



Monitoring and Evaluation of Programme Implementation Plan 2019 – 20,
Solapur District Maharashtra

By

Prashik A. P.
Baldev Singh Kulaste

Population Research Centre
Gokhale Institute of Politics and Economics
Pune – 411004

November 2019

[Report prepared for Ministry of health and Family Welfare, Government of India, New Delhi]

Table of Contents

LIST OF FIGURE	V
ACKNOWLEDGE	VI
EXECUTIVE SUMMARY	VII
KEY OBSERVATIONS AND FINDINGS	VII
STRENGTHS.....	VII
WEAKNESS.....	VIII
1. INTRODUCTIONS	1
1.1 DISTRICT PROFILE.....	2
1.2 HEALTH PROFILE	3
2. INFORMATION FROM DISTRICT HEALTH OFFICE	6
2.1 PROGRAMME MANAGEMENT	6
2.2 HUMAN RESOURCE AND HEALTH INFRASTRUCTURE	6
2.2.1 <i>Human Resource</i>	7
2.2.2 <i>Health Infrastructure</i>	9
2.3 TRAINING OF HEALTH PERSONNEL	10
3. MATERNAL HEALTH	10
3.1 OVERVIEW	11
3.2 JANANI SURAKSHA YOJANA (JSY)	12
3.3 JANANI SHISHU SURAKSHA KARYAKRAM (JSSK)	13
3.4 MATERNAL DEATH REVIEW	14
4. CHILD HEALTH	15
4.1 NEONATAL HEALTH.....	15
4.2 NUTRITION.....	16
4.3 MANAGEMENT OF COMMON CHILDHOOD ILLNESSES	16
4.4 IMMUNIZATION	17
4.5 RASHTRIYA BAL SWASTHYA KARYAKRAM (RBSK)	18
5. FAMILY PLANNING	19
6. INFORMATION EDUCATION COMMUNICATION (IEC)	19
7. COMMUNITY PROCESS	19
8. AYURVEDA, YOGA AND NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY	20

9. DISEASE CONTROL PROGRAMME.....	21
9.1 COMMUNICABLE DISEASE	21
9.2 NON-COMMUNICABLE DISEASE	21
10. HEALTH MANAGEMENT INFORMATION SYSTEM	21
11. HEALTH AND WELLNESS CENTRE.....	22
12. BUDGET UTILIZATION	22
13. FACILITY WISE OBSERVATION	23
13.1 SUB- DISTRICT HOSPITAL: AKLUJ.....	23
13.2 RURAL HOSPITAL/COMMUNITY HEALTH CENTRE: KARKAMB	26
13.3 PRIMARY HEALTH CENTRE: GADEGAON	29
13.4 SUB- CENTRE: KORTI.....	31
14. CONCLUSION AND RECOMMENDATIONS	32
14.1 CONCLUSION	32
14.2 RECOMMENDATIONS.....	33
LIST OF ACRONYMS AND ABBREVIATIONS	35

List of Tables

<i>Table 1: Health Facilities visited in the PIP Monitoring of Solapur District, 2019 – 20.....</i>	<i>2</i>
<i>Table 2: Key Demographic Indicators of Solapur and Maharashtra</i>	<i>3</i>
<i>Table 3: Key stats of Health and service delivery indicator of Maharashtra and Solapur</i>	<i>4</i>
<i>Table 4: Status of Health and Health Care Services Delivery Indicators of Solapur 2019 - 20.....</i>	<i>5</i>
<i>Table 5: Regular Staff under District Health Officer (DHO)</i>	<i>7</i>
<i>Table 6: Contractual staff appointed under NHM in District Programme Management Unit (DPMU)</i>	<i>8</i>
<i>Table 7: Status of Health Infrastructure in Solapur district, 2019 – 20.....</i>	<i>9</i>
<i>Table 8: Status of Health Infrastructure in facilities visited, Solapur.....</i>	<i>9</i>
<i>Table 9: Training given to health personnel of Solapur district at Health & Family Welfare Training Centre under various Programmes</i>	<i>10</i>
<i>Table 10: Maternal Health Indicators of Solapur district.....</i>	<i>11</i>
<i>Table 11: Status of Janani Suraksha Yojana in Solapur, 2019 – 20.....</i>	<i>13</i>
<i>Table 12: Status of Janani Shishu Suraksha Karyakram for pregnant women in Solapur, 2019 – 20</i>	<i>13</i>
<i>Table 13: Block wise status of immunization coverage in Solapur, 2019 -20</i>	<i>18</i>
<i>Table 14: Status of RBSK Programme in Solapur, 2019 - 20.....</i>	<i>18</i>
<i>Table 15: Status of Family Planning in Solapur during 2019 -20.....</i>	<i>19</i>
<i>Table 16: Status of ASHAs worker in Solapur, 2019 – 20</i>	<i>20</i>
<i>Table 17: Status of AYUSH services in Solapur, 2019 -20.....</i>	<i>20</i>
<i>Table 18: Status of Communicable Diseases Programme, Solapur 2019 – 20.....</i>	<i>21</i>
<i>Table 19: HMIS/MCTS status in Solapur, 2019 -20</i>	<i>22</i>
<i>Table 20: Budget utilization parameters, Solapur 2019 -20.....</i>	<i>23</i>

<i>Table 21: Status of Human Resource at the SDH Akluj 2019 -20.....</i>	<i>24</i>
<i>Table 22: Health Service Delivery Indicator of SDH Akluj, 2019 -20.....</i>	<i>26</i>
<i>Table 23: Regular Staff under CHC Karkamb in Solapur District.....</i>	<i>27</i>
<i>Table 24: Regular staff at PHC Gadegaon, Block Pandharpur District Solapur</i>	<i>29</i>
<i>Table 25: Status of Service delivery at PHC Gadegaon</i>	<i>30</i>

