Analysis of Quality of HMIS Data, for all the Districts of Maharashtra

Report prepared by

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ANM	Auxiliary Nurse Midwife
ASHA	Accredited Social Health Activist
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy
BCG	Bacillus Calmette Guerin
CHC	Community Health Centre
DH	District Hospital
DPT	Diphtheria, Pertussis and Tetanus
FRU	First Referral Unit
FP	Family Planning
FS	Female Sterilization
HIV	Human Immuno Deficiency Virus
ICDS	Integrated Child Development Scheme
ICTC	Integrated Counselling and Testing Centre
IFA	Iron and Folic Acid
IMNCI	Integrated Management of Neonatal and Childhood Illnesses
IUD	Intra-uterine Device
JSY	Janani Suraksha Yojana
JSSK	Janani Shisu Suraksha Karyakram
MTP	Medical Termination of Pregnancy
NRHM	National Rural Health Mission
NSV	Non-scalpel Vasectomy
OPD	Out-Patient Department
ORS	Oral Re-hydration Salt
OT	Operation Theatre
PHC	Primary Health Centre
PNC	Post Natal Care
RCH	Reproductive and Child Health
RKS	Rogi Kalyan Samiti
RTI	Reproductive Tract Infection
SDH	Sub-Divisional Hospital
SHC	Sub-Health Centre
STI	Sexually Transmitted Infection
ТВА	Trained Birth Attendant
ТТ	Tetanus Toxoid

Key findings and Recommendations

- Data inconsistencies were quite evident in Mumbai districts. This discrepancy to a large extent is due to inconsistent data from private institutions. Hence, proper mechanism should be in place to collect data from private institutions.
- First trimester ANC registration is only 21.5 percent in Mumbai which is quite less.
- > Total deliveries and total live birth do not match in the district of Mumbai.
- > Data entry errors of Home deliveries in the month of July was observed in Mumbai district.
- In public institutional deliveries, discharge under 48 hours of deliveries was high in Palghar district (50%); followed by Mumbai(17%). However, in Sindudurg district (0%) and Ratnagiri (6.8) it was very less.
- Almost all the indicators are showing either over/under/non reporting of data. This may be either due to data entry error or software error.
- It is observed OPV 0 and BCG doses and total live birth do not match. Many times BCG and OPV 0 are more than live birth. The OPV0 provided immediately after births but BCG doses are provided anytime between live births and within 11 month.
- Validation error of new born weighed greater than live births was observed in Sindhudurg district in the month of April.
- Software updation is recommended. Data is initially entered entered in DHIS-2 level after which it is uploaded in HMIS portal. However while uploading the data entries are not matching. This needs to be addressed at the earliest.
- Data inconsistencies were quite evident in many districts. This discrepancy to a large extent is due to inconsistent data from private institutions. Hence, proper mechanism should be in place to collect data from private institutions.
- Sex ratio at birth is less than 1000 in all the districts of Maharashtra. Interestingly, wherever the number of MTPs increases consecutively the gap in male and female live births increased.
- Almost in all the districts of Pune region indicators are showing either over/under/non reporting of data. This may be either due to data entry error or software error.

- Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than live births was observed in all districts of Pune region. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only or else some kind of format needs to be developed to collect data from private institute for all RCH indicators.
- Number of functional laparoscopes and number of facilities serving as FRU varies across month which is a data inconsistency.
- During PRC field visit it was observed that timely payment of JSY incentives are sometimes not followed. There is a time lag and incentives are paid as and when the amount allocated to JSY is received subsequently validation error increases.
- Comparatively data inconsistencies are observed more than validation error in data values of post partum care.
- Uniformly and in almost all the districts the number of eclampsia cases managed during delivery is either not reported or if reported either under or over reported.
- The specific feature of data collected under blindness control programme is apart from validation error even tough substantial number of eyes is collected negligible number of eyes is utilized.
- Number of NSV trained doctors and number of laparoscopic unit varies considerably month wise which although not a validation error is quite unlike.
- The number of times ambulance services was used does not match proportionally to the number of facilities the ambulance service are available. In some months if 1 or 2 ambulances services are available in facility then rest of months the number of ambulance service would be either 10 or 20 times with same number of ambulance.
- Number of functional laparoscopes and number of facilities serving as FRU varies across month which is a data inconsistency.

Analysis of HMIS Data in Maharashtra

I Introduction:

Health Management Information System (HMIS) provides wealth of information regarding the Health Indicators of India. The information available on this portal is being compiled from Health Management Information System (HMIS) HMIS data. This report is based on analysis of HMIS data during April 2016 to August 2016 and in some districts upto September 2016 among all the districts of Maharashtra as observed from HMIS portal.

Analysis mainly focuses on

- Validation Error
- Data Outliers
- Technical aspects of data
- Other type of data errors

The main focus and objectives is to analyse the data on RCH indicators covering the following aspects:

- Coverage of antenatal check up and immunization services
- Institutional/safe deliveries
- JSY Beneficiaries
- Family planning
- ASHA's involvement
- Health facility and infrastructure

In order to address the hmis data of both ANC and skilled deliveries, we examine the data on validation errors, outlier and any other discrepancies and inconsistencies in the data.

II ANC Care

During ANC visits women seek care for their own health and is an important opportunity for service providers to identify and treat problems such as anemia and infections and for prevention services like prevention of mother to child transmission of HIV (PMTCT), help women best prepare for birth, as well as inform them about pregnancy-related complications, and the advantages of skilled delivery care with at least three ANC visits being recommended for a normal pregnancy. Women who attend ANC are also more likely to seek skilled delivery.

ANC provided by a doctor, an ANM or other health professional comprises of physical checks, checking the position and the growth of fetus and giving TT injection and IFA tablets at periodic intervals during the time of pregnancy. At least three check-ups are expected to complete the course of ANC to safeguard women from pregnancy related complications.

Figure 1 to 62 gives the ANC service coverage in selected districts of Maharashtra. Overall, over reporting, underreporting is observed in selected districts of Maharashtra. Women registered for ANC are less than number of HIV tests conducted in districts of Chandrapur, and Bhandara. Also, Women registered for ANC are less than number of VDRL tests conducted in Bhandara, during the period April-August 2016

More than 90 percent of women registered for ANC in Pune region, Yavtamal, Akola and Nagpur are having HB below 11. In addition the number of women given 100 IFA is less than the number women having HB below 11.

In Palghar the number of 3 ANC checkups done is 28597 whereas 100 IFA tablets given are 17812 which is quite less. It may be due to unavailability of IFA tablets. This district is a tribal district and nearest to Thane and Mumbai office. In Mumbai first trimester ANC registration are very less in both the years 2014-15 and April-August 2016.

Figure 1: Total number of pregnant women Registered for ANC and number of women registered in first trimester in Pune region, Maharashtra April-August 2016

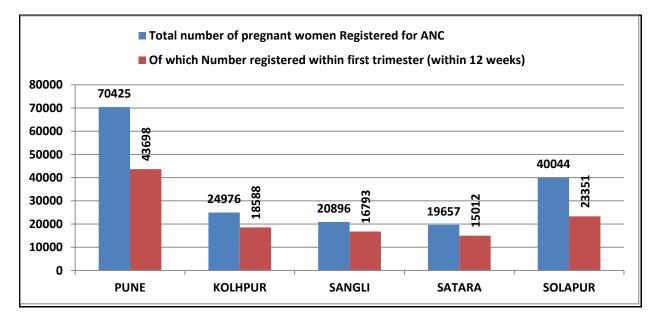
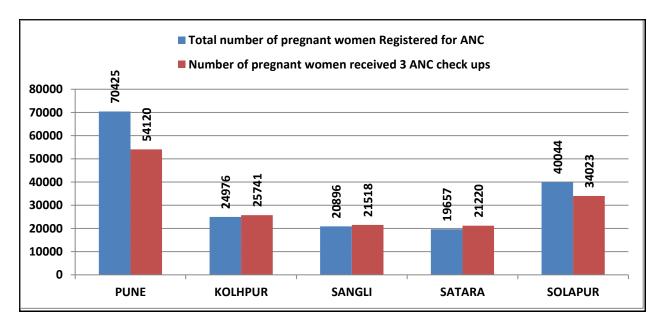


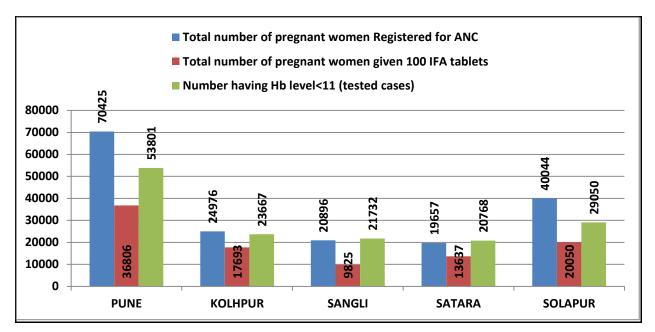
Figure 1 shows during the period April to August percentage of registration in first trimester are 62.04, 74.42, 80.36, 76.36 and 58.31 respectively in Pune, Kolhapur, Sangli, Satara and Solapur. It shows that in spite of making lots of efforts we are unable to register pregnant women in first trimester.

Figure 2: Total number of pregnant women Registered for ANC and number of women received 3 ANC in Pune Region, Maharashtra April-August 2016



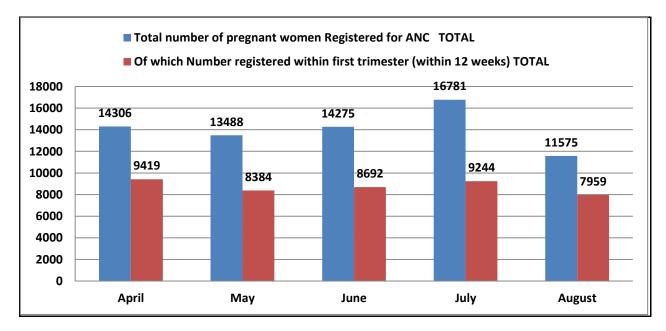
In this figure for the months of April to August in Kolhapur, Sangli and Satara the number of women received 3 ANC are more than number of women registered for ANC.

Figure 3: Total number of pregnant women Registered for ANC and number of women received 100 IFA and women having HB below 11 in Pune Region, Maharashtra April-August 2016



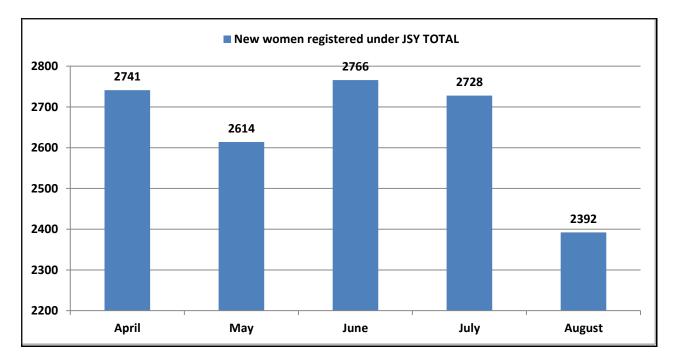
Percentage of women having HB below 11 is 76.39, 94.75, **104, 105.02** and 72.55 during the period April to August in Pune, Kolhapur, Sangli, Satara and Solapur districts of Pune region whereas women received IFA is 68.41, 74.75, 45.20, 65.66 and 69.01 respectively for all districts of Pune region.

Figure 4 Total number of pregnant women Registered for ANC and number of women registered in first trimester in Pune, Maharashtra April-August 2016

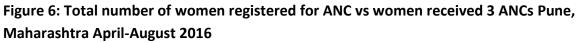


In figure 4 total numbers of pregnant women registered for ANC and women registered in first trimester. Number of registration in first trimester is 65.83, 62.15, 60.88, 55.08 and 68.76 for the months of April to August respectively. It shows that in spite of making lots of efforts we are unable to register pregnant women in first trimester.

Figure 5: New women registered under JSY in Pune, Maharashtra April-August 2016



In the month of April, May, June and July registration under JSY is seems to be okay however, in the month of August JSY registration is less.



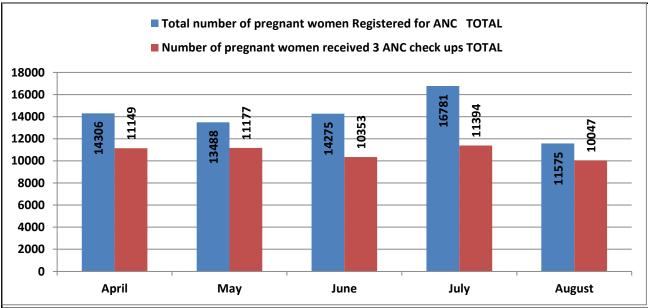
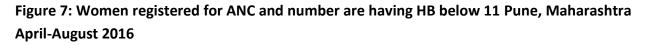


Figure 6 shows the number of women registered for ANC and number of received 3 ANC checkups. During the months of April to August percentage of women getting 3 ANC checkups is respectively 77.93, 82.42, 72.52, 67.89, and 86.79. Ideally all women need to get 3 ANC checkups to avoid further complications during delivery.

Figure 7 shows during the month of April to August 72.71, 76.06, 76.30, 71.35 and 88.74 percent of women are having HB below 11 and surprisingly HB below 7 number is very low. It is quite serious to have more than 70 percent of women are having HB below 11.



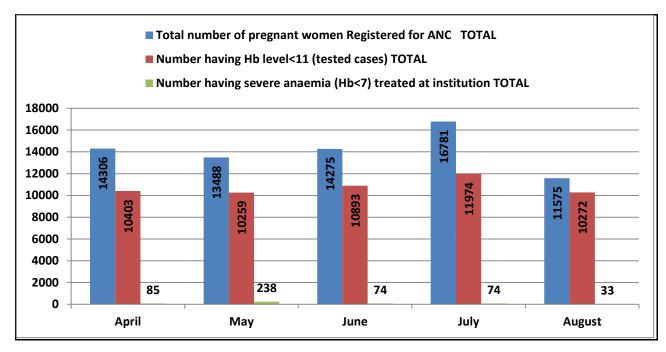


Figure 8: Women registered for ANC and number of HIV tests in Chandrapur, Maharashtra April-August 2016

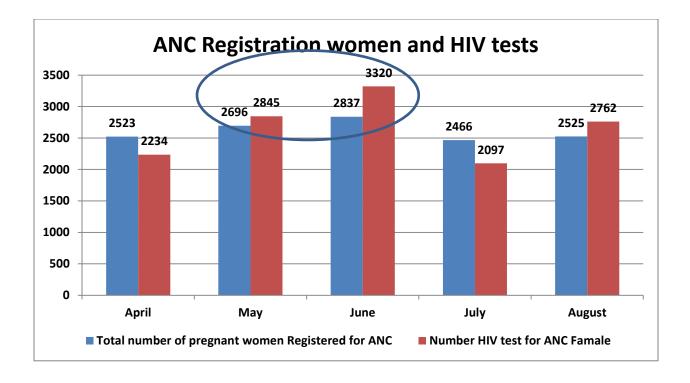


Figure 9: Women registered for ANC and number of women provided with 100 IFA tablets in Chandrapur, Maharashtra April-August 2016

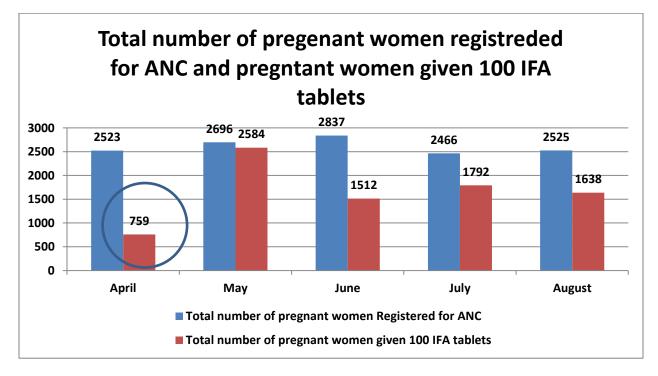


Figure 10: Women registered for ANC and number of HIV tests in Bhandara, Maharashtra April-August 2016

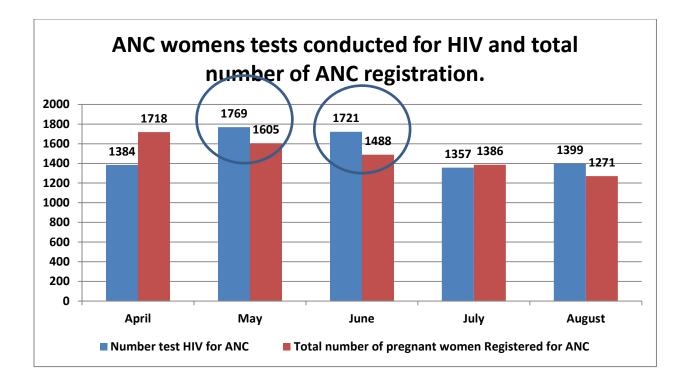


Figure 11: Women registered for ANC and number of VDRL tests conducted in Bhandara, Maharashtra April-August 2016

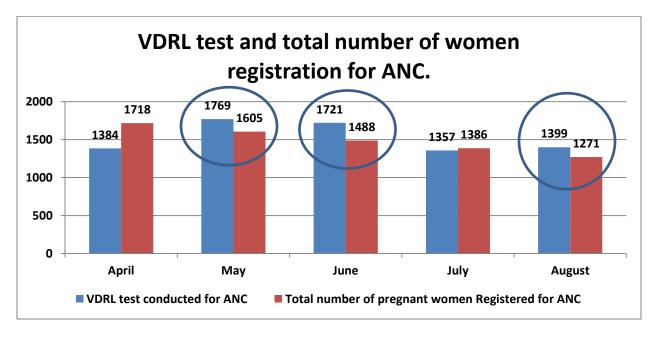
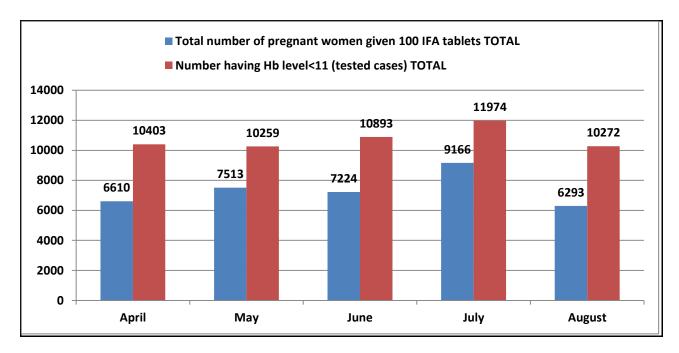


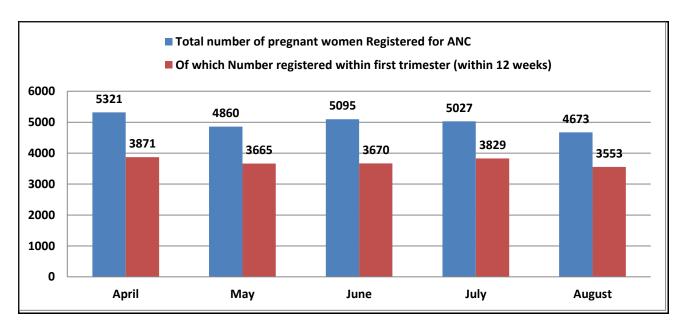
Figure 12 Women having HB below 11 and number of women given 100 IFA tablets in Pune, Maharashtra April-August 2016



During the month of April to August 72.71, 76.06, 76.30, 71.35 and 88.74 percent of women are having HB below 11 and HB below 7 number is very low is quite surprising. It is very serious to have more than 70 percent of women are having HB below 11.

Figure 12 shows during all the months' number of women given 100 IFA is less than number of women having HB below 11.

Figure 13: Total number of pregnant women Registered for ANC and number of women registered in first trimester in Kolhapur, Maharashtra April-August 2016



In figure 13 total numbers of pregnant women registered for ANC and women registered in first trimester. Number of registration in first trimester is 72.74, 75.41, 72.03, 76.16 and 76.03 for the months of April to August respectively. It shows that in spite of making lots of efforts we are unable to register pregnant women in first trimester. This is one of the important works of ASHAs to motivate women to register in time.

In figure 14 Women registered under JSY are 16.98, 18.39, 17.19, 17.92 and 17.26 respectively for the months of April to August. It appears very less as compare to women registered for ANC.

Figure 14 Total numbers of pregnant women Registered for ANC vs number of women registered under JSY in Kolhapur, Maharashtra April-August 2016

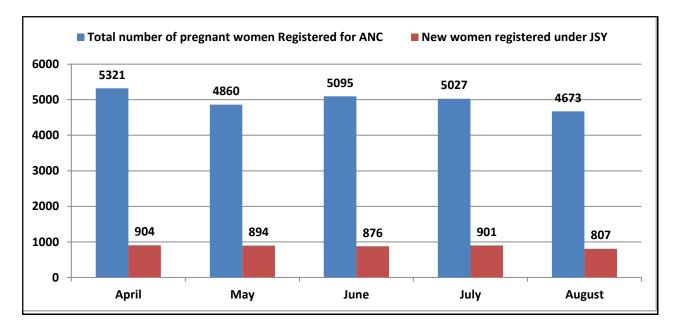


Figure 15: Total number of women registered for ANC vs women received 3 ANCs in Kolhapur, Maharashtra April-August 2016

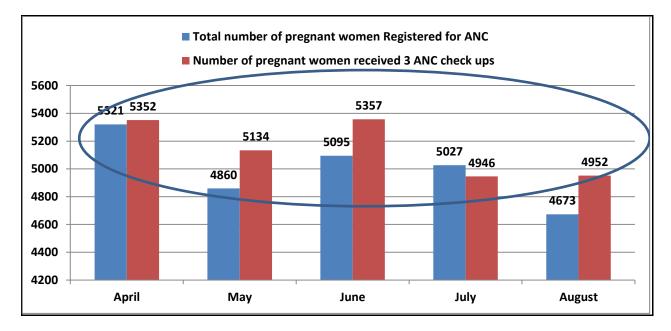
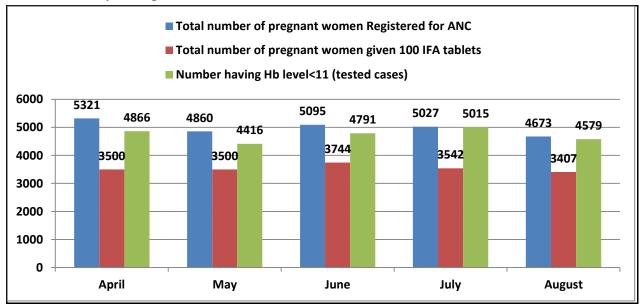


Figure 15 shows the number of women registered for ANC and number of received 3 ANC checkups. In all the months except for month of July, women registered for ANC is lesser than women received 3 ANC.

Figure 16: Women registered for ANC and number are having HB below 11 in Kolhapur, Maharashtra April-August 2016



During the month of April to August 91.14, 90.86, 94.03, 99.76 and 97.98 percent of women are having HB below 11. It is very serious to have more than 90 percent of women registered for ANC are having HB below 11. It is very surprising that number of women given 100 IFA is less than the number women having HB below 11.

In figure 17 total numbers of pregnant women registered for ANC and women registered in first trimester shows number of registration in first trimester is less for all the reporting months. It shows that in spite of making lots of efforts we are unable to register pregnant women in first trimester. This is one of the important works of ASHAs to motivate women to register in time

Figure 17: Total number of pregnant women Registered for ANC and number of women registered in first trimester in in Sangli, Maharashtra April-August 2016

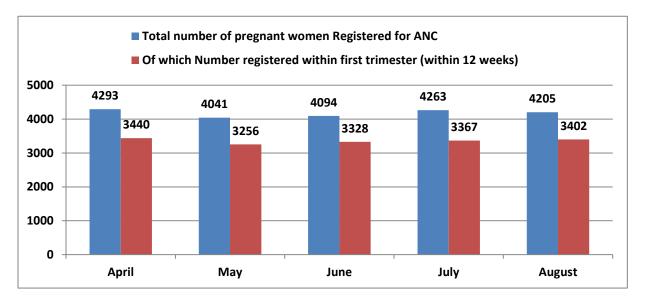
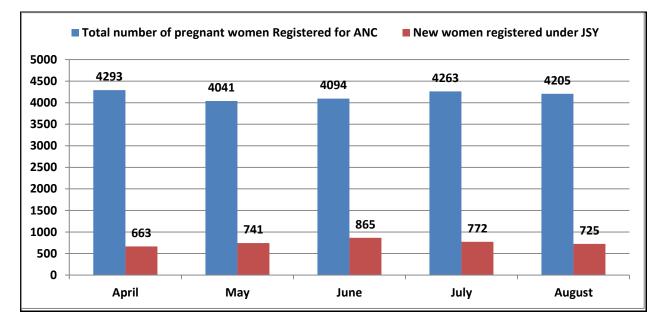


Figure 18: Total number of pregnant women Registered for ANC vs number of women registered under JSY in Sangli, Maharashtra April-August 2016



Women registered under JSY are 15.44, 18.33, 21.12 and 17.42 respectively for the months of April to August. It appears very less as compare to women registered for ANC.

Figure 19: Total number of women registered for ANC vs women received 3 ANCs in Sangli, Maharashtra April-August 2016

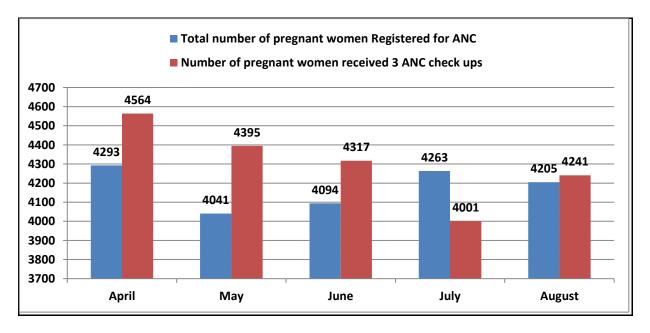


Figure 19 shows the number of women registered for ANC and number of received 3 ANC checkups. In all the months except for month of July, women registered for ANC is lesser than women received 3 ANC.

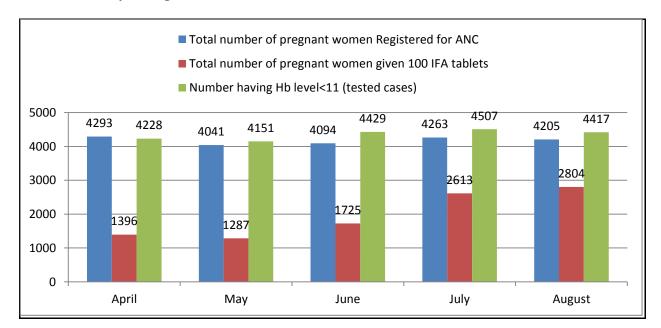


Figure 20: Women registered for ANC and number are having HB below 11 in Sangli, Maharashtra April-August 2016

Except month of April in all reporting months number of women registered for ANC is less than number of women having HB below 11. It is very surprising that number of women given 100 IFA is less than the number women having HB below 11, ideally all women have to be given IFA. It needs urgent intervention to address the problem.



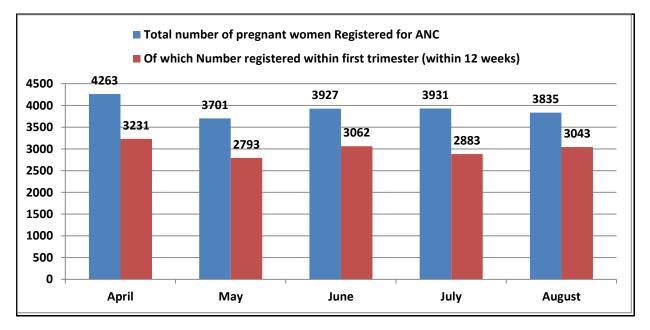
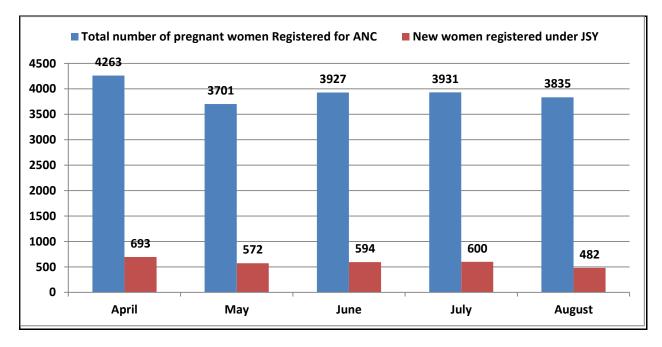
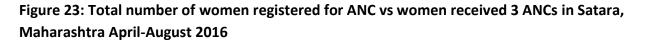


Figure 21 presents total numbers of pregnant women registered for ANC and women registered in first trimester. Inconsistant data on ANC registered is obseerved in all the months there is varition in data.Number of registration in first trimester is 75.79, 75.46, 77.97, 73.34 and 79.34 for the months of April to August respectively. It shows that in spite of making lots of efforts we are unable to register pregnant women in first trimester. This is one of the important works of ASHAs to motivate women to register in time.

Figure 22: Total number of pregnant women Registered for ANC vs number of women registered under JSY in Satara, Maharashtra April-August 2016



Women registered under JSY are 16.25, 15.45, 15.12, 15.26and 12.56 respectively for the months of April to August. It appears very less as compare to women registered for ANC.



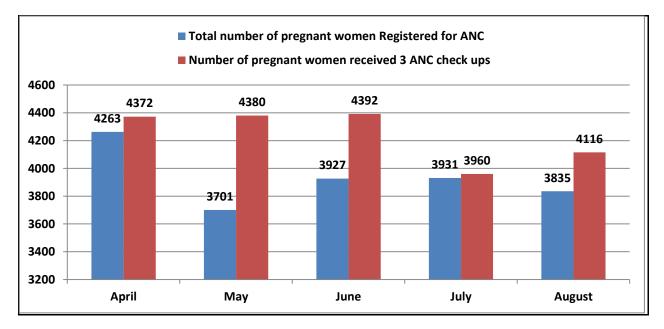


Figure shows the number of women registered for ANC and number of received 3 ANC checkups. In all the months except for month of July, women registered for ANC is lesser than women received 3 ANC.

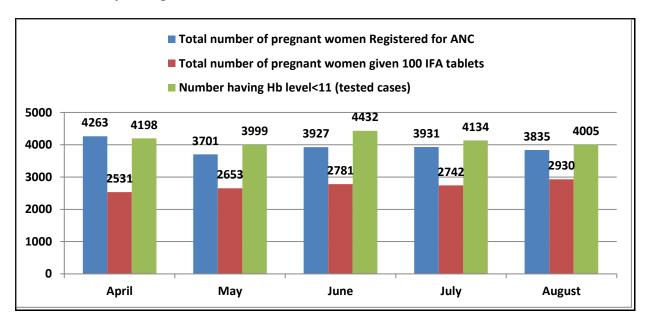


Figure 24: Women registered for ANC and number are having HB below 11 in Satara, Maharashtra April-August 2016

During the month of April to August 59.37, 71.68, 70.81, 69.75 and 76.40 percent of women are having HB below 11. It is very serious to have more than about 70 percent of women registered for ANC are having HB below 11. It is very surprising that number of women given 100 IFA is less than the number women having HB below 11 in all five months. It needs urgent intervention of senior officers to address the problem.

