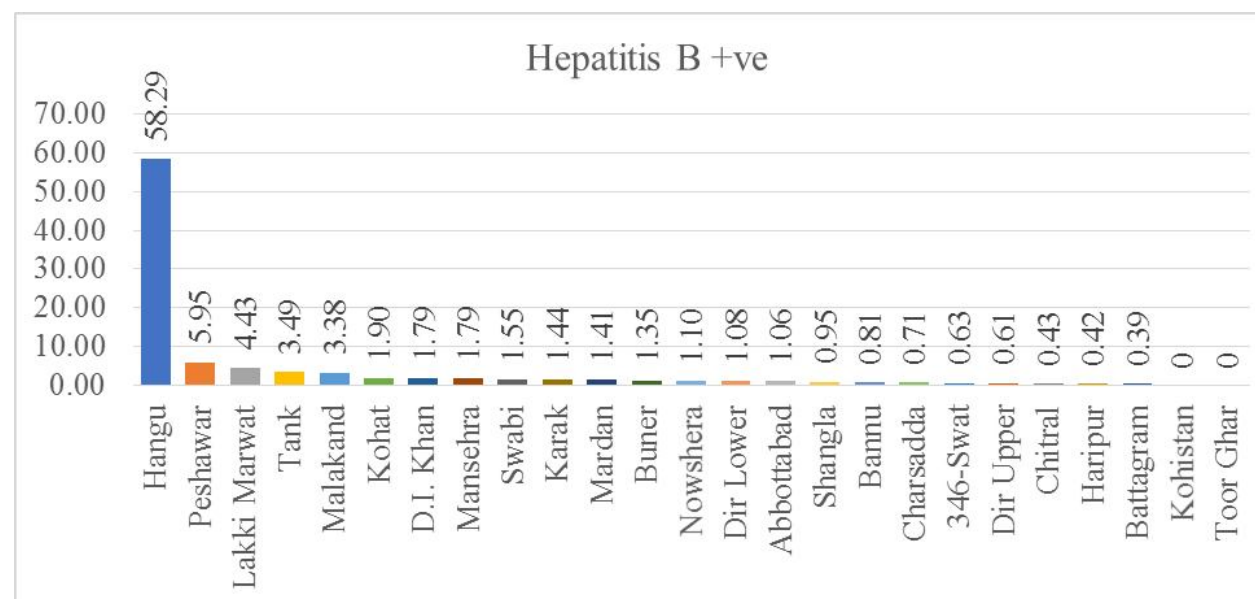
## HEPATITIS B AND C POSITIVITY RATE

Hepatitis is an inflammation of the liver. The condition can be self-limiting or can progress to fibrosis (scarring), cirrhosis or liver cancer. Hepatitis viruses are the most common cause of hepatitis in the world

### Hepatitis B+Ve Proportion

Hepatitis B is a serious liver infection caused by the hepatitis B virus (HBV). For some people, hepatitis B infection becomes chronic, meaning it lasts more than six months. Having chronic hepatitis B increases your risk of developing liver failure, liver cancer or cirrhosis. Most people infected with hepatitis B as adults recover fully, even if their signs and symptoms are severe. Infants and children are more likely to develop a chronic hepatitis B infection. A vaccine can prevent hepatitis B, but there's no cure if you have it. If you're infected, taking certain precautions can help prevent spreading HBV to others.

S.#	DISTRICT	Patients screened	Hepatitis B +ve	%age
1	Hangu	362	211	58.29
2	Peshawar	38417	2287	5.95
3	Lakki Marwat	3789	168	4.43
4	Tank	4671	163	3.49
5	Malakand	444	15	3.38
6	Kohat	14665	278	1.90
7	D.I. Khan	14296	256	1.79
8	Mansehra	25803	461	1.79
9	Swabi	5948	92	1.55
10	Karak	6925	100	1.44
11	Mardan	35995	506	1.41
12	Buner	4384	59	1.35
13	Nowshera	35150	385	1.10
14	Dir Lower	739	8	1.08
15	Abbottabad	5919	63	1.06
16	Shangla	3584	34	0.95
17	Bannu	21147	171	0.81
18	Charsadda	25060	179	0.71
19	346-Swat	72682	461	0.63
20	Dir Upper	7323	45	0.61
21	Chitral	41585	180	0.43
22	Haripur	29197	124	0.42
23	Battagram	18765	73	0.39
24	Kohistan	4	0	0
25	Toor Ghar	0	0	0
<b>Total</b>		<b>416654</b>	<b>6319</b>	<b>1.52</b>



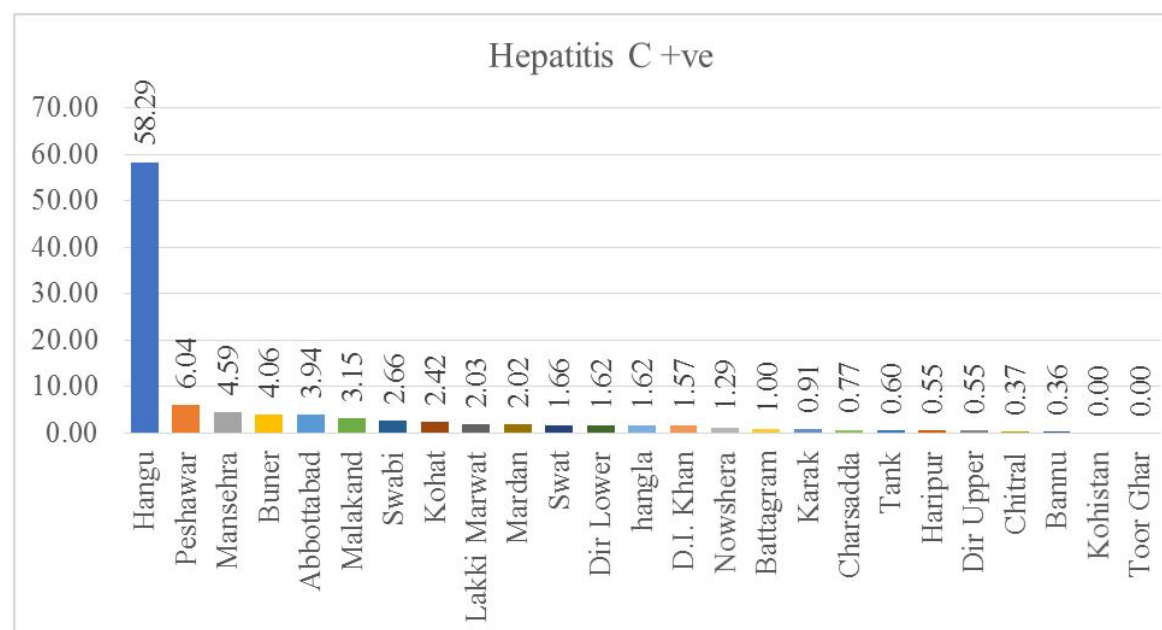
## HEPATITIS B AND C POSITIVITY RATE

Hepatitis is an inflammation of the liver. The condition can be self-limiting or can progress to fibrosis (scarring), cirrhosis or liver cancer. Hepatitis viruses are the most common cause of hepatitis in the world

### Hepatitis C+Ve Proportion

Hepatitis C is an infection caused by a virus that attacks the liver and leads to inflammation. Most people infected with the hepatitis C virus (HCV) have no symptoms. In fact, most people don't know they have the hepatitis C infection until liver damage shows up, decades later, during routine medical tests. Hepatitis C is one of several hepatitis viruses and is generally considered to be among the most serious of these viruses. Hepatitis C is passed through contact with contaminated blood, most commonly through needles (Syringes).

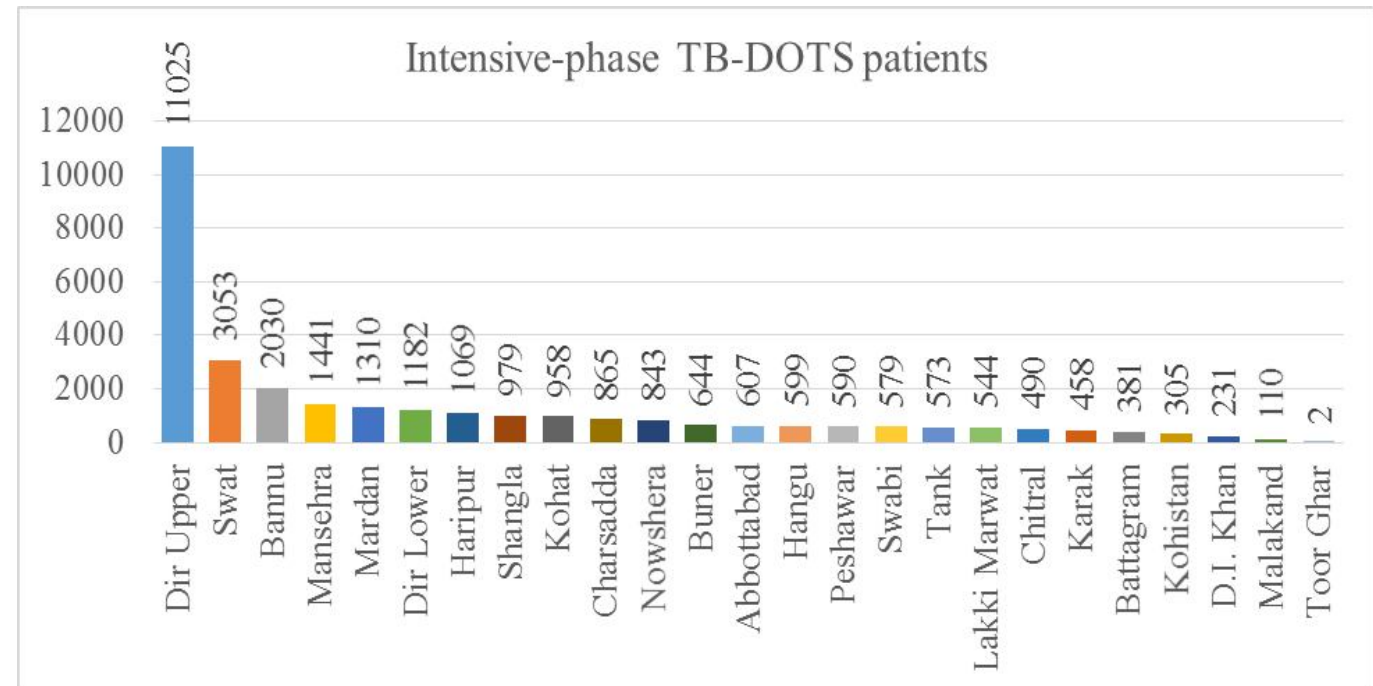
S.#	DISTRICT	Patients Screened	Hepatitis C +ve	%age
1	Hangu	362	211	58.29
2	Peshawar	38417	2319	6.04
3	Mansehra	25803	1185	4.59
4	Buner	4384	178	4.06
5	Abbottabad	5919	233	3.94
6	Malakand	444	14	3.15
7	Swabi	5948	158	2.66
8	Kohat	14665	355	2.42
9	Lakki Marwat	3789	77	2.03
10	Mardan	35995	727	2.02
11	Swat	72682	1209	1.66
12	Dir Lower	739	12	1.62
13	hangla	3584	58	1.62
14	D.I. Khan	14296	225	1.57
15	Nowshera	35150	452	1.29
16	Battagram	18765	188	1.00
17	Karak	6925	63	0.91
18	Charsadda	25060	193	0.77
19	Tank	4671	28	0.60
20	Haripur	29197	161	0.55
21	Dir Upper	7323	40	0.55
22	Chitral	41585	152	0.37
23	Bannu	21147	77	0.36
24	Kohistan	4	0	0.00
25	Toor Ghar	0	0	0.00
<b>Total</b>		<b>416654</b>	<b>8315</b>	<b>2.00</b>



## INTENSIVE-PHASE TB-DOTS PATIENTS

Tuberculosis requires regular and uninterrupted treatment for a cure and a person missing the treatment poses a great threat for developing a resistant form of the disease; so the number of patients missing their treatment for more than a week needs to be actively traced and convinced to continue the treatment.

S.#	DISTRICT	Intensive-phase TB-DOTS patients
1	Dir Upper	11025
2	Swat	3053
3	Bannu	2030
4	Mansehra	1441
5	Mardan	1310
6	Dir Lower	1182
7	Haripur	1069
8	Shangla	979
9	Kohat	958
10	Charsadda	865
11	Nowshera	843
12	Buner	644
13	Abbottabad	607
14	Hangu	599
15	Peshawar	590
16	Swabi	579
17	Tank	573
18	Lakki Marwat	544
19	Chitral	490
20	Karak	458
21	Battagram	381
22	Kohistan	305
23	D.I. Khan	231
24	Malakand	110
25	Toor Ghar	2
Total		30868



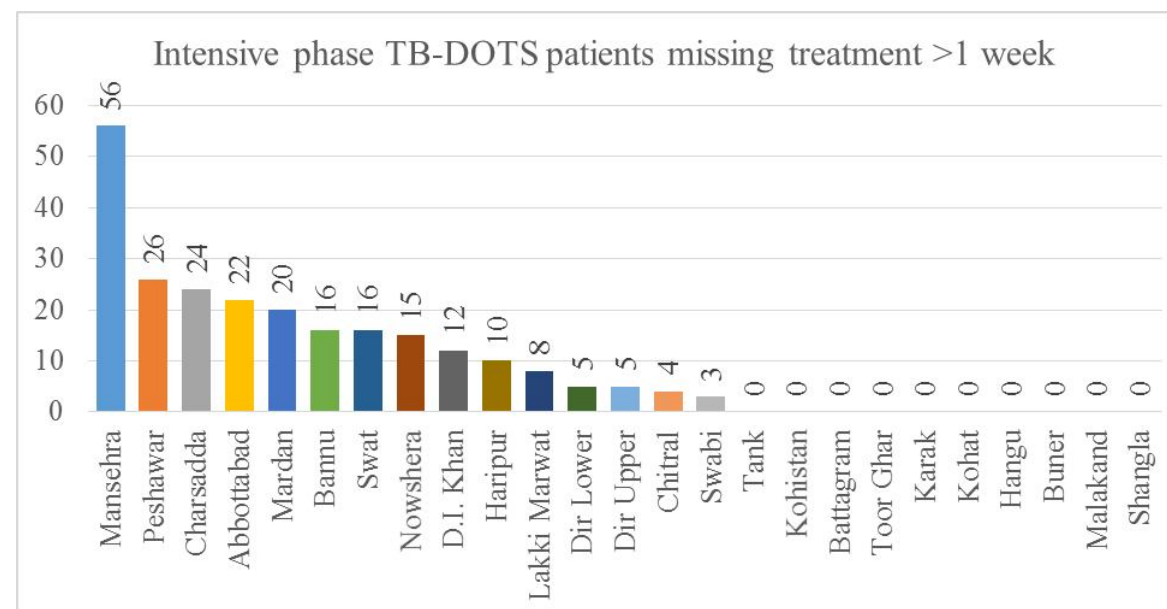
Graph shows the district-wise TB data figures. Districts Dir Upper, Swat and Bannu report 11025, 3053 and 2030 TB patients. District Mansehra to Malakand report TB DOTS patients 1441 to 110 respectively, while district Tor Ghar reports only 2 TB DOTS patients in 2017.

## INTENSIVE PHASE TB-DOTS PATIENTS MISSING TREATMENT >1 WEEK

This indicator measures the proportion of TB-DOTS intensive phase patients missing treatment more than one week. This is the suggestive of the performance of the TB-DOTS treatment center and the associated treatment supporters.

HEALTH FACILITIES' UTILIZATION RATE

S. No	DISTRICT	Intensive phase TB-DOTS patients missing treatment >1 week
1	Mansehra	56
2	Peshawar	26
3	Charsadda	24
4	Abbottabad	22
5	Mardan	20
6	Bannu	16
7	Swat	16
8	Nowshera	15
9	D.I. Khan	12
10	Haripur	10
11	Lakki Marwat	8
12	Dir Lower	5
13	Dir Upper	5
14	Chitral	4
15	Swabi	3
16	Tank	0
17	Kohistan	0
18	Battagram	0
19	Tor Ghar	0
20	Karak	0
21	Kohat	0
22	Hangu	0
23	Buner	0
24	Malakand	0
25	Shangla	0
Total		242



Under TB-DOTS, if a patient misses his/her treatment for more than 2 consecutive days during the initial intensive phase, he must be traced by the health worker or by the treatment supporter. In the continuation phase of treatment, if patient fails to collect his drugs within one week of drug collection day she/he must be traced by health workers



## MORTALITY RATE

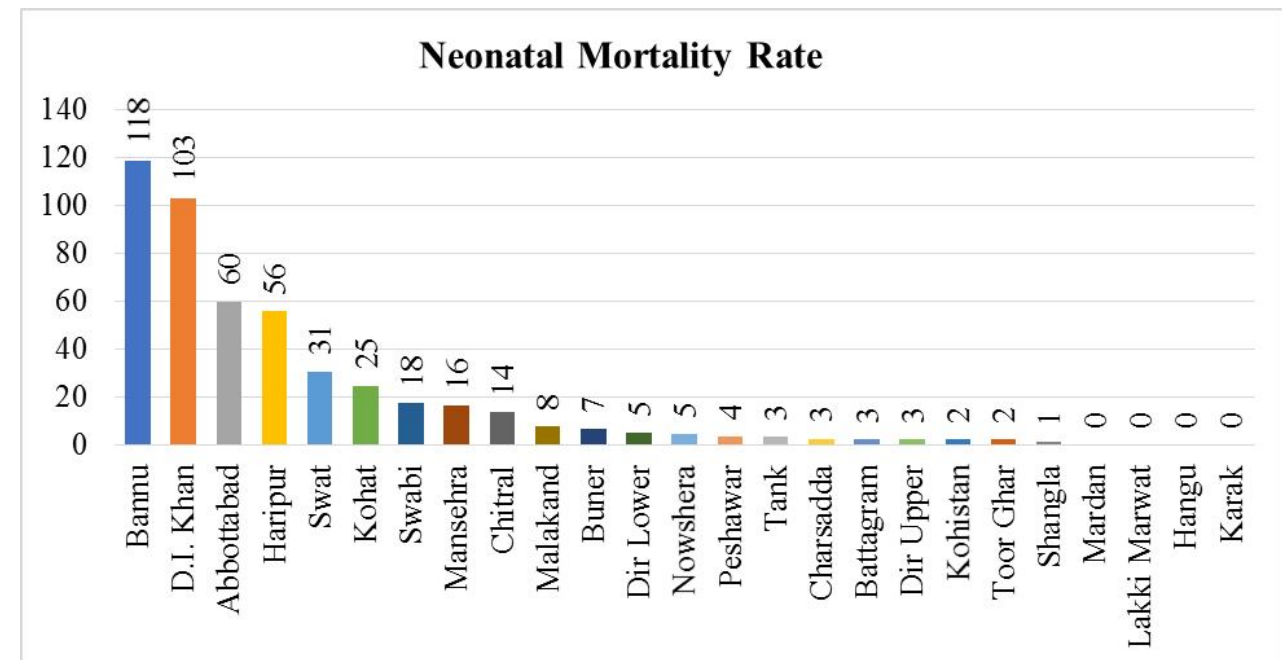
Mortality rate or death rate is a measure of the number of deaths (in general, or due to a specific cause) in a particular population, scaled to the size of that population, per unit of time. Through mortality rates there is an opportunity to get a clear picture of the preventable and the non-preventable causes, enabling the department to concentrate on the prevention of death due to avoidable causes.

### Neonatal Deaths

A neonatal death is the death of a baby within the first 4 weeks of life. Number of Neonatal deaths due to various causes during the deliveries or immediately afterwards Two assumptions have to be made here, one is that this report includes deaths occurring in government health facilities only and the second is the non-availability of data on predispositions in the mother resulting in these fatalities.

S.#	District	Live Birth	Neonatal Deaths	Neonatal Mortality Rate
1	Bannu	14256	1689	118
2	D.I. Khan	5849	602	103
3	Abbottabad	6408	384	60
4	Haripur	6524	364	56
5	Swat	26176	808	31
6	Kohat	9483	235	25
7	Swabi	7371	130	18
8	Mansehra	6006	99	16
9	Chitral	6228	85	14
10	Malakand	14811	115	8
11	Buner	8170	55	7
12	Dir Lower	14243	74	5
13	Nowshera	6229	29	5
14	Peshawar	9960	37	4
15	Tank	1741	6	3
16	Charsadda	9493	26	3
17	Battagram	5208	14	3
18	Dir Upper	6986	18	3
19	Kohistan	403	1	2
20	Tor Ghar	428	1	2
21	Shangla	3045	4	1
22	Mardan	11855	4	0
23	Lakki Marwat	3100	1	0
24	Hangu	3328	1	0
25	Karak	3439	1	0
<b>Total</b>		<b>190740</b>	<b>4783</b>	<b>25</b>

Over Neonatal Mortality Rate is 25 of the province



Graph and table illustrate the neonatal mortality rates in 2017 (neonatal deaths in the facilities). Districts Mardan report 4 neonatal deaths, while district Lakki Marwat, Hangu, and Karak report 1 each neonatal death respectively, hence nearly zero mortality rate in 2017

## MORTALITY RATE

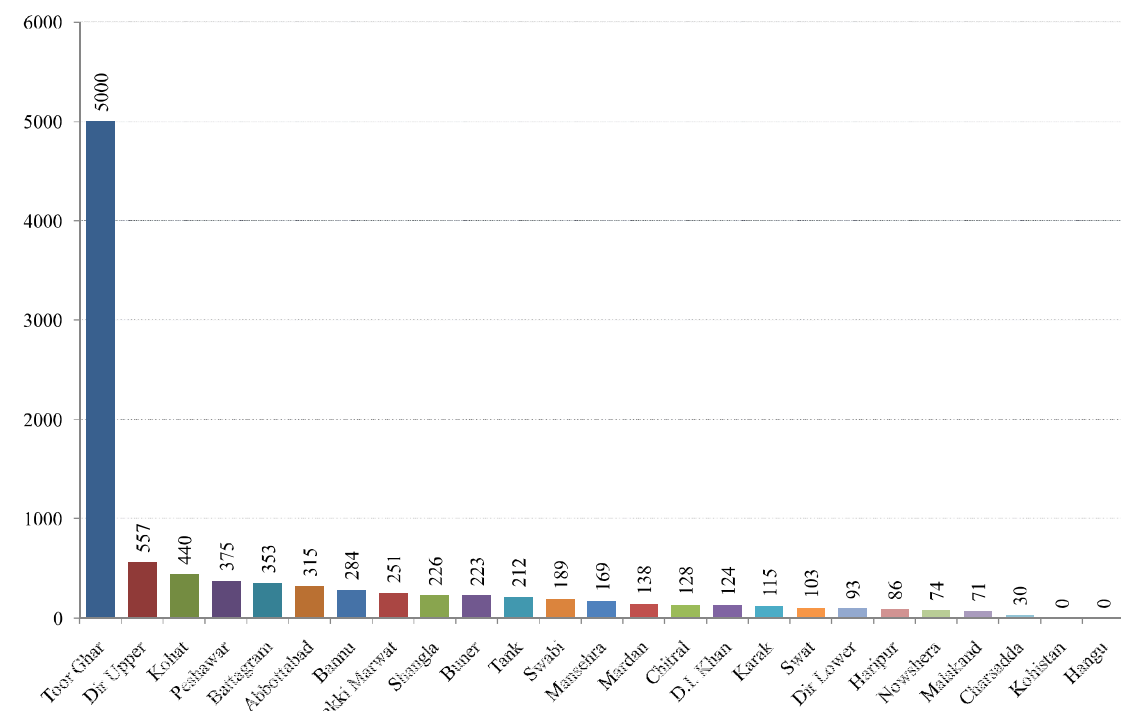
Mortality rate or death rate is a measure of the number of deaths (in general, or due to a specific cause) in a particular population, scaled to the size of that population, per unit of time. Through mortality rates there is an opportunity to get a clear picture of the preventable and the non-preventable causes, enabling the department to concentrate on the prevention of death due to avoidable causes.

### Maternal Mortality Rate (Reported by LHW)

The indicator Maternal Mortality Rate (Maternal Deaths Reported by LHW) illustrates the death rates of the mother during pregnancy or deliveries.

S. No	DISTRICT	Delivery by skilled persons reported	Maternal deaths reported	Maternal Mortality Rate
1	Toor Ghar	40	2	5000
2	Dir Upper	1975	11	557
3	Kohat	3864	17	440
4	Peshawar	28007	105	375
5	Battagram	1417	5	353
6	Abbottabad	13349	42	315
7	Bannu	8439	24	284
8	akki Marwat	3186	8	251
9	Shangla	2208	5	226
10	Buner	4489	10	223
11	Tank	3299	7	212
12	Swabi	10580	20	189
13	Mansehra	14798	25	169
14	Mardan	25321	35	138
15	Chitral	6236	8	128
16	D.I. Khan	6467	8	124
17	Karak	4339	5	115
18	Swat	24169	25	103
19	Dir Lower	2141	2	93
20	Haripur	12841	11	86
21	Nowshera	12094	9	74
22	Malakand	8453	6	71
23	Charsadda	16682	5	30
24	Kohistan	7	0	0
25	Hangu	1113	0	0
Total		215514	395	183

### Over Maternal Mortality Rate is 183 of the province



District Charsadda Figures Revised

# MORTALITY RATE

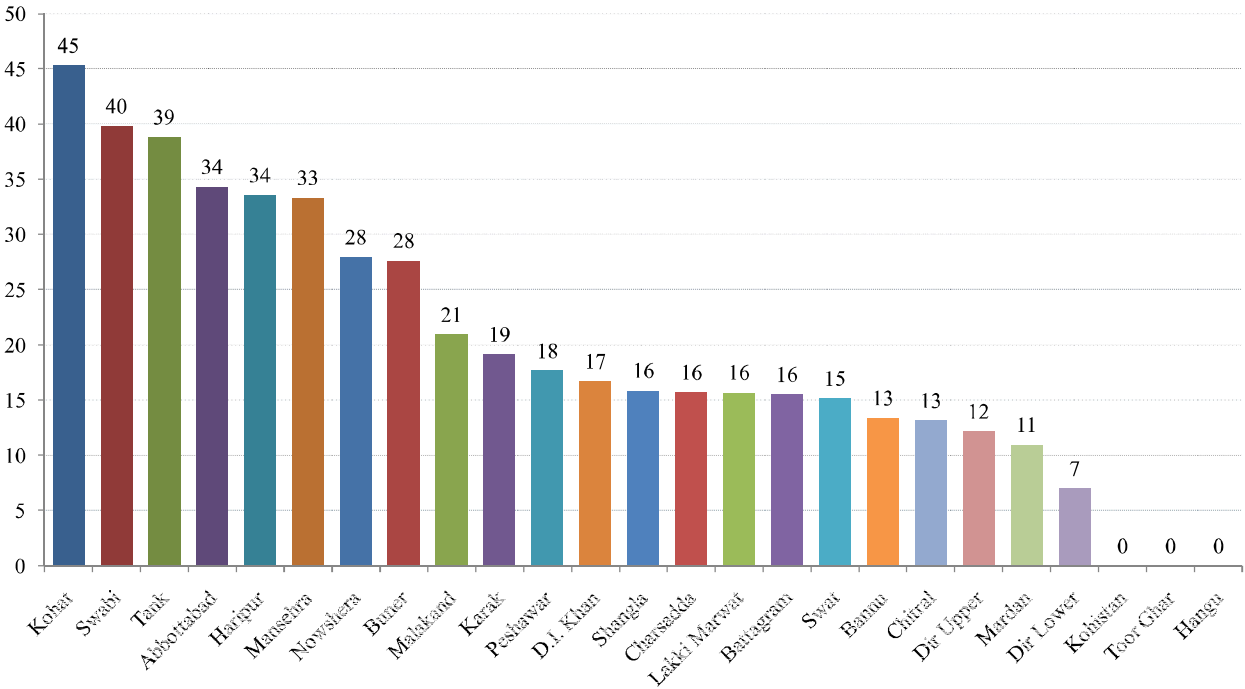
Mortality rate or death rate is a measure of the number of deaths (in general, or due to a specific cause) in a particular population, scaled to the size of that population, per unit of time. Through mortality rates there is an opportunity to get a clear picture of the preventable and the non-preventable causes, enabling the department to concentrate on the prevention of death due to avoidable causes.

## INFANT MORTALITY RATE (REPORTED BY LHW)

**Infant mortality** refers to deaths of children, typically those less than one year of age. It is measured by the infant mortality rate (IMR), which is the number of deaths of children under one year of age per 1000 live births. The leading causes of infant mortality are birth asphyxia, pneumonia, term birth complications, diarrhea, malaria, measles and malnutrition.

S. No	DISTRICT	Delivery by skilled persons reported	Infant deaths reported	Infant Mortality Rate
1	Kohat	3864	175	45
2	Swabi	10580	421	40
3	Tank	3299	128	39
4	Abbottabad	13349	458	34
5	Haripur	12841	431	34
6	Mansehra	14798	493	33
7	Nowshera	12094	338	28
8	Buner	4489	124	28
9	Malakand	8453	177	21
10	Karak	4339	83	19
11	Peshawar	28007	494	18
12	D.I. Khan	6467	108	17
13	Shangla	2208	35	16
14	Charsadda	16682	262	16
15	Lakki Marwat	3186	50	16
16	Battagram	1417	22	16
17	Swat	24169	366	15
18	Bannu	8439	113	13
19	Chitral	6236	82	13
20	Dir Upper	1975	24	12
21	Mardan	25321	278	11
22	Dir Lower	2141	15	7
23	Kohistan	7	0	0
24	Toor Ghar	40	0	0
25	Hangu	1113	0	0
Total		215514	4677	22

Over Infant Mortality Rate is 22 of the province



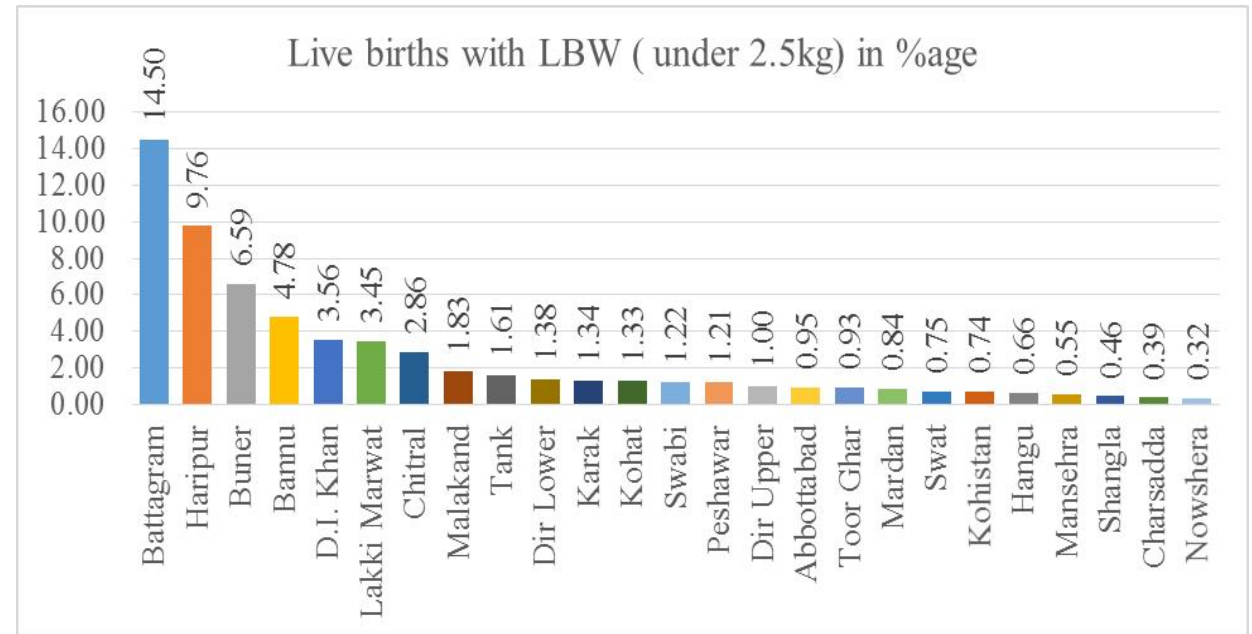
District Charsadda Figures Revised

## DISTRICT WISE COMPARISON OF LIVE BIRTHS WITH LBW (UNDER 2.5KG)

Low birth weight (LBW) is a major public health problem in many developing countries, especially so in Pakistan. Although we do not know all the causes of LBW, maternal and environmental factors appear to be significant risk factors in its occurrence. These low-birth-weight (LBW) infants are at increased risk of early growth delay, infectious disease, developmental delay and death during infancy and childhood. Most LBW is a consequence of preterm birth, small size for gestational age, or both.

HEALTH FACILITIES' UTILIZATION RATE

S.#	DISTRICT	Live births	Live births with LBW (under 2.5kg)	%age
1	Battagram	5208	755	14.50
2	Haripur	6524	637	9.76
3	Buner	8170	538	6.59
4	Bannu	14256	681	4.78
5	D.I. Khan	5849	208	3.56
6	Lakki Marwat	3100	107	3.45
7	Chitral	6228	178	2.86
8	Malakand	14811	271	1.83
9	Tank	1741	28	1.61
10	Dir Lower	14243	196	1.38
11	Karak	3439	46	1.34
12	Kohat	9483	126	1.33
13	Swabi	7371	90	1.22
14	Peshawar	9960	121	1.21
15	Dir Upper	6986	70	1.00
16	Abbottabad	6408	61	0.95
17	Toor Ghar	428	4	0.93
18	Mardan	11855	100	0.84
19	Swat	26176	197	0.75
20	Kohistan	403	3	0.74
21	Hangu	3328	22	0.66
22	Mansehra	6006	33	0.55
23	Shangla	3045	14	0.46
24	Charsadda	9493	37	0.39
25	Nowshera	6229	20	0.32
<b>Total</b>		<b>190740</b>	<b>4543</b>	<b>2.38</b>



There are wide variations in the figures rang from **14.40%** in district Battagram to **0.32%** in Nowshera.

## DISTRICT WISE COMPARISON OF STILLBIRTHS

The birth of an infant that has died in the womb (strictly, after having survived through at least the first 28 weeks of pregnancy, earlier instances being regarded as abortion or miscarriage).

The major causes of stillbirth include:

- Child birth complications ► Post-term pregnancy ► Fetal growth restriction ► Congenital abnormalities
- Maternal infections in pregnancy (malaria, syphilis and HIV) ► Maternal disorders (hypertension, obesity and diabetes)

S.#	District	Live Births	Still Births	%age
1	Shangla	3045	201	6.6
2	D.I. Khan	5849	274	4.7
3	Kohat	9483	391	4.1
4	Swabi	7371	187	2.5
5	Lakki Marwat	3100	59	1.9
6	Malakand	14811	252	1.7
7	Mardan	11855	198	1.7
8	Swat	26176	419	1.6
9	Dir Upper	6986	105	1.5
10	Tank	1741	25	1.4
11	Buner	8170	104	1.3
12	Chitral	6228	75	1.2
13	Mansehra	6006	71	1.2
14	Hangu	3328	39	1.2
15	Haripur	6524	74	1.1
16	Peshawar	9960	87	0.9
17	Charsadda	9493	74	0.8
18	Abbottabad	6408	42	0.7
19	Karak	3439	21	0.6
20	Bannu	14256	73	0.5
21	Toor Ghar	428	2	0.5
22	Dir Lower	14243	42	0.3
23	Kohistan	403	1	0.2
24	Battagram	5208	11	0.2
25	Nowshera	6229	5	0.1
<b>Total</b>		<b>190740</b>	<b>2832</b>	<b>1.5</b>

Almost half of stillbirths happen when the woman is in labour. The majority of stillbirths are preventable, evidenced by the regional variation across the world. The rates correlate with access to maternal healthcare.

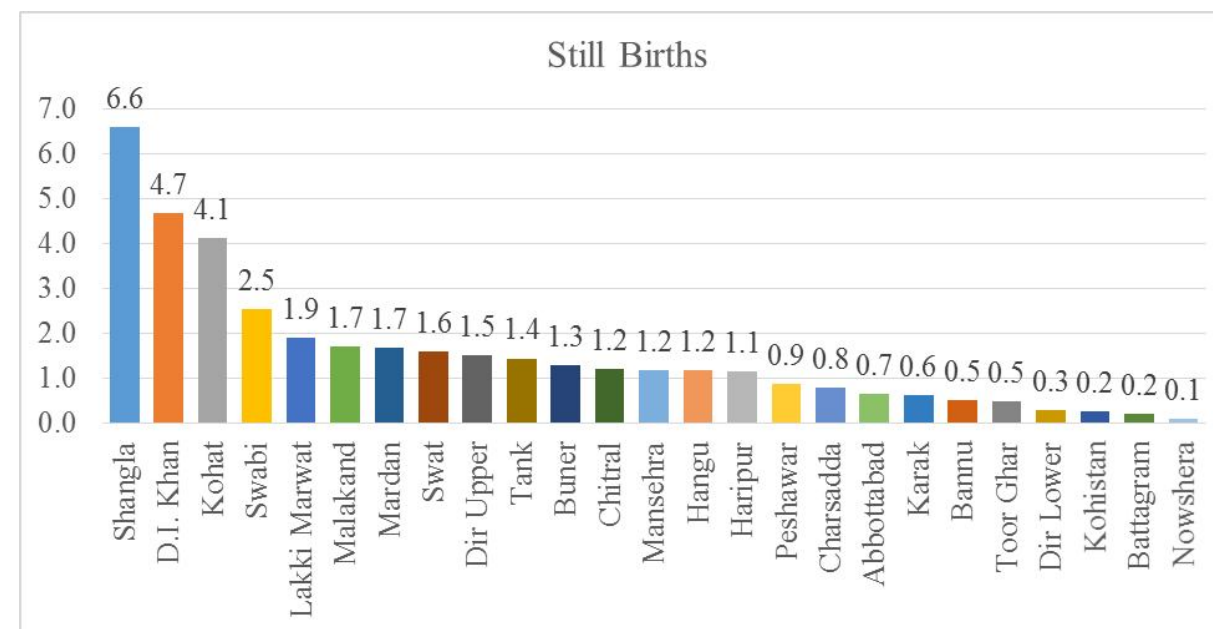


Table and Graph reflects the district wise comparison of the stillbirths in percentage



