

## **CHAPTER-6**

# **MATERNAL AND CHILD CARE, PREVALENCE OF CANCER AND HIV/AIDS IN THE STATE**



## CHAPTER 6: MATERNAL AND CHILD CARE, PREVALENCE OF CANCER AND HIV/AIDS IN THE STATE

### 6. Adequacy of healthcare services relating to maternal and infant care, cancer and HIV/AIDS and consequent improvement in patient outcomes

#### 6.1 Maternal & Child Health

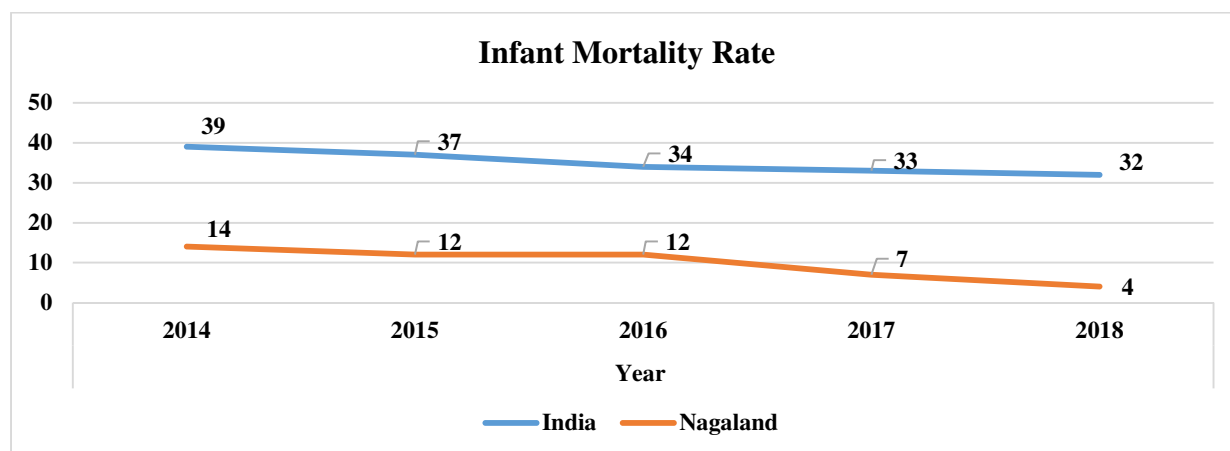
Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period, whereas prenatal health refers to health from 22 completed weeks of gestation until seven completed days after birth. New born health is the babies first month of life. A healthy start during the prenatal period influences infancy, childhood and adulthood<sup>1</sup>.

In Maternal and Child Health, the Anganwadi Centres are supposed to function in coordination with Health Department. It is part of the Indian Public Health Care System. Basic health care activities include contraceptive counselling and supply, nutrition education and supplementation and pre-school activities. The centres are also used for oral rehydration source, basic medicines and child care. They were started as part of the Integrated Child Development Service Programme to combat child hunger and malnutrition. However, in Nagaland, Anganwadi Centres (AWC) are functioning independently and coordination activity with Health Department is limited to organising Village Health Nutrition Day once every month in the village. AWC is identified as the hub for service provision in Reproductive Child Health programme under NHM and also act as a platform for inter-sectoral convergence.

##### 6.1.1 Infant Mortality

The Infant Mortality Rate (IMR) is often regarded as a barometer for overall welfare of a community or a country. As such, it has been used as an outcome to be explained or as an explanatory variable to capture the socio economic development of a country. The IMR of the entire State is shown in Chart 6.1 below:

Chart 6.1 Comparison of Infant Mortality Rate with National Average



Source: SRS Bulletin of respective years (Registrar General, India)

<sup>1</sup> According to World Health Organisation (WHO)

It can be seen from above that Infant Mortality Rate (IMR) was lower than the national figures. In Nagaland, IMR showed a declining trend from 14 in 2014 to 4 in 2018. The decline was more in urban areas as compared to the rural areas. In urban areas it decreased from 17 (2014) to 3 (2018) and in rural areas it decreased from 13 (2014) to 5 (2018). The overall IMR during the period 2014-18, was higher in urban areas as compared to the rural areas.

### 6.1.2 Manpower and infrastructure on maternal care

Audit observed that there was shortage of Gynaecologists in the following test checked DHs as detailed in **Table 6.1**.

**Table 6.1: Shortage of Gynaecologists in the test checked DHs**

Name of Hospital	Approved Bed strength	Functional Bed strength	Requirement of Gynaecologist as per IPHS	Gynaecologist actually available		Shortage	
				April 2014	March 2019	April 2014	March 2019
DH Phek	75	68	2	1	1	1	1
DH Wokha	50	50	2	2	1	0	1
DH Tuensang	100	100	2	1	2	1	Nil
DH Kohima	300	252	4	2	5	2	Nil

*Source: Department and Hospital Records*

Position of availability of Specialist Medical Officers (Gynaecologist) has improved in DHs Kohima and Tuensang while there was shortage in DH Phek.

Department did not comment (November 2020) on shortage of Specialist Medical Officers (Gynaecologist) in the two DHs.

### 6.1.3 Antenatal Care

Government of India, adopted (January 2013) a strategy of expanding the scope of Reproductive and Child Health (RCH) to Reproductive, Maternal, New-born, Child plus Adolescent Health (RMNCH+A). The RMNCH+A guidelines identified delivery of antenatal care package and tracking of high-risk pregnancies as a priority intervention to monitor the progress of foetal growth and to ascertain the well-being of the mother.

