Chapter-3 Essential Resources Management

Adequacy of essential resources - Manpower, Drugs & Consumables, Equipment and Infrastructure for effective functioning of District Hospitals

3.1 Manpower Resources

Indian Public Health Standards (IPHS) guidelines envisage that doctors and nurses should be available round the clock in IPD to provide due medical care to the in-patients. These guidelines also prescribed the minimum number of doctors and nurses to be available in different hospitals according to the number of sanctioned beds. The DHS, Medical Institutions (MI) stated (January 2020) that the State has its own norms⁴ for human resources and does not adopt/ follow the IPHS norms.

3.1.1 Shortage of doctors in the test-checked DHs

Scrutiny revealed shortage of doctors (including specialists) in all the test-checked DH *vis-à-vis* State norms. Out of the total 208 sanctioned post of doctors in 14 Hospitals of the State, the State had 158 doctors (76 *per cent*) posted in these hospitals. Availability of doctors with reference to the State norms and sanctioned posts in test-checked DH as of March 2019 is shown in the table below:

| Parameter | Shillong CH | Nongpoh CH | Jowai CH | Tura MCH | Total |
|---|----------------|---------------|-------------|-------------|----------|
| Requirement as per State norms | 101 | 31 | 31 | 60 | 223 |
| Sanctioned Strength (SS) | 67 | 21 | 27 | 21 | 136 |
| Actual position (March 2019) (PIP) | 61 | 15 | 21 | 18 | 115 |
| Shortfall of SS against State norms (per cent) | 34 (34) | 10 (32) | 4 (13) | 39 (65) | 87 (39) |
| Shortfall of PIP against State norms (per cent) | 40 (40) | 16 (52) | 10 (32) | 42 (70) | 108 (48) |
| Vacancies against Sanctioned posts (per cent) | 6 (9) | 6 (29) | 6 (22) | 3 (14) | 21 (15) |

Table 3.1: Availability of doctors vis-à-vis State norms in test-checked DH as of March 2019

Source: Records of test-checked DH. Note: SS and MIP as furnished by the hospitals do not match the data with the DH due to non-updation.

The State had an overall shortage of 87 doctors against its own norms and in the test-checked DH, the shortfall with respect to sanctioned posts ranged from 13 *per cent* (Jowai CH) to 65 *per cent* (Tura MCH). Clearly, the State had not complied with their own norms for sanctioned posts of doctors. Further, even the sanctioned posts were not fully filled up, as there was an overall vacancy of 15 *per cent* against 136 sanctioned posts of the test-checked DHs. The vacant posts in the test checked DHs ranged from nine *per cent* (Shillong CH) to 29 *per cent* (Nongpoh CH).

Thus, failure of the Department to adhere to State's norms while sanctioning the posts of doctors and in not ensuring recruitment of doctors to fill up the vacant posts, had resulted in acute shortage of doctors in all the test-checked DHs.

⁴ The State norms of human resources for hospitals, CHCs and PHCs was notified in August 2007 and for MCH in September 2007.

During exit conference (16 July 2020), the DHS (MI) while agreeing with the shortage of doctors as pointed out by Audit, attributed the shortage to reluctance of the State sponsored MBBS/ MD, *etc.* candidates, to join the State Government services after completion of the course due to the prospect of getting posted to rural areas. The DHS (MI) further added that the doctors prefer working in corporate hospitals than in Government hospital for better facilities/ package.

The Commissioner & Secretary Health informed that they had increased the Surety Bond amount for State sponsored medical students for not joining the State services after completion of the course and have taken other initiatives to formulate a comprehensive package for doctors.

The reply of the Government is not convincing since the Government has not been able to enforce the Bond conditions signed between the Department and the student, which states that the student, on completion of medical studies, shall join the Meghalaya Health Service and in the event of breach, shall be liable to pay the amount⁵ laid down in the bond. Attention is also drawn to the Comptroller & Auditor General of India's comments in their earlier Audit Report⁶ on the failure of the Department to enforce bond conditions. Thus, the condition of Surety Bond was merely on paper and the State has not addressed the shortage of doctors in rural/ hilly areas by implementing incentivising measures to improve availability of doctors in the government hospitals.