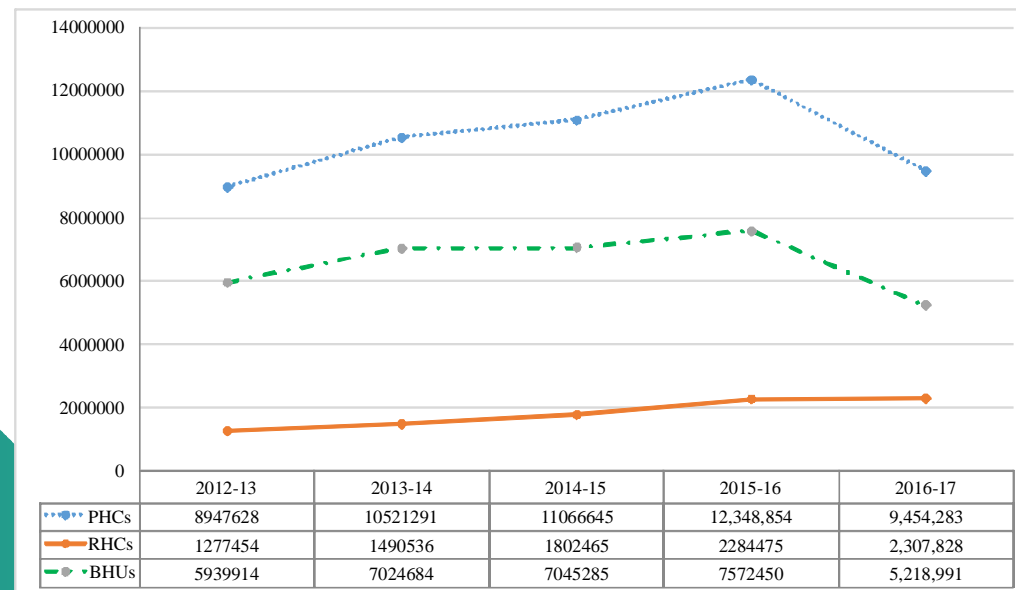
# TREND ANALYSIS

2012-13 TO 2016-17

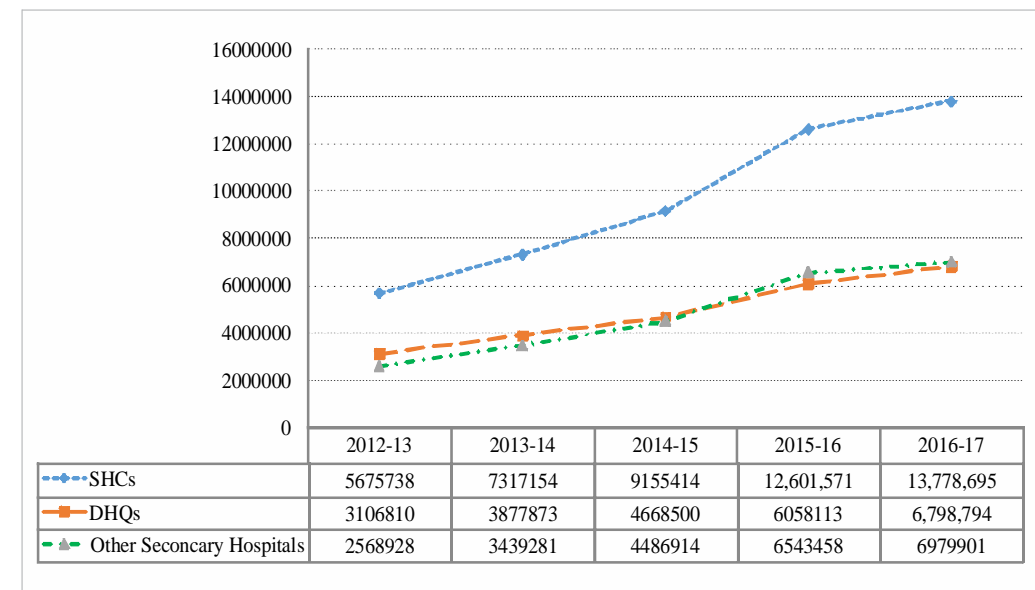


## OUT PATIENTS DEPARTMENT (OPD)

### Primary Level Health Care Facilities

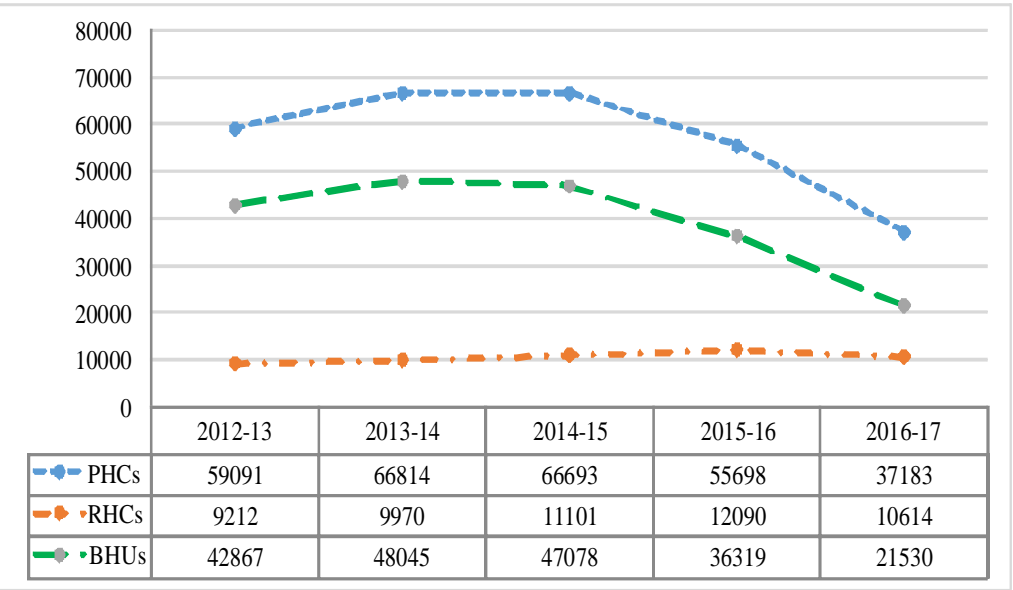


### Secondary Level Health Care Facilities

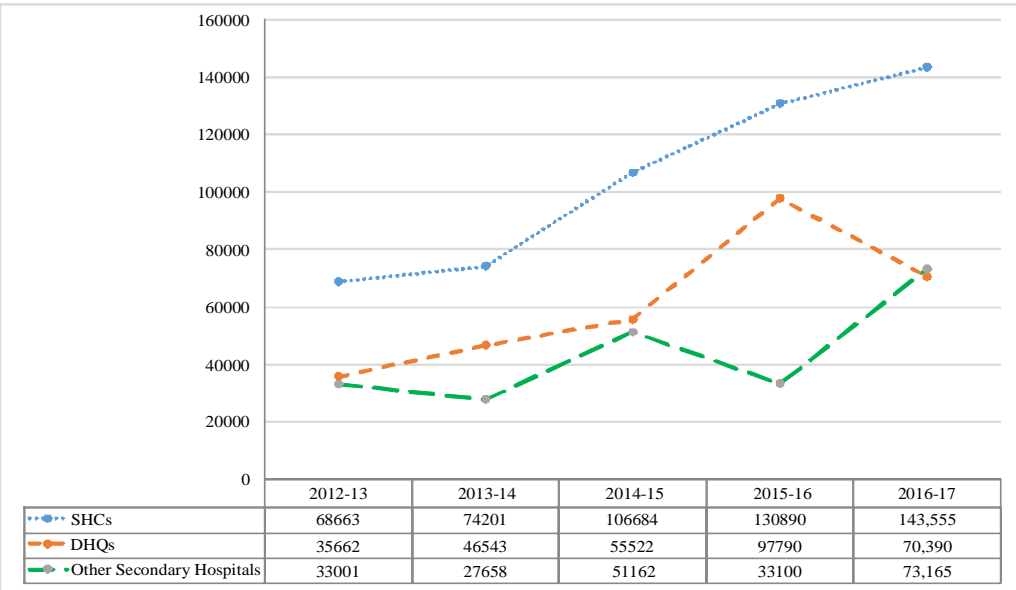


DELIVERIES IN THE HEALTH FACILITIES

Primary Level  
Health Care Facilities

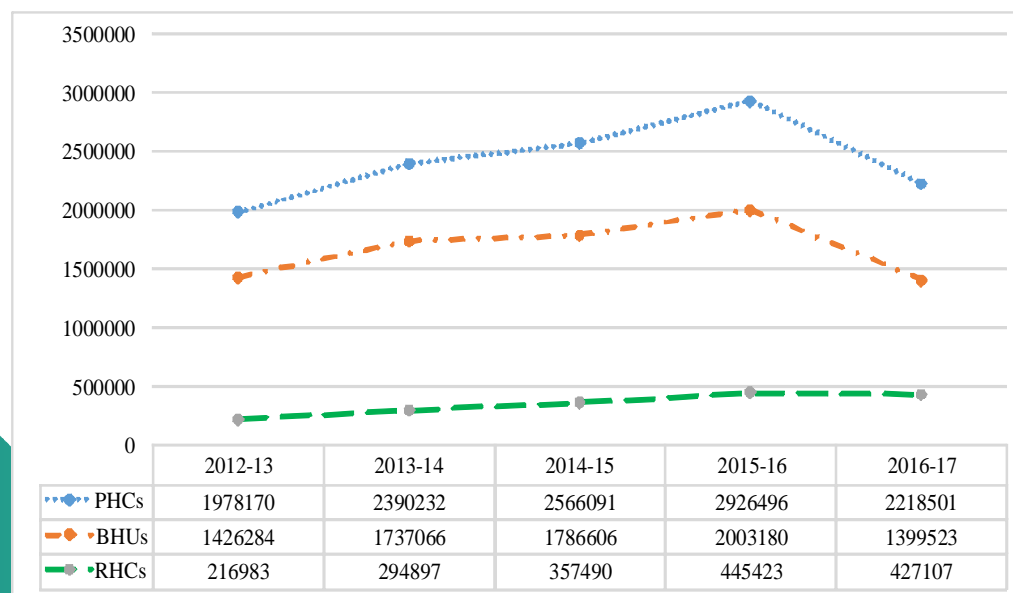


Secondary Level  
Health Care Facilities

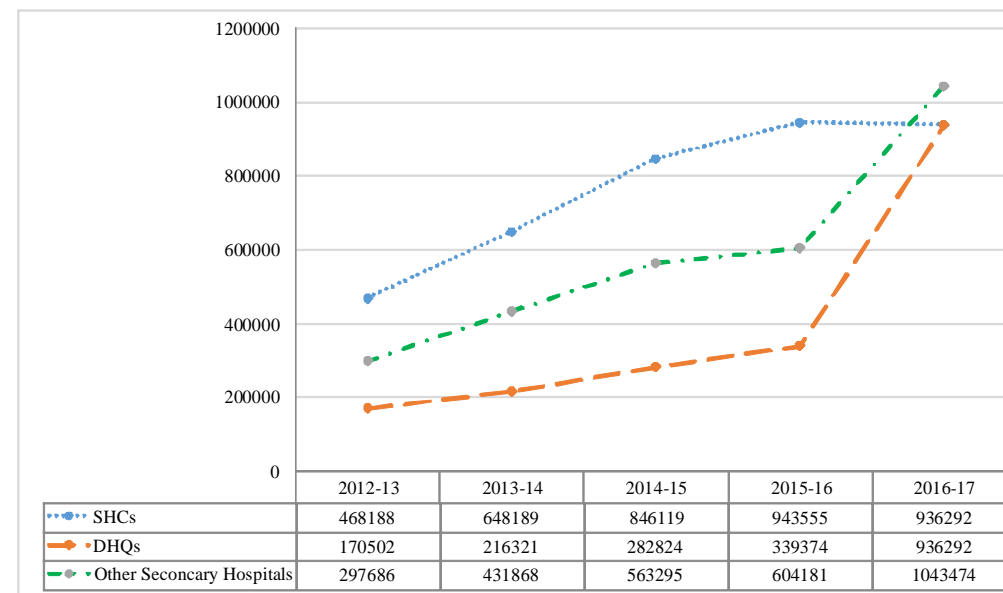


## COMMUNICABLE DISEASES (Acute (upper) Respiratory Infections)

### Primary Level Health Care Facilities

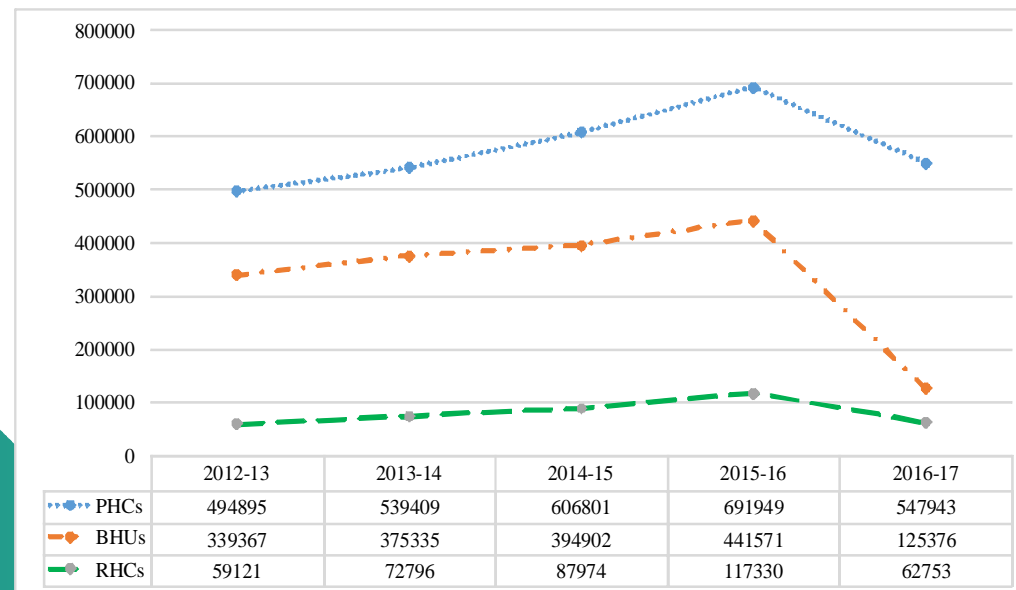


### Secondary Level Health Care Facilities

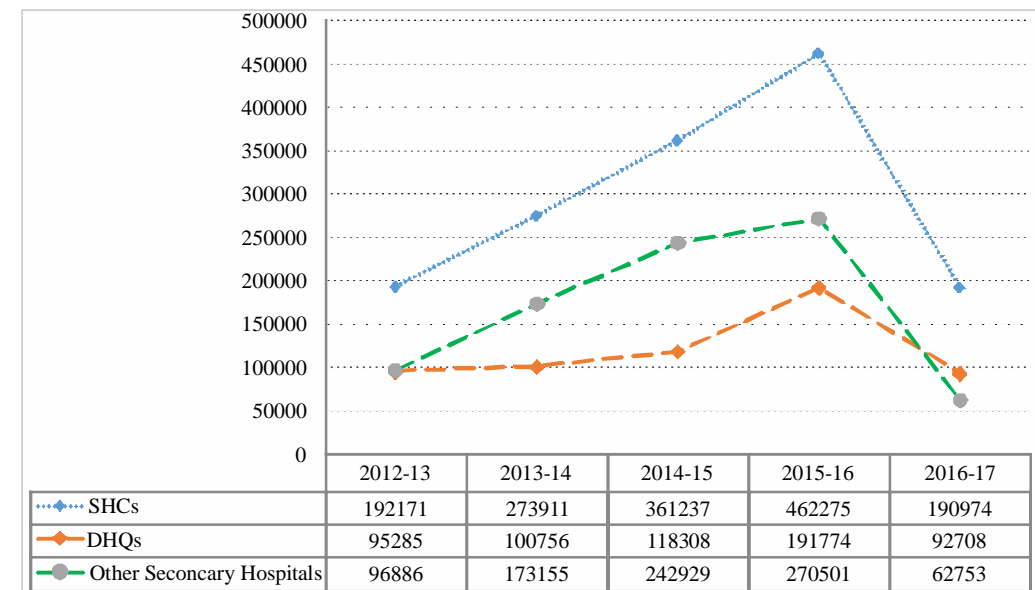


## COMMUNICABLE DISEASES (Diarrhea/Dysentery < 5 years)

### Primary Level Health Care Facilities



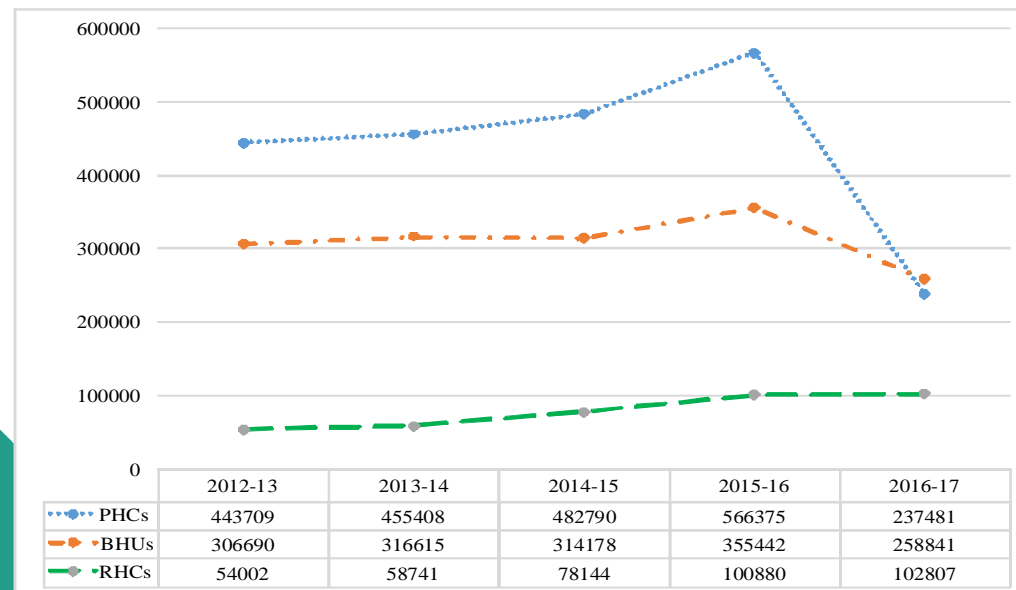
### Secondary Level Health Care Facilities



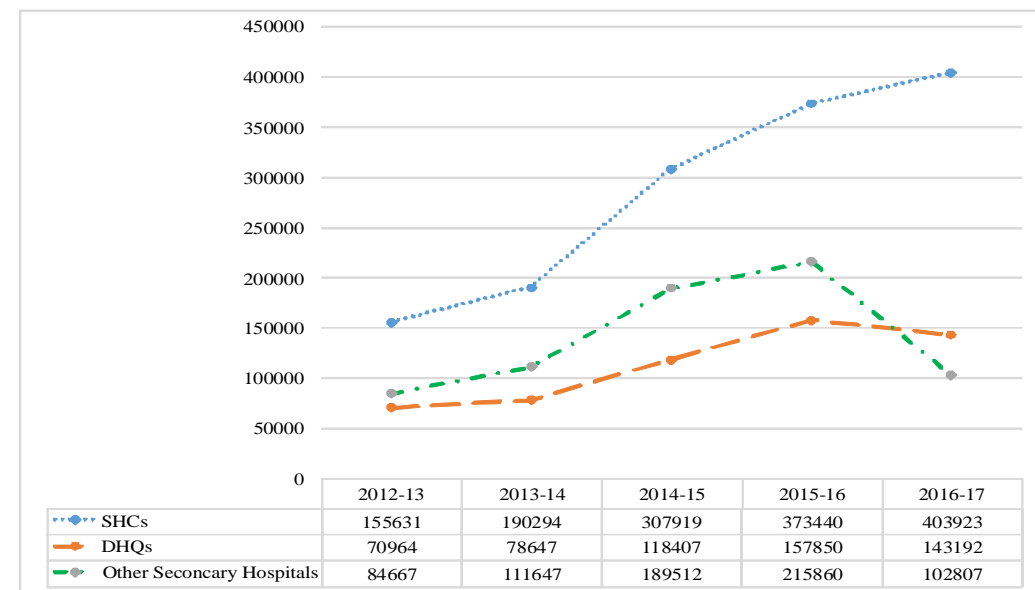


## COMMUNICABLE DISEASES (Diarrhea/Dysentery > 5 years)

### Primary Level Health Care Facilities

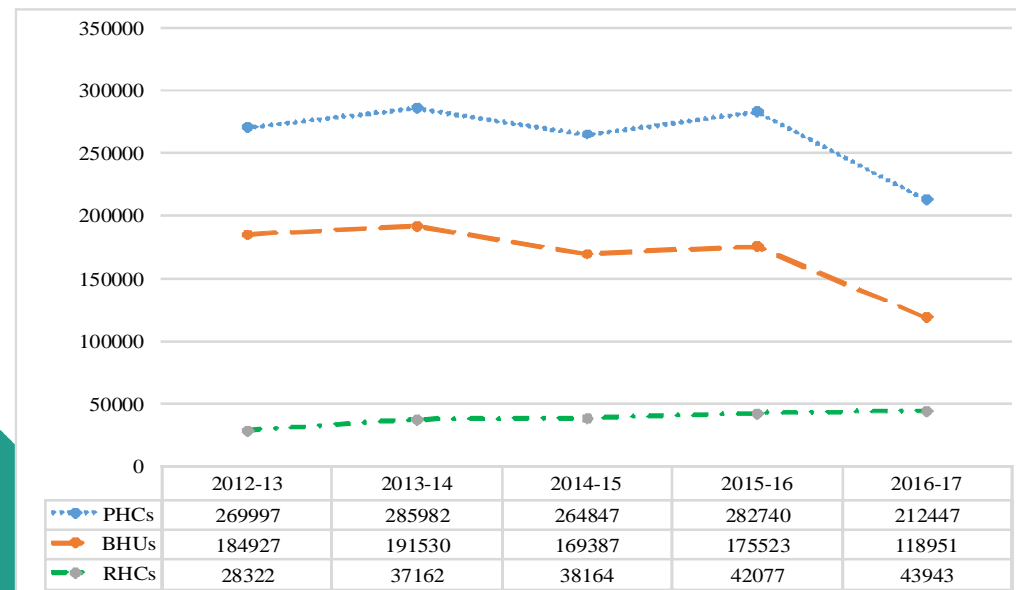


### Secondary Level Health Care Facilities

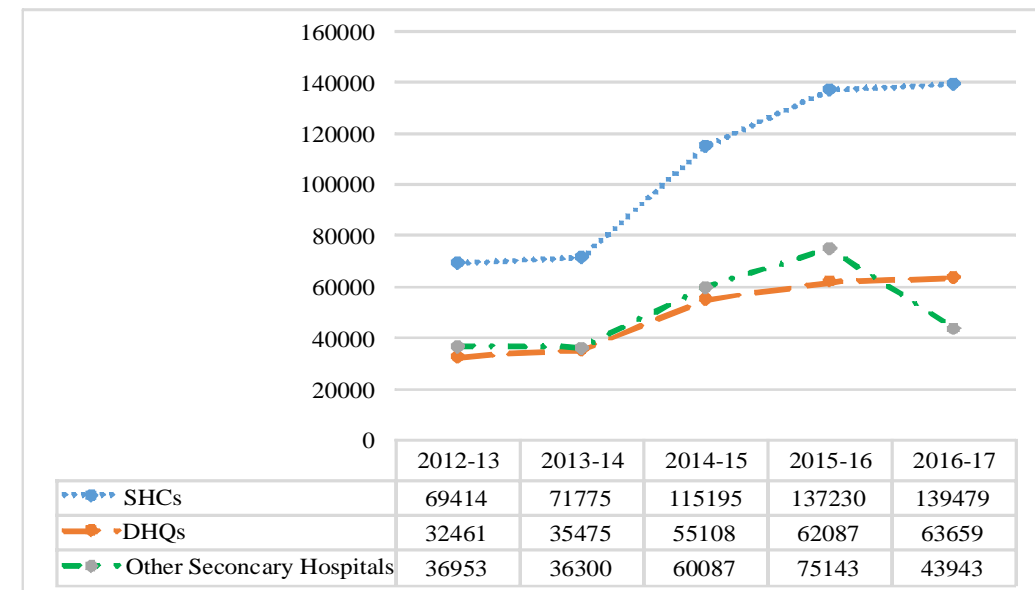


## COMMUNICABLE DISEASES (Scabies)

### Primary Level Health Care Facilities

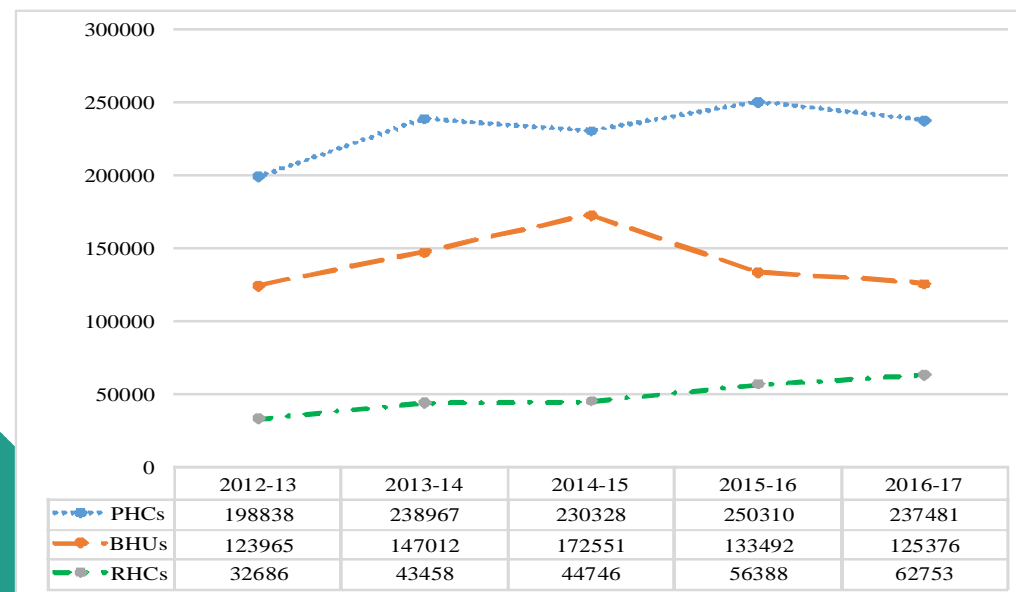


### Secondary Level Health Care Facilities

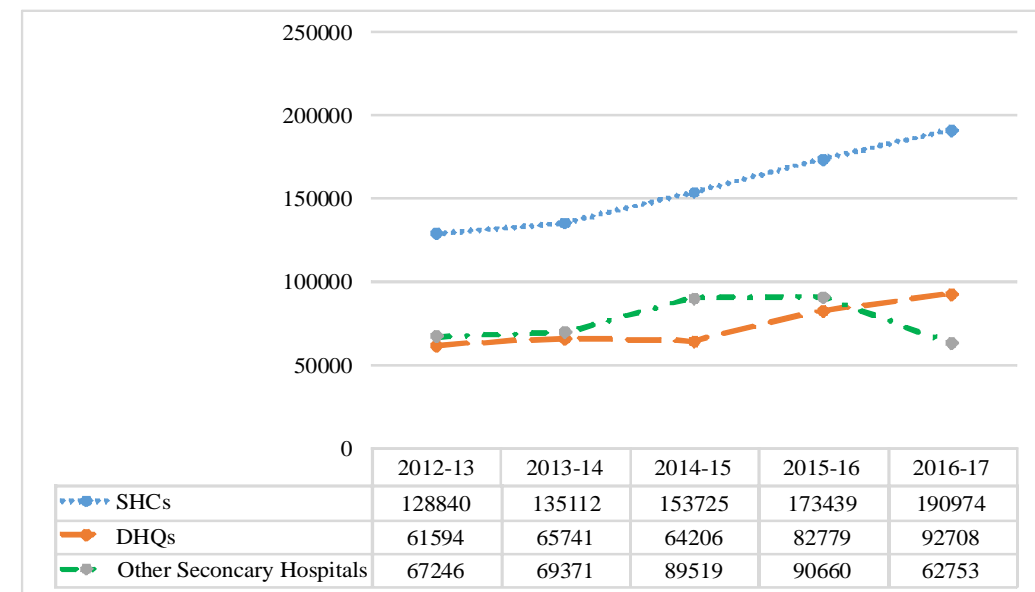


## COMMUNICABLE DISEASES (Suspected Malaria )

### Primary Level Health Care Facilities

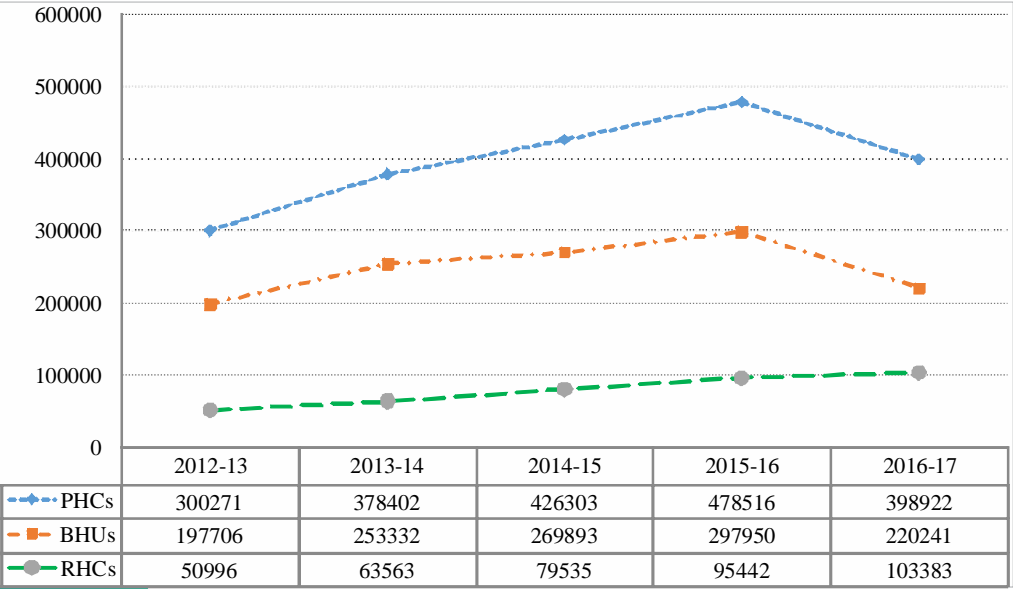


### Secondary Level Health Care Facilities

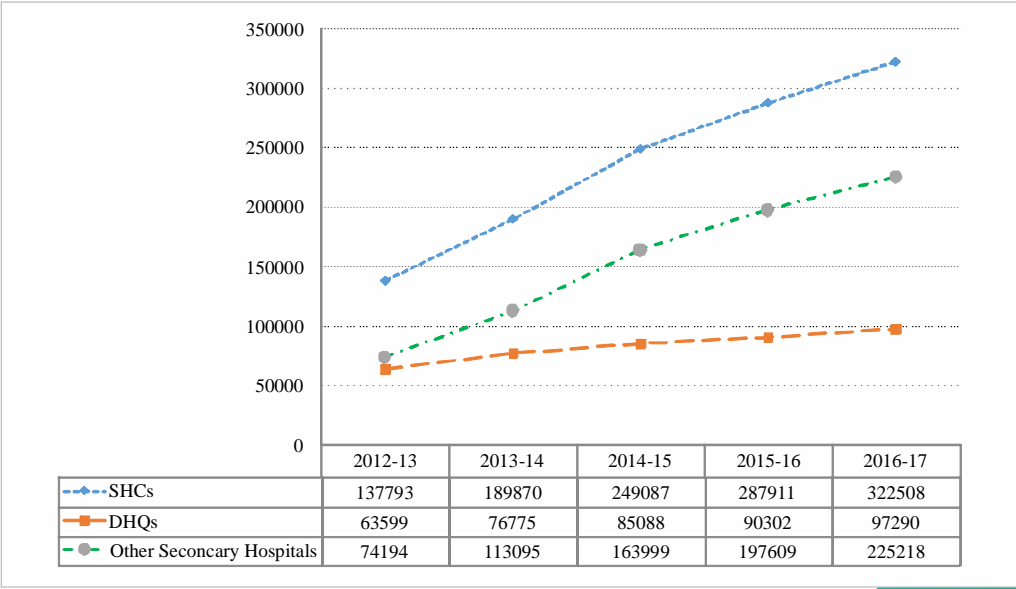


NON-COMMUNICABLE DISEASES  
(Urinary Tract Infections)

Primary Level  
Health Care Facilities

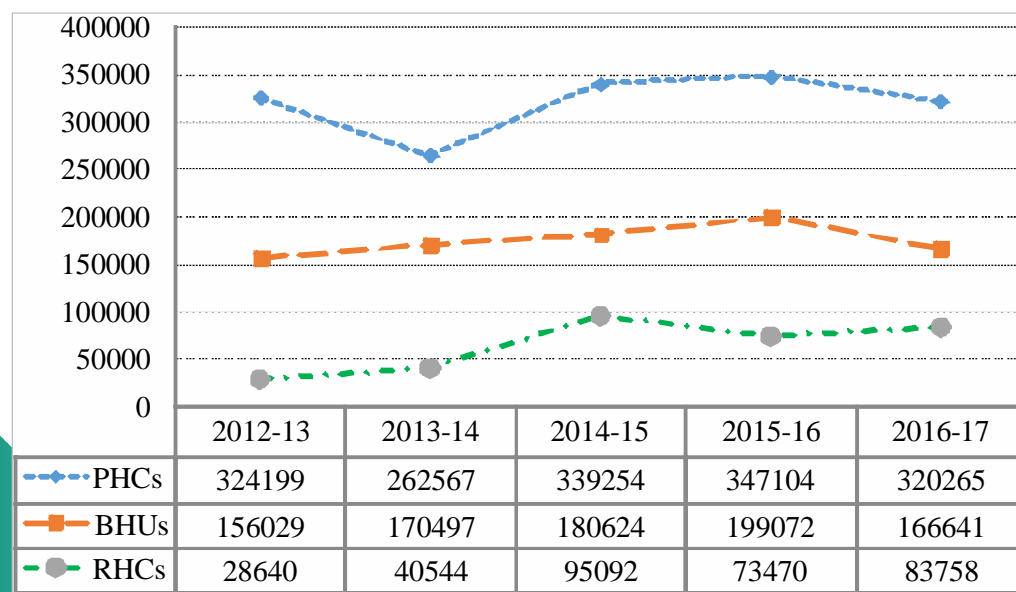


Secondary Level  
Health Care Facilities

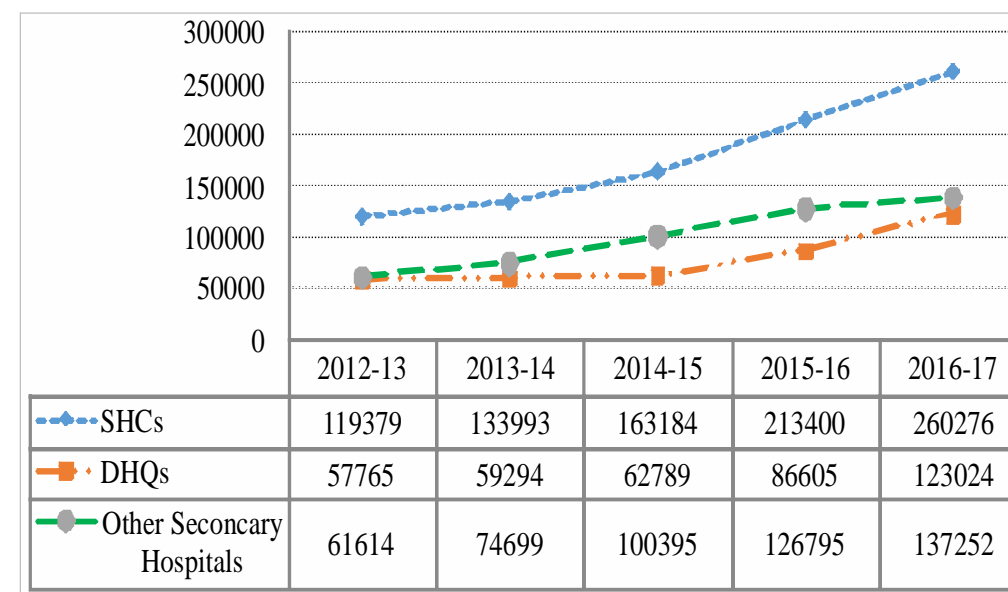


## NON-COMMUNICABLE DISEASES (Hypertension)

### Primary Level Health Care Facilities



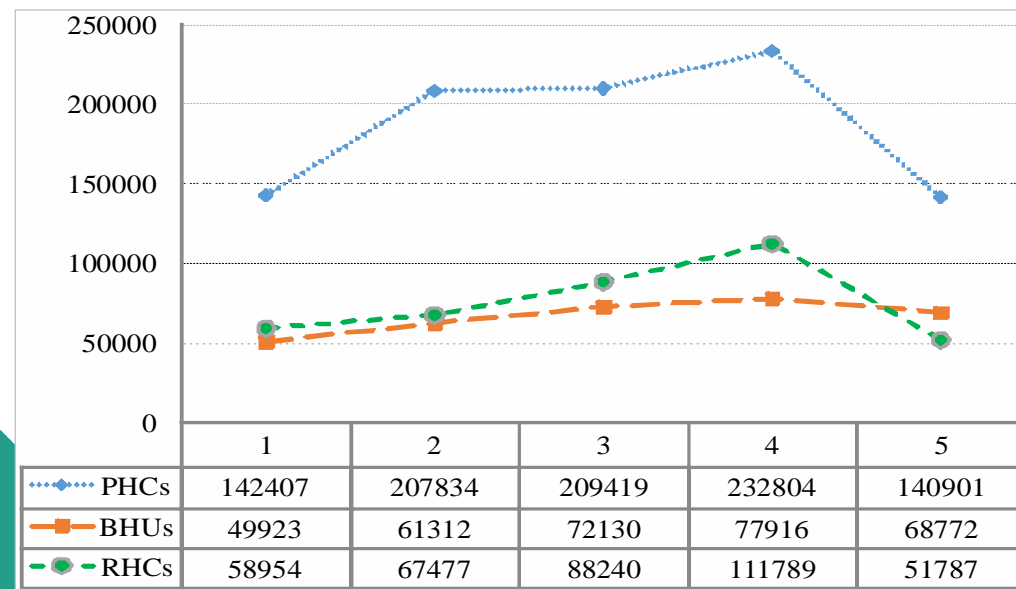
### Secondary Level Health Care Facilities