Figure 25 shows total numbers of pregnant women registered for ANC and women registered in first trimester. Number of registration in first trimester is 59.05, 57.07, 59384, 58.25 and 57.26 for the months of April to August respectively. It shows that in spite of making lots of efforts we are unable to register pregnant women in first trimester. This is one of the important works of ASHAs to motivate women to register in time.

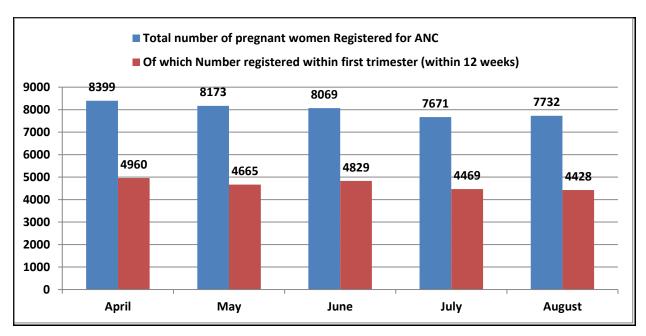
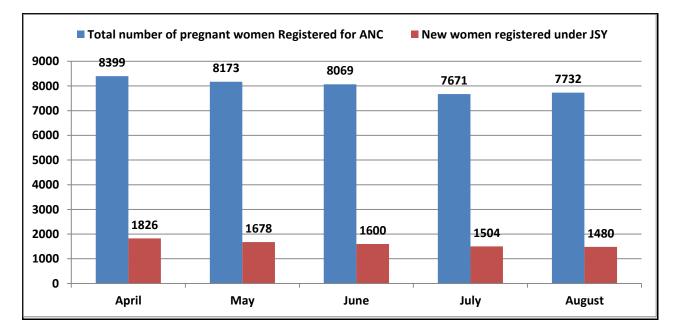


Figure 25: Total number of pregnant women Registered for ANC and number of women registered in first trimester ANC in Solapur, Maharashtra April-August 2016

Figure 26: Total number of pregnant women Registered for ANC vs number of women registered under JSY ANC in Solapur, Maharashtra April-August 2016



Women registered under JSY are 21.74, 20.53, 19.82, 19.60 and 19.14 respectively for the months of April to August. It appears very less as compare to women registered for ANC. If it so, then needs to work on this area.

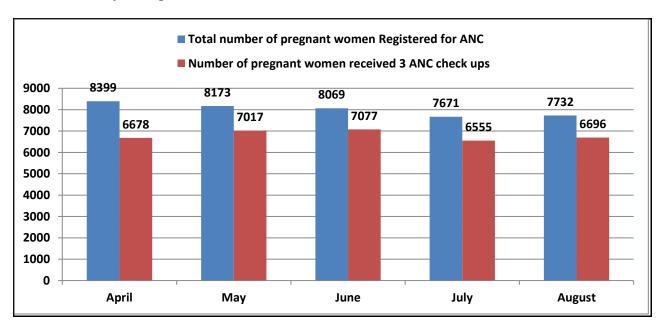
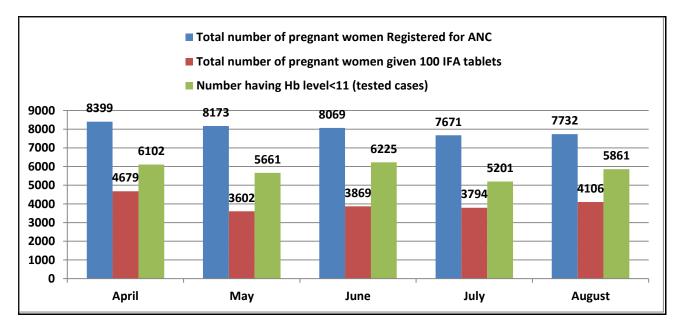


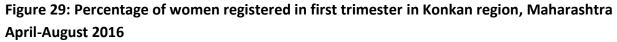
Figure 27: Total number of women registered for ANC vs women received 3 ANCs in Solapur, Maharashtra April-August 2016

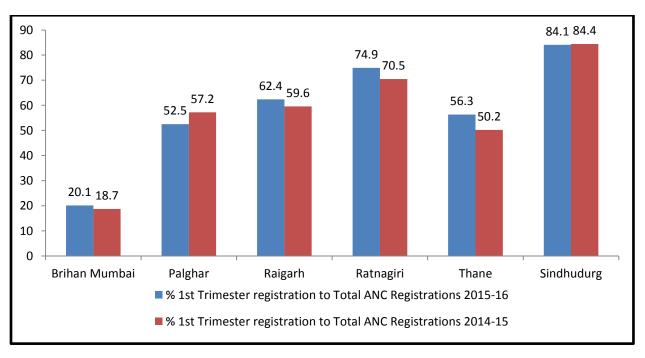
Figure 27 shows the number of women registered for ANC and number of received 3 ANC checkups. Receiving 3 ANC checkups is not at par with the number of women registered for ANC.

Figure 28 shows during the month of April to August 72.65, 69.26, 77.14, 67.80 and 75.80 percent of women are having HB below 11. It is very serious to have more than 70 percent of women registered for ANC are having HB below 11. It is very surprising that number of women given 100 IFA is less than the number women having HB below 11. It needs urgent intervention of senior officers to address the problem.

Figure 28: Women registered for ANC and number are having HB below 11 ANC in Solapur, Maharashtra April-August 2016







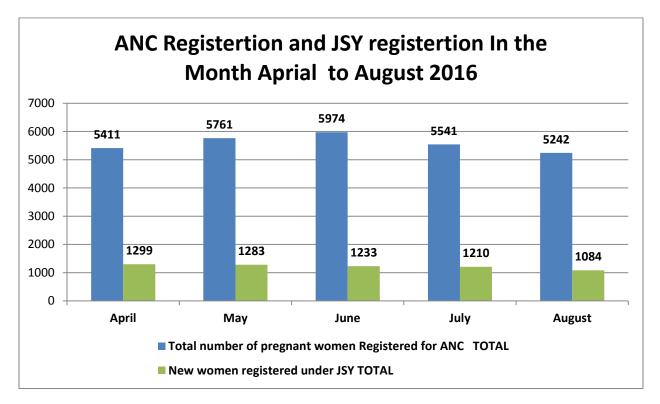
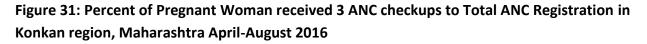
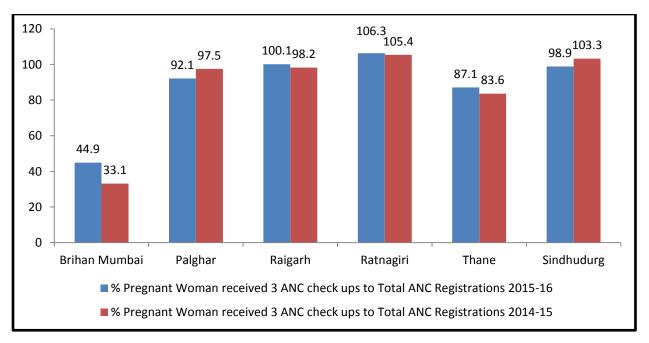


Figure 30: Total ANC and JSY registration in Nagpur, Maharashtra April-August 2016

Figure64 shows JSY women's registration is very low in Nagpur





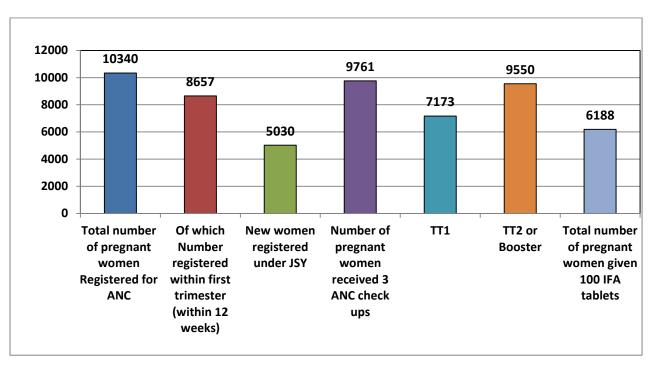
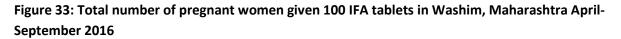
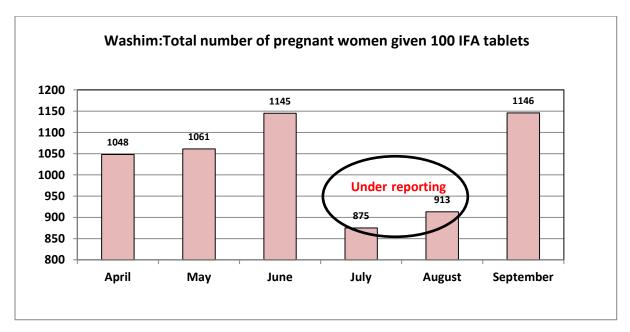


Figure 32: ANC Service Coverage in Washim, Maharashtra April- September 2016

Percentage of ANC registration within 1st trimester (within 12 weeks) is 3.75%. Percentage of 3 ANC checkups is 94%. But percentage of number of women given 100 IFA Tablets is 60%.





Numbers of women given 100IFA Tablets are under reported in all months. Percentage of women given 100 IFA Tablets is very low in July and August; it is 51 % and 56 % respectively.

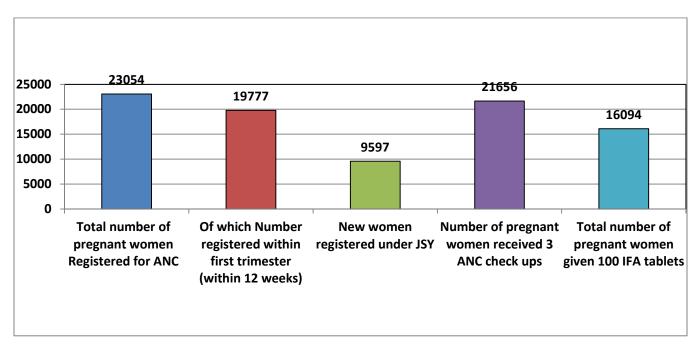
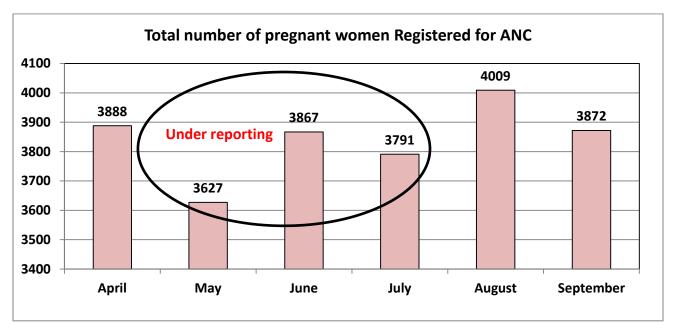


Figure 34: ANC service coverage in Buldana district, Maharashtra April-September 2016

Percentage of ANC registration within 1st trimester (within 12 weeks) is 85%. Percentage of 3 ANC checkups is 94%. But percentage of number of women given 100 IFA Tablets is 70%.





ANC registration is low in May, June and July as compared to other months.

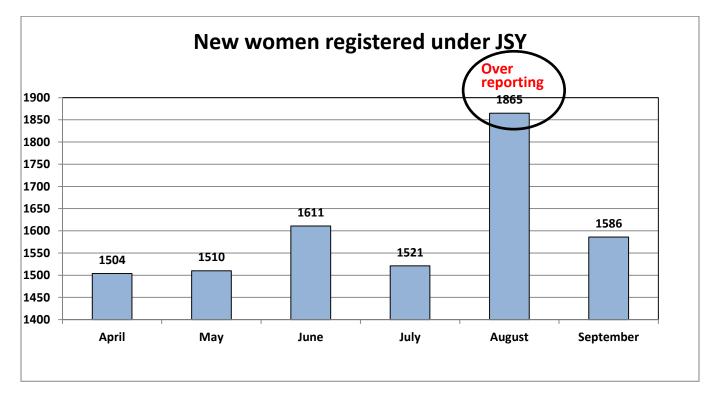
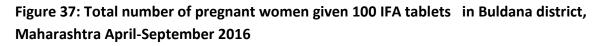
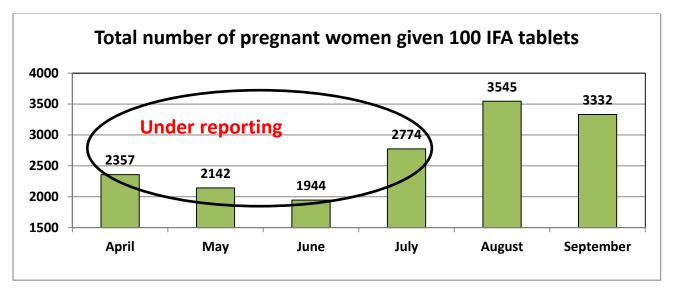


Figure 36: Total number of new women registered under JSY in Buldana district, Maharashtra April-September 2016

New women registered under JSY is over reported in August.





Number of women given 100 IFA tablets is under reported in April, May, June and July. It is 50 % in June which is very low.

Figure 38: Total number of women having severe anemia and treated in institution in Buldana district, Maharashtra April-September 2016

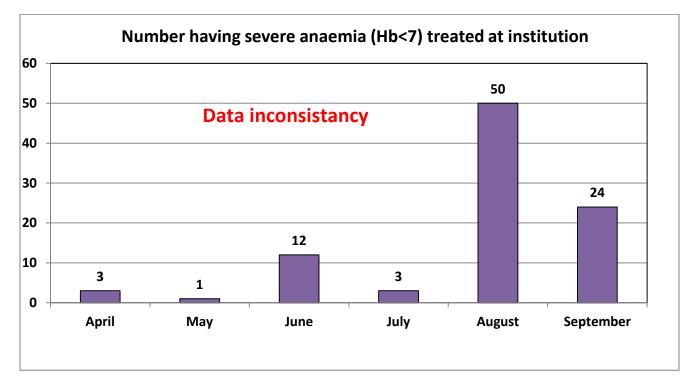


Figure 39: New cases detected in Buldana district, Maharashtra April-September 2016

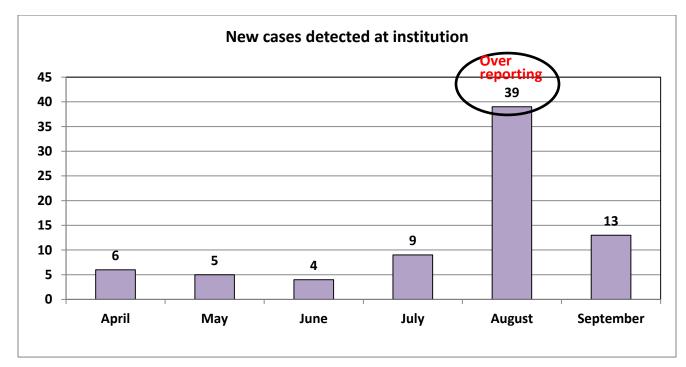
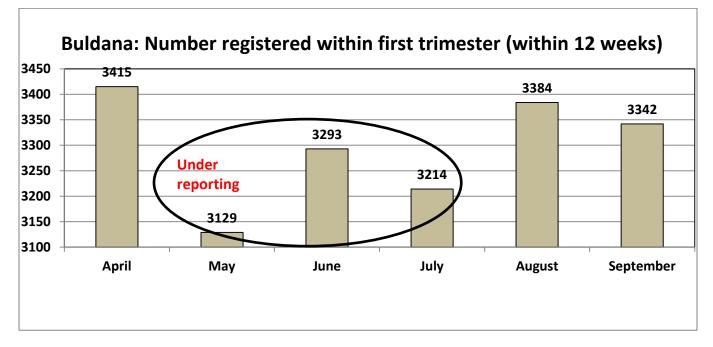


Figure 40: Total number of pregnant women registered within first trimester in Buldana district, Maharashtra April-September 2016



Number registered within first trimester is under reported in May, June and July as compared to other months.

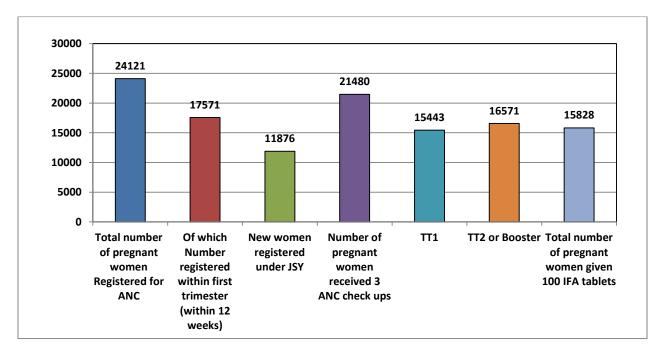


Figure 41: ANC coverage in Yavatmal district, Maharashtra April-September 2016

Percentage of ANC registration within 1st trimester (within 12 weeks) is 72.84%. Percentage of 3 ANC checkups is 89%. But percentage of number of women given 100 IFA Tablets is 65%.

Reporting of month wise data is inconsistent for ANC services. ANC registration is low in months May, July and August, which can be seen from the chart below.

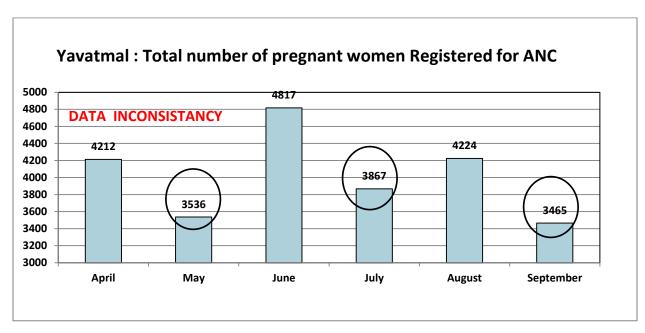
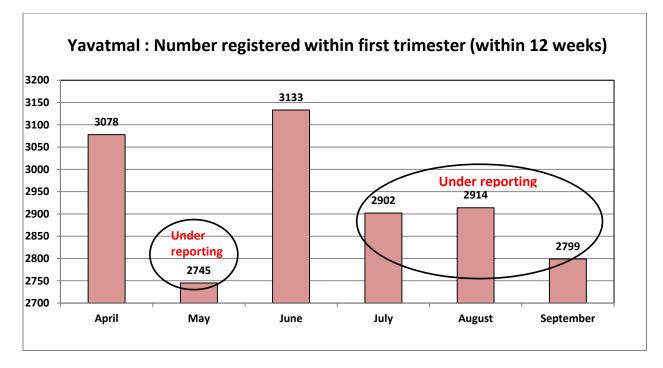


Figure 42: Total number of pregnant women registered for ANC in Yavatmal district, Maharashtra April-September 2016

Figure 43: Total number of women registered within first trimester in Yavatmal district, Maharashtra April-September 2016



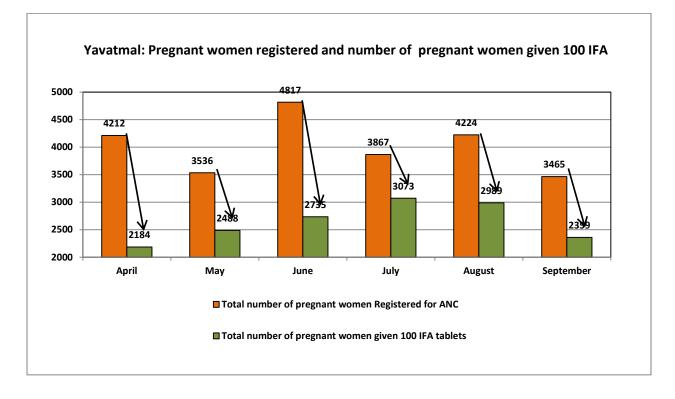
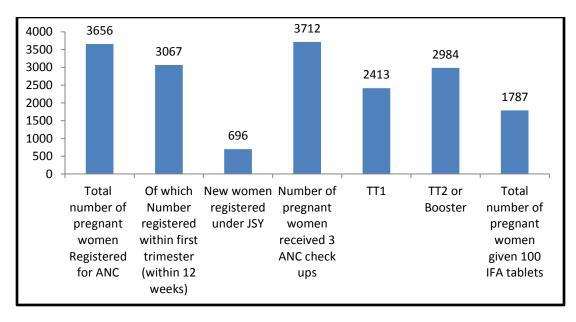
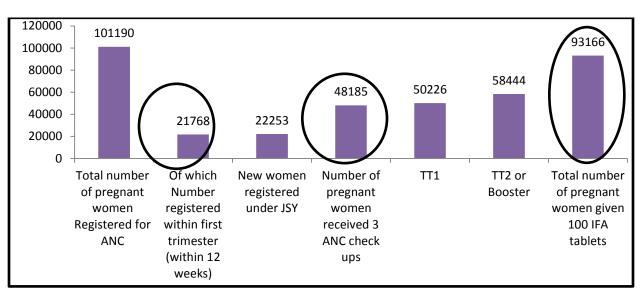


Figure 44: Total number of pregnant women given 100 IFA tablets in Yavatmal district, Maharashtra April-September 2016

Figure 45: ANC coverage in Sindudurg district, Maharashtra April-September 2016



Total number of ANC registered (3656) out of first trimester registered only 84 per cent (3067).





Total number of ANC registered (101190) out of first trimester registered only 21.5 per cent (21768). It means ANC registered was done after 12 weeks.

Pregnant women given 100 IFA tablets (93166) but Three ANC check-ups are (48185). It means IFA tablets given in only two visits.

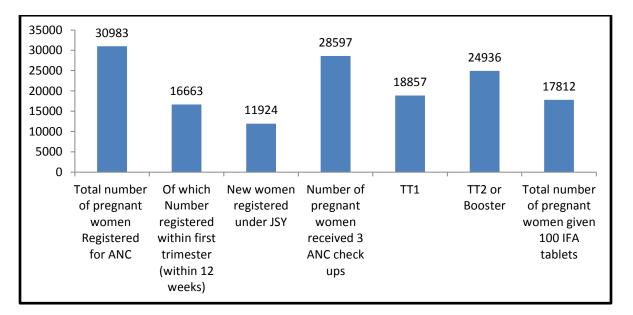


Figure 47: ANC coverage in Palghar district, Maharashtra April-September 2016

Number of 3 ANC checkups (28597) but 100 IFA tablets given (17812) number are small may be because of not available IFA tablets. This district is tribal district and nearest to Thane and Mumbai office.

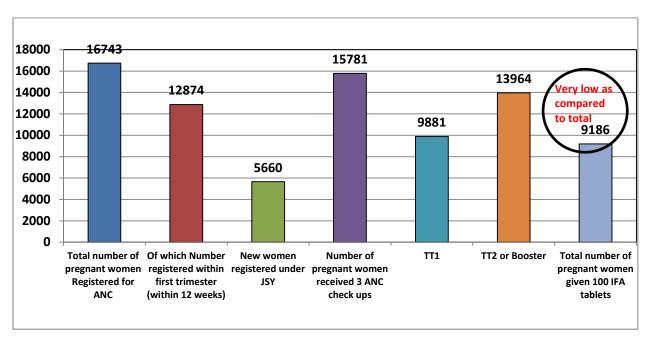
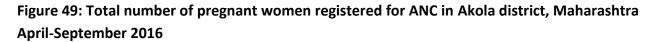


Figure 48: ANC service coverage in Akola district, Maharashtra April-September 2016

Percentage of ANC registration within 1st trimester (within 12 weeks) is 77%. Percentage of 3 ANC checkups is 94%. But percentage of number of women given 100 IFA Tablets is 55%, which is very low.

ANC registration is low in April and May as compared to other months.



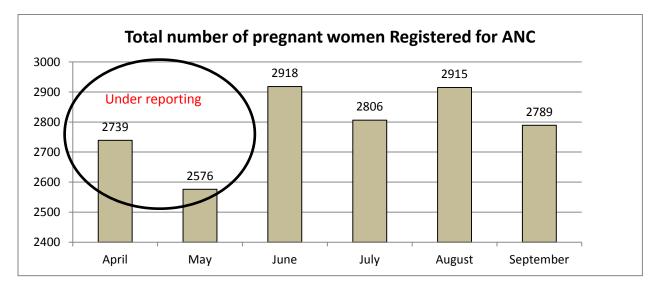
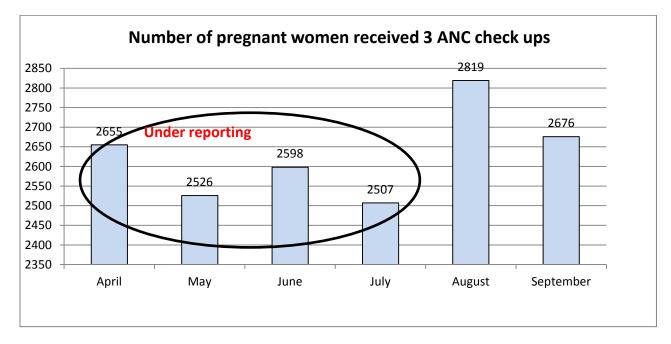


Figure 50: Total number of pregnant women receiving 3 ANC check up in Akola district, Maharashtra April-September 2016



Pregnant women receiving 3 ANC checkups data is under reported in months of April, May, June and July.

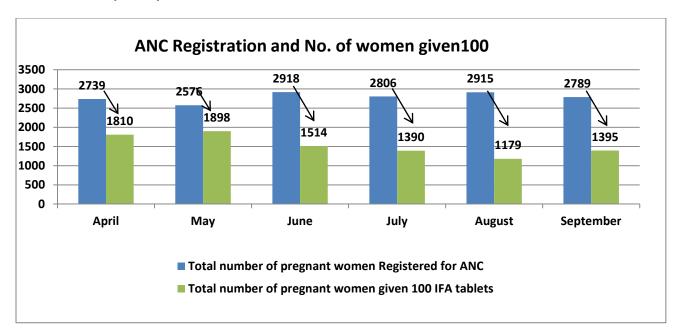
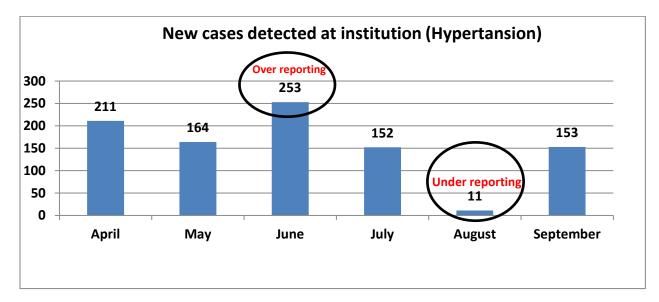


Figure 51: Total number of women provided with 100 IFA tablets in Akola district, Maharashtra April-September 2016

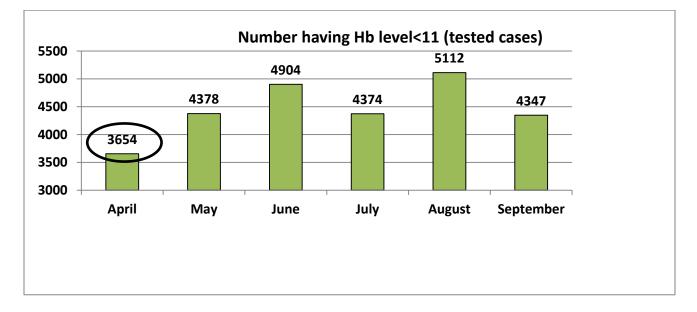
For every month number of women given 100 IFA Tablet is very low as compared to ANC registration.

Figure 52: Total number of new cases detected at institution (Hypertension) in Akola district, Maharashtra April-September 2016

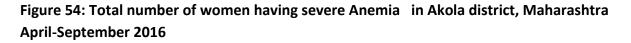


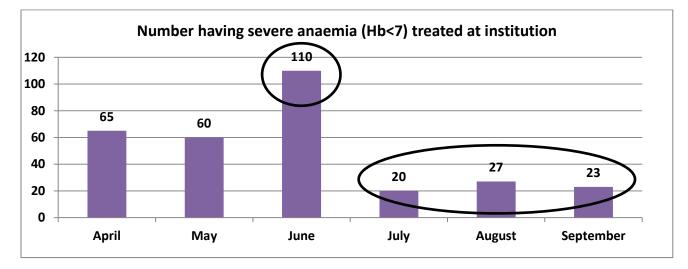
New cases of Hypertension registered are under reported in August and Over reported in June.

Figure 53: Total number of women having HB<11 in Akola district, Maharashtra April-September 2016



Data for number of cases having Hb level <11 are inconsistent. For June and August it is high and for May July and September it is low. Also for April it seems to be under reported.





Data for number of pregnant women having Severe anaemia are under reported for July, August and September. And over reported for June.

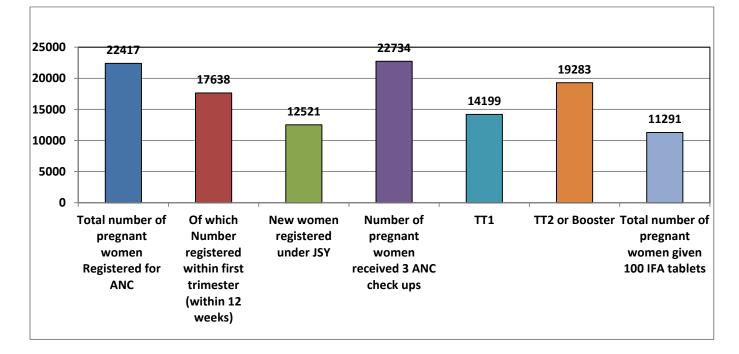


Figure 55: ANC service Coverage in Amravati district, Maharashtra April-September 2016

In Amravati district ANC registration in 1st Trimester is 78.68 %. New women registered under JSY are 55.67 %. Percentage of women given 100 IFA Tablets is 50.37 %, which is very less.

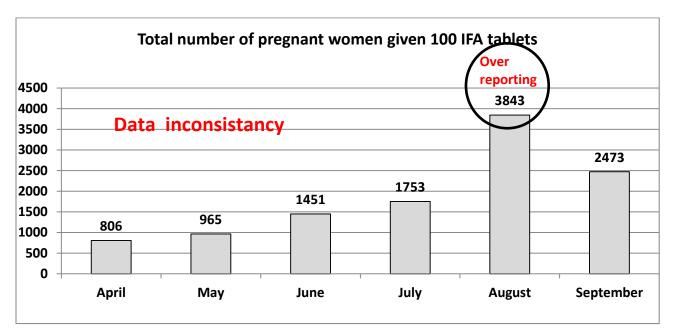


Figure 56: Total number of pregnant women given 100 IFA tablets in Amravati district, Maharashtra April-September 2016

Data about number of women given 100 IFA Tablets is inconsistent. It increases from April to August and declines at September. Also it is over reported in August. Data about number of women given 100 IFA Tablets is inconsistent. It increases from April to August and declines at September. Also it is over reported in August and declines at September. Also it is over reported in August.