List of Figure

<i>Figure 1: Integrated Map of Solapur, Maharashtra</i>	<i>2</i>
<i>Figure 2: Status of JSY Budget.....</i>	<i>12</i>
<i>Figure 3: Status of Transport services provided for sick infants in Solapur, 2019 – 20.....</i>	<i>14</i>
<i>Figure 4: Status of Maternal Deaths in Solapur, 2019 – 20</i>	<i>14</i>
<i>Figure 5: Neonatal health Indicators, Solapur</i>	<i>15</i>
<i>Figure 6: Status of Child Health Nutrition, Solapur 2019 -20</i>	<i>16</i>
<i>Figure 7: Status of childhood disease in Solapur during 2019 – 20.....</i>	<i>17</i>
<i>Figure 8: Fully Immunized children by gender, Solapur 2019 -20</i>	<i>17</i>
<i>Figure 9: Kayakalp Certificate, SDH Akluj.....</i>	<i>24</i>
<i>Figure 10: PIP Monitoring team with Staffs of SDH Akluj</i>	<i>25</i>
<i>Figure 11: Discussion with MS of CHC Karkamb over health services.....</i>	<i>26</i>
<i>Figure 12: PIP Monitoring team with staffs of CHC Karkamb.....</i>	<i>28</i>
<i>Figure 13: Monitoring Team with PHC Gadegaon staff</i>	<i>30</i>
<i>Figure 14: PIP Monitoring team with staffs of SC Korti</i>	<i>31</i>

Acknowledge

Monitoring and Evaluation of NHM PIP in Solapur district of Maharashtra was successfully completed due to the help and cooperation received from district NHM staff and support extended by officials from state medical, health and family welfare department. We wish to extent, first our immense gratitude to **Dr. B. N. Tiwari**, Director General (Stat) and **Dr. D. K. Ojha**, Deputy Director General, Ministry of Health and Family Welfare, Government of India and **Dr. Anup Kumar Yadav**, Commissioner, Health and Mission Director, NHM Maharashtra, for trusting Population Research Centre, Gokhale Institute of Politics and Economics, Pune, Maharashtra with the work of monitoring of the important component of NHM Programme Implementation Plan.

We are grateful to **Dr. B. T. Jamadar**, District Health Officer, **Dr. S. P. Kulkarni**, ADHO, Solapur without whose support and cooperation the evaluation wold not be possible. We would further like to thank **Mr. S. K. Patil**, District Programme Manager of Solapur, for investing his full efforts in facilitating the visits to health facilities.

The Monitoring & Evaluation of National Health Mission Programme Implementation Plans would not have been possible without the active participation and insightful inputs by each and every Medical, Paramedical and Administrative staff, who form the public health system of Solapur. Last but not the least, I would like to thank **Mr. Vijay Kadam** for his immense support and cooperation during the field visits.

November 2019

Prashik A P
Baldev Singh Kulaste

Executive Summary

The Ministry of Health and Family Welfare, Government of India has assigned Population Research Centres (PRCs) the task of monitoring of essential components of National Health Mission State Programme Implementation Plan (PIP 2019 – 20). It is expected that a timely and systematic assessment of the key components of NHM can be critical for further planning and resource allocations. Considering PIP as a major task, Population Research Centre, Gokhale Institute of Politics and Economics (GIPE), Pune would identify critical concerns in implementation of NHM activities and also evolve suitable quality parameters to monitor the NHM components.

This report presents the key findings from the concurrent monitoring of essential components of NHM in Solapur district of Maharashtra. The report is prepared on the basis of field-based observations and visits to selected public health facilities in Solapur. The following public health facilities were visited by the PRC Pune team: SDH Akluj, CHC Karkamb, PHC Gadegaon and SC Korti. Structured checklists were used to collect information on human resources, infrastructure, funds utilization, training, health care services including drugs and equipment's, family planning, disease control programmes and other programmes under the NHM.

Key Observations and Findings

Meetings were conducted with district and block level health administrators including the District Health Officer (DHO), Medical Officers in-Charges, facility and community level health care providers (ANMs, ASHAs etc.) and other supporting staff to understand the strength and weakness of the facilities in service providing. Further, we reviewed relevant programmatic data and information available from the District Programme Management Unit (DPMU), Health Management Information System (HMIS) and also made observations regarding performance of key component of NHM for robust feedback on programme implementation in the district. The major strength and weakness of the district are as follows:

Strengths

- ✚ The in-charge DPM is effectively involved with all NHM activities and possesses a sound knowledge of the current status and the future plans.
- ✚ The percentage of institutional delivery has reached at its peak level as 99.9 percent of the institutional deliveries are conducted in health institutions.
- ✚ RBSK is efficiently working in the district.

- ✚ The district has a dedicated pool of NHM personnel who are striving to work in accordance with the mission and vision of the programmes.
- ✚ The JSY scheme is functioning well and all ASHA workers are doing their best by providing awareness about the schemes benefits and bringing them for institutional delivery.
- ✚ 24 persons has donated their eyes to SDH Akluj, apart from that 500 more person has given signatory to SDH Akluj for eye donation. 1 person has donated its whole body to SDH Akluj.