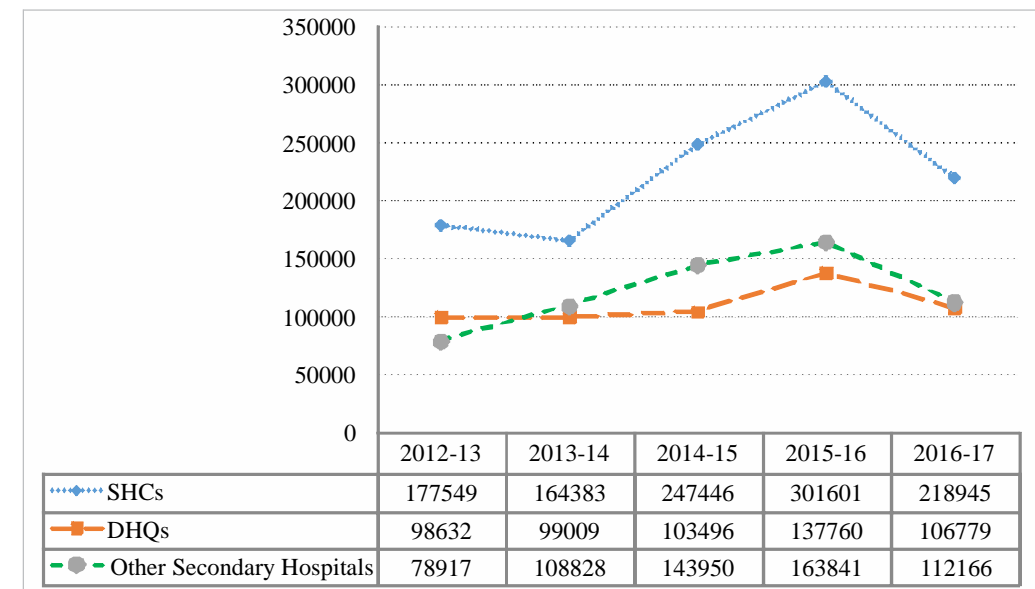


## NON-COMMUNICABLE DISEASES (Diabetes Mellitus)

### Primary Level Health Care Facilities

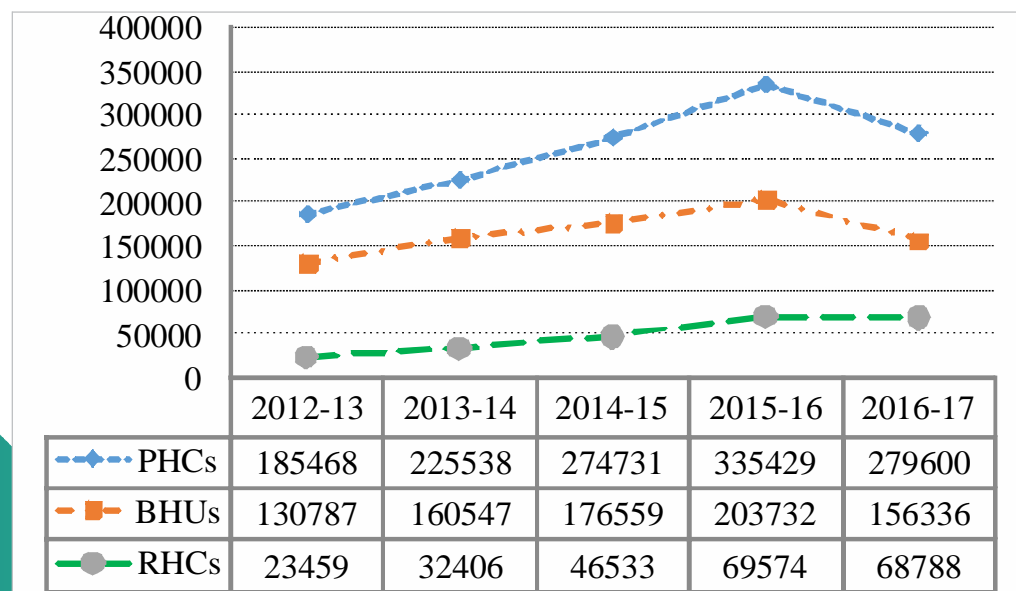


### Secondary Level Health Care Facilities

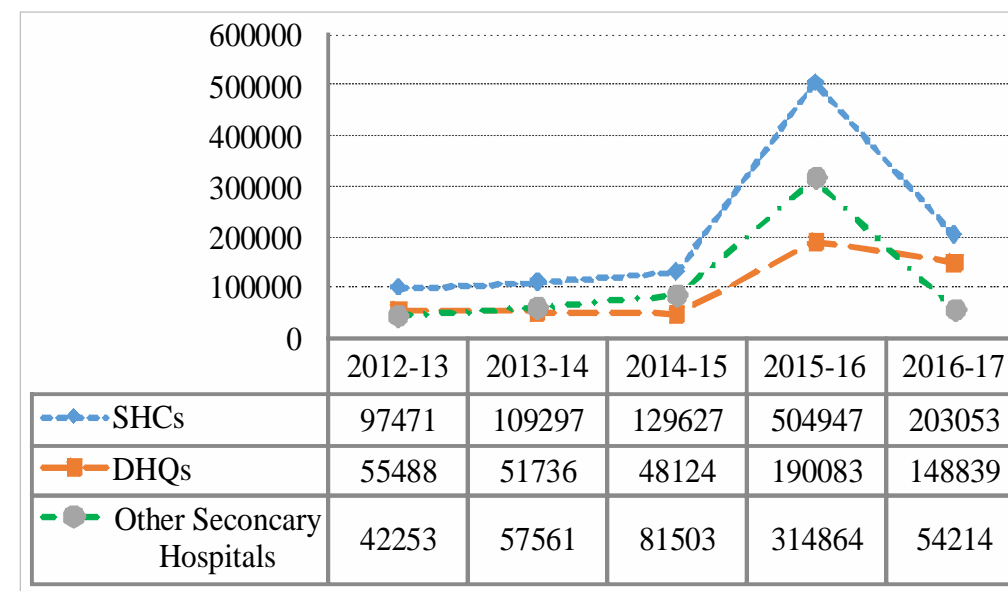


## NON-COMMUNICABLE DISEASES (Peptic Ulcer Diseases)

### Primary Level Health Care Facilities

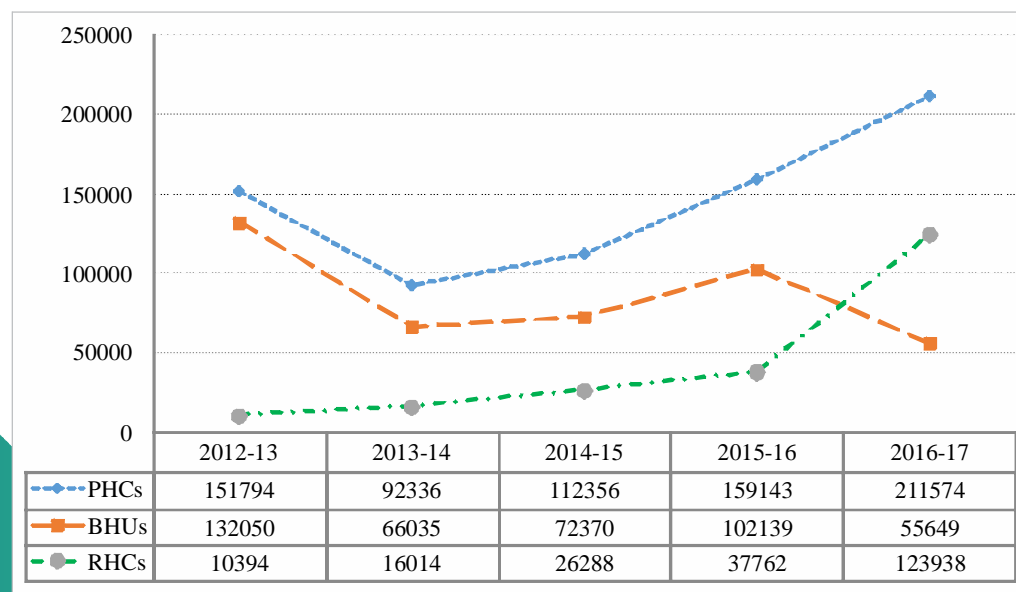


### Secondary Level Health Care Facilities

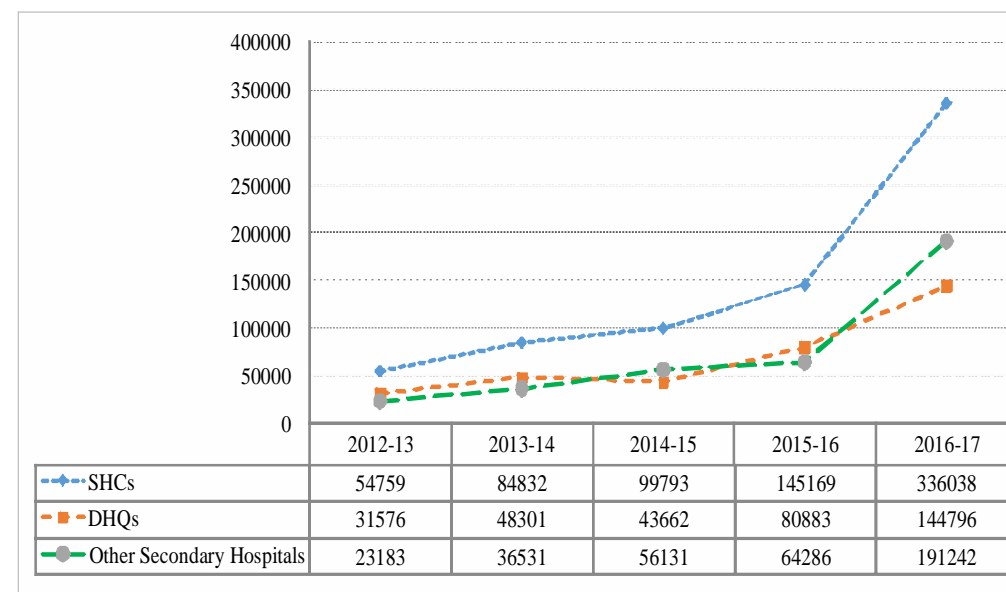


## NON-COMMUNICABLE DISEASES (Dental Caries)

### Primary Level Health Care Facilities

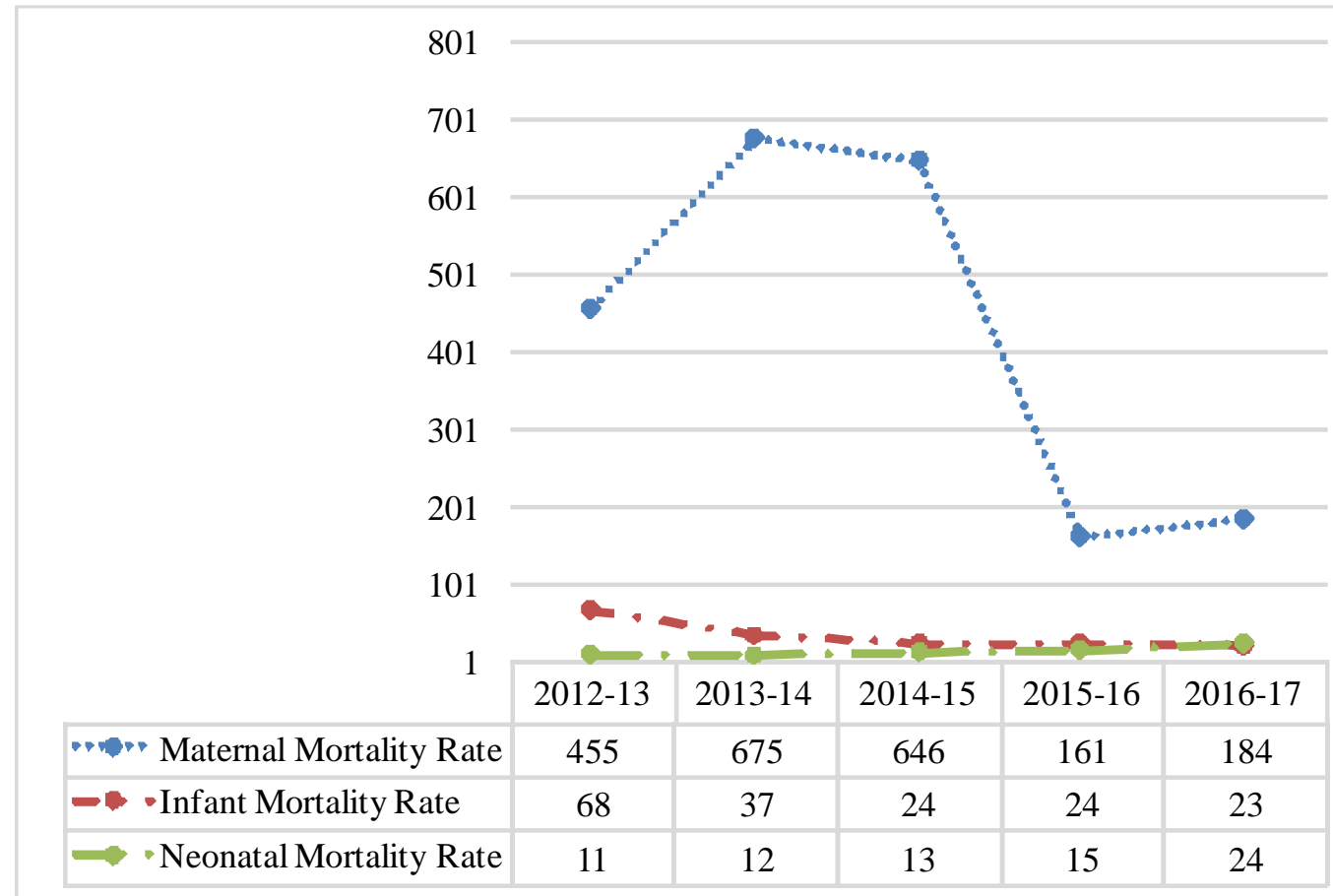


### Secondary Level Health Care Facilities



## 5 YEARS MORTALITY TREND

Maternal Mortality Rate  
Infant Mortality Rate  
Neonatal Mortality Rate





KPIs

# Key Performance Indicators



## KPIs: OVERALL PERFORMANCE OF DISTRICTS

Interval: ☒ Annual ☐ Quarter ☐ Month

Year: 2017

Month: -----Select-----

Quarter: -----Select-----

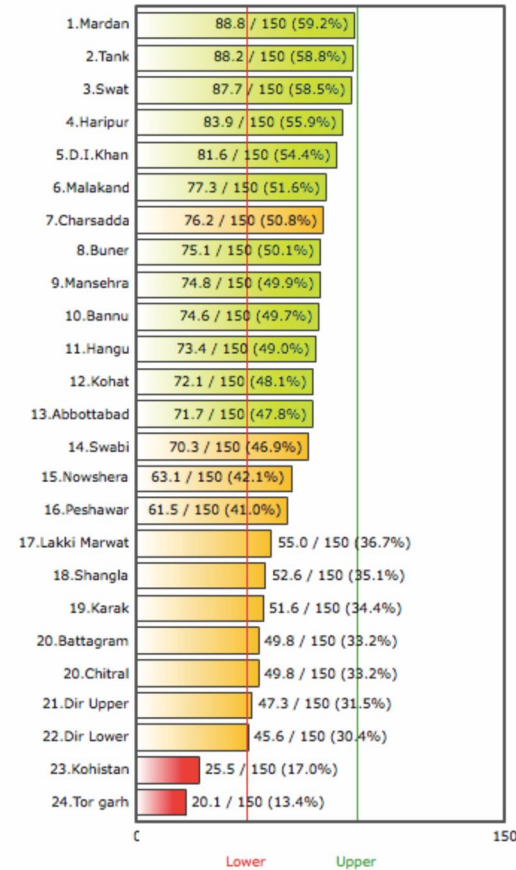
Domain: Overall

Subdomain: --Select--

KPIs: -----Select-----

Data Type: Performance Score

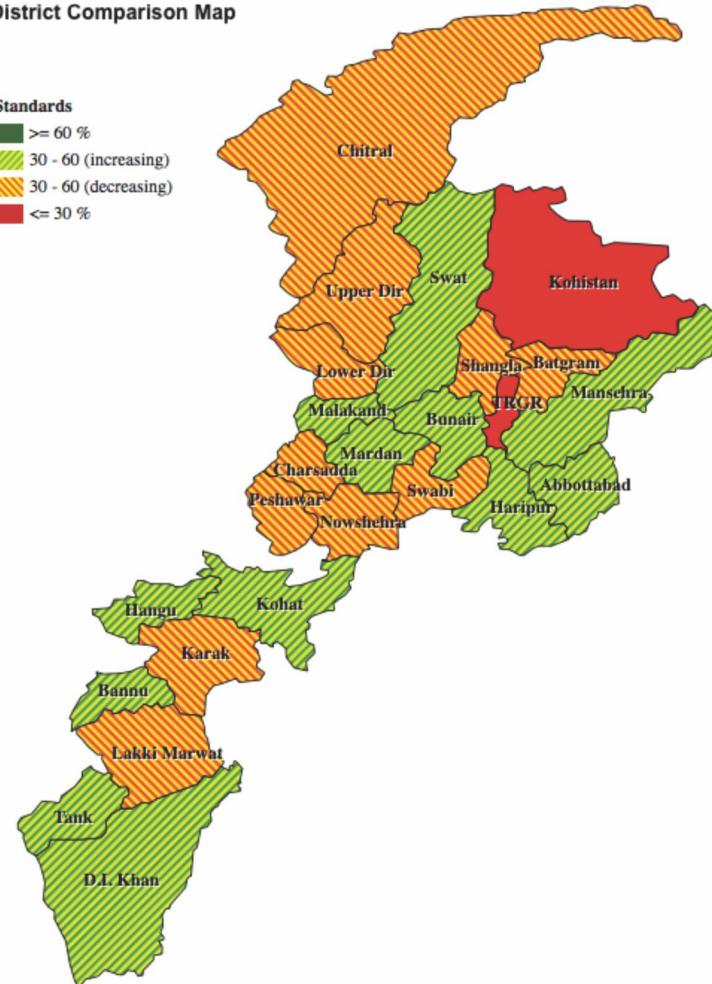
Ranking of KPK Districts



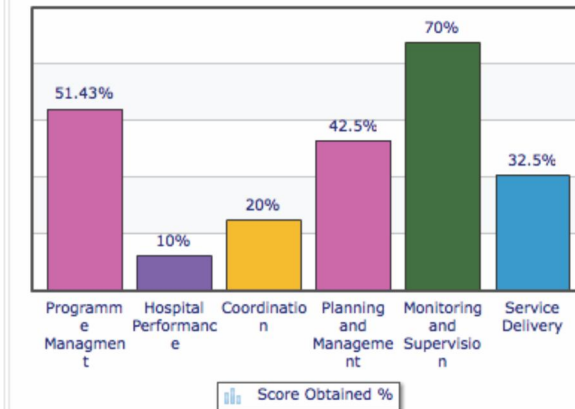
District Comparison Map

Standards

- $\geq 60\%$
- 30 - 60 (increasing)
- 30 - 60 (decreasing)
- $\leq 30\%$



Domain wise Provincial Average Score



## KPIs: COORDINATION EFFORTS OF DISTRICTS

Interval: ☒ Annual ☐ Quarter ☐ Month

Year: 2017

Month: -----Select-----

Quarter: -----Select-----

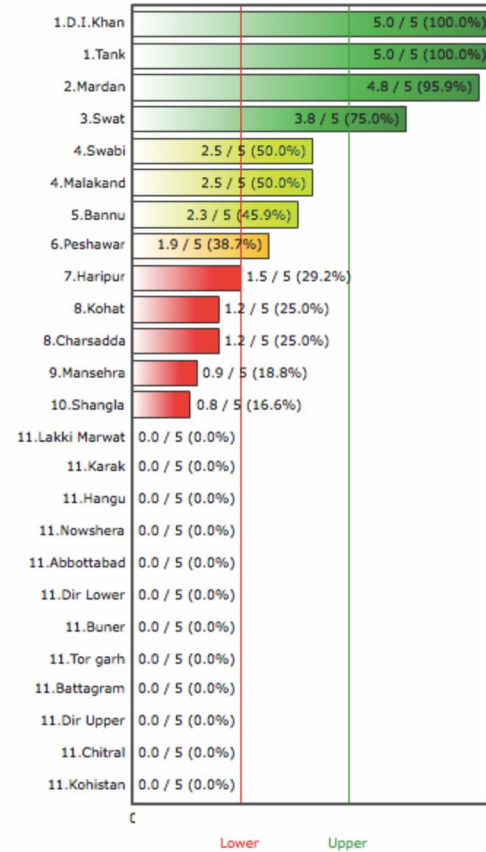
Domain: Coordination

Subdomain: --Select--

KPIs: -----Select-----

Data Type: Performance Score

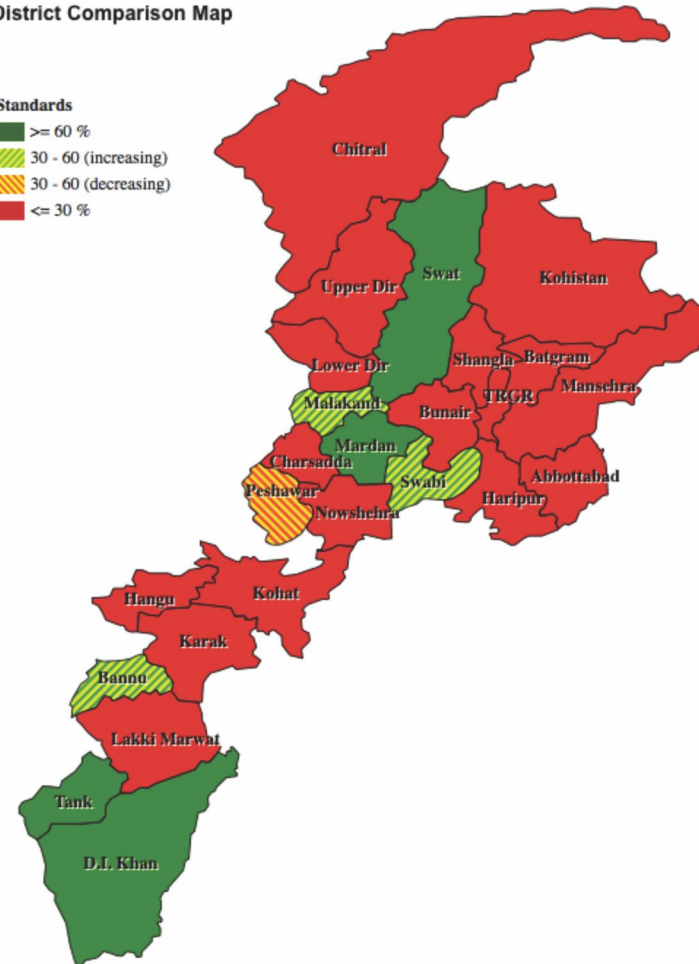
### Ranking of KPK Districts



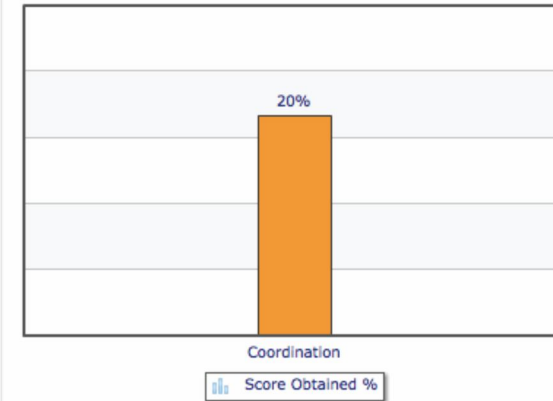
### District Comparison Map

#### Standards

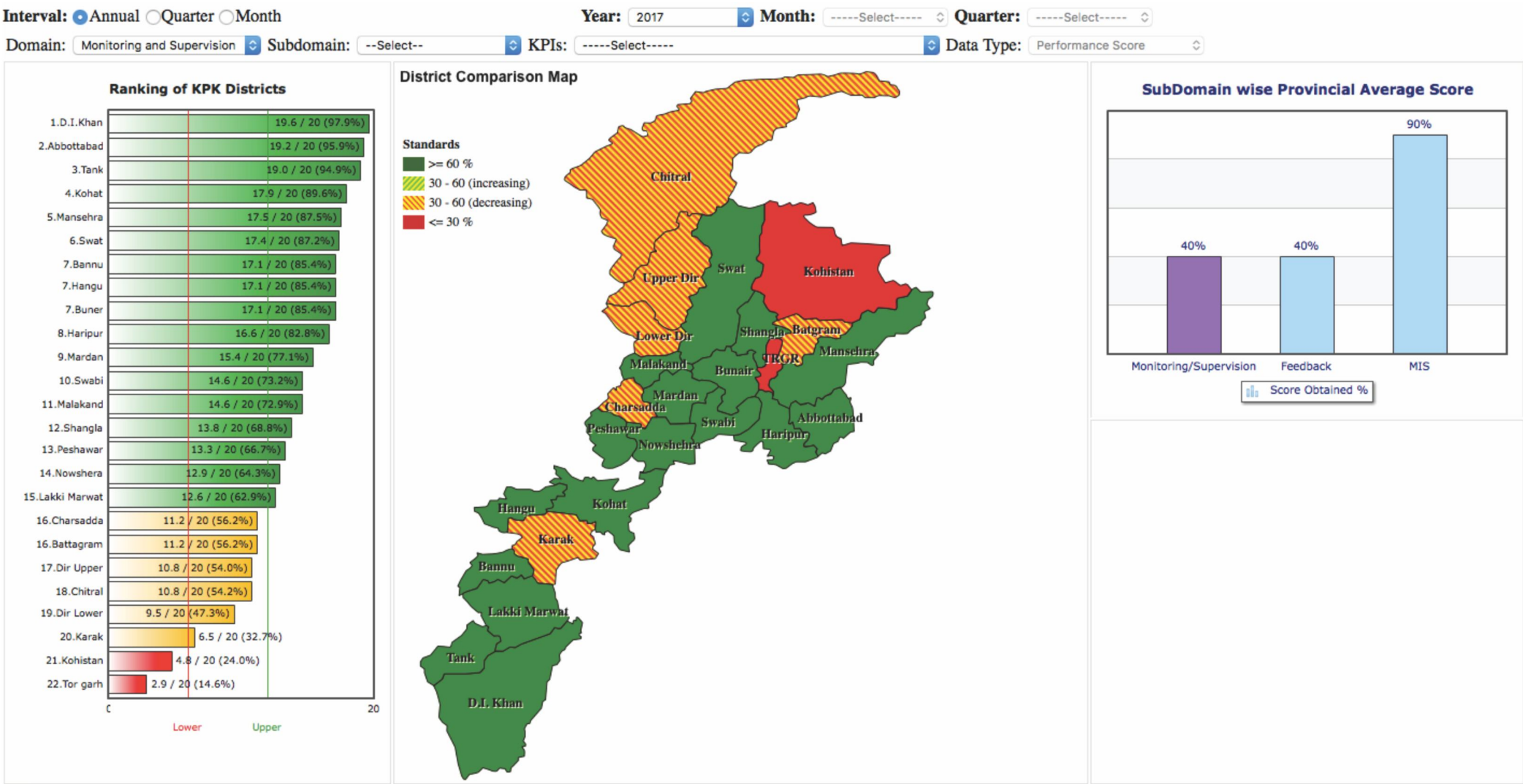
- $\geq 60\%$
- 30 - 60 (increasing)
- 30 - 60 (decreasing)
- $\leq 30\%$



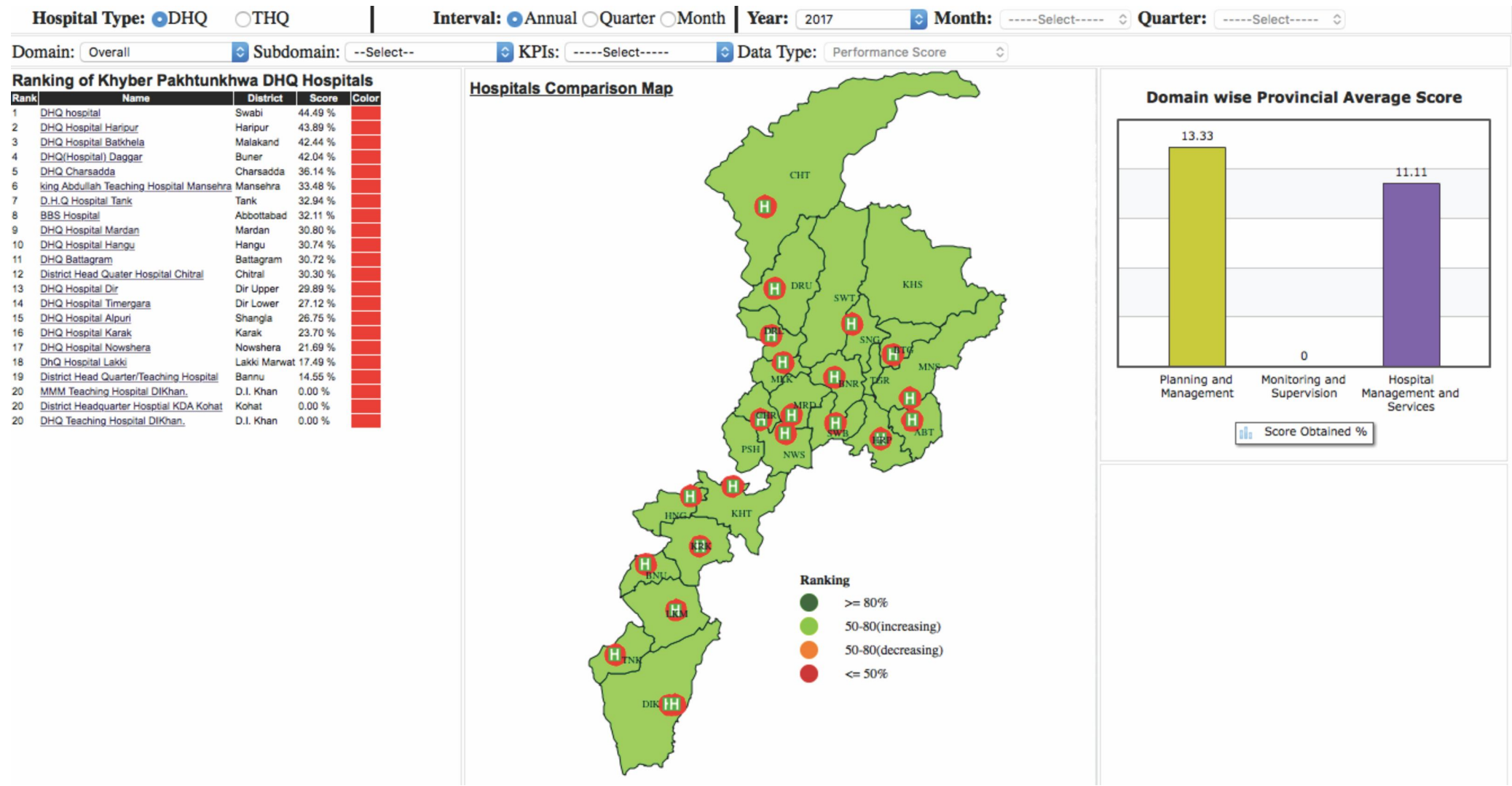
### SubDomain wise Provincial Average Score



# KPIs: MONITORING & SUPERVISION AT DISTRICTS



# KPIs: OVERALL HOSPITALS PERFORMANCE OF KHYBER PAKHTUNKHWA (DISTRICT HEADQUARTER HOSPITALS)



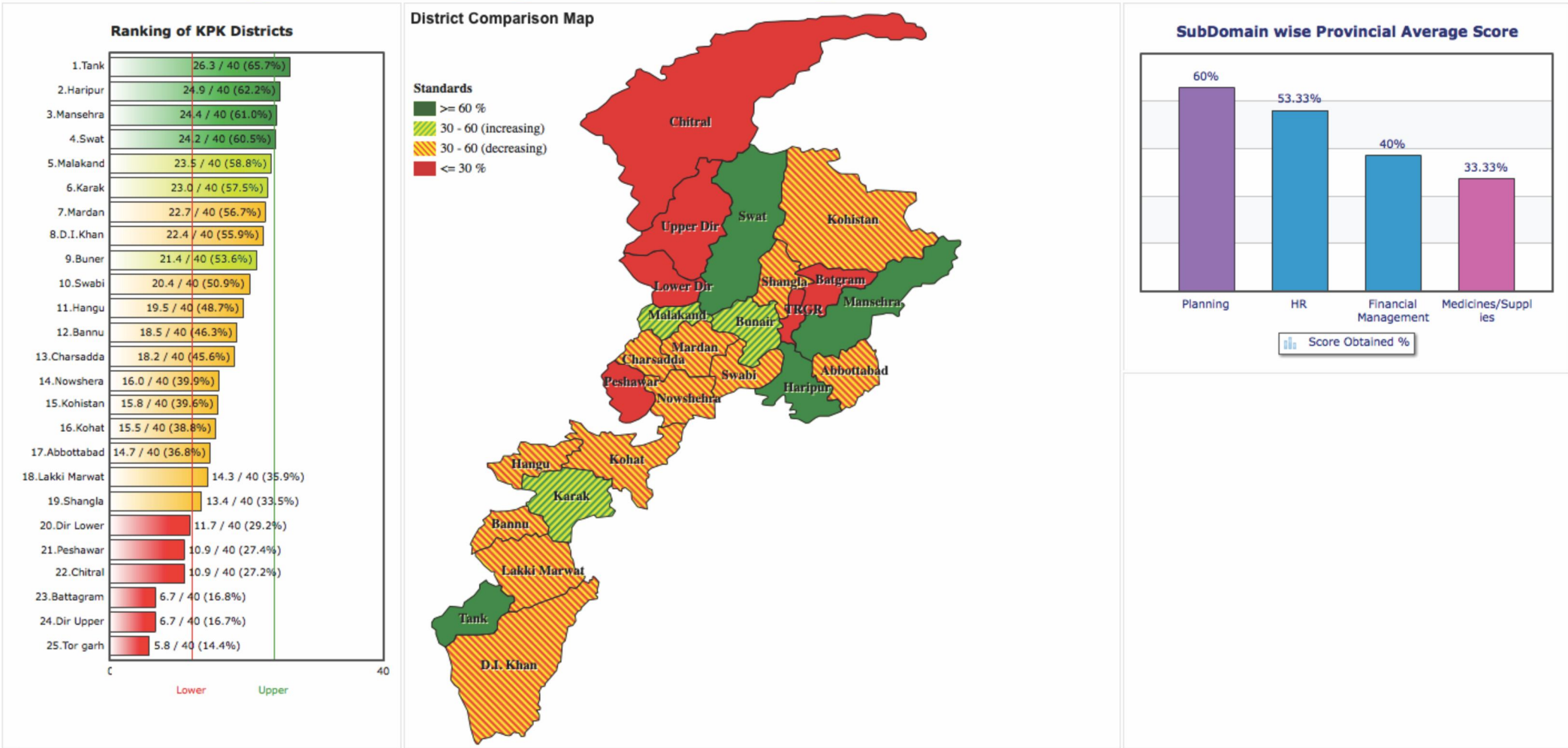


# KPIs: PLANNING & MANAGEMENT PERFORMANCE

Interval: ☒ Annual ☐ Quarter ☐ Month

Year: 2017 Month: -----Select----- Quarter: -----Select-----

Domain: Planning and Management Subdomain: -----Select----- KPIs: -----Select----- Data Type: Performance Score