3.1.2 Shortage of nurses in DHs

The IPHS envisaged the following nurse-bed ratio for a functional District Hospital of different bed strengths; 45 nurses for 100 beds; 90 nurses for 200 beds; 135 nurses for 300 beds; 180 nurses for 400 beds and 225 nurses for 500 beds. Thus, the nurse-bed ratio should be 0.45:1.

We noted that out of the total 958 sanctioned post of nurses in 14 Hospitals of the State, the State had 890 nurses (93 *per cent*) posted in these hospitals. Further, there was an overall shortfall of 22 *per cent* of nursing staff in the test-checked DHs as per IPHS norms. The hospital wise requirement of nursing staff and actual position (PIP) as per IPHS norms are presented in the following table:

| | test-checked DHs | | | | | | | | |
|-----|------------------|-----------------|--------------------------------|------------|---------|--|--|--|--|
| Sl. | District | No. of | PIP as on | Shortfall | | | | | |
| No. | hospital | functional beds | IPHS norms @0.45 nurse per bed | 31.03.2019 | (%) | | | | |
| 1 | Shillong CH | 475 | 214 | 170 | 44 (21) | | | | |
| 2 | Jowai CH | 135 | 61 | 53 | 8 (13) | | | | |
| 3 | Nongpoh CH | 102 | 46 | 35 | 11 (24) | | | | |
| 4 | Tura MCH | 102 | 46 | 29 | 17 (37) | | | | |
| | Total | 814 | 367 | 287 | 80 (22) | | | | |

| Table 3.2: No. of functional beds, required No. of nurses, PIP and shortfall in the |
|---|
| test-checked DHs |

Source: IPHS and records of test-checked DHs.

⁵ Fixed at ₹ 10 lakh for Academic years 2000-10, ₹ 25 lakh up to 2016-17 and ₹ 30 lakh 2017-18 onwards.

⁶ Report of the Comptroller & Auditor General of India (Social, General & Economic Sectors and PSUs) for the year ended 31 March 2013.

From the table above, it can be seen that Tura MCH had a maximum shortfall (37 *per cent*) of staff nurses followed by Nongpoh CH (24 *per cent*), Shillong CH (21 *per cent*) and Jowai CH (13 *per cent*). The shortage of nurses leads to poor quality of nursing care for the patients and adds to workloads of nursing staff, which may again impact safe and effective patient care.

During Exit Conference (16 July 2020), the Commissioner & Secretary while accepting the shortage of staff nurse in the DHs as pointed out by Audit, stated that the Department will take steps to fill up the posts according to hospitals strength.

In the absence of specific action during the period to address the shortage of nurses, the assertion made during the Exit conference are at best statement of intent.

3.1.3 Adequacy of Manpower

District Hospitals provide health and diagnostic services to a large number of patients in the State, besides performing surgical operations and other medical treatments for in-patients.

Audit analysed adequacy of manpower (Medical and para medical staff) *vis-à-vis* increase in the number of patients (both OPD and IPD) during the period 2014-19. The details are given in the following table:

| Hospital | Number | Number of OPD and IPD patients (per cent increase over previous year) | | | | | | |
|--------------|---------|---|---------------|---------------|----------------|----------|--|--|
| | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | increase | | |
| | | | | | | over | | |
| | | | | | | 2014-19 | | |
| Shillong CH* | 181820 | 183967 (1.18) | 186135 (1.18) | 198048 (6.40) | 201306 (1.65) | 10.72 | | |
| Nongpoh CH | 25740 | 34828 (35.31) | 37357 (7.26) | 47029 (25.89) | 38798 (-17.50) | 50.73 | | |
| Jowai CH | 46108 | 52776 (14.46) | 52380 (-0.75) | 66007 (26.02) | 70083 (6.18) | 52.00 | | |
| Tura MCH | 35756 | 36194 (1.22) | 36379 (0.51) | 40973 (12.62) | 43613 (6.44) | 21.97 | | |

 Table 3.3: Adequacy of manpower vis-à-vis patient load in the test-checked DHs

Source:-Information furnished by the hospitals. *contains only OPD figures.

It is evident from the table above that the patients registered at all the test-checked DHs showed an increase over the period 2014-19. The patient load at Shillong CH increased by 10.72 *per cent*, Nongpoh CH by 50.73 *per cent*, Jowai CH by 52 *per cent* and Tura MCH by 21.97 *per cent* over the period. Further, the average yearly increase in the patient load in the test-checked DHs ranged between 2.67 and 13 *per cent*.