Weakness

- ⊖ PRC Monitoring team has observed that more than 31 percent of total sanctioned post are vacant under the District Health Office, of which most of them are MPW and ANM and these two are core pillar of three tier health system in India. They might be hampered the service delivery system if not filled on urgent basis.
- ⊖ Some essential IEC material related to JSY and JSSK were not displayed in visited health facilities.
- ⊖ Sub- District Hospital Akluj has reported the shortage of X-ray technician due to which they were forced to refer the patient to private X-ray clinic for USG. Lack of space is the major problem of this SDH.
- ⊖ It was observed that there was no attached toilet with labour room in SDH Akluj.
- ⊖ The blood bank unit was not available at the facility, hence no blood bags, and refrigerator (for blood storage) available at SDH Akluj as well as at CHC Karkamb.
- ⊖ Community Health Centre at Karkamb reported shortages of human resources which affected the services delivery at the institution.
- ⊖ Shortages of mifepristone and IFA blue are observed at PHC Gadegaon and CHC Karkamb respectively.
- ⊖ A separate ambulance was not available at PHC Gadegaon, which hampered the transport facility under JSSK. Complaint/suggestion box was not installed at SC Korti.

1. Introductions

National Health Mission (NHM), previously known as National Rural Health Mission (NRHM) was launched in order to make health care more accessible and affordable to all especially who are vulnerable and underserved and at the moment it has become one of the essential part of the health services in the country. The Mission is both flexible and dynamic and is intended to guide states towards ensuring the achievement of universal access to health care through strengthening of health systems, institutions and capabilities. Also the need for effective inter-sectoral convergent action to address the wider social determinants of health is envisioned. A timely and systematic assessment of the key components of NHM is important for further planning and resources allocation.

In keeping with the goals of the NHM, the Programme Implementation Plan (PIP) 2019 – 20 has been designed and submitted to Ministry of Health and Family Welfare (MoHFW), Government of India (GOI) by all the states and the Union territories of the country. The PIPs categorically specify the mutually agreed upon goals and targets expected to be achieved by a state or a UT while adhering to the key conditionality's and the road map given for PIP. In order to assess the implementation and progress of PIP, the MoHFW has assigned the task of evaluation and quality monitoring of the important components of NHM to various PRCs. PRC, Pune was assigned the evaluation study of PIP of Maharashtra and Madhya Pradesh for the year of 2019 – 20.

In order to carry out quality monitoring and evaluation of important component of NHM, various type of check – list developed by the Ministry were used. The check – list for District and facilities were aimed at gathering data pertaining to the actual implementation of PIP at the district and facility level.

This report discusses the monitoring and evaluation of PIP findings and observations for the Solapur District in Maharashtra, which was carried out during the period November 18 to November 22, 2019. In the district apart from District Health Officers Office, Sub – District Hospital Akhuj, Community Health Centre Karkamb, Primary Health Centre Gadegaon and Sub – Centre Korti were visited.

This report provides a review of key population, health and service delivery indicators of the Solapur District. The report also deals with health infrastructure and human resources of the district and provides insights on MCH service delivery including JSSK and JSY schemes, NRC, Immunization, RBSK, Family Planning, ARSH, Bio-medical waste management, referral transport, ASHA scheme, communicable and Non-communicable diseases and status of HMIS

and MCTS. This report is based on the interview of DHO, Civil Surgeon, Medical Superintendent, ANMs and beneficiaries.

Table 1: Health Facilities visited in the PIP Monitoring of Solapur District, 2019 – 20

Facility Type	Name of the facility
Sub – District Hospital (FRU)	Sub – District Hospital Akluj
Community Health Centre (Non- FRU)	Community Health Centre Karkamb
Primary Health Centre	Primary Health Centre Gadegaon
Sub - Centre	Sub – Centre Korti

Source: DHO Solapur, 2019

1.1 District Profile

Solapur district is famous for its Chadar, Handloom, Power loom and Beedi Industries. It is located in the Pune Division of Maharashtra state in India and covering an area of 14844.6 sq. km. In the north, it is bordered by Ahmednagar and Osmanabad, in the west by Satara, Pune and Sangali, in the south by Sangali and Bijapur (Karnataka state), in the east by Osmanabad and Gulbarga (Karnataka state).

