Foreword

It is indeed a time of great satisfaction for me personally and my staffs who have worked relentlessly to produce the third volume of the Quarterly DHIS report. The ever expanding horizon of the report has clearly indicated the commitment of the staff at the provincial level and the contributions from the district level have to be appreciated despite the uncertainty prevailing in some of the districts regarding their future after the withdrawal of donor support.

Our earnest effort towards generating accurate data about the health sector continues to expand and this time the report include shortages of critical staffs like those working in the Anesthesia and Nursing care and the patients undergoing cancer treatment and number of maternal and child mortality figures in government facilities. The most significant addition of the mortality data from all institution for the first time ever and in a majority of cases now the cause of death is known. Certain grey areas do remain the most critical being the mortality rate prevalent in the indoor patients and an analysis of the most causes of mortality in our set-up. Another important aspect would be the cost sharing or OPD/ Indoor charges that are not reported at the present moment but hopefully would be a part of the report in the future.

I must express a sincere gratitude to the staffs of the DHIS for their commitment, zeal and hard work in ensuring the appearance of this report on a regular basis. A word of gratitude to the Department of Health and Planning and Development Department Government of Khyber Pakhtunkhwa for their unflinching support, encouragement and guidance on these report and we hope to justify their faith with our effort and promise to further improve and expand our horizons.

Dr. Javaid Pervez, Provincial Program Manager, DHIS Khyber Pakhtunkhwa.

1. REPORTING COMPLIANCE:

Compliance rates are illustrated in the fig.1, fig 1.1. It is satisfactory to note that the compliance rates have been consistent with minor variations. This indicator is reflective of the interest and dedication of the districts staffs in submitting the required reports on time and with the desired accuracy. The adequacy of trainings of the staffs is also indicated by the activity and consistency remains a key index. **Fig. 1**



There are 13 districts with a compliance figure of > 90% which is indeed encouraging. The districts with compliance figures between 70% and 100% is at 09 whereas only two districts have failed to meet the target i.e. Lakki Marwat at 61% and Buner at 43%. The operations of the DHIS staffs in the districts will be looked into and necessary corrections shall be made. It will also remain a point of discussion in the forthcoming meeting of all the EDOs. The surprise improvement in compliance



from the district Kohistan which stood at 55% in the last quarter and now has gone up to 76% this quarter is indeed welcome and their efforts for further improvement shall be encouraged. D.I. Khan has also

shown considerable improvement by increasing the reporting compliance from 63% to 93%.

An effort shall be made on the part of this project to expect a short narrative report from the concerned EDOs and Medical Superintendents which shall further sensitize the staffs working for the DHIS to ensure accuracy in all the reports.

2. OUTPATIENT ATTENDANCE:

Figures 2, 2.1, indicate the general trend of Outpatient facility utilization. The figures for the General OPD in Secondary Care Health facilities and Primary Health Care facilities has risen from **2522930** in the previous quarter to **2887834** in this quarter indicating a rise of more than 14%. Our endeavor continues for including the figures from the Tertiary care hospitals to present a more realistic picture though the figures in themselves are quite encouraging indicating the acceptance of the facilities provided by the department are being utilized fully. A word of caution here would be worthwhile and the efforts to improve should continue unabated. **Fig 2**



A most encouraging trend of patient arrivals at the Specialist OPD is seen this quarter. Compared to the previous quarter with the patient numbers at 698973 at the Specialist OPDs this quarter the number has gone up to 933482 or an increase of more than 34%. It is specially rewarding to note



that these figures have gone up by so much this despite the lack of Specialists in various specialties which shall be elaborated later. These figures should encourage us to fill the gaps existing in the system specially the lack of specialists in the peripheral facilities.

The age wise break up of patients visiting the OPDs is again consistent with the report of the previous quarter whereby the figures show that in the case of males the OPD attendance for 1-14 years is 53% which was 52% in the last quarter. A contrasting figure emerges in the Female OPD attendance whereby 37% of the female patients are under the age of 14years whereas 63% of the patients are above this age bracket with the vast majority falling in the age group of 15-49 years. This certainly indicates that women of child bearing age (CBAs) form a majority of the patients at 46%. With these numbers of women available for consultations in the OPDs for a wide variety of causes, it is imperative the practicable targeted interventions are introduced like vaccinations, birth control and health awareness and health promotion activities. The overall picture though is tilted in favor of female population and indications are that in contrast to male visitors to OPDs (41%) females use the facilities to the extent of 59% which is quite significant. The figures are consistent with the reported figures in the last quarter.

3. SPECIALTY WISE BREAK UP OF PATIENTS:

Figure 3 and 3.1 indicate the breakup of patients visiting the facilities and attending Specialist OPDs for consultations. It is evident that after Accidents and Emergency Department with 25.42% of the total patients, Pediatric patients seem to dominate the picture standing at 19.56% patients consistent with a figure of 19.1% in the previous quarter. Gynecology and Obstetrics patients stand at 10.60% and Medical patients at 9.22%. With figures now being consistent it is high time the policy makers and staffs at the facilities give a serious consideration to appropriate resource allocations. Dental Diseases also deserve our utmost attention with the patients with dental disorders standing at 8.33% of the total a figure similar to the one reported in the previous quarterly report. The important implication for the health professionals here not only the significance of the disease prevalence but also the resources allocated for the treatment of these disorders taking into account the prohibitive costs of dental treatment in the private sector.

Coming to the number of patients visiting the Hakeems and Homeopaths in the government facilities once again the figure is below 1% and it is high time that the system is done away with more resources spared for important health activities that require them. **Fig 3.1**

| Specialty | No. of Patients |
|----------------------------------|-----------------|
| Tibb/Unani Shifa Khana OPD Cases | 982 |
| Psychiatry | 6064 |
| Homeo Case | 8356 |
| Cardiology | 15238 |
| Others | 21068 |
| Skin | 25368 |
| Orthopedics | 30186 |
| ENT | 31223 |
| Eye | 56371 |
| Surgery | 58412 |
| Dental | 78504 |
| Medicine | 86905 |
| OB/GYN | 99843 |
| Pediatrics | 184276 |
| Emergency / Casualty | 239511 |
| General OPD | 603151 |
| Grand Total | 1545458 |

4. DISEASE PATTERN IN OUT PATIENT DEPARTMENT.

Figure 4 and 4.1 illustrate the overall disease pattern in the OPD. As reported previously the Acute Respiratory Infections still constitute a vast majority of patients though the trend seems to lower both in absolute numbers and percentages 45% in the previous quarter versus 33% in this quarter. The seasonal variation seems to be the cause of the lower incidence but that should not be a cause for any complacency since the winters are just around the corner and the figures will tend to increase significantly. The incidence of Asthma has remained stable at the 30000 mark but the treatment facilities at the hospital remain dismally poor. An effort has to be made to allocate funds out of the current medicine budget to provide inhaler which according to our information are not available at all barring a few select facilities which necessitates use of obsolete treatment protocols or the patients are forced to purchase them from the open market.

The rise in incidence of Diarrhea and Dysentery is indeed worrying, the total caseload was 17% in the last quarter rising to a significant 22% this quarter including all age groups or nearly a quarter of all OPD attendances. This alarming situation requires an innovative approach since the morbidity due to this disorder is preventable to a great extent. Two issues arises out of these figures firstly the ineffective approach of our preventive program and secondly the poor management of the cases and can be addressed through a concerted effort. The total caseload of ARIs and Dysentery have gone up from 62% of the total to 67% and the reader can easily realize the implications of the control of these common disorders and the savings accrued from the efforts to control these. **Fig 4**

| S. # | Disease | No. of Patients |
|-------------|---|-----------------|
| 1 | Acute (Upper) Respiratory Infections | 547855 |
| 2 | Diarrhoea/Dysentery in <5 yrs | 203850 |
| 3 | Fever due to other causes | 183782 |
| 4 | Diarrhoea/Dysentery in >5 yrs | 168950 |
| 5 | Urinary Tract Infections | 114363 |
| 6 | Hypertension | 104081 |
| 7 | Scabies | 92372 |
| 8 | Suspected Malaria | 88691 |
| 9 | Dental Caries | 85941 |
| 10 | Peptic Ulcer Diseases | 75021 |
| 11 | Worm Infestations | 50559 |
| 12 | Enteric / Typhoid Fever | 38470 |
| 13 | Pneumonia <5 years | 36375 |
| 14 | Depression | 35934 |
| 15 | Asthma | 31782 |
| 16 | Dermatitis | 31679 |
| 17 | Diabetes Mellitus | 31630 |
| 18 | Otitis Media | 29600 |
| 19 | Pneumonia >5 years | 29292 |
| 20 | Road traffic accidents | 22300 |
| 21 | Cataract | 11247 |
| 22 | TB Suspects | 10596 |
| 23 | Chronic Obstructive Pulmonary Diseases | 8707 |
| 24 | Fractures | 7263 |
| 25 | Ischemic Heart Disease | 5896 |
| 26 | Suspected Viral Hepatitis | 5747 |
| 27 | Dog bite | 4526 |
| 28 | Supected Measles | 4033 |
| 29 | Trachoma | 3819 |
| 30 | Burns | 3052 |
| 31 | Drug Dependence | 2847 |
| 32 | Sexually Transmitted Infections | 2788 |
| 33 | Cirrhosis of Liver | 2559 |
| 34 | Epilepsy | 2501 |
| 35 | Nephritis/Nephrosis | 1899 |
| 36 | Benign Enlargement of Prostrate | 1836 |
| 3/ | | 1/83 |
| 38 | | 1119 |
| 39 | | 1057 |
| 40 | Suspected Neo Natal Tetanus | 600 |
| 41 | Acute Flaccid Paralysis | 249 |
| 42 | Snake bits (with signs/symptoms of poisoning) | 245 |
| 43 | Suspected HIV/AIDS | 31 |
| Total | | 2086927 |

Another figure on the upswing in the OPDs is the patients suffering from dental disorders especially dental caries which has registered an increase of 1% from 4 to 5% but the figure seems considerable when the absolute numbers of patients are taken into consideration. The policy makers need to look into the matter and efforts ought to be made to dental treatment accessible to common people considering the prohibitive cost of the same in private sector. Scabies once again constitutes a significant cause of morbidity with the OPD load of 6%. Though the numbers are small it has to be realized that it is easily preventable and can be treated effectively if someone in a position of decision making a genuine effort.

