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Government of Pakistan
Directorate of Malaria Control
National Data Management Unit



Ministry of National Health Services Regulations & Coordination

Malaria Disease Surveillance Report (FM-4)

The Global Fund (TGF) Round-10; P-19 (April to June 2016)

INTRODUCTION

Directorate of Malaria Control is implementing Malaria Control interventions in 43 highly endemic districts of Pakistan through 5 Sub-Recipients. The list of districts with their respective SRs is at Annex-“A” Recording and reporting for the Malaria cases surveillance is carried out on specific FM tools in TGF supported districts. The suspected cases are screened through Microscopy / RDT at health care delivery health outlets. Confirmed Malaria cases are being treated according to National treatment guidelines. The generated data is aggregated on FM-2 form and forwarded to the district. The district DMUs compile the data on FM-3 and forward it to province / region. The provincial DMUs accumulate the information on FM-4 and transmit to National DMU.

FM-4 PROVINCIAL MALARIA REPORTING FORM (April – June 2016; Period – 19)

The FM-4 reporting format has following variables:

1. Reporting completeness
2. Proportion of suspected malaria cases receiving malaria diagnostic test
3. Clinical cases
4. Species wise confirmed cases
5. Test Positivity Rate
6. Sex & age distribution of reported malaria cases
7. Proportion of malaria cases admitted & referred
8. Proportion of sever malaria cases admitted & treated

The soft copies of FM-4 reporting forms for the period (P-19) collected from the provincial DMUs. Data of each variable was compiled in EXCEL sheet.

REPORTING COMPLETENESS

Total 1906 diagnostic centers (Microscopy+RDT) have been established / strengthened in 47 districts / agencies with the support of GF grant. 5718 reports were expected to be received during the period P-19, out which 5298 (92.7%) reports were received from the health facilities.

The details are as under:

Province / Region	# of Diagnostic centre	# expected Reports to be received	# of reports received	Completeness of reports %
KPK	434	1302	1302	100
Balochistan	740	2220	2052	92.4
Sindh	369	1107	1099	99.3
FATA	363	1089	845	77.6
Total	1906	5718	5298	92.7

PROPORTION OF SUSPECTED MALARIA CASES RECEIVING MALARIA DIAGNOSTIC TEST

Total 429715 malaria suspected cases visited the GF supported health facilities. 99.67% suspected cases were screened through microscopy / RDT. It is appreciable that almost all the suspected malaria cases are getting diagnostic services.

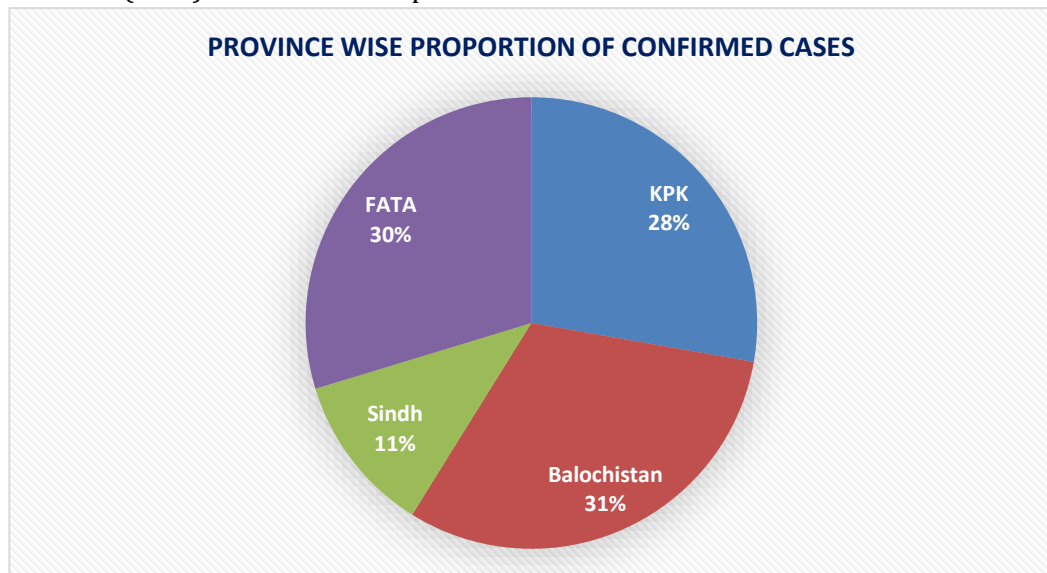
Province / Region	Suspected cases	Screened	Proportion of screened cases
KPK	121324	121324	100
Balochistan	120501	119125	98.86
Sindh	99891	99855	99.96
FATA	87999	87998	100.00
Total	429715	428302	99.67