Despite substantial increase in the number of patients in the test checked DHs, the sanctioned strength of the medical and para-medical staff was not revised. Moreover, as discussed in **Paragraph 3.1.1**, the shortage of doctors in the test-checked DHs *vis-à-vis* sanctioned strength, particularly in Nongpoh and Jowai CH where the increase in patient load over the period 2014-19 was 51 and 52 *per cent* neither did their manpower position improve but on the contrary, they had a shortage of 29 and 22 *per cent* doctors, respectively, making the situation even more alarming.

Thus, increased patient load had put an immense pressure on the medical system and inadequate infrastructure thereby, adversely impacting quality of patient care and patient safety.

Conclusion

Human resources, an essential resource for hospital management saw shortages in Meghalaya, with an overall shortage of 87 doctors against the State norms and 15 *per cent* out of the total 136 sanctioned posts lying vacant (March 2019) in the test-checked DHs. The vacant posts of doctors were nine *per cent* in Shillong CH and 29 *per cent* in Nongpoh CH. As regards staff nurses, when compared with the IPHS norms, the State had an overall shortfall of 80 nurses (22 *per cent*) with Tura MCH having maximum shortfall of 37 *per cent* followed by Nongpoh (24 *per cent*) and Shillong (21 *per cent*).

Further, despite substantial increase in the number of registered OPD and IPD patients in all the test-checked DHs, neither the sanctioned strength of the medical and para-medical staff was revised to take care of the increasing patient load nor were the existing shortages in manpower of hospitals filled up.

The State had not implemented any positive measures such as special /hill allowances, accommodation, *etc.* to address the reluctance of doctors to serve in district hospitals.

Recommendations

- *i.* Keeping in view the fact that Health is a State subject, the State Government may come up with a policy intent to address shortfalls in the Human Resources for the State Health Sector, to improve quality of health care.
- *ii.* To arrest the tendency of Doctors not joining the Government Health Facilities, State Government needs to take stringent action to enforce the Bond conditions for enforcing services of Doctors in rural areas.
- *iii.* The State Government also needs to take positive measures such as special allowances, availability of accommodation, etc. to incentivise doctors to get posted to rural/ hilly area of the State. They can enquire about such measures being taken by other States.

3.2 Physical Infrastructure

3.2.1 Non availability of District Hospital in three districts

District Hospital is a hospital at the secondary referral level responsible for a district. Its objective is to provide comprehensive secondary health care services to the people in the district at an acceptable level of quality and to be responsive and sensitive to the needs of the people and referring centres. Every district is expected to have a district hospital.

As per information furnished (04 November 2019) by the DHS (MI), there are 11 DHs in Meghalaya located in eight out of 11 districts. Audit noticed that the Khliehriat CHC in East Jaintia Hills district which was upgraded to 100 bedded DH by the State Government in January 2014 was still (December 2019) functioning as a CHC due to lack of building infrastructure and manpower.

Thus, three districts⁷ viz. (i) North Garo Hills district; (ii) East Jaintia Hills district and (iii) South West Khasi Hills district are yet to have a DH (December 2019). In the absence of a DH, people of the three districts were deprived of comprehensive secondary level health care services. The DHS (MI) stated (27 January 2020) that processing of setting up DH in the aforesaid three districts was underway.

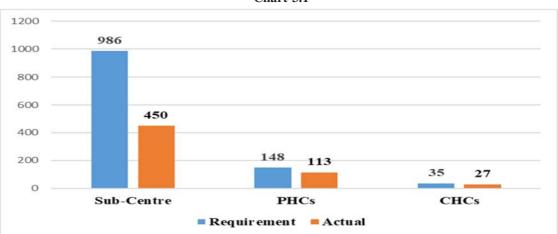
3.2.2 Shortage of CHCs, PHCs and SCs

To ensure universal availability and accessibility of healthcare, the Government of Meghalaya, Health and Family Welfare Department notified (June 2006) the following norms/ criteria for setting up healthcare facilities:

| Table 5.4-101 ms for creation of nearth facilities | | | | | |
|--|---|--|--|--|--|
| Health facility | As per State's Norms | | | | |
| Sub-centre (SC) | One SC for every 3000 people | | | | |
| Primary Health Centre (PHC) | One PHC for every six SCs or for every 20000 people | | | | |
| Community Health Centre (CHC) | One CHC for every four PHCs or for every 80000 people | | | | |

| Table 3.4-Norm | s for | creation | of | health | facilities |
|----------------|-------|----------|----|--------|------------|
|----------------|-------|----------|----|--------|------------|