The Framework for Implementation of NHM issued by GOI as well as IPHS norms stipulate the first antenatal check-up within the first 12 weeks of pregnancy and three check-ups thereafter. The framework also prescribed Iron and Folic Acid (IFA) supplementation of 100 milligram of elemental iron and 500 microgram of folic acid daily for 100 days during pregnancy, followed by same dose for 100 days in post-partum period.

The position of ANC registration and services provided in the State during 2014-19 are as detailed below in **Table 6.2**.

**Table 6.2: The position of ANC registration and services provided in the State during 2014-19**

Year	Total pregnant women registered for ANC	Registered within first trimester (12 weeks)	Received three ANC check-ups during pregnancy	Not received three* ANC check-ups	Pregnant women who received TT1	Pregnant women who received TT2	Pregnant women who received 100 IFA tablets
2014-15	44588	20865	14951	29637	20792	16232	15081
2015-16	48846	17500	15731	33115	19890	15106	14131
2016-17	47166	14512	15299	31867	19173	14803	11913
2017-18	37174	11039	6896	30278	17711	11721	3405
2018-19	37402	10457	8151	29251	17897	11144	5843
<b>Total</b>	<b>215176</b>	<b>74373</b>	<b>61028</b>	<b>154148</b>	<b>95463</b>	<b>69006</b>	<b>50373</b>

*\*2017-18 onwards pregnant women are supposed to get four or more ANC check-ups*

*Source: Departmental figures*

It can be seen from the table above that, the number of pregnant mothers who registered within the first trimester is only 34.56 *per cent* of the total registered pregnant mothers. The number of mothers who received three or more ANC check-ups was 28.36 *per cent* of the total registered pregnant mothers. Further, it is also seen that the total number of registered mothers showed a decreasing trend in the State from 2016-17 onwards. Over the years, pregnant women who received three ANC check-ups during pregnancy had reduced to less than 50 *per cent* with reference to 2016-17. Out of registered pregnant women only 23.41 *per cent* received 100 IFA tablets.

Audit observed that the State Government was not able to keep track of all pregnant women who were registered for ANC to ensure that all pregnant mothers received the stipulated quantum of ANC, timely check-ups, TT and IFA tablets at intervals.

Department did not offer any comment (November 2020).

#### **6.1.4 Post-natal care**

##### **6.1.4.1 Discharge within 48 hours of delivery**

As per JSSK Guidelines, the first 48 hours after delivery are vital for detecting any complications and its immediate management. Care of mother and baby (including immunisation) are essential immediately after delivery and at least upto 48 hours. During this period, mother may be advised for extra calories, fluids and adequate rest which is required for well-being of baby and herself. The position of institutional deliveries and number of women discharged within 48 hours in four test checked DHs is shown in table 6.3 below:

**Table 6.3: Number of women discharged within 48 hours of delivery in the selected DHs**

Year	Kohima			Phek			Tuensang			Wokha		
	ID	Discharge within 48 hrs	%	ID	Discharge within 48 hrs	%	ID	Discharge within 48 hrs	%	ID	Discharge within 48 hrs	%
2014-15	1902	651	34.23	166	146	87.95	545	503	92.29	421	411	97.62
2015-16	1871	1058	56.55	160	142	88.75	494	445	90.08	329	263	79.94
2016-17	1913	824	43.07	156	123	78.85	496	461	92.94	278	262	94.24
2017-18	1854	1224	66.02	135	101	74.81	507	453	89.35	294	294	100.00
2018-19	1835	1083	59.02	132	120	90.91	596	530	88.93	288	288	100.00
<b>Total</b>	<b>9375</b>	<b>4840</b>		<b>749</b>	<b>632</b>		<b>2638</b>	<b>2392</b>		<b>1610</b>	<b>1518</b>	

Source: HMIS data of test-checked districts

It can be seen from the table above that as many as 9382 (65 per cent) out of the 14,372 women who delivered at the DHs were discharged within 48 hours. The percentage of women discharged within 48 hours was alarming in DH Phek (84 per cent), Tuensang (91 per cent) and Wokha (94 per cent).

Department did not offer any comment (November 2020).

### 6.1.5 Status of still birth rate

The still birth rate is a key indicator of quality of care during pregnancy and childbirth. The Still births status in the test checked DHs is given in table below:

**Table 6.4: Still birth status in the test checked DHs**

Year	DH Kohima			DH Phek			DH Tuensang			DH Wokha		
	Total No. of deliveries	Total No. of still birth	% of still birth to deliveries	Total No. of deliveries	Total No. of still birth	% of still birth to deliveries	Total No. of deliveries	Total No. of still birth	% of still birth to deliveries	Total No. of deliveries	Total number of still birth	% of still birth to deliveries
2014-15	1902	34	1.79	166	2	1.20	545	23	4.22	421	0	0.00
2015-16	1871	22	1.18	160	2	1.25	494	17	3.44	329	1	0.30
2016-17	1913	31	1.62	156	0	0.00	496	21	4.23	278	0	0.00
2017-18	1854	35	1.89	135	2	1.48	507	23	4.54	294	6	2.04
2018-19	1835	24	1.31	132	2	1.52	596	18	3.02	288	7	2.43

