

Chapter VI
Maternal & Child Care, Cancer and
HIV/AIDS Care

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Adequacy of healthcare services relating to maternal & infant care, Cancer and HIV/AIDS Care

6.1 Maternal and Child Health

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period, whereas prenatal health refers to health from 22 completed weeks of gestation until seven completed days after birth. New born health is the babies' first month of life. A healthy start during the prenatal period influences infancy, childhood and adulthood⁸.

6.1.1 MMR and IMR (State level)

Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR)⁹ are important indicators of the quality of maternal and child care services available and form part of the most sensitive index of quality of maternal and new born care. The All India MMR during 2011-13 stood at 167 per 100,000 which declined to 130 in 2014-16 and was 113 in 2016-18. The All India IMR which stood at 40/1000 Live Births in 2013 fell to 33/1000 Live Births by 2017.

Trend of MMR and IMR in Manipur during 2014-19 was as follows:

Table 6.1: Trend of MMR and IMR of Manipur during 2014-19

Year	Number of reported			MMR (of one lakh live births)	IMR (of 1000 live births)
	Livebirths	Maternal deaths	Infant deaths		
2014-15	40,749	13	70	-	11
2015-16	39,640	6	93	-	09
2016-17	40,426	12	80	-	11
2017-18	38,577	23	141	-	12
2018-19	37,991	12	82	-	11
Total	1,97,383	66	466	-	-

Source: Sample Registration Survey (SRS), GoI.

It was observed that the IMR for the State of Manipur as calculated by the Sample Registration Survey (SRS) ranged between 9 to 12 during 2012-14 and 2016-18. The SRS, which is responsible for calculating IMR and MMR in India, has not calculated MMR separately for the State of Manipur as it requires prohibitively large sample size to provide robust estimates.

The Department stated (September 2020) that since the reported delivery per year of Manipur is less than one lakh, SRS does not cover the Maternal Mortality Rate (MMR) of the State. So the State does not have an MMR till date (September 2020).

⁸ According to World Health Organization (WHO).

⁹ Maternal Mortality Rate (MMR) is the number of deaths per 100,000 live births due to maternal causes. Infant Mortality Rate (IMR) is the number of deaths of infants (under one year) per 1,000 live births.

6.1.2 Infant deaths and maternal deaths in the test-checked DHs

The trend of infant deaths and maternal deaths of the test-checked DHs during 2014-19 was as given in table 6.2:

Table 6.2: Trend of infant deaths and maternal deaths in the test-checked DHs

Year	DH Bishnupur			DH Chandel			DH Churachandpur			DH Thoubal		
	Live births	Infant deaths	M/ deaths	Live birth	Infant death	M/ death	Live birth	Infant death	M/ death	Live birth	Infant death	M/ death
2014-15	833	-	-	153	-	-	2,756	6	2	1,216	-	-
2015-16	947	-	-	132	-	-	2,968	45	3	1,648	-	-
2016-17	792	-	-	119	-	-	2,831	31	1	2,424	-	-
2017-18	730	-	-	65	-	-	3,011	29	2	1,594	-	-
2018-19	648	-	-	184	-	-	2,580	19	0	1,573	-	-
Total	3,950	-	-	653	-	-	14,146	130	8	8,455	-	-

Source: HMIS.

M/death=Maternal death

From the Table above, it can be seen that only DH Churachandpur had maintained the records of infant and maternal deaths whereas, the other three DHs have not maintained such records.

6.1.3 Antenatal care

Ante-Natal Care (ANC) is the systemic supervision of women during pregnancy to monitor the progress of foetal growth and to ascertain the well-being of the mother and the foetus. ANC involves general and abdominal examination¹⁰ and laboratory investigations to monitor pregnancies, management of complications, such as Reproductive Tract Infection (RTI)/ Sexually Transmitted Infection (STI) and comprehensive abortion care. Early detection of complications during pregnancy through ANC check-up is important for preventing maternal mortality and morbidity. Quality ANC includes minimum of at least four ANCs including early registration, first ANC in first trimester along with physical and abdominal examinations, two doses of tetanus toxoid (TT) immunisation, etc.

Various guidelines for expectant mothers as published under the Ministry of Health and Family Welfare such as “Journeys of the First 1000 days of a Child”, “My safe Motherhood” have reiterated the importance of TT1 injection or 100 IFA tablets not only for the safety of the mother but for the physical and mental development of the child. TT1 injections are meant for the protection of expectant mothers and their babies from tetanus while IFA tablets are meant for protecting them against iron deficiency anaemia.

The total number of pregnant women (PW) in the State registered for ANC, number of PW who received at least three ANC check-ups, number of PW given TT1/Booster, etc. during 2014-19 was as follows:

¹⁰ Weight measure, blood pressure, respiratory rate, check for pallor and oedema, abdominal palpation for foetal growth, foetal lie and auscultation of Foetal Heart Sound (FHS) etc.

Table 6.3: Pregnant women registered and received ANC services

Year	Number of PW registered for ANC	No. of PW registered in the first trimester	No. of PWs received at least 3 ANC check-ups (per cent)	TT1 or Booster given to PWs (per cent)	100 IFA Tablets given to PWs
2014-15	79,090	46,742(59.1)	42,076 (53.2)	39,941 (50.5)	21,592 (27.3)
2015-16	70,899	44,808 (63.2)	42,540 (60.0)	37,790 (53.3)	25,524 (36.0)
2016-17	60,132	36,500 (60.7)	39,327 (65.4)	32,832 (54.6)	37,763 (62.8)
2017-18	55,807	34,098 (61.1)	26,453 (47.4)	37,056 (66.4)	25,616 (45.9)
2018-19	57,301	34,381 (60.0)	29,052 (50.7)	35,746 (62.4)	22,233 (38.8)
Total	3,23,229	196529 (60.8)	1,79,448 (55.5)	1,82,865 (56.6)	1,32,728 (41.0)

Source: HMIS.