# KPIs: PROGRAM MANAGEMENT

Interval: ☒ Annual ☐ Quarter ☐ Month

Year: 2017

Month: -----Select-----

Quarter: -----Select-----

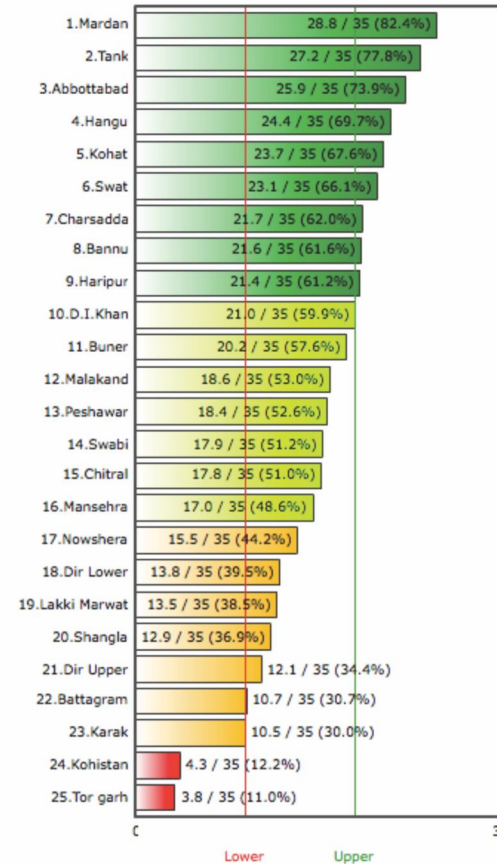
Domain: Programme Management

Subdomain: --Select--

KPIs: -----Select-----

Data Type: Performance Score

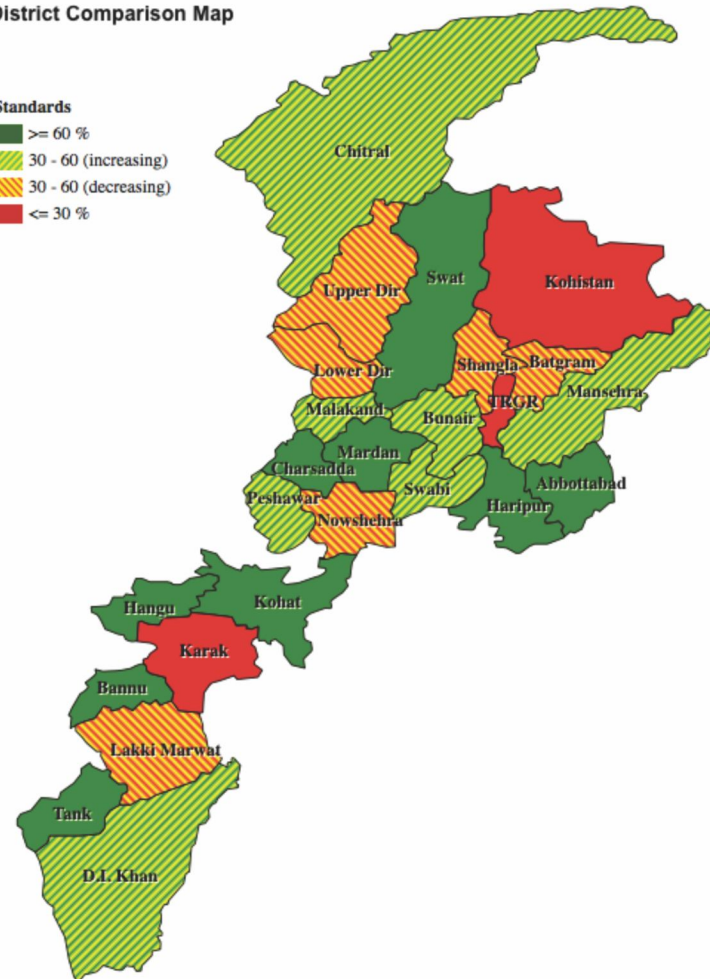
## Ranking of KPK Districts



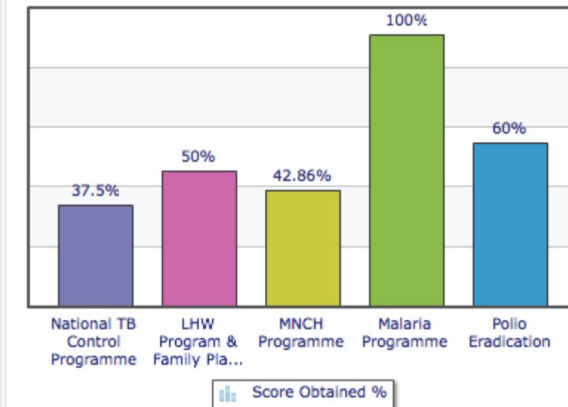
## District Comparison Map

### Standards

- >= 60 %
- 30 - 60 (increasing)
- 30 - 60 (decreasing)
- <= 30 %



## SubDomain wise Provincial Average Score



## KPIs: SERVICES DELIVERY

Interval: ☒ Annual ☐ Quarter ☐ Month

Year: 2017

Month: -----Select-----

Quarter: -----Select-----

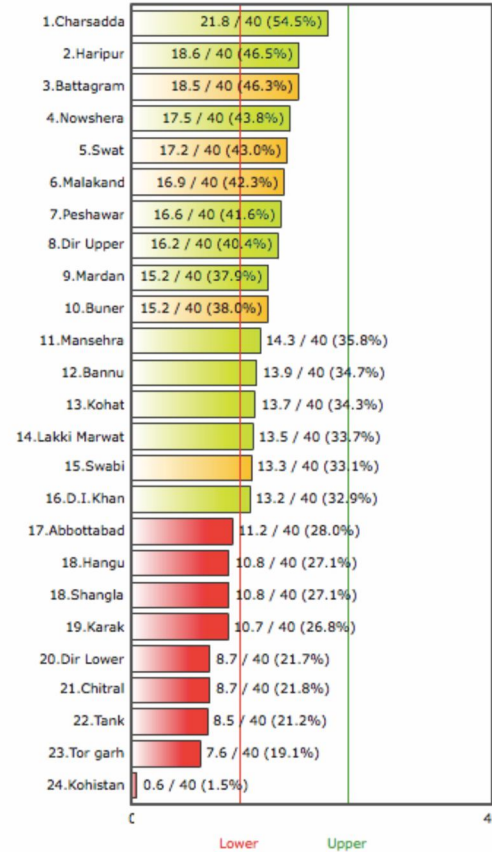
Domain: Service Delivery

Subdomain: --Select--

KPIs: -----Select-----

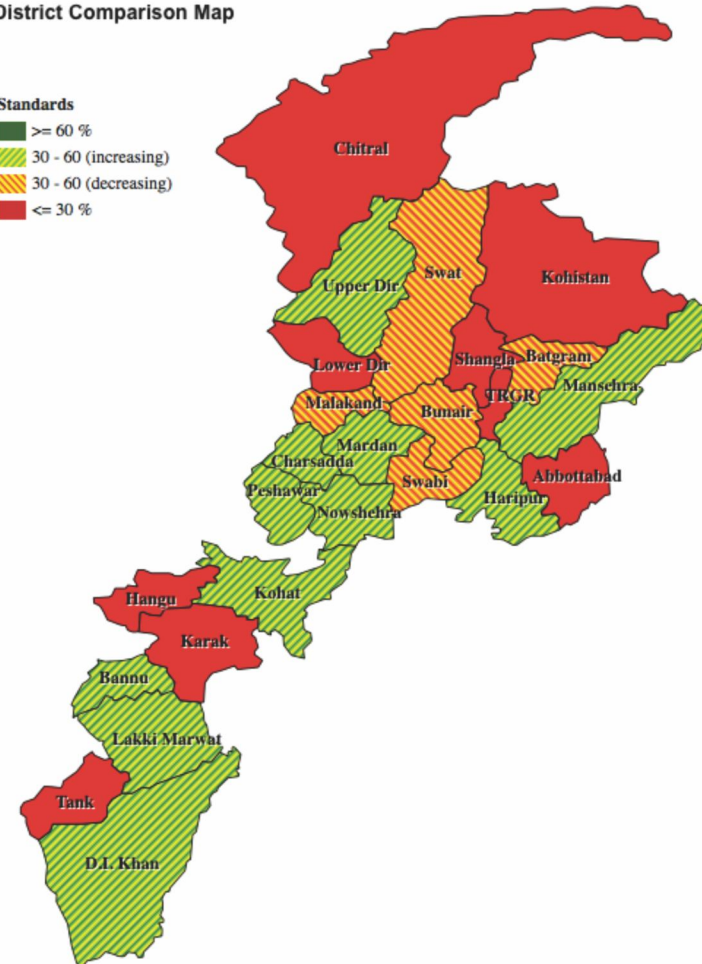
Data Type: Performance Score

Ranking of KPK Districts

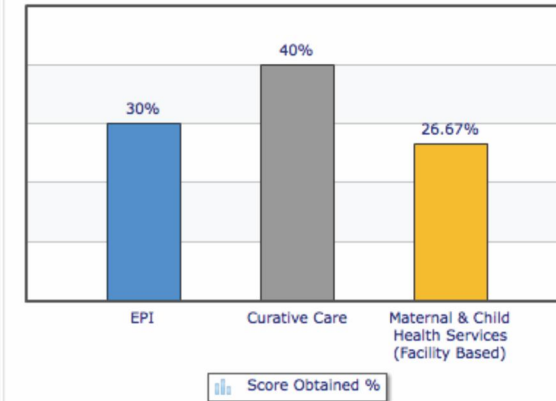


District Comparison Map

Standards  
 >= 60 %  
 30 - 60 (increasing)  
 30 - 60 (decreasing)  
 <= 30 %



SubDomain wise Provincial Average Score



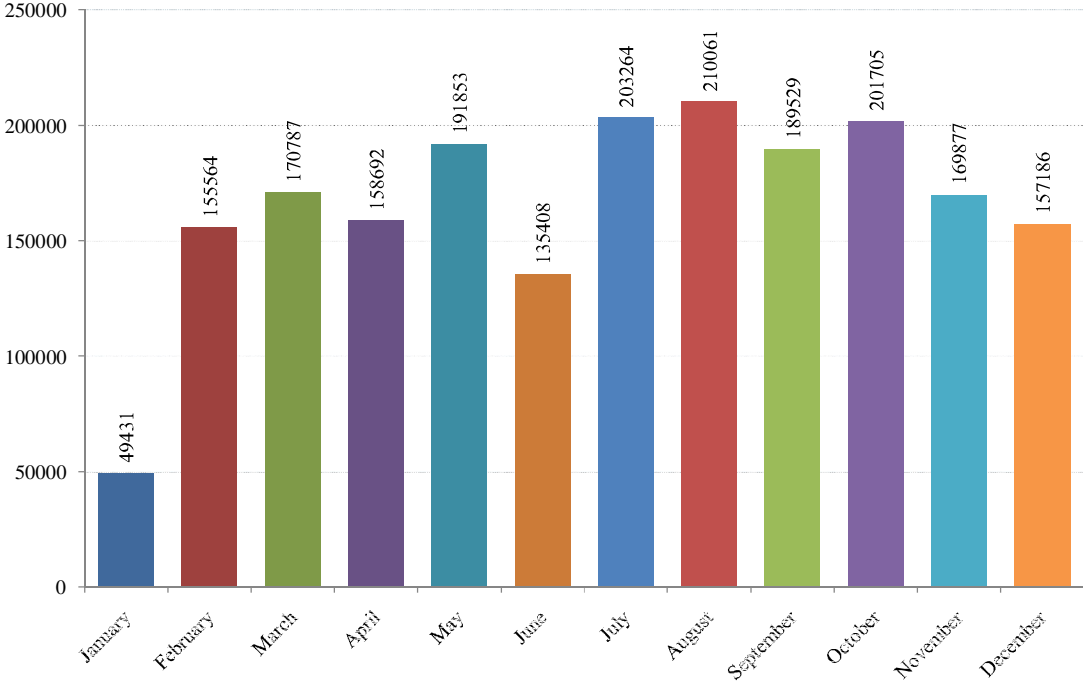


MTIs

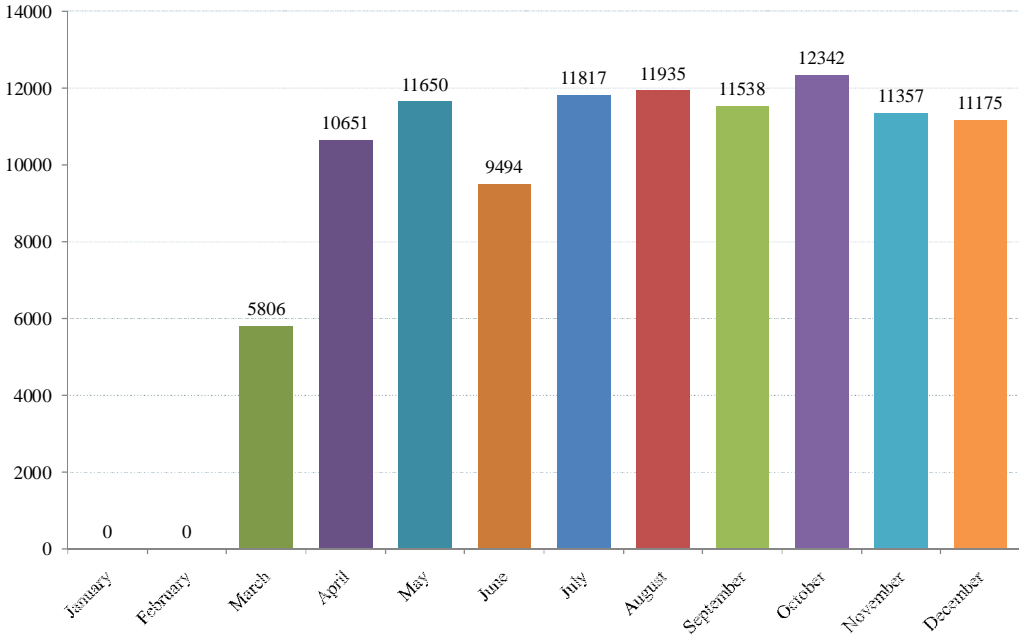
**Medical Teaching Institutes**

LADY READING HOSPITAL, PESHAWAR

OPD PATIENTS

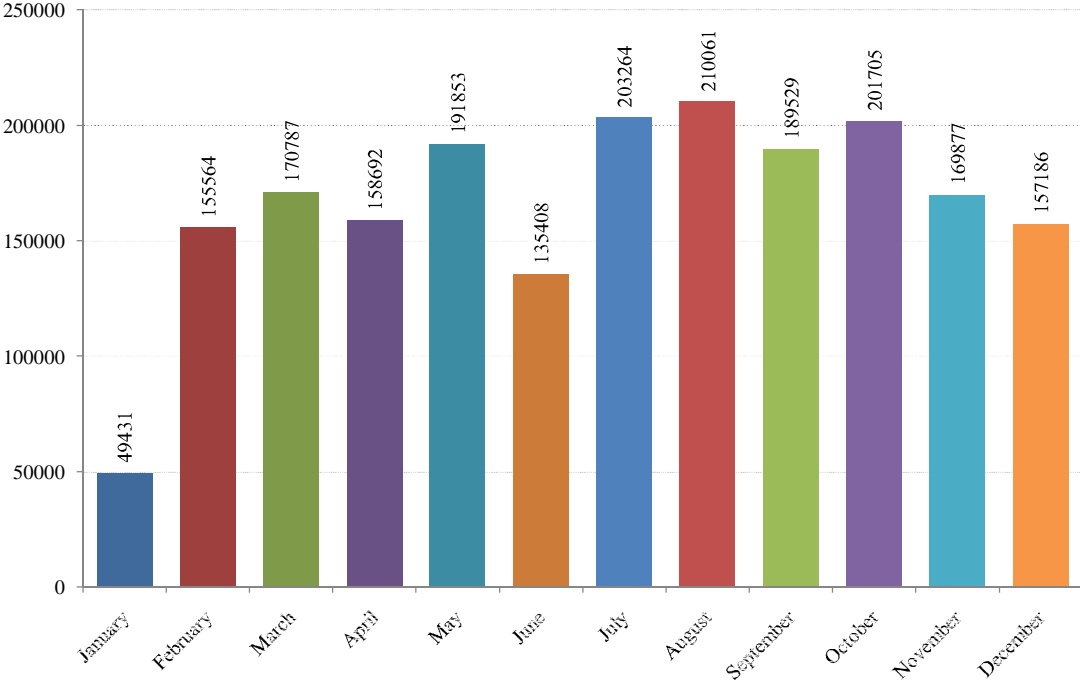


INDOOR PATIENTS

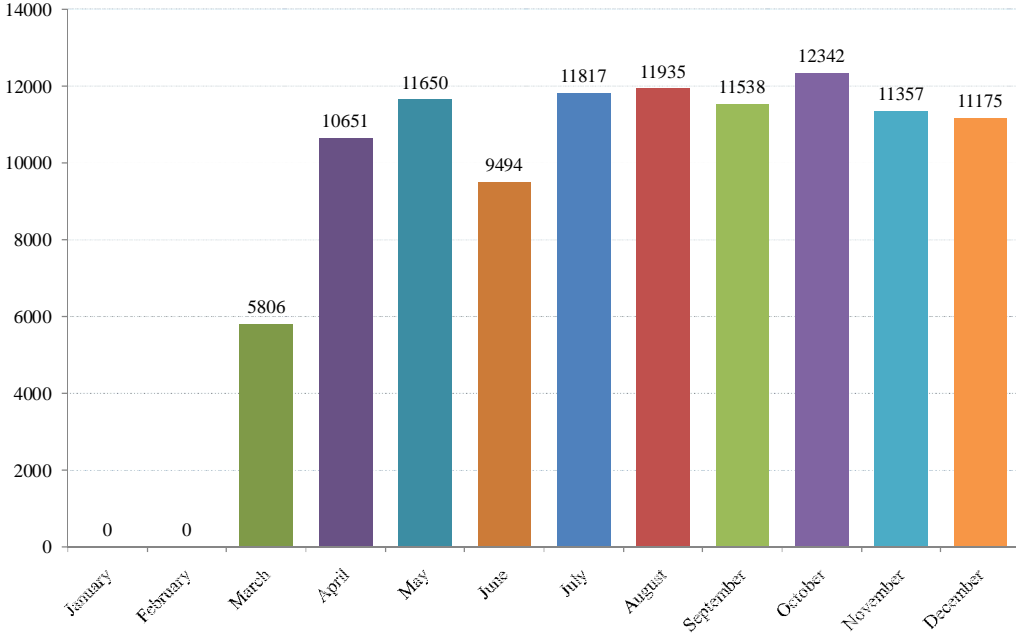


LADY READING HOSPITAL, PESHAWAR

OPD PATIENTS



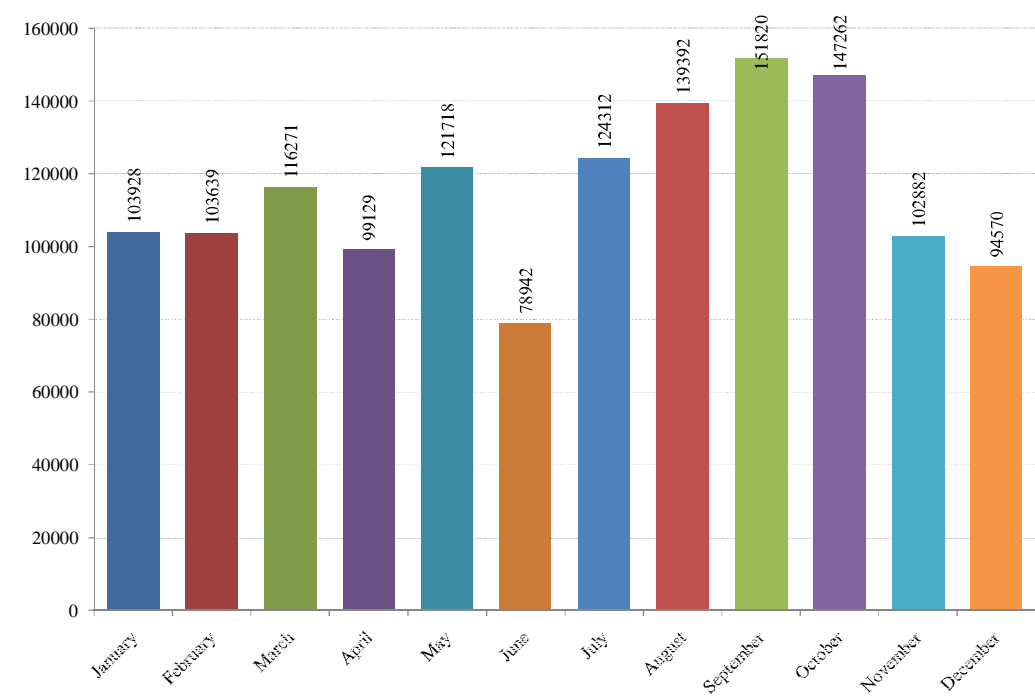
INDOOR PATIENTS



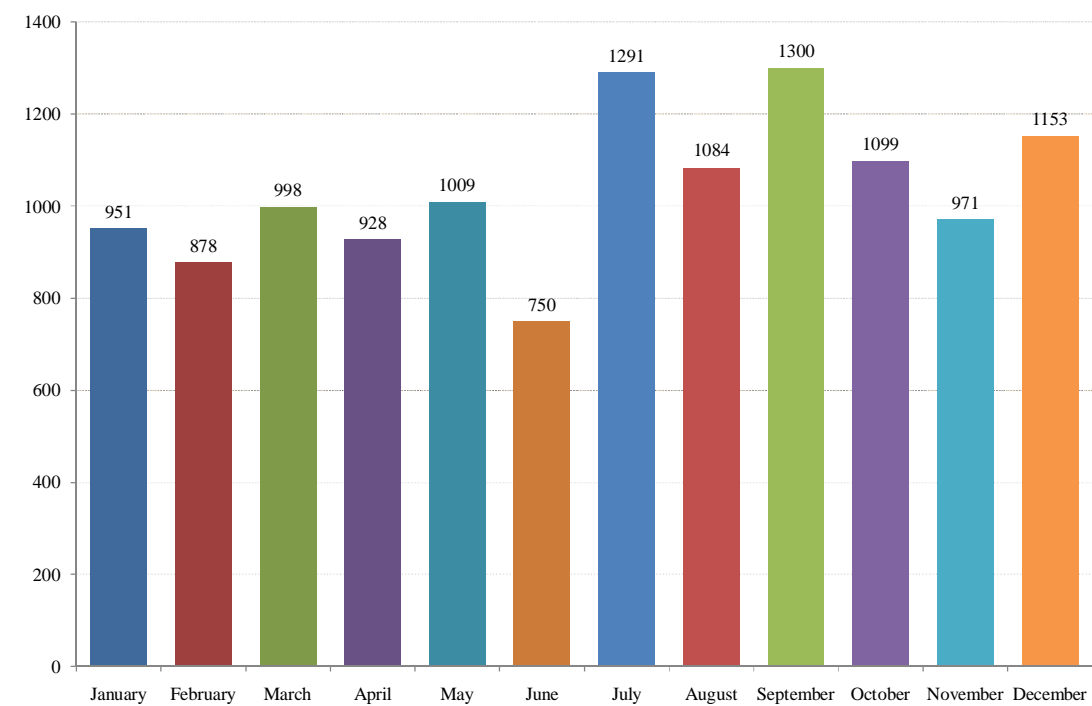


KHYBER TEACHING HOSPITAL, PESHAWAR

OPD PATIENTS

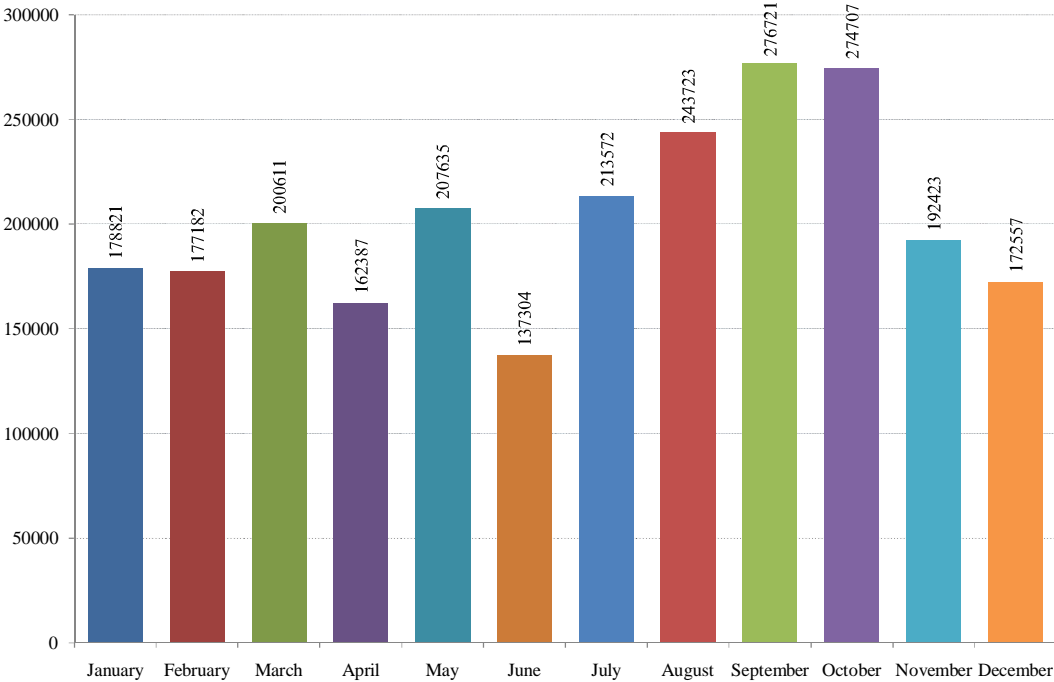


INDOOR PATIENTS

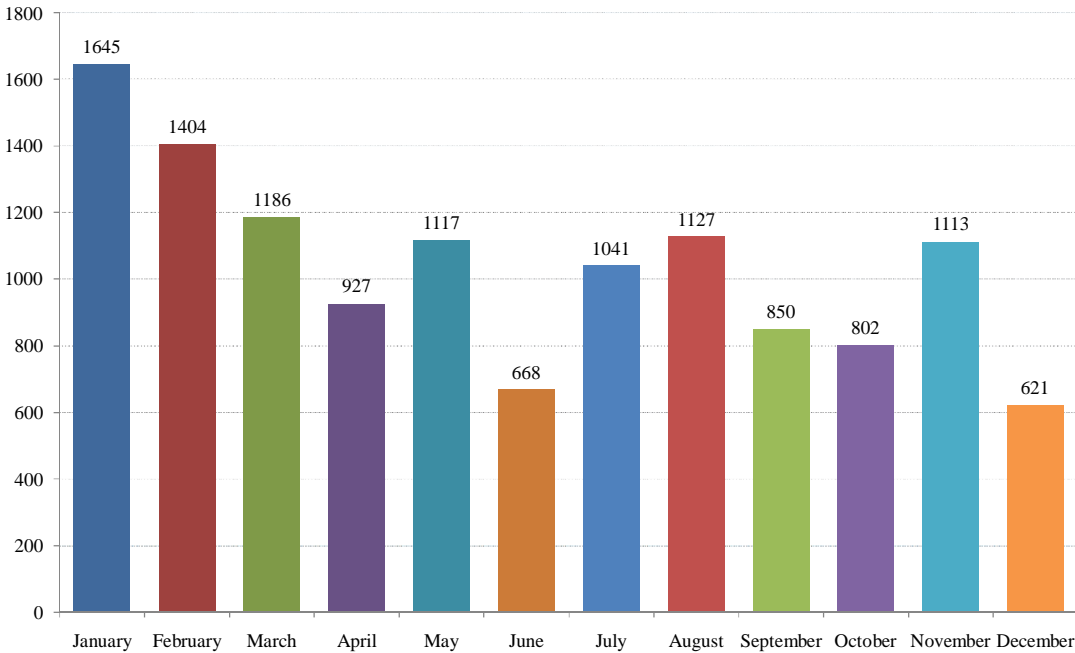


KHYBER TEACHING HOSPITAL, PESHAWAR

INVESTIGATIONS

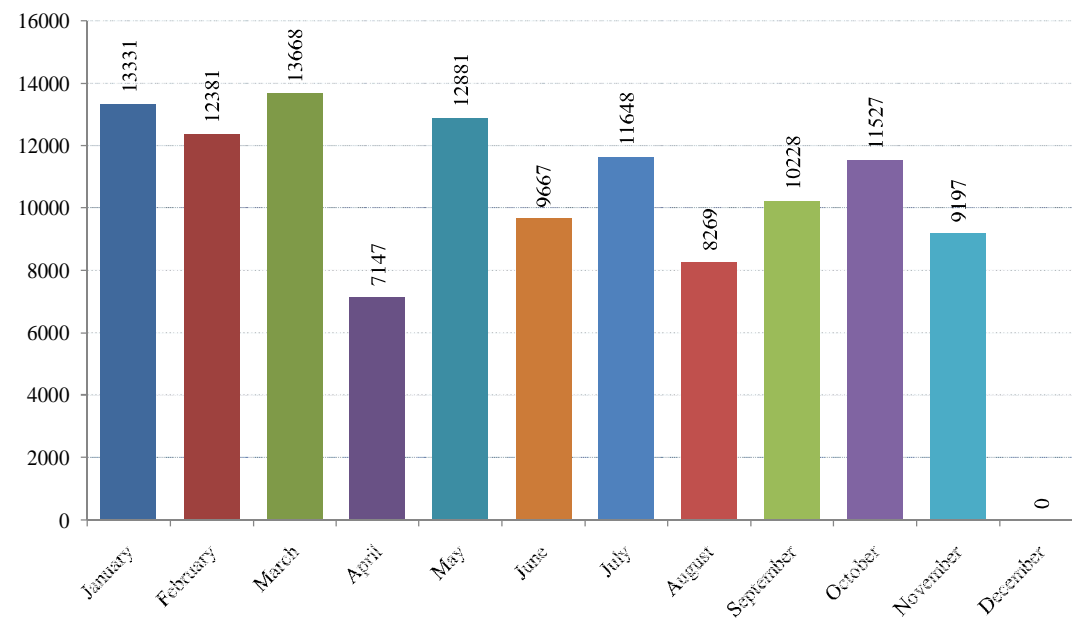


MAJOR OPERATIONS

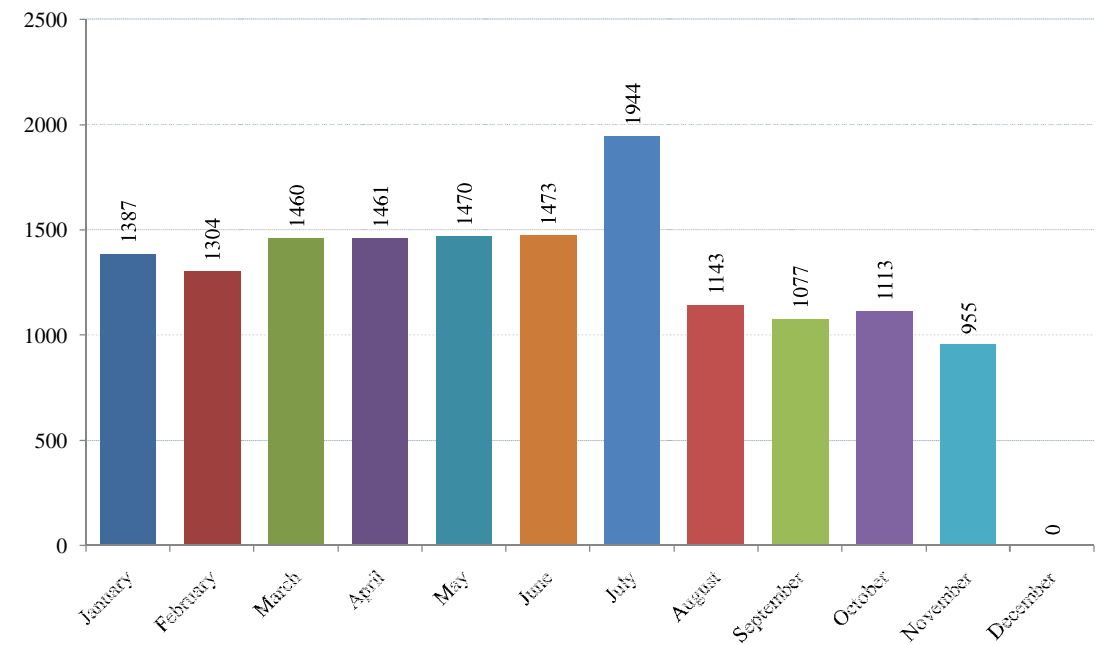


## DISTRICT HEADQUARTER HOSPITAL/TEACHING HOSPITAL BANNU

### OPD PATIENTS

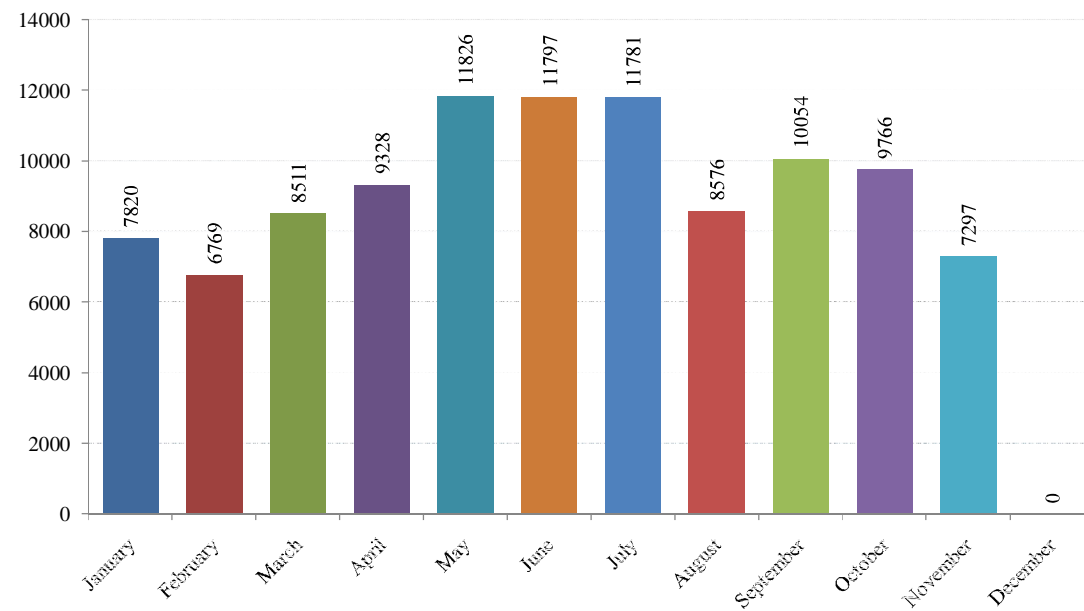


### INDOOR PATIENTS

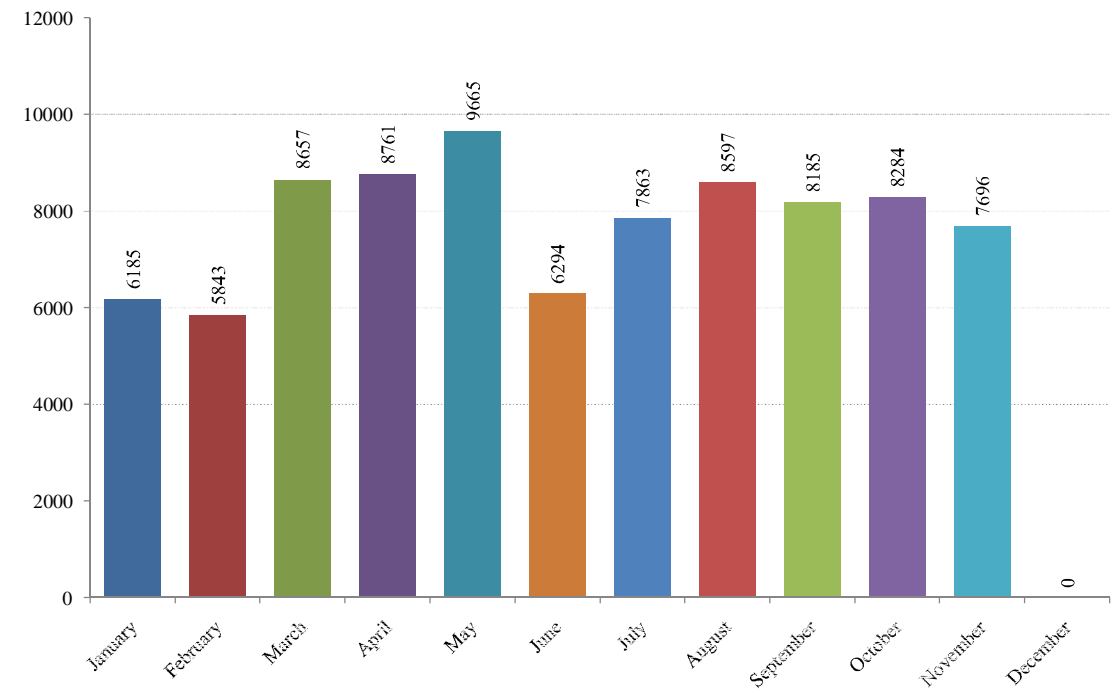


## DISTRICT HEADQUARTER HOSPITAL/TEACHING HOSPITAL BANNU

### EMERGENCY PATIENTS

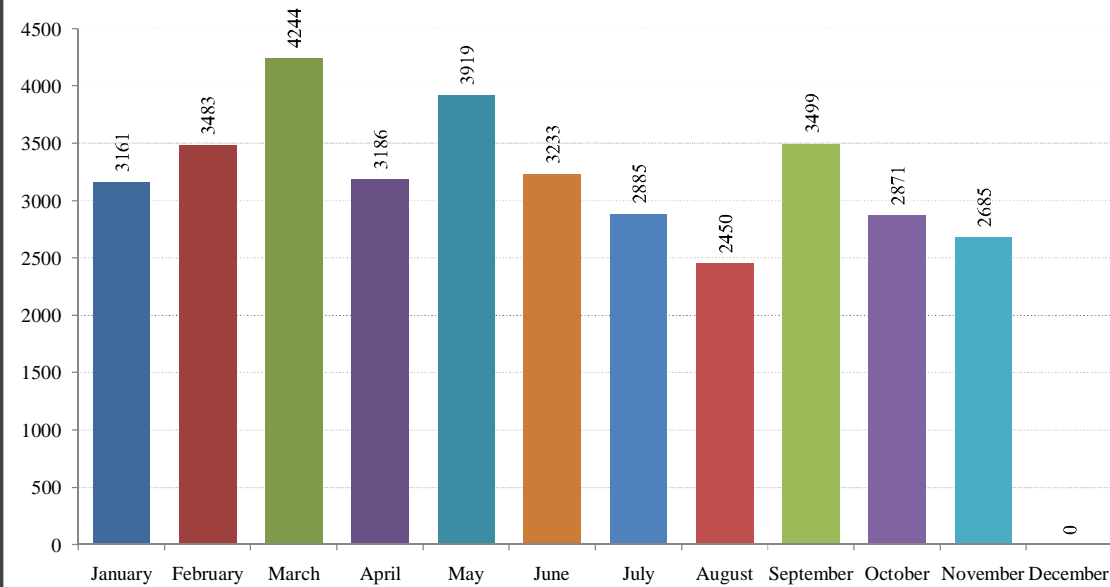


### LABORATORY

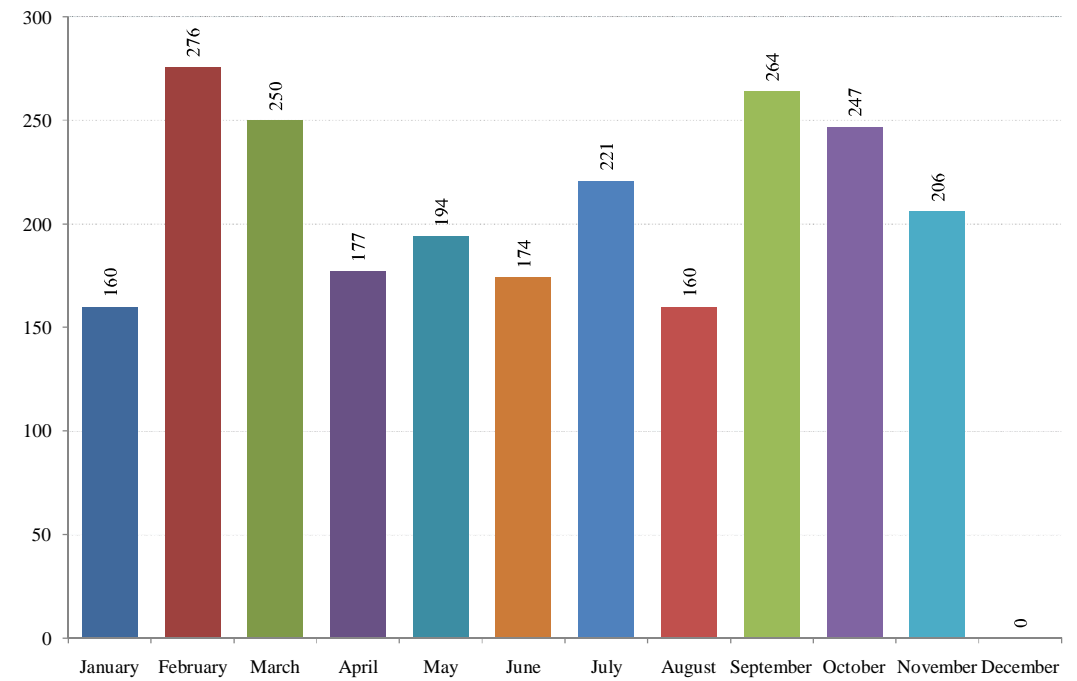


## DISTRICT HEADQUARTER HOSPITAL/TEACHING HOSPITAL BANNU

### X-RAY DEPARTMENT



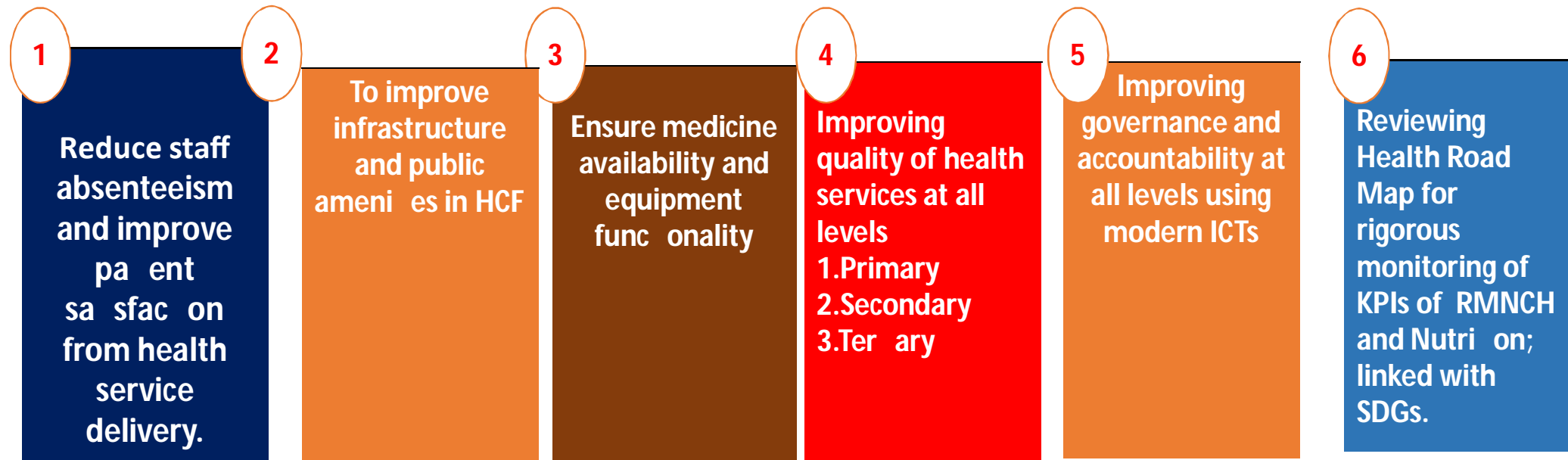
### MAJOR OPERATIONS







## SUBJECT OBJECTIVES



## IMPLEMENTATION OF HEALTH ROADMAP

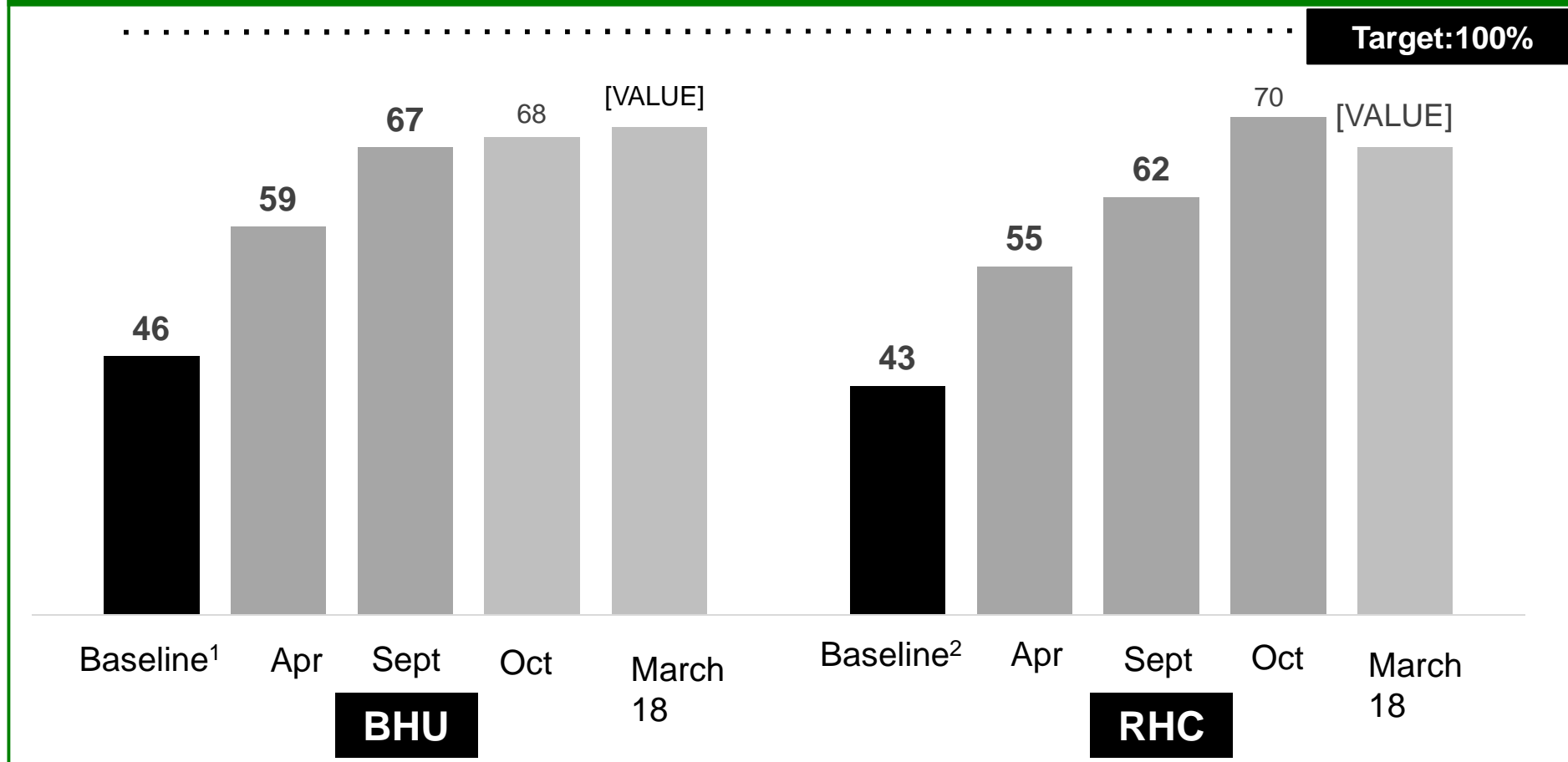
Collaboration with DFID , TRF+ & Roadmap Team to transform health services by ensuring ...

1. Availability of critical staff. (MO,MT,LHV,EPI)
2. Availability of Essential Medicines
3. Children receive routine immunization
4. Establishing reliable data system for health department.
5. Regular Reviews for evidence based decision making on data

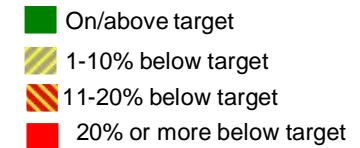
MEDICINE AVAILABILITY HAS IMPROVED HOWEVER FURTHER EFFORTS  
ARE NEEDED TO MEET THE TARGET
















### Availability of critical medicines

% availability of two week stock, April 15 – March 2018



## Summary of Sanctioned positions, Medicine Availability & Staff Attendance

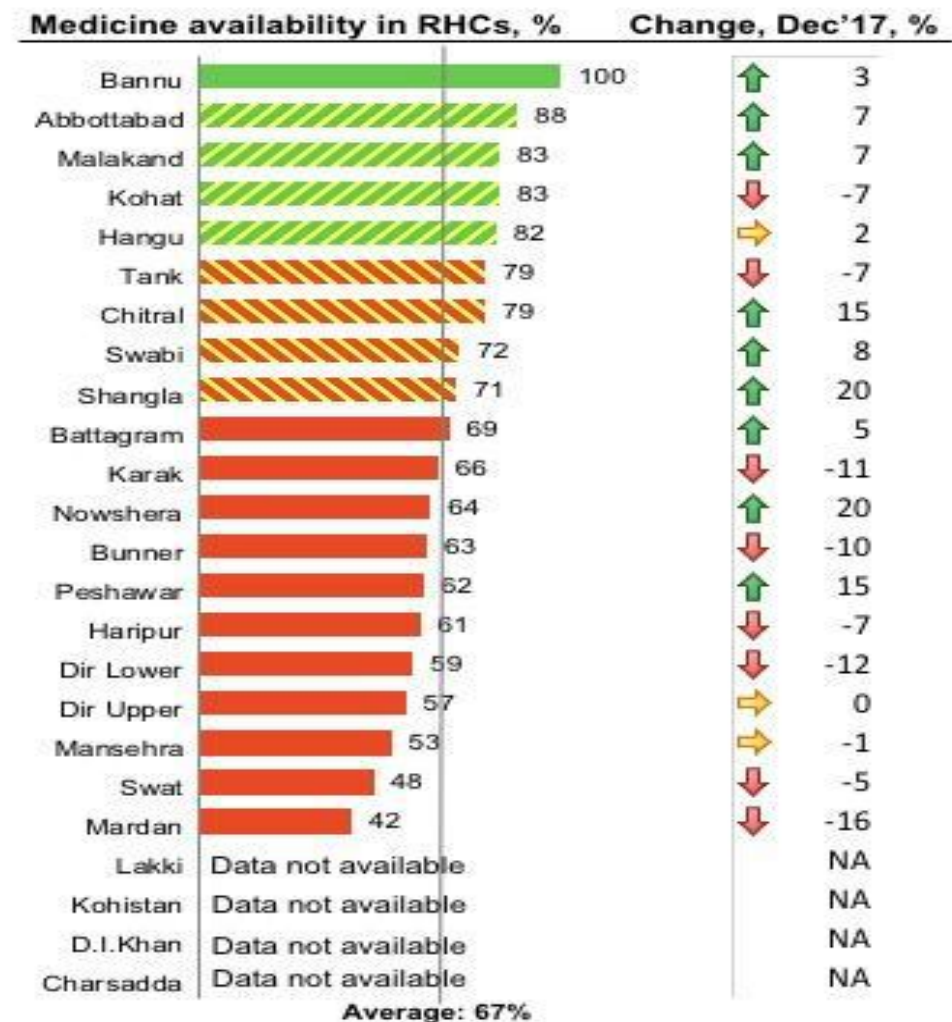
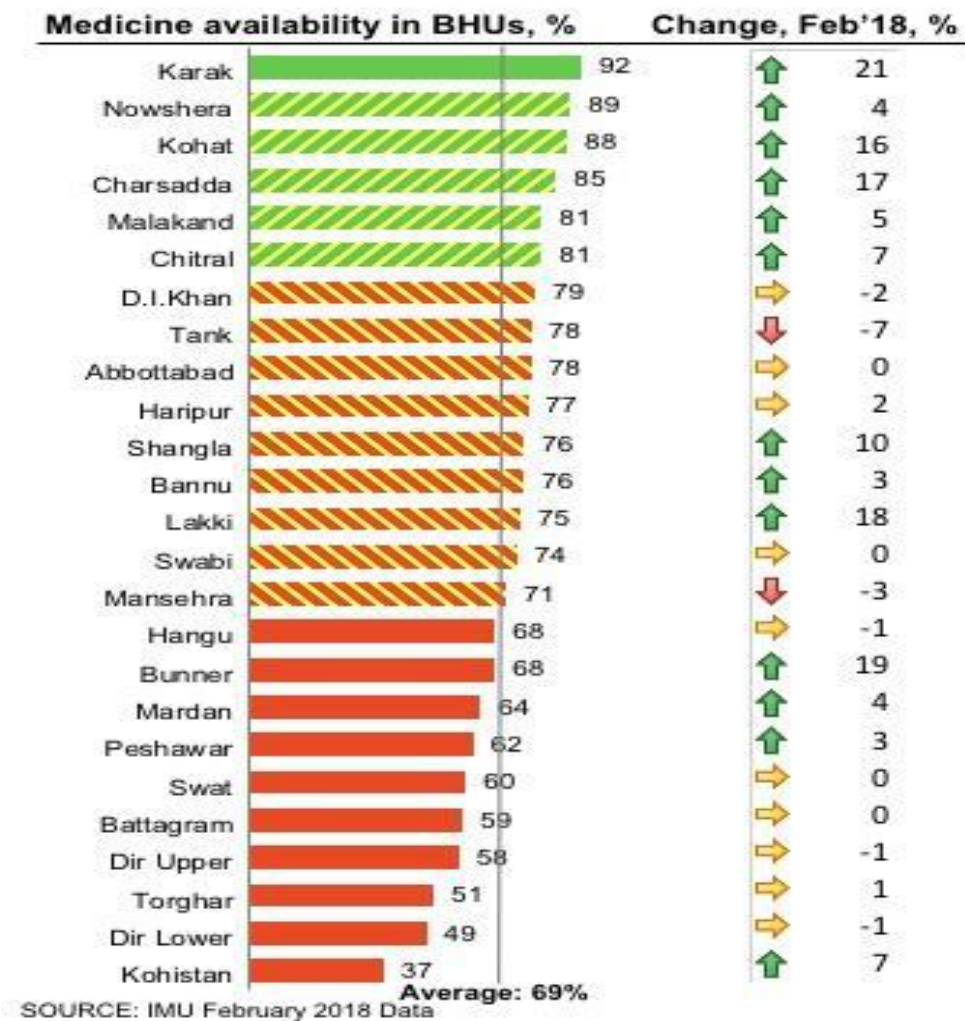
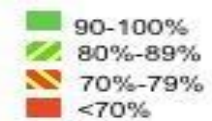


Indicators	Baseline	March 2017	Target	Status
%age of BHUs with MOs	77%	70%	100%	
%age of BHUs with MT	82%	70%	100%	
%age of BHUs with LHV	67.2%	70%	100%	
% of MO posts filled in RHC	54%	52%	100%	
% of MO posts filled in RHC	54%	52%	100%	
% of MT posts filled in RHC	54%*	70%	100%	
% of (BHU)Medicine availability	46%	68%	90%	
% of RHC Medicine availability	43%	67%	90%	
% of BHU MO Presence	64%	83%	80%	
% of BHU MT Presence	70%	79%	80%	
% of BHU LHV Presence	67%	72%	80%	
% of RHC SMO Presence	81%	56%	80%	
% of RHC MO Presence	68%	67%	80%	
% of RHC MT Presence	72%	83%	80%	
% of RHC LHV Presence	64%	68%	80%	

\* Based on new baseline of 2015  
 SOURCE: IMU data, DHO data



# Medicine Availability – March 2018







# KEY HEALTH STATISTICS

# HEALTH DEPARTMENT GOVERNMENT OF KHYBER PAKHTUNKHWA

## VISION

The Department of Health will reorganize the Health Sector in Khyber Pakhtunkhwa Province with clear distinction among regulation, financing and provision of health services in order to achieve the optimum benefit within the available resources for the people of Khyber Pakhtunkhwa Province. The government's role as a guardian for the health of the citizens of Khyber Pakhtunkhwa Province is to regulate the quality of health care services, health care providers and medical training institutions according to international standards.

## MISSION

The mission of the Health Department, Government of Khyber Pakhtunkhwa is to protect the Health of all citizens in the Province

# FUNCTIONS OF HEALTH DEPARTMENT

## **1.Leadership and Evidence-Based Direction Setting**

- i.Health Policy and Reforms
- ii.Health Planning, Financing and Budgeting

## **2.Health Support and Development**

- i.Health Promotion
  - a)Health Education
  - b)Community Involvement and Advocacy
- ii.Disease Prevention and Control
  - a)Communicable Diseases
  - b)Non-communicable Diseases
- iii.Occupational Health
- iv.Environmental Health
- v.Curative and Rehabilitative Care
  - a)Primary, Secondary and Tertiary Level Curative Services including Mental Health
  - b)Rehabilitative Care
- vi. Health Related Preparedness and Response to Disasters

## **3.Health Regulation and Enforcement**

- i.Health Personnel, Facilities and Services
- ii.Levying of Fees and Charges by Medical Professionals and Facilities
- iii.Quality Assurance and Control
  - a)Facilities and Services
- iv.Drugs Control
- v.Alternative Systems of Medicine
- vi.Food and Sanitation
  - a)Prevention and Control of Adulteration in Food
  - b)Monitoring & Reporting upon Safe Drinking Water Supply and Sanitation Services
- vii.Devices and Technology

## **3.Management Support Services**

- i.Health Human Resources Planning
- ii.Health Human Resource Development
  - a)Provision of Quality Medical and Allied Education
  - b)Pre-service Training of Support Medical and Health Professions
  - c)In-service Training of Health Human Resource
- iii.Health Human Resources Management
- iv.Logistics and Procurement
- v.Internal Audit and Accounting
- vi.Legal Services
  - a)Legal & Medico-legal Advice and Litigation
  - b)Law Review, Amendment, Formulation

## **4.Monitoring and Evaluation**

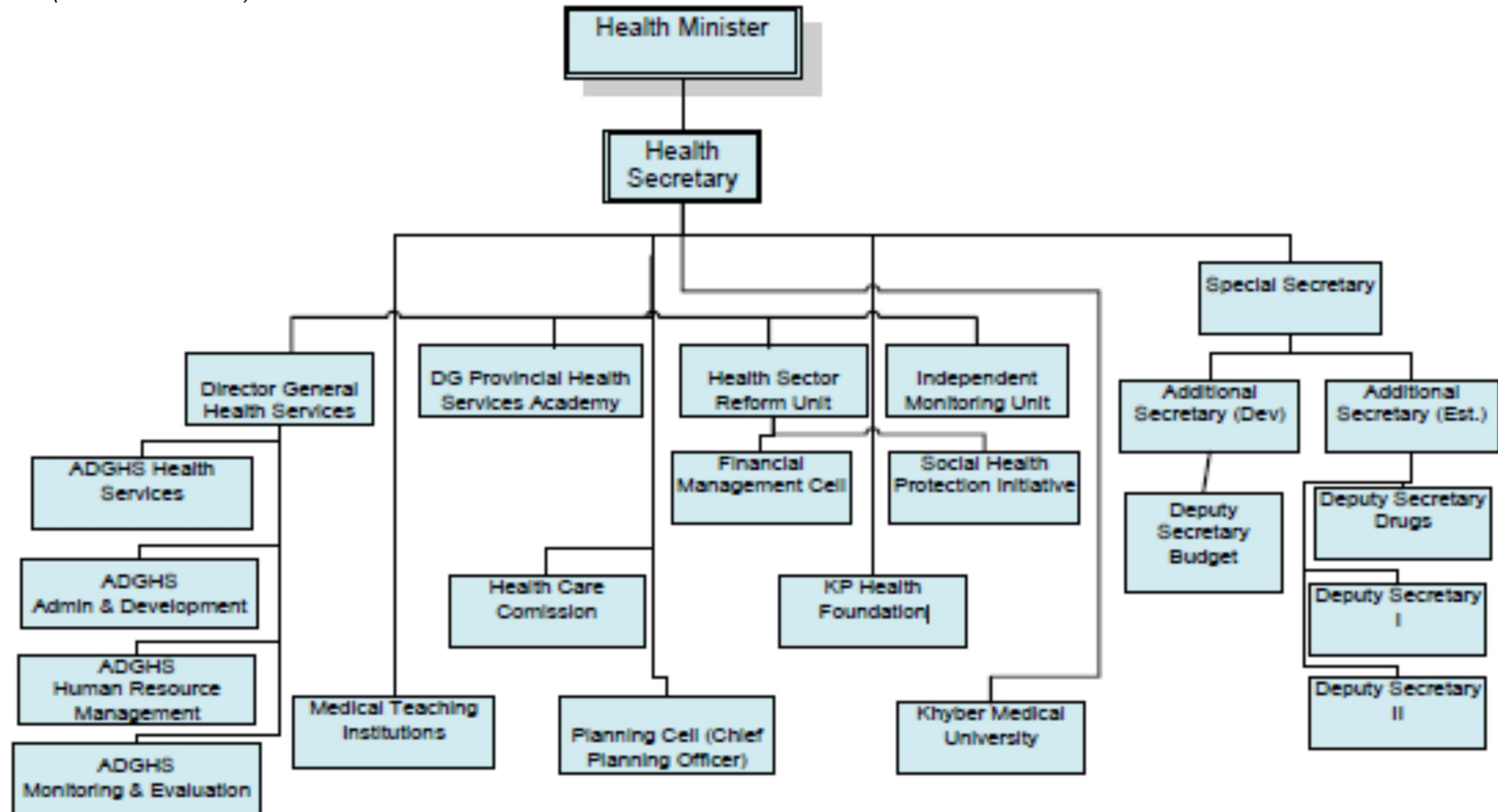
- i.Generation of Evidence
  - a)Performance Assessment
  - b)Information and Communication Systems
  - c)Health, Medical and Allied Research
- ii.Knowledge Management for Evidence Based Decision Making

## **5.Coordination**

- i.Ministries, Departments, Local Partners and Donors
- ii.International Partners and Donors

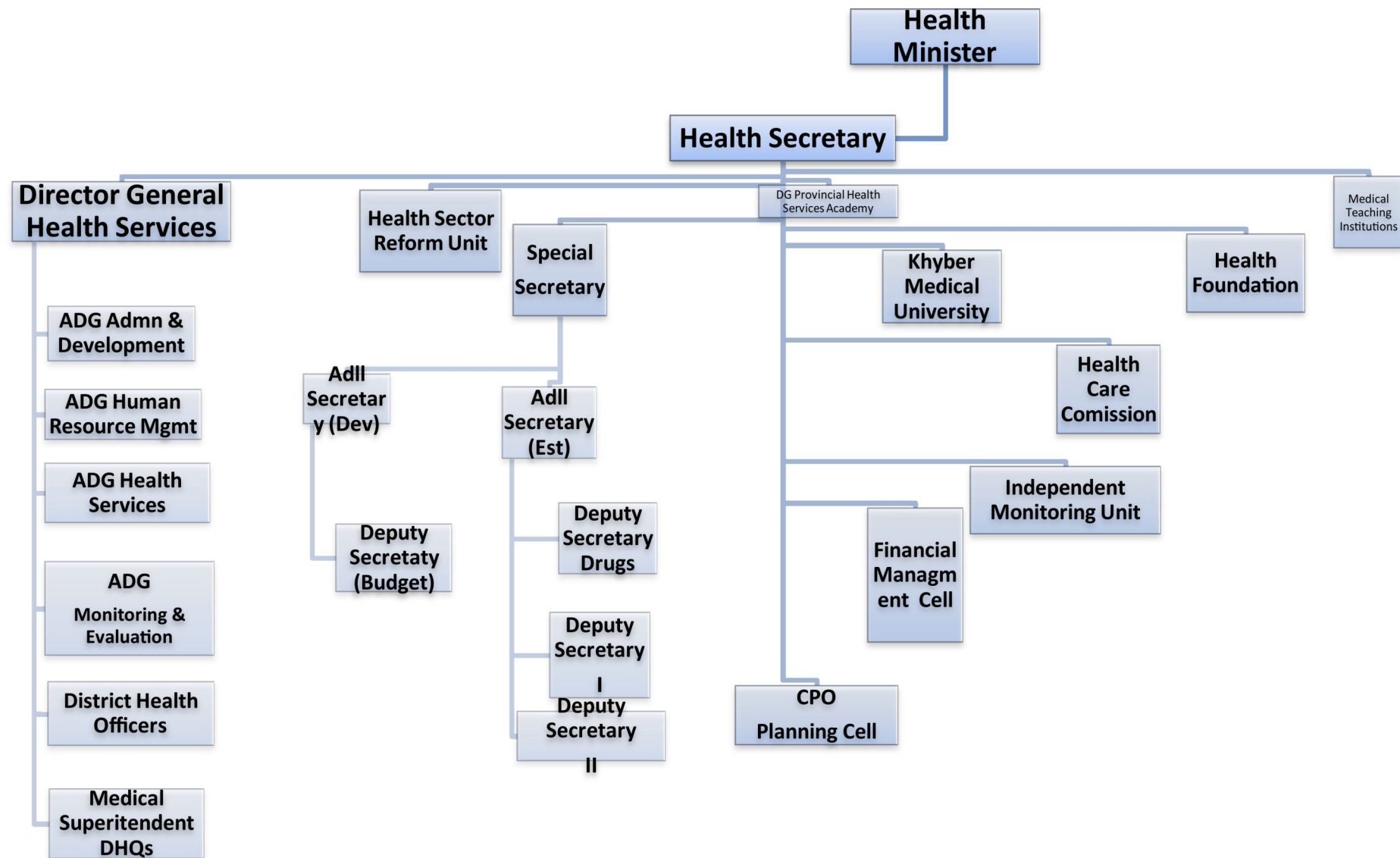
# DEPARTMENT OF HEALTH ORGANIZATIONAL ARRANGEMENT

(Health Secretariat)





# DIRECTORATE GENERAL OF HEALTH SERVICES KHYBER PAKHTUNKHWA





District Wise List of Health Facilities of the Province Khyber Pakhtunkhwa 2016																	
		Teaching/Tertiary & Secondary Health Care Facilities						Primary Health Care Facilities									
S.No	District	Category A MTIs	Category A Non MTIs	Category B	Category C	Category D	Other Hospitals which are still not categorised	THQs	DHQs	RHCs	BHUs	CDs	Sub Health Centers	MCH		Leprosy	
														Located With in Health Facility	Separate Setup	Located With in Health Facility	Separate Setup
		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIV	XV	XVI	XVII
1	Abbottabad	1	0	1	0	3	2	0	A	6	54	42	1	0	1	1	0
2	Bannu	1	0	0	0	2	2	0	B	2	34	50	0	0	3	1	0
3	Battagram	0	0	0	1	1	0	0	C	2	28	9	0	0	1	2	0
4	Buner	0	0	1	0	1	0	0	B	6	18	8	0	0	0	2	1
5	Charsadda	0	0	1	2	1	0	1 Cat-C	A	3	45	7	1	0	1	0	0
6	Chitral	0	0	1	0	2	0	2 Cat-D 1 RHC	B	7	19	28	0	0	2	3	0
7	D.I.Khan	1	0	0	0	4	3	3 Cat-D	A	4	39	36	2	4	3	0	0
8	Dir Lower	0	1	0	2	4	0	2 Cat-D	A	4	32	20	2	3	6	1	1
9	Dir Upper	0	0	1	0	3	1	0	B	4	30	11	2	1	0	1	2
10	Hangu	0	0	0	1	2	2	0	C	1	13	2	2	2		0	0
11	Haripur	0	0	1	3	3	2	0	B	7	40	9	6	1	1	1	0
12	Karak	0	0	1	2	3	1	1 Cat-C	C	7	19	2	0	2		0	0
13	Kohat	0	1	0	1	2	3	0	0	4	20	9	3	1	1	0	0
14	Kohistan	0	0	0	0	0	0	0	B (Under Const)	4	33	3	0	0	0	1	1
15	Lakki Marwat	0	0	1	2	2	0	0	B	4	27	9	2	0	2	0	0
16	Malakand	0	0	1	1	3	0	1 Cat-C	B	6	20	9	0	2	0	0	0
17	Mansehra	0	1	0	1	4	0	1 Cat-D	A	13	49	63	0	1	2	1	1
18	Mardan	1	1	0	1	4	0	1 Cat-C	A	5	49	18	0	0	2	1	0
19	Nowshera	1	0	1	0	5	0	0	A	4	32	12	1	0	2	0	0
20	Peshawar	3	0	1	5	5	0	0	0	3	47	36	0	4	0	0	1
21	Shangla	0	0	1	1	1	0	1 Cat-D 2 RHC	B	2	15	12	0	0	1	1	0
22	Swabi	0	1	0	2	2	0	1 Cat-C	C	8	38	13	0	0	3	1	0
23	Swat	0	1	0	2	5	0	1 Cat-C	0	3	41	18	0	2	1	3	0
24	Tank	0	0	0	1	1	0	0	C	2	18	10	2	0	1	0	0
25	Tor Ghar	0	0	0	0	0	0	0	C***	0	9	0	0	0	0	0	0
Total		8	6	12	28	63	16	18 (already included in catagories of health facilities)	22 (already included in catagories of health facilities)	111	769	436	24	23	33	20	7

Type of Health Facility	Number of Health Facilities
Civil Dispensaries (CDs)	436
Basic Health Units (BHUs)	769
Rural Health Centers (RHCs)	111
Maternal & Child Health Centers (MCHCs)	33
Sub Health Centers	24
Leprosy Centers	7
TB Clinics	6
<b>HOSPITALS</b>	
Type-A (MTIs)	8
Type-A (Non MTIs)	6
Type-B Hospitals	12
Type-C Hospitals	28
Type-D Hospitals	63
Other Hospitals	16
<b>TOTAL</b>	<b>1519</b>

Source: District Authorities-DHOs (Updated 2016-17)

## HEALTH STRATEGIES & MAJOR INTERVENTIONS OF THE GOVERNMENT

### OUTCOME 1: Enhanced access to essential health services especially the poor and vulnerable;

- I. Provision of Free emergency services worth **Rs.1.00 Billion**
- ii. Insulin for life programme
- iii. Provision of Incentives for Maternal Health Services worth **Rs. 300.00 Million**
- iv. Provision of Incentive for Immunization Services
- v. Implementation of MHSDP for primary health care under integrated project.
- vi. Social health protection initiative covering 69% of the population of the province.
- vii. Establishment of burn and trauma center at HMC and in the districts.
- viii. MHSDP at secondary level.
- ix. Up gradation of health facilities.
- x. Telemedicine project.
- xi. Construction of new hospitals
- xii. Steps taken towards improvement of rehabilitative services i.e deployment of physiotherapists at district and tehsil level.

### OUTCOME 2: A measurable reduction in burden of diseases especially among vulnerable segments of the population.

- I. Provision of Incentive for Immunization Services
- ii. Provision of free treatment for critical illness, the initiatives cover free treatment of critical diseases i.e. Renal Transplant, Renal Dialysis, Hepatitis, AIDs and Cancer.
- iii. Khyber Pakhtunkhwa Protection of Breast Feeding and Child Nutrition Act
- iv. Khyber Pakhtunkhwa Injured Persons (Medical Aid) Act
- v. Nutrition strategy already developed but missing under this area in the report.
- vi. Safe blood transfusion project also missing under this area.
- vii. No mention of hepatitis programme.

## HEALTH STRATEGIES & MAJOR INTERVENTIONS OF THE GOVERNMENT

### OUTCOME 3: Improved Human Resource Management.

- i. Computerization of personnel section and HRMIS to be mentioned
- ii. Number of new medical colleges established and recognized by PMDC is missing i.e SWABI and Nowsehera medical colleges.
- iii. Number of nursing schools registered by Pakistan Nursing schools,
- iv. Number of staff trained (induction, promotion and refresher) during the mentioned five years.
- v. Revamping of PGMI and notification of PGMI rules to be mentioned.
- vi. Introduction of BS Nursing as a standard requirement of nursing is also missing.
- vii. Enhanced stipend for nursing.

### OUTCOME 4: Improved Governance and accountability.

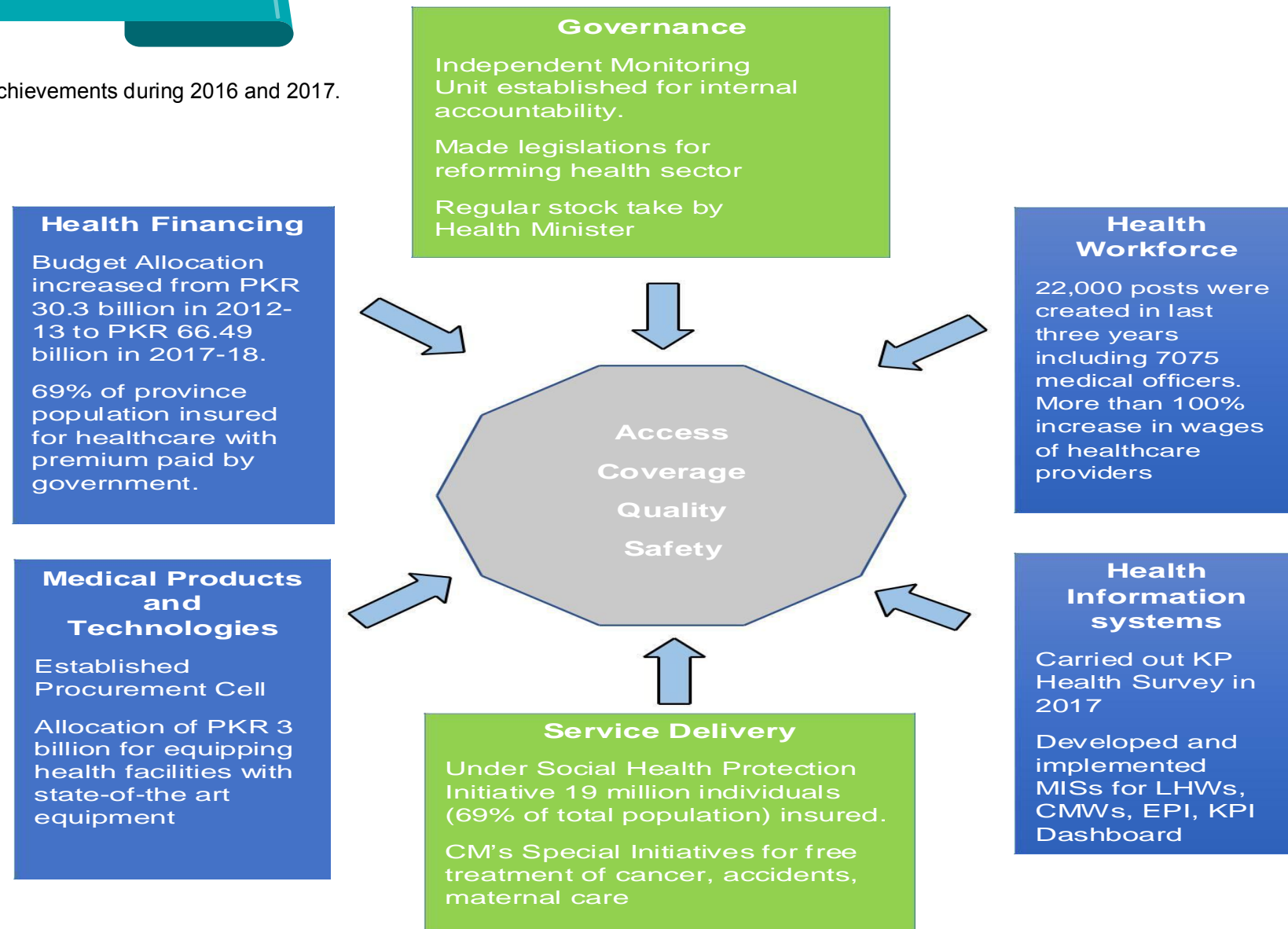
- i. Restructuring of DGHS Office.
- ii. Strengthening the fiduciary assurance function of health department including Financial Management, Procurement and internal audit.
- iii. Creation of posts of legal officers.
- iv. Establishment of IMU.
- v. MCC and rate contracting for equipment.
- vi. Autonomy to major hospitals under the MTI Act.