Source: HMIS data

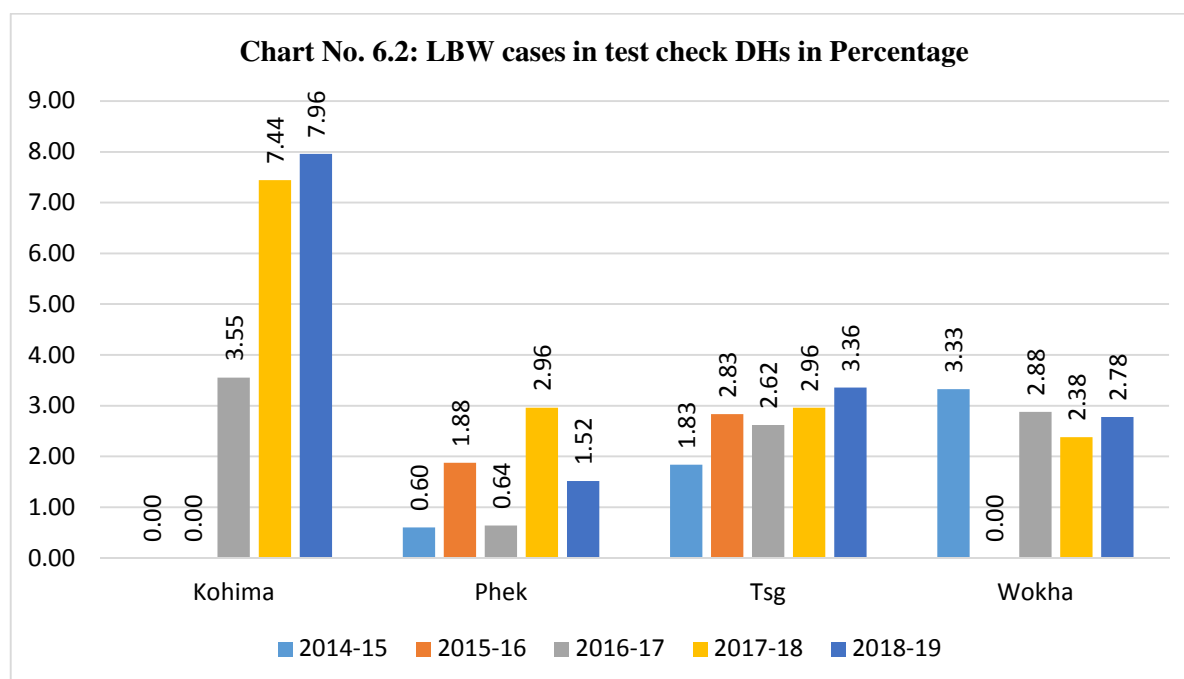
As can be seen from table above, the still birth rate had declined in Kohima but had increased in Phek. The rate of still birth was highest in DH Tuensang. The shortage of doctors (41.67 per cent), nurses (13.34 per cent), paramedical staff (86.05 per cent) and equipment (83.92 per cent) in the DH Tuensang, has a bearing on this issue and the DH had not provided information on steps taken to review this comparatively high still birth rate in the district.

Department did not offer any comment to this audit observation (November 2020).

### 6.1.6 Low Birth Weight (LBW) babies

World Health Organisation (WHO) defined Low Birth Weight (LBW) babies as such infants with a birth weight of 2,499 grams or less. Premature birth and Intrauterine growth restriction (IUGR) are the main causes of LBW.

Audit observed that percentage of low birth babies ranged from zero to 7.96 per cent in test checked DHs.



As can be seen from the chart above, new-born with LBW showed an increasing trend during the last five years in DH Kohima whereas in other three DHs it showed a mixed trend.

### 6.1.7 Deliveries through Caesarean sections

C-section, or caesarean delivery, is the use of surgery to deliver babies. NHM Guidelines on “Engaging General Surgeons for Performing Caesarean Sections and Managing Obstetric Complications” stated that around 8 to 10 per cent of total delivery cases require C-Section.

Status of C-Section deliveries in test checked DHs is shown in **Table 6.5**.

**Table 6.5: C-Section deliveries in test checked DHs**

Year	DH Kohima			DH Phek			DH Tuensang			DH Wokha		
	ID <sup>2</sup>	C-Section <sup>3</sup>	% of C-Section <sup>4</sup>	ID	C-Section	% of C-Section	ID	C-Section	% of C-Section	ID	C-Section	% of C-Section
2014-15	1902	353	18.56	166	25	15.06	545	52	9.54	421	87	20.67
2015-16	1871	325	17.37	160	30	18.75	494	49	9.92	329	60	18.24
2016-17	1913	319	16.68	156	20	12.82	496	35	7.06	278	38	13.67
2017-18	1854	354	19.09	135	20	14.81	507	26	5.13	294	41	13.95
2018-19	1835	323	17.60	132	6	4.55	596	66	11.07	288	36	12.50
<b>Total</b>	<b>9375</b>	<b>1674</b>	<b>17.86</b>	<b>749</b>	<b>101</b>	<b>13.48</b>	<b>2638</b>	<b>228</b>	<b>8.64</b>	<b>1610</b>	<b>262</b>	<b>16.27</b>

Source: HMIS data

<sup>2</sup> ID-Institutional deliveries

<sup>3</sup> Caesarean deliveries

<sup>4</sup> Per cent of Caesarean deliveries

As can be seen from table above, C-Sections in all DHs were above 10 *per cent* except DH Tuensang (2017-18) and DH Phek (2018-19). Though, average C-Section in DHs ranged between 8.64 *per cent* and 17.86 *per cent*, DH Tuensang and DH Wokha were conducting C-Section deliveries without the services of an anaesthesiologist. The percentage of C-Section deliveries were highest in DH Kohima, due to the availability of sufficient manpower (doctors, staff nurse, technical services) in the DH.

Further, examination of records in test checked CHC Viswema, revealed that, out of 120 institutional deliveries during the five years, there was no C-section performed. Lack of C-section services in CHCs were primarily due to shortage of essential resources, including qualified specialist (Gynaecologist), anaesthesiologist, qualified staff nurse, major operation theatre etc.

On Conducting of C-Section deliveries without the services of an anaesthesiologist, Department replied (October 2020) during exit conference that a gynaecologist can perform C-Section after administering spinal anaesthesia.