- The total number of PW with at least three ANC check-ups declined from 53.2 per cent in 2014-15 to 50.07 per cent in 2018-19;
- The percentage of mothers registered in the first trimester hovered around 60 per cent during 2014-19;
- The number of TT1 or Booster dosages administered to pregnant women had increased from 50.5 per cent in 2014-15 to 66.4 per cent in 2017-18 but declined to 62.4 per cent in 2018-19.
- The number of PW given with IFA 100/180 Tablets showed a fluctuating trend, it improved from 27.3 per cent in 2014-15 to 62.8 per cent in 2016-17 but declined to 38.8 per cent in 2018-19.

It is thus imperative that the District Hospitals ensure that they are able to reach out to more expectant mothers through IEC activities or ANMs.

6.1.4 Institutional deliveries

During 2014-19, a total of 1.97 lakh deliveries were reported, of which, 1.60 lakh (81.2 per cent) were institutional deliveries (Public and Private), while 0.37 lakh (18.8 per cent) were home deliveries. Year-wise figures of institutional deliveries (ID) and home deliveries in the State are given in the table below:

Table 6.4: Institutional deliveries and delivery at home during 2014-19

Year	Details of Institutional deliveries (per cent)			Home deliveries (per cent)	Total reported deliveries
	Public Institutions	Private Institutions	Total		
2014-15	26,407(81.2)	6,114(18.8)	32,521(80.0)	8,175(20.0)	40,696
2015-16	26,120(82.1)	5,694(17.9)	31,814 (80.3)	7,798 (19.7)	39,612
2016-17	-*	-	33,184(81.8)	7,350(18.2)	40,534
2017-18	25,858(81.9)	5,715(18.1)	31,573 (81.9)	6,980 (18.1)	38,553
2018-19	25,347(81.0)	5,946(19.0)	31,293 (82.3)	6,735 (17.7)	38,028
Total	1,03,732	23,469	1,60,385(81.2)	37,038(18.8)	1,97,423

Source: HMIS.

*Data not available

- The percentage no. of deliveries at public facilities to total reported institutional deliveries¹¹ ranges from 81.2 per cent in 2014-15 to 81.0 per cent in 2018-19. This shows that around 20 per cent of expectant mothers have a preference to deliver at private hospitals.

¹¹ Data are not available for 2016-17.

On being pointed out the difference between total number of pregnant women registered for ANC (3,22,293) and total reported deliveries (1,97,423), the Department stated (September 2020) that there is 10 *per cent* wastage in the total ANC registration duplication in registration as some pregnant women registered in PHCs are also registered again when availing services in higher facilities such as CHCs, DHs or MCs.

The reply of the Department is not convincing as the difference in the two sets of data is more than 33 *per cent* which needs to be addressed. Further, in view of the reasons for data mismatch put forward, the Department needs to improve the monitoring mechanism and ensure proper reporting.

6.1.5 C-Section deliveries

Cesarean delivery, also called C-section, is a surgery to deliver a baby whereby the baby is taken out through the mother's abdomen. Most cesarean births result in healthy babies and mothers. However, C-section being a major surgery it carries risks. Healing also takes longer than normal delivery. The number of C-Section deliveries in the sampled hospitals is as shown in the table below:

Table 6.5: C-section deliveries during 2014-19

Year	DH Bishnupur	DH Chandel	DH Churachandpur	DH Thoubal	JNIMS	Total
2014-15	48	4	257	102	2194	2605
2015-16	97	0	328	322	2605	3352
2016-17	158	5	489	848	3159	4659
2017-18	128	0	607	422	6583	7740
2018-19	147	44	377	468	6137	7173
Total	578	53	2,058	2,162	20678	25,529

It is evident that the number of C-section deliveries is on constant rise in the sampled hospitals. The number of such deliveries has increased by 4568 (175.35 *per cent*) during 2014-15 to 2018-19 with the largest increase in JNIMS. This is a cause of concern as it puts lives of women and child at risk, besides pressure on the already burdened hospital infrastructure.

6.1.6 Post-natal care

Maternal mortality is a key indicator for maternal and child health. It can result from multiple reasons, such as medical, socio-economic and health system-related factors. Ensuring 48 hours stay in hospital during childbirth is an important component for identification and management of emergencies occurring during post-natal period and reducing MMR.

Table 6.6: No. Of post-partum check-ups within 14 days of delivery

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
No. of PWs (% of total IDs)	15,166(46.7)	16,665(52.4)	16,502(49.7)	19,816(62.8)	18,340(58.6)

Source: HMIS.

It is observed from the table above that the number of post-partum check-up showed a mixed trend during 2014-19. However, there was a decline in the number of check-ups in 2018-19 as compared to 2017-18, which is a cause for

concern. The percentage of post-partum check-ups to total institutional deliveries ranged from 46.7 *per cent* to 62.8 *per cent* during the five-year period.

6.1.7 New-born care services

DHs are to provide six types of New-born care services as prescribed by MNHT guidelines which included care and follow-up of new born babies as well as immunization services. However, audit found that among these services, the follow-up of high risk new-borns was not provided in DH Bishnupur and DH Chandel adversely impacting such cases.

During Exit Conference (July 2020), the Department acknowledged the audit finding and stated that the Department has been conducting six to seven months' training in JNIMS on new-born care services to address the issue. The Department also stated that follow-up of high risk new-borns in DH Bishnupur and DH Chandel are being carried out by the Accredited Social Health Activists (ASHAs) as part of the Home Based New-born Care programme under child health.