Snake Bites with symptoms and signs have increased from 97 in the last quarter to 245 in this quarter. Though the rise in numbers could be attributed to the arrival of the summer season and information about the availability of Anti Snake Serum in DHQs and THQs is unavailable. The department has to ensure that the responsible people at the district level must ensure easy availability of the Anti Snake Serum. Dog bite numbers have remained stable at 4526 but according to our information the latest Anti Rabies regime of vaccines are not available at any major facility and most patients have to purchase these medicines from the open market at an exorbitant price discouraging visits to government facilities.

An encouraging fact emerges from the figures in relation to HIV/AIDS, the number of cases diagnosed stood at 477 whereas this quarter only 31 new cases have emerged. Though the figure seems consistent with the global trend whereby the number of infections is decreasing but this should not lead to any complacency on the part of the health department and vigilance has to be maintained for a considerable length of time. Significance to these figures should be also be

attached since the number of Sexually Transmitted Infections has registered an increase from the previous quarter i.e. 2788 Vs 2392 in the previous quarter.

The cases of suspected Neonatal Tetanus remain constant at around 600 which reflect very poorly on our Ante Natal Care programs and intention should be bring down the cases of this vaccine preventable disease to 0 in the near future. Cutaneous Leshmaniasis has registered a big increase in the number of cases rising from 1133 from the previous quarter to 1783 in this quarter. This disease carries a significant morbidity and the worrying factor is that the number of cases are falling in the Afghan Refugee population and increasing in the local population. Urgent steps are required for surveillance, training and provision of the correct medications to control this menace. The incidence of flaccid paralysis including Polio does not require our comment since massive efforts are already underway for the control of polio and hopefully some positive results would be available soon.

5. COMMUNICABLE AND NON COMMUNICABLE DISEASES

A. COMMUNICABLE DISEASES

Figure 5 and 5.1 indicate the prevalence of communicable diseases. As can be seen from the figures communicable infectious disease contributes to a major share of morbidity and mortality in this province in particular and the country in general. The communicable diseases constitute around 62% of all the patients visiting the OPDs and irritatingly Acute Respiratory Infections and diarrhea and dysentery constitute 71% of these patients. As the reader would recall the previous reports also had similar trends for these diseases and it is indeed worrying. It would indeed be worthwhile to also elucidate the number of admission accrued due to these disorders but in general it could be assumed that the trend would be similar and a lot of resources of the hospitals would be consumed by the patients with these disorders. And if the figures for pneumonia are included in these figures

the total may exceed 75% of all patients. A few other diseases require also а mention here and top of the list would be the prevalence of worm infestations currently standing at presumably 50559 after а simple laboratory test. The question that baffles the mind here is that this condition is the

most common cause of Iron Deficiency Anemia and instead spending millions on programs like Flour Fortifications and others why is there a lack of commitment to control this infection on a regular basis catering to both the preventive and curative side of the problem. It would worthwhile to find out the percentages of hospital budget dedicated to medicine purchase towards the control of this particular problem.

| S.# | Disease | No. of Patients |
|-----|--------------------------------------|-----------------|
| 1 | Acute (Upper) Respiratory Infections | 547855 |
| 2 | Diarrhoea/Dysentery in <5 yrs | 203850 |
| 3 | Diarrhoea/Dysentery in >5 yrs | 168950 |
| 4 | Scabies | 92372 |
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| 6 | Worm Infestations | 50559 |
| 7 | Enteric / Typhoid Fever | 38470 |
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| 9 | Pneumonia >5 years | 29292 |
| 10 | TB Suspects | 10596 |
| 11 | Suspected Viral Hepatitis | 5747 |
| 12 | Supected Measles | 4033 |
| 13 | Trachoma | 3819 |
| 14 | Sexually Transmitted Infections | 2788 |
| 15 | Cutaneous Leishmaniasis | 1783 |
| 16 | Suspected Meningitis | 1119 |
| 17 | Suspected Neo Natal Tetanus | 600 |
| 18 | Acute Flaccid Paralysis | 249 |
| 19 | Suspected HIV/AIDS | 31 |
| | Total | 1287179 |

Sexually Transmitted Diseases have registered an increase in this quarter and it can safely be assumed that this number is a miniscule portion of the total prevalence of this combination of disorders. It is also a well established fact that a majority of patients with these disorders visit a variety of health facilities both regular and irregular. As the reader would appreciate these disorders are potential harbingers of more serious disorders like HIV/AIDS and can result in permanent disability and transmission to the off springs. The worst victims of these disorders are the female populace who cannot obtain proper medical care due to a variety of social and cultural reasons. Despite the various high ticket interventions from various programs it is felt that the problem has not been tackled effectively and this group of diseases continues to spread endangering all the contacts.

B. NON- COMMUNICABLE DISEASES:

Figures 5.2 and 5.3.B shows the prevalence of non communicable diseases in the province during this quarter. A few disorders require a brief narration. Besides the fever due to unknown causes the second significant group is the urinary tract infections standing at 114363 patients. As the reader realizes the this disease can be disastrous especially in children , an attempt would be made to find out the age groups that suffer the most from this disorder. This requires prompt diagnosis and aggressive treatment to ward off any long term damage and prevent the spread of infections to other organs. The patients of hypertension and diabetes mellitus stand at 135760 and it should be

| S.# | Disease | No. of Patients |
|-----|---|-----------------|
| 1 | Fever due to other causes | 183782 |
| 2 | Urinary Tract Infections | 114363 |
| 3 | Hypertension | 104081 |
| 4 | Dental Caries | 85941 |
| 5 | Peptic Ulcer Diseases | 75021 |
| 6 | Depression | 35934 |
| 7 | Asthma | 31782 |
| 8 | Dermatitis | 31679 |
| 9 | Diabetes Mellitus | 31630 |
| 10 | Otitis Media | 29600 |
| 11 | Road traffic accidents | 22300 |
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| 13 | Chronic Obstructive Pulmonary Diseases | 8707 |
| 14 | Fractures | 7263 |
| 15 | Ischemic Heart Disease | 5896 |
| 16 | Dog bite | 4526 |
| 17 | Burns | 3052 |
| 18 | Drug Dependence | 2847 |
| 19 | Cirrhosis of Liver | 2559 |
| 20 | Epilepsy | 2501 |
| 21 | Nephritis/Nephrosis | 1899 |
| 22 | Benign Enlargement of Prostrate | 1836 |
| 23 | Glaucoma | 1057 |
| 24 | Snake bits (with signs/symptoms of poisoning) | 245 |
| | Total | 799748 |

ascertained that how many of our DHQs make purchases for these specific and treatable disorders and thus avoiding the long term mortality and morbidity. **Fig5.2**

More than 3000 cases of burns have been reported in this quarter constituting a significant and it is high time that necessary provisions are made both in areas of human resource and financial resources. This program will try determine the to

degree of burns in patients as well as their age and gender breakup to have an insight into the actual situation. This is a resource intensive disorder where donor expertise and financial support would be required and this program is ready to take a lead in finding the right sources.