Benchmarking the above norms with population as per Census 2011, we observed that there was a shortage in all categories of health facilities in the State. The required number of health facilities, availability and shortfall thereof against the three categories of healthcare infrastructure as of March 2019 is given below:





As can be seen from the Chart above, the shortfall of SCs, PHCs and CHCs was 536 (54 *per cent*), 35 (24 *per cent*) and eight (23 *per cent*) respectively, indicating that the State Government has failed to provide the required number of health infrastructure to its citizens, thereby denying universal accessibility of health facilities. Further, even the only test-checked CHC (Mawiong CHC) was found to be not well equipped to handle emergencies, since services like OT, ICU, BSU/ Blood bank and equipment like X-ray, USG were not available. Besides, there was only one doctor available in the CHC during the period 2014-19.

During exit conference (16 July 2020), the Commissioner & Secretary assured that shortage will be looked into and necessary steps to increase the number of Health

⁷ All three districts were created in 2012.

Centres, wherever required, proportionate to the population and geographical regions, would be taken.

The fact, however remains that one of the important factors for shortage of DHs, CHCs, PHCs and SCs in the State is insufficient capital expenditure (9.2 *per cent*) by the Health & Family Welfare Department as pointed out in **paragraph 2.1.1**. Further, the shortage of DHs, CHCs, PHCs and SCs was also one of the factors responsible for shortfall in achievement of targets such as antenatal care, institutional deliveries, *etc.* as discussed in **paragraphs 6.1.3 and 6.1.4**.

3.2.3 Non-availability of blood banks

As per IPHS, blood bank is one of the essential services that a District Hospital has to provide for. Blood bank should be in close proximity to pathology department and at an accessible distance to operation theatre, intensive care units and emergency & accident departments.

Audit noticed that only Jowai CH⁸ had a blood bank while no functional blood bank was available in other test-checked DHs. The requirement of blood in Shillong CH and Tura MCH were met from the district blood bank at Pasteur, Shillong and Tura Civil hospital respectively which are located at a distance of about two km each from these hospitals. As regards Tura MCH, though the Department had planned for setting up a Blood Storage Unit since 2014, it had not established the same for want of manpower and equipment.

3.2.4 Non-functional blood bank at Nongpoh CH

The Department completed (September 2017) Blood Bank building at Nongpoh CH at a cost of ₹ 50 lakh⁹ and also equipped it with equipment worth ₹ 64.25 lakh but did not make it functional (December 2019).The MS of Nongpoh CH attributed the delay in operationalisation of the blood bank to non-sanctioning of manpower by the State Government¹⁰.



The reply does not appear convincing since the blood bank was sanctioned prior to 2017, the DH should have taken all necessary steps to have the staff in place by now. Due to the non-availability of a functional blood bank during 2014-19, Nongpoh CH referred 4,244 patients, Obstetric ward (1,561 patients) and Emergency ward (2,683 patients) to other hospitals. Thus, the non-operational blood bank at Nongpoh CH had not only resulted in idle expenditure of ₹ 114.25 lakh, but also put the patients

⁸ Started functioning w.e.f. July 2014.

⁹ The blood bank was sanctioned under NHM (SPIP 2015-16) by GoI, Ministry of Health & Family Welfare for ₹ 0.50 crore.

¹⁰ Proposal for sanction of manpower for the blood bank was submitted to DHS (MI) on 16 August 2019.

in need of blood, to avoidable hardship and risk, by being referred to Shillong, which is about 56 km from Nongpoh.

Conclusion

Inadequate health system infrastructure, limits the access of health facilities and also contributes to poor quality of care and outcomes, particularly among vulnerable sections of society. The State did not have district hospital in three of its districts, (North Garo Hills district (ii) East Jaintia Hills district and (iii) South West Khasi Hills district), there was shortage of 536 SCs/ 35 PHCs/ eight CHCs across all the 11 districts. Further, independent blood banks were not planned for/made functional in three out of the four test-checked DHs in violation of IPH norms, thereby risking the life of patients in emergency situations. Non-operational blood bank at Nongpoh CH had not only resulted in idle expenditure of ₹ 114.25 lakh, but also put the patients in need of blood, to avoidable hardship and risk, by being referred to Shillong, which is about 56 km from Nongpoh.