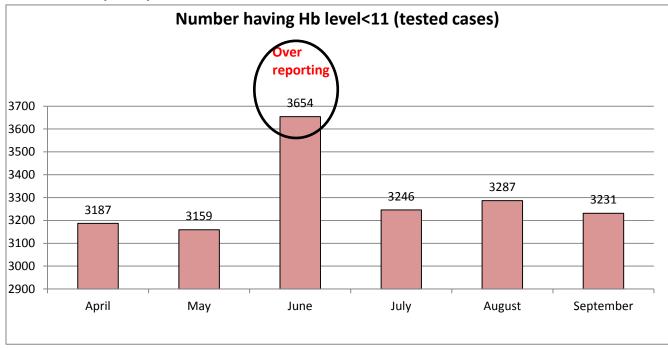
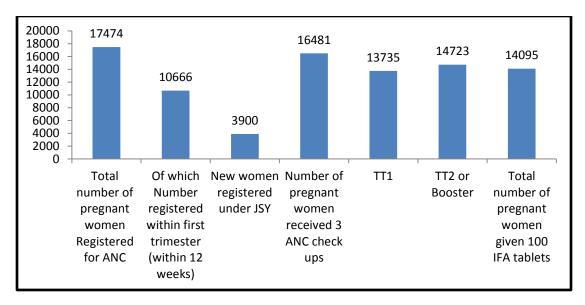


Figure 57: Total number of pregnant women with HB level <11 in Amravati district, Maharashtra April-September 2016

Figure 58: Total number of pregnant women who received ANC services in Raigad region April-August 2016



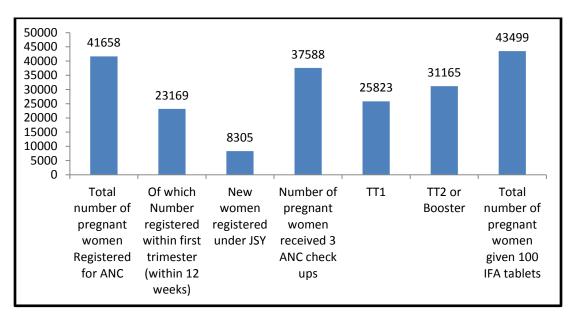
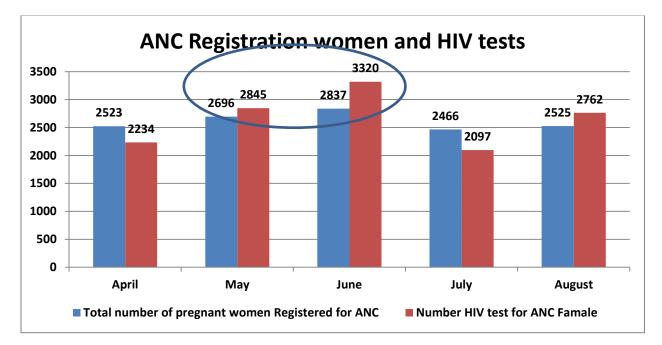


Figure 59: ANC Service Coverage in Thane, Maharashtra April-September 2016

Total number of ANC registered (41658) out of first trimester registered only 56 per cent (23169).

Figure 60: Total ANC registered and Number of HIV test conducted in Nagpur, Maharashtra April-August 2016



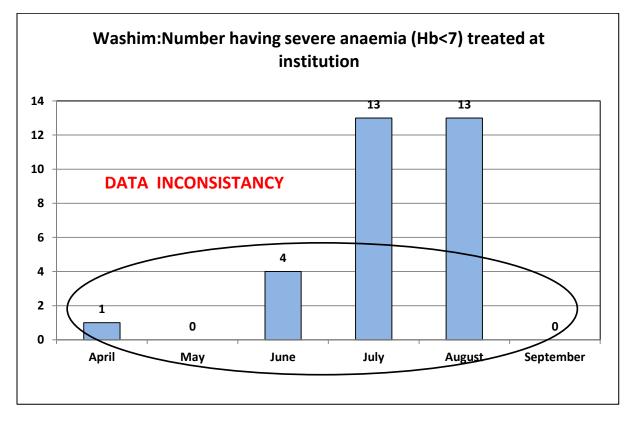


Figure 61: Total number of women having severe anemia and treated in institution in Washim, Maharashtra April-September 2016

In case of severe anemia cases, data are under reported or non reported. In July and August data are same.

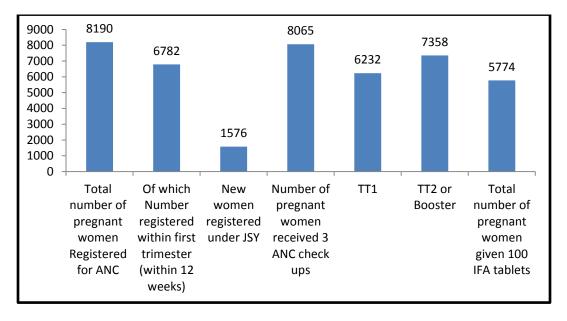


Figure 62: ANC Service coverage in Ratnagiri, Maharashtra April-September 2016

Total number of ANC registered (8190) out of which first trimester registered only 83 per cent (6782).

II Deliveries and live births:

Data related issues as well as reporting (under/over repoting) is observed in total deliveries and live birth. The huge gap in live births and total deliveries are mainly due to data collected from private institional deliveries. As observed from field work there is no proper mechanism in place to collect data from private institutional deliveries

Although, there is very less number of home deliveries in Pune and Solapur district home visits are not made by concern ANM to the delivered women during the period April to August 2016.

In case of retaining delivered women at institute to avoid further PNC complications Sangli and Satara districs are performing well. Kolhapur is also doing good as discharge rate is below 10 percent. But Pune and Solapur is showing percentage of discharge 15.80 and 21.13 respectively. These districts needs to look into this for improvemnet.

In all the district in Pune region women received post-partum check-up is more than women delivered at public facilities are a validation error.

Validation error of new born weighed and newborn breastfed within 1 hour of birth is greater than public institutional deliveries in Pune districts. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only. Or some kind of format needs to be developed to collect data from private institute for all RCH indicators.

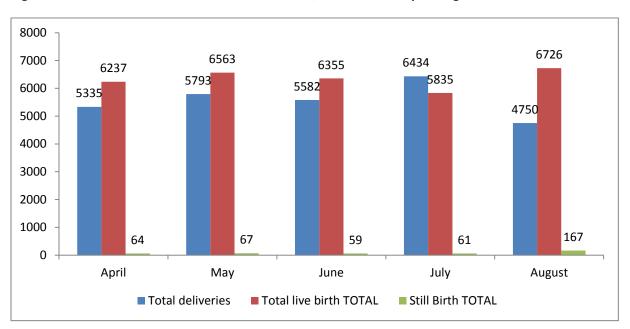
Figure 76 it is clearly seen that number of women received post-partum services within 48 hrs. of delivery is almost equal in numbers with women delivered at public institute except in the month of August. This may be mistake in reporting or perception of data entry operator.

JSY incentives are provided to mothers after institutional and home delivery. ASHAs, also receive incentive for institutional deliveries. Hence, Mothers or ASHAs paid incentives are lesser than or equal to the number of deliveries in the given time period otherwise it is a validation error.

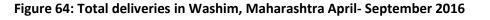
During PRC field visit it was observed that timely payment of JSY incentives are sometimes difficult to follow. There is a time lag and incentives are paid when the amount is received. Delivery in public Institutions are less than the number of ASHAs paid incentives for public institutional deliveries in Nanded, Maharashtra in the month of June. Validation error as number of mothers paid JSY incentive for home deliveries are more than the number of home deliveries in latur and parbhani districts.

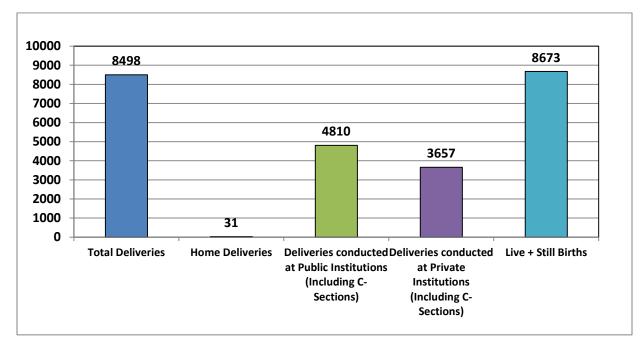
Data on c section deliveries in Nanded district shows inconsistency. Deliveries conducted in private institutions in Jalna is zero.

Number of complicated pregnancies attended at SDHs/DHs varies in Marathwada region with highest complicated pregnancies attended in Aurangabad and lowest in Hingoli. Within district the number of complicated pregnancies varies considerably in Nanded, during the period April-September 2016 with 1008 cases attended in the month of July as compared to 94 cases attended in the month of September.





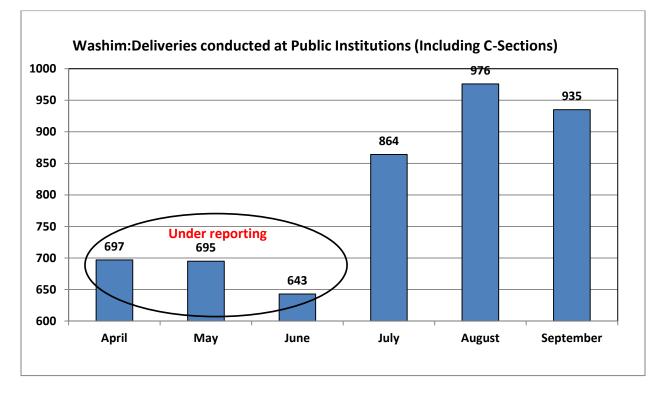




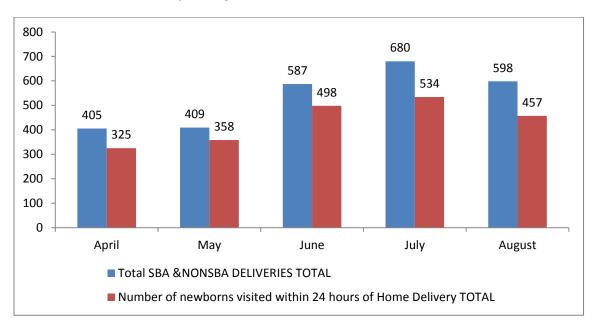
Percentage of institutional deliveries is 99.6 %. 56 percent deliveries are public institutional deliveries and 43 percent deliveries are private institutional deliveries.

If we see monthwise data is under reported in April, May and June for public institutional deliveries.









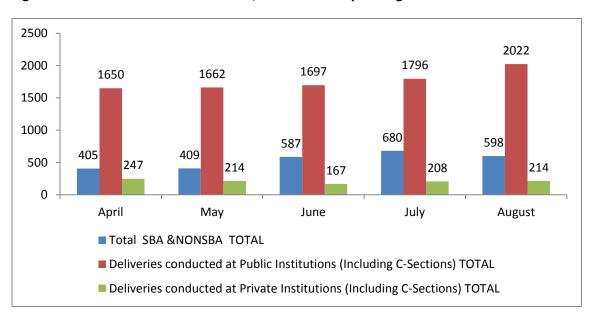




Figure 68: Total public institutional deliveries and number discharged under 48 hours of public institutional delivery in Nandurbar, Maharashtra April- August 2016

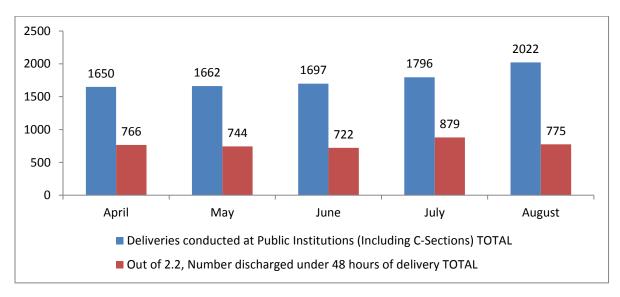


Figure 69: Total Home deliveries and number of newborns visited within 24 hours of home delivery in Nagpur, Maharashtra April- August 2016

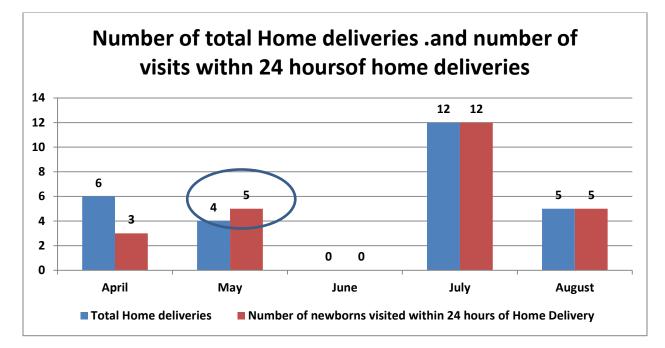
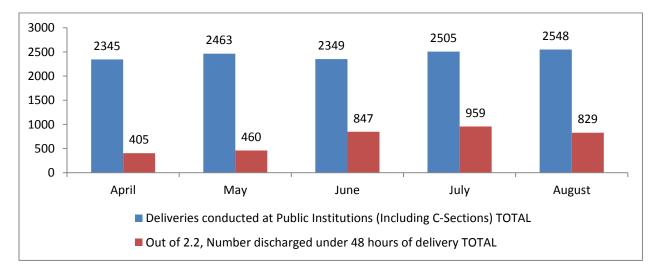
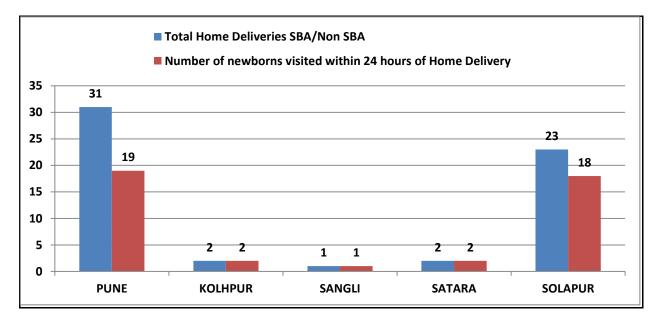


Figure 70: Total deliveries and number discharged within 48 hours of home delivery in Jalgaon, Maharashtra April- August 2016



55

Figure 71: Total Home deliveries and number of newborns visited within 24 hours of home delivery in Pune region, Maharashtra April- August 2016



Although there is very less number of home deliveries in Pune and Solapur district home visits are not made by concern ANM to the delivered women during April to August.

In case of retaining delivered women at institute to avoid further PNC complications Sangli and Satara districs are performing well. Kolhapur is also doing good as there discharge rate is below 10 percent. But Pune and Solapur is having percentage of discharge is 15.80 and 21.13 respectively. These districts needs to look into this for improvemnet.

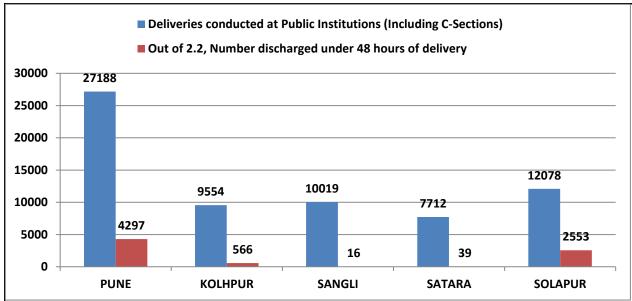


Figure 72: Deliveries conducted at Public institutes and number of women discharged under 48 Hrs in Pune Region, Maharashtra April- August 2016

In all the district women received post-partum check-up is more than women delivered at public facilities are a validation error.

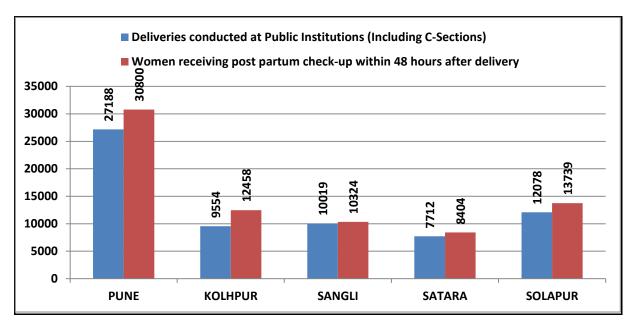
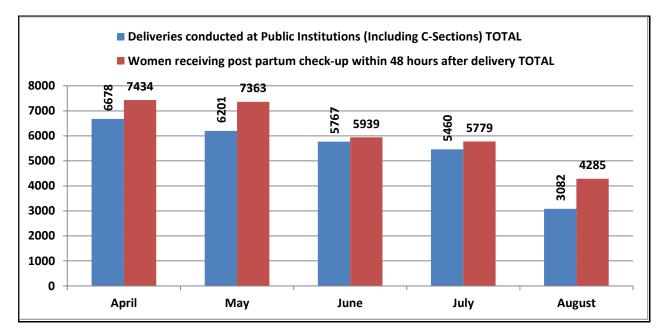


Figure 73: Deliveries conducted at Public institutes and number of women received post-partum check-up within 48 Hrs. Pune region, Maharashtra April- August 2016

Figure 74: Deliveries conducted at public institutions vs women received post-partum service within 48 Hrs. in Pune, Maharashtra April- August 2016



In this figure it is clearly seen that number of women received post-partum services within 48 Hrs. of delivery is more in numbers than women delivered at public institute.

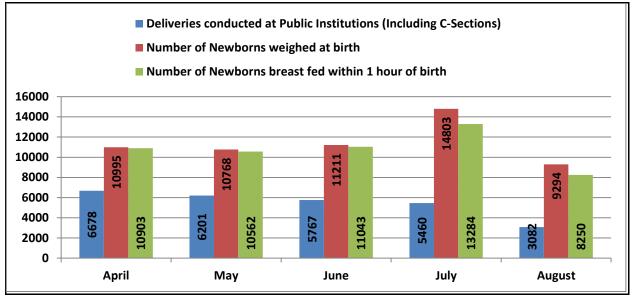
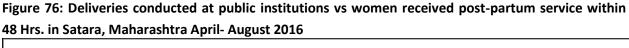


Figure 75: Total number of home deliveries conducted at Public institutes and new born weighed at birth, number of new born breast fed at birth in Pune, Maharashtra April- August 2016

Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than public institutional deliveries in Pune districts. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only. Or some kind of format needs to be developed to collect data from private institute for all RCH indicators.



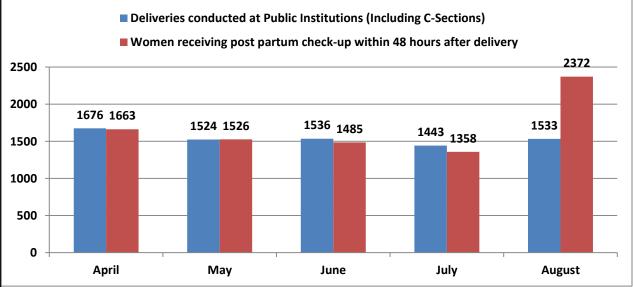


Figure 76 it is clearly seen that number of women received post-partum services within 48 hrs. of delivery is almost equal in numbers with women delivered at public institute except in the month of August. This may be mistake in reporting or perception of data entry operator.

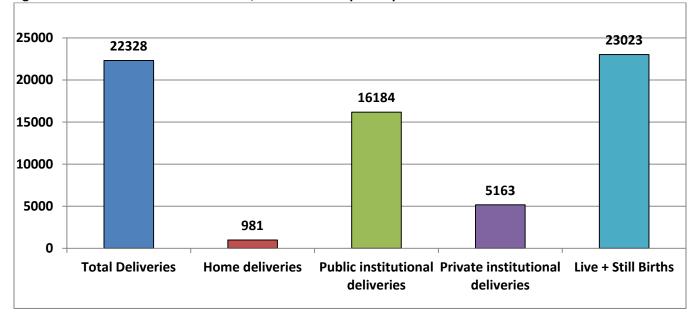


Figure 77: Deliveries Status in Amravati, Maharashtra April- September 2016

Percentage of Home deliveries in Akola district is 4.39%. In institutional deliveries, percentage of public institutional deliveries is 72.48 % and private institutional deliveries is 23.12%.

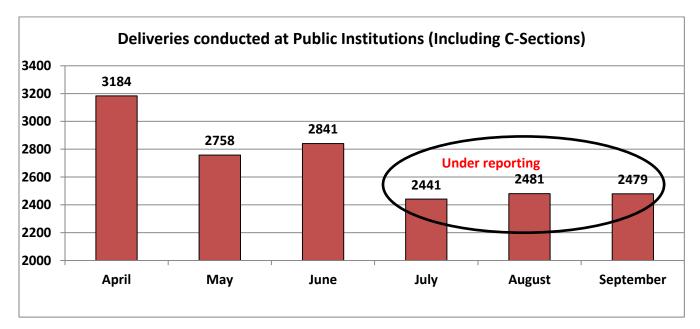


Figure 78: Deliveries conducted at Public Institution in Amravati, Maharashtra April- September 2016

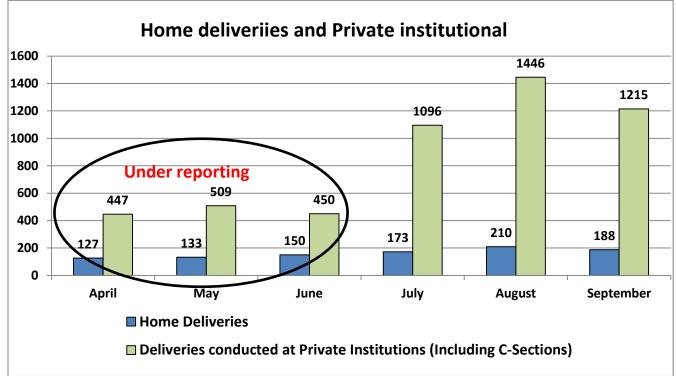


Figure 79: Home and Private Institutional Deliveries in Amravati, Maharashtra April- September 2016

Public institutional deliveries are under reported in July, August and September and home deliveries and private institutional deliveries are under reported in April, May and June.

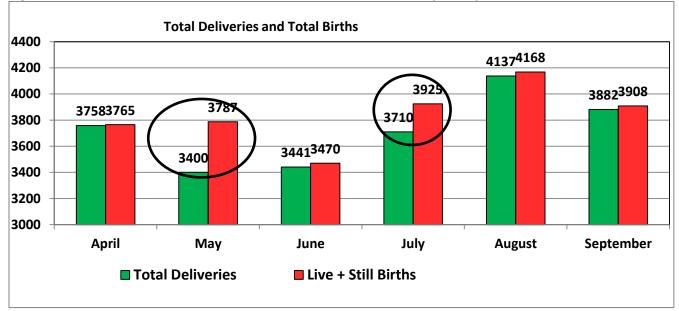


Figure 80: Total Deliveries and Live Births in Amravati, Maharashtra April- September 2016

For months May and July total births (Live + Still) are much more than total deliveries

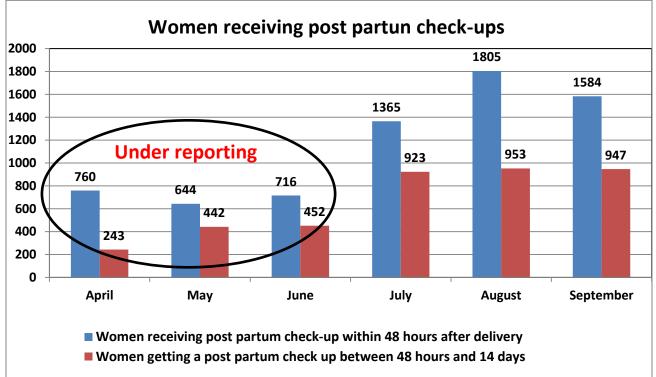


Figure 81: Women receiving post partum check ups in Buldana, Maharashtra April- September 2016

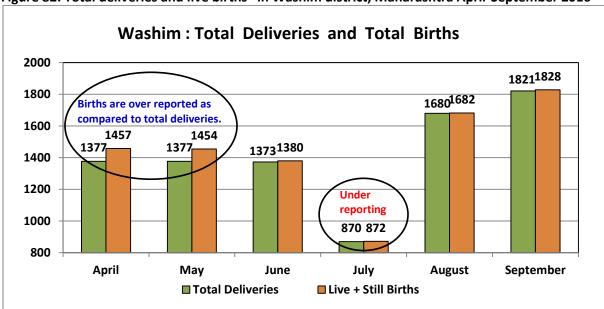


Figure 82: Total deliveries and live births in Washim district, Maharashtra April-September 2016

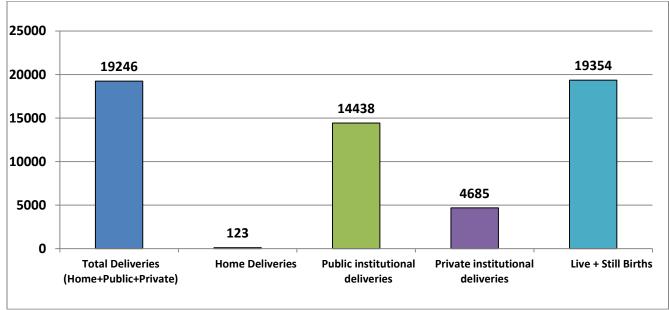
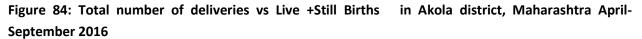
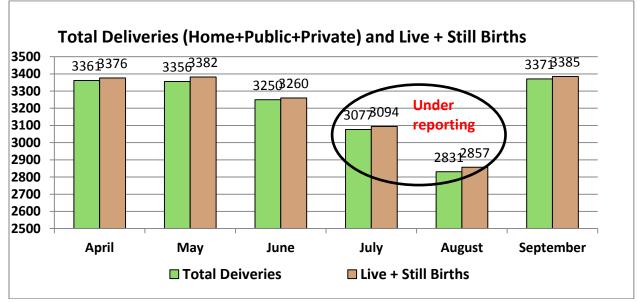


Figure 83: Delivery status in Akola district, Maharashtra April-September 2016

Percentage of Home deliveries in Akola district is 0.64%. Considering institutional deliveries, percentage of public institutional deliveries is 75.02 % and private institutional deliveries are 24.34%.





Total deliveries and total births are under reported in July and August

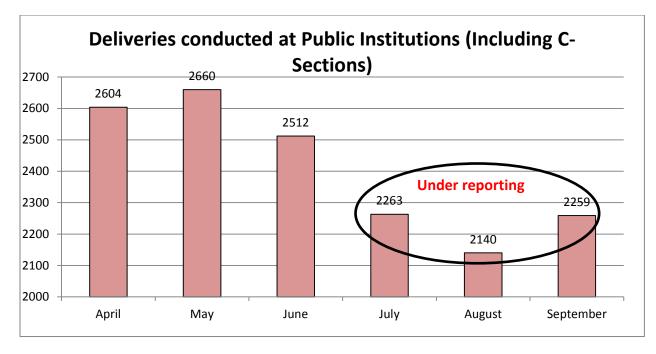
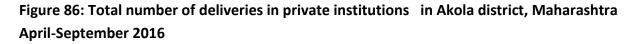
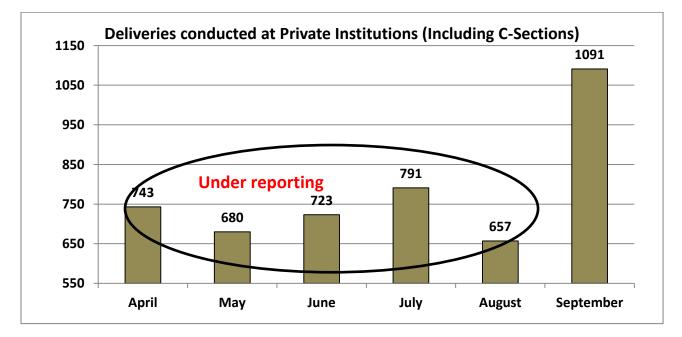


Figure 85: Total number of deliveries in public institutions in Akola district, Maharashtra April-September 2016

Deliveries at public institutions are under reported in July, August and September.





Deliveries at private institutions are under reported in April, May, June, July and August.

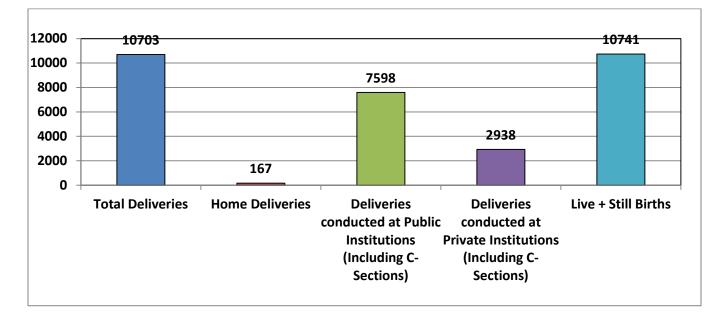
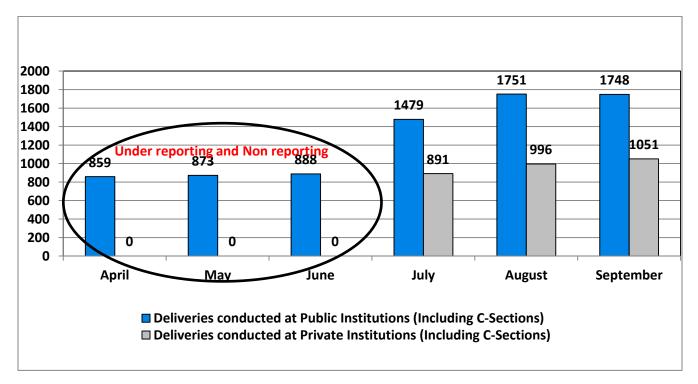
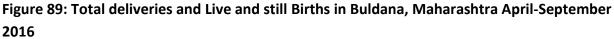


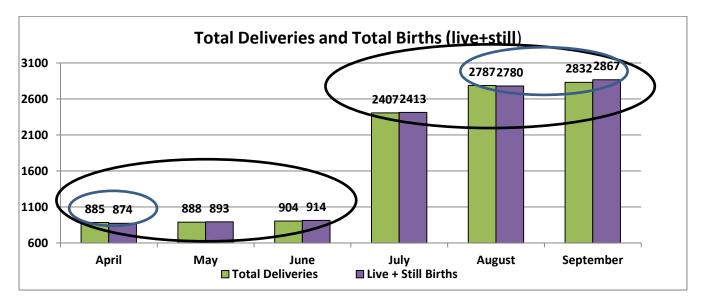
Figure 87: Delivery status in Buldana, Maharashtra April-September 2016

Percentage of Home deliveries in Buldana district is 1.56%. Considering institutional deliveries, percentage of public institutional deliveries is 70.99% and private institutional deliveries is 27.45%. Figure 88: Public and Private institutional deliveries in Buldana, Maharashtra April-September 2016



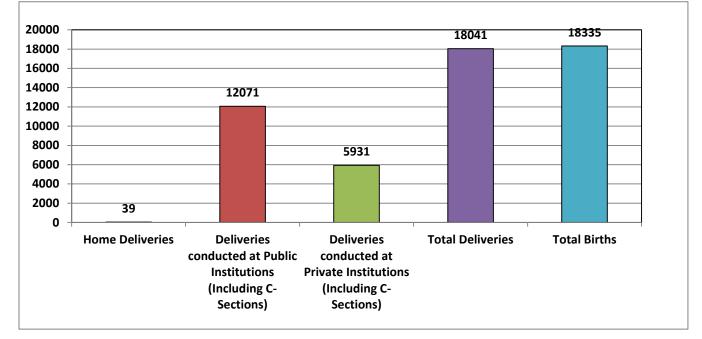
If we see month wise data, in case of deliveries at public institutions data are under reported for April, May and June. For deliveries at private institutions there is non reporting for months April, May and June.