MALARIA CASES

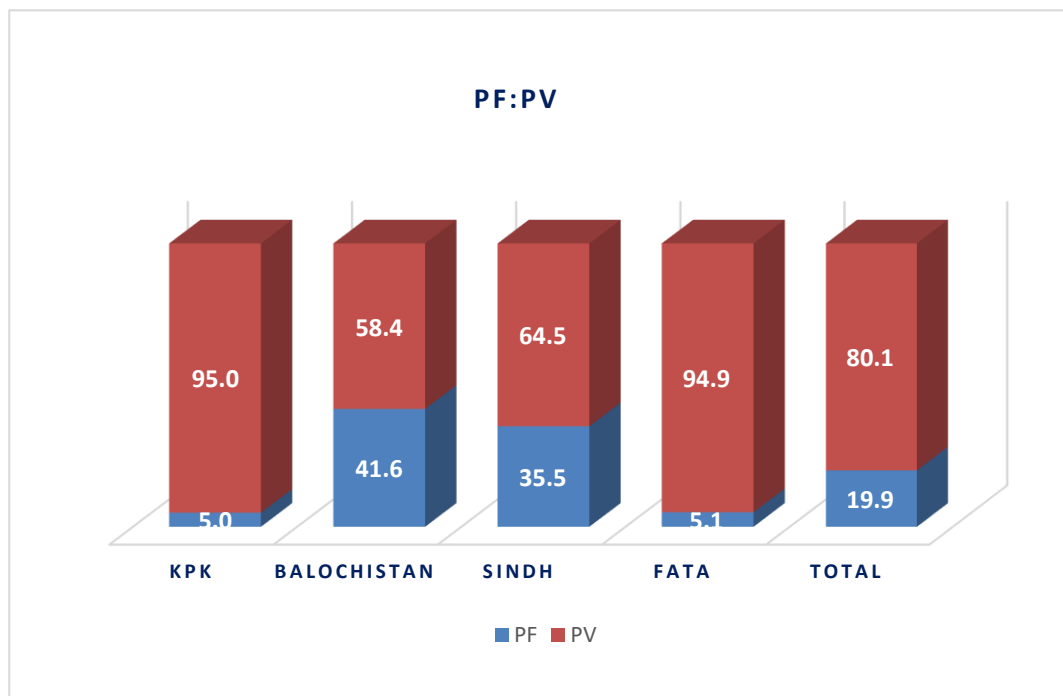
In GF supported districts 57053 malaria patients were treated with ant malarial drugs. 4.3% cases received treatment on clinical grounds with highest proportion 11.1% in Balochistan, while in Sindh and FATA no any case was diagnosed clinically. The details of clinical cases and species wise confirmed cases are as under:

Province / Region	# of cases received anti-malarial drugs	Clinical cases	Confirmed cases			
			P.F	P.V	Mix	Total
KPK	15489	337	302	14399	451	15152
Balochistan	19105	2130	3897	9910	3168	16975
Sindh	6245	0	1173	4029	1043	6245
FATA	16214	0	433	15,381	400	16214
Total	57053	2467	5805	43719	5062	54586

Out of the total cases highest proportion was recorded in Balochistan (31%) and FATA (30%) followed by KPK (28%) and Sindh (11%) as shown in the pie chart.