Recommendations

- *i.* The State Government may ensure setting up of district hospital in all the districts as well as adequate number of SCs/ PHCs/ CHCs so that universal accessibility of healthcare is provided to all sections of society; and
- *ii.* The State Government may also ensure availability of blood bank in all the DHs, ensure completion of sanctioned projects in a timely manner and make them functional with required manpower and equipment.

3.3 Equipment for Health Facilities

IPHS has prescribed norms of equipment for DHs under different categories based on the number of beds, keeping in view the assured services recommended for various grades of the DH.

The State Government did not have Equipment Procurement Policy (EPP) or any Standardised norms/ procedures for procurement of equipment for different health facilities nor has it adopted the IPHS norms. During 2014-19, the DHS (MI) procured needed equipment based on availability of funds.

Audit observed that the types of equipment available in the test-checked DHs to perform various surgical and medical interventions differ from one DH to another. We noted acute shortage of medical equipment in the test-checked DHs vis-a-vis IPHS norms as shown in the following table:

| Category wise | Tura MCH | | Jowai CH | | Nongpoh CH | | Shillong CH | |
|---------------|-----------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|--------------|--------------------------|
| equipment | Required No. | Availability (in No.) | Required No. | Availability (in No.) | Required No. | Availability (in No.) | Required No. | Availability (in No.) |
| ОТ | 21 | 19 | 21 | 11 | 21 | 12 | 19 | 8 |
| Laboratory | 51 | 24 | 51 | 23 | 51 | 26 | 58 | 24 |
| Endoscopy | 3 | Nil | 3 | 1 | 3 | 0 | 7 | 3 |

Table 3.5: Availability of equipment vis-à-vis IPHS norms as on February 2020

| Category wise | Tura MCH | | Jowai CH | | Nongpoh CH | | Shillong CH | |
|-------------------|-----------------|--------------------------|-----------------|--------------------------|--------------|--------------------------|--------------|--------------------------|
| equipment | Required No. | Availability (in No.) | Required No. | Availability (in No.) | Required No. | Availability (in No.) | Required No. | Availability (in No.) |
| Immunisation | 13 | 7 | 13 | 11 | 13 | 10 | Service | not available |
| ENT | Service n | ot available | 18 | 7 | 18 | 3 | 20 | 10 |
| Cardiopulmonary | 14 | 1 | 14 | 4 | 14 | 10 | 16 | 3 |
| Labour & Neonatal | 27 | 22 | 27 | 14 | 27 | 18 | Service | not available |
| Imaging | | | | | | | | |
| Equipment | 4 | 2 | 4 | 2 | 4 | 1 | 7 | 4 |
| Total | 133 | 75 | 151 | 73 | 151 | 80 | 127 | 52 |

Source: JPV of test-checked DH.

As can be seen from the table above, none of the test-checked DHs was fully equipped with the essential equipment as per IPHS norms. The average percentage in terms of availability of the eight sampled categories of equipment ranged from 41 *per cent* (Shillong CH) to 56 *per cent* (Tura MCH) only.

Further, it was seen that the DHs could not provide particular category of service due to non-functional equipment. For example, both the available Imaging equipment in Tura MCH *viz.*, (i) 100 M.A. X-ray machine and (ii) Colour Doppler USG were not functional. Similarly, in Shillong CH, three out of 17 available ENT equipment *viz.*, (i) Micro drill System set, (ii) Oesophagoscope adult and (iii) Oesophagoscope child were not functional.

The non/ short availability of full range of equipment/ machines compounded by non-functional of available equipment, impacted efficient and appropriate health care to be provided in the test-checked DHs.

During exit conference (16 July 2020), the Commissioner & Secretary stated that the State Government is bringing a new policy and mechanism to procure medical equipment or suppliers to address these issues.

The reply did not address the shortage of equipment concerns. The fact remains that it was the responsibility of the DHS(MI) to provide mandated healthcare facilities to the general public and to keep the costly equipment procured functional and available for patient care needs.

Conclusion

Medical equipment/ devices facilitate healthcare personnel to monitor patient health more accurately and help doctors perform various functions from the emergency room to the operating table. The bottom line is that to be able to administer quality health care services, medical equipment must always be available and functioning effectively.