6. ANTE NATAL CARE SERVICES

Figures 6 and 6.1 provide a graphic illustration of the state of the ANC services in government facilities. The District of Kohistan again stands out for its dismal performance of an average of 12 % ANC coverage. No fathomable reason could be ascertained except for the preposterous assumptions of remoteness, lack of infrastructure and socio-cultural reasons, to us this is a clear cut case of mismanagement at all levels. Realizing the importance of the ANC services which form the backbone of any health program the situation is indeed deplorable. This office will send out an enquiry for this persistently dismal performance to bring about visible improvement. **Fig 6**

| S.# | District | Total Population | Exp Pregnancies in a Month | % ANC for April | % ANC for May | % ANC for Jun | Avg % |
|-----|--------------|---------------------|----------------------------------|-----------------------|------------------|------------------|-------|
| 1 | Kohistan | 478000 | 1354.33 | 8.86 | 9.3 | 19.12 | 12 |
| 2 | Malakand | 703000 | 1991.83 | 21.79 | 27.71 | 0 | 17 |
| 3 | Bannu | 980000 | 2776.67 | 16.13 | 18.19 | 21.46 | 19 |
| 4 | Tank | 359000 | 1017.17 | 26.84 | 36.18 | 4.82 | 23 |
| 5 | Peshawar | 3219000 | 9120.5 | 32.63 | 19.9 | 17.29 | 23 |
| 6 | Shangla | 667000 | 1889.83 | 31.22 | 22.28 | 19.95 | 24 |
| 7 | Kohat | 862000 | 2442.33 | 42.01 | 54.7 | 0 | 32 |
| 8 | Nowshera | 1280000 | 3626.67 | 41.83 | 19.44 | 34.83 | 32 |
| 9 | Abbottabad | 1120000 | 3173.33 | 33.09 | 37.82 | 31.07 | 34 |
| 10 | Karak | 661000 | 1872.83 | 30.65 | 26.59 | 48.96 | 35 |
| 11 | Dir Lower | 1124000 | 3184.67 | 11.4 | 49.36 | 44.37 | 35 |
| 12 | Haripur | 924000 | 2618 | 39.57 | 36.86 | 33.69 | 37 |
| 13 | Buner | 838000 | 2374.33 | 0 | 64.73 | 55.43 | 40 |
| 14 | Lakki Marwat | 742000 | 2102.33 | 31.25 | 40.43 | 53.27 | 42 |
| 15 | Hangu | 482000 | 1365.67 | 28.48 | 42.76 | 65.39 | 46 |
| 16 | Mardan | 2168000 | 6142.67 | 46.67 | 48.17 | 42.03 | 46 |
| 17 | Swabi | 1515000 | 4292.5 | 42.35 | 30.5 | 63.69 | 46 |
| 18 | Chitral | 444000 | 1258 | 52.31 | 63.91 | 92.05 | 69 |
| 19 | Mansehra | 1582000 | 4482.33 | 81.36 | 68.71 | 77.84 | 76 |
| 20 | D.I. Khan | 1308000 | 3706 | 75.26 | 86.72 | 71.15 | 78 |
| 21 | Charsadda | 1493000 | 4230.17 | 51.06 | 136.85 | 46 | 78 |
| 22 | Swat | 1956000 | 5542 | 69.38 | 84.93 | 82.03 | 79 |
| 23 | Dir Upper | 828000 | 2346 | 90.92 | 83.29 | 62.06 | 79 |
| 24 | Battagram | 422000 | 1195.67 | 88.82 | 108.56 | 97.18 | 98 |
| | TOTAL | 26155000 | 74105.83 | 43.76 | 51.48 | 45.01 | 47 |

The District of Malakand has also reported unacceptable figures with the ANC coverage averaging 17%. For the month of June 2012 the figure is 0 which needs a serious review. Compared to Kohistan the District of Malakand has easy accessibility, higher level of education in the populace and well positioned health care facilities. Bannu once again has figures far below the expected levels at 19%. This project shall take up the issue with the concerned staffs at this district to pinpoint the deficiencies and suggest remedial measures. The reports and the figures from the provincial

headquarter Peshawar also make depressing reading as the ANC coverage figures are only 23% on the average without any improvement. Even if it is assumed that vibrant private sector health care facilities exist in the city it should also be remembered that Peshawar is also home to a number of slums and rural areas with very little access to private facilities and hence are dependent on government run facilities for economic reasons. There is reason for optimism after going through the reports of Dir Lower where these figures have registered a significant increase going up from 9% in the previous quarter to 35% in the current reporting period.

After briefly describing the worse performing districts let us now focus on the best performing districts with Battagram topping the list once again with 98% ANC coverage followed by Dir Upper and Swat at 79% while Charsadda, DI Khan, Mansehra doing creditably at around 70% ANC coverage. A special mention must be made of the progress recorded in DI Khan where the rate has gone up from 30% to 78% this quarter; the staffs at this district deserve accolades for this outstanding performance. The debatable point arising from these figures is that when there is commitment to improve all hindrances disappears automatically.

The reader may appreciate the importance of ANC services in the prevention of disease and disability both in the pregnant and her babies. It is also felt that too many of the scarce resources are going into the services without significant improvements in the sector and falling levels of service may jeopardize the whole system of health delivery. The critical importance of ANC services can also be realized from the fact that this is usually the first opportunity for the health care providers especially for female care providers to develop a long term rapport with their clients i.e. the expectant mother and her family and can help build up a relationship that over a period of time will enhance the contraception prevalence rates and immunizations.

7. DISTRICT WISE REPORT OF PREGNANT WOMEN HAVING FIRST ANC VISIT AND HB <10g%.

This indicator reflects the general nutritional status of women with particular emphasis on prevalence of anemia in the women. This indicator also is predictive in the outcome of pregnancy since a higher level of prevalence would be prelude to a poor outcome. Figures 7 and 7.1 present a

graphic presentation of the prevalence. The configuration of the data suggests that those districts which have a higher ANC coverage also reflect a higher percentage of anemic women.

Fig 7.1

| <i>S.#</i> | District | ANC-1 | ANC-1 women with Hb.<10 g/dl | Percentage |
|------------|--------------|--------|------------------------------|------------|
| 1 | Bannu | 1549 | 10 | 1 |
| 2 | Kohat | 2362 | 86 | 4 |
| 3 | Chitral | 2620 | 111 | 4 |
| 4 | Battagram | 3522 | 226 | 6 |
| 5 | Malakand | 986 | 62 | 6 |
| 6 | Swat | 13098 | 956 | 7 |
| 7 | Mardan | 8408 | 682 | 8 |
| 8 | Dir Upper | 5543 | 493 | 9 |
| 9 | Abbottabad | 3236 | 317 | 10 |
| 10 | Lakki Marwat | 2627 | 298 | 11 |
| 11 | Haripur | 2883 | 339 | 12 |
| 12 | Hangu | 1866 | 216 | 12 |
| 13 | Tank | 690 | 92 | 13 |
| 14 | Karak | 1989 | 258 | 13 |
| 15 | Swabi | 5861 | 886 | 15 |
| 16 | D.I. Khan | 8640 | 1409 | 16 |
| 17 | Shangla | 1388 | 240 | 17 |
| 18 | Buner | 2853 | 516 | 18 |
| 19 | Peshawar | 6368 | 1117 | 18 |
| 20 | Mansehra | 10216 | 1978 | 19 |
| 21 | Dir Lower | 3348 | 740 | 22 |
| 22 | Nowshera | 3485 | 751 | 22 |
| 23 | Kohistan | 505 | 145 | 29 |
| 24 | Charsadda | 9895 | 3438 | 35 |
| | Total | 103938 | 15366 | |

There is wide variation in the prevalence of the disorder ranging from 1% to 35% and the inconsistency has been elaborated upon previously. A word of caution has to be added here that the staffs of the health facilities must be aware of the high prevalence of Thallaesemia Minor in the region and all suspicious patients with iron deficiency must undergo the necessary investigations.

Despite close the linkage in the prevalence of iron deficiency anemia and socio-economic conditions of the populace it is imperative that the correct measures are taken to cure this easily treatable condition to ensure a happier outcome of all pregnancies. Staffs at

Charsadda and Kohistan need to maintain and constant vigilance and should strive to make improvements on this front.

8. DELIVERIES CONDUCTED IN GOVERNMENT FACILITIES:

This indicator carries considerable importance as it is reflective of the confidence shown by the general public in the government run health facilities for carrying out normal deliveries.