In month wise data for total deliveries (Home + Public + private institutions) and total births (live + still), data for both indicators are under reported in April, May and June. Also number of total births is less than total deliveries for April, August and September, which cannot be the case.

Figure 90: Delivery status in Yavatmal, Maharashtra April-September 2016



Data for deliveries at private and public institutions are inconsistent and under reported in September.

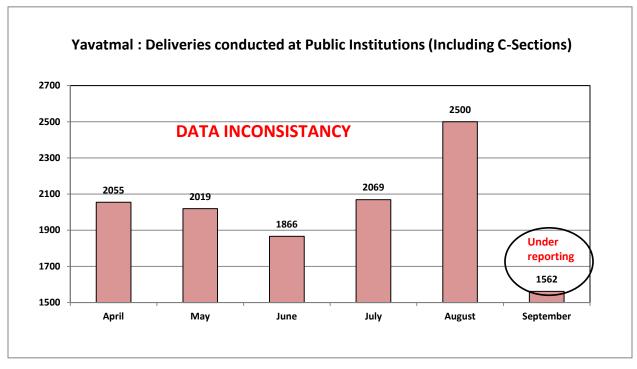
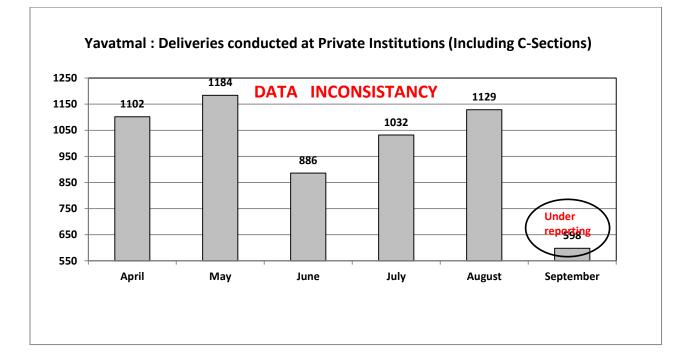
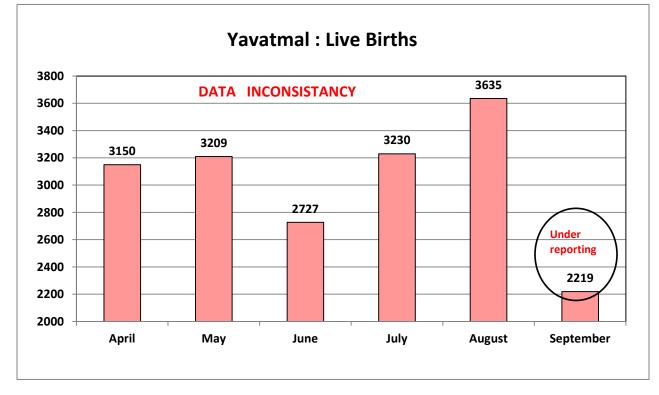


Figure 91: Total Public Institutional Deliveries in Yavatmal, Maharashtra April-September 2016

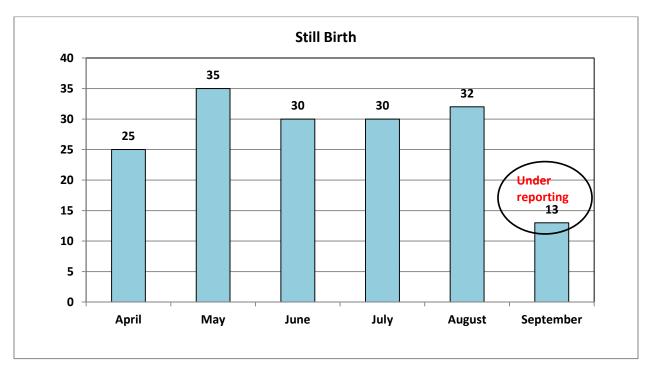
Figure 92: Total Private Institutional Deliveries in Yavatmal, Maharashtra April-September 2016







Total number of ANC registered (17474) out of first trimester registered only 61 per cent (10666). Figure 94: Total Still Births in Yavatmal, Maharashtra April-September 2016



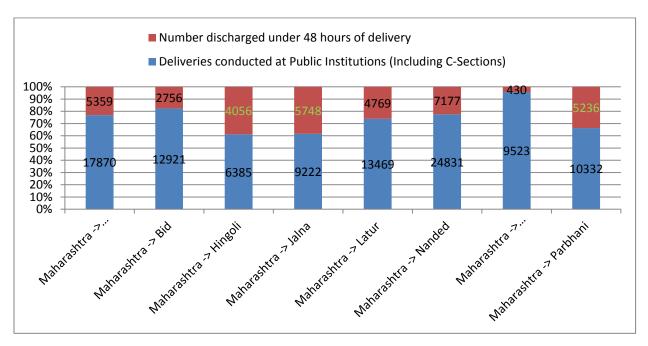


Figure 95: Delivery Status in Marathwada region, Maharashtra April-September 2016

Figure 96: Total Public Institutional Deliveries and number discharged within 48 hours of delivery in Parbhani, Maharashtra April-September 2016

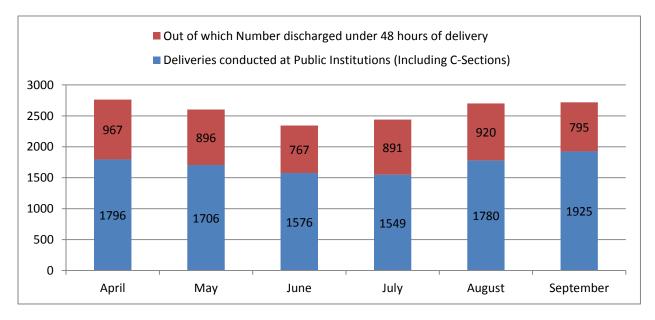


Figure 97: Total Public Institutional Deliveries and number discharged within 48 hours of delivery in Jalna, Maharashtra April-September 2016

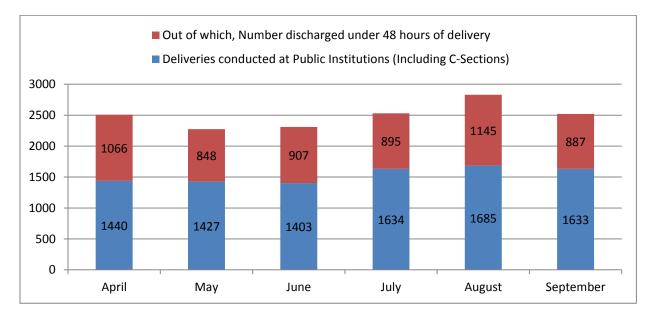
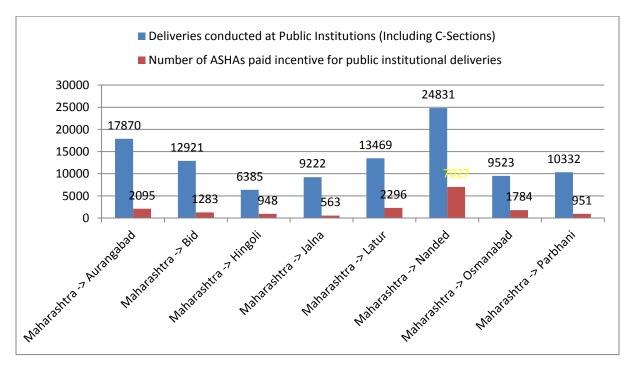


Figure 98: Delivery in public Institutions and number of ASHAs paid incentives for public institutional deliveries in Marathwada, Maharashtra April-September 2016



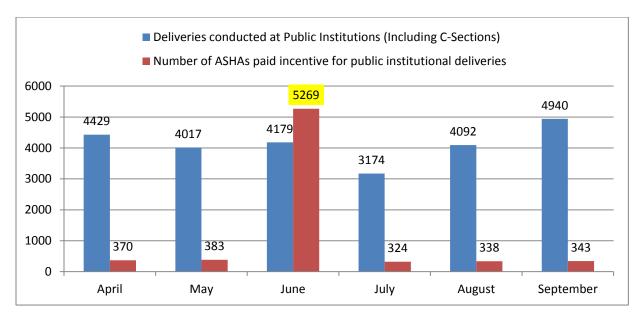
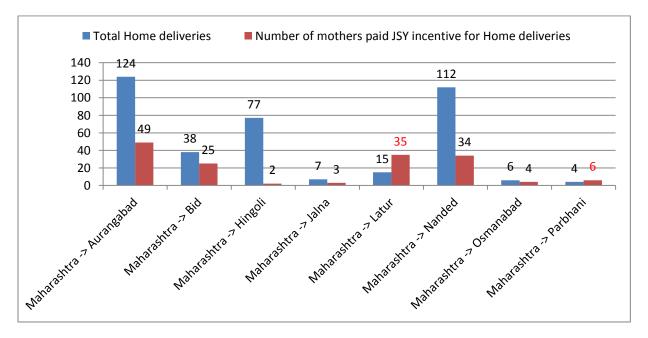


Figure 99: Delivery in public Institutions and number of ASHAs paid incentives for public institutional deliveries in Nanded, Maharashtra April-September 2016

Delivery in public Institutions are less than the number of ASHAs paid incentives for public institutional deliveries in Nanded, Maharashtra in the month of June

Figure 100: Home deliveries and number of mothers paid JSY incentive for home deliveries in Marathwada, Maharashtra April-September 2016



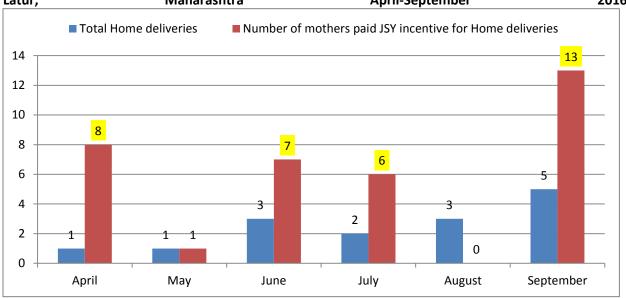
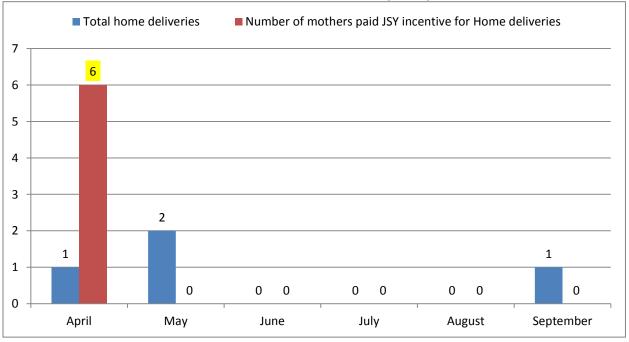


Figure 101: Total Home deliveries and number of mothers paid JSY incentive for home deliveries inLatur,MaharashtraApril-September2016

Validation error as number of mothers paid JSY incentive for home deliveries are more than the number of home deliveries in latur and parbhani districts.

Figure 102: Total Home deliveries and number of mothers paid JSY incentive for home deliveries inParbhani,MaharashtraApril-September2016



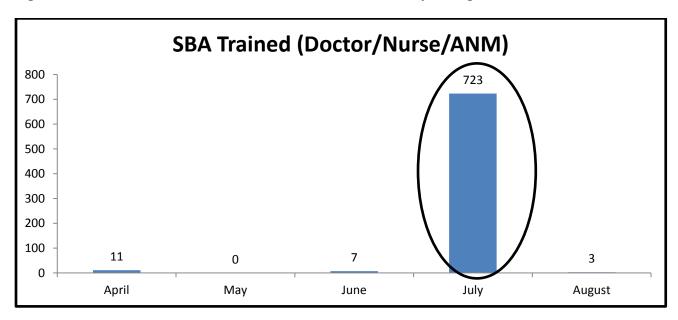
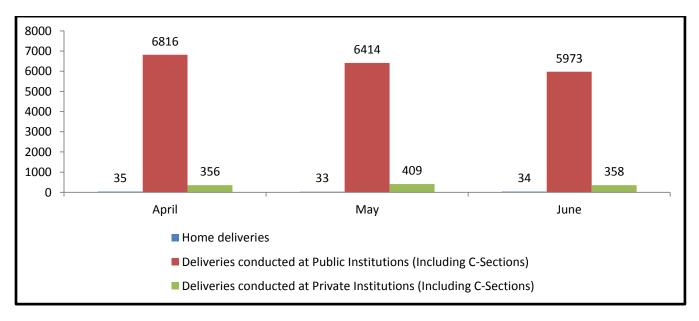


Figure 103: Total Home deliveries in Mumbai, Maharashtra April-August 2016

This is data entry errors for the month of July.

Figure 104: Delivery status in Thane, Maharashtra April-June 2016



In these district Public institutions deliveries are more and Private deliveries are small number. May be private data is not complete.



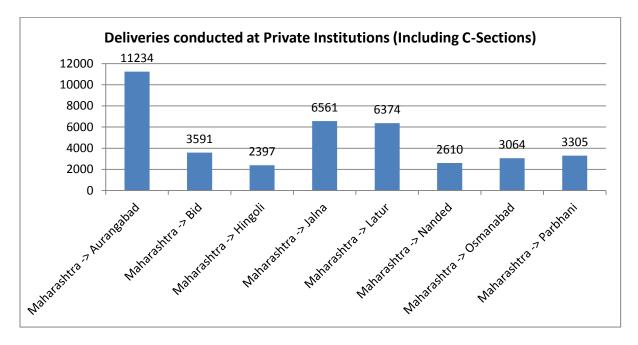


Figure 106: Private institutional Deliveries in Parbhani, Maharashtra April-September 2016

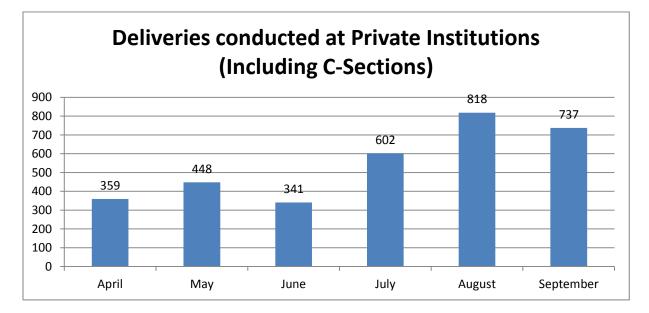
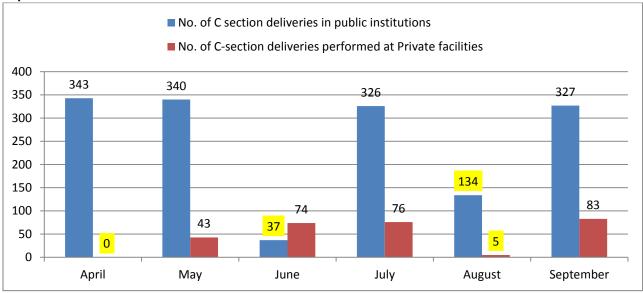


Figure 107: Total C section deliveries in public and private institutions in Nanded, Maharashtra April-September 2016



Data on c section deliveries in Nanded district shows inconsistency. Deliveries conducted in private institutions in Jalna are zero.

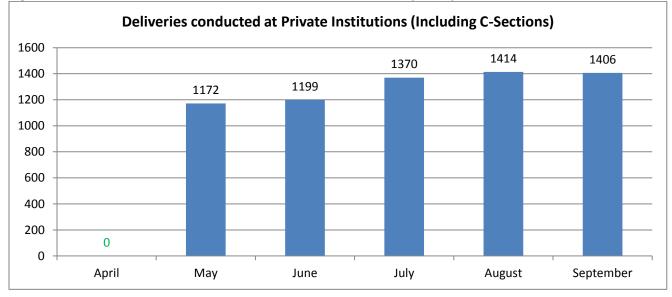


Figure 108: Private institutional Deliveries in Jalna, Maharashtra April-September 2016

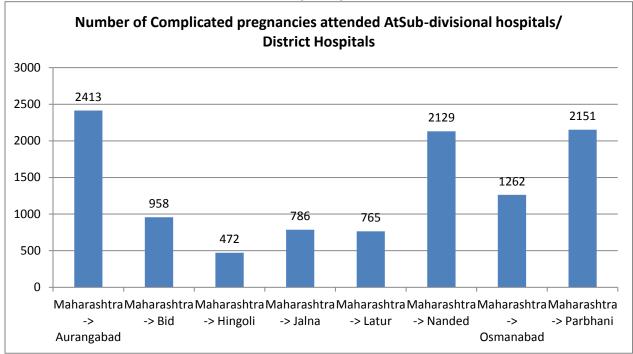


Figure 109: Number of complicated pregnancies attended at SDHs/DHs in Marathwada region,MaharashtraApril-September2016

Number of complicated pregnancies attended at SDHs/DHs varies in Marathwada region with highest complicated pregnancies attended in Aurangabad and lowest in Hingoli. Within district the number of complicated pregnancies varies considerably in Nanded, during the period April-September 2016 with 1008 cases attended in the month of July to 94 cases attended in the month of September.

Month wise deliveries and total birth entered seems to be validation error. In the month of May the deliveries are 14710 and birth 9913, not add in births. The month of August deliveries are less (9700) and births are 10072. Please check errors. It means data not collected to the private Hospital.

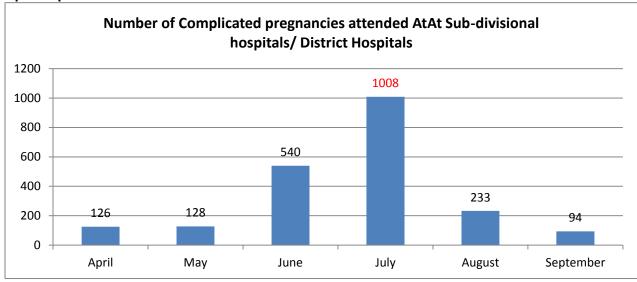
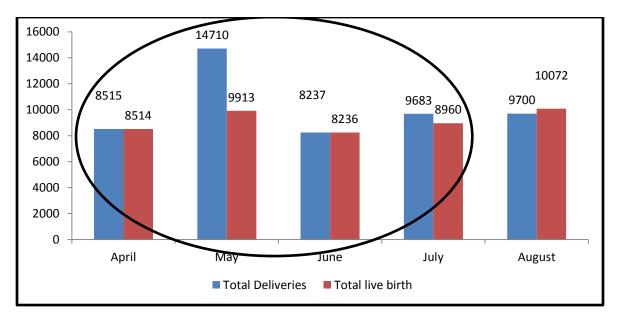


Figure 110: Number of complicated pregnancies attended at SDHs/DHs in Nanded, Maharashtra April-September 2016

Figure 111: Total deliveries and live births in Mumbai, Maharashtra April-August 2016



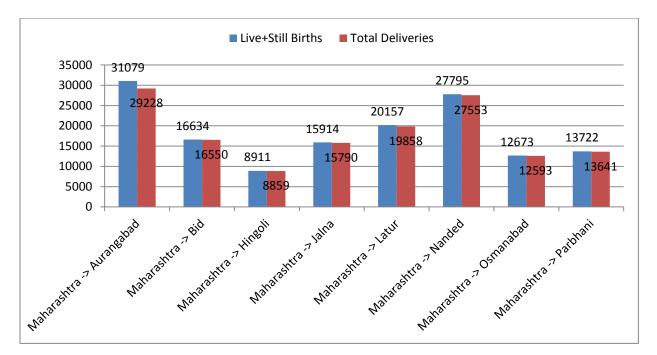
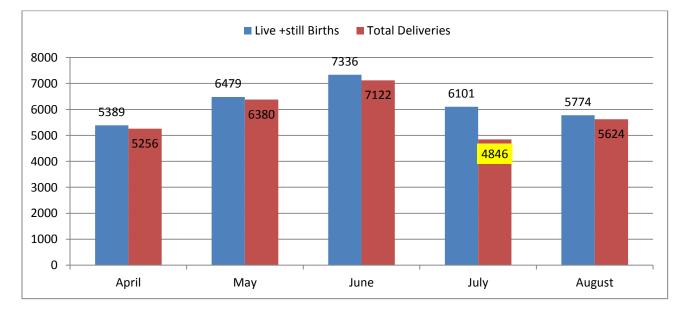


Figure 112: Total deliveries and live births in Marathwada region, Maharashtra April-August 2016

Figure 113: Total deliveries and live births in Aurangabad, Maharashtra April-August 2016



III Sex ratio at Birth:

Sex ratio at birth is less than 1000 in all the districts of Maharashtra. In an ideal situation the sex ratio at births are 105 females to 100 male live births. Except in the month of May in Nanded and July in Latur district the sex ratio shows more number of male birth than female births.

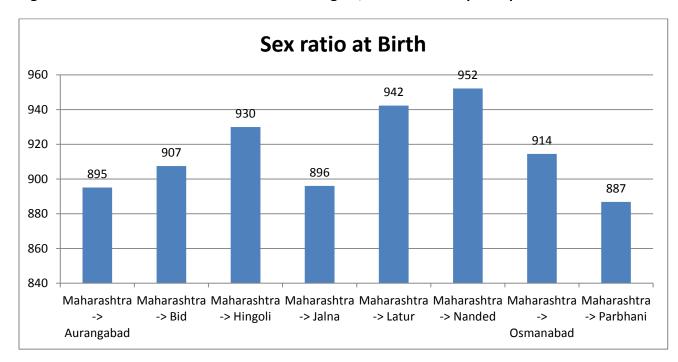
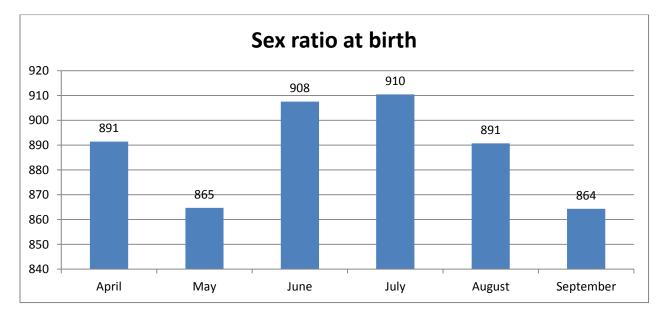


Figure 114: Sex ratio at birth in Marathwada region, Maharashtra April-September 2016

Figure 115: Sex ratio at birth in Parbhani, Maharashtra April-September 2016



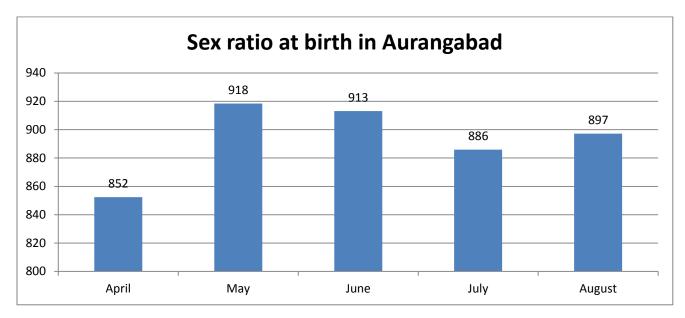
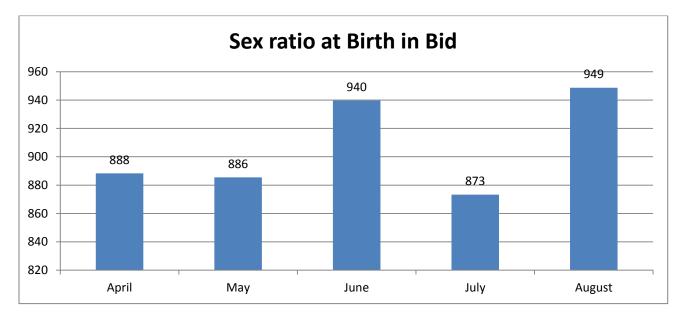


Figure 116: Sex ratio at birth in Aurangabad, Maharashtra April-August 2016

Figure 117: Sex ratio at birth in Bid, Maharashtra April-August 2016



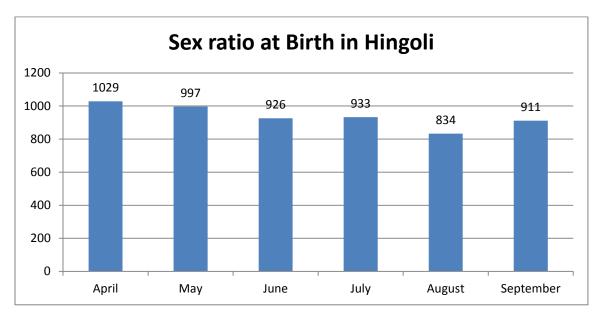
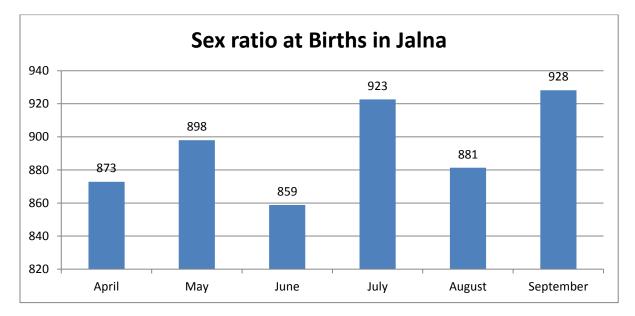


Figure 118: Sex ratio at birth in Hingoli, Maharashtra April-September 2016

Figure 119: Sex ratio at birth in Jalna, Maharashtra April-September 2016



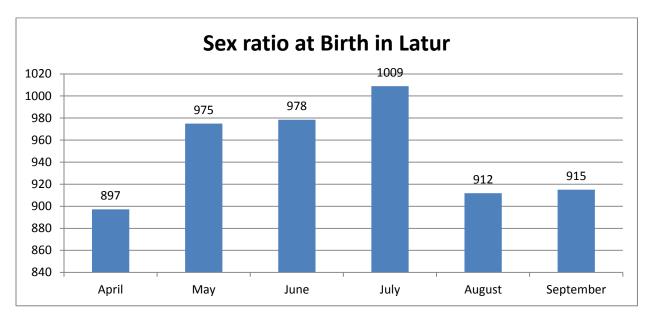
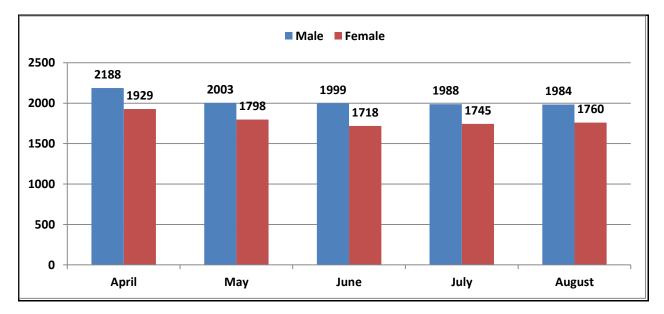


Figure 120: Sex ratio at birth in Latur, Maharashtra April-September 2016





In Satara district out of total abortions 9.2, 9.10, 9.28, 7.09 and 9.11 MTPs took place at Public institutes and 80.44, 83.93, 81.65, 86.46 and 82.98 MTPs are conducted at Private institutes respectively in the months of April, May, June, July and August. Comparatively rate of MTPs are almost double in private institutes. It needs to further investigate why this many MTPs are being conducted at private institute.

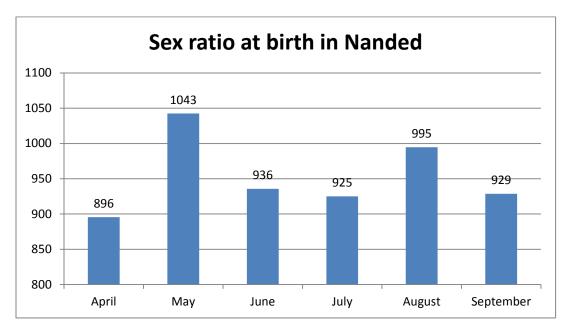
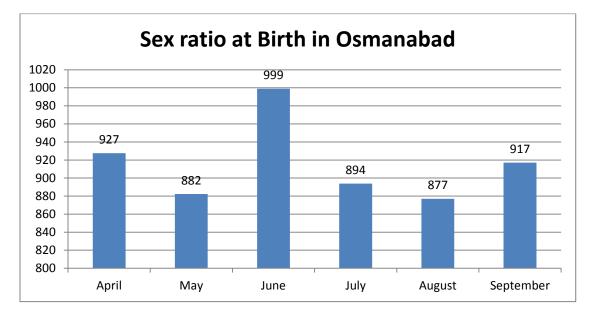


Figure 122: Sex ratio at birth in Nanded, Maharashtra April-September 2016





IV Live Births

Newborns born are weighed immediately and breastfed within 1 hour of normal delivery. Hence, newborn weighed are equal or less than live births. If new borns weighed and new born breast fed within 1 hour of birth are more than live births then it is a validation error.

Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than live births was observed in some months during the period April to September 2016 in Osmanabad, Chandrapur, and Ahmednagar districts.