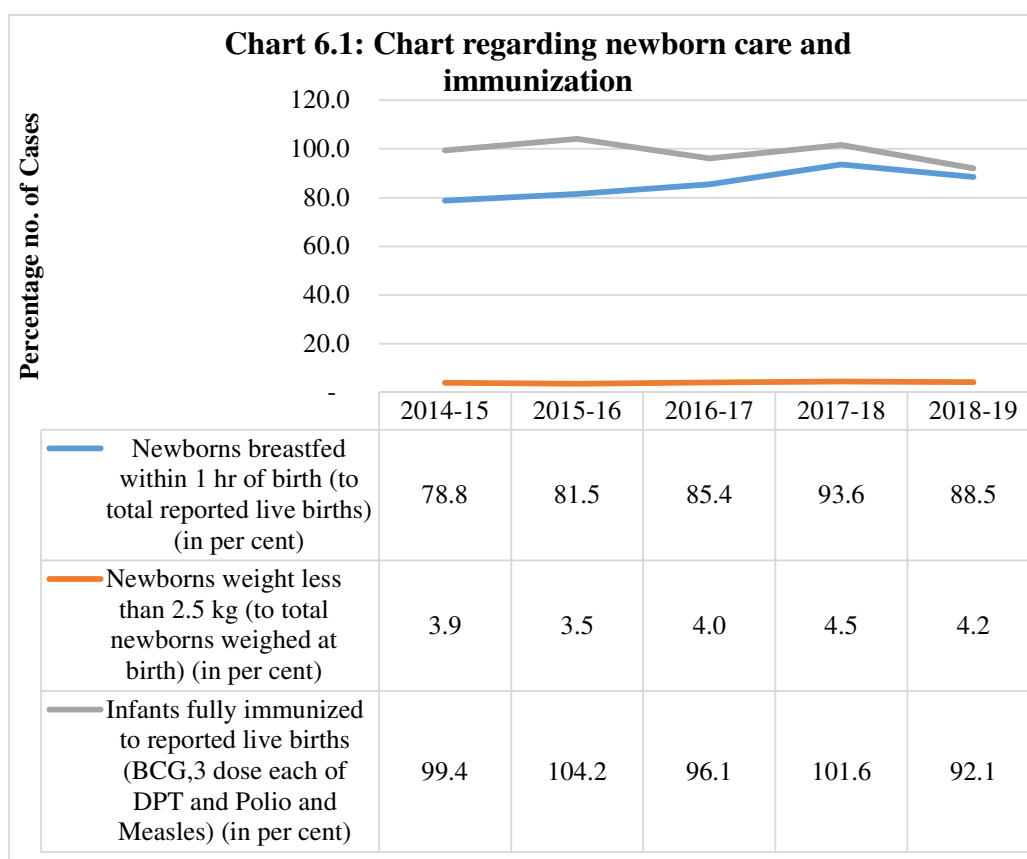
6.1.8 Immunisation of new-borns

As per Maternal New-born Health Toolkits 2013, four vaccines *viz.* (i) Oral Polio Vaccine 0-OPV0, (ii) Bacille Calmette Guerin-BCG, (iii) Hepatitis-B0 and (iv) Inj. Vitamin-K are to be administered on the day of birth of the child.

It is observed from the following chart that the percentage of New-borns weighing less than 2.5 kg to total new-borns weighed at birth has seen a slight increase in the State during 2014-15 to 2018-19. As mentioned in the preceding paragraphs, the distribution of IFA tablets if given due importance in the DHs could arrest the growing number of underweight babies.

On the other hand, a positive observation is that Infants fully immunised to reported live births (BCG, three dose each of DPT and Polio and Measles) have remained around 100 *per cent*¹² in the State.

¹² As per HMIS State fact sheets, high percentage of full immunisation reported in HMIS may be due to reporting of immunisation of a beneficiary by more than one facility.



6.1.9 Pregnancy outcomes

With a view to gauge the quality of maternity care provided by the hospitals, Audit test checked the pregnancy outcomes in terms of live births, still births¹³ and neonatal deaths pertaining to 2014-19, as discussed in the following paragraphs:

6.1.9.1 Still births

Still birth or intrauterine foetal death is an unfavourable pregnancy outcome and is defined as complete expulsion or extraction of baby from its mother where the foetus does not breathe or show any evidence of life, such as breathing of the heart or a cry or movement of the limbs¹⁴. World Health Organisation (WHO) defines Still Birth for international comparison as a baby born with absolutely no signs of life at or after 28 weeks of gestation. Still birth rate is a key indicator of quality of care during pregnancy and childbirth.

Audit observed that still birth rate of four test-checked DHs and JNIMS during 2014-19 was between 0.4 and 1.7 *per cent* as given in the following table:

¹³ Mismanaged ANC and delivery process convert a normal delivery into stillbirth.

¹⁴ As per GoI Operational guidelines for establishing sentinel stillbirth surveillance system 2016.

Table 6.7: Hospital wise Stillbirths during 2014-19

Name of DH	No. of deliveries	No. of live births (%)	Still births (%)
Thoubal	8,398	8,324(99.1)	74 (0.9)
Churachandpur	14,146	13,938(98.5)	208 (1.5)
Bishnupur	3,970	3,954(99.5)	16 (0.5)
Chandel	653	642(98.3)	11(1.7)
JNIMS	28,521	28,126 (98.6)	395(1.4)
Average per cent			1.2

Source: Records of District Hospitals.

The still birth rate of Churachandpur, Chandel and JNIMS with 1.5, 1.7 and 1.4 *per cent* were higher than the average of the five test-checked Hospitals (1.2 *per cent*) and thus required to be addressed by the DH administration.