As the reader would recall from the previous quarterly report the government is spending an enormous amount of money on provision of facilities at the health care centers to facilitate and encourage the general public to use the same but the results are far from encouraging with rates varying from a disappointing 2.25% in Kohistan to encouraging figures from Battagram at nearly 49%

which is the general trend. Peshawar again remains a sore point with deliveries at government facilities standing at only 6% this quarter despite innumerable health outlets operated by the government at a significant cost to the exchequer. The reasons for this have already been explained earlier but an in depth review of the whole system is required. The poor alignment between the primary and secondary health care facilities in the government sector and the Tertiary Care Hospitals needs a thorough revamp and it is hoped that by adding figures from these hospitals the percentages may improve but it can still be reiterated that more than 80% of cases of normal deliveries can be handled outside the domain of the teaching hospitals. **Fig 8.1**

| S.# | Districts | Estimeted Population | Exp-Deliveries in 2nd Quarter 2012 | Deliveries Conducted in whole Quarter | % age |
|-----|--------------|-------------------------|---------------------------------------|--|-------|
| 1 | Kohistan | 478000 | 3466 | 78 | 2.25 |
| 2 | Bannu | 980000 | 7105 | 282 | 3.97 |
| 3 | Karak | 661000 | 4792 | 295 | 6.16 |
| 4 | Shangla | 667000 | 4836 | 360 | 7.44 |
| 5 | Tank | 359000 | 2603 | 396 | 15.21 |
| 6 | Buner | 838000 | 6076 | 712 | 11.72 |
| 7 | Lakki Marwat | 742000 | 5380 | 736 | 13.68 |
| 8 | Hangu | 482000 | 3495 | 751 | 21.49 |
| 9 | Malakand | 703000 | 5097 | 944 | 18.52 |
| 10 | Haripur | 924000 | 6699 | 1056 | 15.76 |
| 11 | Nowshera | 1280000 | 9280 | 1180 | 12.72 |
| 12 | Swabi | 1515000 | 10984 | 1196 | 10.89 |
| 13 | Dir Upper | 828000 | 6003 | 1249 | 20.81 |
| 14 | Abbottabad | 1120000 | 8120 | 1261 | 15.53 |
| 15 | Chitral | 444000 | 3219 | 1349 | 41.91 |
| 16 | Peshawar | 3219000 | 23338 | 1404 | 6.02 |
| 17 | Battagram | 422000 | 3060 | 1495 | 48.86 |
| 18 | Kohat | 862000 | 6250 | 1505 | 24.08 |
| 19 | Charsadda | 1493000 | 10824 | 1758 | 16.24 |
| 20 | Dir Lower | 1124000 | 8149 | 1880 | 23.07 |
| 21 | D.I. Khan | 1308000 | 9483 | 1934 | 20.39 |
| 22 | Mansehra | 1582000 | 11470 | 1979 | 17.25 |
| 23 | Mardan | 2168000 | 15718 | 2523 | 16.05 |
| 24 | Swat | 1956000 | 14181 | 2943 | 20.75 |
| | Total | 26155000 | 189628 | 29266 | |

A statistical analysis reveals that the figures from Chitral where the figures have gone up from 16% in the previous quarter to a very encouraging 42% in this quarter. One reason for this significant improvement may be the accurate reporting from the district prompted by the appearance of regular reports at the provincial but the contribution of the staffs of the health facilities must also appreciated for the improvement in service and the resultant improvement in figures.

A worrying aspect of this report is the figures from Swat against this indicator. In the previous quarter the district reported a figure of 30% whereas in this quarter the number of deliveries in the government facilities has gone down to 20% indicating a very inconsistent pattern whereas the district does well in provision of health care facilities. A cause or causes must be ascertained at the district level and remedial steps taken urgently to address them. Figures 8 and 8.1 presents the figures in tabulated and chart forms.

9. DISTRICT WISE COMPARISON OF LIVE BIRTHS <2.5Kg BORN IN GOVERNMENT HEALTH FACILITIES.

The indicator reflects upon the percentages of low birth weight babies born in government run facilities. The birth weight not only reflects the prospect of baby's long term survival but also an insight into the quality of ANC service provided to the mother before birth. Both these indicators are intrinsically linked barring a few exceptions. There are wide variations in the figures ranging from 1% in Dir Lower to 34% in DI Khan. **Fig 9**

| s # | District | Live births in | Live births with | % aap |
|-----|--------------|----------------|------------------|--------|
| 5.# | District | the facility | LBW <2.5 kg | ∕₀ uye |
| 1 | Dir Lower | 1858 | 11 | 1 |
| 2 | Swabi | 926 | 6 | 1 |
| 3 | Kohat | 1414 | 38 | 3 |
| 4 | Chitral | 754 | 25 | 3 |
| 5 | Malakand | 805 | 26 | 3 |
| 6 | Swat | 2807 | 76 | 3 |
| 7 | Karak | 259 | 11 | 4 |
| 8 | Tank | 380 | 20 | 5 |
| 9 | Abbottabad | 1151 | 67 | 6 |
| 10 | Bannu | 236 | 16 | 7 |
| 11 | Peshawar | 1214 | 90 | 7 |
| 12 | Kohistan | 60 | 5 | 8 |
| 13 | Battagram | 1385 | 111 | 8 |
| 14 | Haripur | 994 | 86 | 9 |
| 15 | Mansehra | 1748 | 160 | 9 |
| 16 | Dir Upper | 947 | 82 | 9 |
| 17 | Shangla | 165 | 15 | 9 |
| 18 | Mardan | 2056 | 192 | 9 |
| 19 | Charsadda | 1635 | 146 | 9 |
| 20 | Nowshera | 280 | 26 | 9 |
| 21 | Lakki Marwat | 1001 | 105 | 10 |
| 22 | Hangu | 502 | 49 | 10 |
| 23 | Buner | 506 | 111 | 22 |
| 24 | D.I. Khan | 1624 | 545 | 34 |
| | Total | 24707 | 2019 | |

The figures from Dir Lower at 1% can be positively compared with the prevalence of ANC the deliveries and conducted at the facilities which are 1858 in this quarter. If the figures are accepted at their face value then the district is indeed performing well and as mentioned earlier this reflects a very good ANC coverage.

Buner and DI Khan have done poorly against this index despite a reasonable number of deliveries conducted in these districts. Buner at 22% and DI Khan 34 % need genuine efforts in the area of ANC coverage to improve these figures. DI Khan district would need to mobilize all resources to overcome

the situation because in the previous quarterly report the figure was above 30% as well.

In conclusion it must be said the government sector must attract more clients by improving services and conditions and in that case accurate data will also emerge. Figure 9 and 9.1 provide a statistical view of the situation.

10. IMMUNIZATION STATUS.

"Prevention is better than cure" is an age old adage that still hold very true and valid despite the changed circumstances. The rate of national immunization is one of the primary indices that indicate the commitment towards maintaining health in the population and also the commitment towards preventing afflictions and disabilities.

The current situation in Pakistan is far from encouraging and we are constantly battling vaccine preventable diseases in the 21st Century. If it is Polio today it might be Measles tomorrow unless we show our whole hearted effort to eradicate all these maladies. A special point to be noted here that despite the rightful stress laid upon childhood immunization it is also high time to realize the importance of vaccinating adults against diseases like Influenza and Pneumonia which though easily preventable could be devastating in certain circumstances. An attempt has been made to simplify this complex set of data and hence all the indicators have been separately described.

11 CHILDREN <12 MONTHS WHO HAVE RECEIVED 3RD PENTAVALENT.

As is evident from the figures the District of Kohistan stands out as poor performer with coverage of only 7%. The encouraging figures emerging from Districts like Swabi at 72% to 179% in Charsadda reflects the hard work put in by the staffs of these districts. Only 10 districts have coverage of less than 70% starting with Kohistan at 7% and ending at Nowshera at 57%. Barring Kohistan, Shangla (39%), Bannu (40%) Lakki Marwat (48%) DI Khan (49%), the performance of the other districts could be termed as stable i.e. more than 50% coverage. The districts with outstanding performances

include Mardan (100%), Mansehra (103%), Swat (125%) Battagram (136%), Chitral (162%) and Charsadda (179%).

Fig 11.1

| S.# | District | Total Population | Exp Children<12 Months (2.7 Expected Live Birht) | 3rd Pentavalent Vaccine Status | % age |
|-----|--------------|---------------------|---|-----------------------------------|-------|
| 1 | Kohistan | 478000 | 3227 | 216 | 7 |
| 2 | Shangla | 667000 | 4502 | 1752 | 39 |
| 3 | Bannu | 980000 | 6615 | 2678 | 40 |
| 4 | Lakki Marwat | 742000 | 5009 | 2429 | 48 |
| 5 | D.I. Khan | 1308000 | 8829 | 4325 | 49 |
| 6 | Kohat | 862000 | 5819 | 2892 | 50 |
| 7 | Buner | 838000 | 5657 | 2822 | 50 |
| 8 | Tank | 359000 | 2423 | 1353 | 56 |
| 9 | Dir Upper | 828000 | 5589 | 3144 | 56 |
| 10 | Nowshera | 1280000 | 8640 | 4912 | 57 |
| 11 | Swabi | 1515000 | 10226 | 7370 | 72 |
| 12 | Malakand | 703000 | 4745 | 3553 | 75 |
| 13 | Hangu | 482000 | 3254 | 2519 | 77 |
| 14 | Dir Lower | 1124000 | 7587 | 5843 | 77 |
| 15 | Karak | 661000 | 4462 | 3476 | 78 |
| 16 | Peshawar | 3219000 | 21728 | 17936 | 83 |
| 17 | Haripur | 924000 | 6237 | 5509 | 88 |
| 18 | Abbottabad | 1120000 | 7560 | 6777 | 90 |
| 19 | Mardan | 2168000 | 14634 | 14671 | 100 |
| 20 | Mansehra | 1582000 | 10679 | 10994 | 103 |
| 21 | Swat | 1956000 | 13203 | 16513 | 125 |
| 22 | Battagram | 422000 | 2849 | 3594 | 126 |
| 23 | Chitral | 444000 | 2997 | 4868 | 162 |
| 24 | Charsadda | 1493000 | 10078 | 18067 | 179 |
| | Total | 26155000 | 176549 | 148213 | 84 |

The figures from Chitral and Charsadda would require a comment and figures would be re-verified and in case these are accurate the staffs of these districts would deservedly earn the accolades of the department. Another point worth adding here is that the overall immunization figures generally indicate that once complete immunizations are performed on all children the figures for epidemic diseases like polio decrease or disappear and the rationale for allocations for the ongoing NIDs and SNIDs goes away. Figures 11 and 11.1 reflects the graphic representation.