### OUTCOME 5: Improved regulation and quality assurance.

- i. Food safety and Halal Food Authority.
- ii. Drug regulation and strengthening of the drug testing laboratory.
- iii. Amendments in the drug rules.

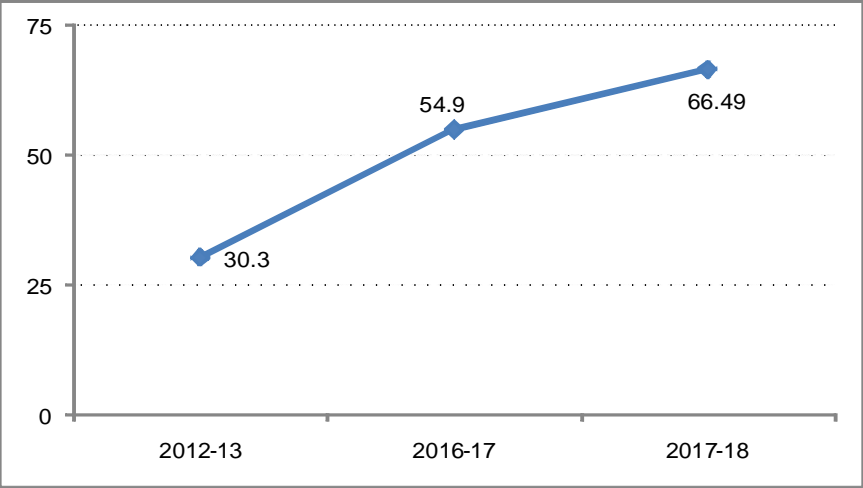
## Key Achievements 2016-17

The following figure depicts key achievements during 2016 and 2017.

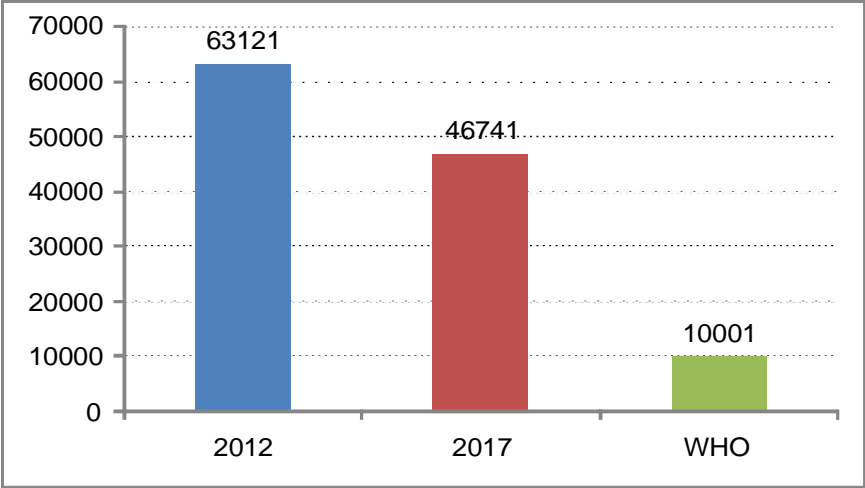


Key Achievement 2016-17 by Building Blocks of Health System at a glance

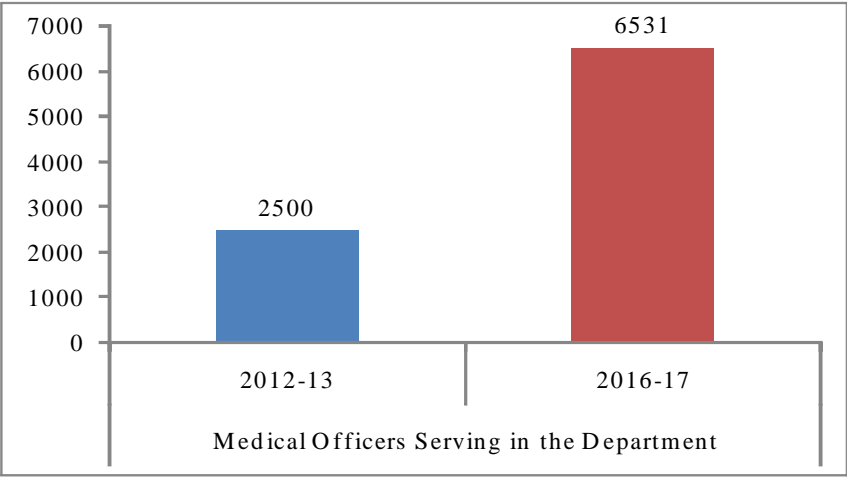
HEALTH SECTOR BUDGET (IN BILLIONS)



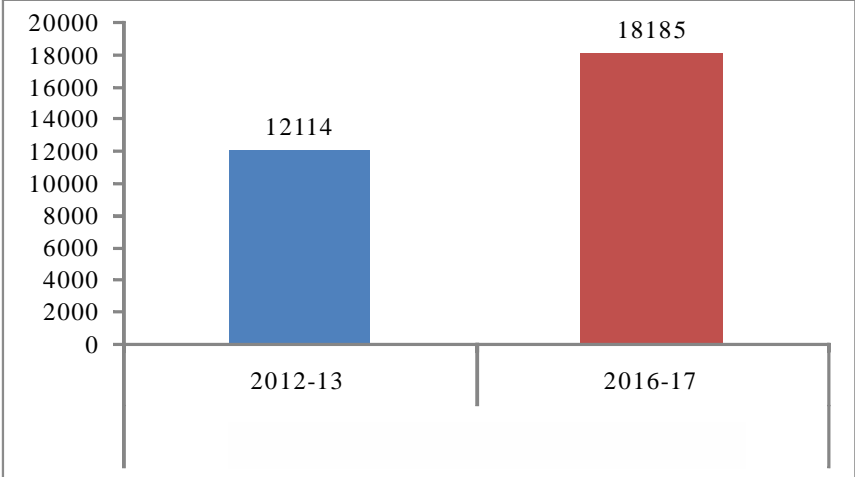
POPULATION PER DOCTOR RATIO



MEDICAL OFFICERS SERVING IN THE DEPARTMENT

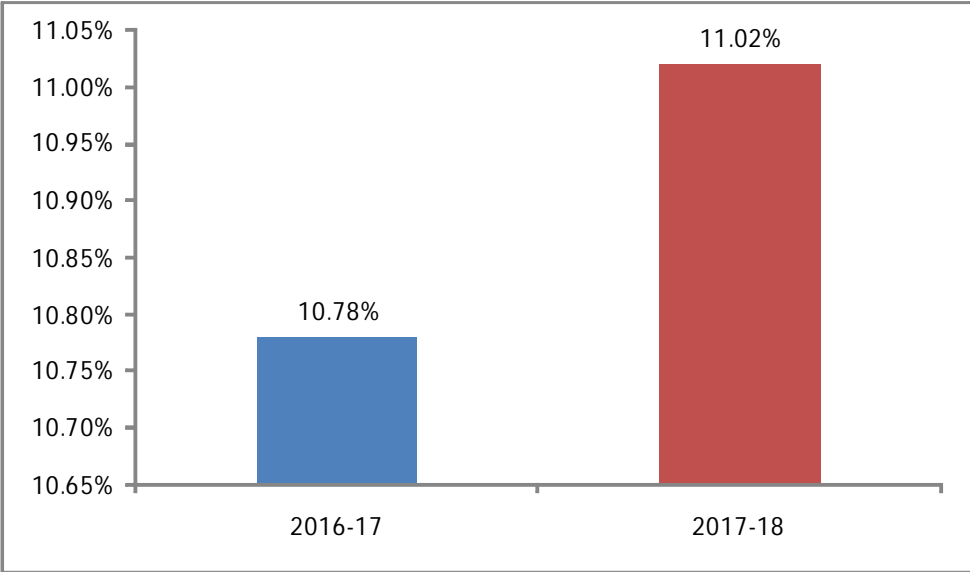


NUMBER OF BEDS IN GOVERNMENT HOSPITALS

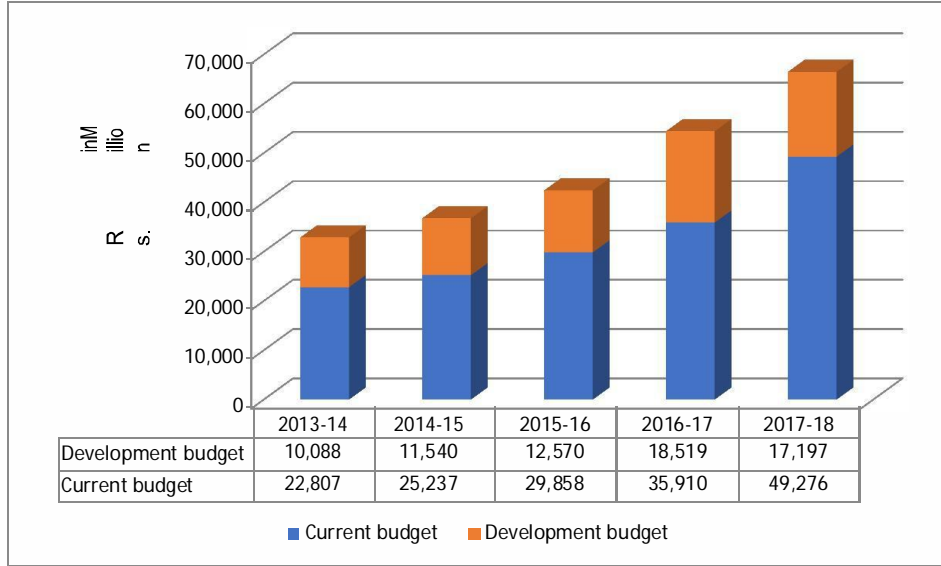




HEALTH BUDGET ALLOCATION  
(CURRENT AND ADP)



Share of Health Sector in total budget of KP



HUMAN RESOURCE FOR HEALTH

Cadre	Number 2016	Number 2017
Teaching	1655	1655
District Specialists	834	1028
Medical Officers	4927	6531
Dental Surgeons	254	254
Drug Inspectors	40	40
Nurses	4672	4672
Paramedics	11900	11900
Ladv Health Workers	13600	13600
Others	10848	10848
<b>TOTAL</b>	<b>48730</b>	<b>50528</b>

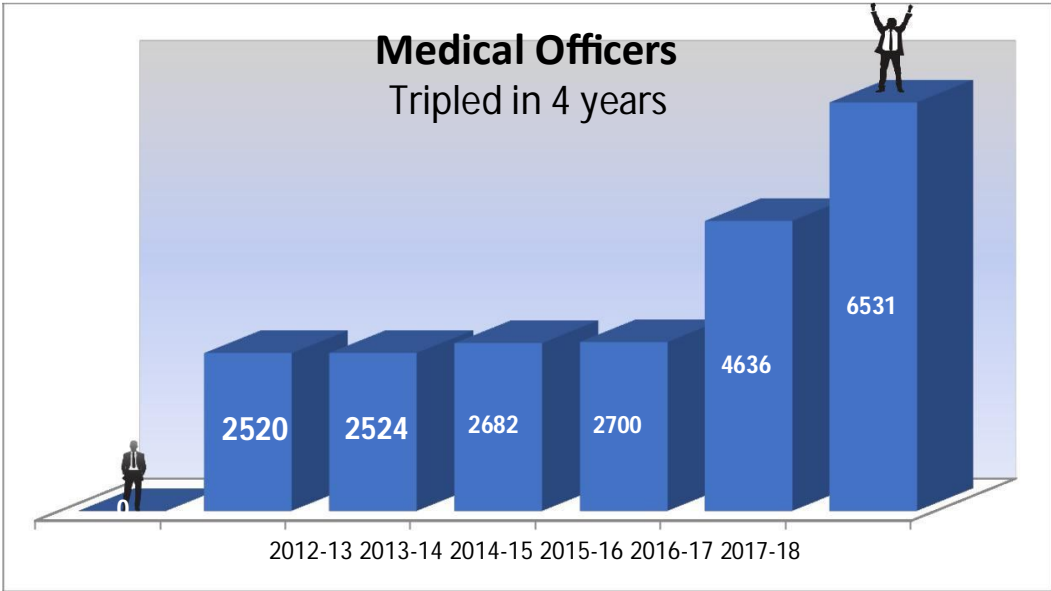
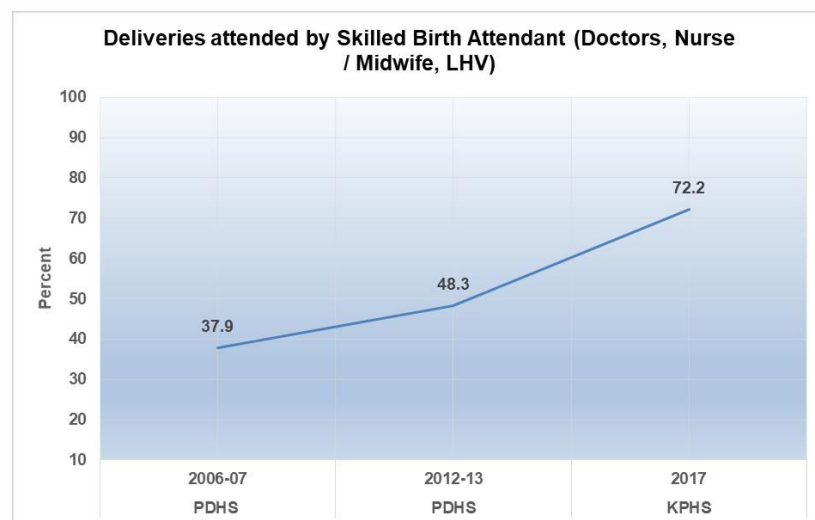


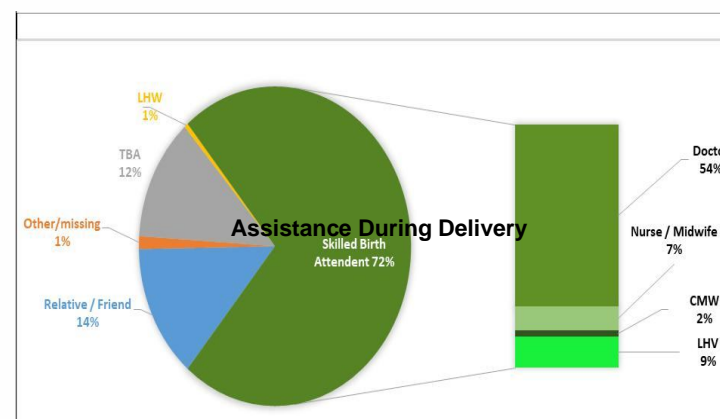
Figure 9: Number of Medical Officers in DOH

## KHYBER PAKHTUNKHWA HEALTH SURVEY

DOH with financial support of DFID and in collaboration with Bureau of Statistics, Planning and Development Department and TRF+ conducted a household survey in KP to determine the status of key outcome of Provincial Health and Nutrition Programme. The sample size included a total of 15,167 eligible mothers and 15,487 eligible children aged 0-23 months. Approximately 75% households from rural and 25% from urban areas were selected. The survey revealed encouraging improvements in health outcomes in the province.

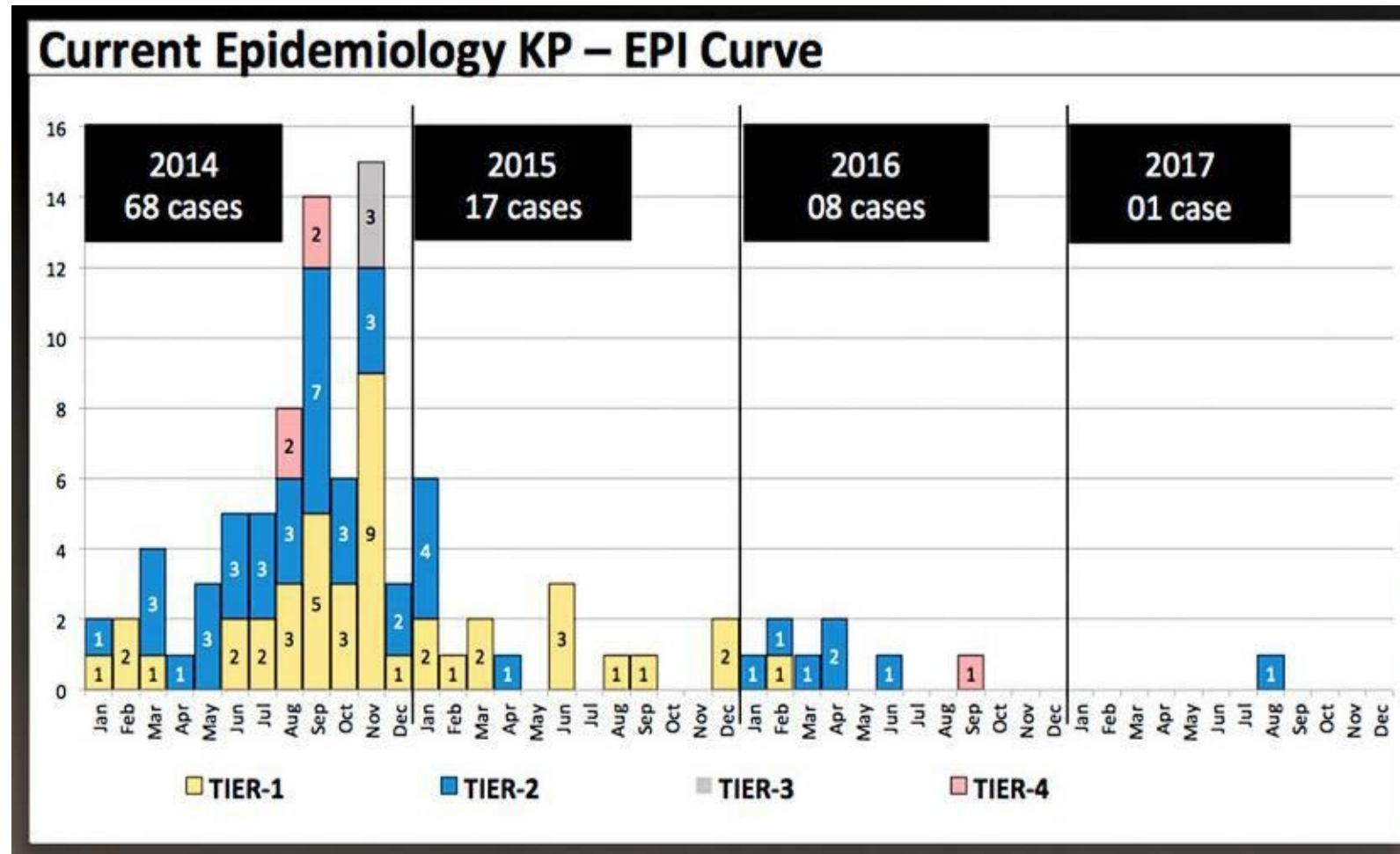


**Skilled Birth Attendance:** The survey results show that skilled birth attendance increased from 48.3% in (2012-13) to 72% in 2017, where 54% deliveries were conducted by doctors, 9% by Lady Health Visitors (LHVs), 7% by nurse or midwife and 2% by Community Midwives.



## POLIO UPDATE

The Health Department Khyber Pakhtunkhwa is cognizant of the importance of the Polio Eradication Initiative and moving towards right direction in removing this menace from the province as evident from the fact that the number of confirmed polio cases declined from 68 in 2014 to only 1 case in 2017.



Polio Update Khyber Pakhtunkhwa

# LIST OF NOTIFIABLE DISEASES

(Case Definition, Alert Threshold, Outbreak Threshold, Reporting Timeline)  
Khyber Pakhtunkhwa Public Health (Serveillance and Response) Act 2017

S.#	Disease/Condition	Case Definition	Alert Threshold	Outbreak Threshold	Reporting Timeline when state of Health Emergency declared	Reporting Timeline Otherwise (Maximum)
1	Probable Diphtheria	Any person with upper respiratory tract illness characterized by an adherent membrane on the tonsils, pharynx and/ or nose and any one of the following: laryngitis, pharyngitis or tonsillitis.	1 probable case	1 confirmed case who has been laboratory confirmed by culture or linked epidemiologically to a laboratory confirmed case	Immediate	24 Hours
2	Crimean Congo Hemorrhagic Fever (CCHF)	Patient with sudden onset of illness with high grade fever (38.5°C) for >3 days and <10 days especially in CCHF endemic areas and among those in contact with a confirmed patient or handling animals and raw animal products and when fever does not respond to antibiotics or anti-malarial treatment.	1 CCHF Case	1 lab confirmed case, if CCHF 6 or more cases in one location + 1 lab confirmed case, if DHF.	Immediate	24 Hours
3	Suspected Measles	Any person with fever and maculopapular rash & one of the following: Cough, Coryza, Conjunctivitis OR Any person in whom a clinician suspects measles infection.	1 suspected case	Cluster of 5 or more clinical cases in a single location over a 30 day time period with at least 1 lab confirmed case.	Immediate	24 Hours
4	Acute Flaccid Paralysis	Any child under 15 years of age with recent onset of floppy weakness of any cause including Guillain Barre Syndrome or any person of any age with a paralytic illness. In whom poliomyelitis is suspected.	1 suspected case	1 case with lab confirmed wild polio virus in stool sample.	Immediate	24 Hours
5	Acute Watery Diarrhoea/ Suspected Cholera	Non endemic areas; Any person aged 2 years or more with severe dehydration or death from acute watery Diarrhoea. During Outbreak; Acute watery diarrhoea with or without vomiting in a patient aged 5 years or more.	1 lab confirmed cholera case, or Cluster of 6 or more AWD in single locality	1 lab confirmed cholera case, or a cluster of 6 or more AWD in a single locality	Immediate	Immediate
6	Tuberculosis	TB presumptive is a patient who represents with symptoms or signs suggestive of TB, as: A. Patient with cough of two or more than two weeks, Or B. Cough less than two week with symptoms: ● Sputum (Blood stained or without blood) ● Fever usually at night ● Weight loss ● A History of previous TB in a patient or TB history in family or close contact	1 Confirm Case	Clustering of cases	24 Hours	7 Days
7	Suspected Dengue Fever	Any person having acute onset of fever (>38°C) for 2-10 days with at least two of the following manifestations: Severe headache, retro-orbital pain, myalgia/ arthralgia.	1 probable case is an Alert.	Cluster of 6 or more cases in one location + 1 lab confirmed DF case	Immediate	24 Hours
	Dengue Hemorrhagic Fever	A probable or confirmed case of Dengue in whom haemorrhagic tendencies is evidenced by; Petechiae, Ecchymoses or Purpura Bleeding mucosa, GIT, injection sites Or Haematemesis or Melena	1 Suspected case	One lab confirmed case	Immediate	Immediate

S.#	Disease/Condition	Case Definition	Alert Threshold	Outbreak Threshold	Reporting Timeline when state of Health Emergency declared	Reporting Timeline Otherwise (Maximum)
8	Cutaneous Leishmaniasis	Any person having skin lesions on the face neck, arms, and legs (exposed body parts), which began as nodules and turned into skin ulcers, eventually healing but leaving a depressed scar.	1 case outside endemic area, 3 cases in endemic area.	Cluster of 6 or more cases in one location.	48 Hours	7 Days
	Visceral Leishmaniasis	A person with clinical symptoms of Prolonged irregular fever, splenomegaly and weight loss where fever lasts more than 2 weeks & does not respond to anti-malarial drugs.	1 suspected case	1 Confirm Case	Immediate	24 Hours
9	Severe Acute Respiratory Syndrome (SARI)	Any person with acute respiratory infection with history of fever of ≥38°C and cough with onset within last 10 days and requires hospitalization.	2 times the mean of number of cases of the previous 3 weeks for a given location	Clustering of cases in a single location above the alert Threshold.	Immediate	24 Hours
10	Suspected Meningococcal Meningitis	Any person having sudden onset of fever >38°C axillary and one or more of the following: Neck stiffness Altered consciousness Other meningeal signs or petechial or purpurral rash In infants under one year of age, suspect meningitis when fever is accompanied by bulging fontanelle.	3 or more suspected cases in one location or 1 confirmed case of N. Meningitidis	2 or more lab confirmed cases from a single location.	Immediate	24 Hours
11	Cutaneous Anthrax	Skin lesion evolving over 1 to 6 days from a papular through a vesicular stage, to a depressed black eschar/scab invariably accompanied by oedema AND has an epidemiological link to a suspected or confirmed Anthrax animal case or contaminated animal product.	1 case	1 Lab Confirmed Case	Immediate	Immediate
12	HIV/AIDS	Lab based surveillance	1 case	1 Lab Confirmed Case	24 Hours	7 Days
13	Pandemic Influenza (H1N1)	Any person with clinical compatible illness or who died of an unexplained acute respiratory illness who is considered to be epidemiologically linked to a probable or confirmed case	1 suspected case is an alert and requires an immediate investigation	1 Lab Confirmed Case	Immediate	Immediate
	Avian/ Human Influenza (H5N1)	Any person who has been in contact with suspected avian influenza case, or living in area where birds/ chickens have died or were sick in last 2 weeks, or living in endemic area, presenting with Respiratory tract illness characterized by fever (Tem >38°C) and one or more of the following: Cough, Sore throat, Shortness of breath	1 case	1 Lab Confirmed Case	Immediate	Immediate
14	Neonatal Tetanus (NNT)	Suspected Case: Any neonatal death between 3 and 28 days of age in which the cause of death is unknown OR any neonate reported as having suffered from neonatal tetanus between 3 and 28 days of age and not investigated. Confirmed case: Any neonate with normal ability to suck and cry during the first 2 days of life, and who between 3 and 28 days of age cannot suck normally and becomes stiff or has convulsions or both. Hospital-reported cases are considered confirmed.	1 case requires investigation for safe birth practices and immunization	Not applicable	24 Hours	7 Days

**Note:** In case of meeting the Alert/Outbreak Threshold, all health professionals (Public and Private) shall report such a case to the concerned Disease Surveillance Reporting Office or District Disease Surveillance Centre as the case may be, following protocols defined in Khyber Pakhtunkhwa Public Health (Surveillance and Response) Act, 2017.



**Performance of Health Department  
as depicted in a few slides of a presentation**





## ► INSTITUTION BUILDING

Medical Teaching Reforms Act, 2015

**Improves Health Education & Tertiary Care**

Health Care Commission Act, 2015

**Sets service delivery standards for Public & Private Sector**

KP Health Foundation Act, 2015

**Encourages Public Private Partnership for outsourcing management & services**

Food Safety Authority Act, 2014

**Ensures basic rights of public towards hygienic intake**

## ► INSTITUTION BUILDING

**Health Management Boards** for Secondary Care Hospital (in process)

Independent Monitoring Unit - Reports available on web >> [www.imuhealthkp.gov.pk](http://www.imuhealthkp.gov.pk)

Category-I powers to DHOs

**E-Office** in Health Department - efficiency & transparency

**Fiduciary Risk Management**

Internal Audit branch

Financial Management Cell

Procurement Cell based on latest ICTs

## ► INVESTMENT

**Budget increased** from 2011-12 Rs. 8 billion to Rs 25 billion **(212% )**

Development budget increased from 2012-13 Rs 7.5 Billion to Rs. 10.54 billion **(40% )**

Over **22000 posts created** in last 3yrs - 15000 in current budget

Improvement of **MTIs - Rs 1.77 Billion**

Refurbishment of **DHQs - Rs 1.12 Billion**

**4 Billion** reserved for improving District & Tehsil Hospitals

## ► INVESTMENT – HUMAN RESOURCE (RS5.6 BILLION)

Category	Previous	Present	%age
House Officer	24000	62000	128%
TMOs	42000	103000	110 %
HPA for Doctors	10000/15000	Upto 140,000	1300%
HPA for Nurses/Paramedics	0	10,000	

## ► INVESTMENT – HUMAN RESOURCE (RS5.6 BILLION)

Nurses Mess Allowance from Rs 500 to Rs. 8000

**1500%** ↑

Dress Allowance from Rs. 600 to Rs 3100

**416%** ↑

Stipend for students from Rs 3500 to Rs 5000

**42%** ↑

## ► HUMAN DEVELOPMENT – ‘TASK SHIFTING’

12187 Paramedics given 2-step upgradation **Rs1.6 Billion**

**Postgraduate & MSc Courses** initiated at PGPI

Existing Admissions doubled to 740

Human Resource will be also exported

After 1984 legal status given to Paramedic Education through Allied Health Sciences Act, 2016

Working on Nurses Education

## ► MEGA PROJECTS- NEAR COMPLETION

- Casualty Block KTH - 265 bedded •Allied Building LRH- 4 stories- 600 bedded
- DHQ Malakand - 210 bedded •Peshawar Institute of Cardiology -250 bedded
- Saidu Teaching Swat - 500 bedded •Casualty block DHQ Haripur
- Gomal Medical College DI Khan •Lecture theatres and mortuary at KGMC
- DHQ Nowsehra - 350 bedded •DHQ Mardan - 350 bedded
- IKD Peshawar - 50 bedded

## ► MEGA PROJECTS - PRO-POOR (SEHAT INSAF CARD)

- Started in 4 District for 21 % of poorest
- Extended to **all 25** at cost of **Rs. 5.4 billion (2yrs)**
- Population coverage 50%, 1.8 million families or 12 million individuals**
- Coverage enhanced from Rs 175,000 to 210,000
- Tertiary care add-on Rs 300,000 per family**
- Package includes post delivery transport, referral transport

## ► MEGA PROJECTS - PRO-POOR (SEHAT INSAF CARD)

- Free emergency treatment Rs 1 billion per year** since last 3 years  
**18 million beneficiaries** till date.
- Free treatment chronic illnesses**  
Diabetes, Renal disorders including post transplant medications  
Rs 925 million - **beneficiaries 87968** patients till date
- All cancers covered from this year** - cost Rs. 1.9 billion  
beneficiaries **up from 800 to 3500**
- Rs. 6.17 billion committed for EPI (5 years **2.3 million children**)

## ► DRUG REGULATIONS

- Drug Inspectors fully mobilized
- Over 700 out of 2000 drug cases pending since 2005 decided
- Pharmacy Council issued **2800 licenses** regulating retail, wholesale and distribution of drugs-employment generator
- MCC formulary (437 drugs) based on **generic name** finalized and advertised
- State-of-the-Art Drug & Food Testing Laboratories upgraded last year**

## ► ISSUES

- Court Cases - Legal Officers sanctioned in Budget
- Stay Orders - Dates
- Gap in Management Cadre - promotions
- Pace enhancement of case clearance

## ► CARRY FORWARD

- Consolidation and Implementation – Districts & Laws
- Independent System for District & Tehsil Hospitals through community participation
- Transparent outsourcing of Services, Diagnostics under PPP through Health Foundation
- Correction of HR skill mix
- Telemedicine
- HR shortage through no retirement age and domicile





## Final Presentation of the Department to CM



# Health Department KP

MAY 23, 2018

Health Department Khyber Pakhtunkhwa



## Legislative Achievements

**Law:** Health Care Commission Act, 2015

**Purpose:** To regulate public & private sector hospitals, clinics, diagnostic laboratories – To act against quacks.

**Progress:** 1550 premises sealed, fine accrued Rs 19.010 Million, geo-Survey of 4800 private hospitals, clinics & labs completed

Regulations framed & Notified

Health Department Khyber Pakhtunkhwa



## Legislative Achievements

**Law:** Food Safety Authority Act, 2014

**Purpose:** To ensure the provision of pure, safe & healthy food to the population throughout KP & to abolish malpractices & adulteration in food commodities [Later on Halal Food also added as mandate].

**Progress:** Just initiated its activities [independent of HD] – Fines Rs 11.945 Million, Improvement Notices 7397, Hotels Inspected 1266, Schools & Colleges Inspected 692, Milk discarded in litres 9040, Expired items discarded KGs 10080

Regulations framed & Notified

Health Department Khyber Pakhtunkhwa



## Legislative Achievements

**Law:** Medical Teaching Institutions Reforms Act, 2015

**Purpose:** Provide administrative & financial autonomy through private members Boards of Governor to tertiary care hospitals to improve governance & accountability

**Progress:** 9 x Tertiary Care / Teaching Institutions working as MTIs

Rules notified by Govt, Regulations by each MTI

Health Department Khyber Pakhtunkhwa





## Legislative Achievements

2013-2018

**Law:** Injured Persons and Emergency (Medical Aid) Act, 2014

**Purpose:**

Unhindered treatment of injured persons brought to hospitals, without police interference and without any negatives for the one who has brought them

Health Department Khyber Pakhtunkhwa



## Legislative Achievements

2013-2018

**Law:** Transplantation Regulatory Authority Act, 2014

**Purpose:** To regulate, monitor & control transplantation of human organs through various committees constituted under the Act. Establish a Provincial Regulatory & Regional Networks for evaluating quality and outcome of transplant centers.

**Progress:** 1 x Kidney Transplant license given to IKD, 2 x under process

5 x Cornea Transplant applications & 1 x Liver Transplant application for license near finalization

Rules notified

Health Department Khyber Pakhtunkhwa



## Legislative Achievements

2013-2018

**Law:** Health Foundation Act, 2016

**Purpose:** Public Private Partnership for outsourcing management or services, through solicited and un-solicited proposals – contract management

**Progress:** Issues with Board have delayed on ground progress

Rules Notified

Health Department Khyber Pakhtunkhwa



## Legislative Achievements

2013-2018

**Law:** Blood Transfusion Safety Authority Act, 2016

**Purpose:** To regulate safe blood, safe blood products and allied matters

**Progress:** Authority working, Regional Blood Centre in Hayatabad providing blood products to Hospitals in Peshawar

3 x Regional Blood Centres under development in Swat, Abbottabad & DI Khan

Procedure for registration of private blood banks etc launched

Regulations Notified

Health Department Khyber Pakhtunkhwa





### Legislative Achievements

2013-2018

**Law:** Protection of Breast Feeding & Child Nutrition Act, 2016

**Purpose:** To advance the benefits of breastfeeding & ward against child malnutrition

**Progress:** Provincial Committee fully active, notices issued to formula baby milk manufacturers, baby friendly hospitals / units under development with UNICEF partnership, OTP Centres established in each District for treatment of severely mal-nourished

Rules notified

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Tuberculosis As Notifiable Disease Act, 2016

**Purpose:** Declares TB as notifiable through registered medical practitioners, private clinics, private hospitals, registered practitioners, community leaders and in charge of covered premises, by formulating Tuberculosis Notification Forms through the Tuberculosis Control Program of the province.

Over the counter sale of TB Drug banned to ward against Drug Resistance.

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Mental Health Act, 2017

**Purpose:** all matters relating to promotion of mental health & prevention of mental disorder; develop & establish new provincial standards for care & treatment; recommend measures to improve existing mental health services & setting up of child and adolescence, substance abuse, drug dependence, psycho geriatric, forensic, learning disability; prescribe for setting up and functioning of mental health services & facilities in KP

**Progress:** 2 x meetings of Authority held, Consultant being hired to frame rules, 250 x bedded Fountain House in Hayatabad under completion

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Public Health (Surveillance & Response) Act, 2017

**Purpose:** Provides method for implementation & enforcement of measures to prevent & control spread of disease, provide for disease surveillance, detection and reporting system from grass root to provincial level

**Progress:** Authority declared health emergency during Dengue last year, Integrated Disease Surveillance & Reporting System PC-I recently approved

Health Department Khyber Pakhtunkhwa





### Legislative Achievements

2013-2018

**Law:** Vaccination (Amendment) Act, 2017

**Purpose:** Amended Vaccination Ordinance 1958 to take out smallpox alone, and bring in all Vaccine Preventable Diseases. Schedule details diseases, preventive vaccines, time-lines for vaccination

**Progress:** Vaccination Officers, Committees notified in Districts, Jails etc. Punitive clauses NOT being used for now except notices to parents

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Faculty of Paramedical & Allied Health Sciences Act, 2017

**Purpose:** To regulate, promote and streamline the education, training, examination and registration of Para-medics and allied health professionals pertaining to preventive, promotive, curative, rehabilitative, environmental and occupational health sectors in the province

**Progress:** New registration & examination system set in place and working

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Tibb & Homeopathy Employees Regularisation Act 2016

**Purpose:** Regularization of services of staff

**Progress:** 48 x Doctors, 77 x Ministerial staff regularized

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Lady Health Workers Program Employees Regularization Act 2014

**Purpose:** Regularization of Staff

**Progress:** 13500 LHWs, LHSs & allied staff regularized, service structure under process

Health Department Khyber Pakhtunkhwa





### Legislative Achievements

2013-2018

**Law:** Medical Officers and Dental Surgeons (Regularisation of Services) Act 2015

**Purpose:** Regularization of MOs & Dental Surgeons

**Progress:** 412 x Medical Officers, 29 x Dental Surgeons regularized

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Appointment of GAVI, JICA, Adhoc & Contract Employees Act, 2016

**Purpose:** Regularization of staff

**Progress:** 290 x Doctors regularized  
296 x Project Staff of GAVI, JICA regularized

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Regularization of Employees Act, 2018

**Purpose:** Regularization of staff

**Progress:** 712 x Doctors, Staff of Permanent Projects regularized

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Law:** Employees of Health Department (Regularization of Service) Act, 2016

**Purpose:** Regularization of staff

**Progress:** 2380 x Medical Officers regularized

Health Department Khyber Pakhtunkhwa





### Legislative Achievements

2013-2018

**BILL:** Prohibition of Tobacco and Protection of Non- Smokers Health Bill, 2016

**Purpose:** To provide for prohibition of tobacco in public places and public service vehicles and to protect the health of non-smokers

**Progress:** Referred to Committee after introduction in Provincial Assembly

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Bill:** Sehat Insaf Bill, 2018

**Purpose:** To provide for health protection to the eligible beneficiaries of Sehat Insaf Card Program

**Progress:** Stands introduced in Assembly

Health Department Khyber Pakhtunkhwa



### Legislative Achievements

2013-2018

**Bill:** Healthcare Service Persons and Institutions (Prevention of violence and Damage to Property) Bill, 2018

**Purpose:** To provide for mechanism of protection and compensation to health employees and property both in public and private sector.

**Progress:** Stands cleared by Cabinet

Health Department Khyber Pakhtunkhwa



### Legislative Achievements - Rules

2013-2018

IN ADDITION TO ONES INDICATED WITH ACTS

1. 3 x Lady Health Workers Rules in 2015
2. Medical Attendance Rules, 2016
3. Nurses Service Rules, 2016 – amended again in 2017
4. Drug Rules 1982 – amended in 2017
5. Paramedics Service Rules, 2017
6. Post Graduate Medical Institute (Functions) Rules 2017

Health Department Khyber Pakhtunkhwa





### Developmental Achievements Total completed 15, Beds 2085

2013-2018

S#	Names of Hospitals/Projects	No. of Beds	Starting Year	Completion Year
1.	Women and Children Hospital Peshawar	228	2007-08	2013-14
2.	Category-C Hospital Takhfihai, Mardan	110	2011-12	2013-14
3.	Emergency Unit in DHQ Hospital Kohat	40	2011-12	2013-14
4.	Cat-C Hospital Khawazakhela Swat	110	2009-10	2013-14

Health Department Khyber Pakhtunkhwa



### Developmental Achievements Total completed 15, Beds 2085

2013-2018

5.	Category-D Hospital Doaba District Hangu.	40	2004-05	2014-15
6.	Category-C Hospital Pattan District Kohistan	110	2005-06	2014-15
7.	Shaheed Farid Khan DHQH (Cat-C) Hangu	110	2004-05	2014-15
8.	Up-Gradation of DHQ Hosp Kohat to Type-A	140	2011-12	2014-15
9.	Category-D Hospital Boi Abbottabad	40	2014-15	2014-15
10.	Construction of Gynae/Peds Wards at Ayub Teaching Hosp Abbottabad	400	2009-10	2014-15

Health Department Khyber Pakhtunkhwa



### Developmental Achievements Total completed 15, Beds 2085

2013-2018

11.	Expansion/Extension of Institute of Kidney Diseases Hayatabad Peshawar.	120	2012-13	2015-16
12.	Establishment of Peds surgery ward at Gynea block in LRH Peshawar.	32	2014-15	2015-16

Health Department Khyber Pakhtunkhwa




### Developmental Achievements Total completed 15, Beds 2085


2013-2018

13.	Construction of Casualty at DHQ Hospital Haripur.	40	2014-15	2016-17
14.	Establishment of Casualty block at KTH Peshawar.	265	2011-12	2016-17
15.	Establishment of Peshawar Institute of Cardiology	300	2008-09	2016-17

Health Department Khyber Pakhtunkhwa



 <b>Developmental Achievements</b> <b>Total NEAR completion 15, Beds 2626</b> <span>2013-2018</span>				
S#	Name of Hospitals	No. of Beds	Starting Year	Expected completion
1.	RHC Shewa Swabi	14	2015-16	2017-18
2.	RHC Martung Shangla	14	2015-16	2017-18
3.	RHC AzaKhel Nowshera	14	2014-15	2017-18
4.	RHC Charbanda Mardan	14	2015-16	2017-18
5.	THQ Hospital Kulachi to Cate-D Hospital DI Khan	40	2014-15	2017-18
6.	Cat-C Hosp Topi Swabi	40	2013-14	2017-18
7.	Cat-D Hosp Yar Hussain	40	2014-15	2017-18
8.	Addl Ward LRH Pesh	800	2007-08	2017-18
9.	Saidu Hosp Swat.	500	2005-06	2017-18
Health Department Khyber Pakhtunkhwa				

 <b>Developmental Achievements</b> <b>Total NEAR completion 15, Beds 2626</b> <span>2013-2018</span>				
S#	Name of Hospitals	No. of Beds	Starting Year	Expected completion
10.	Old DHQ Hospital Swabi.	210	2015-16	2018-19
11.	Qazi Hussain Ahmad Med Comp Nowshera	140	2005-06	2017-18
12.	Benazir Children Hospital Mardan	200	2011-12	2018-19
13.	Maternity and Children Hospital Charsadda.	200	2012-13	2017-18
14.	Cat-D Hosp Manki Sharif, Dag Ismail Khel & Ziarat Kaka Sahib Nowshera.	120	2014-15	2018-19
15.	DHQ Hospital Malakand.	210	2011-12	2017-18
Health Department Khyber Pakhtunkhwa				

 <b>Developmental Achievements</b> <span>2013-2018</span>	
<ul style="list-style-type: none"> <li>▶ ADP increased from Rs.7575.100 million in 2012-13 to Rs. 12000.000 million in 2017-18 (Increase of 58%)</li> <li>▶ <b>Establishment &amp; Initiation of classes in 02 Medical Colleges ( Nowshera Medical College, Gajju Khan Medical College Swabi)</b></li> <li>▶ Approval of projects of 02 Medical Colleges (ZAB Medical College Peshawar &amp; Timergira Medical College, Dir-Lower)</li> <li>▶ <b>Upgradation of the existing Toxicology/DNA Laboratory of Khyber Medical College, Peshawar. (completed)</b></li> </ul>	
Health Department Khyber Pakhtunkhwa	

 <b>Developmental Achievements</b> <span>2013-2018</span>	
<p><u>MTIs/Teaching Hospitals</u></p> <ul style="list-style-type: none"> <li>▶ Improvement and beautification of MTIs (Rs. 1.770 Billion) (<b>completed</b>)</li> <li>▶ Expansion/Extension of Institute of Kidney Dieases, Hayatabad Peshawar(<b>completed</b>)</li> <li>▶ Upgradation of existing Accident &amp; Emergency Unit and ICU at HMC, Peshawar. (<b>Work in progress</b>)</li> <li>▶ Improvement/Upgradation of Gynea and Eye Department in KTH Peshawar. (<b>completed</b>)</li> <li>▶ Establishment of Orthopedic and Spine Surgery Block in HMC, Peshawar. (PC-I approved)</li> </ul>	
Health Department Khyber Pakhtunkhwa	





## Developmental Achievements

2013-2018

### Specialized Hospitals

- ▶ Khyber institute of Neuro Sciences and Clinical Research (KINAR) in Mardan. (**approved**) (Cost: Rs. 3.05 billion)
- ▶ Upgradation of Paraplegic Centre Hayatabad, Peshawar (Rs. 175 million) (**Work in progress**)
- ▶ Establishment of Safe Blood Transfusion Project (Phase-II)( Regional Centres at Abbotabad, Swat and D.I.Khan) (**Donor assisted project activities in progress**)

Health Department Khyber Pakhtunkhwa



## Developmental Achievements

2013-2018

### Preventive

- ▶ Rs. 6.5 billion for immunization Support Program (**Project activities in progress**)
- ▶ Integrated HIV, Hepatitis and Thalasemia Control Program at a cost of Rs.500.000 million. (**Project activities in progress**)
- ▶ Integrated Vector Control Program. (**Project activities in progress**)
- ▶ Strengthening of TB Control Programme in Khyber Pakhtunkhwa. (**Project activities in progress**)

Health Department Khyber Pakhtunkhwa



## Developmental Achievements

2013-2018

### Pro-Poor Initiatives

- ▶ **Free treatment to Cancer Patients** (Rs. 1.945 billion) (Ambit increased from blood & breast cancer to ALL cancers)
- ▶ **Free treatment to Emergency Patients** (Rs. 500 million per Year) (Project activities in progress)
- ▶ **Insulin for Life: Free treatment for Diabetic Patients** (On going )
- ▶ **Rs 2700** for pregnant women subject to pre & post natal visits & delivery at facility – **103,000 beneficiaries** till date

Health Department Khyber Pakhtunkhwa



## Developmental Achievements


2013-2018

### Sehat Insaf Card

- ▶ **Free treatment to 70 % population of KP – Households 2.4 Million – Size 8 individuals**
- ▶ **Over 1000 procedures for INDOOR patients**
- ▶ **106 public & private sector hospitals**
- ▶ **Rs 2.64 Billion free treatment provided till date**
- ▶ **Transgenders included recently**

Health Department Khyber Pakhtunkhwa



 <b>Institutional Achievements – Budget</b> <b>Pak Rs Billions</b>			2013-2018
Budget	2012-13	2017-18	
Current (Prov +District)	22.8	49.28	
ADP	9.9	17.2	
		Prov Dev =16.47	
		District De = 0.72	
Total	32.7	66.47+ 13 Special grant = 79.47	
KP Budget	303	603	
%age overall Budget	10.79 %	13.17 %	


Health Department Khyber Pakhtunkhwa

 <b>Institutional Achievements - HR</b>					2013-2018
Posts	2013	2018	Increase in Number	Increase %age	
Med Officers (BS-17 till 20)	3,639	8801	5,162	142 %	
District Specialists	280	931	651	232 %	
Management	325	488	163	50%	
Dental Surgeons	254	397	143	56%	
Nurses	4,000	6003	2,003	50%	
Paramedics	13,000	14,542	1,542	12%	
LHW+LHS	13678	16977	3,299	24%	
Grand Total	35176	48,139	12,963	39%	

Health Department Khyber Pakhtunkhwa


 <b>Institutional Achievements</b> <b>Retention of HR</b>			2013-2018
Category	Previous	Present	
House Officer (Stipend)	24000	62,000	
TMOs (Stipend)	42000	103,000	
HPA for Doctors	10000/15000	Upto 140,000	
HPA Nurses/Paramedics	0	10,000	
Stipend Student Nurses	3500	20,000	
Nurses Mess Allowance	500	8,000	
Nurses Dress Allowance	600	3,100	


Health Department Khyber Pakhtunkhwa


 <b>Institutional Achievements</b> <b>Revised Service Structures</b>					2013-2018
4-Tier of Medical Officer Cadre					
Sr	Grade	Previous	Formula %	Present	
1.	20	24	3%	171	
2.	19	357	19%	1087	
3.	18	706	36%	2060	
4.	17	4636	42%	2403	


Health Department Khyber Pakhtunkhwa



<div>  <div> <b>Institutional Achievements</b>  <b>Revised Service Structures</b> </div> <div>2013-2018</div> </div>				
4-Tier of Dental Surgeon Cadre				
S.#	Grade	Previous	formula %	Present
1.	20	02	3%	11
2.	19	22	19%	67
3.	18	44	36%	127
4.	17	285	42%	148
Health Department Khyber Pakhtunkhwa				

<div>  <div> <b>Institutional Achievements</b>  <b>Revised Service Structures</b> </div> <div>2013-2018</div> </div>				
3-Tier of Specialist Cadre				
S.#	Grade	Previous	Revised Ratio % 2017	Present
1.	20	16	+10%	93
2.	19	119	+40%	372
3.	18	796	-50%	466
Health Department Khyber Pakhtunkhwa				

<div>  <div> <b>Institutional Achievements</b>  <b>Revised Service Structures</b> </div> <div>2013-2018</div> </div>				
7-Tier of Paramedics Cadre				
Grade	Previous posts	Revised % age	Revised posts	Difference
BS-12	13,732	40%	5,818	- 7905
BS-14	349	30%	4,362	+ 4013
BS-16	266	20%	2,908	+ 2642
BS-17	177	8.0%	1,164	+ 987
BS-18	12	1.95%	284	+ 272
BS-19	5	0.04%	5	0
BS-20	1	0.01%	1	0
	= 14542		= 14542	
Health Department Khyber Pakhtunkhwa				

<div>  <div> <b>Institutional Achievements</b>  <b>Revised Service Structures</b> </div> <div>2013-2018</div> </div>		
Nurses Cadre		
S#	Scale	Total
1	BS-16 (Charge Nurse)	5,667
2	BS-17 (Head Nurse)	201
3	BS-17 (Nursing Superintendent/Nursing Instructor)	103
4	BS-18 (Chief Nursing Superintendent / Director Nursing / Principal / Vice Principal / Nursing Tutor)	31
5	BS-19 (Principal Post Graduate College of Nursing Hayatabad)	01
Grand Total		6,003
*30% quota in promotion has been reserved for qualified nurses		
Health Department Khyber Pakhtunkhwa		





## Institutional Achievements Appointments

2013-2018

► **Total Doctors – 6915**

- General Cadre- 5446
- Dental Surgeons- 219
- District Specialist- 976
- Teaching- 274

► **Total Others – 8759**

- Nurses - 2305
- Drug Inspectors - 25
- Pharmacists - 28
- Chemist - 1
- Paramedics – 3101
- LHWS/LHS - 3299

Health Department Khyber Pakhtunkhwa



## Institutional Achievements Promotions

2013-2018

► **Total Doctors – 2182**

- Management -156
- General Cadre - 1677
- Dental Surgeons- 130
- District Specialist-178
- Teaching- 73

► **Total Others –229**

- Drug Inspectors = 14
- Analysts = 3
- Nurses = 162
- Paramedics = 49
- Others = 1

Health Department Khyber Pakhtunkhwa



## Institutional Achievements

At a glance

2013-2018

► **Total Appointments – 15674 (less class-IV)**

► **Total Promotions Grade 17 & above - 2411**

► **Total Regularizations- 17744**

Health Department Khyber Pakhtunkhwa



## Other Achievements

### Investment in Equipment FY 2017-18

2013-2018

Facility (Total = Rs 13.613 Billion)	Rs (M)
Additional ward at LRH	2264
Casualty Block at KTH	2714
Institute for Kidney Diseases (IKD)	600
Peshawar Institute of Cardiology	2400
Saidu Group of Hospitals Swat	2000
Postgraduate Medical Institute (PGMI)	235
Hepatitis Centre at Nishterabad, Peshawar	400
District Hospitals from DHQ to BHU/CD	3000

Health Department Khyber Pakhtunkhwa





### Other Achievements

2013-2018

#### 120 bedded Burns & Trauma Centre Hayatabad

- Failure of WWB to provide committed amount
- GoKP with support of a Donor Agency undertook measures to functionalize state-of-the-art facility by 30<sup>th</sup> June 2018
- Rs. 1.767 billion have already been provided.
- 347 posts have already been created by Finance Department and advertised on 16-04-2018.
- Building is already complete and awaiting fixture of HVAC which will arrive by end of May.
- Orders for medical equipment already placed.