6.1.10 Veracity of HMIS Data

NHM interventions have increased the demand for disaggregated data on population and health for use in both micro-level planning and program implementation. At the same time, understanding the synergy between availability of services, cost involved in provision of public health care services, expenditure and pattern of utilisation among various sections of population, including vulnerable sections of the society, are important aspects that influence decision making. A continuous flow of good quality information on inputs, outputs and outcome indicators facilitates monitoring of the objectives of NRHM.

A dedicated Health Management Information System (HMIS) web-portal has been established at the URL (<http://www.nrhm-hmis.nic.in>), where the users at the facility level can log on and enter the physical and financial performance data directly onto the portal. The HMIS portal facilitates data to be entered also.

Audit cross-checked three out of 355 parameters available at HMIS with those in the DH records for 2014-15 to 2018-19. The data comparison is shown in Table 6.8:

Table 6.8: HMIS Vs DH Records

Month/ Year	Total No. of births		Total No. of C-section deliveries		Total No. of still births/deaths	
	HMIS data	DH records	HMIS data	DH records	HMIS data	DH records
2014-15	9,204	9,913	2,003	2,605	25	101
2015-16	8,239	10,874	1,785	3,352	18	113
2016-17	10,873	11,833	2,346	4,659	24	147
2017-18	11,013	12,003	1,280	7,740	27	162
2018-19	10,590	11,065	1,160	7,173	42	181
Total	49,919	55,688	8,574	25,529	136	704
Difference	5,769		16,955		568	
Per cent	11.56		197.74		417.64	

Source: Records of Hospitals and HMIS.

The above table shows that there is a huge mismatch in the data entered into the HMIS with that of the records maintained by the DHs. Incorrect uploading of numbers in HMIS defeats the very purpose of a sound data management and reporting system. All efforts must be made to rectify the lapses so that HMIS can provide correct data to all stakeholders involved.

The Department stated (September 2020) that HMIS is a new concept and its use among DHs' staff under DHS is limited. The Department also stated that they will need to be oriented and will take some more time. However, action taken in this regard has not been intimated to audit.

6.1.11 Maternal and infant care

As per Maternal and Newborn Health Toolkit (MNHT) guidelines (January 2013), various aspects of the Maternity and Child Care services to be provided by DHs are discussed below.

6.1.11.1 Maternal health services

Under MNHT guidelines, DHs are expected to provide 26 different maternal health services (as shown in *Appendix I*).

Audit found that all the 26 required maternal healthcare services were being provided in all sample DHs. The only exception noticed in audit was that Blood bank/storage centre was not available in DH Chandel. As such, cold storage equipment was being utilised as temporary blood storage equipment.

During Exit Conference (July 2020), the Department acknowledged the audit finding and stated that the matter will be looked into.

6.1.11.2 Maternity Laboratory investigations

Under MNHT guidelines, DHs are expected to provide 10 types of Maternity Laboratory investigations such as blood tests, VSG, pap smear tests *etc.* However, audit found that among these tests, the Pap smear test was not available in DH Chandel and DH Bishnupur while Gram staining test was not available in DH Bishnupur and DH Thoubal. Lack of Pap smear test may hamper cervical cancer detection while lack of Gram staining test may hamper detection of bacteria.

During Exit Conference (July 2020), the Department acknowledged the audit finding and stated that the matter will be looked into.

6.1.11.3 Human resources required for maternal care

MNHT guidelines prescribe four types of Human resource *viz.* (i) Specialists including gynaecologist/ EmOC, anaesthetist/LSAS, paediatrician, (ii) Medical Officers, (iii) Staff nurse, cleaning staff, counsellor, lab technician, and (iv) certified Sonologist (on call after routine hours) for providing quality maternal care by DHs *etc.*

It was seen that DH Bishnupur, DH Chandel and DH Thoubal did not provide for services of a certified Sonologist on call after routine hours thereby maternal care using ultrasonography was adversely impacted.

During Exit Conference (July 2020), the Department acknowledged the audit finding and stated that action has already been taken up under LAQSHYA programme of the Ministry of Health & Family Welfare, GoI and these deficiencies would be taken care of very soon.

Despite action taken by the Department, human resource deficiencies in DHs continued.

6.1.11.4 Eclampsia Room equipment

Eclampsia during pregnancy is a life-threatening medical emergency. Pre-eclampsia is a condition that can develop during pregnancy characterised by high blood pressure (hypertension) and protein in the urine. If not properly recognised and managed, pre-eclampsia can progress to eclampsia, which is defined as the development of seizures in a woman with pre-eclampsia. Eclampsia is serious for both mother and baby and can even be fatal.

Under MNHT guidelines, DHs are expected to have 25 types of Eclampsia Room equipment such as labour costs, ACs, oxygen cylinders and standard medical equipment for deliveries. DHs were not fully equipped as shown below:

Table 6.9: Availability of Eclampsia Room equipment

Hospitals	Availability of Eclampsia Room equipment
DH Bishnupur	Air conditioners, Pulse oxymeter, Kelly's Pad, Nebuliser are not available in the Eclampsia room.
DH Chandel	Most of the equipment were not available (24)
DH Churachandpur	Two Kelly's Pad not available.
DH Thoubal	Foot Operated Suction Machine, Pulse oxymeter – with two adult probes and one neonatal probe were not available.

Source: Records of District Hospitals.

From the above table, it is observed that Eclampsia Room equipment was almost non-existent in DH Chandel, adversely affecting emergency treatment which can jeopardise both mother and child's life.

During Exit Conference (July 2020), the Department acknowledged the audit finding and stated that under LAQSHYA program of the Ministry of Health & Family Welfare, GoI about provision for 60 *per cent* of the required equipment pertaining to Maternal Health has already been approved.