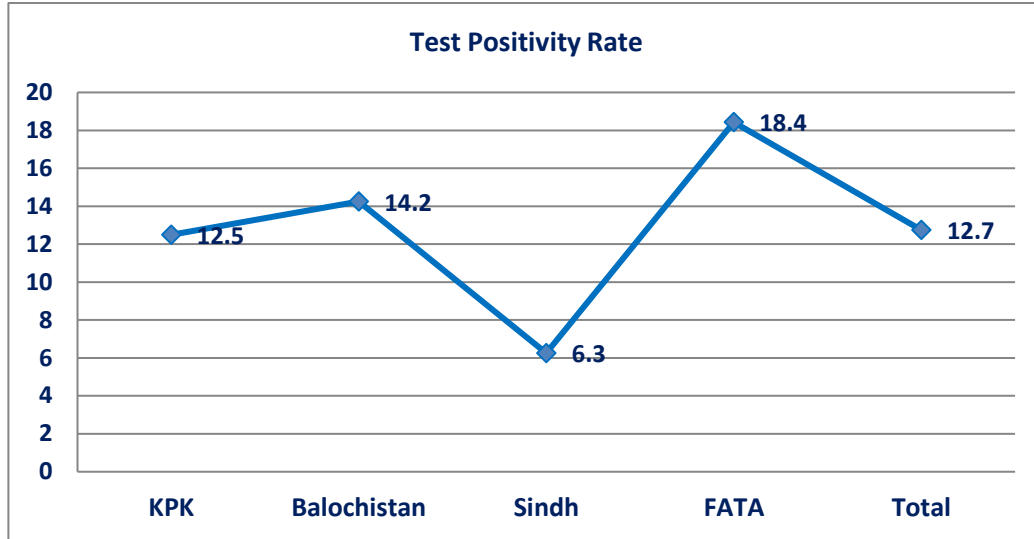
During the reporting period (P-19), overall the *P. vivax* (PV) cases remain dominant (80%), with the usage of ACTs, PF cases restricted to only 20%. The reported *P. falciparum* (PF) cases in Balochistan and Sindh provinces are 41.6% and 35.5% respectively, which are on higher sides and needs attention. Efforts should also be made to explore the reasons of not curtailing the PF proportion cases in both the provinces despite of ACTs usage.



TEST POSITIVITY RATE

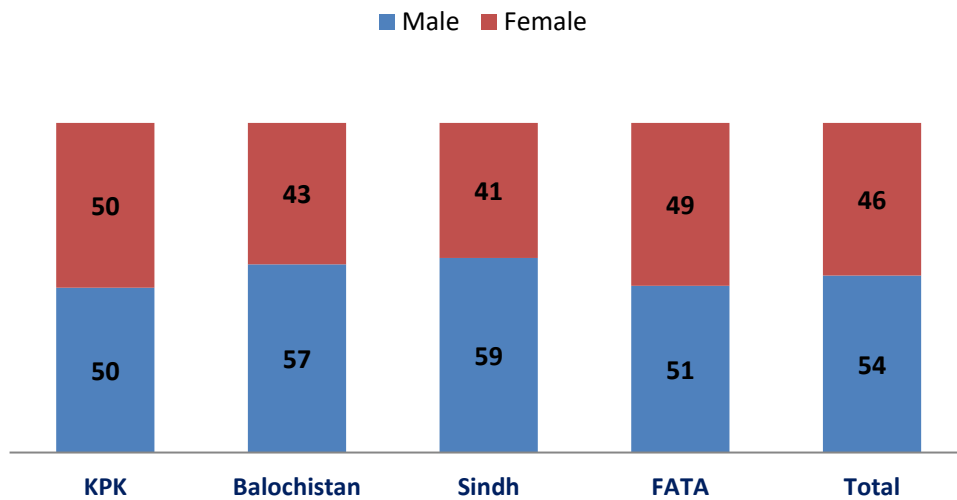
The malaria test positivity rate (TPR), defined as the proportion of diagnostic tests that are positive for malaria, and is one of the important indicator of malaria morbidity. The advantages of TPR are that it inherently incorporates only laboratory-confirmed cases, provides a clear denominator and can provide a rapid and inexpensive means of assessing malaria morbidity in a population utilizing health care facilities where diagnostic testing is available.

The overall Test Positivity Rate (TPR) during the period P-19 is 12.7%. TPR in FATA is 18.4% followed by Balochistan and KPK, 14.2% and 12.5% respectively.



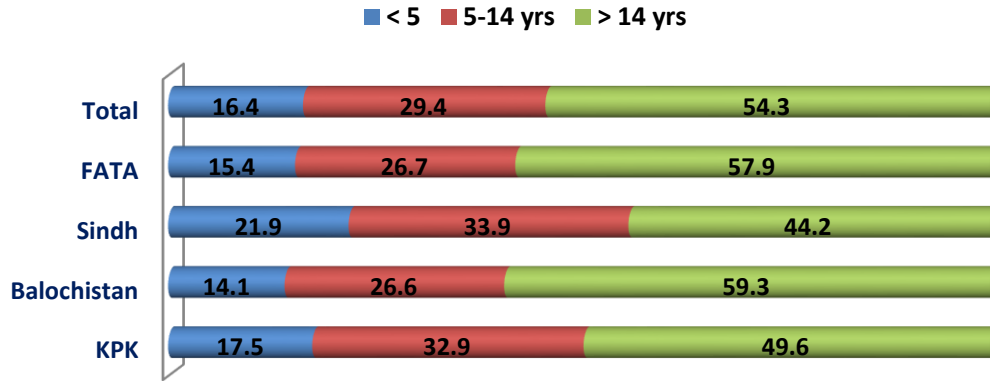
SEX DISTRIBUTION

Of the total malaria cases reported during the period the male female ratio is 53.7:46.3. The data shows that the females from Fata are diagnosed more amongst other Provinces.