12 CHILDREN <12 MONTHS RECEIVING 1ST MEASLES VACCINE.

As the reader is aware Measles is making a big comeback particularly in Pakistan as a vaccine preventable infectious disease. Considering our socio-economic set up it is critical that all the cases of Measles are treated seriously to prevent rapid spread in large households prevalent in our society. Another concern would be the commitment of the donors towards funding the Polio eradication Program and Measles control program concurrently and it becomes our primary duty to play our part in preventing the outbreak of Measles on a top priority basis within the existing resources. Certain changes can however be made in the strategy for overcoming the spread by introducing the MMR (Measles, Mumps, Rubella) Vaccine in the routine immunizations at 12 month thus obviating the need for administering separate vaccines for these diseases. **Fig 12**

| | | | | Childern<12 | |
|------|--------------|------------|---------------------------|-----------------|-------|
| S.# | District | Total | Exp Children<12 Months | Months received | % age |
| •••• | | Population | (2.7 Expected Live Birth) | 1st Measles |) |
| - | - | | | vaccine | |
| 1 | Kohistan | 478000 | 3227 | 184 | 6 |
| 2 | Lakki Marwat | 742000 | 5009 | 1454 | 29 |
| 3 | Shangla | 667000 | 4502 | 1473 | 33 |
| 4 | Bannu | 980000 | 6615 | 2497 | 38 |
| 5 | D.I. Khan | 1308000 | 8829 | 3407 | 39 |
| 6 | Buner | 838000 | 5657 | 2336 | 41 |
| 7 | Kohat | 862000 | 5819 | 2495 | 43 |
| 8 | Nowshera | 1280000 | 8640 | 4008 | 46 |
| 9 | Dir Upper | 828000 | 5589 | 2727 | 49 |
| 10 | Tank | 359000 | 2423 | 1204 | 50 |
| 11 | Karak | 661000 | 4462 | 2369 | 53 |
| 12 | Dir Lower | 1124000 | 7587 | 4028 | 53 |
| 13 | Swabi | 1515000 | 10226 | 6264 | 61 |
| 14 | Peshawar | 3219000 | 21728 | 13920 | 64 |
| 15 | Charsadda | 1493000 | 10078 | 7677 | 76 |
| 16 | Abbottabad | 1120000 | 7560 | 6059 | 80 |
| 17 | Haripur | 924000 | 6237 | 5014 | 80 |
| 18 | Malakand | 703000 | 4745 | 3820 | 81 |
| 19 | Hangu | 482000 | 3254 | 2716 | 83 |
| 20 | Mardan | 2168000 | 14634 | 12349 | 84 |
| 21 | Mansehra | 1582000 | 10679 | 10015 | 94 |
| 22 | Swat | 1956000 | 13203 | 15574 | 118 |
| 23 | Battagram | 422000 | 2849 | 3892 | 137 |
| 24 | Chitral | 444000 | 2997 | 4999 | 167 |
| | Total | 26155000 | 176549 | 120481 | |

An analysis of the data reveals that Kohistan once again with irritating frequency is the top non performer with only 6% coverage against this indicator. Lakki Marwat, Shangla, Bannu and DI Khan score below 40% on this count which is indeed dismal. A leaf should be taken out of the experiences of the top performing districts like Mansehra (94%), Swat (118%), Battagram (137%) and Chitral (167%) and find a cause or causes for their success and it should be widely shared between the districts to encourage learning from the experiences of others. The DHIS would gladly act as a conduit for this flow of information and help in re-invigorating the whole program. The table (fig 12) and graph (fig 12.1) illustrate the narrative.

13 CHILDREN <12 MONTHS FULLY IMMUNIZED.

A fully immunized population is the best indicator to predict the state of the health of a nation. Efficiency in this sector prevents a lot of mortality and morbidity besides huge savings in the health sector in the long term and the set target for this indicator is 100%.

The analysis of the data for this quarter reveals that the districts can be divided into three broad groups:

| a. The Top Performers: | c. Satisfactory Performers. | b. Poor Performance Districts. | |
|------------------------|-----------------------------|--------------------------------|--|
| Chitral182% | Mansehra93% | Kohistan6% | |
| Hangu129% | Abbottabad92% | Lakki Marwat26% | |
| Battagram111% | Mardan91% | DI Khan35% | |
| Swat110% | Peshawar71% | Shangla38% | |
| Charsadda104% | Kohat70% | Buner39% | |
| | | | |

Looking at the figures that a serious soul searching is required so that all the districts can be brought at par and there is continual improvement in performances. It is also worth mentioning that the top performing district need not be complacent and should continue their good work. Figures 13 and 13.1 reflect the state. **Fig 13.1**

| S.# | District | Total Population | Exp Children<12 Months (2.7 Expected Live Birth) | Childern<12 months Fully Immunized | % age |
|-----|--------------|---------------------|---|---------------------------------------|-------|
| 1 | Kohistan | 478000 | 3227 | 195 | 6 |
| 2 | Lakki Marwat | 742000 | 5009 | 1317 | 26 |
| 3 | D.I. Khan | 1308000 | 8829 | 3098 | 35 |
| 4 | Shangla | 667000 | 4502 | 1715 | 38 |
| 5 | Buner | 838000 | 5657 | 2193 | 39 |
| 6 | Tank | 359000 | 2423 | 1002 | 41 |
| 7 | Dir Upper | 828000 | 5589 | 2486 | 44 |
| 8 | Bannu | 980000 | 6615 | 3065 | 46 |
| 9 | Dir Lower | 1124000 | 7587 | 4128 | 54 |
| 10 | Karak | 661000 | 4462 | 2526 | 57 |
| 11 | Swabi | 1515000 | 10226 | 6452 | 63 |
| 12 | Nowshera | 1280000 | 8640 | 5586 | 65 |
| 13 | Haripur | 924000 | 6237 | 4116 | 66 |
| 14 | Kohat | 862000 | 5819 | 4081 | 70 |
| 15 | Peshawar | 3219000 | 21728 | 15345 | 71 |
| 16 | Mardan | 2168000 | 14634 | 11836 | 81 |
| 17 | Abbottabad | 1120000 | 7560 | 6904 | 91 |
| 18 | Mansehra | 1582000 | 10679 | 9775 | 92 |
| 19 | Charsadda | 1493000 | 10078 | 9374 | 93 |
| 20 | Malakand | 703000 | 4745 | 4930 | 104 |
| 21 | Battagram | 422000 | 2849 | 3130 | 110 |
| 22 | Swat | 1956000 | 13203 | 14636 | 111 |
| 23 | Hangu | 482000 | 3254 | 4209 | 129 |
| 24 | Chitral | 444000 | 2997 | 5446 | 182 |
| | Total | 26155000 | 173322 | 127545 | |

14 WOMEN RECEIVING TT-2 VACCINE.

Performing well against this target would ensure that Neo-Natal Tetanus would disappear from our reporting format forever. Unfortunately this quarter we are still reporting 600 cases of Neonatal Tetanus and the never ending saga continues unabated. The foremost reason for these figures is lack of coherence of the ANC and Immunization program and both are interlinked. If the ANC coverage is improved all round the cases of Neonatal Tetanus would disappear. A pilot project was initiated in the Afghan Refugees Program for the universal immunization against this deadly disease in the Child Bearing Age (CBAs) women with spectacular results and no case of Neo-Natal Tetanus has been reported over a period of almost 6 years. It calls for replicating the same in our population targeting the CBAs. **Fig 14**

| S.# | District | Total Population | Exp Children<12 Months (2.7 Expected Live Birth) | Women Received TT-2 Vaccine | % age |
|-----|--------------|---------------------|---|--------------------------------|-------|
| 1 | Kohistan | 478000 | 3227 | 107 | 3 |
| 2 | Lakki Marwat | 742000 | 5009 | 1115 | 22 |
| 3 | Shangla | 667000 | 4502 | 970 | 22 |
| 4 | D.I. Khan | 1308000 | 8829 | 2487 | 28 |
| 5 | Bannu | 980000 | 6615 | 1987 | 30 |
| 6 | Kohat | 862000 | 5819 | 2041 | 35 |
| 7 | Nowshera | 1280000 | 8640 | 2992 | 35 |
| 8 | Buner | 838000 | 5657 | 2254 | 40 |
| 9 | Tank | 359000 | 2423 | 1091 | 45 |
| 10 | Dir Upper | 828000 | 5589 | 2567 | 46 |
| 11 | Swabi | 1515000 | 10226 | 4730 | 46 |
| 12 | Hangu | 482000 | 3254 | 1539 | 47 |
| 13 | Dir Lower | 1124000 | 7587 | 3666 | 48 |
| 14 | Karak | 661000 | 4462 | 2204 | 49 |
| 15 | Peshawar | 3219000 | 21728 | 11163 | 51 |
| 16 | Abbottabad | 1120000 | 7560 | 4309 | 57 |
| 17 | Battagram | 422000 | 2849 | 1626 | 57 |
| 18 | Haripur | 924000 | 6237 | 3827 | 61 |
| 19 | Malakand | 703000 | 4745 | 3106 | 65 |
| 20 | Mardan | 2168000 | 14634 | 9988 | 68 |
| 21 | Charsadda | 1493000 | 10078 | 7000 | 69 |
| 22 | Chitral | 444000 | 2997 | 2140 | 71 |
| 23 | Swat | 1956000 | 13203 | 12860 | 97 |
| 24 | Mansehra | 1582000 | 10679 | 11030 | 103 |
| | Total | 26155000 | 176549 | 96799 | |

Considering the importance of the prevention of this NNT it is strange that 13 districts have reported coverage of less than 50% with Kohistan enjoying the dubious distinction of only 3% coverage. 11 districts have reported coverage of more than 50% with Mansehra topping the list with 103% coverage. How long can we cover our failures with excuses like inaccessibility, socio-economic

conditions and cultural reasons? It is high time that we act now before it is too late. Figures 14 and 14.1 reflect this.