6.1.12 Implementation of Janani Shishu Suraksha Karyakaram (JSSK) in DHs

Janani Shishu Suraksha Karyakaram (JSSK) was launched in June 2011 to eliminate out-of-pocket expenses for institutional delivery of pregnant women and treatment of sick new-born till 30 days after birth. The entitlements for pregnant women and sick new-born are:

- Free Transport from Home to Health Institutions and referrals
- Exemption from all kinds of User Charges
- Free drugs and consumables
- Free Essential Diagnostics (Blood, Urine tests and Ultra-sonography, etc.)
- Free and zero expense Delivery and Caesarean Section

- f) Free provision of Blood
- g) Free Diet during stay in the health institutions (up to three days for normal delivery & seven days for caesarean section)
- h) Drop Back from Institutions to home after 48 hours stay

Norms for provisioning of various maternal health services and resources, viz., human resources, drugs, consumables and equipment for different levels of hospitals have been specified in the Guidelines of Janani Shishu Suraksha Karyakram (JSSK), issued by the GoI for delivery of quality maternal health services. As per the Guidelines for JSSK, availability of drugs and consumables is to be ensured at the public health institutions (DHs). Also, blood banks are to be established and operationalised at district level.

6.1.12.1 Availability of Essential drugs and consumables under JSSK

With regard to availability of essential drugs and essential consumables, Audit found that many essential drugs and consumables, which should be available as per JSSK norms were not available in the District Hospitals at the time of audit (December 2019 to March 2020). Further, there were many instances of stock out of required drugs. Details are given in *Appendix II(A) to II(E)*. Summary of the status of non-availability of essential drugs and essential consumables are given below:

Table 6.10: Essential drugs and consumables for Intra-Partum Normal Delivery (during December 2019 to March 2020)

Name of District Hospital	Total no. of essential drugs	No. of available essential drugs	Total no. of essential consumables	No. of available essential consumables
Bishnupur	24	18	18	17
Chandel		10		13
Churachandpur		11		11
Thoubal		0		0

Source: Records of District Hospitals.

Out of a total of 24 essential drugs and 18 essential consumables for Intra-Partum Normal Delivery, the essential drug availability ranged from NIL to 18 while the essential consumables ranged from NIL to 17 in the sample DHs. There were no essential drugs and consumables available at DH Thoubal.

Table 6.11: Essential drugs and consumables for Intra-Partum C- Section Delivery (during December 2019 to March 2020)

Name of District Hospital	Total no. of essential drugs	No. of available essential drugs	Total no. of essential consumables	No. of available essential consumables
Bishnupur	16	11	22	19
Chandel		5		18
Churachandpur		13		0
Thoubal		0		0

Source: Records of District Hospitals.

Out of a total of 16 essential drugs and 22 essential consumables for Intra-Partum C- Section Delivery, the essential drug availability ranged from NIL to 13 while the essential consumables ranged from NIL to 19 in the DHs.

During Exit Conference (July 2020), the Department stated that a committee was formed wherein it was decided to provide kits for each type of delivery and this has been in implementation since 2017-18. Further, the NIL report in the case of Thoubal DH could be because of the non-availability only at the time of audit.

On comparing the above table with **Table 6.5** relating to C-Section deliveries, it is observed despite shortage of these essential C-section delivery drugs in all DHs, especially DH Thoubal, such deliveries were performed at the DHs. It is not known how DH Thoubal were asked to perform these surgeries in absence of required drugs and whether patients were asked to purchase these drugs.

Table 6.12: Essential drugs for New-born (during December 2019 to March 2020)

Name of District Hospital	Total no. of essential drugs	No. of available essential drugs
Bishnupur	14	9
Chandel		4
Churachandpur		6
Thoubal		0

Source: Records of District Hospitals.

Out of a total of 14 essential drugs for new-borns, the essential drug availability ranged from NIL to nine in the sample DHs.

As such, norms for providing drugs and consumables to women during delivery and to new-born as specified in the JSSK guidelines were not fully complied with in the sample DHs. It is also observed that all DHs especially DH Thoubal are unprepared in terms of availability of drugs and consumables to handle such deliveries. This had resulted in out of pocket expenses on the part of patient parties to the extent of such unavailable drugs and consumables. As such, this had adverse impact on the delivery of quality maternal health services in all the DHs.

During Exit Conference, the Department stated that 10 out of 14 essential drugs for new-borns are available (July 2020). The reply is not tenable as the records of the DHs showed that their availability ranged from NIL to nine in the sampled DHs.

Conclusion

IMR for the State of Manipur ranged between 9 to 12 during 2012-14 and 2016-18. Although the number of PWs registered in 2014-15 declined from 79,090 to 57,301 in 2018-19, there is an increase in the percentage of PW registered in the first trimester, PW getting TT1 or Booster dosages and IFA 100/180 tablets during this period. The percentage of PW opting for home deliveries declined from 20.0 *per cent* in 2014-15 to 17.7 *per cent* in 2018-19. The number of post-partum check-ups showed an increasing trend in the State during the period. Follow-up of high risk new-borns is not provided in DH

Bishnupur and DH Chandel. Still birth rate of four test-checked DHs and JNIMS during 2014-19 was between 0.4 and 1.7 per cent.

Huge mismatches were noticed in the figures uploaded in the HMIS with that of the actual records. None of the hospitals kept records of data being collected before uploading to HMIS. Eclampsia Room equipment is almost non-existent in DH Chandel.

Under JSSK, we noticed shortage of essential drugs and consumables for Intra-partum under Normal and C-section deliveries and for new-borns in all the sampled DHs while there was complete absence of drugs and consumables at DH Thoubal.