### **6.1.8 Veracity of HMIS data**

In order to ascertain the correctness of data/ information submitted to the Ministry of Health & Family Welfare, Government of India, Audit examined records of two parameters [Institutional Deliveries (ID) and In-patient Department (IPD)] for the period 2014-19 in two test checked DHs. It was observed that the data reported to the Ministry in respect of the two selected parameters during the five years varied with that of the actual data recorded in the respective DHs. The details are given in the following **Table 6.6:**

**Table 6.6: Comparison of HMIS data with records of DH Wokha and Phek**

Month/ Year	Total No. ID in Wokha		Total No. ID in Phek		Total No. IPD in Wokha		Total No. IPD in Phek	
	HMIS data	DH records	HMIS data	DH records	HMIS data	DH records	HMIS data	DH records
2014-15	421	206	166	169	2682	3105	1107	533
2015-16	329	388	160	157	1804	2486	1145	451
2016-17	278	252	156	145	1941	2386	2504	516
2017-18	294	295	135	138	1789	2307	5540	545
2018-19	288	268	132	121	1689	1769	4279	693
<b>Total</b>	<b>1610</b>	<b>1409</b>	<b>749</b>	<b>730</b>	<b>9905</b>	<b>12053</b>	<b>14575</b>	<b>2738</b>
Difference	201		19		-2148		11837	
Percentage	14.27		2.60		17.82		432.32	

*Source: Records of DH Wokha and Phek and HMIS data*

As can be seen from the Table above, the Hospital Management Information System (HMIS) data for ID registered for ANC was inflated by 14.27 *per cent* and 2.6 *per cent* in DH Wokha and DH Phek respectively. In the case of IPD admissions, HMIS data was understated by 2148 (17.82 *per cent*). However, in the case of DH Phek, it was inflated by 11837 (432.32 *per cent*).

During exit conference (October 2020), Principal Secretary, H & FW stated that Department had prioritised 11 DHs for installation of “Mera Hospital” software for effective patient management system and till such installation, one DEO would be posted in each DH under



NHM who would collect information from DH and pass to CMO of the district. The reply did not elaborate on the data discrepancy.

### 6.1.9 Coverage of ANC under Pradhan Mantri Surakshit Matritva Abhiyan

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) was launched (July 2016) by the Ministry of Health & Family Welfare (MoHFW), Government of India. The program aims to provide assured, comprehensive and quality antenatal care, free of cost, universally to all pregnant women on the 9<sup>th</sup> of every month.

A minimum package of antenatal care services (including investigations and drugs) would be provided to the beneficiaries at identified public health facilities (PHCs/ CHCs, DHs/ urban health facilities etc.) in both urban and rural areas in addition to the routine ANC at the health facility/ outreach. It was launched in Nagaland during November 2016.

Number of pregnant women given ANC from November 2016 to March 2019 in test checked districts were as shown in **Table 6.7**.

**Table 6.7: Number of pregnant women given ANC from November 2016 to March 2019 in test checked districts**

Year	Kohima		Wokha		Phek		Tuensang	
	Target for the year	No. of ANC given	Target for the year	No. of ANC given	Target for the year	No. of ANC given	Target for the year	No. of ANC given
2016-17	4794	41 (0.85%)	2683	29 (1.08%)	2235	54 (2.41%)	3175	3 (0.09%)
2017-18	4818	302 (6.26%)	2966	171 (5.76%)	2913	125 (4.29%)	3511	105 (2.99%)
2018-19	4024	Not reported	2477	4 (0.16%)	2433	58 (2.38%)	2933	74 (2.52%)

*Source: As furnished by the Department*

As can be seen from above, achievement against the target for ANC was very low in the selected districts and ranged from 0.09 *per cent* to 6.26 *per cent*, which indicated that comprehensive and quality antenatal care as envisaged under the programme, could not be given to pregnant women.

Department replied (October 2020) that the achievement was low as only 36 health facilities were implementing PMSMA out of 615 health units across 11 districts.

The outreach of PMSMA may be increased by implementing the scheme in more number of health units.

### 6.1.10 District Early Intervention Centre (DEIC)

Government of India launched (February 2013) the Rashtriya Bal Swasthya Karyakram (RBSK) targeted to deliver Child Health Screening and Early Intervention Services under NHM. The RBSK also envisaged setting up of District Early Intervention Centres (DEIC) at the DH level across the country. The purpose of DEIC is to provide referral support to children detected with health conditions during health screening, primarily for children up to 6 years of

age group. DEICs are supposed to deliver 16 types<sup>5</sup> of services. A team consisting of one Paediatrician, one Medical officer, one Dentist, two Staff Nurses, Paramedics and visiting specialists will be engaged to provide services.

Government of India approved establishment of five<sup>6</sup> DEICs (ROP 2017-18) and approved ₹ 144.63 lakh (ROP 2017-18) for procurement of equipment for DEIC. Equipment for ₹ 119.45 lakh was procured (February 2019) by NHM which was issued (February to August 2019) to five DEICs. On further scrutiny, it was observed that except DEIC Kohima, other four DEIC were not yet established and DEIC Kohima commenced its function from April 2019 whereby 119 patients had utilised the services available in DEIC Kohima (July 2019) so far.



**Photograph 6.1: Non-functional dental x-ray equipment in DH-Kohima**

Audit noticed that Dental X-Ray set received (02/19) in DEIC unit of DH Kohima could not be utilised due to non-receipt of time range. Similarly, Indirect Ophthalmoscope received (February 2020) also could not be used due to non-supply of lens (Specification not stated to audit). Tuning fork (one number) also was not supplied. BERA with ABR both insert phone and head phone received on 20/02/2019 could not be put to use due to problem in calibration.