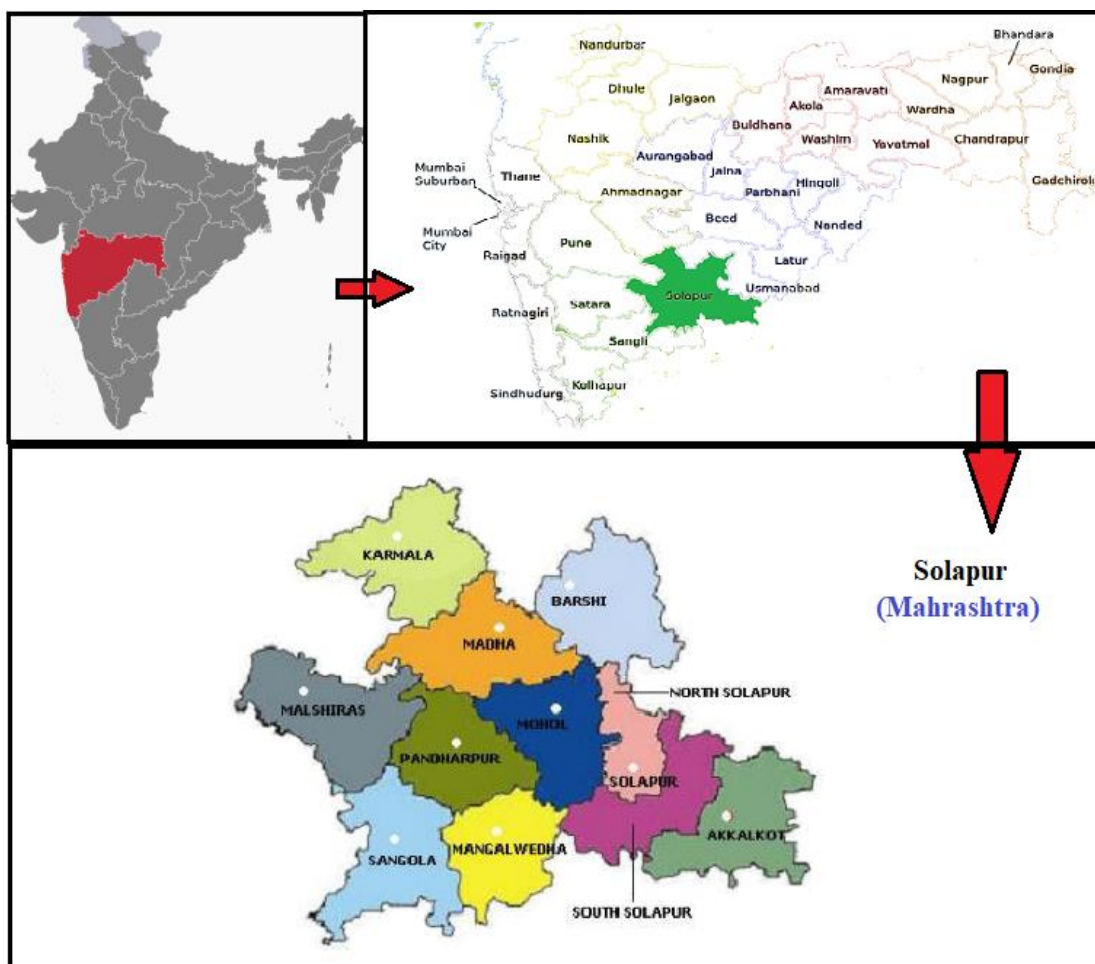


Figure 1: Integrated Map of Solapur, Maharashtra

The district comprises with 11 talukas viz. South Solapur, North Solapur, Mohol, Mangalwedha, Sangola, Madha, Akkalkot, Karmala, Barshi, Malshiras, and Pandharpur, which are further comprises with 1142 villages.

Table 2 depict the demographic profile of the Solapur district. The district has a total population of 43,17,756, which contribute to around 4 percent of the state population. Of the total population, 15.05 percent belong to Scheduled Caste and 1.80 belongs to Scheduled Tribes. The sex ratio of the district is 922 females per 1000 males which is lower than the state (929) sex ratio and the child sex ratio of the district is 874 against the 894 for the state. The literacy rate of the district is 77 percent which is well below the state average of 82.34 percent. The same pattern follows for the male and female literacy, where 85 percent male and 68 .55 percent female are literate in the district.

Table 2: Key Demographic Indicators of Solapur and Maharashtra

Parameters	Maharashtra	Solapur
Total Area (in sq.km)	307,713	14844.6
Total Population	112,374,333	43,17,756
Male	58,243,056	22,27,852
Female	54,131,277	20,89,904
Scheduled Caste	13,271,408	6,49,822
Scheduled Tribes	10,507,000	77,719
Sex Ratio	929	922
Child Sex Ratio	894	874
Population Density (sq.km)	365	290
Literacy	82.34	77.02
Male literacy	88.38	85.03
Female literacy	75.87	68.55

Source: Census, 2011

1.2 Health Profile

The health profile highlights the performance of major service delivery indicators and the subsequent health outcomes in terms of the quantifiable goals of NHM. It analyses the input, output and outcomes of the public health delivery system in Solapur with respect to various domains such as Maternal Health, Child Health, Delivery Care, Family Planning etc. Table 3 presents key stats of health and service delivery indicators of Maharashtra and Solapur district. The district was performing almost same as the state as per the NFHS 4 (2015 – 16) except immunization where district was fully vaccinating to 65 percent of 9 – 11 months of children against the 56 percent of state.

Table 3: Key stats of Health and service delivery indicator of Maharashtra and Solapur

Indicators	NFHS 4	
	Maharashtra	Solapur
Mother registered in the first trimester	67.6	66.3
Mother who had at least 4 ANC visits	72.2	73.8
Mothers who got at least one TT injection	90.4	90.7
Institutional Delivery	90.3	86.4
Home Deliveries assisted by SBA	3.6	6.5
Children (12 -23 months) fully Immunized	56.2	64.9
Using any modern method for family planning	64.8	63.4
Total Unmet need for FP	9.7	8.2
Unmet need for spacing	4.3	4.9

Source: NFHS 4 Factsheet, 2015 -16

Table 4 summarises the current status of health care service delivery indicators in the district. An important component of the maternal health is ANC, which is a systematic supervision of women during pregnancy to ascertain the well-being of the mother and the foetus. It allows for the timely management of complications and provides opportunity to prepare a birth plan and identify the facility for delivery. In Solapur, 88.1 percent of pregnant women registered for ANC in first trimester and 97.6 percent have received 4 or more ANC check –ups against the total ANC registration. Early registration of pregnancy allows for adequate care during the cycle. District has observed the adequate distribution of IFA supplementation, as it was given to 108.4 percent of women who registered for ANC. The district has observed 49 maternal deaths per 100,000 live births.