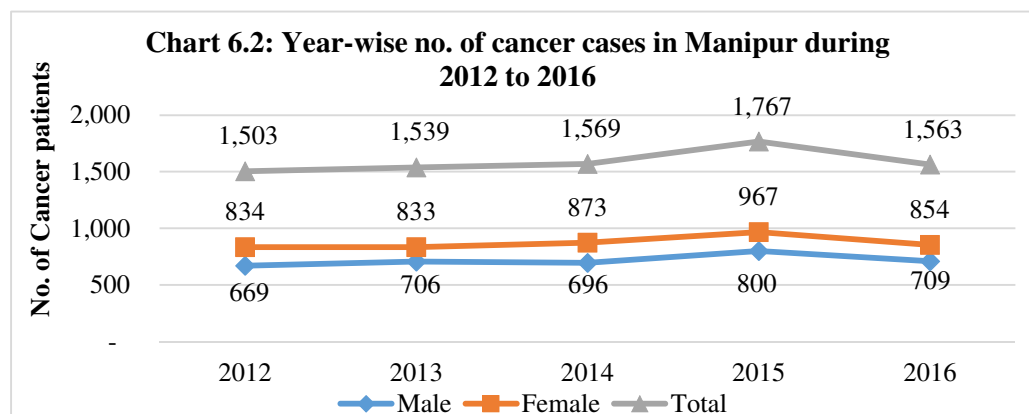
Recommendations

- i. *The State Government may take steps to further improve the facilities available for safe deliveries of babies at the DHs in line with the MNHT guidelines*
- ii. *The State Government may take up steps to provide actual figures in the HMIS and ensure that DH administration verifies the data before it is uploaded on HMIS.*

6.2 Cancer

6.2.1 Cancer indicators

The following charts depict the status of cases involving cancer in the State during 2012-16.

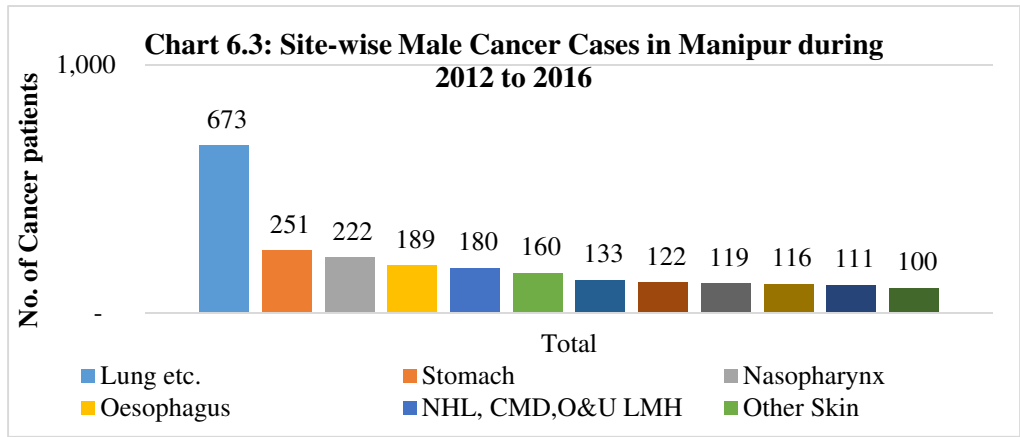


From the above chart, it is observed that the number of cancer cases detected every year in the State is approximately around 1,500 during the five-year period. It is also observed that there are more number of female cases than male cases every year.

Table 6.13: Incidence of common types of cancer in Manipur during 2012-16

Year	Lung	Stomach	Nasopharynx	Oesophagus	Breast	Cervical	Liver	Thyroid	Other	Total
2012-16	1295	405	343	189	682	417	133	341	1896	5701
<i>In per cent</i>	22.32	6.98	5.91	3.25	11.75	7.18	2.29	5.87	34.40	

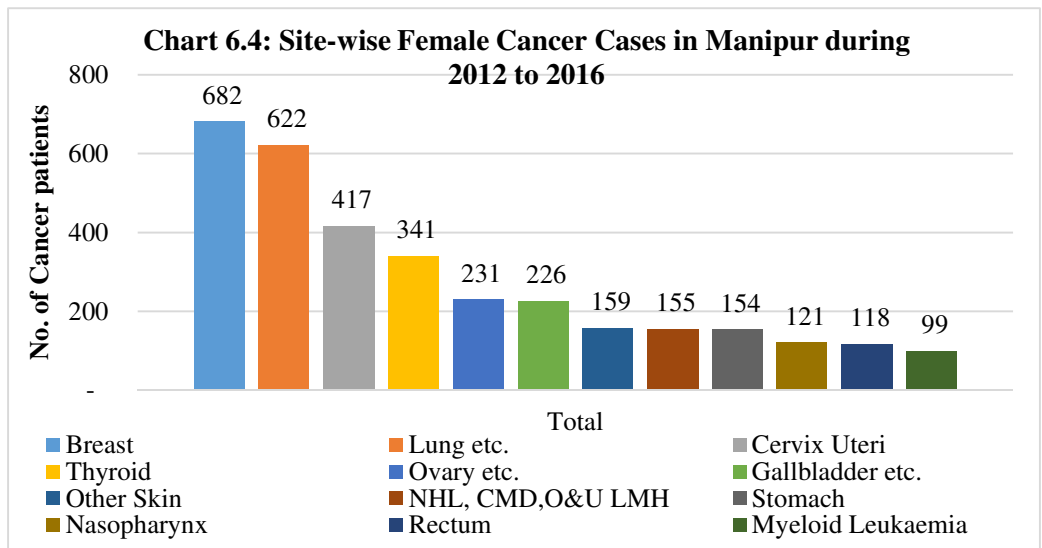
Source: Records of Population Based Cancer Registry, Imphal.