15 INTENSIVE - PHASE TB-DOTS PATIENTS/ PATIENTS MISSING > 1 WEEK.

This index has been included for the first and it is felt that this is a welcome addition to the scope of the DHIS reporting and it has been placed under the heading of the Immunization since the treatment of Tuberculosis is also a preventive measure resulting in significant fall in mortality and morbidity. The TB-Directly Observed Treatment system (DOTS) is indeed an innovative and effective way of treating this age-old malady. As the reader would realize Tuberculosis required 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 and so the numbers of patients missing their treatment for more than week need to be actively traced and convinced to continue the treatment. Figures 15 and 15.1 & 15.2 reflect the statistics. **Fig 15**

Fig 15.2

| c # | Districts | Intensive-phase TB-DOTS | Intensive phase TB-DOTS patients missing |
|-----|--------------|-------------------------|--|
| 5.# | Districts | patients | treatment >1 week |
| 1 | Malakand | 13 | 0 |
| 2 | Shangla | 23 | 1 |
| 3 | Kohistan | 37 | 4 |
| 4 | Karak | 60 | 0 |
| 5 | Buner | 83 | 2 |
| 6 | D.I. Khan | 87 | 0 |
| 7 | Tank | 126 | 0 |
| 8 | Dir Upper | 156 | 5 |
| 9 | Lakki Marwat | 161 | 59 |
| 10 | Nowshera | 172 | 9 |
| 11 | Dir Lower | 198 | 0 |
| 12 | Hangu | 226 | 7 |
| 13 | Chitral | 232 | 0 |
| 14 | Kohat | 259 | 0 |
| 15 | Bannu | 293 | 3 |
| 16 | Mardan | 319 | 50 |
| 17 | Swabi | 360 | 0 |
| 18 | Haripur | 402 | 6 |
| 19 | Battagram | 405 | 0 |
| 20 | Peshawar | 434 | 33 |
| 21 | Abbottabad | 483 | 10 |
| 22 | Mansehra | 503 | 38 |
| 23 | Charsadda | 511 | 2 |
| 24 | Swat | 674 | 7 |
| | Total | 6217 | 236 |

16. MORTALITY RATES.

It is indeed matters of great satisfaction that finally we have been able obtain a data on the mortality and leading causes for that. This also presents an opportunity to get a clearer picture of the preventable causes and the non preventable causes thus enabling the department to concentrate on the prevention of death due to avoidable causes. For the convenience of the readers the data has been sub classified to make easily understandable.

| S.# | Diseases | Total Admission | Total Deaths |
|-----|------------------------------|--------------------|--------------|
| 1 | Diarrhoea/Dysentery | 8084 | 12 |
| 2 | Diarrhoea/Dysentery>5 | 5838 | 34 |
| 3 | Pneumonia | 973 | 50 |
| 4 | Pneumonia>5 | 870 | 4 |
| 5 | Malaria | 1711 | 23 |
| 8 | Pulmonary Tuberculosis | 251 | 5 |
| 9 | Extra Pulmonary Tuberculosis | 134 | 0 |
| 10 | Enteric / Typhoid Fever | 2301 | 5 |
| 12 | Viral Hepatitis A & E | 237 | 0 |
| 13 | Viral Hepatits B | 92 | 2 |
| 14 | Viral Hepatits C | 243 | 7 |
| 15 | Meningitis | 155 | 10 |
| | Total | 20889 | 152 |

Deaths from Infectious Diseases. Fig 16

An analysis of the figures reveals a consistent pattern as seen earlier in the chapter related to prevalence of disease especially the section on the prevalence of the Communicable diseases. A total number of 20889 patients have been admitted with infectious disease with 152 deaths constituting 0.7% mortality. A close look at the figures reveals that out of the 152 deaths a hundred (100) could be attributed to Diarrhea/ Dysentery and Pneumonia. The figures are alarming constituting 2/3rd deaths due to infectious diseases and in most cases are preventable. 23 deaths or 15 % of the mortality has been attributed to Malaria so in total more than 80% of deaths are attributable to the 6 most prevalent diseases in the province. Another 10 patients or 6.5% of the total admissions lost their life to Meningitis which is also a vaccine preventable disease. A pertinent query here would be to enquire into the purchases through the MCC by the districts and whether they conform to the disease patterns or otherwise. Figures 16 represent the statistical table and graph for these.

| S# | Disease | Total Admissions | Total Deaths |
|----|--------------------------------|---------------------|-----------------|
| 1 | Acute Appendicitis | 2883 | 22 |
| 2 | Burns | 146 | 1 |
| 3 | Cholelithiasis / Cholecystitis | 303 | 1 |
| 4 | Hernias | 748 | 10 |
| 5 | Hyperplasia of Prostate | 222 | 1 |
| 6 | Urolithiasis | 143 | 0 |
| | Total | 4445 | 35 |

17 Deaths from Surgical Causes. Fig 17

From the figures it can be seen that patients with appendicitis form the largest group of patients using the surgical facilities in the hospitals standing at 2883 patients out of the total of 4445 patients or 65% of the total patients and suffer the most deaths i.e. 22 or nearly 1% of the mortality. Since appendicectomy as an operation has evolved into a relative simple surgery these figures would need improvement and with proper care and infection control this is an achievable target. Figures at 17.

18 Deaths from Gynecological and Obstetric Causes.

Fig 18

| Gynecological | | | | | |
|---------------|---|------|---|--|--|
| 1 | Fibroid Uterus | 51 | | | |
| 2 | Inflam diseases of female pelvic organs (PID) | 239 | 1 | | |
| 3 | Uterine Prolapse | 79 | | | |
| 4 | Vesico - Vaginal Fistula | 8 | | | |
| Obs | stetrics/Maternal Complecications | | | | |
| 5 | Ante partum Hemorrhage (APH) | 68 | | | |
| 6 | Complications of Abortion | 231 | | | |
| 7 | Ectopic Pregnancies | 30 | | | |
| 8 | Postpartum Hemorrhage (PPH) | 83 | 1 | | |
| 9 | Pre-Eclampsia/Eclampsia | 57 | | | |
| 10 | Prolonged/Obstructed Labour | 64 | | | |
| 11 | Puerperal Sepsis | 29 | | | |
| 12 | Rupture Uterus | 9 | | | |
| Obstetrics | | | | | |
| 13 | Other Obstetric Complications | 156 | 1 | | |
| | TOTAL | 1104 | 3 | | |

It is heartening to note that despite admission of 1104 patients with gynecological and obstetric disorders the mortality remained at 3 which is just 0.2% and indeed all the health workers engaged in these departments deserve a word of praise for their efforts and these figures clearly indicate that the preventive effort in this area has made intense interventions with a nearly perfect outcome. The sense of complacency must not impede this great work though effort shall

be made to collect data from other sources i.e. Tertiary Care Hospital to make it more representative. Figures at 18.

19 Maternal Deaths during Deliveries.

An attempt has been made to present a comprehensive picture of our obstetric facilities through figure 19. A total number of 134 deaths have been attributed to obstetric causes during delivery out of the total of 29266 deliveries conducted which constitutes a mortality rate of 0.44% this quarter. These figures indicate that the facilities where deliveries are equipped and the staffs have performed exceptionally well to maintain these standards. A word of caution has to be added though considering this is the first time that this indicator has been included in the report and we shall be looking for consistency in the next report.