Delivery care is another important component for maternal health as well for infant health. In Solapur, there were only 15 home deliveries were observed, of which 53.3 were conducted by SBA. Thus presence of SBA in case of home deliveries is essential to combat maternal deaths. 99.9 percent of all deliveries are institutional deliveries, while comparing the institutional deliveries versus total ANC registration, it goes down with 76.4 percent. About 21 percent of the institutional deliveries were C- Section deliveries. With regards to PNC, 91.7 percent of the newborns were breastfed within one hours of birth and 99.8 percent newborns were weighed at birth, whereas only 33.3 percent of women received the 1st post-partum check-up within 48 hours and 14 days of delivery. The district has observed 9 Neonatal Mortality Rate and 11 Infant Mortality Rate during April – October, 2019.

With regards to service delivery for child health, Solapur district has observed that 45,882 children of age 9 to 11 months have received full coverage of immunization. The most common childhood disease is reported as diarrhoea with 683 case followed by Pneumonia with 200 cases in the district. The district also observed that there were 13 children against the 1000 live birth were died during April – October, 2019.

Table 4: Status of Health and Health Care Services Delivery Indicators of Solapur 2019 - 20

Health and Health Care Service Delivery Indicators	Solapur
I. Maternal Health	
Total number of pregnant women registered for ANC	53,689
% 1 st trimester registration to total ANC registration	88.1
% Pregnant women received 4 or more ANC check-ups to total ANC registration	97.6
% Pregnant women given 180 IFA to total ANC registration	108.4
II. Delivery and Post-Delivery Care	
Number of Home Deliveries	15
% SBA attended home deliveries	53.3
% home deliveries	0.04
Institutional Deliveries	38725
% Institutional deliveries to total deliveries	99.9
% Institutional deliveries to ANC registration	76.4
% of C Section Deliveries to Institutional deliveries	20.7
% Women discharged in less than 48 hours of delivery to total reported deliveries	17.3
% Women getting 1 st Post – Partum check –ups between 48 hrs and 14 days to total reported deliveries	33.3
% Newborns breast fed within 1hours of birth to total live births	91.7
% Newborns weighed at birth to live births	99.8
III. Child Health and Immunization Coverage	
Number of fully immunized children (9 – 11 months)	45882
Number of cases of childhood diseases (0 – 5 Years): Pneumonia	200
Number of Cases of childhood disease (0 – 5 Years): Diarrhoea	683
Number of Cases of Childhood disease (0 – 5 Years): SAM	190
% Fully Immunized Children to MR 1 st dose	99
V. Family Planning	
Total Sterilization Conducted	11047
% Male sterilization (Vasectomies) to total sterilization	0.3
% Female sterilization (Tubectomy) to total sterilization	99.7
% IUCD Insertions to all family planning methods (IUCD Plus Permanent)	46.6
VI. Facility Service Delivery	
OPD	19,22,723
IPD	1,32,633
VII. Health Outcomes	
MMR	49
NMR	9
IMR	11
U5MR	13

Source: HMIS and DHO Solapur, 2019 -20

Unmet need for family planning is a significant factor that contributes to population growth. Family planning services work in accordance to lower the unmet need. Female sterilization as a method of permanent family planning dominates with 99.7 percent of all sterilization conducted during April – October, 2019 in Solapur district.

To improve the health care delivery, increase in the OPD and IPD services through better facilitation and coordination of public health system has been a contribution of NHM. The OPD patient load is as high as 19,22,723 number of OPD patients against 1,32,633 IPD patients.

2. Information from District Health Office

Information was collected with the help of district questionnaire covering all the aspects of PIP under various heads. Results of the information collected from Programme Management Unit, Health Officials and Staff Associated with various heads of PIP are as follow:

2.1 Programme Management

District Programme Management Unit (DPMU) at the district level and Block Programme Management Unit (BPMU) at the block level are established in all the development block of the district and they are fully functional. Meeting of District Health Society (governing and executive) of both these units are taking place regularly. DPMU staffs are visiting regularly for PIP monitoring at various level on yearly basis. The NHM funds are utilized only for salary of staff and contingency fund. These funds to the facilities are released as and when received from apex body of NHM with its guidelines.

HMIS data are regularly used to review the performance of the district. RCH officer is the Nodal person responsible for monitoring and supportive supervision in the district. Supervision visits from apex officers are done periodically.

2.2 Human Resource and Health Infrastructure

The component of Human Resources under NHM is to ensure availability of adequate manpower at the public health facilities in the State. Human Resources are largely based on the requirements. The component/scheme of HR under NHM includes different interventions to ensure recruitment, development, continued capacity building and functioning of adequate health care man power. Interventions for increasing the generation of health HR to meet the demands in public sector.

The Public Health Care Infrastructure includes of Sub Centres at the most peripheral level, Primary Health Centre envisaged to provide an integrated curative and preventive health care and

Community Health Centre which serve as a referral centre for PHCs and also provides facilities for obstetric care and specialist consultations.

2.2.1 Human Resource

Human resources are an important component of health care system. Achievement of good health outcomes is not possible without sufficient qualified health workforce and its shortage will lead to decrease in the quality of health care services. There are some improvements in human resources after implementation of National Health Mission. **Table 5** presents the status of regular staff under District Health Office in Solapur. It shows that among the sanctioned post of one each of RCH officer, ADHO, District Malaria Officer, District TB Officer, Statistical Investigator and 6 post of MOs are vacant. Similarly, post of Pharmacist (9%), Health Supervisor (50%), MPW (48%), ANM (34%) are vacant in the district.