Thus, the objective of DEIC to intervene in the early stages of child health could not be achieved in the three test-checked districts and in Kohima, its impact was minimum.

Department in reply (October 2020) stated that initially five DEICs were approved for establishment, subsequently one DEIC could be made functional due to shortage of specialist doctors.

Reply is not acceptable as the Department was well aware that there were shortage of specialist doctors in the State but decided to procure DEIC equipment which resulted in blockade of Government money.

### **6.1.11 Conclusion**

Government of India had initiated many focussed interventions under NHM like ANC, JSY, JSSK, Labour Room Quality Improvement Initiative, Capacity building trainings in Skilled Birth Attendance, Emergency Obstetric Care, Navjat Shishu Suraksha Karyakram, etc. along with establishment of First Referral Units (FRUs) to promote enhanced access to critical maternal, new-born and child health services in health institutions. Main objective of these

<sup>5</sup> Medical services, Dental services, Occupational therapy & Physical therapy, Psychological services, Cognition services, Audiology, Speech-language pathology, Vision services, Health services, Lab services, Nutrition services, Social support services, Psycho-social services, Transportation and related costs, Service coordination – (DEIC Manager)

<sup>6</sup> District Hospitals of Kohima, Mokokchung, Tuensang, Mon and Dimapur

programmes were to reduce the IMR and MMR. Though infant death was less in Nagaland, but still birth rate continued to be high in Tuensang and Phek districts. There were shortage of Gynaecologists in DH Phek and DH Wokha. Audit observed that the number of women receiving ANC was decreasing over the years and had reduced to less than 50 *per cent* over the years in the test checked DHs. This indicated that State Government was not able to track all pregnant women who were registered for ANC to ensure that all pregnant mothers received the stipulated quantum of ANC. Deficiencies were observed in providing post-natal care as 65 *per cent* women who delivered at the DHs were discharged within 48 hours which was against the norms of JSSK. DEIC could be made operational only in one district, for want of specialist doctors. The HMIS data of the State provided to GoI, was not reliable as it differed significantly with the DH records.

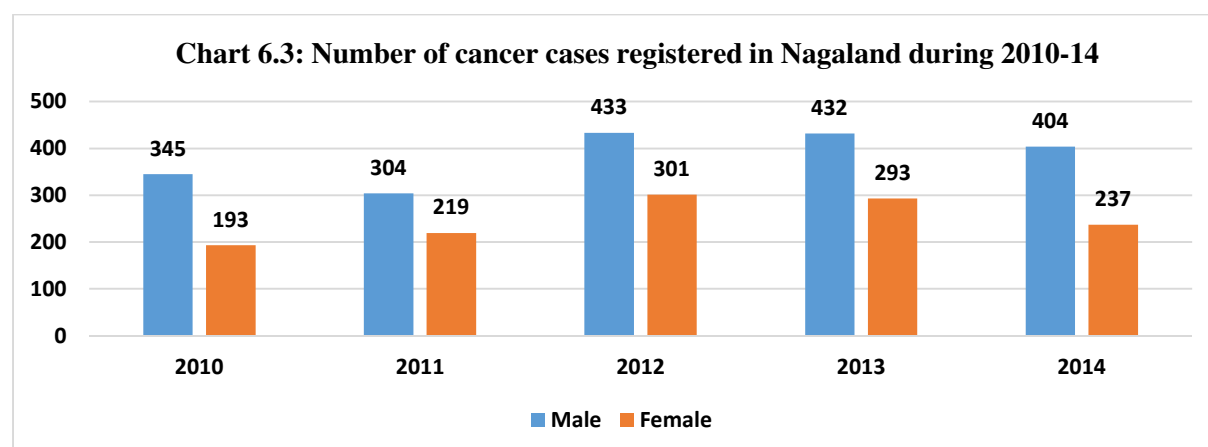
### 6.1.12 Recommendation

- (i) *The Department may strengthen the ante-natal care by proper monitoring and follow up of all pregnant women in collaboration with ASHA workers so that the mandated check-ups, including immunisation and IFA tablets are availed by all pregnant women.*
- (ii) *ANC should be strengthened in all HUs to achieve the objective of mother and child care.*
- (iii) *DHs may review still birth rates critically for corrective action.*
- (iv) *Sanctioned DEICs may be made functional as per the norms prescribed by GoI.*
- (v) *HMIS data of the State may be made reliable with adequate cross checks by the DH administration and at the State level.*

## 6.2 Cancer

### 6.2.1 National Cancer Registry Programme

National Cancer Registry programme (NCRP) was commenced (December 1981) by the Indian Council of Medical Research (ICMR) with a network of cancer registries across the country. The main objective of the programme was to generate a reliable data in magnitude and patterns of Cancer. Population based Cancer Registry was established in Nagaland in June 2009 with its office at DH Kohima in the Department of Pathology. As per the report of Population Based Cancer Registry, Nagaland, total number of cancer cases registered for the years 2010-14 was 3161 where 60.68 *per cent* were male and 39.32 *per cent* were female.



Report of the Population Based Cancer Registry Nagaland (2015-19) is yet to be published (March 2020).

### **6.2.2 Cancer cases diagnosed in DH Kohima**

As per information furnished to audit by the DH Kohima, 1297 cases were diagnosed as cancer during 2014-19. Audit observed that number of cancer cases diagnosed increased from 188 (2014-15) to 335 (2018-19) which showed a growth of 78.19 *per cent* during last five years. Total number of patients screened and gender wise bifurcation was not furnished to audit.

### **6.2.3 Establishment of Non-Communicable Diseases (NCD) clinics**

The Cancer Control Programme in the State was being implemented mainly through Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke' (NPCDCS) under the National Health Mission.