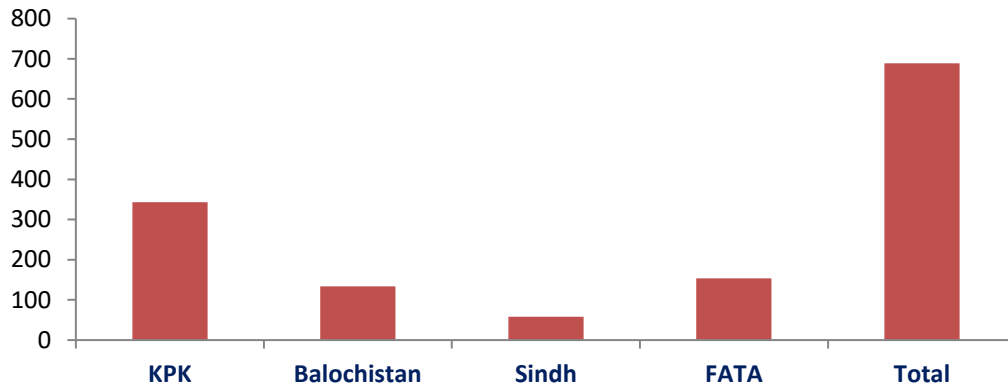
AGE DISTRIBUTION

The overall proportion of children less than 5 years is 16.4%. Sindh province with 22% of their total cases is on top, followed by KPK (17.5%), FATA (15.4%) and Balochistan (14.1%).



NUMBER OF PREGNANT WOMEN

Total 689 pregnant women were treated as per national treatment guidelines, which are 1.3% of the total cases reported from all the province. More pregnant women benefitted in KPK followed by Balochistan and FATA, while Sindh has less number.



TREATMENT

The data in the section of treatment seems imperfect. It is not clear whether the antimalarial drugs prescribed are the total number of tablets or courses.

In the section **ACTION TAKEN** data shows that 67 cases were admitted but this figure is not matching with the column of Malaria admissions in the section of **OPD, ADMISSIONS & DEATH**.

DR.MUHAMMAD SULEMAN MEMON
EPIDEMIOLOGIST / INCHARGE NTIONAL DATA MNAGEMENT UNIT

ANNEXURES

Annex: A – Names of the Districts in different Provinces under the TGF Grant (Round 10)

Directorate of Malaria Control		
National Data Management UNIT		
Reporting period April to June 2016 (P-19)		
S.No.	District	# of Diagnostic centres
KPK		
1	Bannu	64
2	D.I.Khan	59
3	Lakki	51
4	Tank	46
5	Mardan	91
6	Charsada	61
7	Noshera	62
Sub-Total		434
Balochistan		
8	Harnai	27
9	Killa Saifullah	35
10	Loralia	46
11	Musa khal	33
12	Mustung	25
13	Naseerabad	28
14	Noshki	37
15	Pishin	33
16	Sherani	22
17	Sibi	24
18	Zhob	33
19	Chaghi	36
20	Gwadar	47
21	Kech	55
22	Kharan	40
23	Panjgoor	41
24	Washuk	34
25	Bolan	35
26	Dera bugti	28
27	Jafarabad	56
28	Jhal Magsi	25
Sub-Total		740
Sindh		
29	Khairpur	125

30	Tharparkar	61
31	Thatta	64
32	Tando Allahyar	41
33	Mirpur Khas	78
34	Sujawal	
Sub-Total		369
FATA		
35	Bajaur	46
36	Khyber	44
37	Kurram	44
38	Orakzai	38
39	Mohmand	55
40	S.Waziristan	29
41	N.Waziristan	29
42	FR Kohat	12
43	FR Peshawar	26
44	FR Bannu	12
45	FR Lakki	9
46	FR DI Khan	12
47	FR Tank	7
Sub-Total		363
GRAND TOTAL		1906