Table 5: Regular Staff under District Health Officer (DHO)

Sr. No.	Name of Post	Sanctioned Post	Filled up Post	Vacant Post
1	District Health officer(DHO) Class I	1	1	0
2	Additional District officer Class I	1	1	0
3	RCH officer	1	0	1
4	Asst. District health officer Class I	1	0	1
5	Asst. Director leprocy	1	1	0
6	Dist. malaria officer	1	0	1
7	Dist. T B Officer	1	0	1
8	Medical officer II	155	149	6
9	Administration officer	1	1	0
10	Dist. Ext officer	1	0	1
11	Asst. Administration officer	1	1	0
12	Jr Administration officer	4	3	1
13	Asst. Account officer	2	1	1
14	Jr account officer	1	1	0
15	Ext Statistical officer	1	1	0
16	Statistical supervisor	1	1	0
17	Statistical investigator	1	0	1
18	Pharmacists officer	79	72	7
19	Health supervisor	10	5	5
20	Health asst.	122	110	10
21	Health asst. Female(LHV)	2	1	1
22	MPW	428	223	205
23	ANM	683	452	231
24	Driver	6	4	2
25	Cold Chain technician	1	1	0
26	Sweeper	231	162	69
	Total	1737	1191	544

Source: DHO Solapur, 2019 - 20

Table 6 depict the status of contractual staff appointed under NHM in Solapur district. PRC monitoring team have observed that overall there were 10 percent of shortages among the contractual staff under NHM.

Table 6: Contractual staff appointed under NHM in District Programme Management Unit (DPMU)

Sr. No.	Name of the post	Sanctioned	Filled	Vacant
1	IPHS	49	42	7
2	SNCU /NBSU	27	23	4
4	EMS	1	1	0
5	AYUSH	10	7	3
6	DPMU	4	2	2
7	RBSK	210	191	19
8	NRC	7	4	3
9	Telemedicine	1	1	0
10	DEIC	12	12	0
11	Dialysis	3	0	3
12	NMHP	2	0	2
13	NPCDCS	1	0	1
14	NTCP	1	1	0
15	PNDT	1	1	0
16	Urban ANM	15	15	
17	ANM	216	212	4
18	Staff nurse	17	16	1
19	MNHP	1	0	1
20	LHV STAFF	59	59	0
21	COMMUNITY NURSE	1	0	1
22	RNTCP	18	18	0
23	KMC	4	0	4
24	RKSK	1	0	1
25	RI	4	4	0
26	BSU	8	6	2
27	DRIVER	6	0	6
28	PHARMASIST	2	1	1
29	ASHA CO ORDINITER	1	1	0
30	MED	2	1	1
31	QA	1	0	1
32	RKS	1	1	0
33	EMS	1	1	0
34	MIS	3	3	0
35	BUDGET FINCEOFFICER	1	1	0
36	ACCOUNTANT	4	4	0
37	NCD	1	1	0
38	FMG	1	0	1
39	NPCB	1	1	0
40	BLOCK COMMUNITYMANGER	11	10	1
41	BLOCK ACCONUTANT	11	10	1
42	DEO	11	10	1
43	TOTAL PROGRAM MANGER	99	85	14
	Total	830	745	85

Source: DHO Solapur 2019 – 20

2.2.2 Health Infrastructure

Table 7 depict the details of Health Infrastructure in the Solapur district. With regards to Public Health Infrastructure, there are 3 Sub – District Hospitals, 14 Community Health Centre (CHCs), 77 Primary Health Centre, and 427 Sub – Centres in Solapur district. The district also has 1 Medical college providing its services in Solapur North block.

All the facilities are run in a government building. Regarding the transport facility in the district, there are 104 ambulance working at present. During April – October, 2019, total 11,540 patients had utilized the ambulance services.

Table 7: Status of Health Infrastructure in Solapur district, 2019 – 20

Health Facilities	Number of Institutions	Govt. building	Rented Building
District Hospital	0		-
Sub – District Hospital	3	3	0
CHC	14	14	0
PHC	77	-	0
SC	427	-	-
Medical College	1	1	0
Transport Facility	Number Available		Number of Functional
108 Ambulance	104		104
102 Ambulance			
Mobile Medical Unit	-		-

Source: DHO Solapur, 2019 – 20

Among the visited facilities, all four facilities are easily accessible from nearest road head and are working in government building. Except CHC Karkamb, all three have residential quarter for MOs and SNs/ANMs in their premises. Similarly, PHC Gadegaon does not have piped water supply at the moment and SC Korti does not have clean separate toilets and suggestion box in the premises.

Table 8: Status of Health Infrastructure in facilities visited, Solapur

Physical Infrastructure Indicators	SDH Akluj	CHC Karkamb	PHC Gadegaon	SC Korti
Health facility easily accessible from nearest road head	Yes	Yes	Yes	Yes
Functioning in govt. building	Yes	Yes	Yes	Yes
Residential quarters for MOs and SNs/ANMs	Yes	No	Yes	Yes
Piped Water Supply	Yes	Yes	Yes	Yes
Clean Wards	Yes	Yes	Yes	Yes
Clean separate Toilets	Yes	Yes	Yes	No
Availability of complaint/suggestion box	Yes	Yes	Yes	No

Source: DHO Solapur, 2019 – 20

2.3 Training of Health Personnel

Table 9 depict the status of training given to health personnel of Solapur district at Health & Family Welfare Training Centre under various Programmes during April – October 2019. Total 864 health personnel had trained under various programme head. Of which 479 health personnel were trained under NCD programmes, followed by SBA with 73 health personnel and NSSK with 62 health personnel.