The focus of NPCDCS is promotion of healthy life styles, early diagnosis and management of diabetes, hypertension, cardiovascular diseases & common cancers e.g. cervix cancer, breast cancer & oral cancer. NPCDCS was initiated in the State during September 2014. Under NPCDCS, NCD Clinics are to be set up at District and CHC levels, to provide services for early diagnosis, treatment and follow-up for common NCDs.

At present the programme is functioning with one State NCD cell, NCD clinics in all DHs and five<sup>7</sup> CHC NCD clinics.

In the case of cancer, number of patients newly diagnosed, put on treatment, treatment follow-up and referral made in sampled DHs during 2018-19 were as shown in **Table 6.8**.

**Table 6.8: Number of patients newly diagnosed, put on treatment, treatment follow-up and referral made in sampled DHs in respect of Cancer during 2018-19**

Name of DH	Type of NCD	No. of patients attended in NCD	Newly diagnosed with Cancer.	No. of newly diagnosed Put on treatment	No. of persons on treatment follow-up	Referred
Tuensang	Cancer	3924	9	8	0	0
Phek		583	1	1	0	0
Kohima		3971	62	62	0	0
Wokha		8234	8	3	0	0

*Source: Monthly Report (Form 5A) of respective NCD Cell*

As can be seen from the above table, though newly diagnosed patients were put on treatment, there was absence of follow-up and referrals.

There was no community screening as per the prescribed age and periodicity during the last five years. Two programmes were conducted during 2014-19 for cancer screening by Wokha DH during 2014-19. 48 cases of cancer suspects were identified and referred for higher examination.

<sup>7</sup> Bhandari, Pungro, Jalukie, Medziphema and Noklak

DHs are supposed to have equipment like Colposcope for detection of Precancerous conditions of the cervix and mammography for detection of breast cancer. In three<sup>8</sup> DHs, audit observed that Mammography machine and Colposcope were not available.

In reply (October 2020) Department stated that community screening commenced from 2018 in Kohima and Dimapur districts and continued with Phek and Kiphire districts in 2019 through population based screening. Equipment like Colposcope and Mammogram for early detection of cancer were yet to be procured.

#### **6.2.4 Referral cases**

Paragraph 2.3.2 of Operational guidelines of NPCDCS prescribes that complicated cases shall be referred from CHC to the DH for further investigations. Audit observed that test checked hospitals did not maintain any records pertaining to cases referred from CHCs/ PHCs including suspected cases of cancer.

In the absence of records, audit could not comment on referral cases of NCD clinics in test checked DHs.

#### **6.2.5 Training in Non-Communicable Diseases (NCDs)**

Health professionals and health care providers at various levels of health care are to be trained for health promotion, NCD prevention, early detection and management of cancer, diabetes, cardiovascular diseases (CVD) and stroke. Audit observed that MOs or Nurses were not trained in NCD in DH, Phek. Further, no training targets had been set in the test checked DHs.

Department did not offer any reply to this observation (November 2020).

#### **6.2.6 Institutional mechanism for treating of poor Cancer patients**

Under Rashtriya Arogya Nidhi (RAN) (set up in January 1997), Ministry of Health & Family Welfare, GoI was to provide financial assistance to patients living below poverty line who are suffering from major life threatening diseases, to receive medical treatment at any of the super speciality hospitals/institutes or other Government hospitals. State Governments were also to set up (November 1996) State Illness Assistance Fund (SIAF) in their respective States for which Grant-in-Aid would be released by Central Government. Audit observed that State Government did not setup any SIAF nor referred any case under RAN.

#### **6.2.7 Establishment of Tertiary Care Cancer Centre (TCCC ) at DH Kohima**

NPCDCS guidelines stipulate that identified cases should be referred to the Tertiary Cancer Care Centre (TCCC) for further management of the disease and that the TCCC was to be equipped with necessary infrastructure for such treatment. Scrutiny of records of DH Kohima revealed that the project for setting up TCCC under the 'Strengthening of Tertiary Care Cancer facilities Scheme' of NPCDCS was approved for ₹ 43.50 crore<sup>9</sup> on 90:10 sharing basis between GoI & GoN in 2016-17. An amount of ₹ 13.23 crore was released by GoI between December 2016 and April 2018 against which GoN released State share of ₹ 1.30 crore in November 2019.

<sup>8</sup> DHs Wokha, Phek and Tuensang

<sup>9</sup> Civil works ₹ 12.00 crore and equipment ₹ 31.50 crore.



Work order for construction of TCCC for ₹14.82 crore was awarded (December 2017) by Development Authority Nagaland (DAN) to a contractor to be completed within 30 months. However, the construction work is still incomplete (October 2020).



**Photograph 6.2:** showing the current status of project- TCCC, DH Kohima.

The purchase order for the equipment was awarded (December 2017) to a firm<sup>10</sup> for ₹ 7.04 crore before completion of civil work. The equipment was received (March 2018) and was kept in DH Kohima pending installation due to non-completion of Civil works. Thus, procurement of equipment before civil work resulted in idle expenditure of ₹ 7.04 crore.



**Photograph 6.3:** Equipment for TCCC lying in DH Kohima, uninstalled since two years of completion of supply order

Further, Ministry of H&FW had directed (April 2018) to complete the project by March 2019 as the assistance will not be given after 2018-19. Thus, the prospect of completion of the project with the assistance of GoI under the scheme is doubtful. The delay in completion of the project defeats the very objective of strengthening of Tertiary Care Cancer facilities and the benefits that would have accrued to the cancer patients of the State.