Audit noted absence of Equipment Procurement Policy (EPP) or any Standardised norms/ procedures for procurement of equipment for different health facilities. Thus, the types of equipment available in the test-checked DHs differ from one DH to another DH. There were shortage of full range of essential equipment in the test-checked DHs in comparison to the IPHS norms. The average percentage in terms of availability of eight sampled categories of equipment required by the test-checked DHs ranged from 41 *per cent* (Shillong CH) to 56 *per cent* (Tura MCH) only.

The available equipment frequently broke down due to inadequate maintenance thereby impacting the efficiency and appropriateness level of health care provided in the test-checked DHs.

Recommendations

- *i.* State Government may ensure availability of full range of essential equipment in every hospital, particularly in view of the increasing reliance on diagnostics for treatment of patients.
- *ii. Proper maintenance of equipment through Annual Maintenance Contracts may also be ensured to reduce the breakdown time of critical equipment for diagnosis.*

3.4 Drugs Management

In Meghalaya, procurement of medicines under the State Government's free drugs policy is centralised through DHS (MI); and the Mission Director, NHM is responsible for drug procurement for different national health programmes under NHM. The State Government procured drugs through tendering process based on approved list of medicines, 2008¹¹ and State Essential Drugs List (SEDL)¹² respectively. Medicines purchased are first received at the State Central Medical Store, Pasteur, Shillong and from there lifted by the indenting healthcare facilities.

3.4.1 Inadequate provision of funds

During 2014-19, against the total requirement of ₹ 329.97 crore for procurement of drugs as per the indented need of hospitals, it was seen that the DHS (MI) submitted a budget estimate of ₹ 137.08 crore only, to the State Government, the total shortfall in provisioning of funds being of ₹ 192.89 crore. Year-wise requirement of funds based on indents submitted by various health facilities, budget estimates submitted to the State Government by the DHS (MI) and actual expenditure during 2014-19 was as given in the table below:

| | | | | | (₹in crore) |
|---------|---|---------------------------------------|------------------------------|--------------------|---|
| Year | Total value of indents/ demand received by DHS (MI) | Total proposal submitted to GoM | Total budget allotment | Actual expenditure | Budget proposal shortfall against demand (in %) |
| 2014-15 | 41.87 | 13.58 | 17.65 | 17.65 | 58 |
| 2015-16 | 79.21 | 14.55 | 22.49 | 22.49 | 71 |
| 2016-17 | 48.80 | 30.00 | 28.60 | 28.59 | 41 |
| 2017-18 | 79.92 | 37.80 | 61.16 | 61.16 | 23 |
| 2018-19 | 80.17 | 41.15 | 58.66 | 58.55 | 27 |
| Total | 329.97 | 137.08 | 188.56 | 188.44 | 43 |

 Table 3.6: Year-wise demand, budget proposal, actual expenditure and shortfall of budget proposal towards procurement of medicines during 2014-19

Source: Information furnished by the DHS (MI).

¹¹ The DHS (MI) notified (May 2008) an approved list of medicines & chemicals containing 309 drugs & chemicals along with approved rates and name of manufacturers/ suppliers.

¹² The Department prepared State Essential Drugs List containing 233 drugs in 2016.

It can be seen that the funds were inadequate compared to the requirement of the DHs resulting in short supply of medicines to the indenting facilities thereby depriving the patients of prescribed medicines free of cost from the hospital pharmacy as pointed out in **Paragraph 3.4.2**.

The DHS (MI) stated (January 2020) that adequate quantity of medicines could not be purchased due to shortage of funds.

During exit conference (16 July 2020), the Commissioner & Secretary stated that the State Government is committed to provide universal healthcare services and the new free drug policy is intended to address this issue.

The reply is not based on facts as the budget proposals submitted to the Government during 2014-19 were always short of the actual demand.