Table 9: Training given to health personnel of Solapur district at Health & Family Welfare Training Centre under various Programmes

Sr. No.	Training Programmes	No. of health personnel
1	BeMOC	6
2	SBA	73
3	MTP/MVA	5
4	NSSK	62
5	IUCD	58
6	PPIUCD	17
7	IMEP	15
8	RI/Immunization and Cold Chain	50
9	Mini Lap	1
10	NCD	479
11	KMC	19
12	PAFP	24
13	New Inj-Cont	55
	Total	864

Source: DHO Solapur, 2019 – 20

3. Maternal Health

Maternal Health is an important aspect for the development of any country in terms of increasing equity and reducing poverty. The survival and well-being of mothers is not only important in their own right but also central to solving large boarder, economic, social and developmental challenges.

Maternal health refers to the health of women during pregnancy, childbirth and the postpartum period. While motherhood is often a positive and fulfilling experience, for too many women it is associated with suffering, ill-health and even death. The RMNCH+A strategy aims to reduce child and maternal mortality through strengthening of health care delivery system.

3.1 Overview

The 5×5 RMNCH+A matrix under NHM throws light on 4 important life cycle of maternal and reproductive health. **Table 10** depicts the performance indicators by various stages for the current financial years (April – October, 2019).

IUCD insertions is a priority area under spacing services. Pertaining to the performance under reproductive health, more than 46 percent of women opted for IUCD insertions as a family planning method. Women continue to bear an uneven burden of sterilization in Solapur, as 99.7 percent of the women has opted for permanent sterilization against the total permanent sterilization.

With regards to accessibility of ANC services, more than 88 percent of women had registered for ANC in 1st trimester and more than 97 percent had received 4 or more ANC services against the total ANC registration. Though, 2.3 percent of obstetric complications were managed against the total deliveries during April – October, 2019.

In 2019 – 20, more than 53 percent of all home deliveries were attended by SBA. Solapur has performed extremely well with regards to institutional delivery as almost all the deliveries were conducted in health institution. During the same period there were 20.7 percent of C – Section deliveries were performed against the total institutional deliveries.

Postnatal care is yet another domain integral to maternal health. In Solapur, more than 17 percent of women were discharged under 48 hours of delivery in health facilities. However, more than 91 percent of newborns were initiated breastfeeding within one of birth and almost all the newborns were weighed at birth, of them 13.6 percent were born with less than 2.5 kg.

Table 10: Maternal Health Indicators of Solapur district

Sr. No.	Indicators	April - October 2019
Reproductive age		
1	%Post – partum sterilization against total female sterilization	99.7
2	%Male sterilization to total sterilization conducted	0.3
3	%IUCD insertions to all family planning methods (IUCD plus permanent)	46.6
Pregnancy Care		
4	% 1 st Trimester registration to total registration	88.1
5	% Pregnant women received 4 or more ANC check-ups to total ANC registration	97.6
6	% Pregnant women given 180 IFA to total ANC registration	108.4
7	%Cases of pregnant women with Obstetric Complication managed to total deliveries	2.3

Sr. No.	Indicators	April - October 2019
Child Birth		
8	% SBA attended home deliveries to total home deliveries	53.3
9	% Institutional deliveries to total deliveries	99.9
10	% of C Section Deliveries to Institutional deliveries	20.7
Postnatal, Maternal and New Born Care		
11	% of new born received 7 HBNC visits to total home deliveries	60
12	% New born breast fed within 1hours of birth to total live births	91.7
13	% Women discharged under 48 hours of delivery in public institution to total deliveries in public institutions	17.3
14	% New born weighed at birth to live births	99.8
15	% New born having weight less than 2.5 kg	13.6

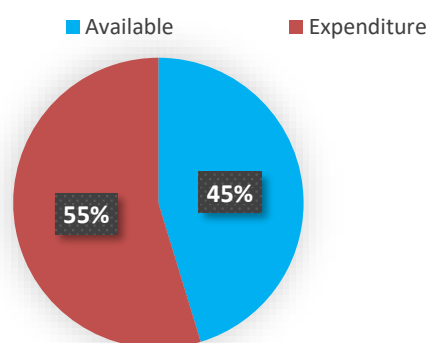
Source: DHO Solapur and HMIS 2019 – 20

3.2 Janani Suraksha Yojana (JSY)

Janani Suraksha Yojana is one of the key maternal health strategies under NHM. JSY a demand promotion scheme was launched in April 2005 with the objective to reducing maternal and infant mortality. This conditional cash transfer scheme for pregnant women coming into the institutional fold for delivery. It has been lauded as successful scheme bringing about a surge in institutional deliveries since its launch. Cash assistance of ₹1400 is provide to mothers who deliver in institutional facilities.

Table 11 depict the highlights of the JSY scheme in Solapur district. Beneficiaries were satisfactorily aware about the JSY schemes, and most of the beneficiaries had bank accounts. The ASHAs were helping beneficiaries to open bank accounts. The payments are being paid through PFMS mode. **Table 11** shows that total 5887 women who delivered in institutional facilities received JSY payments and all of them were brought by AHSA, which highlights their active role in emphasizing institutional deliveries. The district has utilized 55 percent of the total PIP funds under JSY payments during April – October, 2019 (**Figure 2**).

Figure 2: Status of JSY Budget



Source: DHO Solapur, 2019 - 20

Table 11: Status of Janani Suraksha Yojana in Solapur, 2019 – 20

Institutional Deliveries	Home Deliveries	Deliveries brought by ASHAs
5887	0	5887
Record Maintenance		
Available and Updated		

Source: HMIS Solapur, 2019 – 20

3.3 Janani Shishu Suraksha Karyakram (JSSK)

Government of India had come with another programme named as Janani Shishu Suraksha Karyakram (JSSK) and launched it in 2012, in order to eliminate out of pocket expenditure for pregnant women and sick –new born and infants on drugs, diet, diagnostics, user charges, referral transport etc. which was occurring during the successful implementation of JSY. The scheme entitles to all pregnant women delivering in public health institutions to absolutely free and no expenses delivery including Caesarean section.