This discrepancies in deliveries data maybe inconsistencies or error in collection and reporting data from private institutions

Figure 124: Live Births and number of newborn breastfed within 1 hour of birth in Marathwada region, Maharashtra April-September 2016

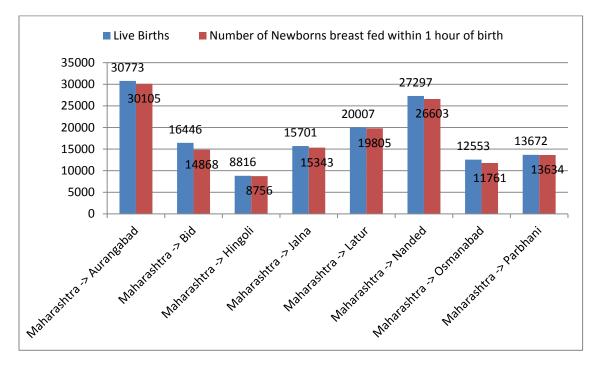


Figure 125: Live Births and number of newborn breastfed within 1 hour of birth in Osmanabad, Maharashtra April-September 2016

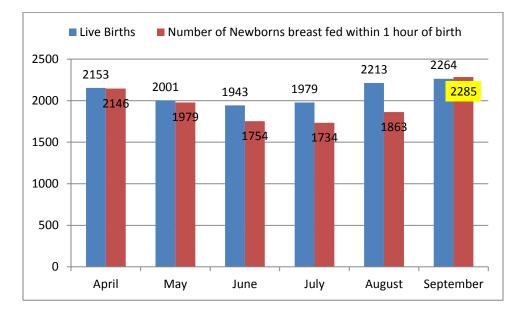
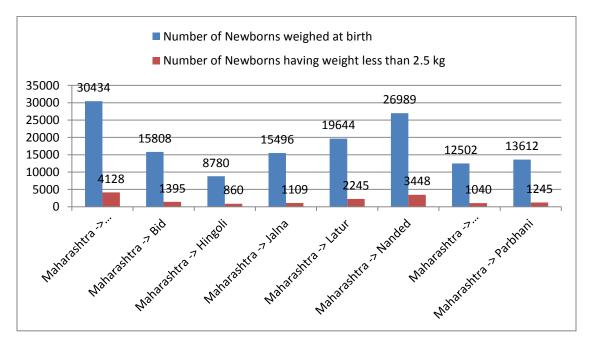


Figure 125: Total number of newborn weighed and number weighed less than 2.5 kg in Marathwada region, Maharashtra April-September 2016



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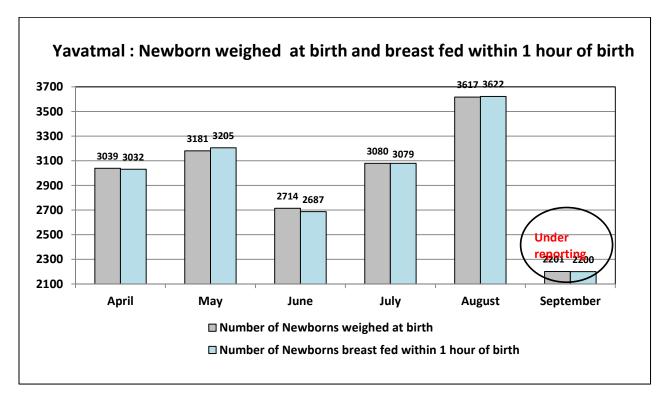
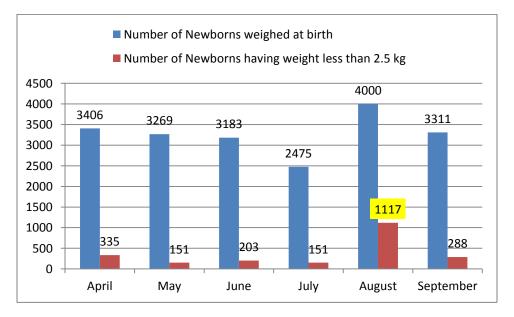


Figure 126: Live Births and number of newborn breastfed within 1 hour of birth in Yavatmal, Maharashtra April-September 2016

Figure 127: Total number of newborn weighed and number weighed less than 2.5 kg in Latur, Maharashtra April-September 2016



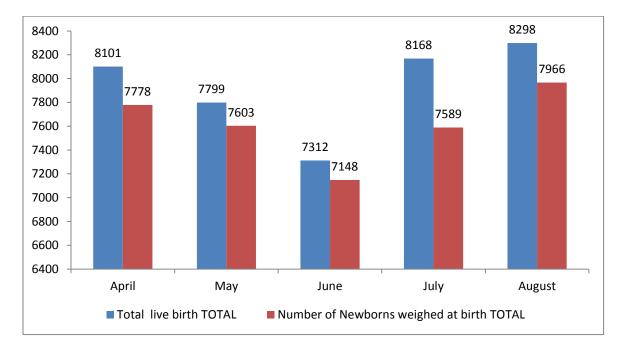
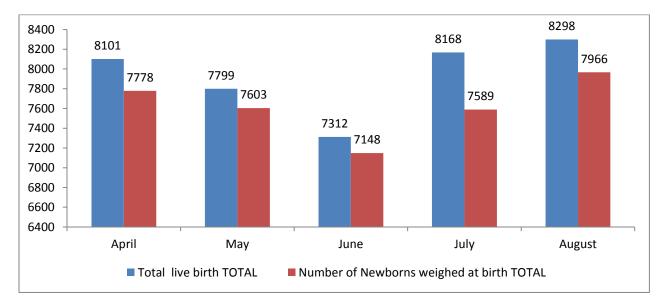


Figure 128: Total live births and number of newborn weighed in Jalgaon, Maharashtra April-September 2016

Figure 129: Total live births and newborn weighed in Nasik region, Maharashtra April-August 2016



Newborn weighed and breast fed within 1 hour of birth are under reported in April, May, June and July. Newborn having weight less than 2.5 kg. are also under reported in April, May, June and July.

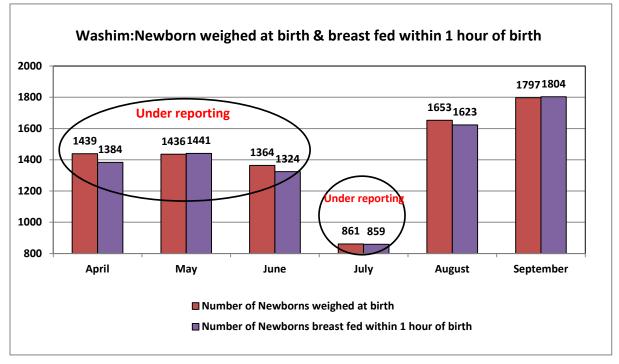


Figure 130: Live Births and number of newborn breastfed within 1 hour of birth in Washim, Maharashtra April-September 2016

Figure 131: Total number of newborn weighed and number weighed less than 2.5 kg in Washim, Maharashtra April-September 2016

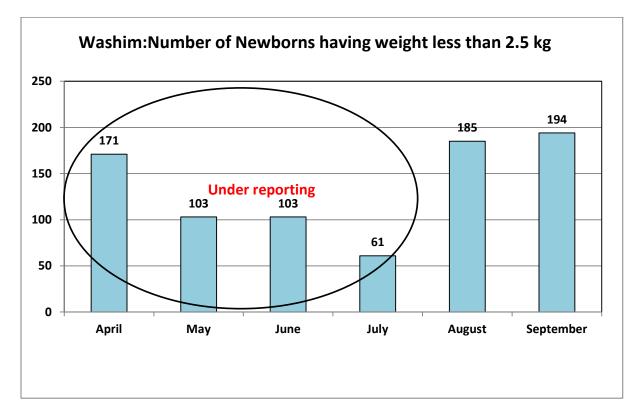
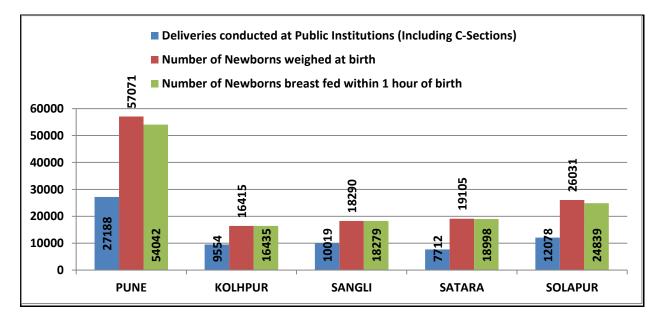


Figure 132: Total number of deliveries conducted at Public institutes and new born weighed at birth, number of new born breast fed at birth in Pune, Maharashtra April-August 2016



Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than live births was observed in all districts of Pune region. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only. Or some kind of format needs to be developed to collect data from private institute for all RCH indicators.

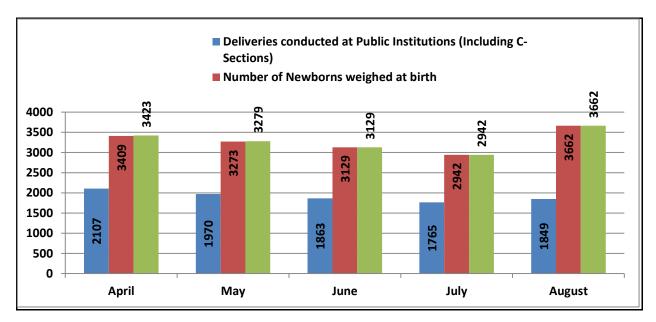
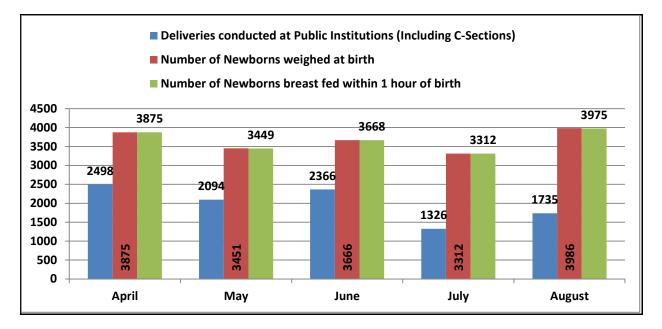


Figure 133: Total number of deliveries conducted at Public institutes and new born weighed at birth, number of new born breast fed at birth in Kolhapur, Maharashtra April-August 2016

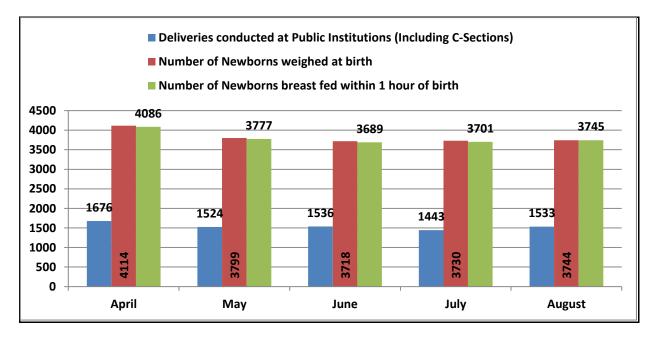
Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than live births was observed in Kolhapur districts. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only. Or some kind of format needs to be developed to collect data from private institute for all RCH indicators.

Figure 134: Total number of deliveries conducted at Public institutes and new born weighed at birth, number of new born breast fed at birth in Sangli, Maharashtra April-August 2016



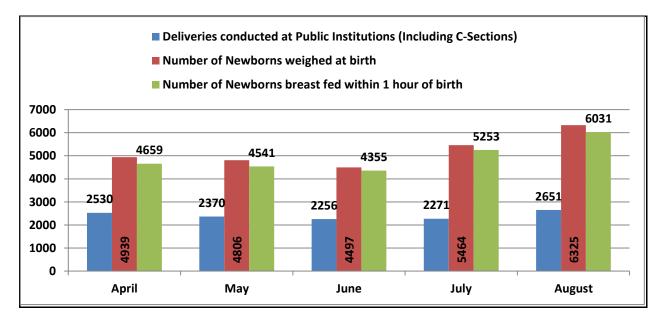
Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than live births was observed in Sangli districts. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only. Or some kind of format needs to be developed to collect data from private institute for all RCH indicators.

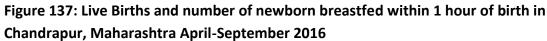
Figure 135: Total number of deliveries conducted at Public institutes and new born weighed at birth, number of new born breast fed at birth in Satara, Maharashtra April-August 2016

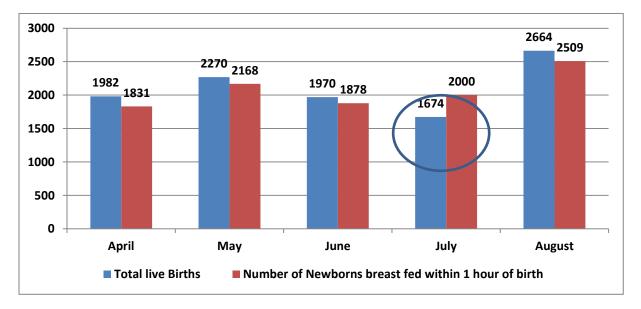


Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than live births was observed in Satara districts. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only. Or some kind of format needs to be developed to collect data from private institute for all RCH indicators.

Validation error of new born weighed and newborn breastfed within 1 hour of birth greater than live births was observed in Solapur districts. It is observed in our field visits that there is no proper mechanism to collect data from Private hospital. Therefore it is suggested while reporting of new born weighed at birth and new born breast fed within one hour should be considered for public institutions only. Or some kind of format needs to be developed to collect data from private institute for all RCH indicators. Figure 136: Total number of deliveries conducted at Public institutes and new born weighed at birth, number of new born breast fed at birth in Solapur, Maharashtra April-August 2016







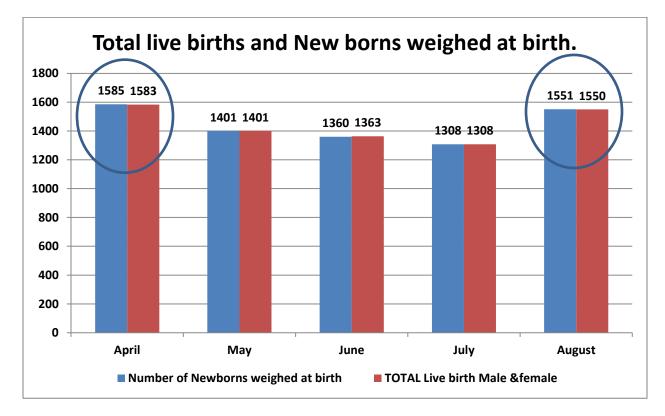
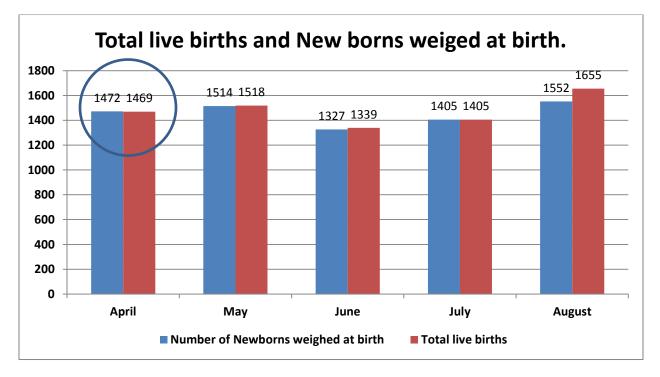


Figure 138: Total number of newborn weighed and Live Births in Bhandara, Maharashtra April-August 2016

Figure 139: Total number of newborn weighed and Live Births in Wardha, Maharashtra April-August 2016



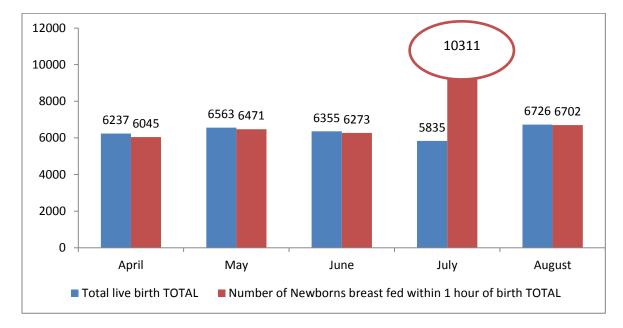
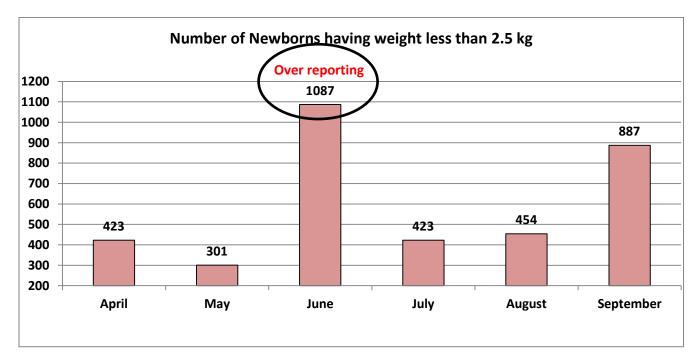


Figure 140: Live Births and number of newborn breastfed within 1 hour of birth in Ahmednagar, Maharashtra April-August 2016

In the Ahmednagar district in July month breast fed within 1 hours high more thin total live birth.

Figure 141: Total number of newborn weighed less than 2.5 kg in Amravati, Maharashtra April-September 2016



Newborn having weight less than 2.5 kg are over reported in June.

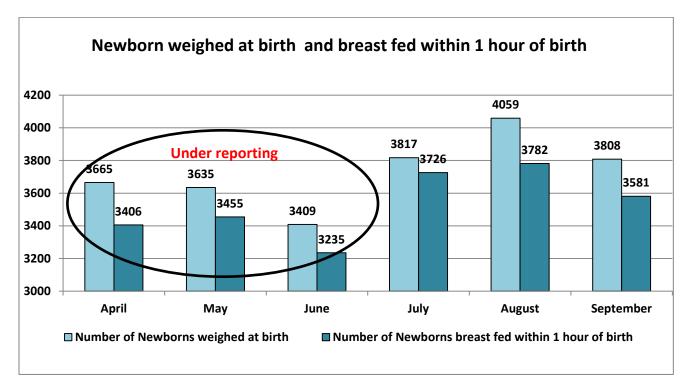
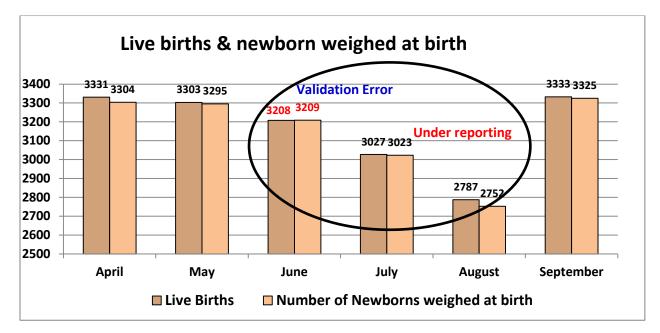


Figure 142: Live Births and number of newborn breastfed within 1 hour of birth in Amravati, Maharashtra April-September 2016

Figure 143: Total number of newborn weighed and live births in Akola, Maharashtra April-September 2016



There is under reporting for June, July and August. Also a validation error in the month of June, as number weighed cannot be more than total live births.

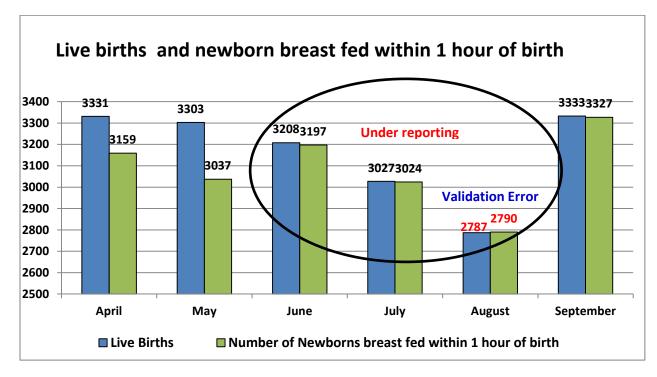
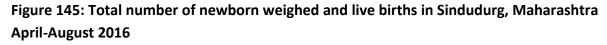
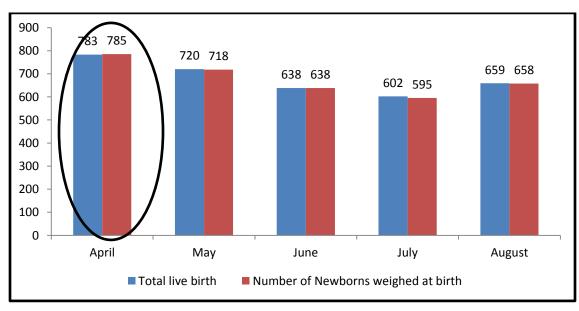


Figure 144: Live Births and number of newborn breastfed within 1 hour of birth in Akola, Maharashtra April-September 2016

There is under reporting for June, July and August. Also a validation error in the month of August, as number of newborn breasted fed within 1 hour cannot be more than total live births.





Only month of April the validation errors of Newborns weighed at birth.

VI. Abortions and MTP:

Abortions includes spontaneous and induced abortions hence MTPs conducted during the same given period are either less than or equal to total abortions if MTPs are greater than total abortions then it is a validation error.

Validation error of MTPs greater than total abortions were observed in some of the months in district of Ratnagiri, Latur, Yavatmal and Osmanabad etc; under and over reporting of MTPs and abortions were observed in most of the districts.

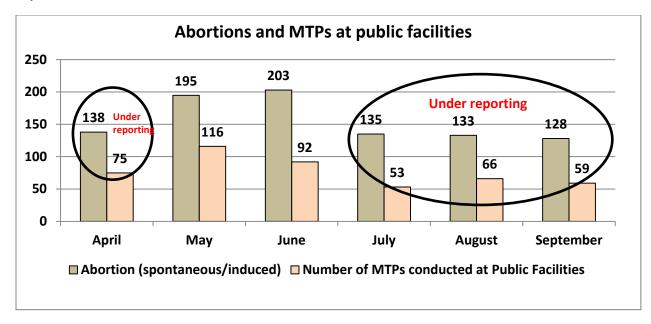
MTPs conducted at private facility are more in numbers. Percentage of MTPs conducted at Private hospitals is Pune 62.54, Kolhapur71.98, Sangli 70.48, Satara 90.46 and Solapur62.29. Particularly in Sangli, Satara and Kolhapur percentage is more than 70. As it are sugar cane belt people having money to get the tests done. It needs to further investigate why this many MTPs are being conducted at private institute.

In Kolhapur district out of total abortions 39.57, 32.72, 26.36, 22.18 and 25.81 MTPs took place at Public institutes and 61.58, 68.27, 86.44, , 77.51 and 76.62 MTPs are conducted at Private institutes respectively in the months of April, May, June, July and August. Comparatively rate of MTPs are almost double in private institutes.

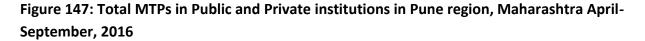
In Sangli district out of total abortions 23.33, 33.43, 24.75, 24.47and 22.33 MTPs took place at Public institutes and 66.33, 48.12, 69.96, 64.68 and 59.66 respectively during the period April to August 2016. MTPs are conducted at Private institutes respectively in the months of April, May, June, July and August. Comparatively rate of MTPs are almost double in private institutes.

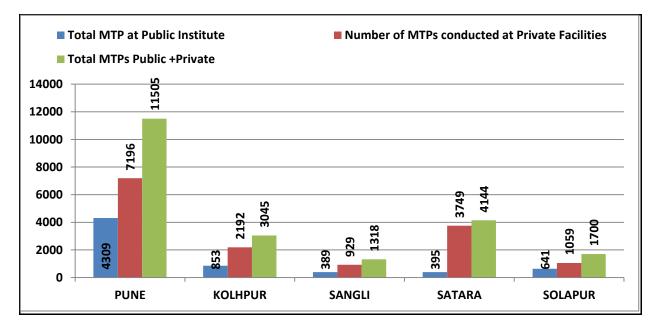
During pregnancy and delivery women detected with obstetric cases are provided with treatment such as oxytocis and antibiotics. Validation error is observed if number of women provided with treatment for obstetric cases are greater than number of women detected with obstetric cases. In addition under and over reporting of data was observed in many of the districts 5.

Figure 146: Total MTPs and Abortions in Public institutions in Akola, Maharashtra April-September, 2016



Data under reported in April, July, August and September.





In all districts MTPs conducted at private facility is more in numbers. Percentage of MTPs conducted at Private hospitals is Pune 62.54, Kolhapur71.98, Sangli 70.48, Satara 90.46 and Solapur62.29. Particularly in Sangli, Satara and Kolhapur percentage is more than 70. As it are sugar cane belt people having

money to get the tests done. It needs to further investigate why this many MTPs are being conducted at private institute.

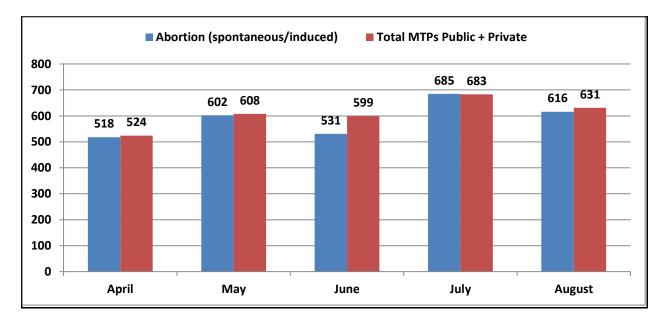
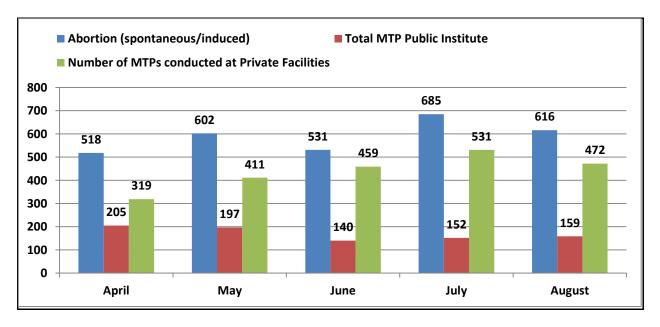


Figure 148: Total MTPs and Abortions in Public institutions in Kolhapur, Maharashtra April-August, 2016

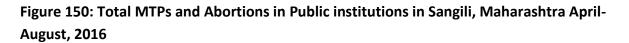
During all the months number of MTPs are more than number of Abortions took place in the district which may be wrong reporting.

Figure 149: Total MTPs and Abortions in Public institutions in Kolhapur, Maharashtra April-August, 2016



In Kolhapur district out of total abortions 39.57, 32.72, 26.36, 22.18 and 25.81 MTPs took place at Public institutes and 61.58, 68.27, 86.44, , 77.51 and 76.62 MTPs are conducted at Private institutes respectively in the months of April, May, June, July and August. Comparatively rate of MTPs are almost double in private institutes.

In Sangli district out of total abortions 23.33, 33.43, 24.75, 24.47and 22.33 MTPs took place at Public institutes and 66.33, 48.12, 69.96, 64.68 and 59.66 MTPs are conducted at Private institutes respectively in the months of April, May, June, July and August. Comparatively rate of MTPs are almost double in private institutes.



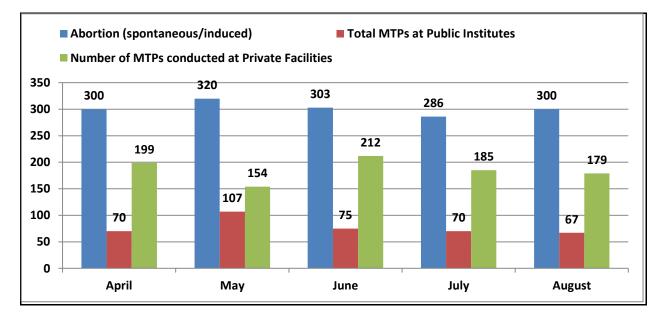


Figure 151: Percentage of MTPs to Total number of Abortions (spontaneous/induced) conducted at Public institutes and Private institutes in Satara, Maharashtra, April-August 2016

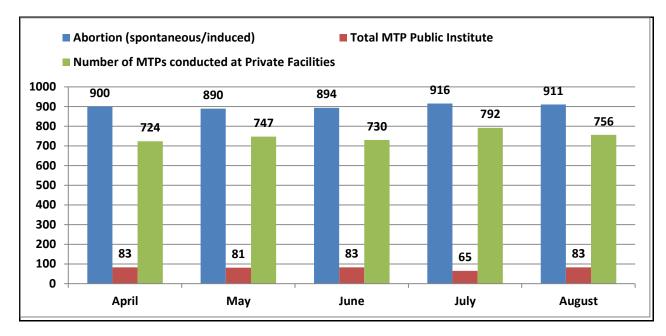
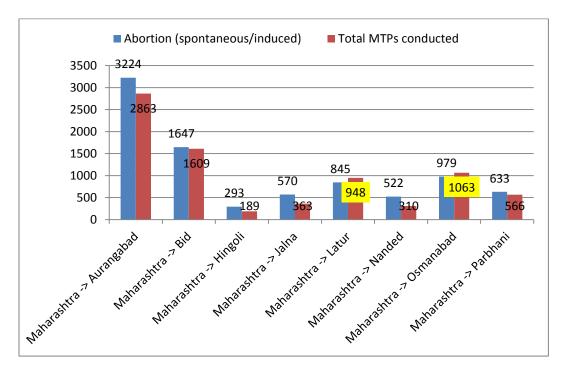


Figure 152: Total MTPs and Abortions in Marathwada region, Maharashtra April- September, 2016



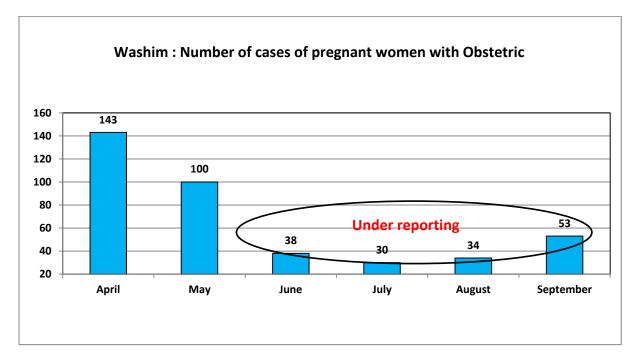


Figure 153: Total number of pregnant women with obstetric complicated cases in Washim, Maharashtra April- September, 2016

MTPs conducted at public facilities are non reported in all months. MTPs conducted in more than 12 weeks of pregnancy are non reported. MTPs conducted at private facilities are non reported in July. Data are inconsistent regarding this variable. It can be seen in bar charts given below-

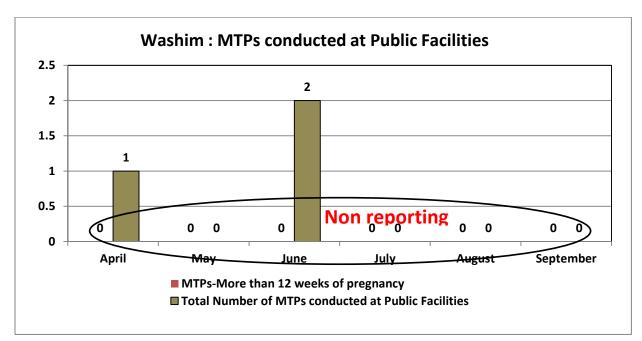


Figure 154: Total MTPs in Washim, Maharashtra April- September, 2016

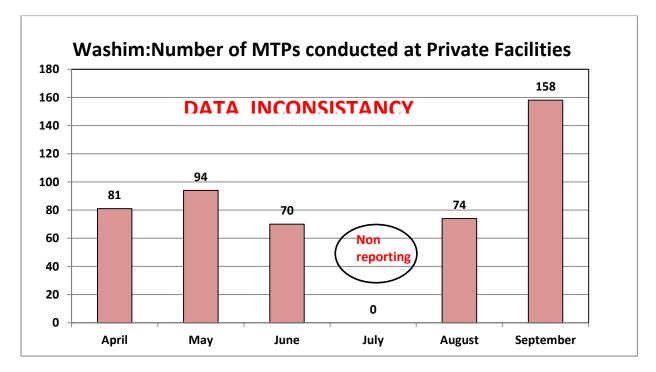


Figure 155: Total MTPs in private institutions in Washim, Maharashtra April- September, 2016

Figure 156: Number of women with obstetric complication and attended public facilities in Buldana, Maharashtra April- September, 2016

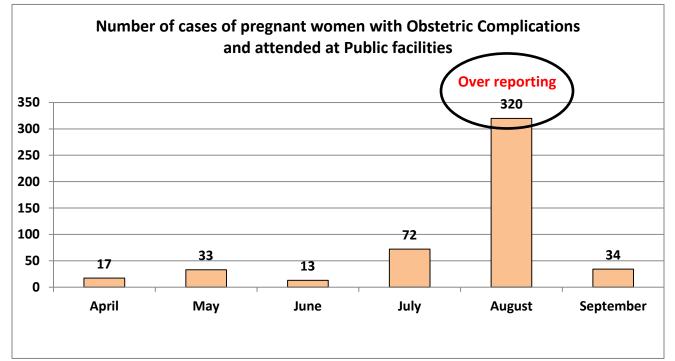


Figure 157: Number of women with obstetric complication and attended private facilities in Buldana, Maharashtra April- September, 2016

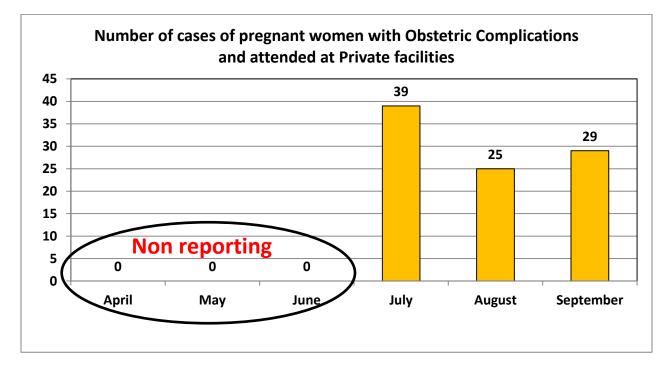
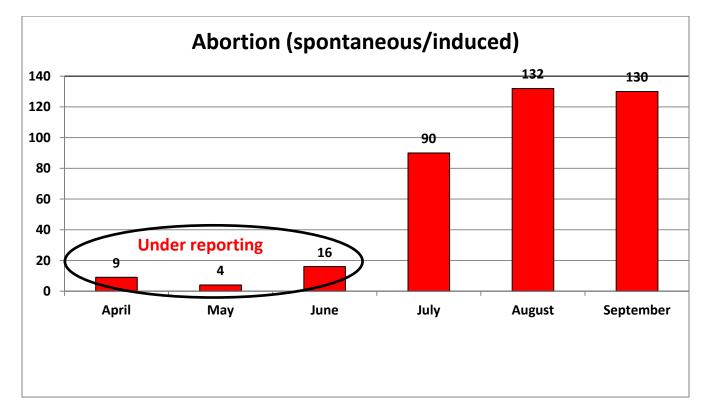


Figure 158: Total number of Abortions in Buldana, Maharashtra April- September, 2016



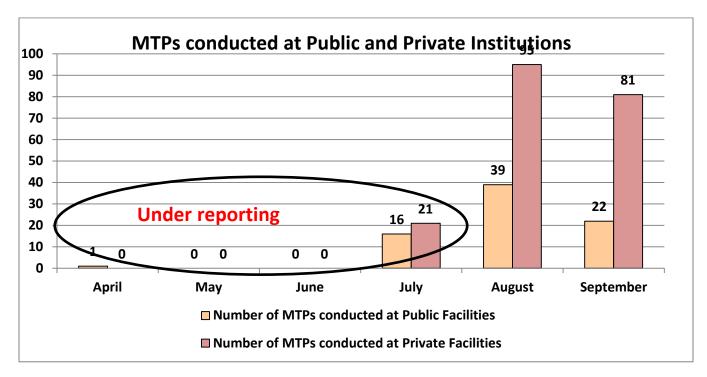
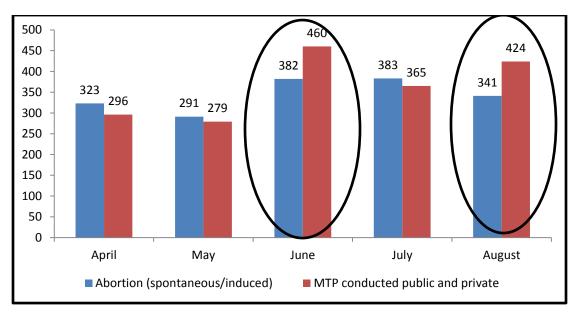


Figure 159: Total number of MTPs in Buldana, Maharashtra April- September, 2016





In the month of June and August MTP is more than Abortion. This is validation errors.