The reader would also appreciate that these figures are exclusively derived from patients delivering their babies in the health facilities whereas it is a well known fact that most of the normal deliveries are conducted at home especially in the rural areas. The non existence of birth and death registration data at the local level greatly impedes our access to reliable data. It is hoped with increased placements of LHWs and Community Midwives would greatly enhance the scope of data collection.

| S.# | Districts | Total Deliveries | Maternal deaths reported |
|-----|--------------|------------------|--------------------------|
| 1 | Lakki Marwat | 736 | 0 |
| 2 | Tank | 396 | 0 |
| 3 | Haripur | 1056 | 0 |
| 4 | Kohistan | 78 | 0 |
| 5 | Battagram | 1495 | 0 |
| 6 | Karak | 295 | 0 |
| 7 | Kohat | 1505 | 0 |
| 8 | Hangu | 751 | 0 |
| 9 | Dir Upper | 1249 | 0 |
| 10 | Shangla | 360 | 0 |
| 11 | Nowshera | 1180 | 0 |
| 12 | Malakand | 944 | 1 |
| 13 | Bannu | 282 | 2 |
| 14 | Swabi | 1196 | 4 |
| 15 | Dir Lower | 1880 | 5 |
| 16 | Swat | 2943 | 5 |
| 17 | Chitral | 1349 | 6 |
| 18 | Mardan | 2523 | 6 |
| 19 | Charsadda | 1758 | 10 |
| 20 | Peshawar | 1404 | 11 |
| 21 | Mansehra | 1979 | 19 |
| 22 | Abbottabad | 1261 | 21 |
| 23 | D.I. Khan | 1934 | 41 |
| 24 | Buner | 712 | 3 |
| | Total | 29266 | 134 |

20 INFANT DEATHS (NEONATAL DEATHS REPORTED DURING DELIVERIES).

Another new indicator added to the report this quarter is the number of Neonatal deaths due to various causes during the deliveries or immediately afterwards has been added. Two assumptions have to be made here, one is that this report includes deaths occurring in government facilities only and the second is the non availability of data on predispositions in the mother resulting in these fatalities. Figures 20 show a graphic presentation of the mortality figures.

Out of the 29266 deliveries conducted in the government sector facilities the mortality of neonates stood at 541 or 1.8% of the total deliveries where the maternal mortality in the same facilities and the same number of patients stands at 0.1%. Though the total percentage of 1.8% would be satisfactory in our circumstances, the discrepancy in the maternal and neonatal/ infant mortality would indicate that there is still plenty room for improvement in managing new born babies. Barring a few unavoidable causes of death in newborn baby efforts could be made to minimize the preventable causes of death.

| S.# District | | Total Deliveries | Infant deaths reported |
|--------------|--------------|---------------------|---------------------------|
| 1 | Kohistan | 78 | 0 |
| 2 | Battagram | 1495 | 3 |
| 3 | Dir Lower | 1880 | 1 |
| 4 | Malakand | 944 | 4 |
| 5 | Dir Upper | 1249 | 3 |
| 6 | Shangla | 360 | 1 |
| 7 | D.I. Khan | 1934 | 27 |
| 8 | Kohat | 1505 | 10 |
| 9 | Hangu | 751 | 6 |
| 10 | Chitral | 1349 | 19 |
| 11 | Charsadda | 1758 | 19 |
| 12 | Peshawar | 1404 | 18 |
| 13 | Bannu | 282 | 7 |
| 14 | Swat | 2943 | 63 |
| 15 | Abbottabad | 1261 | 40 |
| 16 | Mansehra | 1979 | 60 |
| 17 | Mardan | 2523 | 68 |
| 18 | Nowshera | 1180 | 37 |
| 19 | Tank | 396 | 16 |
| 20 | Haripur | 1056 | 42 |
| 21 | Karak | 295 | 11 |
| 22 | Swabi | 1196 | 61 |
| 23 | Lakki Marwat | 736 | 10 |
| 24 | Buner | 712 | 15 |
| | Total | 29266 | 541 |

Fig 20 A training program for staffs working in the deliveries would be in order to bring this further down and long way in achieving our short and long term goals as envisaged in our policy statement.

A brief description of the report would suggest that that those with a higher number of women registered in the government health facilities for deliveries would have more neonatal deaths but that should not deter us from our goal of ensuring maximum utilization of health facilities by the people. As expected there have no neonatal deaths in Kohistan for the obvious reason that only 78 deliveries were conducted in the district in the government facilities this quarter in contrast to Swat 63 neonatal deaths were reported but concurrently the deliveries conducted in the facilities were also 2943, the highest in the province and nearly 10% of all deliveries conducted in the facilities. If a comparison is made with the district of Karak where only 295 deliveries were conducted this guarter and the neonatal deaths were reported at 11 then the figures from Swat would seem spectacular.

21. THE STATISTICS ON CANCER PATIENTS.

The DHIS Project has tried its level best to gather the maximum amount of data. Out of the three operational units dealing in Oncology 02 (INOR Abbottabad, ONCOLOGY Unit HMC) graciously provided the data whereas the largest operational unit i.e. IRNUM PESHAWAR refused to provide the data despite our repeated requests for the same and no fathomable reason was provided. The need for this data was essential since one project is already working on alleviating the sufferings of patients with cancer and the other project is in the pipeline. An attempt has been made to analyze the incidence of different cancers and to provide a rationale for preventive and curative interventions despite the availability of data.

| # | INSTITUTION | CA BREAST | CA LUNG | CA STOMACH | CA OESOPHAGUS | CA COLON | YIY | AML | CLL | CML | LYMPHOMAS | CA ORAL | OTHERS | Total |
|---|---------------------------------------|-----------|---------|------------|---------------|----------|-----|-----|-----|-----|-----------|---------|--------|-------|
| 1 | INOR Abbottabad | 497 | 34 | 113 | 70 | 47 | 58 | 04 | 4 | 05 | 165 | 184 | | 1181 |
| 2 | IRNUM (Peshawar) | | | | | | | | | | | | | |
| 3 | ONCOLOGY UNIT (HMC Peshawar) | 4 | | 2 | | 4 | 85 | 58 | | 11 | 6 | | 49 | 219 |
| | Total | 501 | 34 | 115 | 70 | 51 | 143 | 62 | 4 | 16 | 171 | 184 | 49 | 1400 |

Fig 21

Figures 21 provide the breakup of the patients with cancer in the province. The data indicates that Breast Cancer constitutes the largest number of patients standing at 501 this quarter or 35.78% with Oral Cancer constituting the second largest group with 184 patients or 13.1% of the reported patients. Lymphomas constitute the third largest group standing at 171 or 12.2%. Acute Lymphoblastic Leukemia (ALL) and Cancer of the stomach are at 4th and 5th place. The patients with Chronic Myeloid Leukemia (CML) stand at 16 or 1.14% of the patients. The number of patients with CML deserves a special mention since the provincial government has already launched an ambitious 8 year project for treatment of these patients at a considerable cost. Though not disagreeing with the ultimate goal of the project several issues need to be addressed here. The biggest group of patients i.e. those with Breast Cancer have no access to the expensive treatments available and since almost all the patients are female and deserve our support. It is also a happy coincidence that the government has taken a decision to launch a project to support all the patients with cancer and we also hope that both these projects shall be consolidated resulting in alignment of both the programs for the benefit of the patients. It is also worthwhile to mention that for the new indices included in the report we do not have comparative figures and hopefully it would improve in the next report.

22. REPORT ON BLOOD TRANSFUSIONS AND INCIDENCE OF INFECTIVE DISEASES.

These figures are included to ascertain the prevalence of blood borne infections like HIV, Hepatitis B, Hepatitis C and Syphilis in healthy volunteers donating blood in government and non-government hospitals and centers though some professional blood donors may form a part of the donors. Figure 22 are illustrative of the prevailing incidence of these disorders. A total of 28987 bags of blood were screened in the six major centers including three private sector organizations. The incidence of HIV +ive patients has come down from a total of 21 reported last quarter to 08 this quarter constituting 0.03% of the patients this quarter. It reflects the efficiency of the control program and the efforts need to be redoubled to ensure that this disease does not make a comeback and the trend remains consistent with global trends.

The figures for Hepatitis B found during screening of blood stands at 610 or (2.1%) of the total with Hepatitis C positivity rate standing at 421 or 1.4 (3.5%) compared to the combined positivity rate of (HBV and HCV) 4.6% in the last quarter. Though these figures are not inclusive of high risk patients like Female and Male sex workers or drug addicts but these figures do reflect a general trend and the often quoted rates of > 10% seem unrealistic and comparison would be made with the results of screening of high risk groups in the next report. With the launch of the free treatment for patients of HCV and HBV it is earnestly hoped that the figures would come down further if proper care is taken vis-à-vis the procurement of medicines and other supplies for these ailments. A UN Report has included the co-prevalence of HBV and HIV and both these disorders need controlled concurrently. A close and direct relationship must exist between the HIV/AIDS control program and the Hepatitis Control Program.