Health Department Khyber Pakhtunkhwa



### Other Achievements

2013-2018

#### 300 Bedded Peshawar Institute of Cardiology

- ▶ Building for both cardio & cardio vascular completed
- ▶ 297 posts created by Finance Department
- ▶ Budget for current year already released
- ▶ Orders for medical equipment placed

Health Department Khyber Pakhtunkhwa



### Other Achievements

2013-2018

#### Polio Eradication initiative

	2014	2015	2016	2017	2018
Campaign	34	13	18	15	06
Children	67,029,298	43,972,000	55,170,000	44,850,000	26,289,400
Cases	68	17	8	1	0

Health Department Khyber Pakhtunkhwa




### Provincial Quality Control Board

2013-2018

Year	No Cases Decided by Board	No of FIR Lodged	No of cases referred to Drug court
2013	291	12	109
2014	355	20	180
2015	600	16	280
2016	1100	8	560
2017	1950	16	1418
2018 (Jan-May)	2155	14	1657
total	6451	86	4204

Health Department Khyber Pakhtunkhwa

	<b>KP Pharmacy Council</b>			2013-2018
Year	Certificates Issued Category A	Certificates Issued Category B	Certificates Issued Category C	
2013	237	391	60	
2014	451	310	45	
2015	621	387	267	
2016	757	138	1681	
2017	765	120	4238	
2018 till May	346	74	385	
<b>Total</b>	<b>3177</b>	<b>1420</b>	<b>6676</b>	

Year	2013-2018
No of Verifications Issued	3000
Good standing certificates Issued	1500

Health Department Khyber Pakhtunkhwa

# KP Drug Control

2013-2018

## CONSOLIDATED REPORT OF DRUG CONTROL KHYBER PAKHTUNKHWA

Yearwise	2014	2015	2016	2017	2018 (upto April)	TOTAL
Inspection made	4155	14249	15155	16740	7660	57959
Seizure made			1808	1326	870	4004
Sample taken	2995	3804	6571	6860	2811	23041
Sample declared as substandard/ unregistered	57	208	522	395	155	1337
Samples declared as spurious	22	3	58	56	1	140
Medicine shops sealed	9	484	625	458	362	1938
FIRs made	1	18	20	15	10	64
Cases referred to PQCB		626	1621	1402	804	4453
Prosecution in Drug Court	86	93	226	313	428	1146
Cases Decided by Drug Court	7		77	92	87	263
Fine imposed by Drug Court	287000	2492400	3098700	2315250	7779000	15972350

Health Department Khyber Pakhtunkhwa



# EPI REPORT 2017



## EXECUTIVE SUMMARY

EPI Khyber Pakhtunkhwa made a remarkable progress in improving vaccination coverage over a period of time. There has been notable improvement in life-expectancy at birth through vaccination; and marked reduction in mortality and morbidity. The achievements in health Department and EPI in specific would not have been possible without the continuous support from government, stakeholders, development partners and media. Since the inception of immunization program to the date it has been an established and successfully public health intervention.

The policies and strategies formulated have been instrumental in achieving the outcomes. The indicator of fully immunized against 10 vaccines preventable disease has been improved to 68%. The vaccine administration rate for pentavalent vaccine against Diphtheria, Pertussis, Tetanus, Hepatitis B and Haemophilus influenza type b has significantly improved to 95% which is considered as indicator of access in EPI while Measles vaccine coverage ranges to 78%. Although the milestones are yet to be achieve to eradicate and eliminate vaccine preventable diseases from Khyber Pakhtunkhwa and Pakistan.

The overall coverage of fully immunize is about 68% in which, 6 districts including Haripur, Charsadda, Dir Upper, Dir Lower, Swat and Mansehra achieved more than 85% coverage.

BCG is highest of all antigens indicates almost 94% have access on immunization services. A significant increase in BCG coverage has been witnessed from year 2016, in which 14 district have achieved more than 90% including Peshawar, Haripur, Dir Upper, Bannu, Dir Lower, Kohat, Shangla, Charsadda, Swat, Abbotabad, Mansehra, Malakand, Mardan & Swabi. While 5 districts have more than 80% coverage which include Buner, Nowshera, Battagram, D.I. Khan & Hangu. Rest of the districts lying between 60 and 70 % coverage.

The coverage of 1<sup>st</sup> and 3<sup>rd</sup> dose of pentavalent-III & PCV-10 is 98% & 87%, respectively while IPV coverage is 83%. 18 districts achieved more than 90% coverage, 3 districts have coverage more than of 80% while only 3 districts ranges in between 70 to 80 percent.

Measles containing vaccine (MCV) is administered against contiguous disease of measles. The coverage of MCV-I & II is 82% and 60% respectively. 13 districts having more than 80% coverage for MCV-I while other ranges in between 79 to 52.

The achievements have been possible through introduction of interventions and its implementation. Government of Khyber Pakhtunkhwa approves PC-I for cost of **6,493.6 million for 5 years to strengthen EPI Programme**. Vaccination ordinance revision is another crucial step to reach every child and make mandatory that every child should receive vaccine against vaccine preventable diseases. Notification for each action has been issued and distributed in relevant sections for its implementation.

Network of health facilities providing services have been accessible to all people by increasing health units to 1251 only 10% of total UCs re lacking EPI centers. These centers are confined for provision of services for population who visits health facility, and at the same time outreach services provided to hard to reach community. The participation of private sector has also been increased.



Human resources required for almost all levels are being sanctioned and hired across Khyber Pakhtunkhwa with the ultimate goal to reach every community and child for provision of basic vaccination. 1588 new EPI technicians hired and trained for quality services.

Only hiring had not been the goal, along with hiring the staff facilitated by providing POL cost to conduct outreach sessions.

eVAAC : Innovative technologies for oversight and robust monitoring has been introduced. In order to overcome this long standing issue of monitoring, the Government of Khyber Pakhtunkhwa has launched a web-based GPRS Tracking System (eVACC) for supervisors and vaccinators. 1,500 android phone has been provided with installed eVACC software, for proper functioning to monitor each vaccinator.

Real time data entry is a great achievement and data quality improved with introduction of EPI MIS having (5) modules which include HR and infrastructure details, EPI achievements, VPD surveillance, vaccines Management and cold chain inventory. The reporting has been monitored at all levels as regular intervals.

Credible data is one of the key cornerstone for proper monitoring and evaluation of Programme performance and plan for improvement. To identify the weaknesses and strengthens of data quality, Data Quality Assessment (DQA) activity conducted and on basis of activity its findings formulated a plan of action to improve its performance which implemented throughout the year.

Capacity building is the basic requirement of any job. The existing managerial EPI staff and all other technical staff has been trained based on their job requirements. Around One hundred and fifty district trainers had been trained as Master trainers at provincial level for conducting further trainings at the district level.

Vaccine quality and recommended temperature is the basic requirement for efficacy of vaccine. In this context EVM secretariat established. State of the art technologies has been installed to strengthen monitoring of cold chain temperature records at provincial level. It includes installation of Smart-view Cold Room Temperature Monitoring systems for cold rooms. Staff has been hired for EVM secretariat.

Divisional cold chain ware-houses rehabilitated/ reconstructed and ILRs (electrical & solar) provided at Provincial, District and Health Facility Level. Cold Chain equipment gradual replacement, 429 ILR (263 solar ILR and 166 electric ILR) and 900 data loggers also been installed to record 30-days temperature.

Measles Mop-up conducted in to boost the population immunity based on Measles risk assessment in two Phases. In Phase-I 449 out of 1,010 Union Councils of 24 districts were considered for Mop up activities. According to data 324366 children (84%) of the target was administered with MCV against measles disease for target age group of 6m-5years.

While in phase-II mop up conducted in districts of South (DI.Khan, Kohat, Karak, Tank, Lakki Marwat, Bannu, Hangu) and Central KP (Charsadda, Nowshera, Mardan & Swabi). Total children vaccinated in this phase were 912,889 (87%) of the targeted children. Apart from these 37,134 children above the target age group (i.e. 9m-5 years) were vaccinated as an opportunity.

# **SECTION: 1**

## **PROGRAMME MANAGEMENT**

Program management is a layer above the management of projects and focuses on selecting the best policies and frameworks, defining them in terms of their objectives and providing an environment where projects can be run successfully. strengthening planning and management and introduction of new interventions, development guidelines, protocols and monitoring and reporting instruments institutionalizing accountability mechanisms is the core activities of Programme Management.

Governance and program management has been strengthened through building staff capacities in policy and planning, and institutionalizing accountability mechanisms through regular progress assessment and performance-based reviews.

An effective management system is imperative for efficient management of health services. Preparation of the annual budget, timely disbursement of funds, accounting, reporting, and auditing are the main management functions that are necessary to support the implementation of health programs. The Finance Section of the DoHS is the focal point for financial management for all programs under the DoHS.

### **1.1 EPI ANNUAL WORK PLAN**

An annual work plan detailed activity report outlining what will be achieved during the year in order to achieve specific results with anticipated outcomes, the activities to be performed toward achieving the anticipated outcomes, the time frame involved, those responsible for performing the activities, and what each activity entails, a complete plan for year 2017 developed with support of district Coordinators, Provincial EPI and developmental partners.

EPI immunization service components ISC, Programme management, Human Resource Management, Costing & Financing, Vaccines Cold Chain Logistics, Immunization Service Deliver, Surveillance, Monitoring/ Supervision, Recording/ Reporting & Demand Generation Communication & Advocacy were considered and strategies & activities were outlined linking with these components.

Annual work plan was developed for Khyber Pakhtunkhwa 25 districts holding 3 days’ workshop in which activities were incorporated for all district. At the same time district specific annual work plan was also developed so districts can follow the plan and identify the lacuna. For this purpose, 5 planning workshops conducted division wise having divisional districts in one workshop.

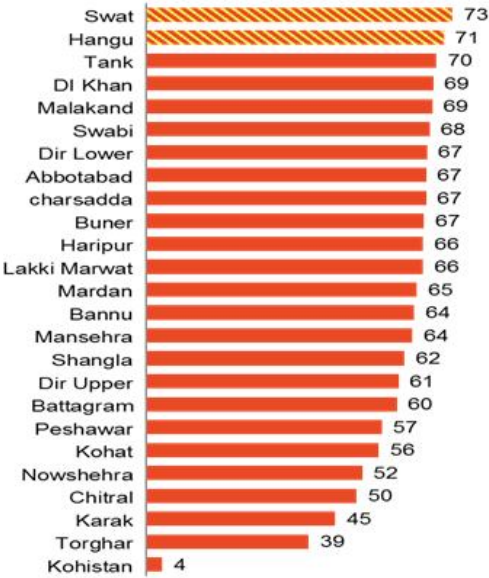
Following the Annual plan eighty percent of the activities have been completed in all components subsequent to the time frame in terms of capacity building training, procurement, Development of software’s and applications, facilitating EPI staff by providing monetary support to meet Petrol Oil & Lubricants (PoL) costs.

1.2 EPI MONTHLY & QUARTERLY REVIEWS

1.2.1 EPI QUARTERLY REVIEW

Review or performance assessment is the dire need of EPI Programme to assess district wise performance and make necessary arrangements or take decision to resolve the matters. Essentially a review is an opportunity as well to have a discussion with a team about their work and development, to develop consensus future target & objectives and identify where improvements/changes could be made

EPI Khyber Pakhtunkhwa commenced Quarterly review; interacting and discussing with districts. The review mechanism has been developed by scoring them according to their achievement and consequently rank them to identify the best performing and low performing districts against each indicator.



Attendance of EPI technicians, Coverage of routine Immunization, Dropout, Compliance of EPI MIS, Surveillance, RED/REC micro-plans, Outreach Session Dropout, Monthly meeting of EPI technicians have been opted as indicators for ranking districts

District Swat has been the best performer of the year based on criteria set up for review with 73% score while Kohistan came at the bottom with 4 percent. Only 3 districts following in the range of above 70% while 15 districts lie in between 60 to 70 percent.

### **1.2.2 WEEKLY REVIEW MEETING**

Weekly review meetings have been a regular feature at Provincial EPI. Approximately more than 40 regular meeting conducted under the chairmanship of EOC Coordinator or Director EPI. The core group was Deputy Directors EPI and partners to critically overview the performance and gaps.

The main purpose of the meetings was to analyze the performance over the week and had worked in collaboration with PEI. The platform of EOC had been utilized to support EPI and major decisions were taken during the meeting with deadline of end of each week.

### **1.2.3 MONTHLY MEETINGS AT DISTRICT LEVEL**

Districts conducted monthly review meeting in first week of every month with EPI Technicians following the set agenda which include all important and relevant indicators. Each month EPI Coordinator arrange review meeting and LHW program coordinator, stake holders and partners, PEI personnel participate in the meeting to resolve the issues with integrated approach. Agenda and minutes format has been developed, following agenda district submit minutes of each month and decision may be taken according to the issues.



## Provincial and district level routines have been established to drive implementation

- **Weekly meeting of provincial team with partners** takes place on Friday in EOC
- **Monthly meeting of district team chaired by DHO** is conducted in the first week of each month:
  - District team reviews **key performance indicators for EPI**
  - Each district shares a **photo of meeting with minutes and monthly plan** with provincial office
- **EPI MIS has been implemented** to provide **regular data** to managers on KPIs



### **1.3 EPI PC-I Development &Approval**

In order to strengthen the routine immunization and to ensure the financial sustainability, Khyber Pakhtunkhwa developed Comprehensive Multi Year Plans (cMYPs) for immunization with a robust section on costing and financing component.

In order to operationalize and implement the cMYP, Department of Health Khyber Pakhtunkhwa has prepared this plan in partnership with the World Bank, Global Alliance for Vaccines and Immunization (GAVI) and Gates Foundation. The National Immunization Support Project is a financing mechanism for the Comprehensive Multiyear Plans - aligning support for Routine Immunization from the World Bank, Gates Foundation and GAVI. The Government of Khyber Pakhtunkhwa has thus prepared EPI PC-1 in order to align it with cMYP and meet the eligibility criteria for getting NISP funds.

Subsequently EPI PC-I has been approved in 2017 to improve the Programme and fill the basic requirements, needs and gaps. The PC-I document approved for cost of **Rs. 6,493.6 million.**

### **1.4 REVISION OF VACCINATION ORDINANCE**

Revision of vaccination ordinance is an ample achievement of Health Department and EPI Programme. Vaccination is the basic right of every child and should be administered to produce herd immunity against vaccine preventable diseases

Khyber Pakhtunkhwa vaccination (Amendment) Bill, 2017 have been passed by the Provincial Assembly of Khyber Pakhtunkhwa on 12<sup>th</sup> May, 2017 and assented by the Governor of Khyber Pakhtunkhwa on 16<sup>th</sup> May, 2017

## **SECTION-2:**

# **HUMAN RESOURCE MANGEMENT**

Human resource management is the management of human resources. Commonly referred to as the HR Department, it is designed to maximize employee performance in service of an employer's strategic objectives need quotation to verify HR is primarily concerned with the management of people within organizations, focusing on policies and on systems. HR departments are responsible for overseeing employee-benefits design, employee recruitment, training and development, performance appraisal, and rewarding (e.g., managing pay and benefit systems).

Human resource Management focuses on maximizing employee productivity, manage human capital of an organization and focus on implementing policies and processes. They can specialize in recruiting, training, employee-relations or benefits.

This section entails recruitment of Human Resource, capacity building trainings

### **2.1 Availability of skilled immunization staff:**

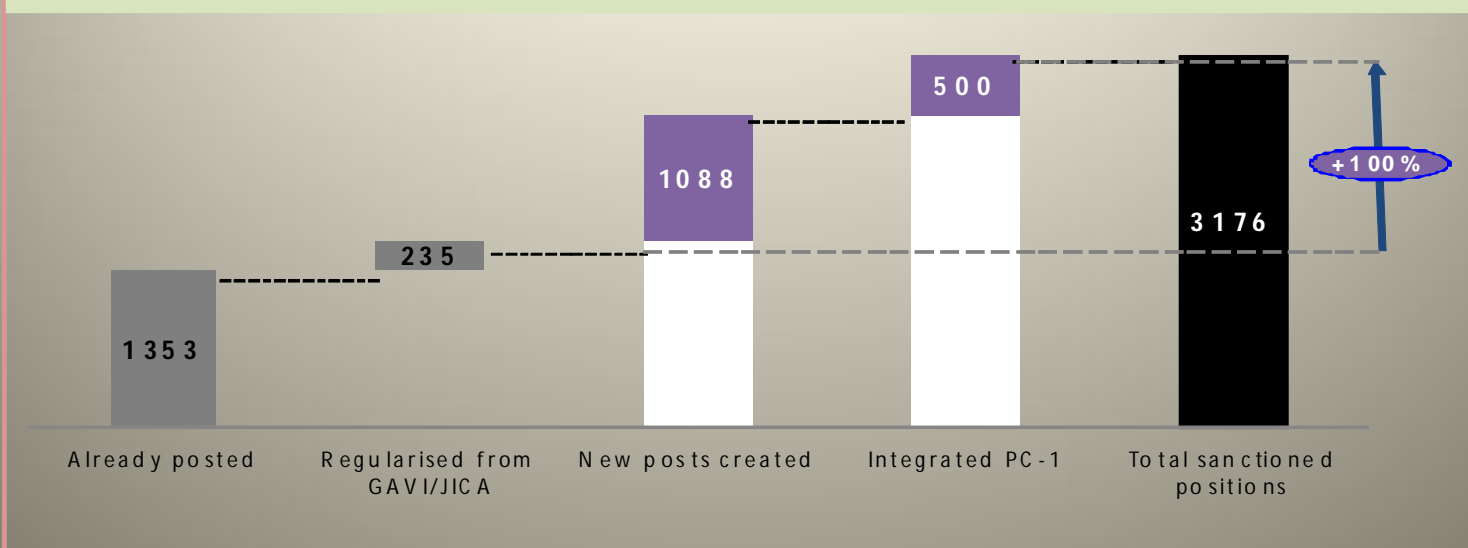
The key challenge for Pakistan is the availability of adequately qualified and skilled human resources in infrastructure sector, which are essential for sustained growth and development of the capacity of construction industry to undertake large volumes of work with acceptable standards of quality workmanship

EPI required recruitment of new vaccinators at the district and level because the existing vaccinators were overburdened by per vaccinator work load and Polio Eradication Initiative activities. EPI Technicians position under the Integrated Project PC-I has been created, while multipurpose technicians (vaccinators) has been approved by GOKP under regular budget.

According to EPI policy, there should be one EPI Technician per 10000 urban or 5000 rural populations. Percentage of fully immunized children from 12-23 was 53% which means 47% children were missed in KP. One of the reasons of drop out was less number of EPI Technician in each district. In 2016, 1588 new EPI Technician (1088 regular & 500 integrated PC-I) recruited while 235 GAVI & JICA EPI Technician regularized, and posted where Human resource was insufficient.

## Department has doubled the number of EPI technicians in 2016

**Vaccinator/EPI technician**  
No of positions



For strengthening Expanded Program on Immunization in Khyber Pakhtunkhwa, two Foreign Aided Projects were regularized namely :

- “Project for *Immunization Services Strengthening Khyber Pakhtunkhwa* GAVI Phase-II 2012-13 to 2014-15
- Project for Strengthening Routine (SRI) JICA assisted project for the period of 2012-2015.*

On completion of GAVI, the Staff hired therein was terminated in line with the Project Policy. A Bill was passed by the Provincial Assembly of Khyber Pakhtunkhwa with the name of “*Khyber Pakhtunkhwa appointment of GAVI and SRI (JICA) Employees ACT*” for the regularization of 296 mentioned staff including 235 EPI Technicians and technical staff i.e., Monitoring Coordinator, 2 data Analyst, Health Education Officer, Network Administrator, Superintendent, Accountant and 2 Computer Operators.



## **2.2    CAPACITY BUILDING TRAININGS**

The ultimate goal of **capacity building** is to sustain a process of individual and organizational change and to enable EPI Programme to achieve their **development** objectives. **Capacity building** activities designed to improve the existing knowledge so that it would contribute to the goal.

A variety of trainings had been conducted across the year on Surveillance, RED/REC, Vlmis, eVACC, induction training, Data Quality, Monitoring & Evaluation. Following is the list of training which has been imparted to all cadres of EPI.

1. RED/REC Training
2. VPD Surveillance Training
3. MIS Software Training
4. EVACC Androids Trainings
5. Cascade of EVACC Androids 20
6. Training On Temperature Monitoring
7. Devices & Cold Chain Mapping
8. Induction On Routine Immunization
9. Introduction of Rota Virus
10. Refresher on EPI MIS
11. Data Quality Management Training
12. Mid- Level Manager Training
13. Rota Introduction Trainings

The above mentioned training planned in consultation of Programme requirements and gap analysis in cMYP which is then aligned with PC-I and budgeted accordingly. Trainings had been planned and conducted by training section under the lead of Training Coordinator EPI. The trainings were organized mostly in collaboration with WHO, UNICEF, JICA and TRF+

The Participants included EPI Vaccinators, EPI Coordinators, cold chain Operators, Data Entry Operators, LHWs and Mid-Level Managers (DHOs, Deputy DHO). While the facilitators of the workshop included technical experts from WHO, UNICEF, JICA and Department of Health.

The workshop and training successfully completed with different methodologies included lectures, discussions, role playing and 'hands-on' Basic skills training.

The existing managerial EPI staff and all other technical staff has been trained based on their job requirements. Around One hundred and fifty district trainers had been trained as Master trainers at provincial level for conducting further trainings at the district level.

As per the guidelines from the World Health Organization, refreshers may have conducted every two years, following the guidelines refresher also been conducted to enhance their capacity. The effectiveness of trainings of EPI managerial and technical staff has been assessed by introducing a system of pre and post trainings assessment. Following are the trainings completed.

### **2.2.1 RED/REC Training**

Reaching every district and every community” (RED/REC) is a strategy to achieve the goal of 80% immunization coverage in all districts. RED/REC strategy addresses common obstacles to increasing immunization coverage such as poor quality district planning, low quality and unreliable service, inadequate monitoring and supervision of health workers. The strategy encourages districts and health facilities to prepare micro-plans to identify local problems and find corrective solutions, using their own data.

EPI Health Department, Khyber Pakhtunkhwa in collaboration with WHO arranged training in three batches by dividing participants of 25 district from Central, Southern, Malakand and Hazara region in three groups. In this training five important components have been deliberated with other basic EPI modules.

1. Re-establishing outreach vaccination services
2. Supportive Supervision  
Linking services with Communities
3. Monitoring and use of data action
4. Planning and management of resources

Around 100 participants trained on RED/REC Module during ToT. The objective of Master trainer training was to develop capacity of trainers to further conduct cascade at district level

RED/REC training cascade roll out training has been implemented at District level across Khyber Pakhtunkhwa, in which 1314 participants trained including FMTs/MTs/EPI Technicians.

<b>RED/REC Cascade district wise training data</b>					
<b>S.N</b>	<b>Districts</b>	<b>FMTs</b>	<b>MTs</b>	<b>EPI Technicians</b>	<b>Total</b>
1	Abbottabad	35	45	75	150
2	Bannu	42	33	53	75
3	Buner	33	24	34	63
4	Battagram	13	24	29	47
5	Chitral	17	18	51	86
6	Charsadda	13	13	66	92
7	Dir Lower	15	16	33	64
8	Dir Upper	16	17	22	55
9	D.I.Khan	13	13	61	87
10	Haripur	14	14	46	74
11	Hangu	18	18	21	57
12	Karak	20	20	32	72
13	Kohistan	21	21	47	89
14	Kohat	19	19	39	77
15	Lakki Marwat	16	16	33	65
16	Mansehra	17	18	73	108
17	Mardan	14	14	64	92
18	Malakand	46	47	38	55
19	Nowshera	16	16	56	88
20	Peshawar	37	38	133	208
21	Shangla	12	13	38	63
22	Swabi			53	83
23	Swat			74	102
24	Tank			27	64
25	Torghar				66

### 2.2.2 VPD Surveillance

Provincial EPI in collaboration with JICA SRI aimed to strengthen routine EPI in the province of Khyber Pakhtunkhwa under strengthening routine immunization project. In order to improve the quality of routine immunization coverage, the project is mainly focused on four major components, i.e. capacity building in vaccine management, capacity building in service delivery, capacity building in VPD surveillance and social mobilization.

As already planned, the training on VPD surveillance was held at Islamabad, where the target audience were EPI coordinators, DSVs and focal persons for VPD surveillance, nominated by the DH offices, from 25 districts of KP. The purpose of this activity was to build up the capacity and capability of the health care workers involved in Routine immunization and surveillance to understand the importance of surveillance, timely reporting, early detection and response, in order to prevent and control imminent outbreaks of VPD's especially those with contagious nature.

The training activity was completed in three batches participated by an average of 27 participants per batch from districts and provincial EPI office.

#### 1. Objectives of the training:

The current training activity aimed to improve and enable the EPI workers to;

- To ensure timely detection, response and control of outbreaks by early detection at local level
- To monitor trends of vaccine preventable diseases in order to take appropriate public health actions

To estimate workload of different health units involved in the system to rationalize resource allocation

#### 2. Assessment of the training

In batch first pre and post-test the highest marks obtained were 100% while the lowest marks counted with 11% in pre-test and 26% in post-test respectively, where the average percentage was seen as 52 % for the pre-test and 74% for the post test.

Highest marks obtained in the second batch pre and post-test were a 100% while the lowest marks for the pre-test and post-test 15% and with an average of 57% for the pre-test and 72% for the post-test.

The third batch of the VPD training resulted in obtaining the highest of 100% marks in the pre-test and 96% in the post-test, while the lowest marks obtained were 4% and 8% in the pre and post-test respectively. The average marks counted for the third batch were 52% and 66% in the pre and post-test.



**Post-test marks by designation:**

Post-test Marks						
Designation	below 80	Percentage	80 and above	percentage	Total	
EPI Coordinator	08	10%	16	20%	24	30%
DSV	16	20%	6	8%	22	28%
Focal person for VPD	17	22%	5	6%	22	28%
Provincial staff	1	1%	10	13%	11	14%
Total	42	53%	37	47%	79	100%

About 20% of the EPI coordinators achieved above 80% marks, followed by the DSV's with 8% and focal persons for VPD surveillance 6%.

**2.2.3 MIS Software & EVACC Trainings**

EPI Khyber Pakhtunkhwa developed a webased software with name of EPI MIS for online real time data entry and analysis. The software was developed by technical support provided by TRF+.

Training and workshop was also conducted in collaboration with TRF+ in Shelton Rezidor Peshawar. One-day orientation workshop conducted with participation of EPI Coordinators while two days training was imparted to data entry operators. The total participants for whol activity was 75.

Provincial EPI also in support of TRF and Punjab Information Technology Board (PITB) has developed electronic Vaccination (Evacc) Monitoring system to monitor EPI staff and their activities to improve EPI coverage and performance in all aspects. Although training was arranged by Department of Health, EPI Programme

The PITB supported in facilitating the training and conducted sessions on eVACC software. Android phones have been given during training for each vaccinator and a total 2617 phones were given in the province.

#### 2.2.4 **Cold Room Temperature Mapping Exercise**

Cold rooms' temperature mapping is one of the key activity of the Effective Vaccine Management Improvement Plan (EVM IP). In this context, a three days training workshop was arranged for Cold Chain Staff in Peshawar from 10<sup>th</sup> to 12<sup>th</sup> March 2017. Participants from divisional and Provincial warehouses were participated in the activity.

Objectives of the temperature mapping

- Prepare a mapping protocol.
- Carry out the mapping exercise.
- Prepare a mapping report.
- Implement the recommendations by carrying out the remedial and other actions identified in the mapping report.

In Provincial warehouse one cold room and one freezer room were selected for mapping purpose. The structure of the cold rooms was overserved and the protocol set for both room. The measurement of both cold and freezer rooms has been completed. Then the points have been identified where the sincere to be placed. All the sensors were placed properly as per the direction given by the facilitators.

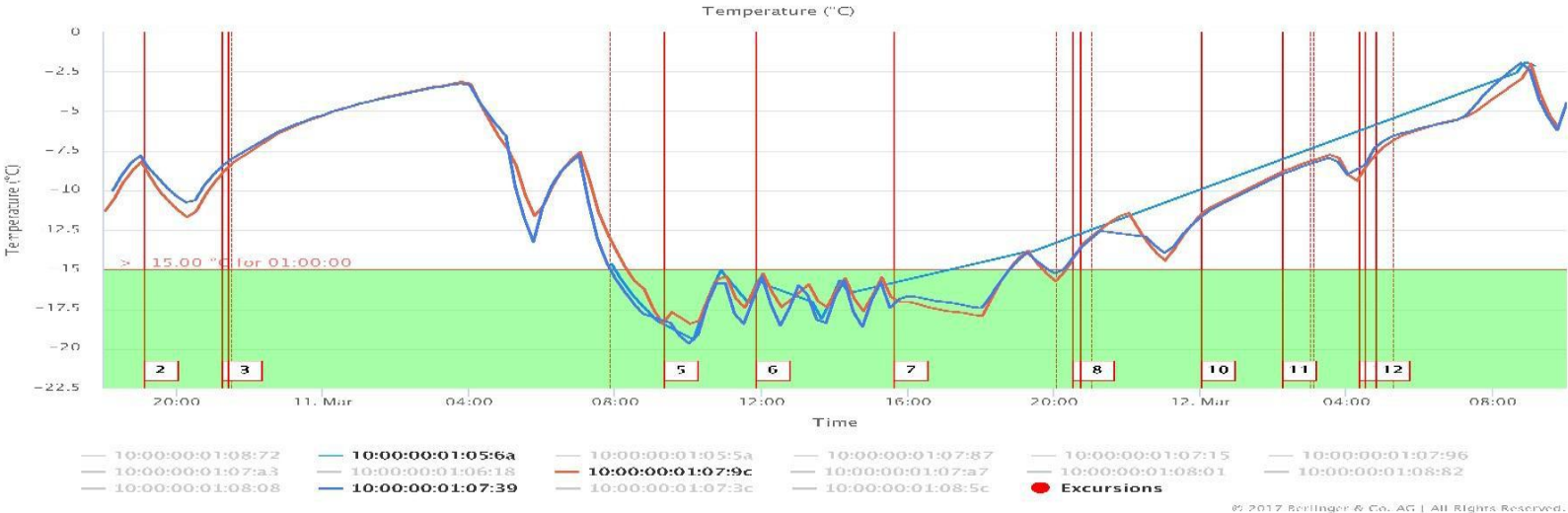


All the participants were trained in detail on Fridge Tag and its related documentation. The participants were practically demonstrated on each point of Fridge Tag. Fridge Tag of Lady Reading Hospital was taken as sample to demonstrate the trainees.

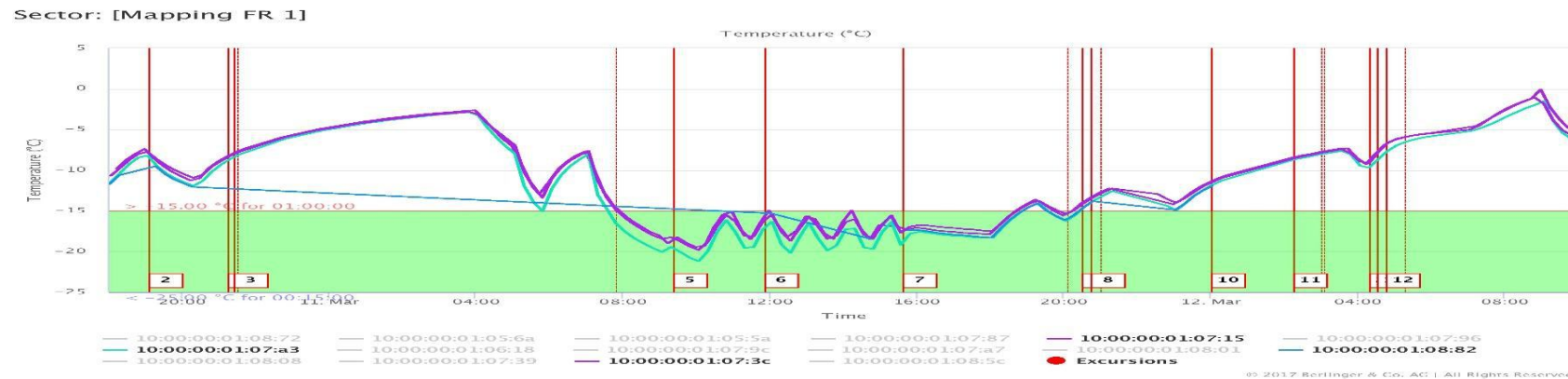
Last day of training, all the mapping sincere were checked online. The result of the sensors was observed in different time period. The observation steps were followed as:

1. Temperature was monitored from 5:00 pm to 5:00 am for 12 hours to turn on the first unit.
2. The second unit was turn on for another 12 hours from 5:00 am to 5:00 pm on 11<sup>th</sup> March 2017.

Sector: [Mapping FR 1]



- Graphic Presentation of Cold room mapping
3. At 5:00 pm both the units were turn off to next 5 hours, to observe hold over time.



Graphic Presentation of Cold room mappi

## 2.2.5 DATA QUALITY MANAEMENT TRAINING

There are often discrepancies between data at the vaccination delivery sites and reported data from the same vaccination sites. This has necessitated the need for the research since high coverage of EPI cannot be achieved without quality data. EPI coverage has to be improved but this cannot also be achieved without quality data or strengthening of the data management system.

For this purpose, with the support of WHO, Department of EPI Khyber Pakhtunkhwa conducted a training of Data Quality Management in two Batches 23<sup>rd</sup> – 24<sup>th</sup> Oct, 7<sup>th</sup>, 8<sup>th</sup> Nov 2017 to equip EPI Coordinators, and DSVs on Data management and analysis. Its focused to build capacity of EPI Management team to analyze the data and use data for improvement and actions.



## SECTION-3

### **MONITORING & REPORTING:**

**Monitoring** is the systematic process of collecting, analyzing and using information to track a program's progress toward reaching its objectives and to guide management decisions. Monitoring usually focuses on processes, such as when and where activities occur, who delivers them and how many people or entities they reach. EPI is one of the high profile public Health Programme and requires a huge work force and technologies to monitor the Programme to achieve the key performance indicators & milestones.

Monitoring and supervision is an important aspect of program management and initiated provision of PoL cost to supervisory cadre to meet the requirement of mobility.

Technologies and software's are one of the crucial achievement at this point and stage to monitor the activities. Following are the initiatives for monitoring & reporting

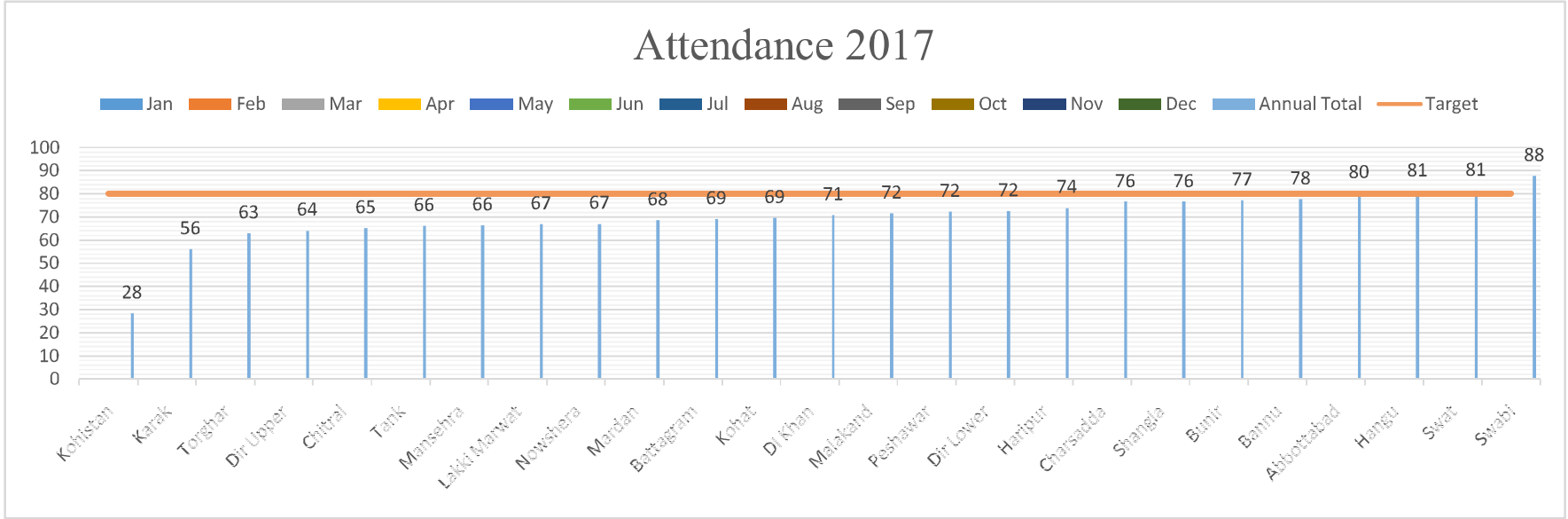
#### **3.1    eVAAC : Innovative technologies for oversight and robust monitoring**

It has been a long standing concern that the EPI field staff often do not go to the field and consequently, monitoring systems has been crippling over years. In order to overcome this long standing issue, the Government of Khyber Pakhtunkhwa has launched a web-based GPRS Tracking System (eVACC) for supervisors and vaccinators. This innovative technology enable the district and provincial managerial staff to analyze and verify whether field supervisors and vaccinators are visiting their assigned areas for vaccination, monitoring and supervision.

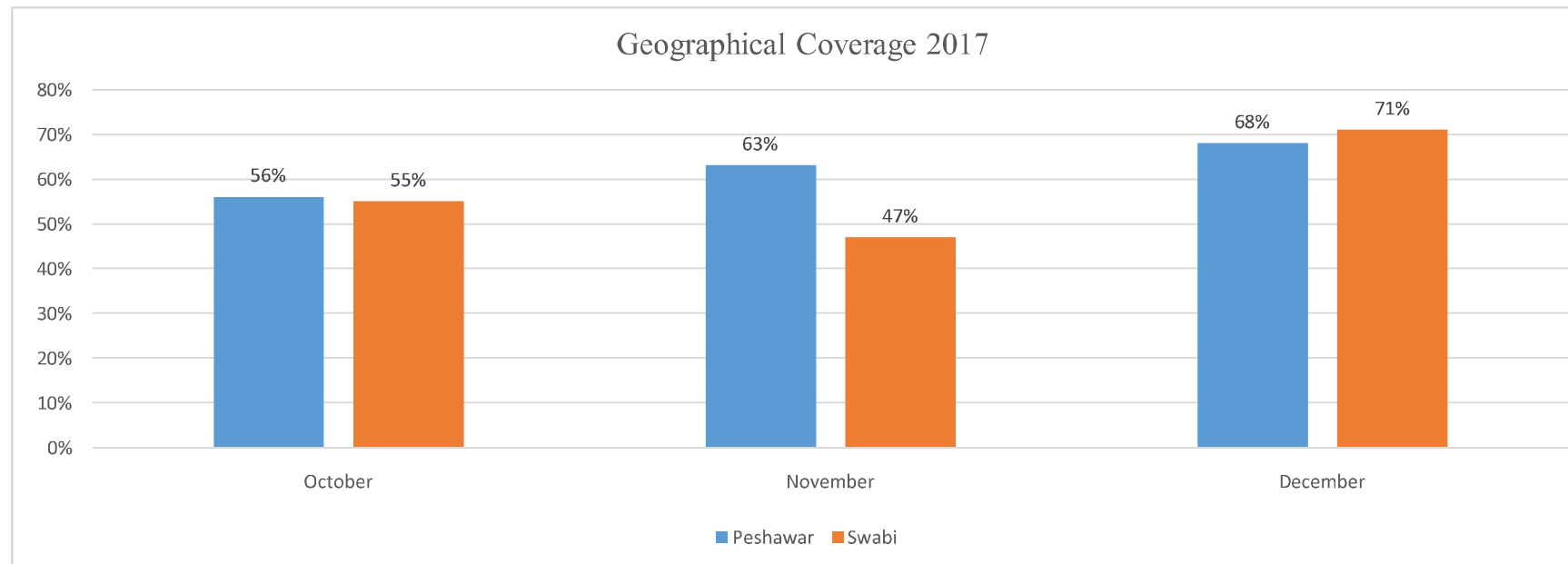
EPI Programme launched the android monitoring of vaccinators to track attendance and vaccination activity across Province. Punjab Information Technology Board (PITB) provided technical support to EPI Programme by developing the application and dashboard for the EPI Programme KP. **2617** numbers of vaccinators in the province are currently using the EVACCs-I application. Provincial and district managers view the attendance, location and polygons of vaccinators through the online dashboard.

**1373** number of EVACC android mobile issued to district for attendance and data. After recruitment of new vaccinators in October 2017 EPI Programme issued **1244** number of mobile to all the vaccinators working for routine immunization in the field.

There is a gradual upward trend in attendance but no district is achieving 100% attendance. The probable reasons include in active number because of non-functioning mobiles, retired or death.



In 2017 only District Swabi, Swat, Hangu and Abbottabad with 88%, 81%, 81%, and 80% achieved 80% of benchmark while remaining districts failed to achieve their targets. Districts Kohistan and Karak shows poor performance in eVVAC attendance with 28% and 56% respectively.



Initially polygons (Geographical coverage) piloted in three districts in October and later on its activated for all the districts by 19<sup>th</sup> of December. After attendance EPI Cell now can also track that which area covered by vaccinator and which still left to be visited.

### **3.2 EPI MIS developed and launched**

EPI MIS a web-based software has been launched with support of TRF+. It has five (5) modules which include HR and infrastructure details, EPI achievements, VPD surveillance, vaccines Management and cold chain inventory. The reporting has been monitored at all levels as regular intervals. Online MIS system across all districts of Khyber Pakhtunkhwa plays an instrumental role in this regards because it requires real time data entry of daily vaccination, VPD cases, vaccine stocks and quarterly data updating of cold chain equipment. An effective and sustainable online MIS system will ensure adequate data flow, quality and quantities of vaccines are available at the service delivery point and will give

access to demand forecasting, capacity planning, analysis and modeling based on valid data and consumption, stock status and real-time supply chain management capabilities.

