



MALARIA DISEASE SURVEILLANCE REPORT (FM-4)

Reporting Period: **NFM P-1 (July to September 2016)**

INTRODUCTION

Under the TGF funded NFM grant, Directorate of Malaria Control is implementing Malaria Control interventions in 66 highly endemic districts of Pakistan through 8 Public and Private Sub-Recipients.

The suspected cases are screened through Microscopy / RDT at health care delivery outlets. Confirmed Malaria cases are being treated according to National treatment guidelines. The generated data is aggregated on FM-2 form at the health facility level and forwarded to district, the district DMU compile the data on FM-3 and forward to province / region. The provincial DMU accumulate the information on FM-4 and transmit to National DMU.

FM-4 PROVINCIAL MALARIA REPORTING FORM (Jul-Sep 2016; Period - 1)

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-1) received 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-1, out of which 5298 (92.7%) reports 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	422	1266	1220	96.4
Balochistan	753	2259	2003	88.7
Sindh	378	1134	1131	99.7
FATA	363	1089	852	78.2
Total	1916	5748	5206	90.6

Proportion of suspected malaria cases receiving malaria diagnostic test:

Total 572648 malaria suspected cases visited the GF supported health facilities. 99.8% 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	160429	160429	100
Balochistan	152930	151904	99.3
Sindh	157446	157385	99.9
FATA	101843	101843	100
Total	572648	571561	99.8

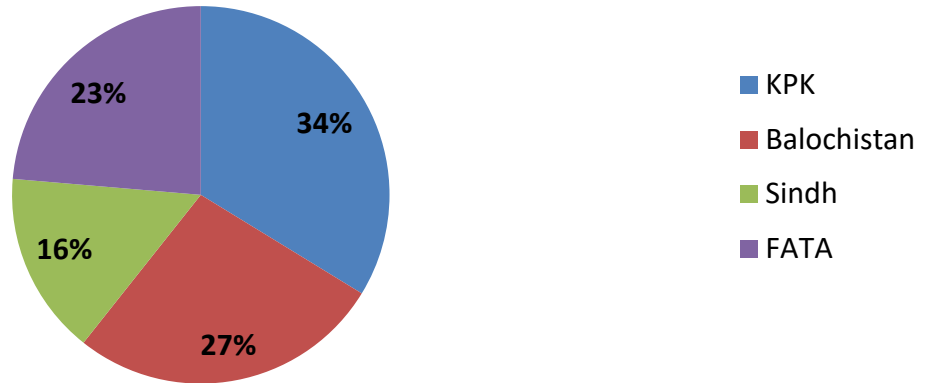
Malaria cases:

In GF supported districts 83485 malaria patients were treated with ant malarial drugs. 2% cases received treatment on clinical grounds. Out of the total clinical cases 48.5% from Balochistan, followed by 38.8% from Sindh. The details of clinical cases and species wise confirmed cases are as under:

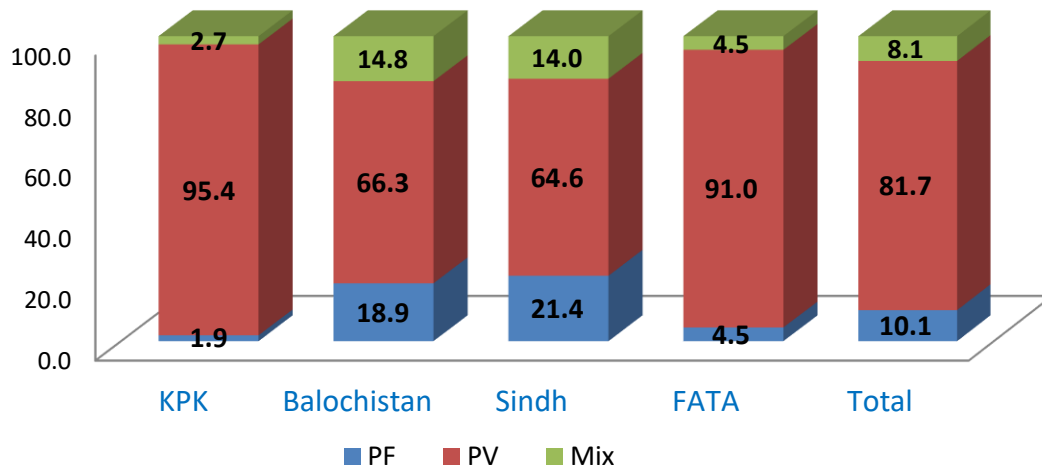
Province / Region	# of cases received anti malarial drugs	Clinical cases	Confirmed cases			Total
			P.F	P.V	Mix	
KPK	27743	207	524	26270	742	27536
Balochistan	22780	805	4163	14565	3247	21975
Sindh	13435	643	2739	8267	1786	12792
FATA	19527	4	876	17774	873	19523
Total	83485	1659	8302	66876	6648	81826

Out of the total confirmed cases highest proportion was recorded in KPK 34% followed by Balochistan 27%, FATA 23% and Sindh 16% as shown in the pie chart.