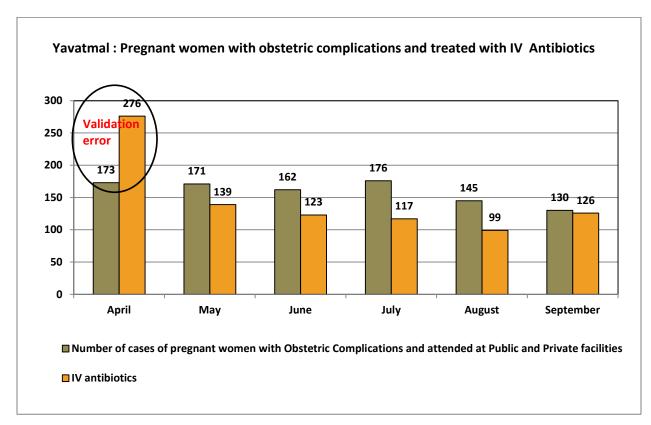
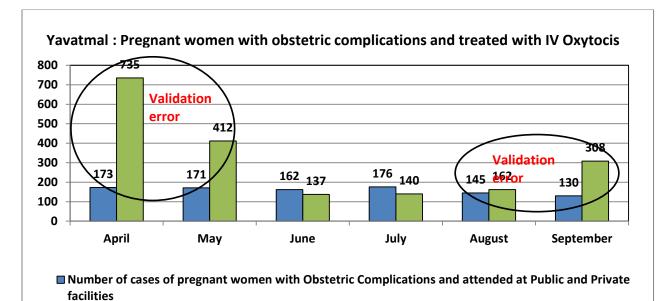


Figure 161: Total number of pregnant women with obstetric complication and treated with IV antibiotics in Yavatmal, Maharashtra April- September, 2016

Figure 162: Total number of pregnant women with obstetric complication and treated with IV Oxytocis in Yavatmal, Maharashtra April- September, 2016



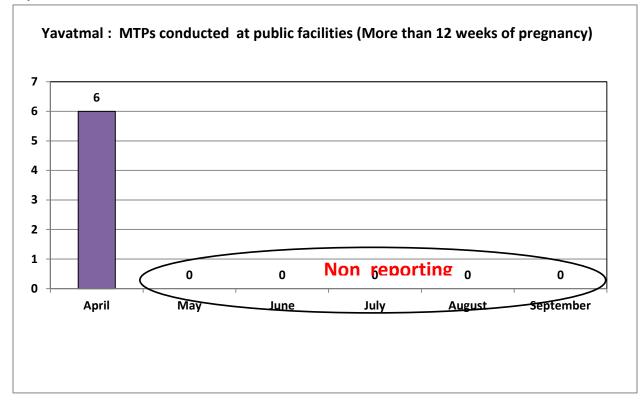
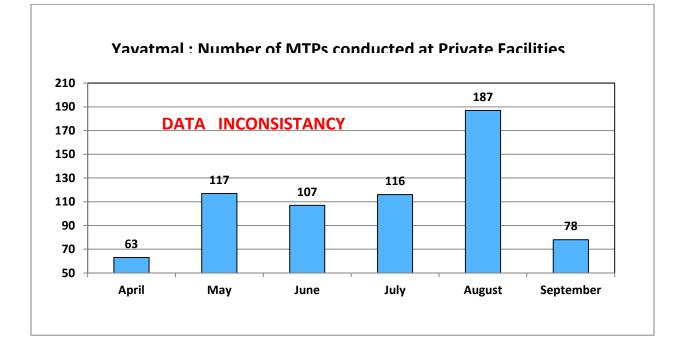


Figure 163: Total number of MTPs in Public institutions in Yavatmal, Maharashtra April-September, 2016

Figure 164: Total number of MTPs in Private institutions in Yavatmal, Maharashtra April-September, 2016



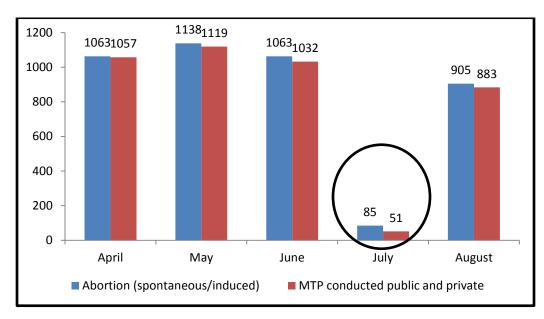
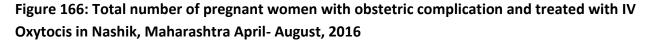
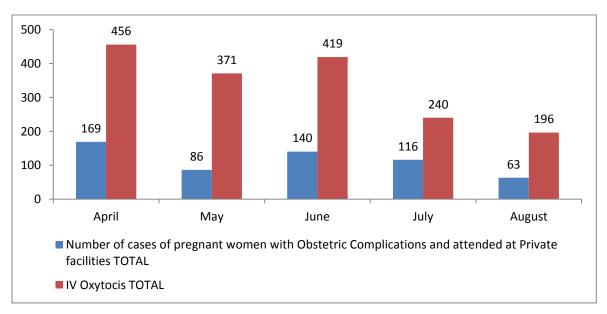


Figure 165: Total number of MTPs and Abortions in Raigad, Maharashtra April- August, 2016

The month of July both Abortion and MTP numbers are very small compared to other months.





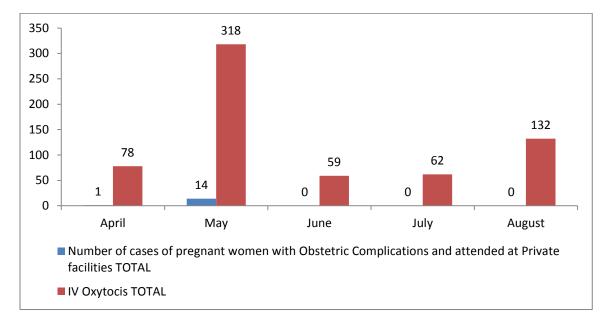
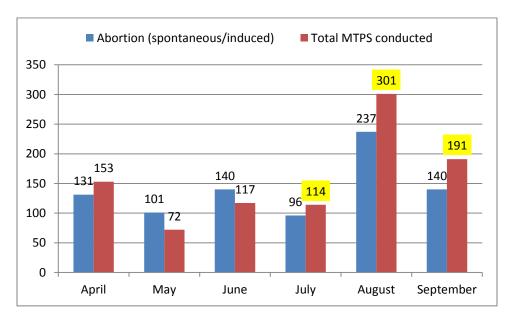


Figure 167: Total number of pregnant women with obstetric complication and treated with IV Oxytocis in Nandurbar, Maharashtra April- August, 2016

Figure 168: Total number of MTPs and Abortions in Latur, Maharashtra April- September, 2016



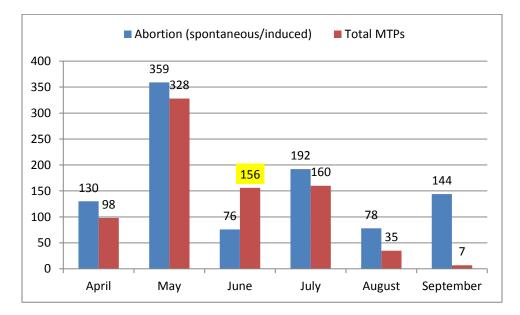
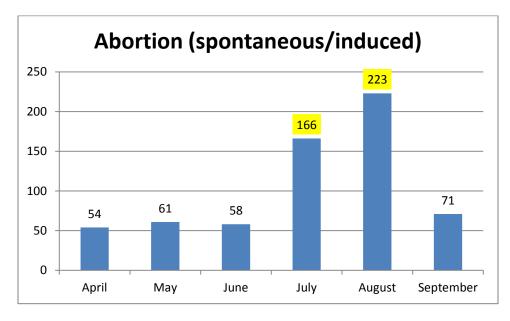


Figure 169: Total number of MTPs and Abortions in Osmanabad, Maharashtra April-September, 2016

Figure 170: Total number of Abortions in Parbhani, Maharashtra April- September, 2016



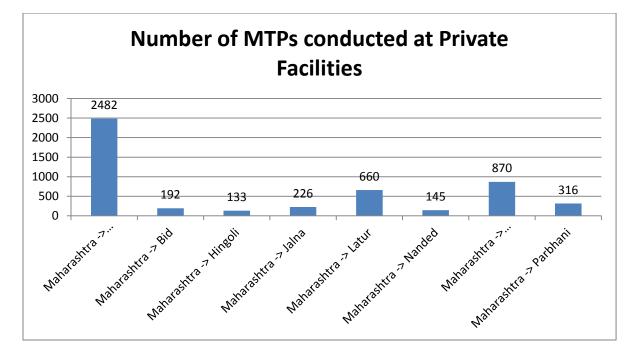


Figure 171: Total number of MTPs in private facilities in Marathwada, Maharashtra April-September, 2016

Figure 172: Total number of MTPs at Private institutions in Parbhani, Maharashtra April-September, 2016

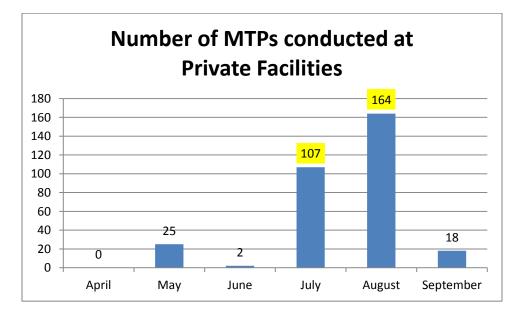


Figure 173: Total number of MTPs and Abortions in Parbhani, Maharashtra April- September, 2016

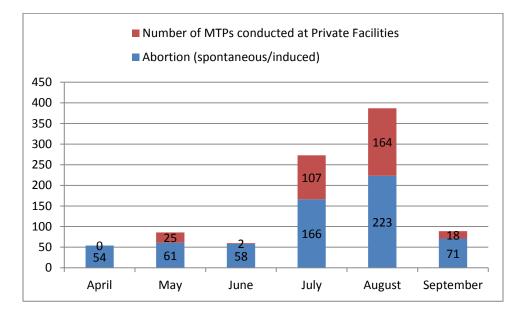


Figure 174: Total number of pregnant women with obstetric complication and treated with IVOxytocisinAurangabad,MaharashtraApril-August,2016

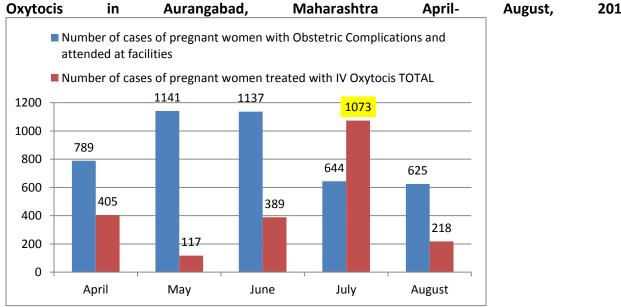


Figure 175: Total number of pregnant women with obstetric complication and attended at private facilities in Marathwada, Maharashtra April- August, 2016

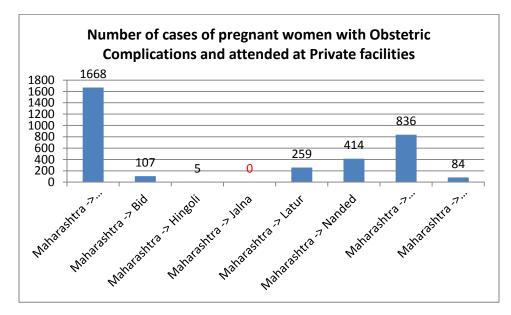


Figure 176: Total number of pregnant women with obstetric complication and attended at private facilities in Nanded, Maharashtra April- September, 2016

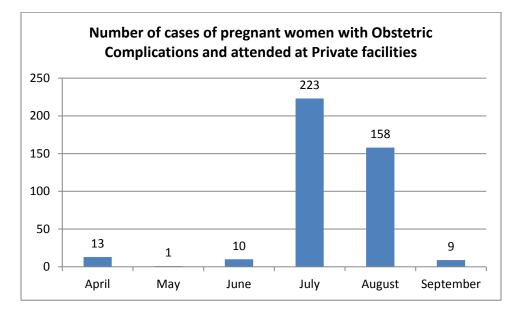


Figure 177: Percentage of women by types of treatment for obstetric complication in Marathwada, Maharashtra April- August 2016

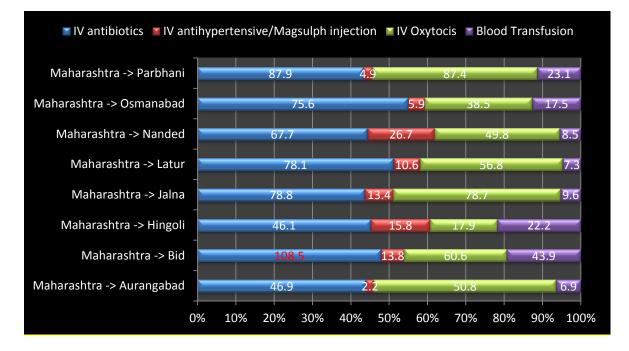


Figure 178: Total number of pregnant women with obstetric complication and treated with IV antibiotics in Marathwada, Maharashtra April- August 2016

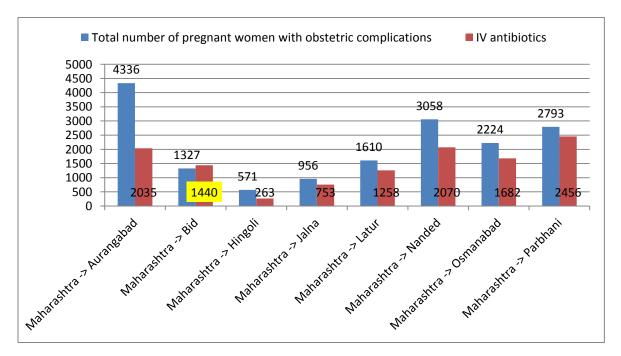


Figure 179: Total number of pregnant women with obstetric complication and treated with IV antibiotics and oxytocis in Bid, Maharashtra April- August 2016

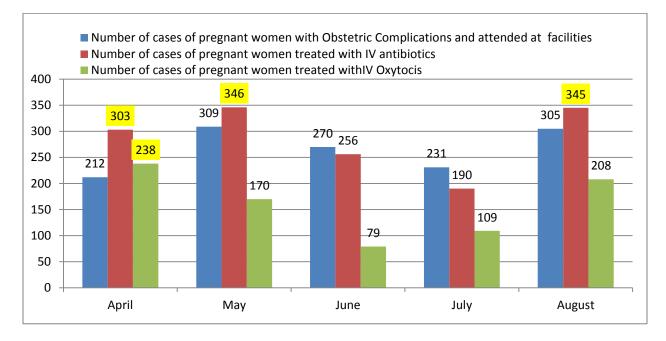


Figure 180: Total number of pregnant women with obstetric complication and treated with IV antibiotics in Nagpur, Maharashtra April- August 2016

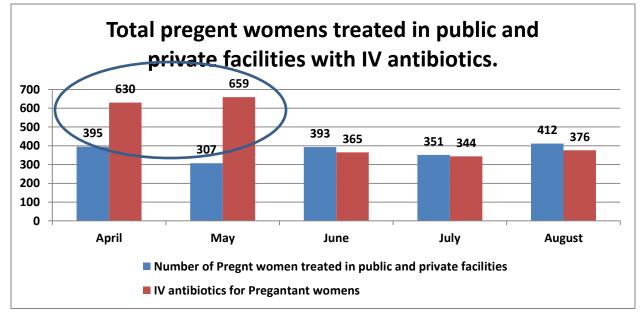
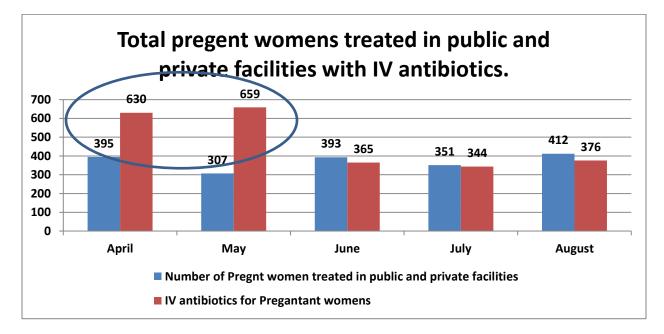


Figure 181: Total number of pregnant women with obstetric complication and treated with IV antibiotics in Gadchiroli, Maharashtra April- August 2016



Immunizations:

OPV 0 and BCG doses are normally provided immediately after live births. Hence, OPV 0 and BCG doses provided are always lesser than or equal to the live births otherwise it is a validation error. However, it is observed in our field visit although OPV 0 doses are provided immediately after births but BCG doses are provided anytime between live births and within 11 month. Sometimes immunizations are provided during session. In addition, there are several cases wherein deliveries happen in private institutions and immunizations are provided in public health facilities leading to mismatch of live births and immunization provided. In such cases BCG doses will be both greater than live births in some of the months and not uniformly constant with either greater or lesser than live births. Hence, comparison of BCG with live births is not suggested to be consider as a validation error. Total number of measles provided should be either greater than or equal to full immunization otherwise it is a validation error. Data inconsistencies such as over and under reporting is also observed.

Other type of data issues such as Immunisation sessions held and number of ASHAs present although it is not a validation error it needs to be investigated why ASHAs were not present for immunization sessions. In some districts Pentavalent was provided for only a month which needs to be investigated. Report on deaths was also reported following immunization.

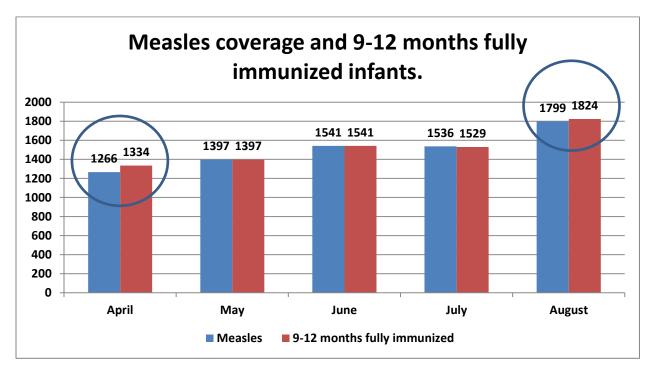
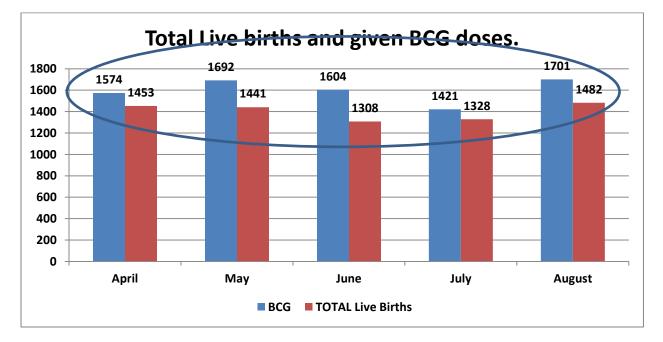


Figure 182: Measles coverage and children fully immunized in Gadchiroli, Maharashtra April- August, 2016

Figure 183: Live births and BCG dose provided in Gondiya, Maharashtra April- August, 2016



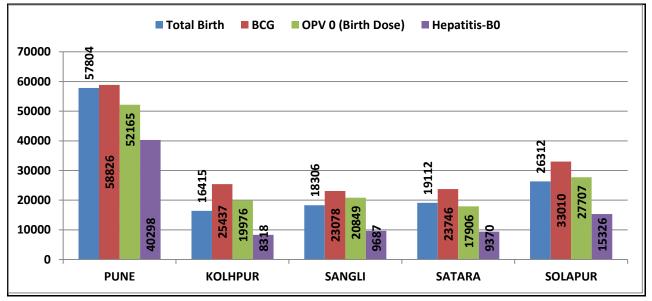


Figure 184: Total live births and vaccination of zero doses in Pune Region, Maharashtra 2016

During all the months' total number of births is less than number of number of doses of OPV and BCG and number of Hepatitis B-0 is less than number of total births. This is a validation error for all the reported months of all districts of Pune region for April to August.

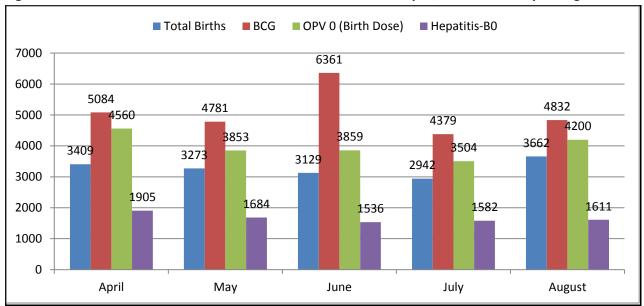
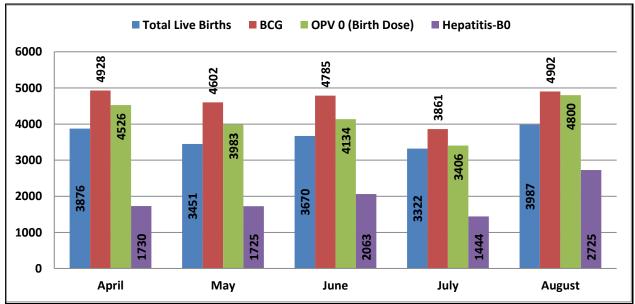


Figure 185: Total live births and vaccination of zero doses in Kolhapur, Maharashtra April-August2016

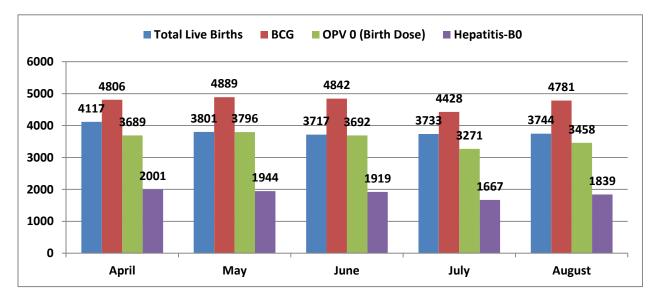
During all the months' total number of births is less than number of number of doses of OPV and BCG and number of Hepatitis B-0 is less than number of total births. This is a validation error for all the reported months





During all the months' total number of births is less than number of number of doses of OPV and BCG and number of Hepatitis B-0 is less than number of total births. This is a validation error for all the reported months

. Figure 187: Total live births and vaccination of zero doses in Satara, Maharashtra April-August2016



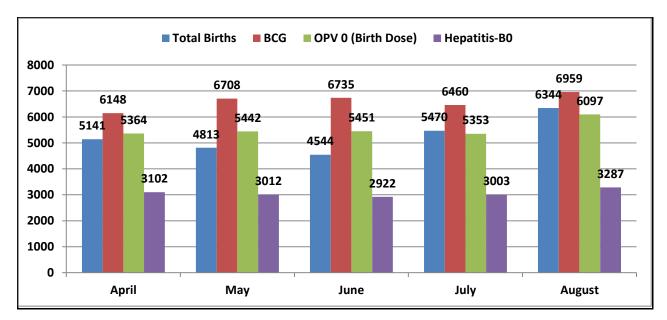


Figure 188: Total live births and vaccination of zero doses in Solapur, Maharashtra April- August2016

During all the months' total number of births is less than number of number of doses of OPV and BCG and number of Hepatitis B-0 is less than number of total births. This is a validation error for all the reported months.

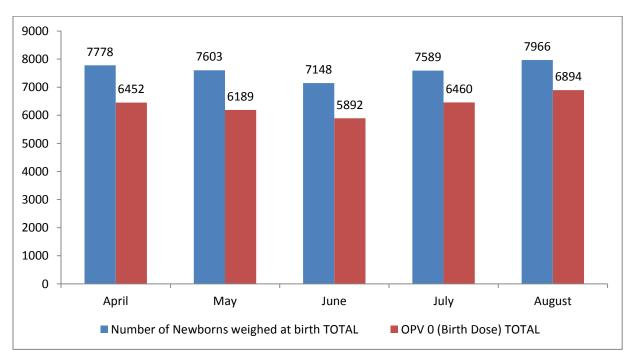


Figure 189: Total live births and OPV0 dose provided in Nashik, Maharashtra April- August2016

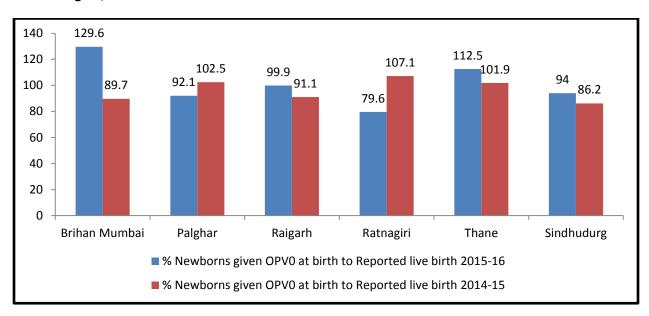
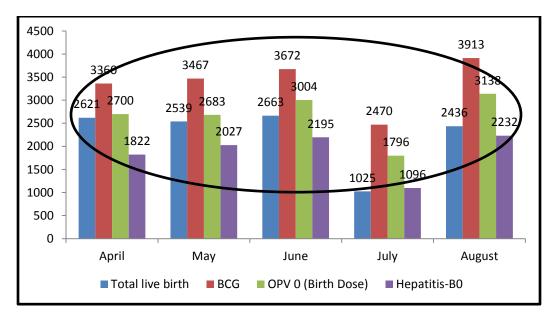


Figure 190: Percentage of newborn provided with OPV0 dose provided during April- August 2015-16 in konkan region, Maharashtra

Figure 191: BCG, OPV0 and Hepatitis B0 dose provided in Raigad, Maharashtra April- August2016



Above Three doses given at the time of birth live birth are less Number and doses are more. It is validation errors.