In the previous report it was pointed out of the sexually transmitted diseases syphilis is one of the most easily cured if detected early and help provided to the affectees. It has to be realized that left untreated this disorder can have devastating effects in the long term. The figures for this disorder indicate that the total number of VDRL positive patients stands at 65 or 0.2% of the total but the

| S.No. | Name of Organization | Total No. Registered Patients | Total No. of Blood Transfusions Conducted This Quarter. | Total No. of Blood units screened this Quarter | HIV +ive | HBV +ive | HCV +ive | Others |
|-------|-------------------------|-------------------------------------|---|--|-------------|-------------|-------------|---------|
| 1) | Lady Reading | | | | | | | |
| | Hospital, | | 11596 | 11596 | 3 | 294 | 238 | VDRL=27 |
| | Peshawar. | | | | | | | |
| 2) | Khyber | | | | | | | |
| | Teaching | | 5189 | 5189 | Nil | 116 | 63 | |
| | Hospital, | | | | | - | | |
| | Peshawar. | | | | | | | |
| 3) | Hayatabad | | | | | | | |
| | Medical | | 4525 | 4525 | Nil | 76 | 72 | VDRL=33 |
| | Complex, | | | | | | | |
| | Peshawar. | | | | | | | |
| 4) | Frontier | 2320 | 2912 | 2745 | 1 | 37 | 17 | |
| | Foundation, | | | | | | | |
| | Peshawar. | | | | | | | |
| 5) | Hamza | | | | | | | |
| | Foundation, | 855 | 2090 | 2090 | Nil | 46 | 11 | VDRL=05 |
| | Peshawar. | | | | | | | |
| 6) | Fatimid | 3041 | 4211 | 2842 | 4 | 41 | 48 | |
| | Foundation, | | | | | | | |
| | Peshawar. | | | | | | | |

Fig 22

significance of this should not be lost on the readers considering the facts elaborated earlier since a close direct relationship exists between all sexually transmitted diseases and HIV/AIDS. All the healthcare providers must be aware of this emerging scourge and stop it in its tracks before it can be established in the society.

This project strives to create linkages with all institution both in the public and private sector to improve the quality of the data. Three organizations in the non-governmental sector namely, The Frontier Foundation, The Fatimid Foundation and Hamza Foundation have provided timely and accurate data and we truly appreciate their cooperation. All these organizations primarily work in the transfusion sector providing services to the patients with Thallaesemia and Hemophilia and provision of blood to government institutions in times of need.

The preventive effort against all these diseases would be invigorated by an effective awareness campaign. Though the awareness campaign for HIV/AIDS Control can be described as satisfactory the Hepatitis Control program has totally failed in this area with millions of rupees in unspent budget and few patients are aware of the availability of free treatment for these disorders.

In the next report an effort will be made to obtain data from the DHQ and THQ Hospital to have a better representative data reflecting the disease pattern in the population.

23. AVAILABILITY OF NURSING STAFFS IN GOVERNMENT HOSPITALS.

Figure 23 indicate the position of the placements of this critical group of medical staffs. The reader would realize that the absence of nursing staffs would render the health care services superfluous. With so much of investment in creating reliable indoor and EMOC (Emergency Obstetric Care) the absence of nursing staff would greatly impede the implementation of the desired goals of the government as well as the MDGs are going to missed by a wide margin. **Fig 23**

| S# | Category | Sanctioned | Filled | Vacant |
|----|---|------------|--------|--------|
| 1 | Principal, PGCN Peshawar (B-19) | 01 | 0 | 01 |
| 2 | Chief Nursing Supdt (B-18) | 07 | 02 | 05 |
| 3 | Sister Tutor (B-18) | 11 | 0 | 11 |
| 4 | Vice Principal (B-18) | 07 | 0 | 07 |
| 5 | Principal (B-18) HMC Peshawar Hospital Side | 01 | 0 | 01 |
| 6 | Deputy Director (Nursing)(B-18) | 01 | 01 | 0 |
| 7 | Assistant Director (Nursing)(B-17) | 02 | 01 | 01 |
| 8 | Nursing Supdt (B-17) | 17 | 13 | 04 |
| 9 | Sister Tutor (B-17) | 45 | 36 | 09 |
| 10 | Clinical Instructor (B-17) | 03 | 0 | 03 |
| 11 | Head Nurse (B-17) | 163 | 149 | 14 |
| 12 | Charge Nurse (B-16) | 3455 | 2879 | 576 |
| 13 | Male Nurse (B-16) | 254 | 158 | 96 |
| | TOTAL | 3967 | 3239 | 728 |

The existing vacant posts of the nursing staffs in all grades numbers 728 or 18.35% of the sanctioned posts. The situation is indeed deplorable which on the one hand deprives the patients of proper medical care and on the other denies a chance to qualified candidates from having productive employments. This critical situation demands an urgent redressal and the bottlenecks in deploying these staffs must be removed on a top priority. The absence of nursing staffs at the administrative level can be ignored but the vacant posts of Staff Nurses currently standing at 16.6% is indeed is cause for serious concern. Though the details regarding nursing staffs at the peripheral hospitals is not known it can safely be assumed that the most remote districts of the province must be suffering a huge deficiency with the facilities in the main cities having fewer shortages.

Though it is recognized that the recruitment through the Public Service Commission is a time consuming and laborious process other means of immediate placement of these staffs on ad-hoc basis must be used.

Looking at the figures above it is imperative that the strength of the Male Nurses has to be increased by a significant percentage to offset the deficiencies in the far flung areas where female nursing staffs are not ready to serve for a variety of financial, social and cultural reasons. Since the cadre of dispenser has already been done away with it is high time that cadre of Male Nurses is further strengthened either through the retraining of some of the existing staffs or by deploying fresh candidates. The Pakistan Army and several other organizations do have corps of male nurses and the same must be applied in the health department though on a much larger scale.

24. REPORT OF THE PROVINCIAL DRUG LABORATORY FOR THIS QUARTER.

The performance of the Provincial Drugs Laboratory is shown in figures. A total of 1689 drugs were analyzed in this quarter out of which 850 drugs conformed to the usual standards (50.3%) with 116 drugs below the permitted standards which is 6.8%% of the total samples examined. It is heartening to note that in contrast to the previous quarter when only 686 samples were examined in this quarter the number has gone up to 1689 which is more than three times the numbers analyzed in the last quarter. These numbers on one hand would indicate seriousness on the part of the field regulators and would also provide a rationale for the PDL to seek more resources for achieving its tasks effectively. Out of the total 87 drugs were unregistered and by common understanding it can be assumed that no action against the firm manufacturing these can be initiated. **Fig 24**

| Months | Sample Received | Test | | | Samples Upto Standards with | Samples Below | |
|--------|------------------|------|-----|-------|--------------------------------|---------------|--|
| | During the Month | New | Old | Total | Percentage | standard | |
| April | 218 | 26 | 408 | 434 | 378 | 56 | |
| May | 348 | 84 | 205 | 289 | 256 | 33 | |
| June | 281 | 0 | 0 | 243 | 216 | 27 | |
| Total | 847 | 110 | 723 | 1689 | 850 | 116 | |

Analysis reveals that most of the unregistered Homeo or Herbal Laboratories operating freely outside the ambit of the Drug Control Authorities with preposterous unsubstantiated claims of providing cure for every ailment on the face of this planet. Their advertising campaign in the Print and Electronic media goes unchallenged and hence the gullible public is deceived into purchasing

these ineffective and dangerous medicines at exorbitant costs with an eminent chance of adverse reactions. Unfortunately these medications are freely available in the market without any control and it is only a chance encounter that a regulator might apprehend the criminals behind these rackets. The Provincial Drugs Laboratory is doing a commendable job of identifying the culprits despite an enormous resource constraint and non availability of machinery for performing complex analysis. The Provincial Drugs Laboratories have also been very consistent in reporting their findings on a regular but it is felt it is the oversight in the field that is lacking despite the interventions from a variety of Law Enforcing agencies like the Police, FIA, Anti Corruption establishment to name a few. Even if we ignore the manufacturers from other provinces who control a dominant portion of the market question marks would still be raised on the action against the local producers of spurious medicines within this province. A new set of laws for control of this criminal activity would be the order of the day and the MCC Purchase Committee must ensure that none of these black sheep enter the government sector at least.

The presence of spurious drugs in the market is a serious threat to the overall welfare of the society and in curtailing this menace becomes the responsibility of sections of the society including the government, media, civil society and judiciary. The intent must be sincere and serious and convoluted procedure now in vogue must be done away with immediately to expect any tangible benefits in the near future.

CONCLUSIONS:

As expected the regularity of reporting has improved significantly over a period of time and now the district staffs are taking keen interest in generating accurate reports but gaps do exist and hopefully the new PC-1 of the project shall go a long way in encouraging the trend and remove the bottlenecks that are prevalent at the moment.

As the reader would realize new indicators and new sets of information have been introduced in this report and we hope to improve upon these and add new ones in our future editions. The data on availability of the Nursing Staffs at facility level has been eye-opener and hopefully will result in a positive outcome. This project has also tried to highlight the deficiencies in the staffs dedicated to Anesthesia but unfortunately accurate figures were not available and it is hoped that the data shall be incorporated in the next report. The project is fully aware of the importance of maintaining an accurate data base for all human resource that the department works through and we shall strive to obtain the disseminate the same in the due course of time.

Another important area that needs our attention is the data from the Tertiary Care Hospitals in the province and we would seek their cooperation in incorporating their outputs into reports so that their efforts are also appreciated and more data driven initiatives are taken by these hospitals to improve their performance.