Province wise Proportion of confirmed cases

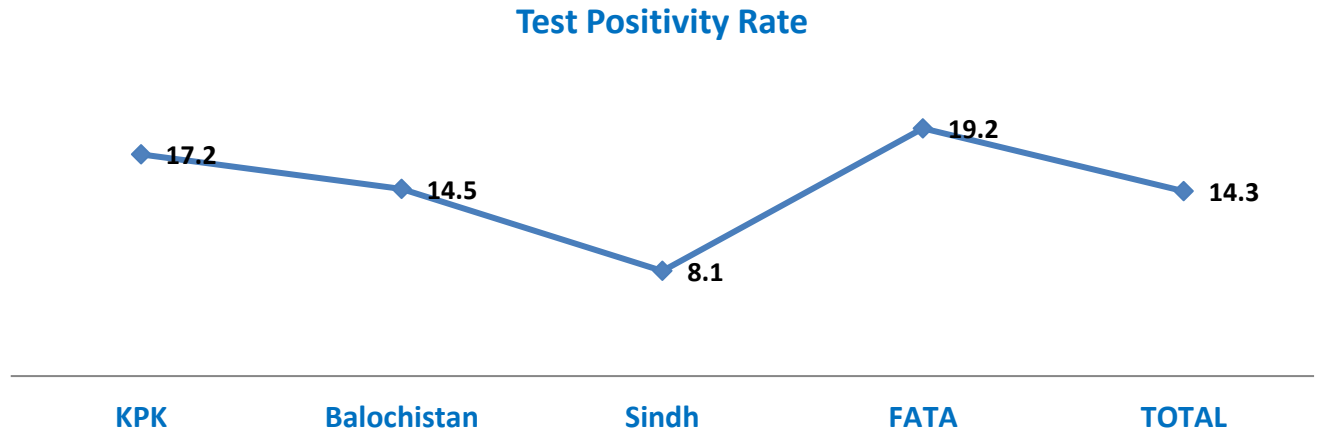


During the reporting period (P-1) P.Vivax cases remain dominant (82%), with the usage of ACTs, PF cases restricted to only 10%. The reported PF cases in Sindh and Balochistan provinces are 21.4% and 18.9% respectively. The proportion of mixed cases are high in Balochistan (14.8%) and Sindh (14.0%) as compared to other provinces.



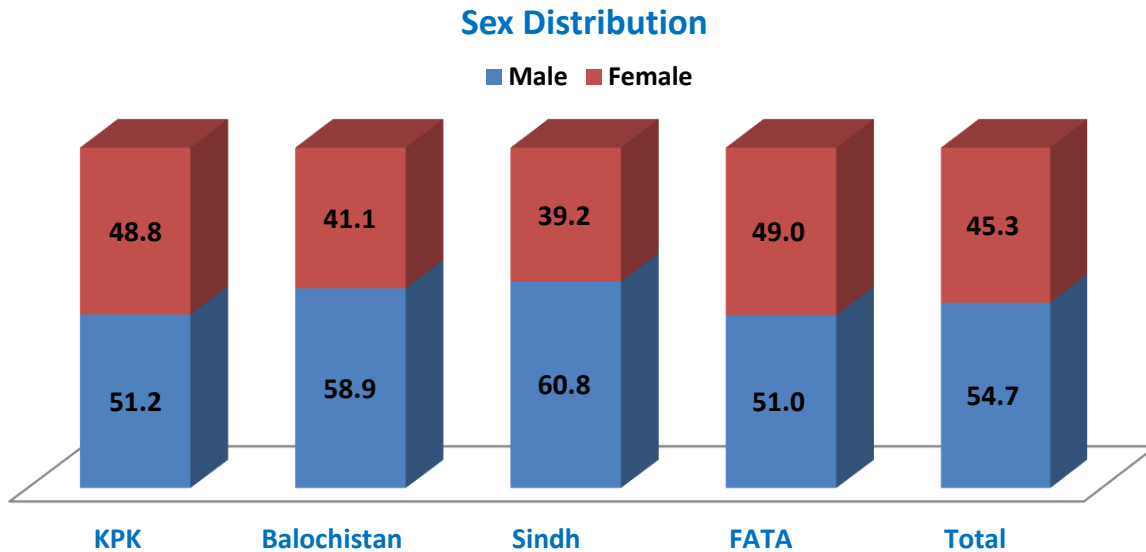
Test Positivity Rate:

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.