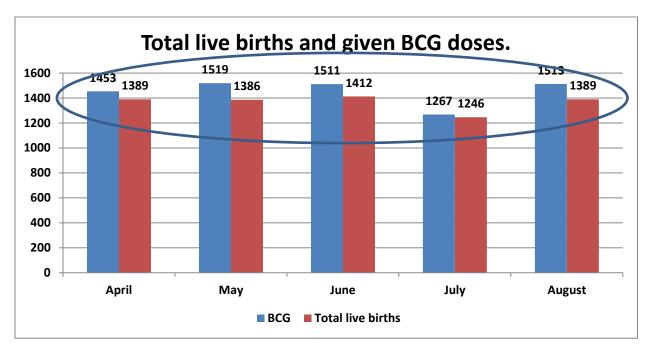
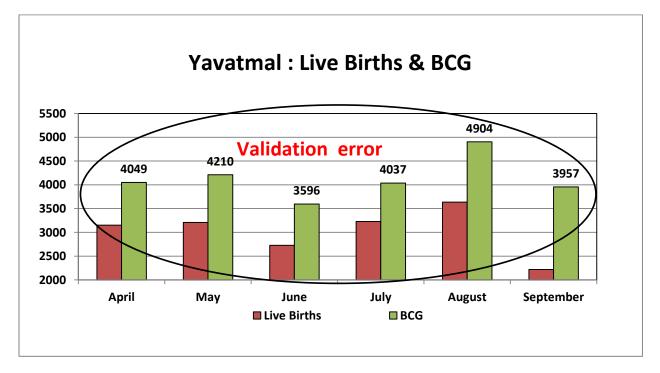


Figure 192: Total live births and BCG dose provided in Gadchiroli, Maharashtra April- August2016

Figure 193: Total live births and BCG dose provided in Yavatmal, Maharashtra April- September 2016



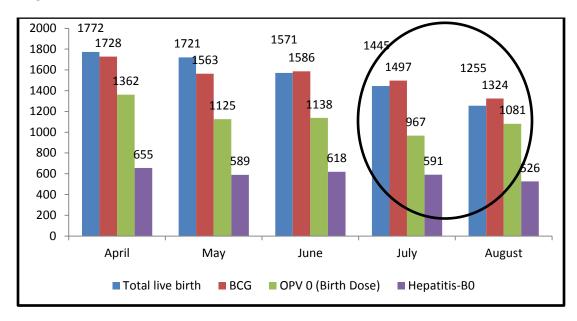


Figure 194: Total live births and BCG OPV, Hepatitis dose provided in Ratnagiri, Maharashtra April-August2016

This is the district of Ratnagiri the and given the doses like BCG, OPVO and Hepatitis B are except month of July and August number are less number of total live births. This two months the validation errors for BCG only.

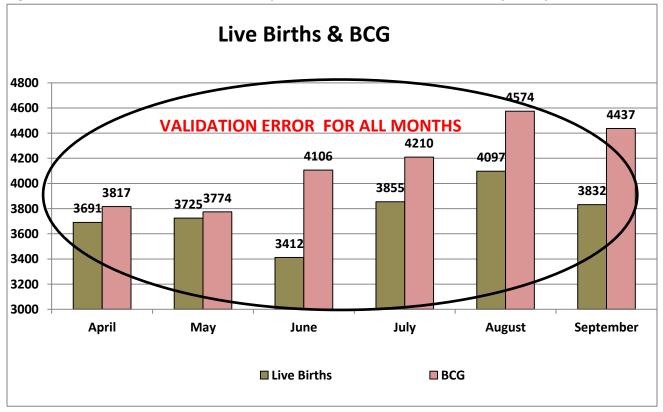


Figure 195: Total live births and BCG dose provided in Amravati, Maharashtra April- September 2016

is a validation error for all months, as number of BCGs given are more than live births.

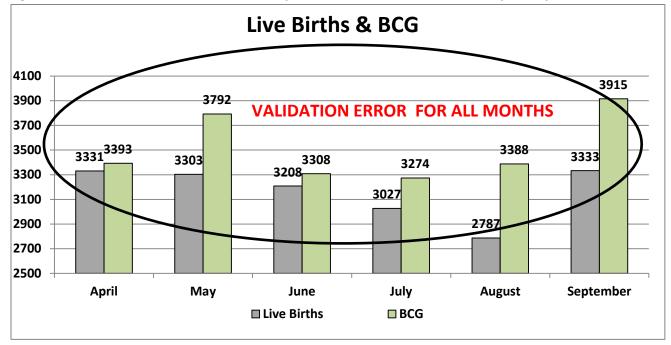


Figure 196: Total live births and BCG dose provided in Akola, Maharashtra April- September 2016

There is a validation error for all months, as number of BCGs given are more than live births.

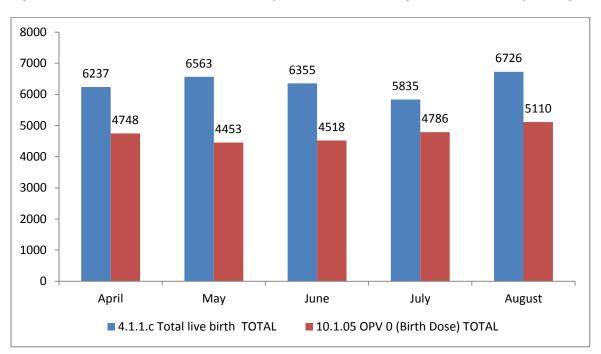


Figure 197: Total live births and OPV0dose provided in Ahmednagar, Maharashtra April- August2016

In this district mostly Every month live birth is high and OPV 0 (Birth Dose) is low totally five month.

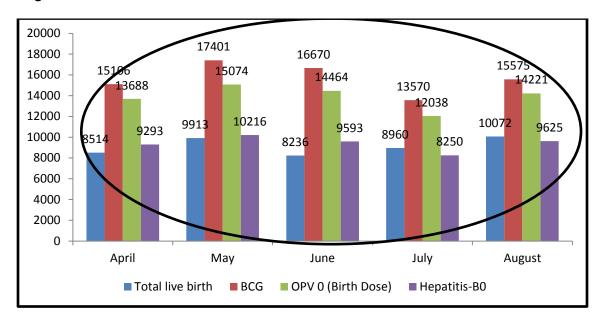
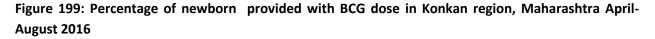
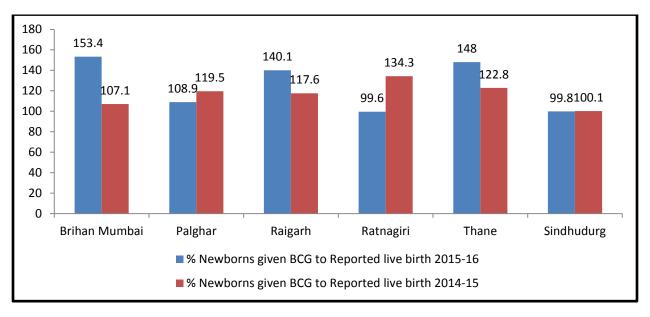


Figure 198: Total live births and BCG, OPV, Hepatitis B dose provided in Mumbai, Maharashtra April-August2016

Above Three doses given at the time of birth live birth are less Number and doses are more. It is validation errors.





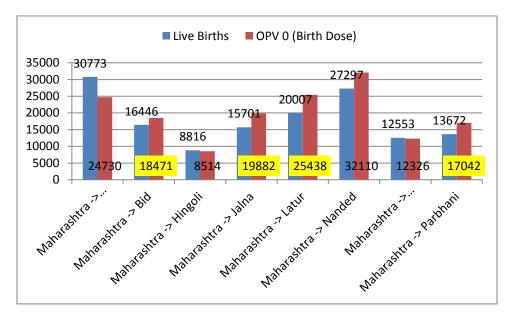
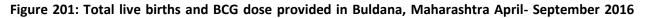
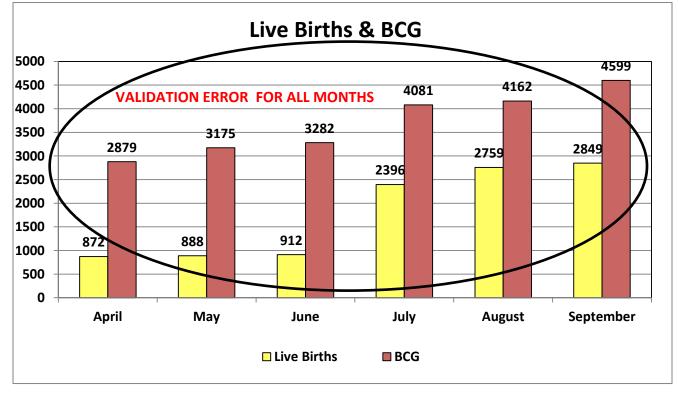


Figure 200: Total live births and OPV dose provided in Marathwada, Maharashtra April- August2016





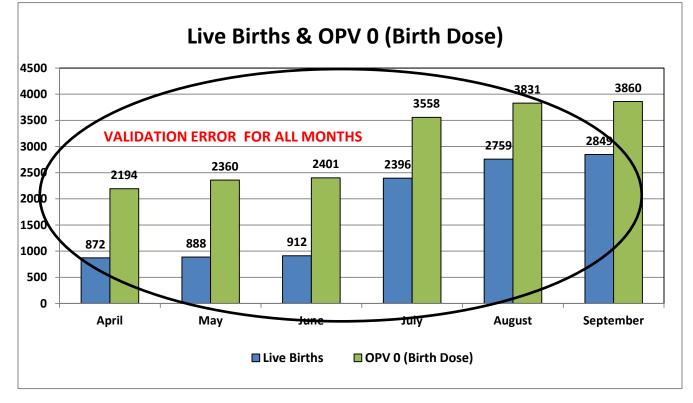


Figure 202: Total live births and OPV dose provided in Buldana, Maharashtra April- September 2016

Figure 203: Total Measles vaccination and full immunization provided in Buldana, Maharashtra April-September 2016

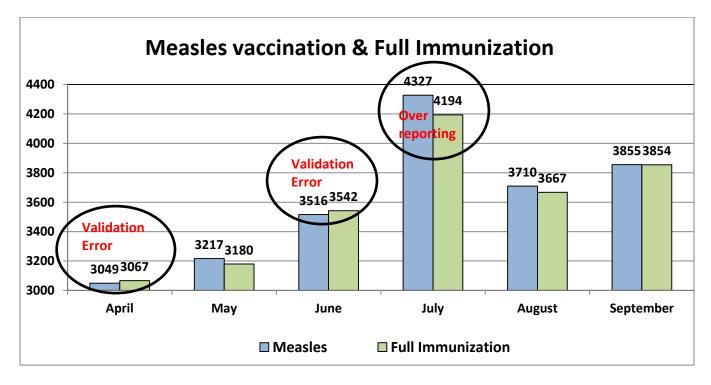
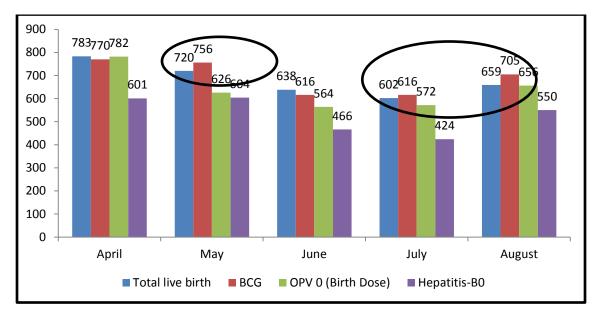


Figure 204: Total live births and BCG, OPV, Hepatitis B dose provided in Sindudurg, Maharashtra April-August 2016



This is the district of Sindudurg the and given the doses like BCG, OPVO and Hepatitis B are except month of May, July and August number are less number of total live births. These three months the validation errors for BCG only.

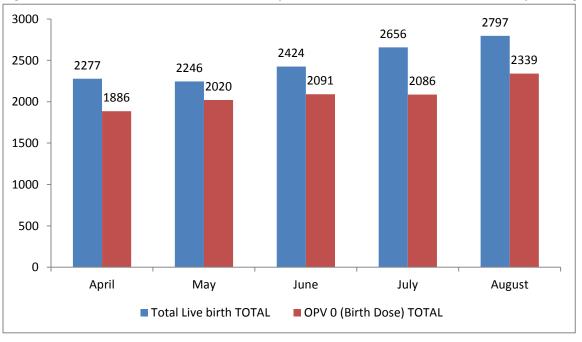


Figure 205: Total live births and OPV dose provided in Nandurbar, Maharashtra April- August2016

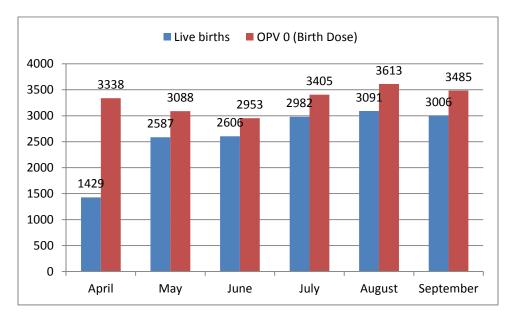
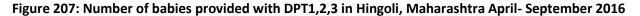


Figure 206: Total live births and OPV dose provided in Jalna, Maharashtra April- September 2016



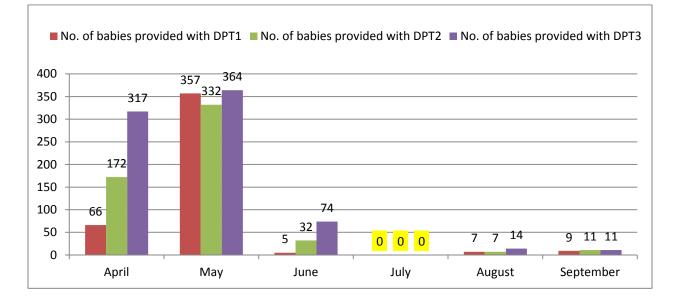
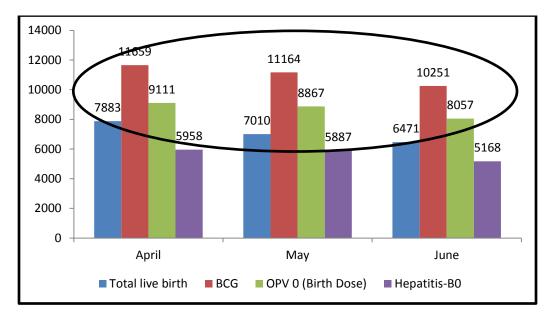
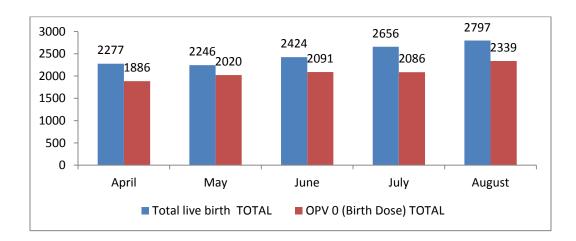


Figure 208: Total live births and BCG OPV, Hepatitis B dose provided in Thane, Maharashtra April- June 2016



Doses like BCG, OPV0 are more than total livebirth. These are validation errors for BCG and OPV0.





Number of infants given BCG are more than live births, which is a validation error. Same is the case with OPV (0) Birth Dose. Number of OPV (0) Birth Dose given are more than live births.

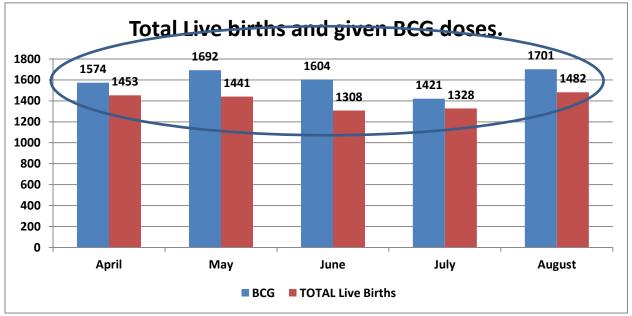
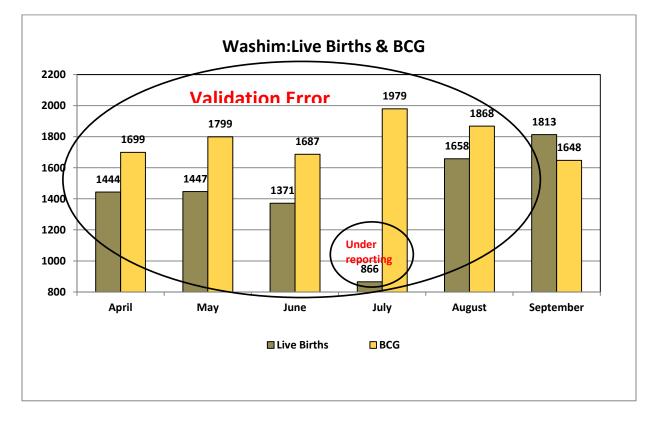


Figure 210: Total live births and BCG dose provided in Gondiya, Maharashtra April- August 2016

Figure 211: Total live births and BCG dose provided in Washim, Maharashtra April- September 2016



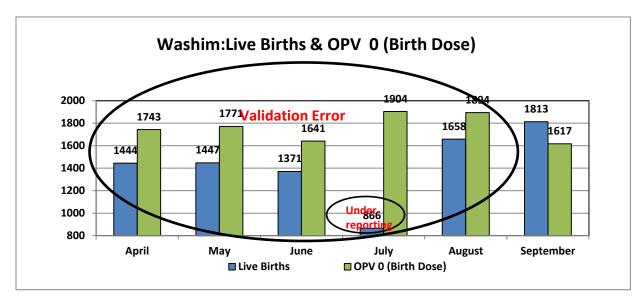
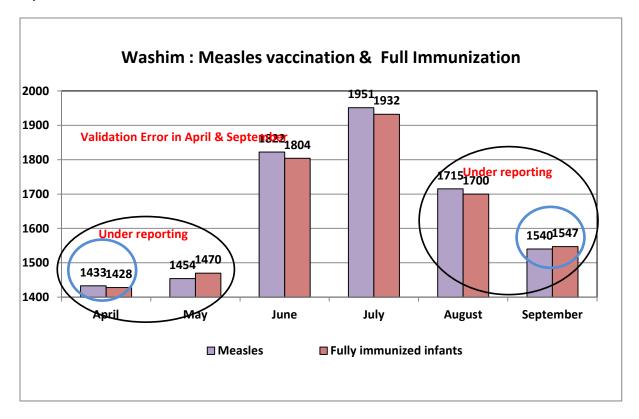


Figure 212: Total live births and OPV dose provided in Washim, Maharashtra April- September 2016

Number of infants given Measles vaccination are more than fully immunized infants in months, April, May, August and September, which is a validation error.

Figure 213: Measles vaccination and Full immunization provided in Washim, Maharashtra April-September 2016



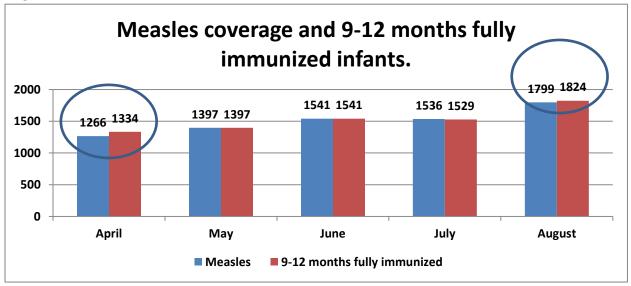
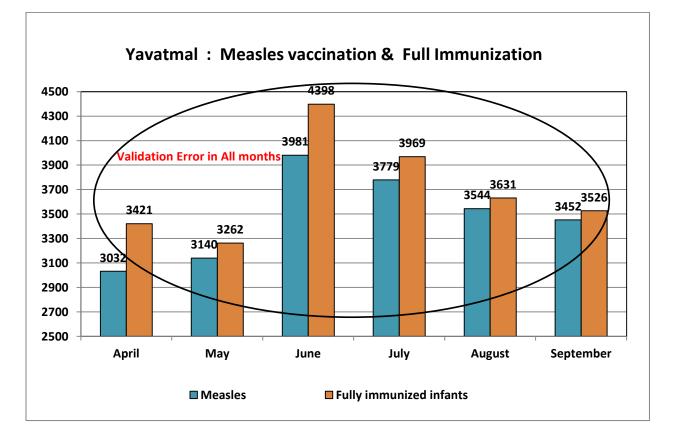
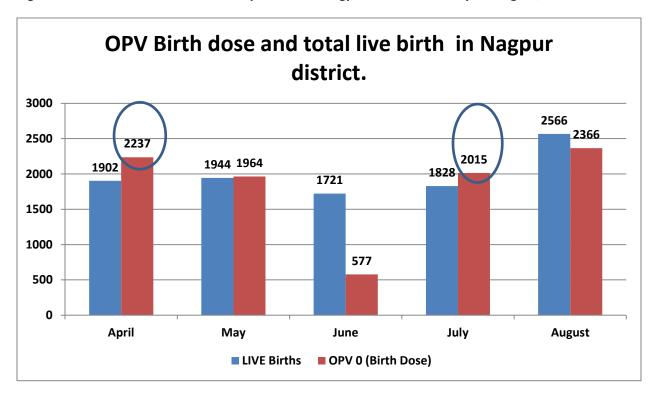


Figure 214: Measles coverage and Full immunization provided in Gadchiroli, Maharashtra April-August 2016

Figure 215: Total live births and BCG dose provided in Yavatmal, Maharashtra April- September 2016







OPV birth doses are reported is high in the month of April and July in the Nagpur district.

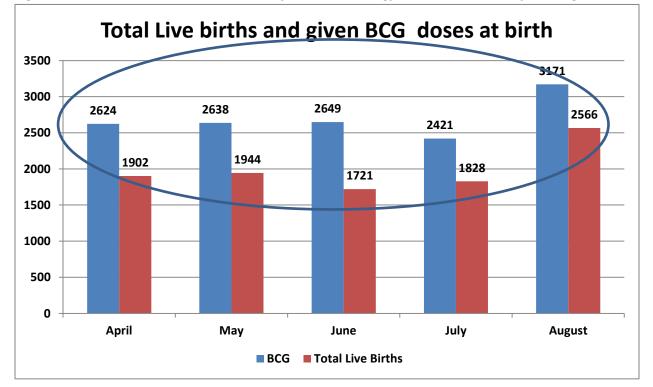


Figure 217: Live births and BCG dose provided in Nagpur, Maharashtra April- August, 2016

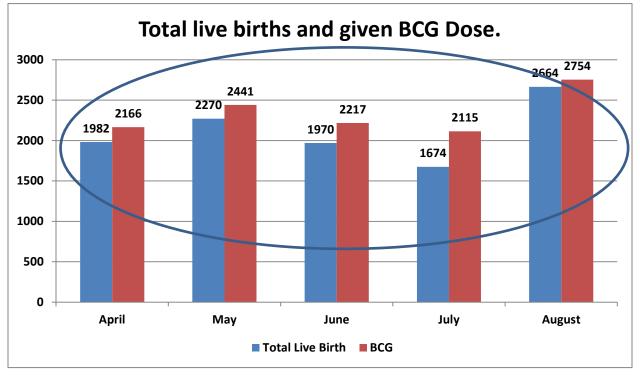


Figure 218: Live births and OPV0 dose provided in Chandrapur, Maharashtra April- August, 2016

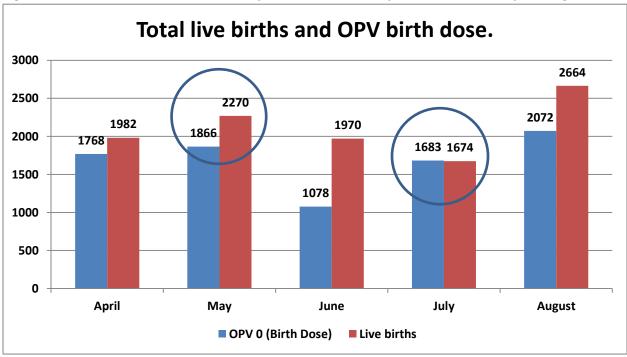


Figure 219: Live births and OPVO dose provided in Chandrapur, Maharashtra April- August, 2016

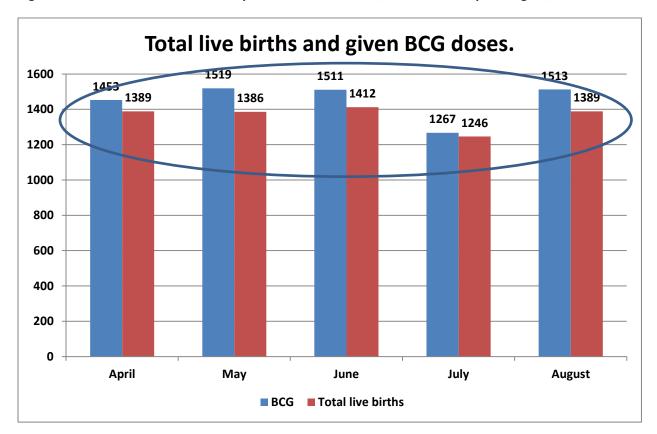
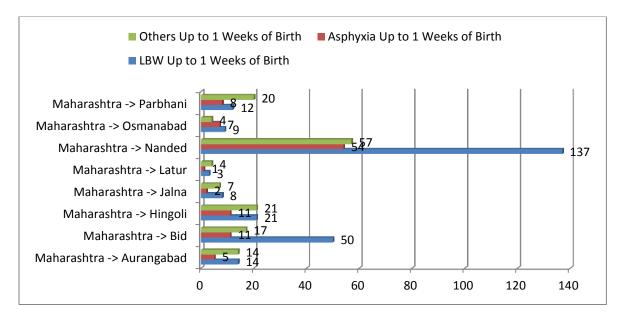


Figure 220: Live births and BCG dose provided in Gadchiroli, Maharashtra April- August, 2016

Number of Deaths:

The number of deaths and infant deaths as shown in figure to shows non reporting and either reporting or overreporting of number of deaths

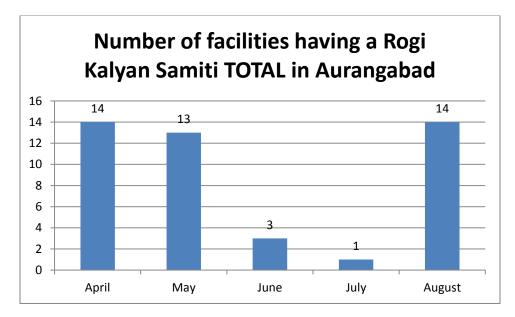
Figure 221: Cause of Neonatal deaths within 1 week of birth in Marathwada, Maharashtra April-August 2016



RKS committees formed and meeting held:

Validation error is observed with more number of RKS meetings than number of facilities with RKS committee.

Figure 222: Number of facilities having Rogi Kalyan Samiti in Aurangabad, Maharashtra April- August 2016



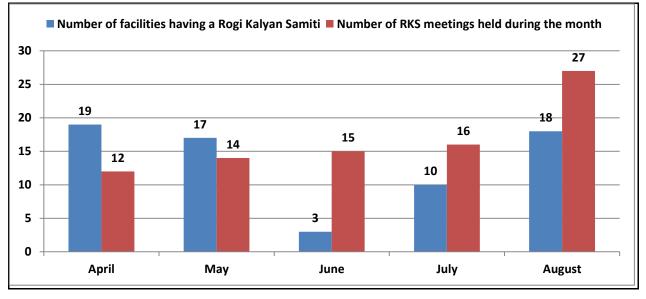


Figure 223: Rogi Kalyan Samitis vs RKS meetings in Satara, Maharashtra April- August 2016

In the month of April and May meetings held of RKS are reported proper are less than Rogi kalyan Samitis. But in the month of June, July and August there is validation error.

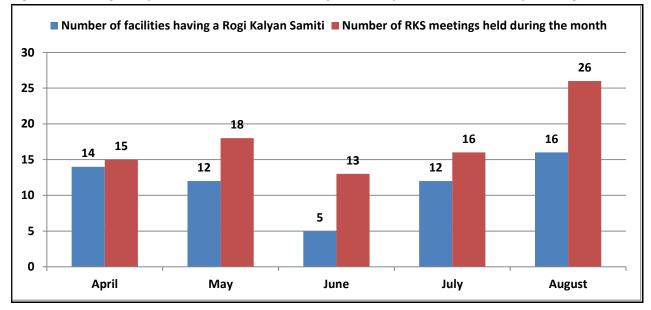


Figure 224: Rogi Kalyan Samitis vs RKS meetings in Solapur, Maharashtra April- August 2016

In the month of April and May meetings held of RKS are reported proper are less than Rogi Kalyan Samitis. But in the month of June, July and August there is validation error.

8. Blindness Control Programme:

Under Blindness control programme various information is collected such as number of eyes collected; number of eyes collected; Number of cataract operations; number of IOL implantation; number of children provided with free glasses and number of children detected with refractive.

Number of eyes utilsed are less than or equal to number of eyes collected; Number of cataract operation should be equal to number of IOL implantation and number of children provided with free glasses are less than number of children detected with refractive otherwise it is a validation error.

Figures given below shows validation error as well as under and over reporting of data. The specific feature of these variables are non reporting of data specifically it is observed from the data eventough substantial number of eyes is collected whereas nil number of eyes are utilized.

Figure 225: Total number of school children detected with refractive errors and number of school children provided with free glasses in Nagpur, Maharashtra April- August 2016

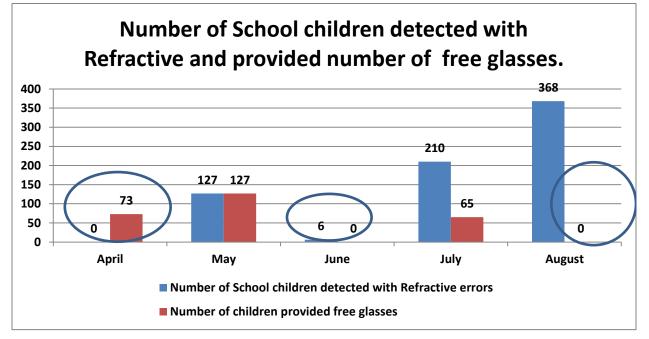


Figure 226: Total number of patients operated for cataract and provided IOL lens implantations in Nagpur, Maharashtra April- August 2016

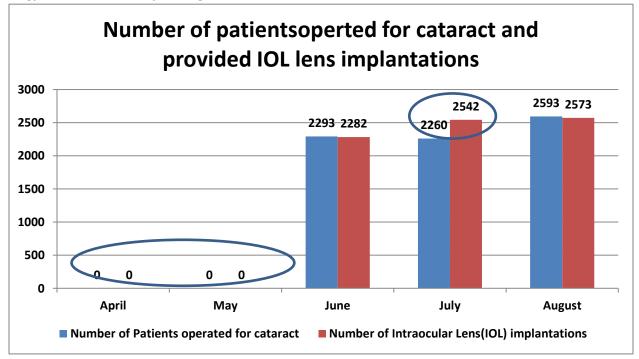


Figure 227: Total number of patients operated for cataract and provided IOL lens implantations in Wardha, Maharashtra April- August 2016

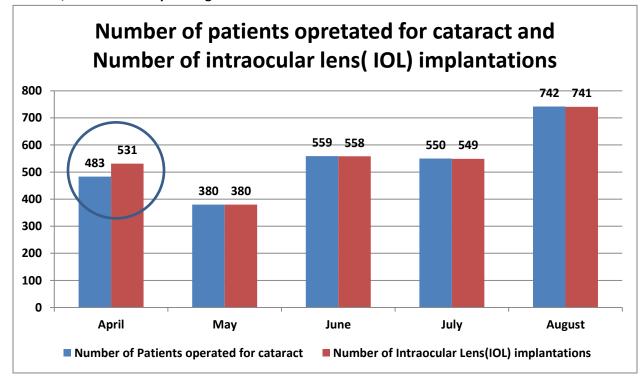


Figure 228: Total number of school children detected with refractive errors and number of school children provided with free glasses in Wardha, Maharashtra April- August 2016

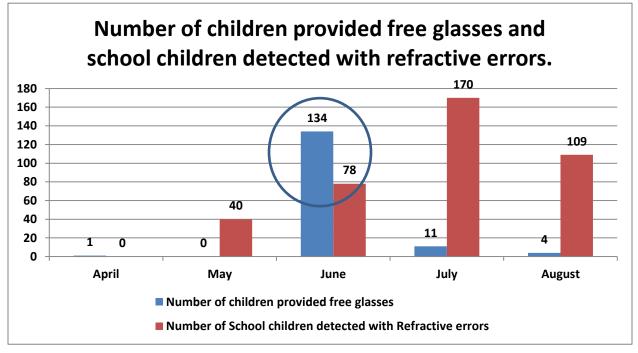
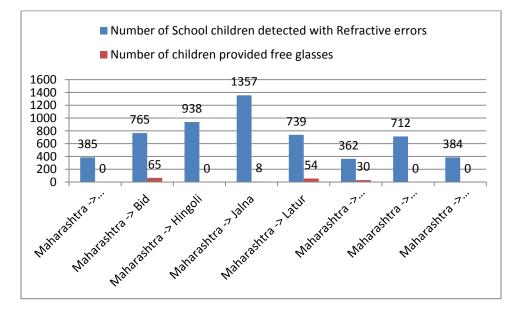
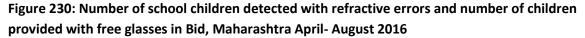


Figure 229: Number of school children detected with refractive errors and number of children provided with free glasses in Marathwada, Maharashtra April- August 2016





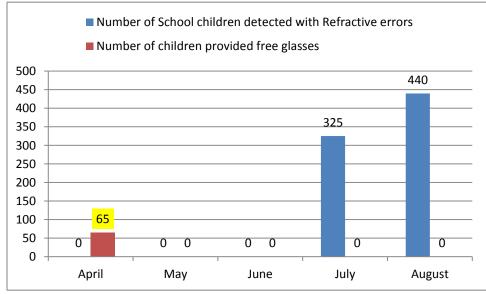
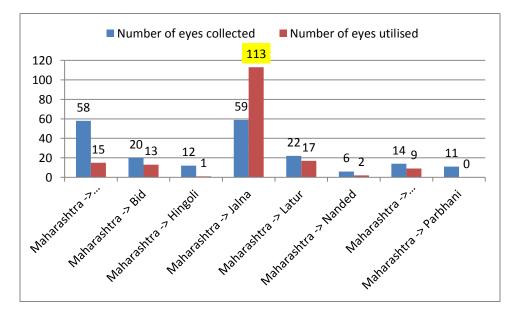
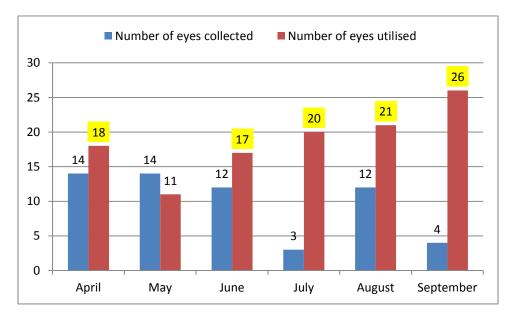


Figure 231: Number of eyes collected and utilised in Marathwada, Maharashtra April- August 2016







9.Infrastructure:

Although, negligible validation error in indicators of ambulance services considerable data inconsistencies was observed with number of facilities having ambulance services changing drastically across months. The difference in number of facilities having ambulance services was striking across months.