Source: Records of Population Based Cancer Registry, Imphal.

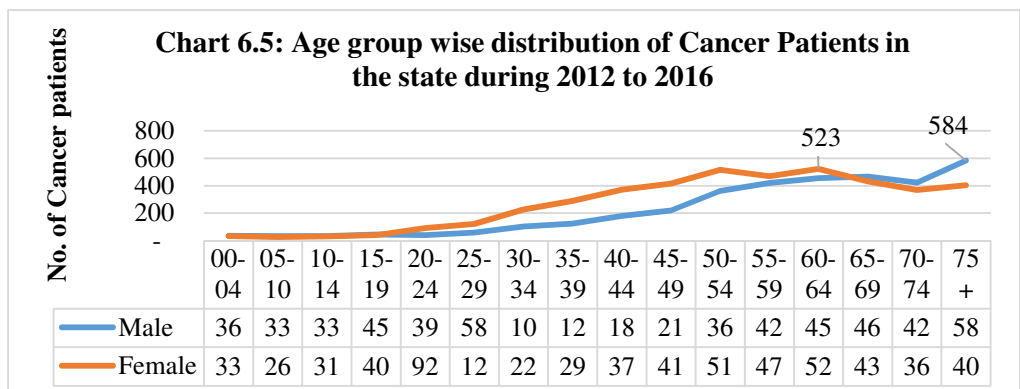
a) NHL means Non-Hodgkin lymphoma, b) CMD means Chronic myeloid leukemia, c) O&U means ill-defined sites in Digestive Organs, Respiratory System and Intrathoracic Organs, Retro peritoneum and Peritoneum, Endocrine Glands and Related Structures, Lymph Nodes, Unknown Primary Site; and d) LMH means Malignant neoplasm of lymphoid, hematopoietic and related tissue.

From the above chart, it is observed that the highest incidents of cancer in males is Lungs cancer followed by Stomach, Nasopharynx and Oesophagus and NHL, CMD, O&U LMH cancer.



Source: Records of Population Based Cancer Registry, Imphal.

In case of females, it is observed that the highest incidents of cancer are Breast cancer followed by Lungs, Cervix Uteri and Thyroid cancer.



Source: Records of Population Based Cancer Registry, Imphal.

From the above chart, it is observed that the highest incidents of cancer in males occur in the age group of 75+.years while in case of females, the highest incidents of cancer occur in the age group of 60-64 years.

6.2.2 Cancer Services

As per Operational Framework: Screening and Management of Common Cancers (August 2016), cancer screening services are to be provided in DHs. Here, three types of screenings are to be performed viz. mouth, breast and cervical cancer.

Audit found that three of the four sampled DHs had diagnosed cancer cases during 2014-15 to 2018-19 and details are given below. No Oncologist has been posted in DH Bishnupur and hence the DH did not diagnose any case during 2014-15 to 2018-19 while DH Churachandpur diagnosed 412 (95.81 per cent) of total 430 cases diagnosed in the sampled DHs.

Table 6.14: No. of cancer cases diagnosed during 2014-15 to 2018-19

Types of cancer	DH Bishnupur	DH Chandel	DH Churachandpur	DH Thoubal
Oral	-	-	13	-
Cervical	-	-	21	-
Breast	-	-	12	1
Others	-	3	366	14
Total	-	3	412	15

Source: Records of District Hospitals.

Furthermore, audit found that the following services and linkages are available for cancer treatment in the sample DHs.

Table 6.15: Services and linkages available for cancer treatment

DH name	Services available in DH	Linkage to nearest tertiary centres/ medical colleges for further treatment
Bishnupur	Only FNAC facility is available	Linked to RIMS Hospital.
Chandel	Only biopsy excision is available.	Linked to RIMS/ JNIMS Hospital.
Churachandpur	Oncology and Palliative OPD, day care chemotherapy centre	
Thoubal		

Source: Records of District Hospitals.

While only Fine Needle Aspiration Cytology (FNAC) facility and biopsy excision are available in DH Bishnupur and DH Chandel, Oncology and Palliative OPD and day-care chemotherapy centre are available in DH Churachandpur and DH Thoubal. Thus, the services provided to cancer patients are not uniform in the sample DHs. Also, in case of requiring further treatment, linkage to the nearest tertiary centres/ medical colleges is provided at RIMS or JNIMS Hospital in Imphal.

Further action in this regard should be encouraged by State Government since cancer patients are largely dependent on hospitals in Imphal. It would be challenging to access these hospitals in times of emergency or prolonged ill health, when it becomes difficult for patients to travel long distances.

During Exit Conference (July 2020), the Department acknowledged the audit finding and stated that the matter will be looked into. They also stated that cancer screening services had been made available in the DHs since 2018 under the Non-Communicable Disease programme.

Conclusion

The number of cancer cases detected in the State is 7,941 (Males: 3580, Females: 4361) during 2012-16. The number of female cases detected were more than male cases in all five years. The highest number of incidents is of lung, stomach and nasopharynx cancer. Three of the four sampled DHs (except Bishnupur) have been diagnosing cancer cases during 2014-15 to 2018-19 but the services provided to cancer patients are not uniform in the sample DHs and referrals to RIMS/JNIMS at Imphal was necessitated.

Recommendations

- i. *The State Government may take up steps to post dedicated oncologists at each DHs.*
- ii. *The State Government may take up steps to provide day-care chemotherapy centres at all DHs, so that pressures on referral hospitals for routine treatment of cancer are reduced.*

6.3 HIV/AIDS

6.3.1 Overview of HIV positive cases diagnosed in DHs during 2014-15 to 2018-19

The following is an overview of HIV positive cases diagnosed in the State and the sample DHs during 2014-15 to 2018-19.