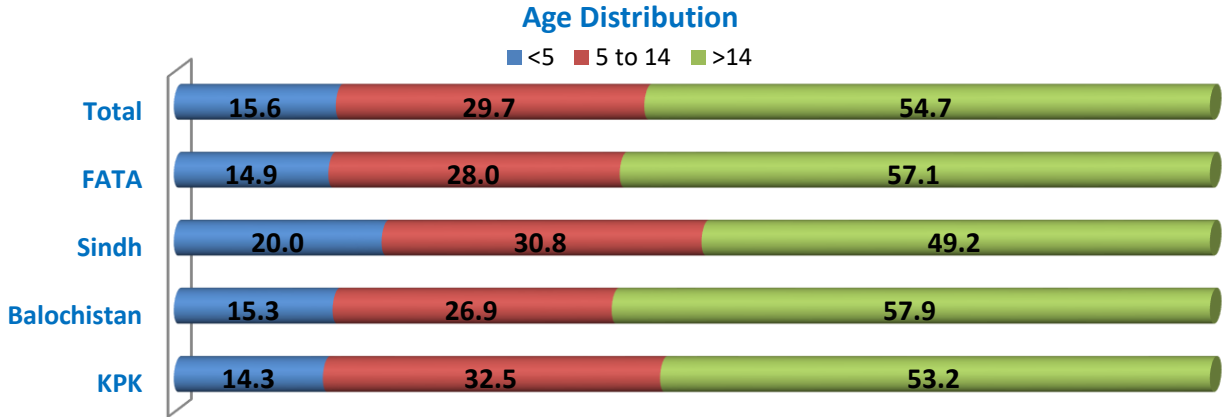
The overall Test Positivity Rate (TPR) during the period P-1 is 14.3%. TPR in FATA is 19.2% followed by KPK, Balochistan and Sindh 17.2%, 14.5% and 8.1% respectively.

Sex & Age distribution:



Of the total malaria cases reported during the period the male female ratio is 54.7:45.3. The trend is almost same in all the provinces.

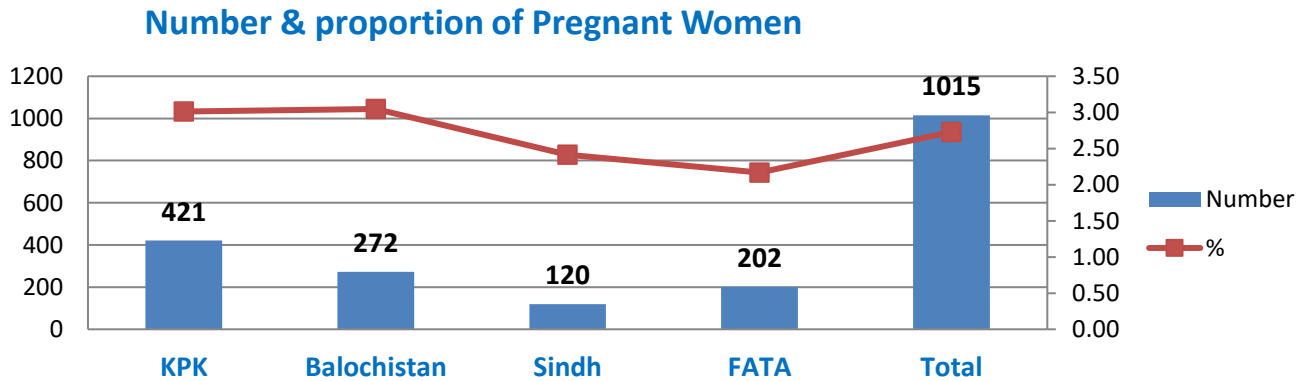
The overall proportion of children less than 5 years is 15.6%.



Sindh province with 20% of their total cases is on top. The other provinces have almost same proportion.

Pregnant women:

Total 1015 pregnant women were treated as per national treatment guidelines, which are 2.4% of the total female cases reported from all the provinces. 3% pregnant women from KPK and 3% from Balochistan were provided anti-malarial drugs. The proportion of PW is less in Sindh (2.4%) and FATA (2.1%).



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 has errors; the number of admitted cases is not matching with the column of Malaria admissions in the section of **OPD, ADMISSIONS & DEATH**.

DR.MUHAMMAD SULEMAN MEMON
 EPIDEMIOLOGIST / INCHARGE NATIONAL DATA MANAGEMENT UNIT
 Directorate of Malaria Control Program (DMC) – Islamabad