However, in some months if 1 or 2 ambulances services are available in facility then rest of months the number of ambulance service would be either 10 or 20 times more. Moreover, the number of times ambulance services used does not match proportionally to the number of ambulance facilities has.

Number of functional laparoscopes and number of facilities serving as FRU varies across month which is a data inconsistency .

Overall, it reflects data inconsistencies in reporting the data values.

Figure 233: Average number of times ambulance was used for transporting patients per month in Marathwada, Maharashtra April- August 2016

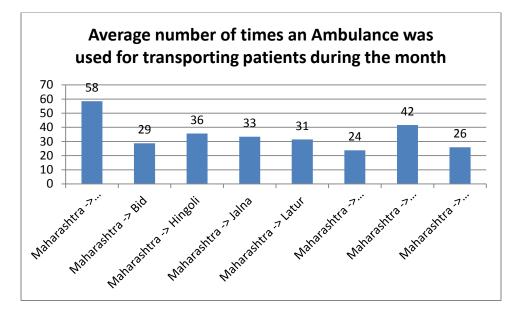


Figure 234: Average number of times ambulance was used for transporting patients per month in Aurangabad April- August 2016

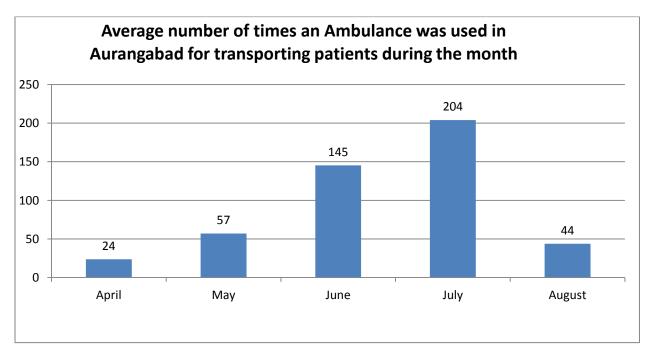


Figure 235: Average number of times ambulance was used for transporting patients per month in Hingoli, Maharashtra April- September 2016

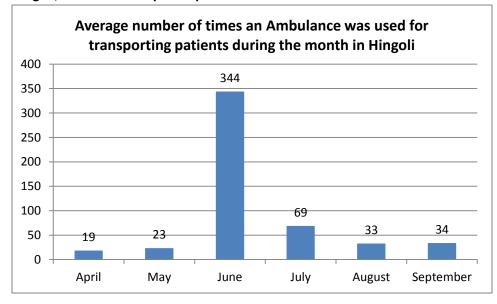


Figure 236: Average number of times ambulance was used for transporting patients per month in Jalna, Maharashtra April- September 2016

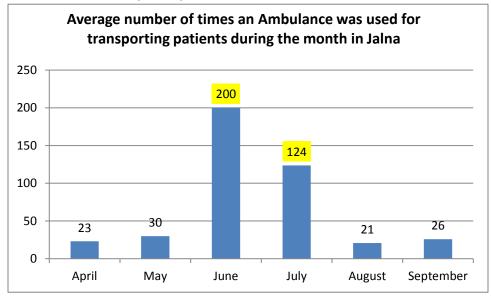


Figure 237: Average number of times ambulance was used for transporting patients per month in Parbhani, Maharashtra April- September 2016

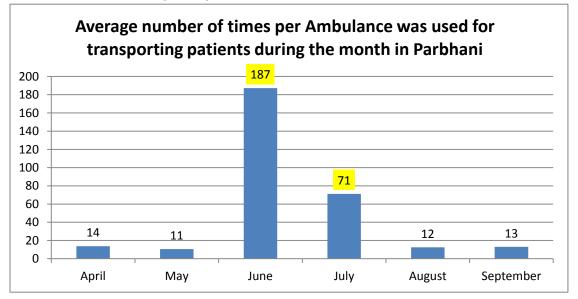
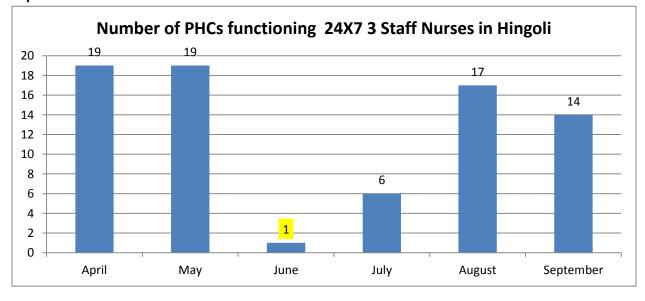
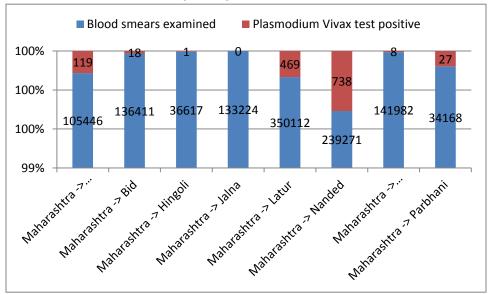


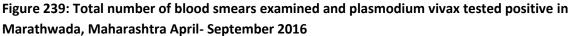
Figure 238: Total number of PHCs functioning with 24*7 staff nurses in Hingoli, Maharashtra April-September 2016

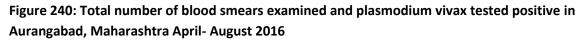


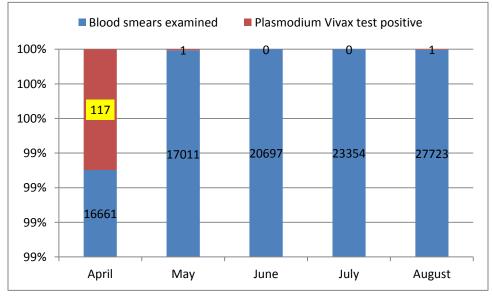
Lab Tests

Considerable variation is observed in total number of blood smears examined and plasmodium vivax tested positive with number tested positive varying from 1 to 500.









10. Family Planning

Although, no major validation error was observed in indicators of family planning but data inconsistencies such as, non reporting and either under or over reporting were found in data.Number of NSV trained doctors and number of laparoscopic unit varies considerably month wise which although not a validation error is quite unlike.

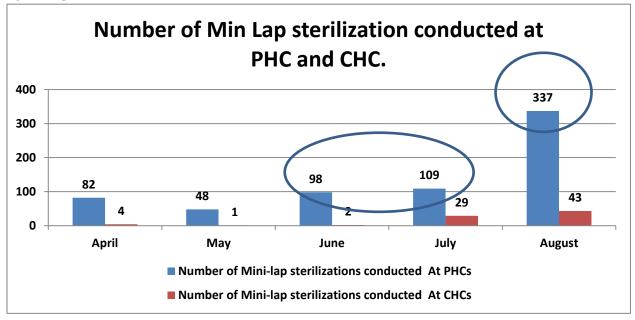
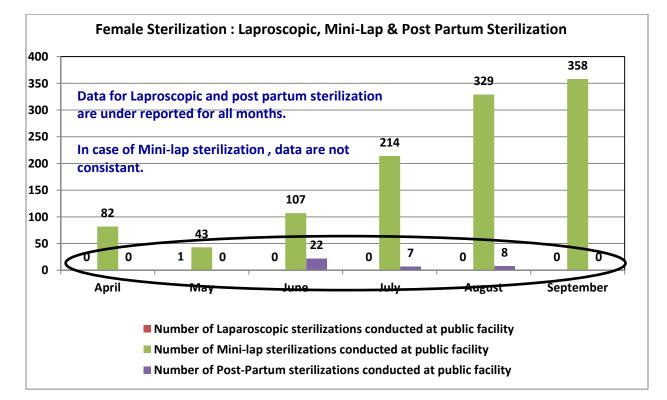


Figure 241: Total number of Minilap sterilization conducted at PHC and CHC in Gondiya, Maharashtra April- August 2016





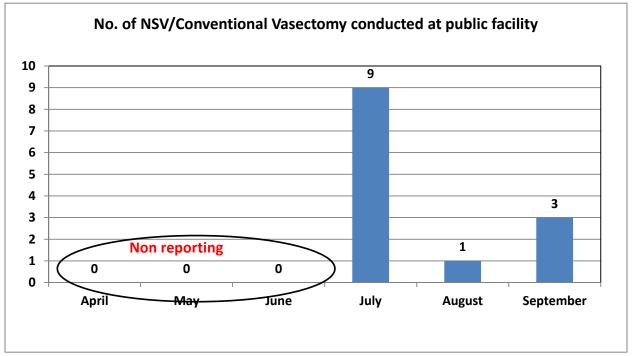
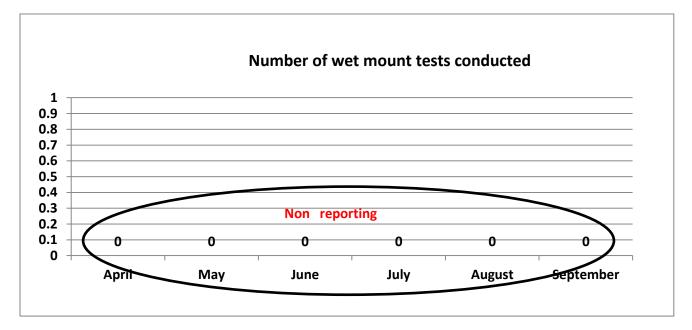


Figure 243: Total number of NSV/Vasectomy conducted in public facility in Washim, Maharashtra April- September 2016

Figure 244: Total number of Wet Mount test conducted in Amravati, Maharashtra April- September 2016



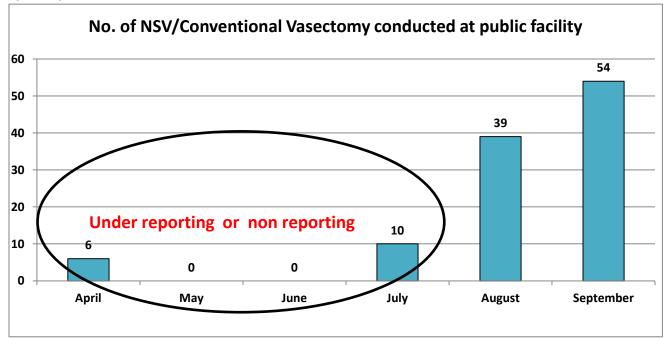
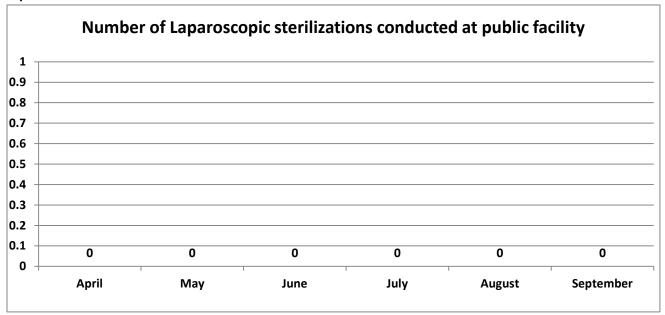


Figure 245: Total number of NSV/Vasectomy conducted in public facility in Amravati, Maharashtra April- September 2016

Figure 246: Laparoscopic sterilization conducted in public facility in Amravati, Maharashtra April-September 2016



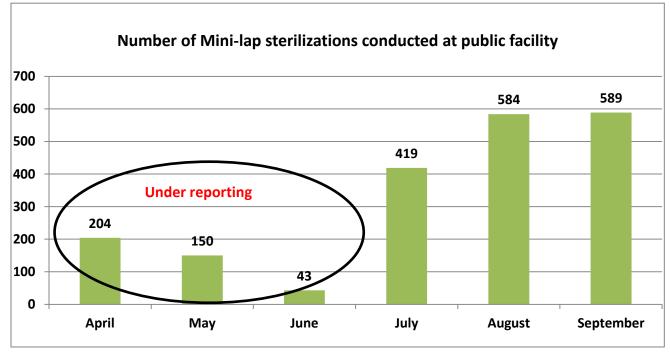
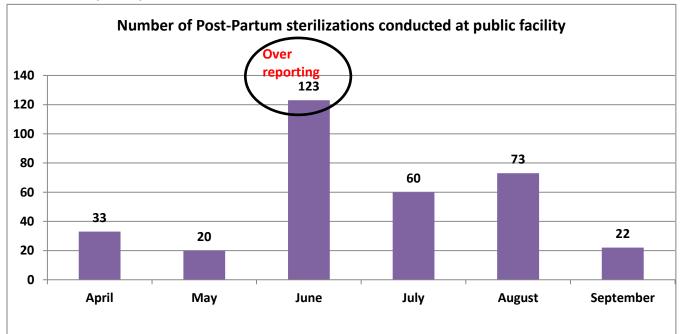


Figure 247: Total number of Minilap sterilization conducted at public facility in Amravati, Maharashtra April- September 2016

Figure 248: Total number of Post partum sterilization conducted at public facility in Amravati, Maharashtra April- September 2016



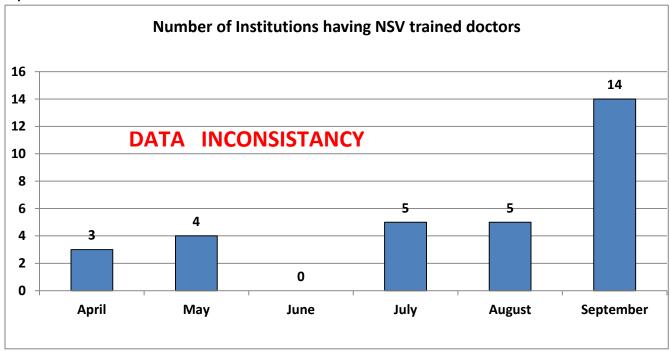


Figure 249: Total number of institutions having NSV trained doctors in Amravati, Maharashtra April-September 2016

Data are inconsistent about the number of institutions having NSV trained doctors. Number cannot vary for each month. It is varies from 3 in April to 14 in September.

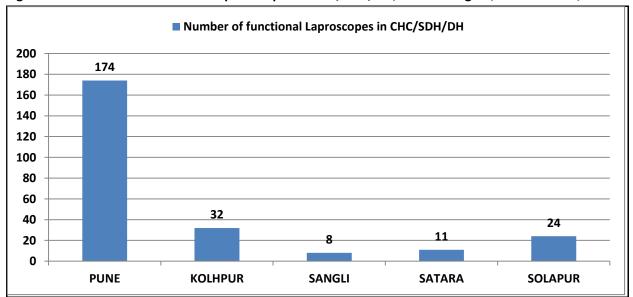


Figure 250: Number of functional Laparoscopes in CHC/SDH/DH, in Pune Region, Maharashtra, 2016

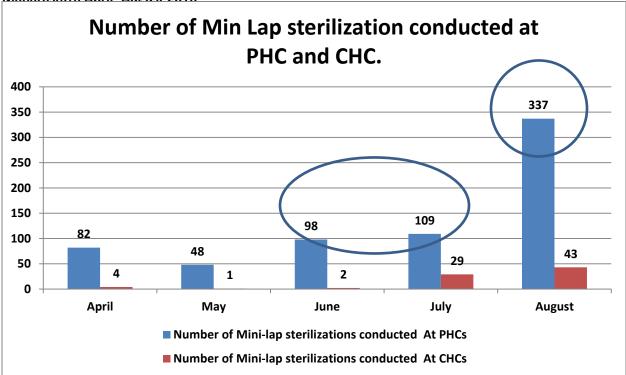
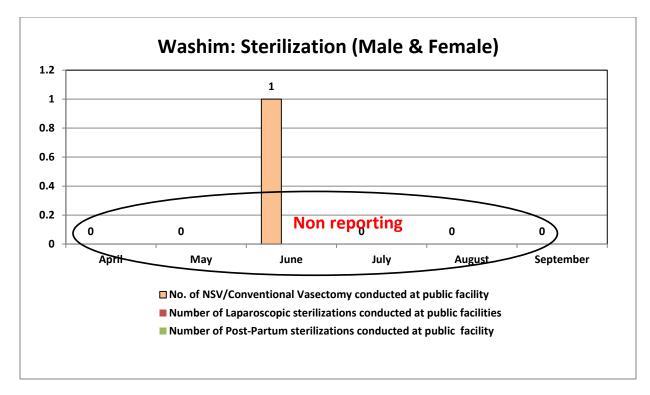


Figure 251: Total number of Minilap sterilization conducted at PHCs and CHCs in Gondiya, Maharashtra April- August 2016

Figure 252: Total number of Male and Female sterilization conducted at public facility in Washim, Maharashtra April- September 2016



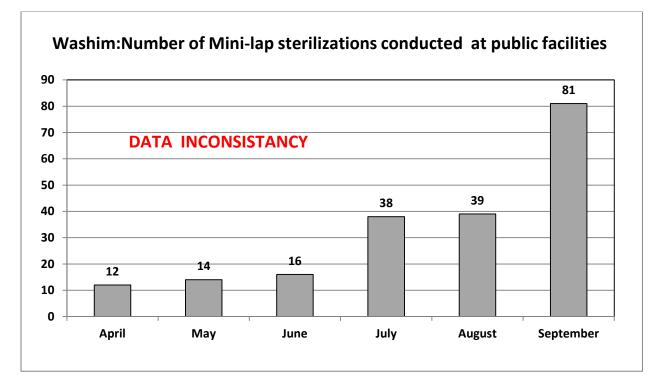
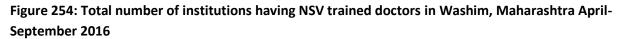
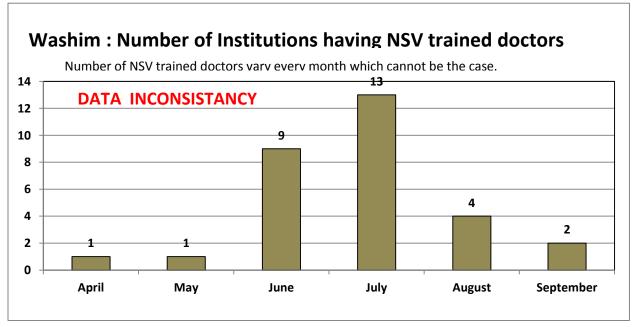


Figure 253: Total number of Minilap sterilization conducted at public facility in Washim, Maharashtra April- September 2016

Data regarding number of institutions having NSV trained doctors is inconsistent. It varies by month, which cannot be the case.





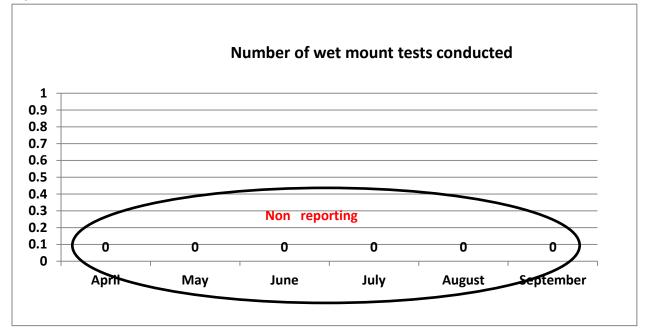
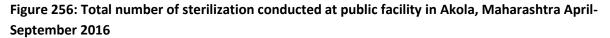
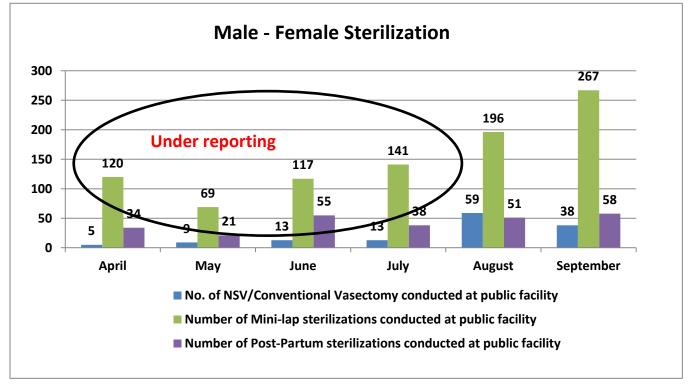


Figure 255: Total number of Wet mount tests conducted at public facility in Akola, Maharashtra April-September 2016

There is non reporting for indicator 'Number of wet mount tests conducted'.





Under reporting for male & female sterilization indicators.

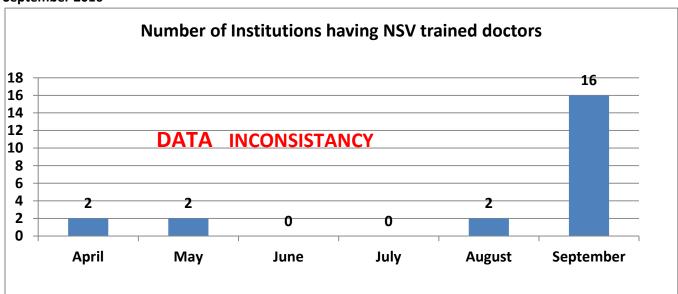


Figure 257: Total number of institutions having NSV trained doctors in Akola, Maharashtra April-September 2016

Data are inconsistent about the number of institutions having NSV trained doctors. Number cannot vary for each month. It is 2 for April, May and August, 0 for June & July and increases to 16 in the month September.

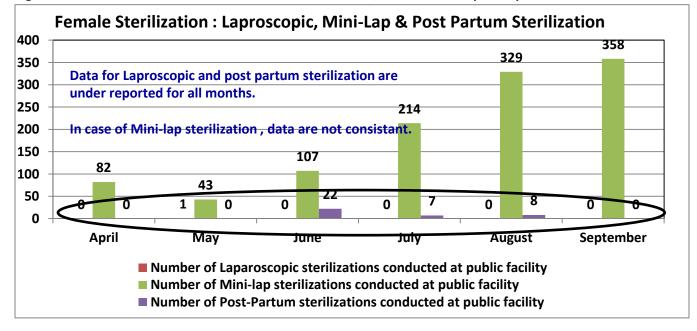


Figure 258: Total number of Female sterilization in Buldana, Maharashtra April- September 2016

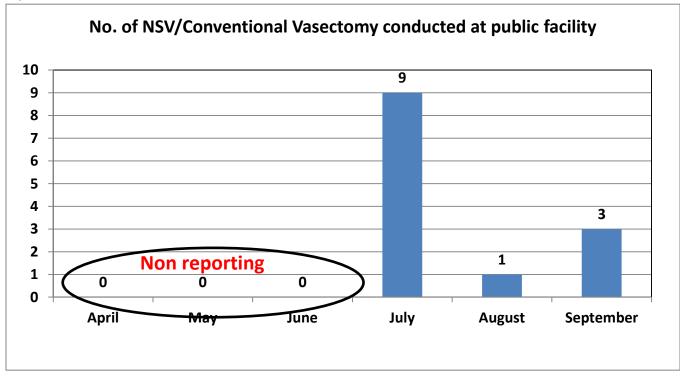
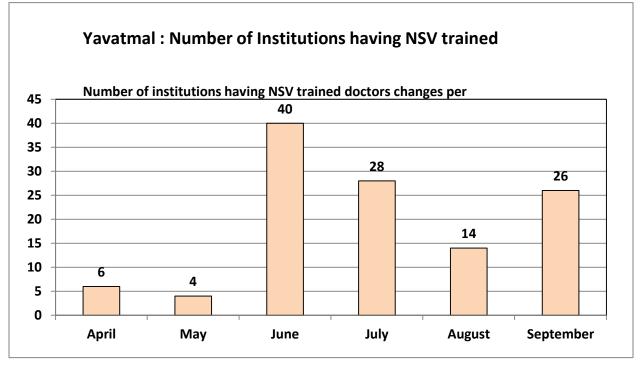


Figure 259: Total number of institutions having NSV trained doctors in Buldana, Maharashtra April-September 2016

Figure 260: Total number of institutions having NSV trained doctors in Yavatmal, Maharashtra April-September 2016



Eclampsia cases during delivery

Uniformly and in almost all the districts it was observed the number of eclampsia cases managed during delivery are either not reported or if reported is either under or over reported.

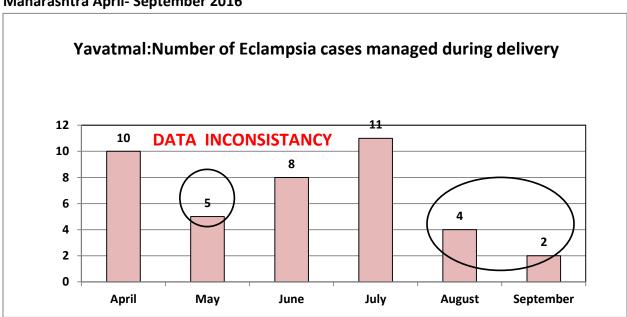
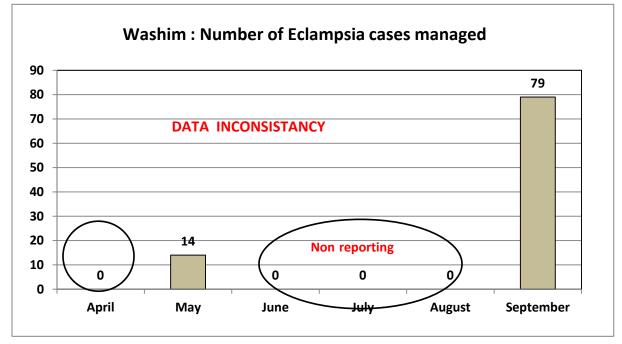
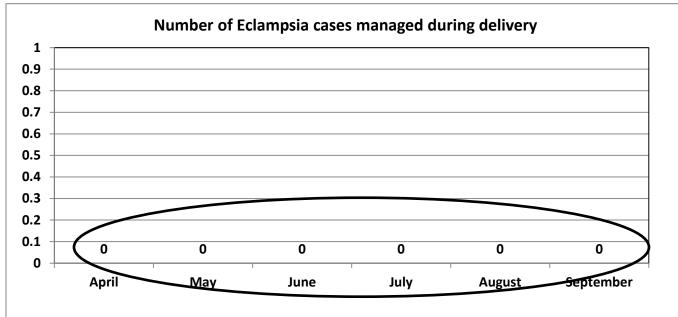


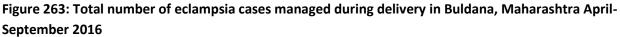
Figure 261: Total number of eclampsia cases managed during delivery in Yavatmal, Maharashtra April- September 2016

Figure 262: Total number of eclampsia cases managed during delivery in Washim, Maharashtra April- September 2016



In case of indicator 'Number of eclampsia cases managed ', data are inconsistent. In April, June, July August it is non reported and in MAY it is under reported.





Data for number eclampsia cases managed during delivery in not reported.

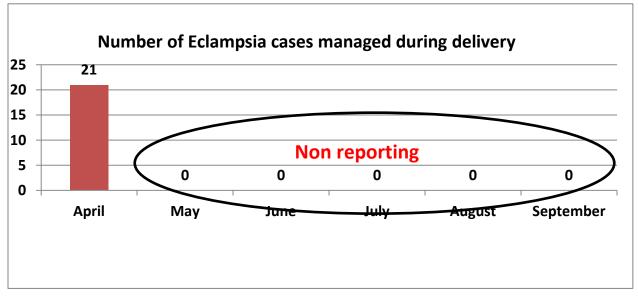
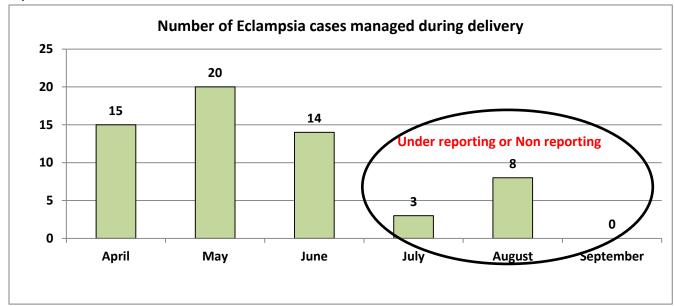
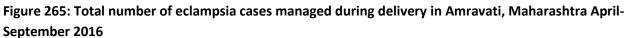


Figure 264: Total number of eclampsia cases managed during delivery in Akola, Maharashtra April-September 2016

Eclampsia cases are not reported for May, June, July, August and September.





In case of eclampsia case managed, data is under reported in July, August and September.