Department in its reply (October 2020) accepted that construction work was delayed due to various reasons like land stability issue, non-availability of stone piling experts, incessant rains etc. It further stated that stone piling work is expected to be completed by December 2020 and radiation treatment of patients would begin by last part of 2021.

<sup>10</sup> M/s. Panacea Medical Technologies Pvt Limited, Whitefield Bangalore.

Reply of the Department was silent on funding for completion of the project as Ministry of H&FW had informed that assistance would not be given after 2018-19. No reply was given on procurement of equipment before completion of civil works.

### 6.2.8 Monitoring and evaluation

Success of implementation of any programme depends on effective monitoring on achievement of set objectives and quality of impact by evaluation. As per the operational guidelines of NPCDCS, the State NCD cell is to undertake situational analysis and prepare State Plans that spell out physical targets, means of coordination, supervision and monitoring related to various components of NPCDCS in the State.

Audit observed that periodic surveys were not carried out by the Department on prevalence of cancer, type of cancers and indicators which causes cancer. Since periodic surveys were not carried out, remedial action in control of cancer were inadequate. Strategies for supervision and monitoring were also not framed.

### 6.2.9 Conclusion

Management of Cancer Control Programme in the State needs improvement in many areas. Public awareness on cancer through IEC activity requires to be strengthened. The TCCC at DH, Kohima sanctioned by GoI in 2016-17 at a cost of ₹ 43.50 crore and against which funds received were ₹ 13.23 crore remained incomplete, due to land issues and non-availability of stone piling experts etc. Despite MOHFW direction to complete the project by March 2019, the project remained incomplete (October 2020) and the Department would not be able to provide services until end 2021.

### 6.2.10 Recommendation

- (i) *Develop an accurate data bank of all details relating to the incidence of cancer in the State and strengthen screening of the patients to identify early warning signals of all types of cancer.*
- (ii) *Develop focussed strategies to bring behaviour changes in tackling the menace of Cancer.*
- (iii) *Develop infrastructure as well as human resources in district hospitals for necessary diagnostic procedures including biopsy.*
- (iv) *Ensure expeditious completion of TCCC at DH, Kohima and it may be made fully functional with state of the art bio medical equipment.*

## **6.3 HIV/AIDS**

### **6.3.1 Prevalence of AIDS in the State**

The National AIDS Control Organisation (NACO), is a division of India’s Ministry of Health and Family Welfare that provides leadership to HIV & AIDS control programme in India through HIV & AIDS Prevention and Control Societies, and is “the nodal organisation for formulation of policy and implementation of programs for prevention and control of HIV & AIDS in India.” Nagaland State Aids Control Society (NSACS) co-ordinates different activities of NACO in the State. Under NSACS, District Aids Prevention and Control Unit (DAPCU) were established in ten districts except Longleng. DAPCU coordinates with all the HIV facilities in the district.

Under DAPCU, each district constituted Integrated Counselling and Testing Centre (ICTC) which is a place where a person is counselled and tested for HIV. Under DAPCU, Opioid Substitution Therapy (OST), Sexually Transmitted Infections (STI) and Anti-Retroviral Therapy (ART) centres are also functioning. ART centres provide care, support and treatment services to persons living with AIDS and monitor patients in HIV care.

### **6.3.2 Preparation of Annual Action plan**

As per para 5.1 of Operational Guidelines for Financial Management of NACO, there should be a bottom-up approach in respect of planning of activities as inputs for the preparation of budget at the State Aids Control Society (SACS) level. The activity plan should be prepared based on the inputs from various implementing units.

Audit observed that inputs were not received from these units before formulation of budget and preparation of Annual Action Plan by NSACS. Hence, bottom-up approach in respect of planning at State and district level was not adopted.

### **6.3.3 Status of HIV/AIDS in the State**

The status of number of cases tested and number found positive in respect of HIV/AIDS in the State during 2014-15 to 2018-19 is shown in **Table 6.9**.

**Table 6.9: Number of cases tested and number found positive of HIV/AIDS in the State during 2014-15 to 2018-19**

<b>Year</b>	<b>Total number of clients tested</b>	<b>Total number found positive</b>	<b>Percentage positive cases</b>
<b>2014-15</b>	99179	1834	1.85
<b>2015-16</b>	95247	1616	1.70
<b>2016-17</b>	90924	1697	1.87
<b>2017-18</b>	90236	1801	2.0
<b>2018-19</b>	83013	1879	2.26
<b>Total</b>	<b>458599</b>	<b>8827</b>	<b>1.92</b>

*Source: Departmental figure*



It is observed that there has been a decline in the total number of clients tested in the State and the percentage found positive registered an increase except in 2015-16. In the case of sampled districts, status is as shown in **Table 6.10**.

**Table 6.10: Status of HIV/AIDs in the test checked districts during the last five years.**

District		2014-15	2015-16	2016-17	2017-18	2018-19	Total
Kohima	Tested	13775	12613	13117	14243	12127	65875
	Positive cases	319	281	296	300	295	1491
	<b>Percentage</b>	<b>2.32</b>	<b>2.23</b>	<b>2.26</b>	<b>2.11</b>	<b>2.43</b>	<b>2.26</b>
Phek	Tested	5499	4775	4187	5155	4321	23937
	Positive cases	36	52	34	25	28	175
	<b>Percentage</b>	<b>0.65</b>	<b>1.09</b>	<b>0.81</b>	<b>0.48</b>	<b>0.65</b>	<b>0.73</b>
Tuensang	Tested	10334	10478	8463	7916	7495	44686
	Positive cases	154	166	187	152	249	908
	<b>Percentage</b>	<b>1.49</b>	<b>1.58</b>	<b>2.21</b>	<b>1.92</b>	<b>3.32</b>	<b>2.03</b>
Wokha	Tested	7549	7350	7950	7172	6419	36440
	Positive cases	33	29	58	52	55	227
	<b>Percentage</b>	<b>0.44</b>	<b>0.39</b>	<b>0.73</b>	<b>0.73</b>	<b>0.86</b>	<b>0.62</b>

Source: Departmental records

HIV positive cases in the test checked DHs have shown a mixed trend. However, the HIV positive cases increased by 16 *per cent* from 542 to 627 during the period 2014-15 to 2018-19. Nagaland State Aids Control Society (NSACS) conducted study/research on 'Epidemiological Investigation in to the drives of HIV& AIDS in the State' during 2018. The result of which is yet to be put in public domain.