Table 6.16: HIV positive cases diagnosed in DHs during 2014-15 to 2018-19

Incidents	State Total	Bishnu-pur	Chandel	Churac-handpur	Thou-bal
Total tested for HIV	6,45,238	21,214	11,692	30,022	29,318
Total detected with HIV	5,875	139	139	794	127
Pregnant Women tested for HIV	2,35,118	9,244	4,242	16,184	14,930
Pregnant Women detected with HIV	412	11	34	90	6
Injecting Drug Users tested for HIV	1,44,135	2,732	3613	8,937	4,063
Injecting Drug Users tested for HIV detected with HIV	177	5	12	53	17
Female Sex Workers tested for HIV	45,817	717	1,593	8,996	682
Female Sex Workers detected with HIV	47	0	3	3	1
Men having Sex with Men tested for HIV	8,749	1,658	2	342	554
Men having Sex with Men detected with HIV	8	2	0	4	0

Source: Records of Manipur State AIDS Control Society (MACS).

The State Society did well in testing for AIDS and the form test checked DHs were also found to be doing adequate testing for AIDS.

6.3.2 Non-availability of Doctors and Lab technicians and other difficulties

The Anti-Retroviral Treatment (ART) Centre, identifies the eligible persons with HIV/AIDS requiring ART through laboratory services, providing ART drugs free of cost to eligible persons, providing counselling services before and during treatment, educating persons and escorts on nutritional requirements, hygiene and measures to prevent transmission of infections.

Audit observed following regarding the non-availability of Doctors and Lab technicians and other difficulties faced by ART Centres.

Table 6.17: Non-availability of Doctors and Lab technicians at ART Centres

District Hospital	Treatments provided at ART Centres	Observation
Bishnupur		-
Chandel	1 st line treatment medicines provided.	No dedicated doctor provided to ART centre. Lab technician shared between DH Chandel and DH Thoubal. Some ART Medicines issued to DH are very old and sometimes a few months away from being expired at the time of issue to DH.
Thoubal		Lab technician shared between DH Chandel and DH Thoubal
Churach-andpur	1 st and 2 nd line treatment medicines provided.	-

Source: Records of District Hospitals.

The State society did well in testing for AIDS and the four test checked DHs were also found to doing adequate testing for AIDS.

Absence of dedicated doctor at ART centre is a serious cause of concern as doctors are required for clinical assessment of the patients. Shortage of dedicated lab technicians also affects the testing of samples and assessment of the disease.

During Exit Conference (July 2020), the Department acknowledged the audit finding and stated that that the matter will be looked into for recruitment of doctors and Lab technicians.

In their reply, MACS stated (July 2020) that due to acute shortage (173 vacant posts out of 496 sanctioned posts), one Lab technician is posted at both DH Chandel and DH Thoubal. Further, they also stated that approval has been received to fill up 86 posts. MACS stated that once these vacant posts are filled up, the issue will definitely be addressed. Action taken up in this regard has not been intimated to Audit till date (July 2020).

6.3.3 Scarcity of ART drugs

Government of India has been providing free ART since April 2004. In all DHs, 20 types of ART drugs were being supplied to the ART centres by the Manipur AIDS Control Society.

However, audit observed that the drug supply was deficient and inadequate due to which drugs could not be provided to the patients. Stock-out position of the ART drugs during 2014-15 till the date of audit (February 2020) is given in *Appendix III*.

It was thus observed that out of 20 types of drugs, there was shortage of 12 drugs during the period from 2014-15 till the date of audit (February 2020). The ART centres, did not receive uninterrupted supply of drugs.

It was stated by the ART centres that during shortage periods, ART drugs were rationed to the patients. However, such shortages would adversely affect the quality and quantity of services provided by ART centres.

During Exit Conference (July 2020), the Department stated that during shortages medicines are procured from the market. The reply is not tenable as such procurements, if any, was insufficient to meet the demands of the ART centres as pointed out in this observation.

In their reply, MACS stated (July 2020) that all the drugs are supplied centrally from NACO. They stated that due to certain logistics and technical issues, delivery of some of these medicines is delayed from the regional ware house of Central Medical Services Society, Guwahati resulting in low stock position for short period of time. In such situation of ART drug shortages, they stated that they manage by inter re-location of drug within the ART centres as well as interstate relocation and also by locally procuring these medicines to ensure that such shortage is taken care of.

Since stock out situations have been reported at the ART Centres in the DHs despite these measures taken, DH Administration needs to ensure availability of ART drugs at the treatment centres and this will adversely impact the treatment of people living with HIV.

Conclusion

The State had detected 5,875 cases with HIV during 2014-15 to 2018-19 out of which 1,199 cases were found in sampled DHs. No dedicated doctor was provided to ART center at DH Chandel. One Lab technician is shared between DH Chandel and DH Thoubal. Some ART Medicines issued to DH Chandel are very old and sometimes a few months away from being expired at the time of issue to DH. Out of 20 types of drugs being supplied to the ART centres by the Manipur AIDS Control Society, there were shortage of 12 drugs during the period from 2014-15 till February 2020. In spite of being requisitioned by the ART centres, uninterrupted supply of drugs was not ensured resulting in shortages, and ART drugs being rationed to the patients.

Recommendations

- i. *The State Government may take steps to post dedicated HIV/AIDS medical and paramedical staff at ART centres.*
- ii. *The State Government may take steps to provide adequate drugs at district ART Centres, by coordinating better with the Central depot for ART medicines supply.*



(JOHN K. SELLATE)

Principal Accountant General (Audit), Manipur

**Imphal
The 15 March 2021**

Countersigned



**(GIRISH CHANDRA MURMU)
Comptroller and Auditor General of India**

**New Delhi
The 30 March 2021**