3.4.2 Shortages in availability of essential drugs

To ascertain the availability of essential drugs in the DHs, a Joint Physical Verification (JPV) was conducted along with the officials and staff of the test-checked DHs and available stock records were also verified. In the JPV, it was noticed that 60 types of essential drugs (**Appendix-I**) common in both the State Essential Drug List (SEDL) and the prescribed drugs list of NHM Assessor's Guidebook, were either not supplied at all or 'stock out' as shown in table below:

| Hospital | Date of | No. of drugs not | No. of drugs which were stock | Drugs not supplied to any |
|----------------|------------|-------------------------------------|---|--|
| Hospital | JPV | supplied at all during 2014-19 | out frequently during 2014-19 | DH during 2014-19 |
| Shillong CH | 11.01.2020 | 27 (45%) out of 60 sampled drugs | 11 drugs were 'stock out' on the date of JPV for a period ranging from one to ten months. | Tab Piroxicam 20mg; Inj. Drotavarine; Inj. Quinine; Inj. Benzathine penicillin 12 |
| Nongpoh CH | 21.11.2019 | 32 (53%) out of 60 sampled drugs | 06 drugs were 'stock out' on the date of JPV for a period ranging from three to twenty seven months. | lac; Tab Haloperidol; Tab Risperidone 2mg; Tab Imipramine 75mg; Tab Lorazepam 2mg; Tab Olanzapine 5mg; Cap |
| Jowai CH | 21.02.2020 | 28 (47%) out of 60 sampled drugs | 18 drugs were 'stock out' on the date of JPV for a period ranging from one to twenty nine months. | Olanzapine 5mg; Cap Fluoxetine 20 mg; Inj. Chlopromazine 25mg, 100mg; Inj. Pethidine; Inj. Haloperidol; Clotrimazple |
| Tura MCH | 07.02.2020 | 25 (42%) out of 60 sampled drugs | 15 drugs were 'stock out' on the date of JPV; date of stock out not available/recorded. | lotion |

Table 3.7: Availability of essential drugs in DH

Source: JPV report of drugs of test-checked DH.

Out of the 60 sampled drugs, 42 to 53 *per cent* of the drugs were never supplied to the test-checked DHs during 2014-19 and 6 to 18 essential drugs were 'stock out' for a period ranging up to 29 months. Essentials drugs such as Tab Piroxicam 20mg (*used to treat pain or inflammation caused by osteoarthritis or rheumatoid arthritis*), Inj. Drotavarine (*used to enhance cervical dilation during childbirth*), Inj. Benzathine penicillin 12 lac (*used to treat a wide variety of bacterial infections*), *etc.* were not available in the IPD of the test-checked DHs.

In response to Patient's satisfaction survey conducted by audit on 88 patients in the test-checked DHs, the non/ short availability of essential drugs was confirmed whereas

eight *per cent* stated that prescribed medicines were **'almost never'** available in the hospital pharmacy; 28 *per cent* stated that medicines were available a **'few times'**; while 50 *per cent* and 14 *per cent* stated to have received the prescribed medicines **'Most times'** and **'Always'** respectively.

The reason for non-availability of prescribed medicines in the hospital pharmacies were attributed to (i) non/short supply of the indented medicines by the DHS (MI) and (ii) the prescribed medicines being written by its brand name¹³ by some doctors. Due to short/non supply of all essential drugs to the DHs by the Department, patients had to purchase the prescribed medicines from the open market out of their pocket.

During exit conference (16 July 2020), the Commissioner & Secretary stated that as per the patient's satisfaction survey report, more than 60 *per cent* responded positively, which is a good indication. He however, stated that matter will be looked into for improvement. The Commissioner & Secretary did not offer any reply on the reasons for shortfall in supply of essential drugs.

Conclusion

During 2014-19, out of the 60 essential sampled drugs, 42 to 53 *per cent* of the drugs were never supplied to the test-checked DHs, while 6 to 18 drugs were 'stock out' for a period ranging from one to twenty nine months. The serious non-availability of essential drugs in the test-checked DHs, compelled the patients to purchase the prescribed medicines from the open market out of their pocket.

Recommendations

- *i.* The State Government may put in place a comprehensive drug policy according to the need of hospitals to ensure all time availability of essential drugs in each hospital in order to avoid 'stock out'.
- *ii.* They may ensure that a formulary of drugs is prepared by each hospital on the basis of disease patterns and inflow of patients. The State Essential Drug List (SEDL) be updated accordingly.
- *iii.* Storage of drugs under conditions prescribed in the Drugs and Cosmetics Rules, 1945 to maintain their efficacy may be ensured, before being administered to the patients.

 $^{^{13}}$ $\,$ While the medicines supplied by the DHS (MI) were only in generic name.