This information is monitored through web-based technology both at district and provincial levels. Effectiveness of reporting and monitoring about availability of vaccines and functionality of cold chain has been strengthened by institutionalizing online reporting system.

### **3.3 Data Quality Assessment**

Provincial EPI conducted DQA in each individual district to set a baseline for each district.

Credible data is one of the key cornerstones for proper monitoring and evaluation of programme performance and plan for improvement. To identify the weaknesses and strengths of data quality in Khyber Pakhtunkhwa, a Data Quality Assessment (DQA) activity was conducted and based on its findings, a plan of action was formulated to improve its performance.

DQA assessed three main components:

- Quality of the monitoring system, using questionnaires administered at the province, district and health facilities, assigning scores to questions established for seven domains: demographics, registration, reporting and archiving, data analysis and use, supervision and feedback, planning and management and human resources.
- Accuracy of data, the doses of vaccine from different sources (daily register, monthly tabulation at the district and province) were recounted and compared with the reported values.
- Timeliness and completeness of reporting, by calculating the number of reports sent on time and complete from the health facility to the district and from the district to the province.



## SECTION- 4

### VACCINES, COLD CHAIN & LOGISTICS

Uninterrupted supply of vaccines is a fundamental requirement of a functional immunization program. Procurement of vaccines and injections supplies is the most expensive component of EPI.

The current storage capacity was far below the requirement and majority of the cold chain equipment were outdated. The outdated cold chain equipment including cold rooms replaced in phased manner. Five new cold room installed. Six hundred electricity operated Ice-liner Refrigerators (ILRs) purchased to replace the outdated ILRs and also to increase the storage capacity for new vaccines. For areas where electricity is not available, new solar operated ILRs supplied.

Similar to storage capacity of vaccines, the current capacity of EPI warehouse is well below par and cannot meet the future requirements. A new warehouse construction initiated at the provincial level for EPI logistics comprising injection supplies, stationary, buffer cold chain equipment and other non-vaccine consumables.

**i. Establishment of EVM secretariat**

State of the art technologies has been installed to strengthen monitoring of cold chain temperature records at provincial level. It includes installation of Smart-view Cold Room Temperature Monitoring systems for cold rooms. Staff has been hired for EVM secretariat.

**ii. Divisional cold chain ware-houses rehabilitated/ reconstructed and availability of ILRs at Provincial, District and Health Facility Level:**

Similar to storage capacity of vaccines, the current capacity of EPI warehouse is well below par and cannot meet the future requirements. rehabilitated/ reconstructed. Cold Chain equipment gradual replacement, 429 ILR (263 solar ILR and 166 electric ILR).

## Details of Cold Chain Equipment

### ☐ At Provincial Level

Cold Rooms	Freezer Rooms	ILRs	Freezers
3	2	2	3

### ☐ At District Level

Cold Rooms	Freezer Rooms	ILRs	Freezers	Cold Boxes	SVC
13	1	242	78	281	1401

### ☐ At Service Delivery Level

ILRs	Freezers	Cold Box	Vaccine Carriers
962	78	118	5083

### iii. DATA LOGGERS

900 Data loggers has been installed to strengthen monitoring of cold chain temperature records at district and health care facility levels. It record 30-day temperature for ILRs at district and health care facility levels.

## SECTION-4

### SURVEILLANCE

#### 4.1 Introduction/Background:

The Annual Surveillance report 2017 gives an overview of the epidemiology of Vaccine Preventable Diseases (VPD's) of public health significance, drawn from the surveillance information provided by the 25 districts of Khyber Pakhtunkhwa. It also includes in it the initiatives taken by Provincial EPI Cell, Health Department in collaboration with GAVI Support, WHO, Unicef and JICA in the chapter of Surveillance.

Vaccine Preventable Diseases Reporting sites in KP:

Vaccine Preventable Diseases surveillance system is a passive surveillance system in Khyber Pakhtunkhwa. In KP, the number of all possible reporting sites for all communicable diseases (According to HMIS) are 1519, while proportion of sites that are designated for the VPD surveillance are 1,289 (84.5%). These all belongs to the public sector. KP has online real time data in the form of EPI-MIS through which the reports are timely monitored. The Zero report for VPD's comes in hard copy from the health facility to district. The districts then enter each VPD case in online reporting software (EPI-MIS). The moment the district enter the report it can be seen at provincial level.

VPD's in Numbers:

In 2017 the statistics of VPD's reported from districts are as under:

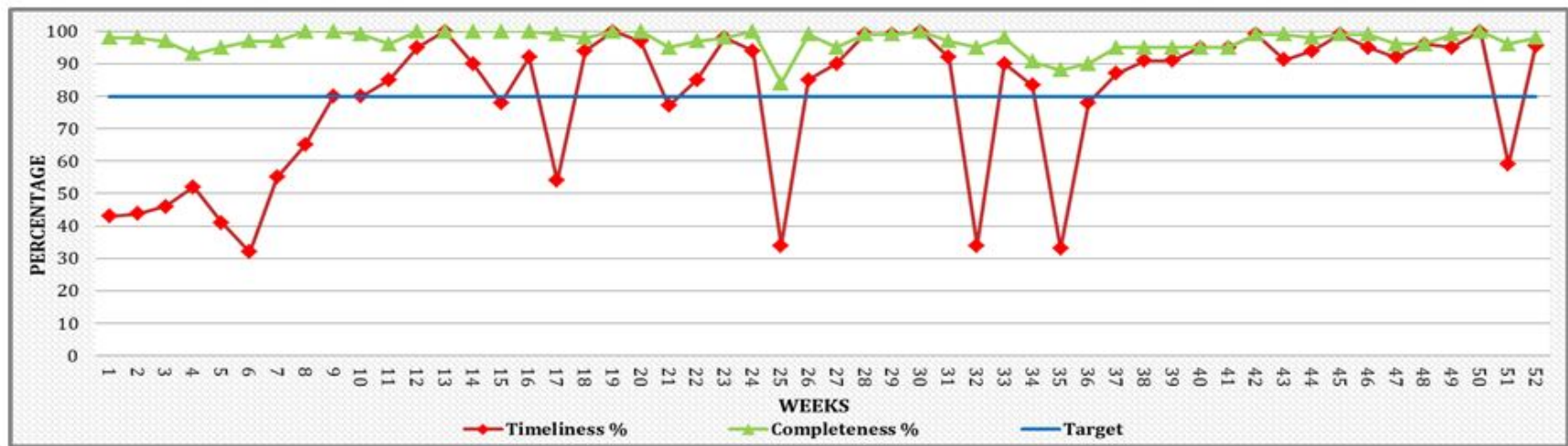
Khyber Pakhtunkhwa surveillance data indicate that 14,263 VPD cases were reported in 2017, representing an average annual crude rate of 478 cases per 1,000,000 population. VPD's that accounted for largest proportion of reported cases were Measles (83.7%) and AFP (14.5%).

District Name	Suspected Measles	AFP	NNT	Diphtheria	Pertussis	Childhood TB	Meningitis
Abbottabad	279	72	0	0	0	0	0
Bannu	478	56	2	24	0	0	0
Battagram	862	42	0	0	0	0	0
Buner	143	51	0	0	0	0	0
Charsadda	670	168	0	0	0	0	0
Chitral	80	41	0	0	0	0	0
D.I. Khan	1158	55	33	44	8	0	0
Dir Lower	455	72	0	0	0	0	0
Dir Upper	238	42	0	0	0	0	0
Hangu	48	43	0	0	0	0	0
Haripur	77	52	0	0	0	0	0
Karak	157	76	0	49	0	0	0
Kohat	77	53	1	0	0	0	0
Kohistan	71	26	0	0	3	0	0
Lakki Marwat	278	79	4	23	26	6	1
Malakand	317	68	0	0	0	0	0
Mansehra	254	74	0	0	0	0	0
Mardan	1163	228	0	1	0	0	0
Nowshera	991	96	0	1	0	0	0
Peshawar	2219	278	1	2	0	0	0
Shangla	363	76	0	5	0	0	0
Swabi	919	141	1	0	0	0	0
Swat	524	134	0	0	0	0	0
Tank	65	33	2	3	0	0	0
Tor Ghar	65	15	1	0	0	0	0
<b>Total KP</b>	<b>11951</b>	<b>2071</b>	<b>45</b>	<b>152</b>	<b>37</b>	<b>6</b>	<b>1</b>



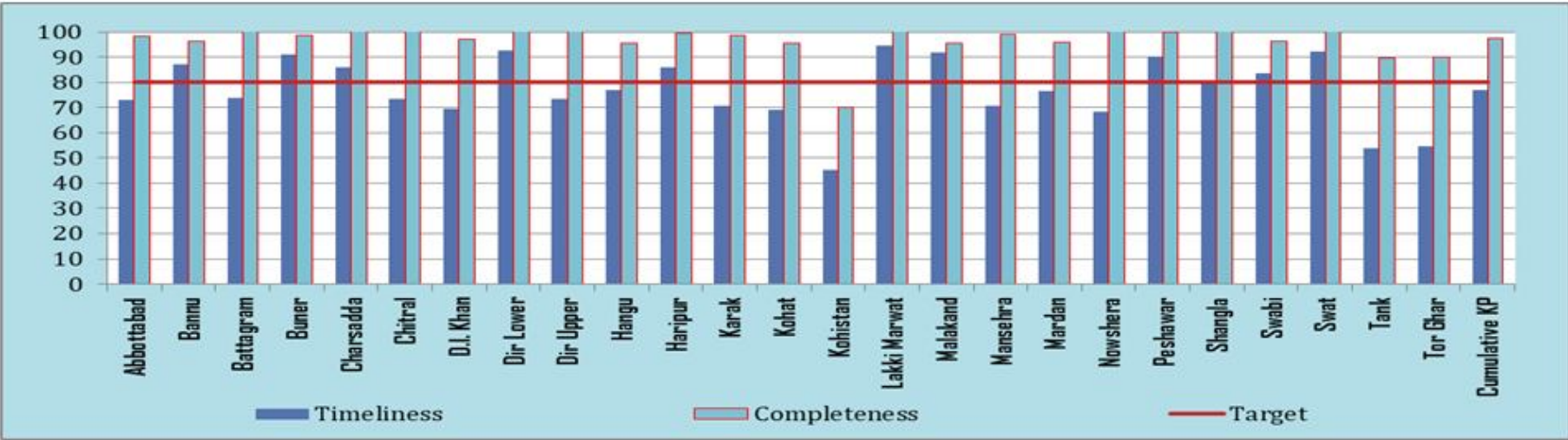
**Timeliness & Completeness of VPD's Zero Reports:**

The KP developed a weekly zero reports for all the VPD's including 22 other important communicable diseases. Every passive reporting site has to report on this form on weekly basis to their districts offices even if there was no case found in their catchment population. This practice developed the habit of memorizing the importance of reporting the disease of concern and it helped in limiting the outbreak management and case responses. As discussed the EPI MIS helped in online real monitoring of disease trends, so the timeliness and completeness of these reports were improved. In comparison to 2016, in which the province had 96% complete and 10% timely reports, in 2017 the Timeliness and Completeness was improved to 78% and 99% respectively. The epidemiological week (Starting from Monday and ending on Sunday of each calendar year) wise Timeliness and Completeness is as follows:



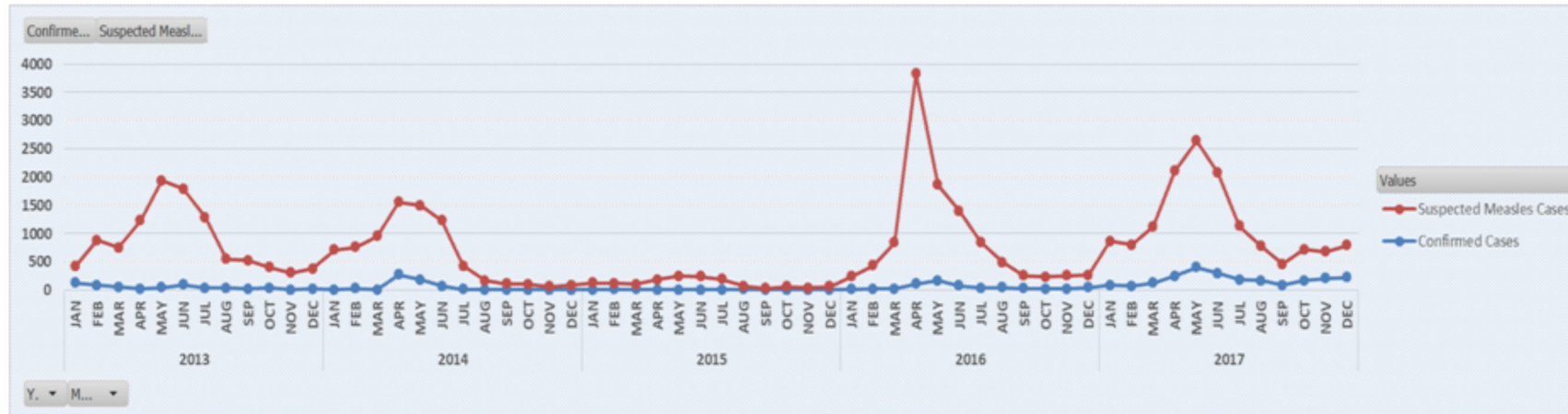
**Week Wise Timeliness & Completeness of VPD Reports**

The districts performance was also monitored and regular feedbacks from provincial office were given to the districts to improve their Timeliness and completeness of VPD Zero reports. The district wise graphs for both of these General Surveillance Indicators are as:



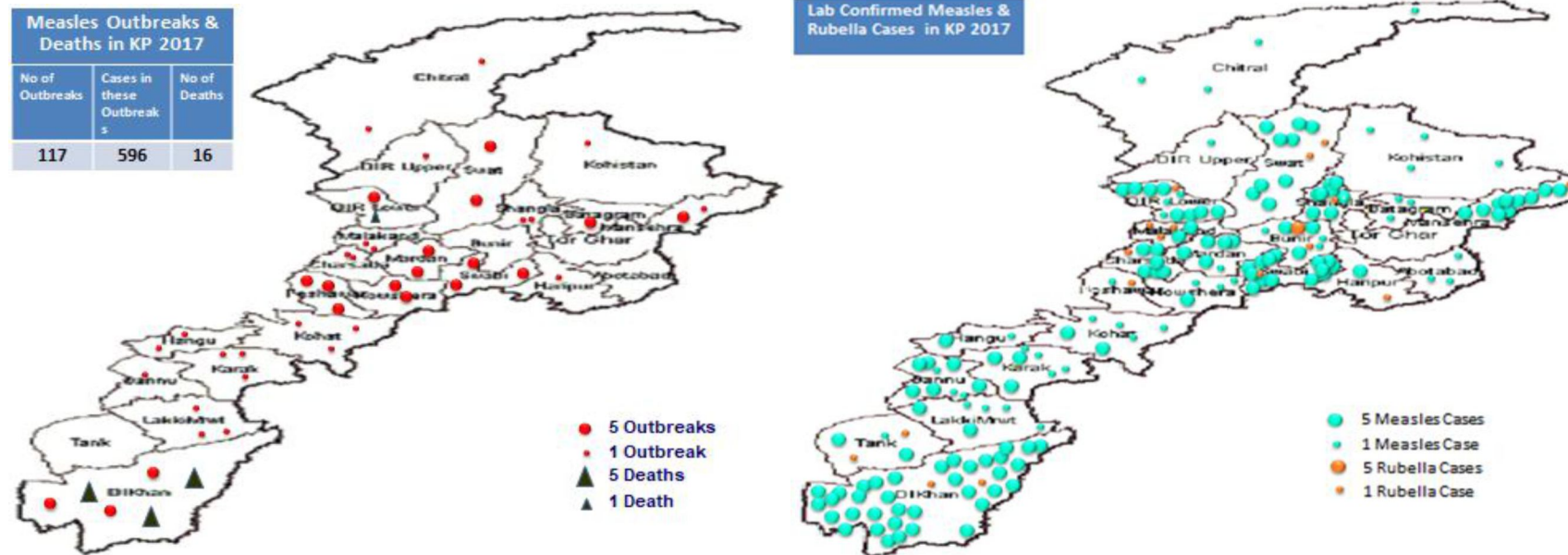
The Graph shows that in KP out of 25 districts 24 districts (96%) achieved the desired benchmark of more than 80%, however for Timeliness of these reports only 10 districts (40%) achieved the yardstick of more than 80% of timeliness reports. District Kohistan is far flung district of KP with a very difficult terrain and having 22 valley's had the lowest Completeness and timeliness of these VPD's reports.

**Measles Elimination Program:**



**Year & Month Wise Suspected and Lab Confirmed Measles Cases.** The graph shows that in KP the high incidence for Measles cases is from April to July of every year

Measles outbreaks periodically occur in situation of low measles vaccination coverage. Such outbreaks occur after every 2-3 years in case immunization rate is lower than 95% and/or after 6-7 years if immunization rate is 95% or more. In 2017 KP has 117 reported outbreaks of Measles with 16 deaths.



The province conducted a wide age (6 months to 10 years) measles vaccination campaign in 2014; due to this a gross decrease was observed in measles case incidence. On the other hand EPI program was unable to maintain high population immunity achieved through SIAs and resulted in accumulation of susceptible over last two years. In 2016, an upward trend in measles case reporting is observed and a total of 10,350 suspected measles cases and 9 deaths were reported. Improved surveillance though contributed in increasing case identification and reporting rate but it cannot be denied that there is an actual rise in disease burden of measles due to accumulation of susceptible. Most of the measles positive cases (76%) were in younger age group (<5 years). Case response including measles vaccination for children up to 10 year of age were provided throughout the province in affected union councils of majority of districts but mostly not properly planned as well as not monitored, therefore not bringing gross reduction in measles cases.

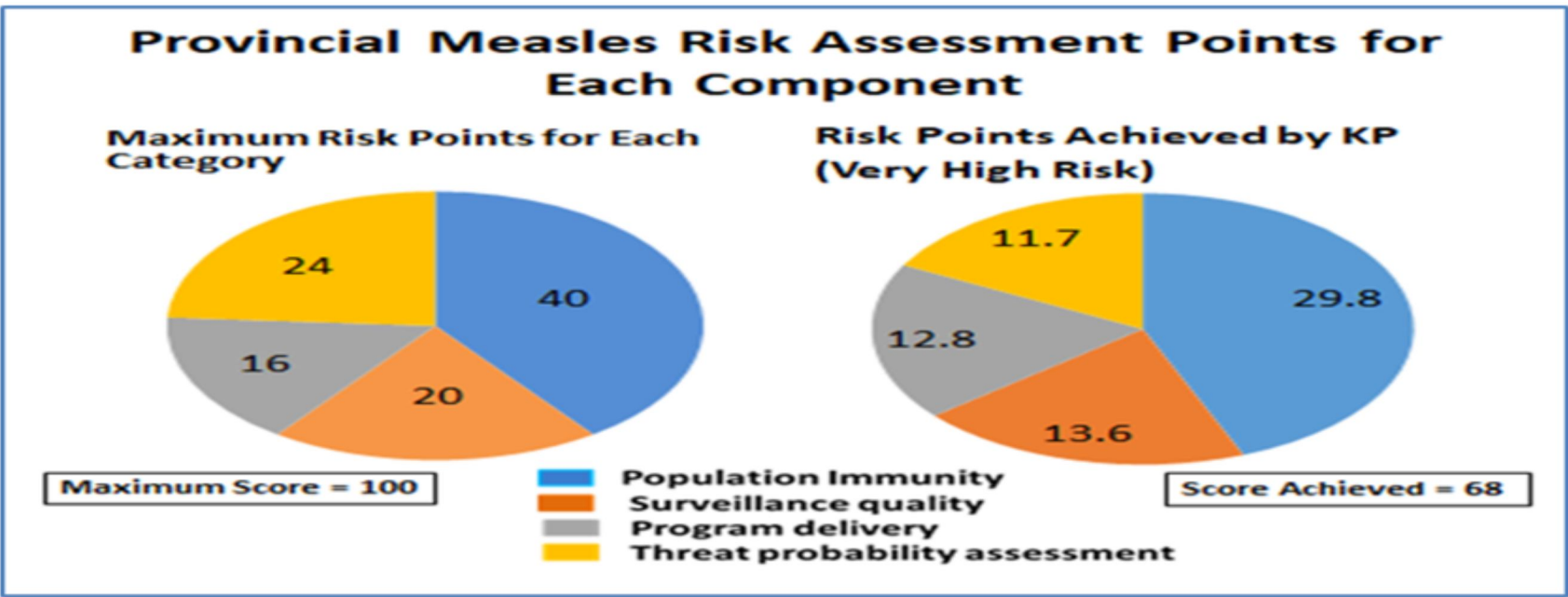
One of the immediate measures to mobilize resources and advocate for mass vaccination is to conduct a measles risk assessment of all districts using the World Health Organization (WHO) measles programmatic risk assessment tool, which identifies areas not meeting measles programmatic targets in order to guide and strengthen measles elimination program activities and reduce the risk of outbreaks. This tool assesses subnational programmatic risk as the sum of indicator scores in four categories:



1. Population immunity,
2. Surveillance quality,
3. Program performance, and
4. Threat assessment.

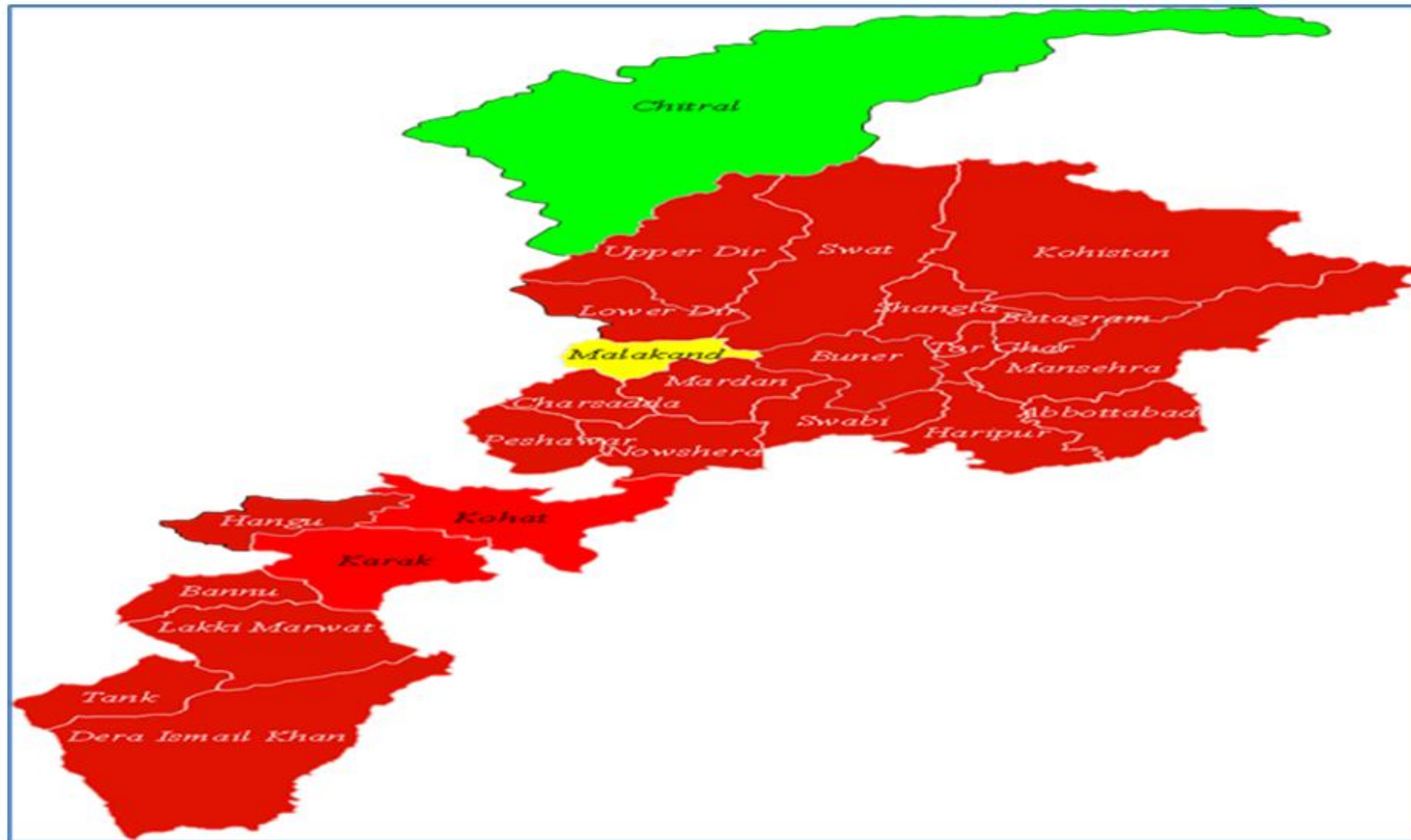
Each district in Khyber Pakhtunkhwa is assigned to a programmatic risk category of low, medium, high, or very high risk based on the overall risk score.

Using the measles risk assessment tool, risk assessment has been completed for all districts (25) of the province. Khyber Pakhtunkhwa got 28.8 out of 40 points for population immunity



component, 13.6 out of 20 points in the surveillance component, 12.8 out of 16 points in the program performance component and 11.7 out 24 points in the threat assessment component (figure). Cumulative score of 68 for the province shows that the province is in the very high risk

category. The assessment results show that 90% of Khyber Pakhtunkhwa population (21 districts) is in very high risk category, while 6% of population (2 districts; Kohat and Karak) are in the high risk category. This means that 96% of the population needs immediate intervention in



the form of measles vaccination for the susceptible group. Two districts, Malakand (3%) and Chitral (2%) falls under medium risk and low risk categories respectively. Low population immunity is the major risk factor for all 25 districts of the province. Overall summary of provincial categorization and proportion of population at risk is shown in figure

### Proportion of Population at Risk, KP



Risk Categories	# of Districts	Population
Very high Risk	21	26,008,301
High risk	2	1,618,880
Medium risk	1	737,040
Low risk	1	519,326

**Mop-Ups:**

Khyber Pakhtunkhwa wished to conduct the Measles SIA in 23 high risk districts to boost the population immunity based on Measles risk assessment but due to non availability of logistics (MCV) the program opted for Mop-ups and case responses. The brief of Phase 1 and Phase 2 Mop-up is as below:

**Phase I Mop- Up Activity:**

Unfortunately, as the required amount of vaccine was not available to conduct such an activity to limit the outbreak, second plan was made based on population immunity and measles surveillance indicators. The criteria for selection in this plan was a UC with low population immunity and UC with five or more than five suspected cases in a month or a single confirmed case of measles since 1st January 2017. According to this, 449 out of 1,010 Union Councils of 24 districts qualified for Mop up activities. We calculated the vaccine and logistics required for vaccinating these children and required vaccine was 22 million doses but even these doses were not available. The third plan was then made which focused only those Union Councils where there was an outbreak or a single confirmed Measles case. According to this plan, the province required round about 9 million doses of measles but again the vaccine was not available and federal EPI only assured 5 million doses. In this scenario, the provincial EPI team further analyzed the data at the area level of the UC's from where the cases are emerging and there are outbreaks. Accordingly area specific resource micro-plan was developed and mop up Phase I was conducted from 9th to 12th May 2017 and 324366 children(84%) of the target was achieved. The target age group was from 6m-5years of age.

**Phase 2 Mop up Activity:**

Based on Population immunity, 5 suspected cases/outbreak and 1 Lab confirmed Measles case from January to May 2017, 577 Union Councils in 25 districts of KP were selected for the Phase II Mop up activity. The target for this campaign was 2.5 million children aged 9months to 5 years. Looking into the vaccine availability, districts of South (DI.Khan, Kohat, Karak, Tank, Lakki Marwat, Bannu, Hangu) and Central KP (Charsadda, Nowshera, Mardan & Swabi) were considered to conduct campaign in the first place having target of 1.5 million. Thereafter North KP will conduct mop-up Campaign. Operational (POL support only) expenses were borne by WHO.

To avoid vaccine wastage of multi-dose open vial policy, strategy was adopted that if in a session ends and doses are still left then they have to vaccinate children even above 5 years of age. The provincial supervision and monitoring plan was developed to supervise the pre campaign activities.



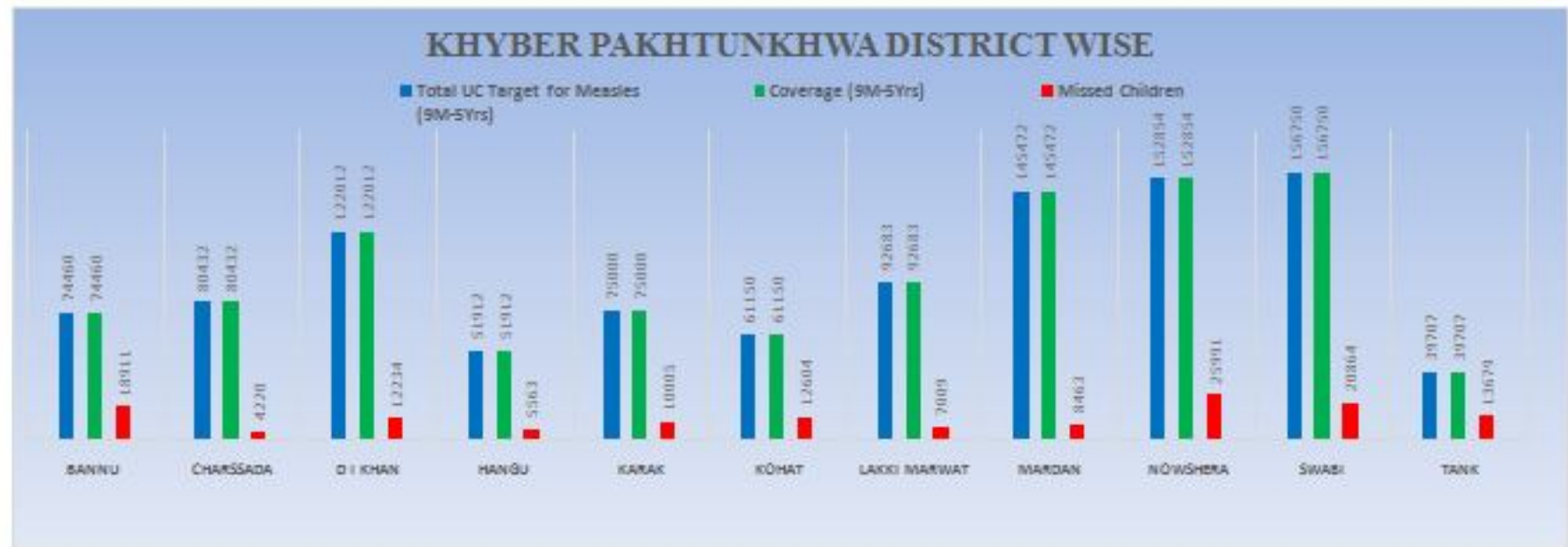
Total children vaccinated in this phase were 912,889 (87%) of the targeted children. Apart from these 37,134 children above the target age group (i.e. 9m-5 years) were vaccinated as an opportunity.

- > 90%: Four districts Charsadda, DI Khan, Lakki Marwat and Mardan
- 80-89%: Four districts Hangu, Karak, Nowshera and Swabi
- 65-79%: Three districts Bannu, Kohat and Tank



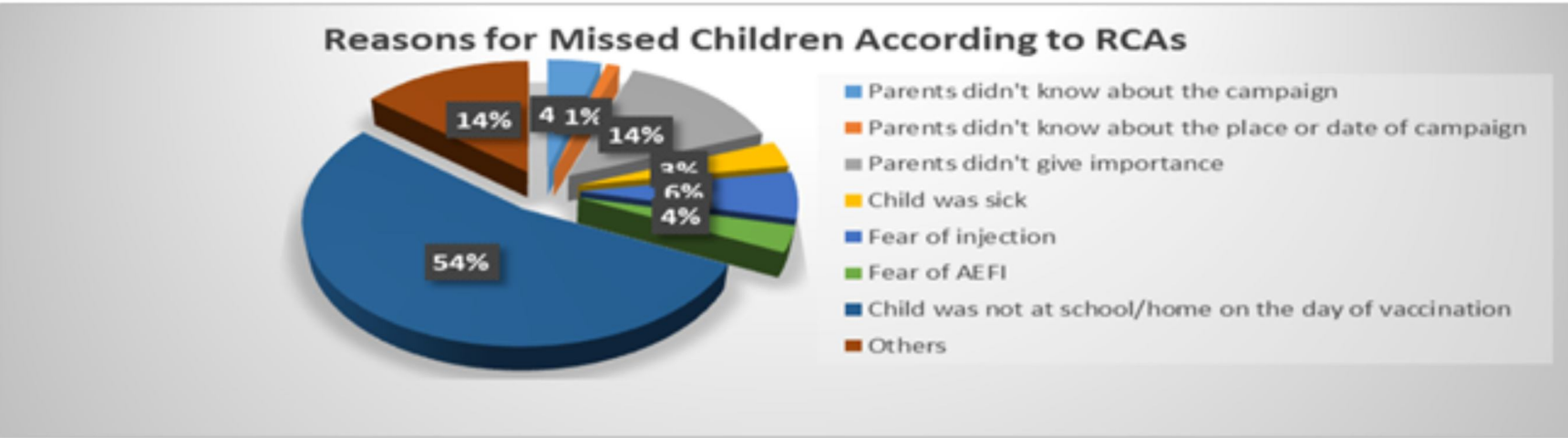
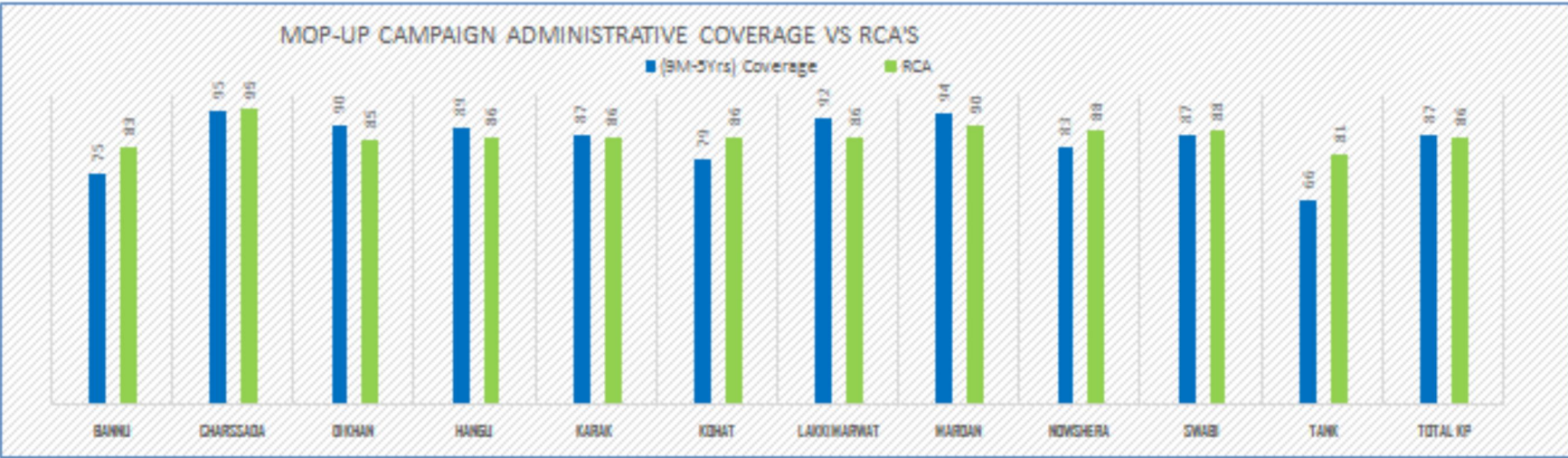
Missed Children:

Total 1,39,502 children i.e.13% of the target were missed.



RCA's:

The Rapid Convenience assessment Checklist was conducted in all the districts by the District & provincial supervisors to assess the quality of implementation of Mop-up activities. It was also used to assess why the children were being missed. 2197 clusters were taken during the Mop-up campaign.



The North KP which was planned later on did not conduct the mop-up campaigns phase 2 due to non-availability of vaccines and competing priorities.

#### Measles Surveillance Indicators:

As mentioned earlier Measles Surveillance was not on priority by the district level staff because of other competing priorities and low capacity, so standard protocols were not followed. The case based surveillance was not strong enough to follow the case, investigate it adequately and take blood samples and in outbreak settings the throat swabs. The districts did not utilize the District Review Committee made for AFP Surveillance and many suspected measles cases were left unclassified or they were taken finally as clinically confirmed/compatible measles cases. Out of 11951, 8851 (73%) were classified as Clinical compatible cases. However, with continued feedbacks in 2017 through weekly Epidemiological bulletins and quarterly reviews the case detection, and sample collection rates had improved slightly. The individual indicator wise performance is as under:

#### **1. Case Reporting Rate/Non-Measles Discarded Rate:**

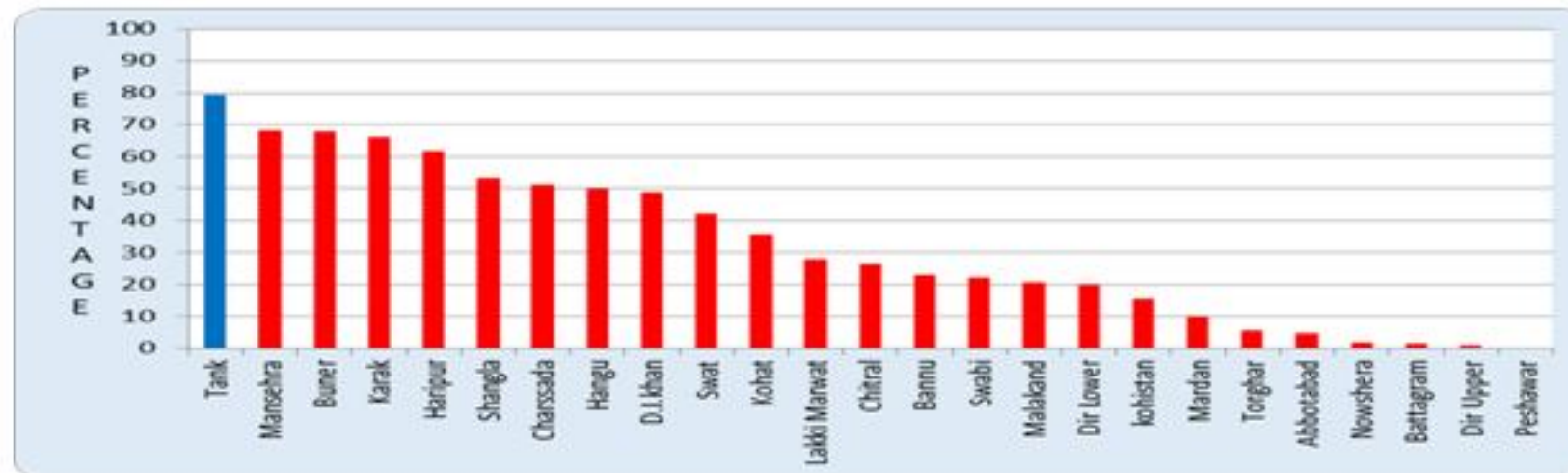
The case reporting rate for KP is 1.2 (standard= 2 cases/100000 population) in a calendar year. To calculate the indicator all those cases whose samples were not sent to Lab due to any reason were labelled as clinical confirmed/Compatible cases. Only 4 districts (16%) Shangla, DI Khan, Karak and Buner (16%) of the districts achieved the desired benchmark. Rest of the districts performance in this indicator remained low.





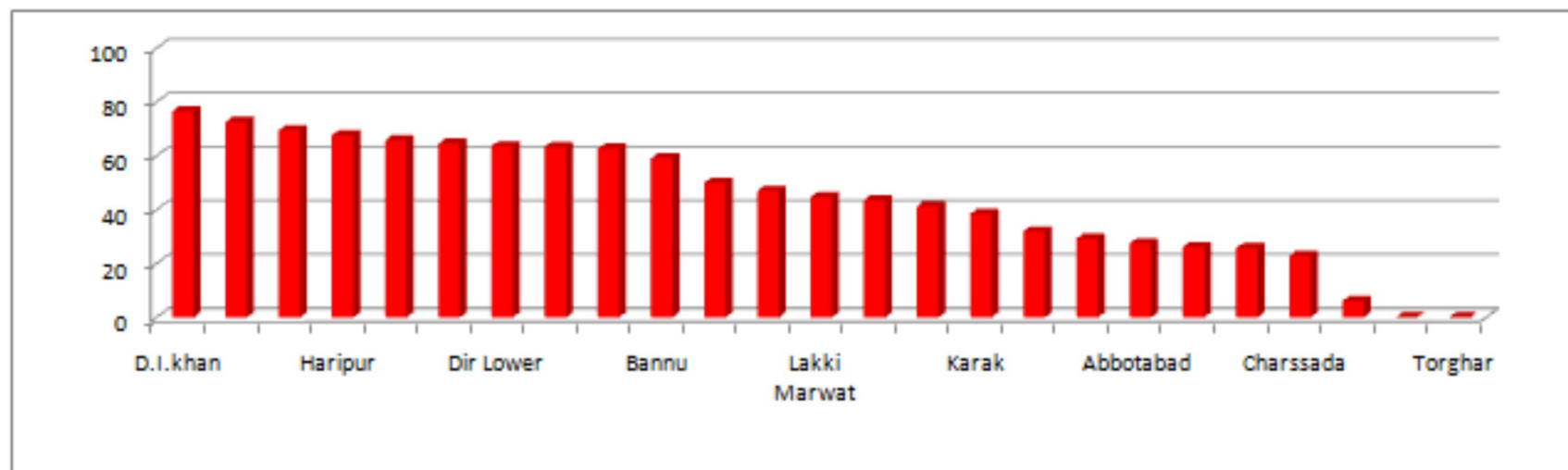
## 2. Specimen Collection Rate:

Specimen collection rate was also very low for KP i.e 16% (standard-80% of samples). Out of 11,901 suspected Measles cases only 3136 were sent to Lab for IgM antibody detection. District Wise performance is as below. Only 1 district managed to achieve the target of 80%.



### 3. Adequacy Of Investigation:

Adequate investigation rate was 12% for KP (Standard 80%). Most of the cases were investigated within 48 hours but due to non-collection of blood samples they lost their adequacy.



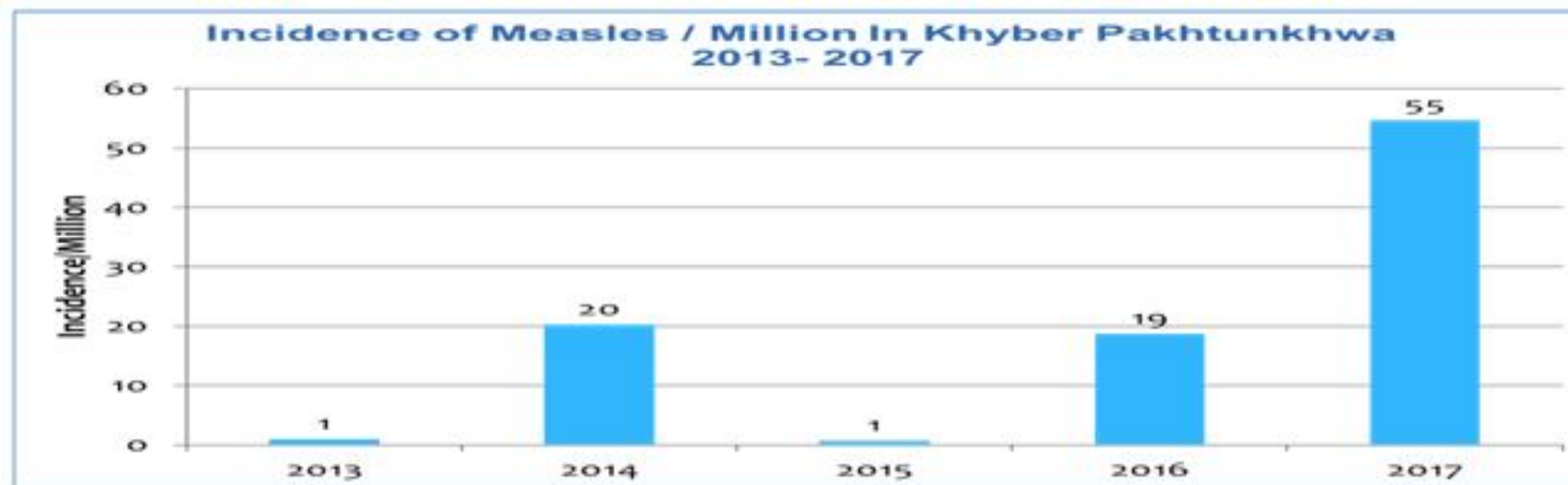
#### 4. Viral Detection Rate:

Only two out of 117 outbreaks in KP collected the Oral swab. The viral genotype in KP is B3.

#### Statistics of Measles Cases 2017:

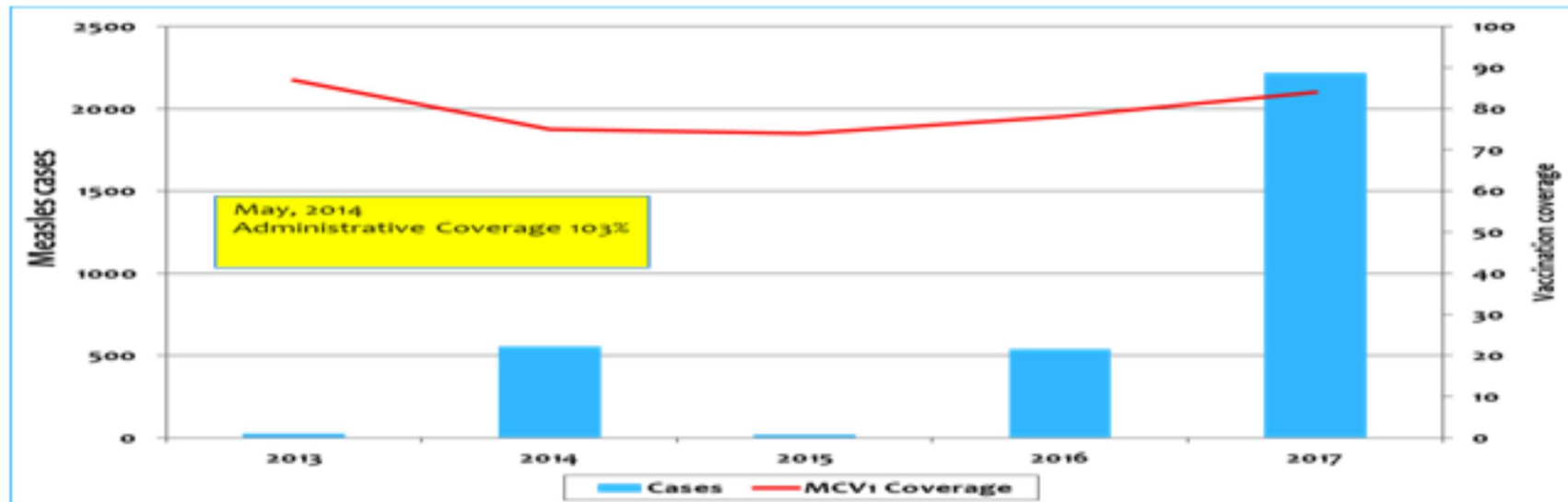
Suspected measles cases were reported from all districts of KP. Overall, 11,951 suspected measles cases were reported in 2017. Central KP comprising of 5 districts have major burden of disease i.e. 50% followed by north KP (31%) and South KP (19%) of cases.