#### 6.3.4 Surveillance System for tracking HIV/AIDS

The objective of Surveillance System for tracking HIV/AIDS is to study and analyse risky behaviour which spread HIV infection. Initial information is collected from Integrated Counselling and Testing Centre (ICTC), Programmes of Prevention of Parent to Child Transmission (PPTCT), ARTs, Sentinel Surveillances sites etc. It was stated by the NSACS that National Institute of Medical Statistic (NIMS) conducts estimation by data triangulation method using spectrum software.

It was observed that specific surveillance plan was not formulated by the NSACS and hence identification of the pockets of infection of HIV/AIDS was limited to data received from DAPCU.

Department replied (October 2020) that in order to detect / get information on HIV/AIDS, Standalone ICTCs, Facility-ICTCs and Community Based Screening were set up in all the Government health facilities.

#### 6.3.5 ICTC Services for pregnant Women

The RMNCH+A Guidelines issued by GOI (January 2013) identified parent to child transmission of HIV/AIDS as a major route of new and emerging HIV infections in children. Therefore, universal confidential HIV screening of pregnant women was made as an integral part of routine ANC check-up.

Status of pregnant women screened for HIV/AIDS and referred to ICTC/ART centres in test checked DHs during 2014-19 were as shown in **Table 6.11**.

**Table 6.11: Status of pregnant women screened for HIV/AIDS and referred to ICTC/ART centres in test checked DHs during 2014-19**

Name of DH	Registered for ANC	No. of Screening conducted	Positive cases	Actually referred to ART	Percentage referred to ART to positive cases
Wokha	8742	4055	42	10	23.81
Phek	8623	3581	38	13	34.21
Tuensang	11564	5974	125	36	28.8
Kohima	27481	11807	171	108	63.16
<b>Total</b>	<b>56410</b>	<b>25417</b>	<b>376</b>	<b>167</b>	<b>41.41</b>

Source: NSACS data

As can be seen from above table, only 45 per cent of the women registered for ANC were screened for HIV/AIDS. Though 376 pregnant women were screened as positive for HIV/AIDS, only 41.41 per cent were referred or attended ARTs. Since all the positive cases were not given ART services, possibility of transmission of HIV/AIDS to the new-borns cannot be ruled out. This indicates counselling being offered in ICTC centres for pregnant women was not adequate.

Department replied (October 2020) that despite given adequate counselling services to the positive clients, some of the positive pregnant women were unable to reach ARTC due to inaccessibility of the Centre.

### 6.3.6 STI/RTI services in ICTC

Diagnostic and laboratory services for management of Sexually Transmitted Infections (STI) and Reproductive Tract Infections (RTI) were to be provided at all CHCs, First Referral Units and at PHCs 24x7. Further, special focus was to be given to linking up with Integrated Counselling and Testing Centres (ICTCs) and establishing appropriate referrals for HIV testing and RTI/STI management. Status of pregnant women screened for RTI/STI cases in test checked DHs is shown in **Table 6.12**.

**Table 6.12: Status of pregnant women screened for RTI/STI cases in test checked DHs**

Name of DH	Total pregnant women				Percentage of pregnant women not screened for RTI/STI to the total registered ANC
	Registered for ANC	Screened for RTI/STI	Positive cases	Not screened for RTI/STI	
Wokha	8742	1206	12	7536	86.20
Phek	8623	1181	13	7442	86.30
Tuensang	11564	3698	23	7866	68.02
Kohima	27481	8454	51	19027	69.24
<b>Total</b>	<b>56410</b>	<b>14539</b>	<b>99</b>	<b>41871</b>	

Source: Records of DHs

In the test checked districts overall 74 *per cent* of pregnant women registered for ANC were not screened for RTI/STI. In the test checked DHs, the non-screening of pregnant women for RTI/STI ranged between 68.02 *per cent* (DH Tuensang) to 86.30 *per cent* (DH Phek).

### **6.3.7 Conclusion**

NSACS had initiated a number of steps for improvement of institutional mechanisms in the State for coordinating HIV/AIDS related activities. It had established DAPCU in 10 out of 11 districts. Under DAPCU, all test checked DHs had ICT centres, OST & STI clinics and ART centres for treatment. However full potential of these facilities were not found utilised as all the pregnant women registered for ANC were not screened for HIV/AIDS and RTI/STI and those found positive were not fully referred to ART. The number of HIV positive cases had increased by 16 *per cent* to 627 during the period 2014-19. The results of the HIV Study, though completed in 2018 had not been put in public domain, so as to benefit/learn from the results of the Study.

### **6.3.8 Recommendation**

*The Nagaland State AIDS Control Society and the Department may consider:*

- (i) Adopting a bottom up approach for preparation of Annual Action Plans so that it is realistic and meets the demands of local situation in the State.*
- (ii) Taking effective steps to screen all pregnant women registered for ANC for detection of HIV/AIDS and RTI/STI cases and ensure that those detected positive should be referred for ART.*
- (iii) The results of the HIV Study conducted by NSACS be put in public domain.*