The incidence of measles has been increasing over years as is evident from the graph below. The reporting of cases no doubt has improved since 2013 so it also contribute to the higher incidence but if we look onto 2015 the incidence of measles was decreased because of Nation wise campaign held in mid 2014 targeting wider age groups (6m-10 years).

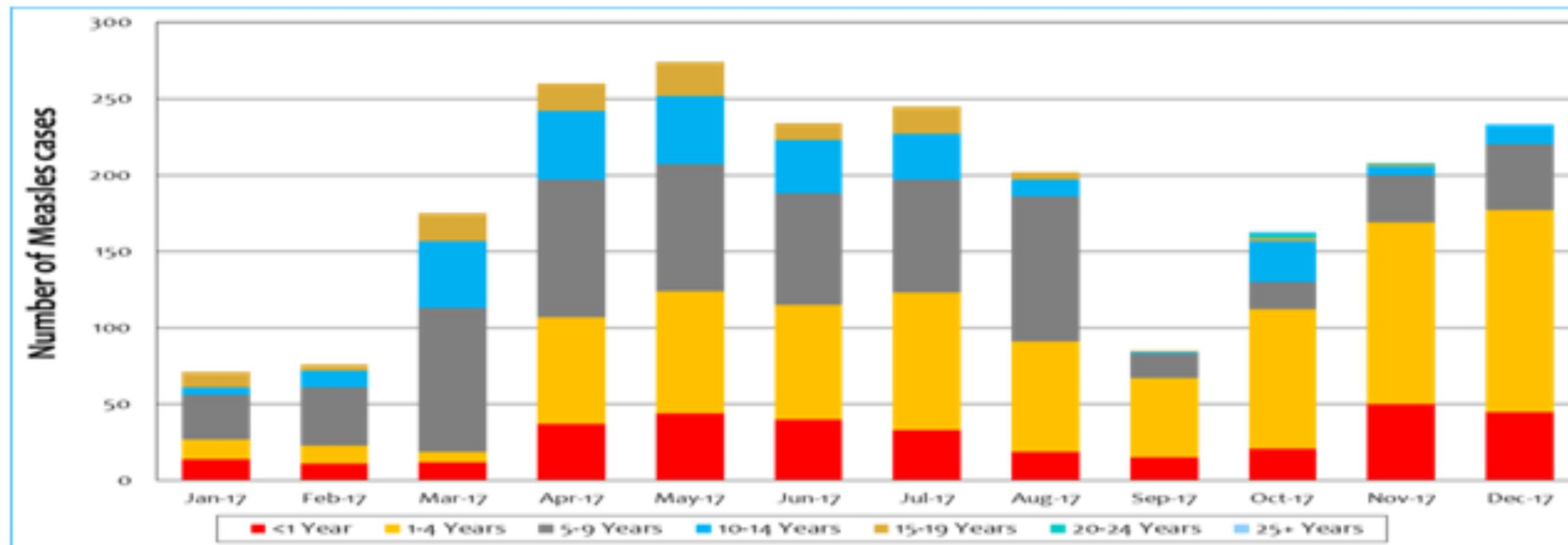


To interrupt the circulation of virus, vaccination coverage of at least 95% must be reached with two doses of Measles containing vaccine (MCV) through routine vaccination. Unfortunately the outbreaks and cases are increasing because the routine EPI coverage of 95% with MCV1 was never achieved since 2013 as evident from the graph below:

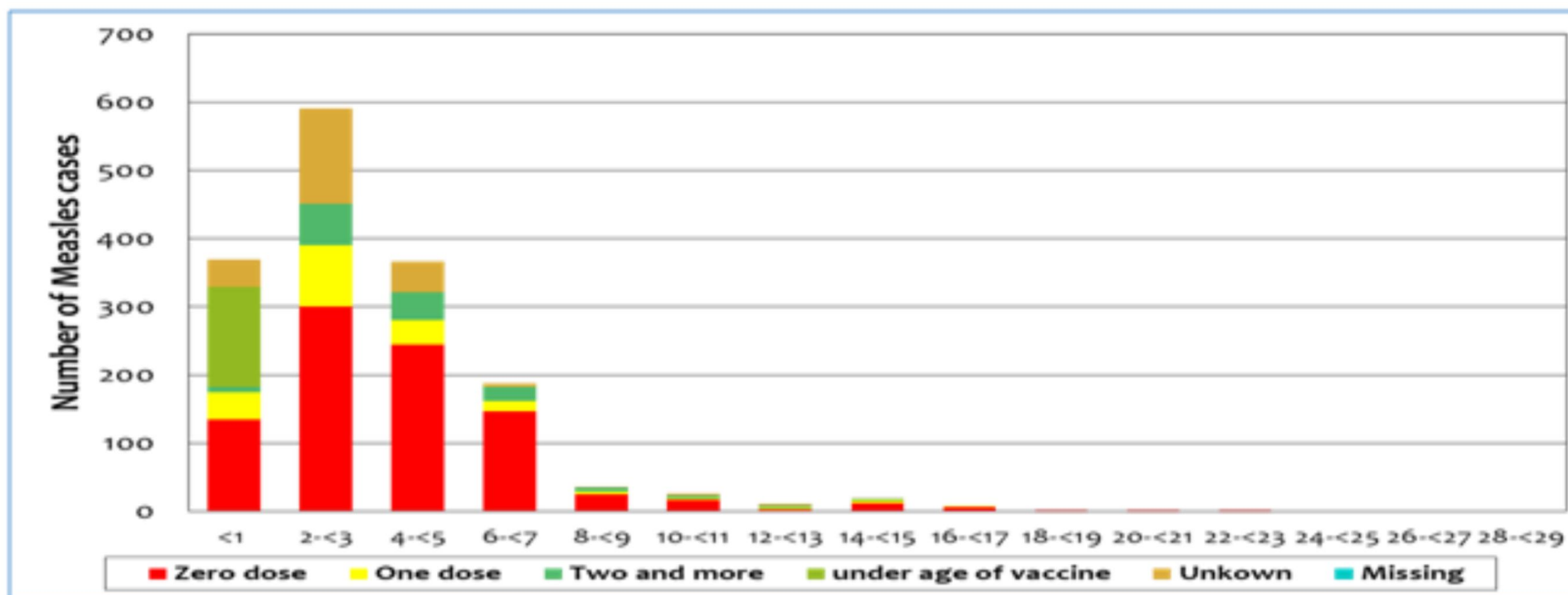




The age group most commonly affected in the confirmed Measles cases is 6months to 5 years. The Month-AGE wise distribution of Confirmed Measles cases are shown in the graph:



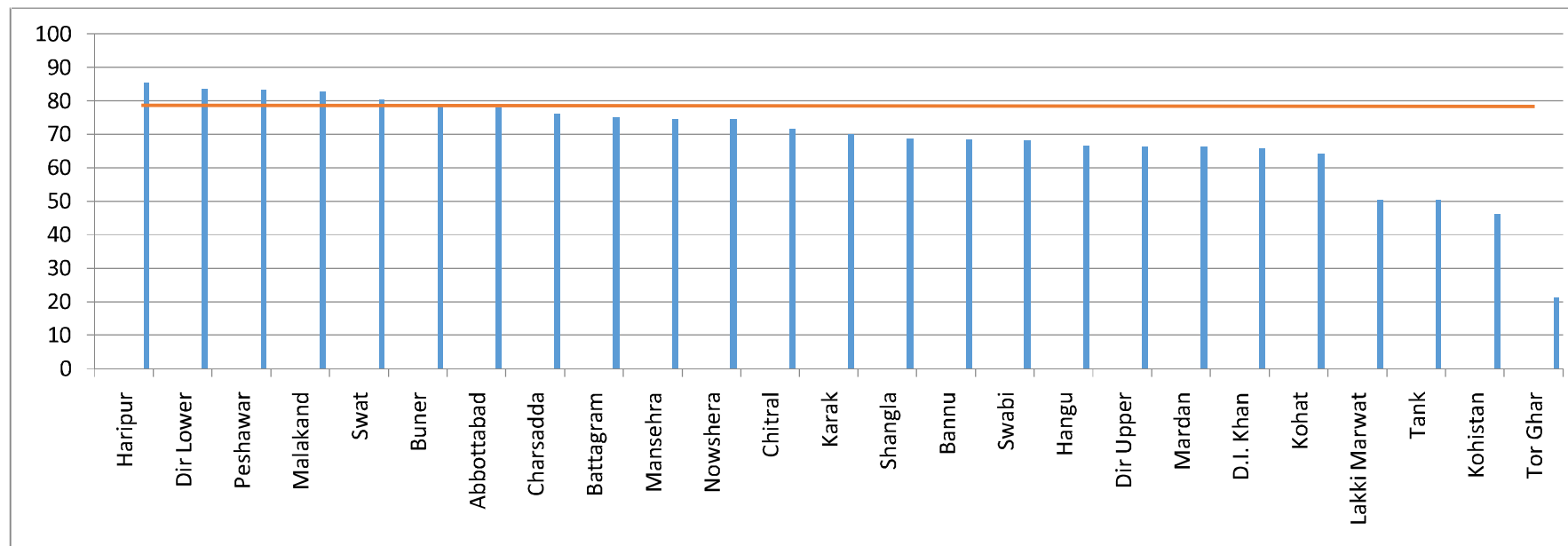
Unfortunately as the EPI coverages for measles were quiet low so there was a large cohort of children which remained unvaccinated. If we see the Graph of Measles confirmed cases, major chunk are that of ZERO dose children.



#### KP-Age wise vaccination Status of Measles Confirmed Cases 2017

#### KP Diphtheria Activity:

Khyber Pakhtunkhwa health department is working hard to get over with this deadly disease. For this the Pentavalent vaccine has been introduced in KP EPI Program in 2012. Before that DPT (Diphtheria, Pertussis and Tetanus) was already there in the program. However the desired coverages cannot be achieved leading into the cases and outbreaks of Diphtheria in some districts of KP.



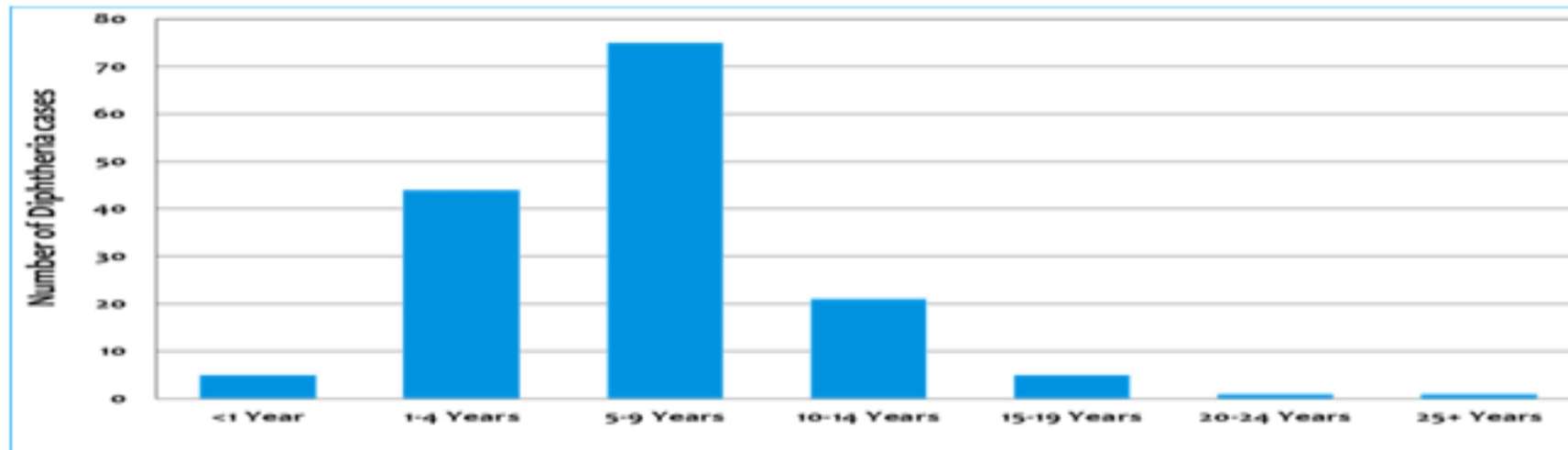
The above graph is the cumulative coverage of Penta 3 achieved by the districts from 2010 to 2017. This show only 5 districts (20%) have achieved the desired coverage for Penta 3, rest are still struggling. The factors are numerous including competing priorities for Polio campaigns, low number of outreach sessions by EPI technicians, security situations in some districts and weak accountability at the district level for routine EPI.

**Statics of Diphtheria Cases In KP:**

In 2017, 152 cases of Probable Diphtheria cases have been reported from the districts of KP. South KP has reported highest number (83%) of Diphtheria cases (Karak=47, DI Khan= 44, Bannu=24, Lakki Marwat=23) with multiple outbreaks in 5 Union councils of Karak, 2 in Lakki Marwat. KP due to its geographical variation share a long border with FATA agencies.

The age wise distribution of Probable Diphtheria cases of KP is shown below. The majority of C. Diphtheria cases occurred in 5-9 years of age





Vaccination is the best way to prevent diphtheria infection. In 2017, 62 cases (41%) of diphtheria cases are Zero dose for pentavalent vaccine and had not received the recommended number of pentavalent vaccines for their age. In general, those who have received at least one pentavalent dose have less severe outcomes than those who have never been vaccinated.

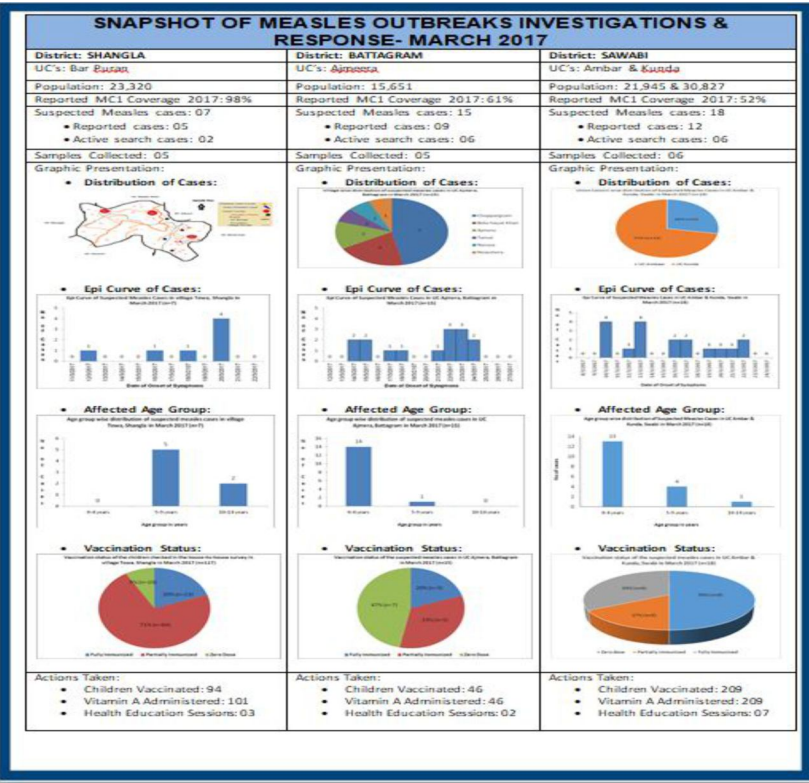
The low number of reported cases did not allow a detailed analysis of seasonal trend, however based on the available data the cases peaked from May till July.

The total of 51 cases from FATA (FR Bannu, FR Lakki Marwat, FR DI Khan and North Waziristan Agency) were also reported and investigated by KP surveillance team.

#### **Weekly Epidemiological/Surveillance Bulletins:**

Regular feedback of surveillance activities is an important aspect to keep the program performance on track, highlight the gaps and identify areas of improvement. For this purpose KP EPI Department with the technical support of WHO started weekly epidemiological bulletins in 2017.

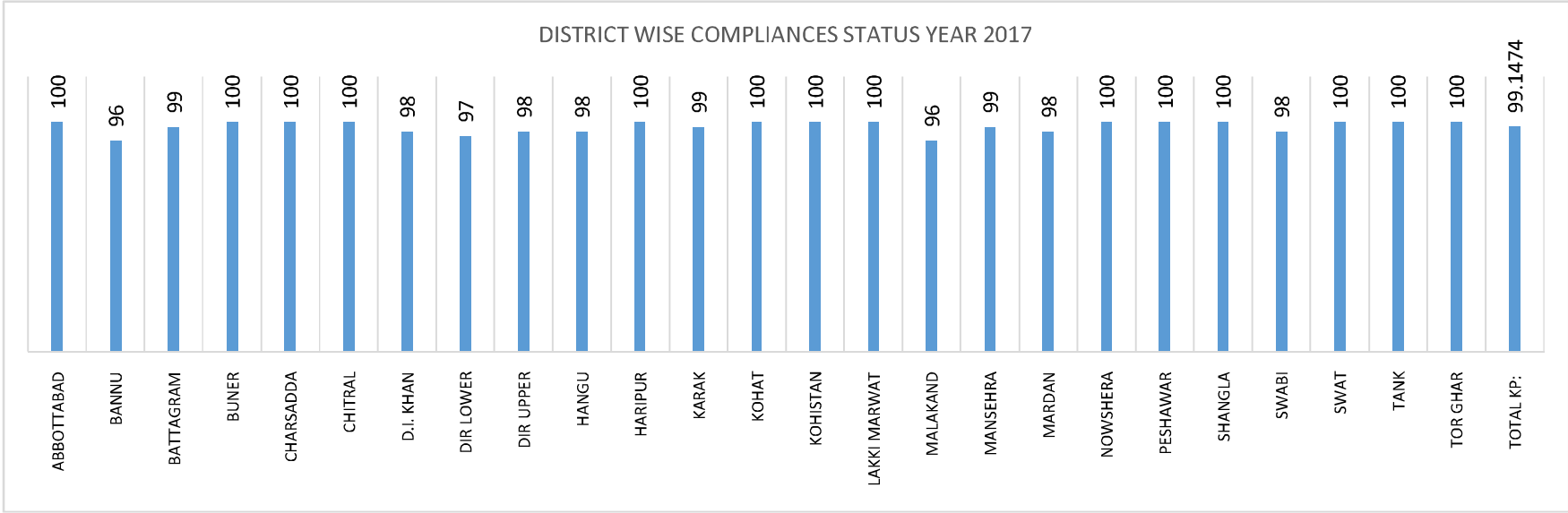
Each weekly bulletin report highlighted vaccine preventable diseases (VPD's) with notifiable activity, so keep an eye out for the inclusion of different VPD's as activity levels change. The snap shots of sample bulletin is shown below



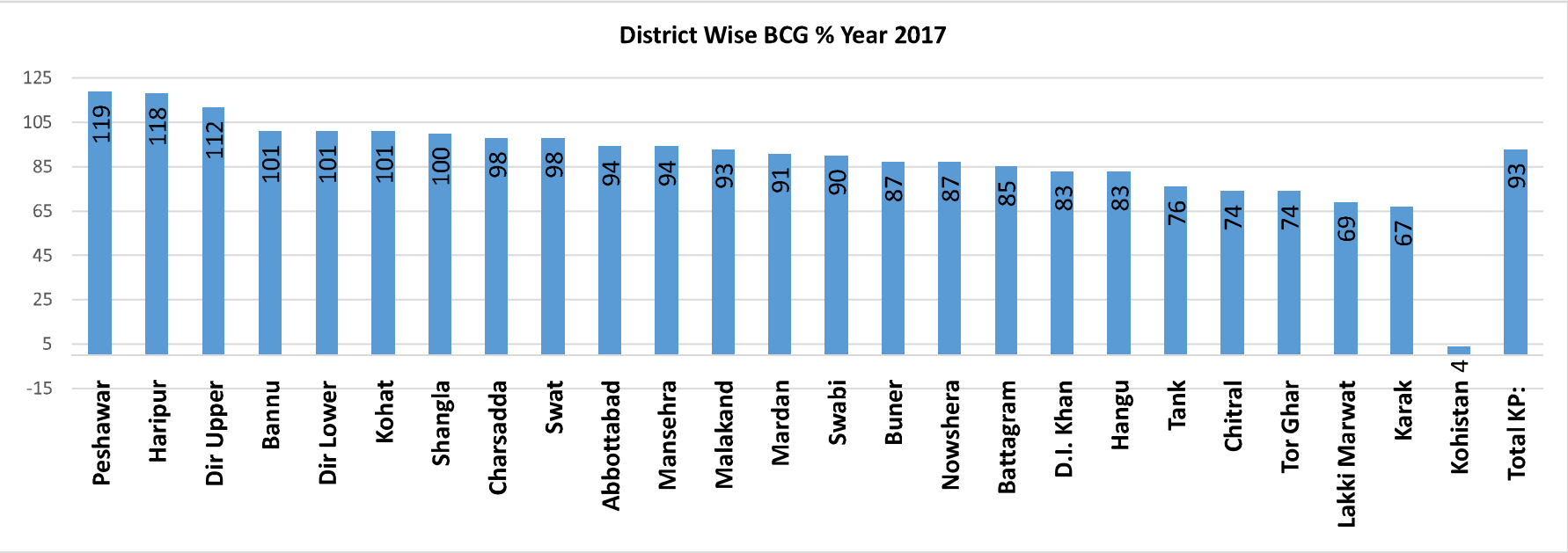
## SECTION-5

### EPI Vaccination Achievements

The fundamental pace of EPI is to improve EPI vaccination status and reduce disease burden due vaccine preventable diseases. EPI coverages against all antigens have been improved. Details against each coverage antigen are as follows.



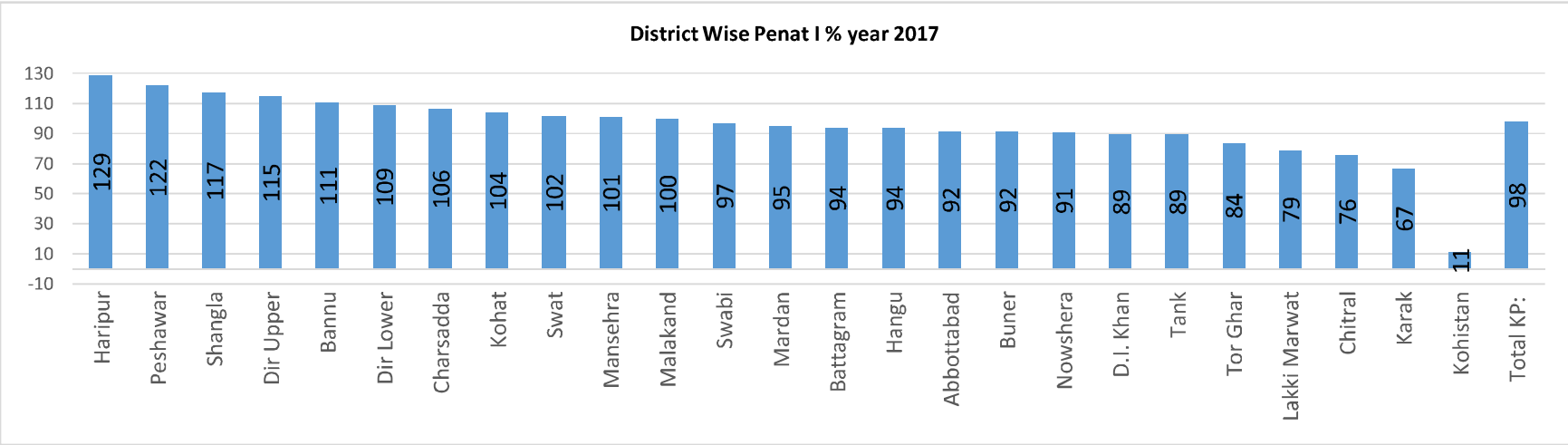
In 2017 EPI MIS was fully functional in all districts. Most of the districts submitted their all reports except districts like Bannu, Dir lower, DIKhan, Hangu, Dir Upper, Lakki Marwat, Mansehra, Shangla, and Mardan who failed to submit their 100% reports. Although timeliness of the most of the districts were above 80% and overall KP timeliness was 95%.



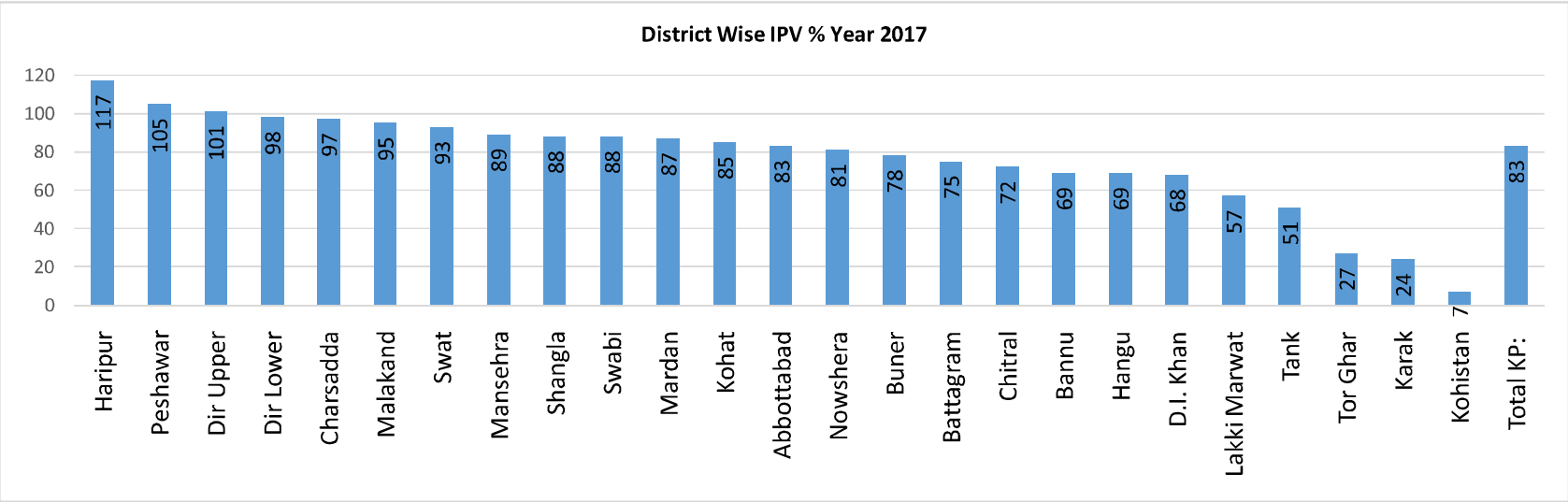
District Like Kohistan remained poor due to its hard to reach areas and could only manage to get 4% of coverage. While other district most from the south of KP like Tank, Karak and Lakki Marwat and fro northern region chitral and Torghar failed to achieve at-least 80% of coverage . While desirable coverage in BCG is 95% which was only achieve by the 9 districts Peshawar is leading and follow by Haripur and others.

While in whole KP 51% of female and 49% of females are vaccinated.

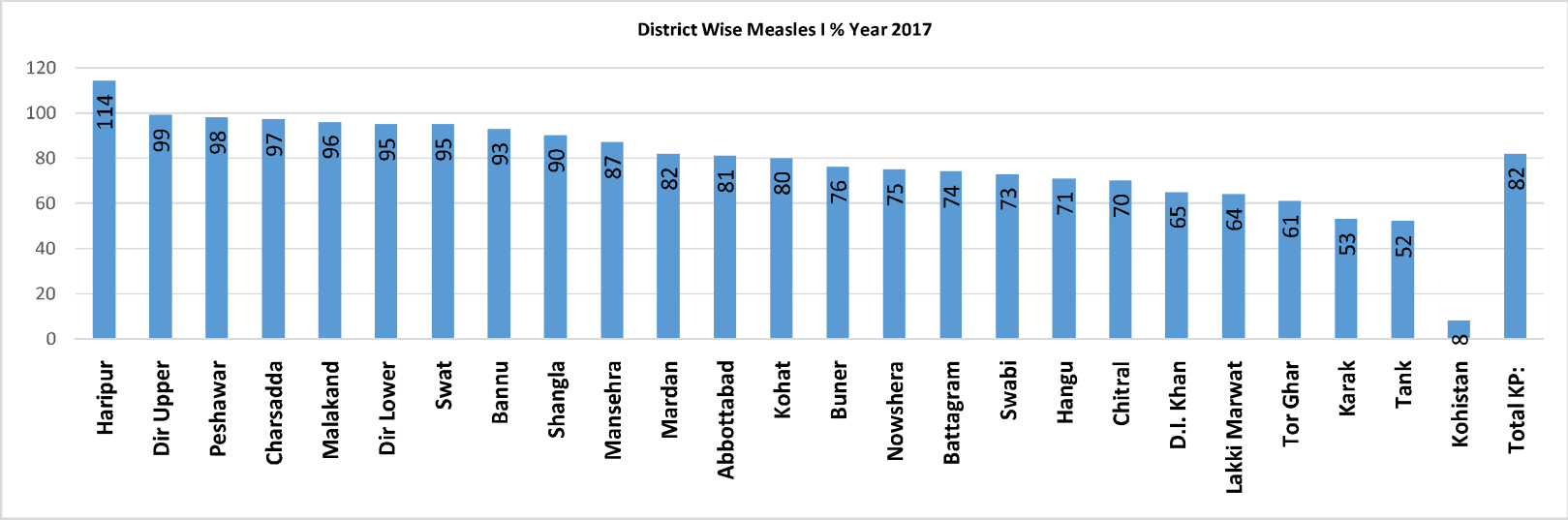




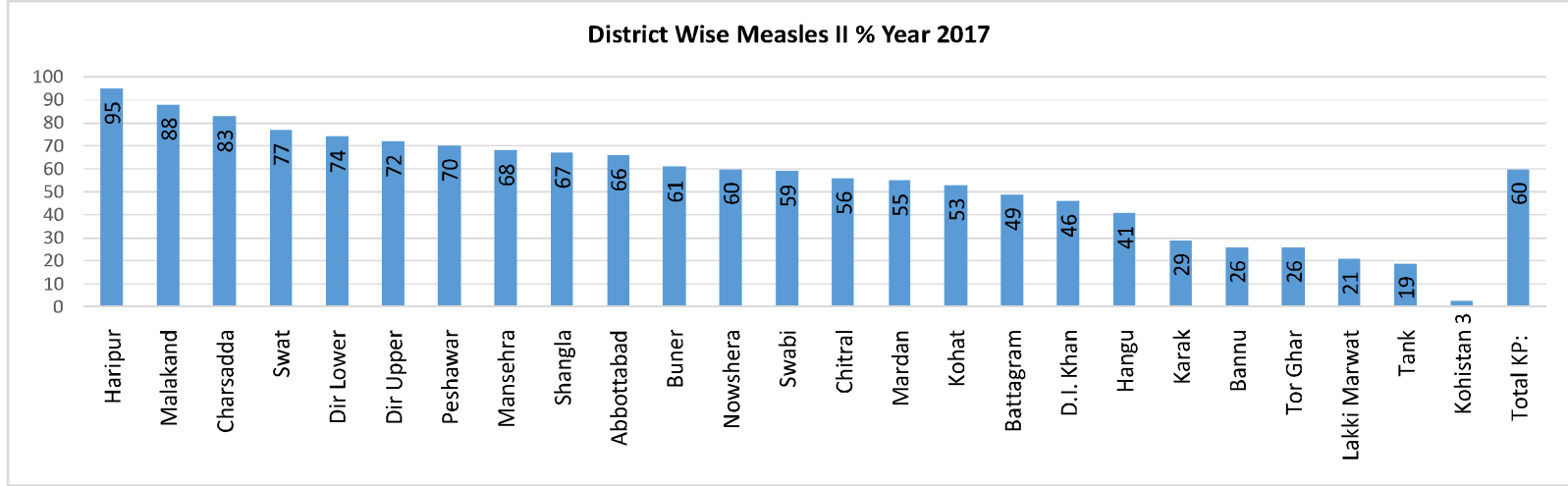
All districts except Lakki Marwat, Chitral, karak and Kohistan achieve the coverage of above 80%, while Districts like DIkhan, Tank and Torghar couldn't manage to achieve the coverage of 90%



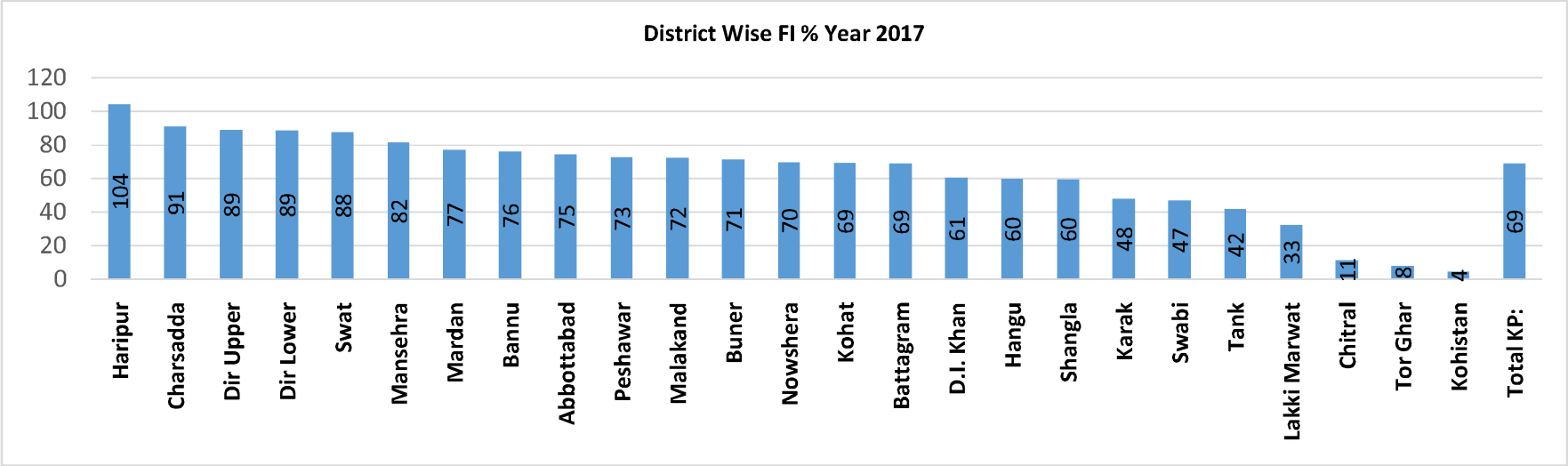
11 districts couldn't manage to achieve the desire coverage of 80% . Kohistan, Karak , Torghar and Tank remained poor in terms of performance . In contrast to this District Haripur, Peshawar and Dir Upper scored above 100 which should also be addressed while remaining 11 districts have good coverage of above 80%.



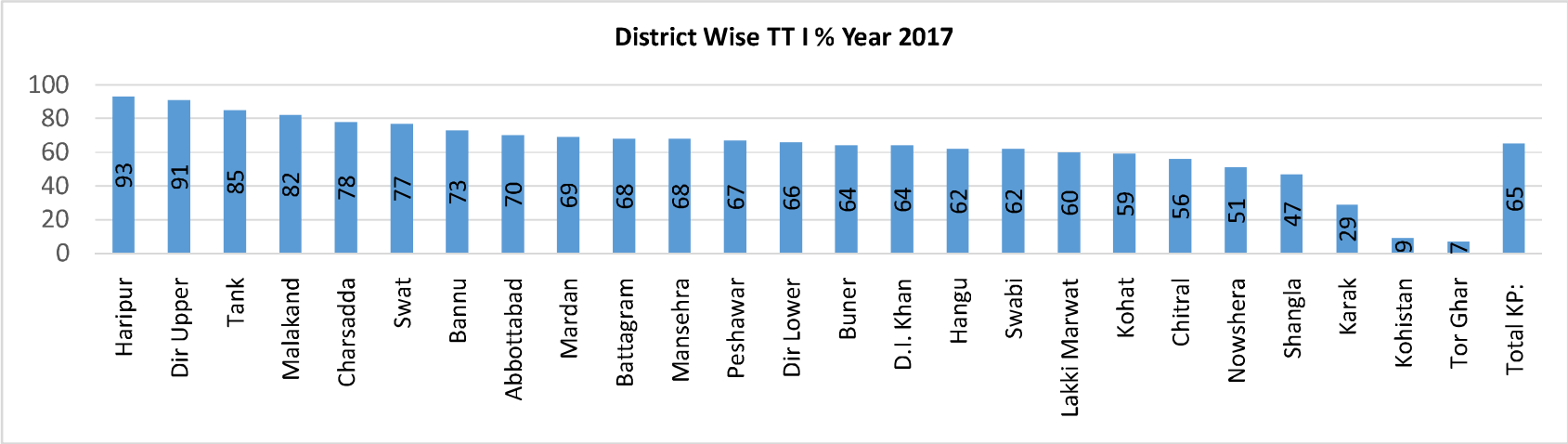
As Measles is one of the most contagious disease and there were number of outbreaks in several districts. Looking into the coverage 13 districts were reporting coverage above 80%. While Remaining districts remained below par being Kohistan, Tank and karak among the very poor performing.



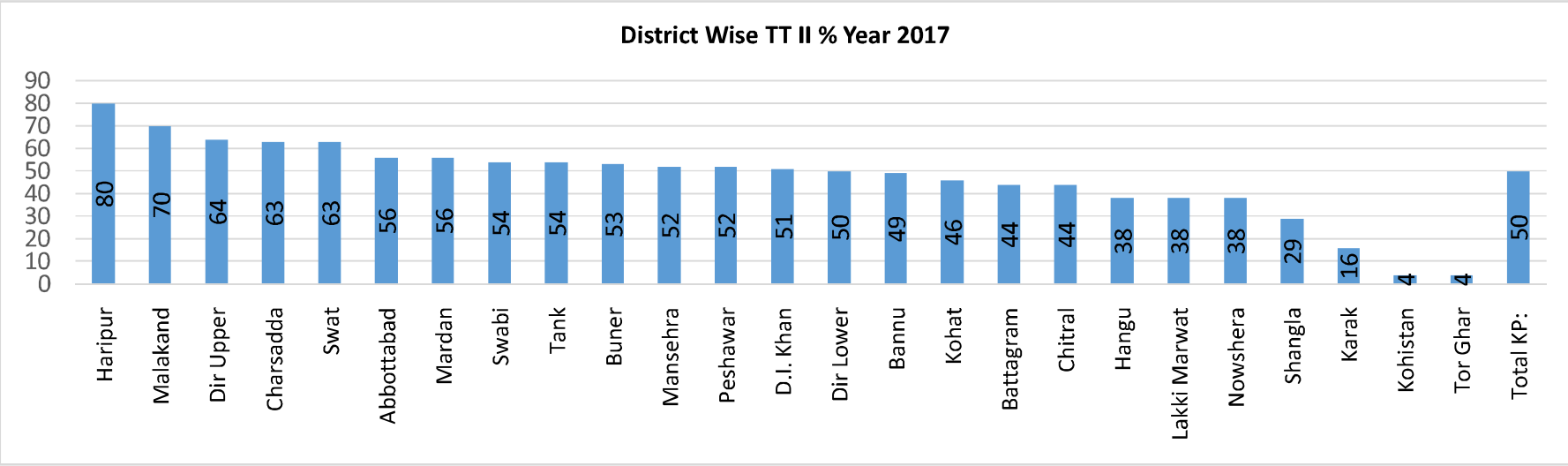
There is a huge drop in MCV-II coverage and all the districts except Haripur, Malakand and Charsadda have coverage above 80% while remaining districts failed to comply with the targets. Kohistan, Torghar and southern districts of KP remained poor performing and experienced number of measles outbreaks.



District Haripur, Charssada, Dir Upper, Dir Lower, Swat and Mansehra managed to achieved 80% of fully immunized coverage while rest of the districts could not achieved their targets. As well as Districts Torghar, Kohistan, Chitral, Lakki marwat, Tank, Swabi and Karak were below 50% and consider to be very poor in terms of performance.

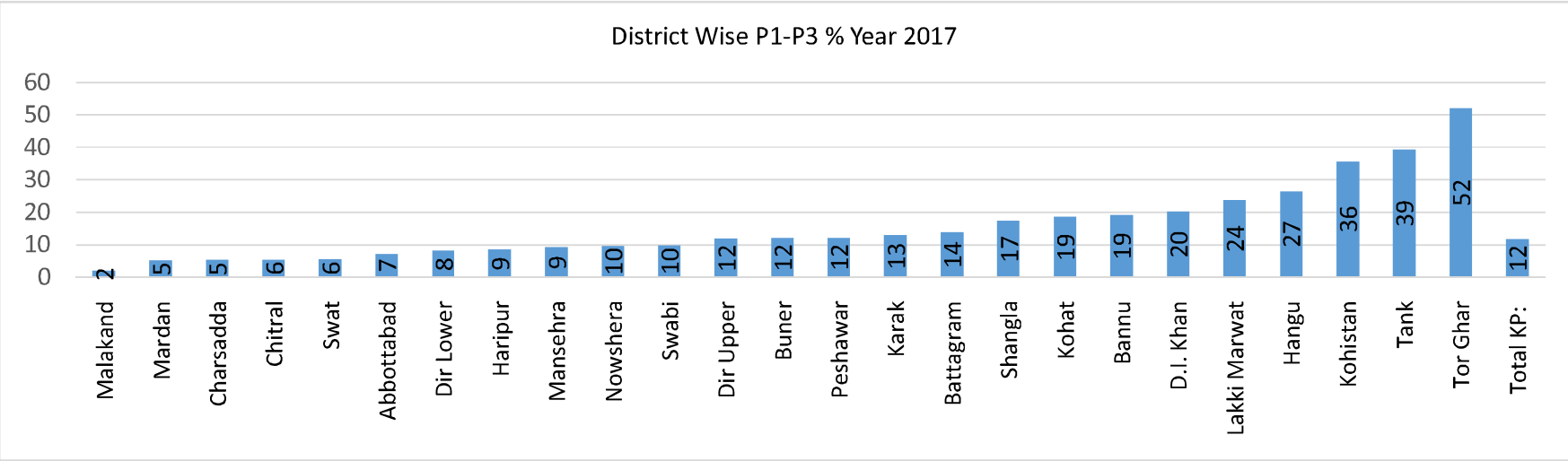


District Haripur, Dir Upper, Tank and Malakand achieved 80% coverage while rest of the districts failed to achieve their targets.

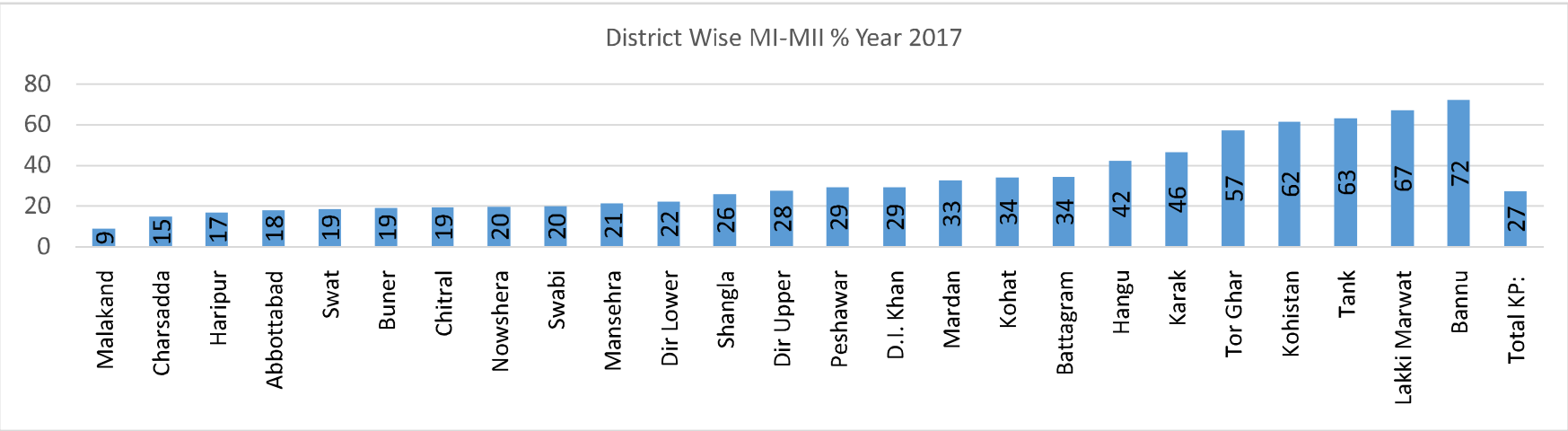


Only Haripur manage to achieve the coverage of 80% while remaining 24 Districts are below par being the Kohistan and Torghar among the worst.





9 District could only manage to have dropout lower than 10% remaining 16 Districts being Torghar , Tank, Kohistan, Hangu ,Lakki Marwat are the worst one. Improvement in these districts will have a positive effect on overall KP dropout which is currently 12%



Except Malakand, all district have dropout more than 10%, while district Bannu is one of the worst follow by Lakki Marwat , Tank, Kohistan, Torgar and Karak. Overall Kp dropout is sealed on 27% which is still very high.

#### **ACHIEVEMENTS 2017**

1. 1,088 permanent new position of EPI technicians sanctioned and recruitment completed.
2. 500 new position recruited under integrated PC-1.
3. 298 staff of Gavi and JICA project regularized, this include 235 EPI technicians. New temperature monitoring devices (30-days temperature) introduced in EPI for all EPI centers.
4. Cold Chain equipment gradual replacement, 429 ILR (263 solar ILR and 166 electric ILR).
5. 1,500 android phone purchased through integrated PC-1 and online monitoring of vaccinators started with the help of PITB through EVACC.
6. Online EPI MIS system developed and launched. Regular reporting from districts.
7. Separation of vaccinators from polio SIAs in four districts (Peshawar, Malakand, Buner and Haripur).
8. Routine EPI micro-planning in all 25 districts.
9. EVM secretariat established at provincial level.
10. Five divisional cold store reconstructed/ rehabilitated (Malakand, Mansehra, Kohat, Bannu, D.I. Khan).
11. Site for construction of new provincial EPI warehouse identified and ground breaking in August 2017
12. Mid-year and annual program and quarter reviews.
13. Re-established monthly EPI meetings of all vaccinators with district management.
14. RED/ REC trainings and development of RI micro-plans in all 25 districts.
15. Identification and training of one para-medical staff per EPI center to provide vaccination during vaccinator's outreach visit.
16. Started Integrated Disease Surveillance and Response (IDSRS) in collaboration with public health section of DOH.
17. Capacity building of health facility in-charges on IDSRS with focus on VPD surveillance.
18. Disease outbreak investigation and response.
19. Data Quality Assessment, so far conducted in 23 districts.
20. SOPs for data quality improvement developed and implemented.
21. District specific plan of actions 2017-18 developed.
22. Provincial plan of action 2017-18 developed based on district plan of actions.
23. Technical support in planning and implementation of disease surveillance and case response.
24. Technical support for EPI monthly data analysis and response at provincial and district level.
25. EPI MIS developed and launched for online reporting.
26. Measles Mop up conducted in phase wise manner



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