Table 12: Status of Janani Shishu Suraksha Karyakram for pregnant women in Solapur, 2019 – 20

Blocks	Total Deliveries	Diet	Medicine	Home to Institution	Institution to Institution	Institution to Home
Akkalkot	1092	1092	1092	1203	315	860
Barshi	469	468	466	762	314	441
Karmala	316	316	316	414	134	85
Madha	248	248	248	659	402	204
Malshiras	750	750	750	800	220	480
Mangalwedha	452	452	452	536	143	338
Mohol	349	306	323	377	141	188
N. Solapur	230	230	230	651	53	61
Pandharpur	1511	1427	1496	1615	290	1025
S. Solapur	441	441	441	708	295	403
Sangola	543	543	543	627	116	470
Total	6401	6273	6357	8352	2902	4555

Source: HMIS 2019 -20

In Solapur, the coverage of JSSK was good, as 6273 mothers has received the diet facility during their stay in health institution against the 6401 institutional delivery. Similarly, 6357 pregnant women has received medicine from the health facility during their child wearing period. With regards to transport facility, total 8352 pregnant women had availed the ambulance services from home to health institution during ANC/INC/PNC period. The drop back facility was not 100 percent as some the women or her family members has refused to use ambulance for returning back to home with new born child. The reason given by MS of SDH Akluj was that, the women

or her family members refused to use the ambulance service because of the myth i.e. the ambulances are used to bring died person in the hospitals and new-born baby can't travel on that ambulance/vehicle.

Figure 3: Status of Transport services provided for sick infants in Solapur, 2019 – 20

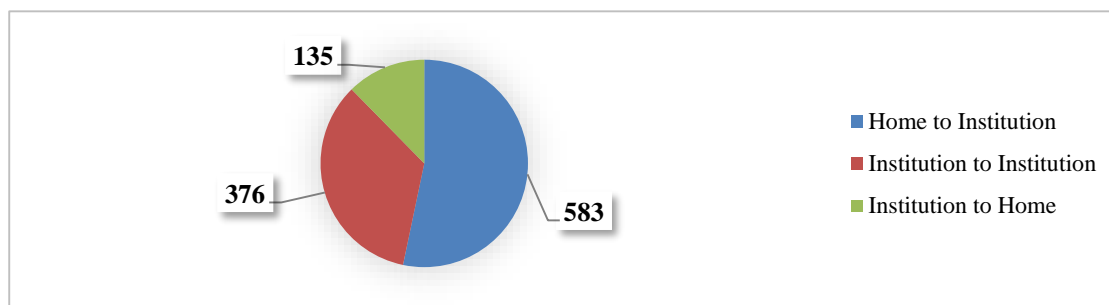
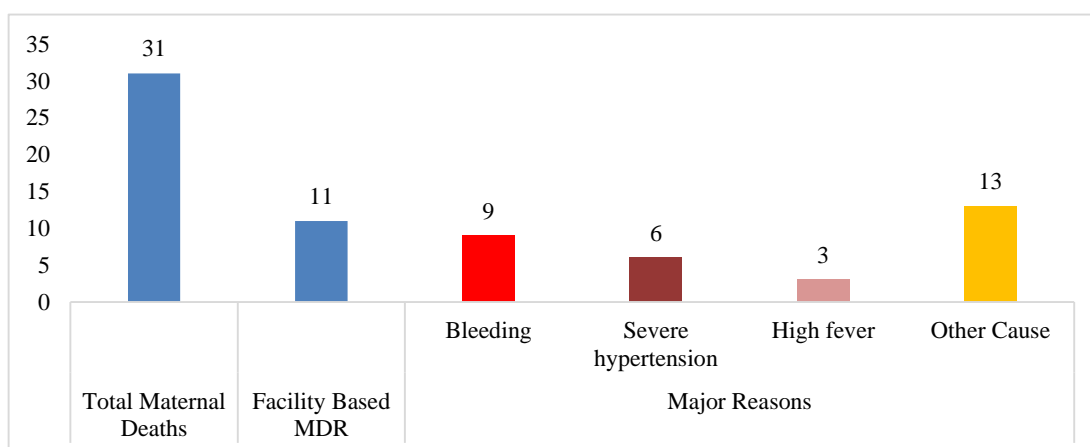


Figure 3, present the status of transport services provided to sick infants in Solapur during April – October. Total 583 sick infants had provided transport facility from home to health institution, 376 sick infants for institution to institution and 135 sick infants for institution to home during April to October 2019.

3.4 Maternal Death Review

Maternal Death Review (MDR) as a strategy has been spelt out clearly in the RCH –II National Programme Implementation Plan documents. The importance of MDR lies in the fact that it provides detailed information on various factors at facility, district, community, regional and national level that are needed to be addressed to reduce maternal deaths. Analysis of these deaths can identify the delays that contribute to maternal deaths at various levels and the information used to adopt measures to fill the gaps in services.

Figure 4: Status of Maternal Deaths in Solapur, 2019 – 20



Source: DHO Solapur and HMIS 2019

There were 31 Maternal Deaths observed in Solapur district during the reference period as shown in *figure 4*. Of which only 11 maternal deaths (all were in Solapur North Block) were reviewed (Facility Based Maternal Death Review: FBMDR). The major problems for these deaths were bleeding, hypertension, high fever and other causes.

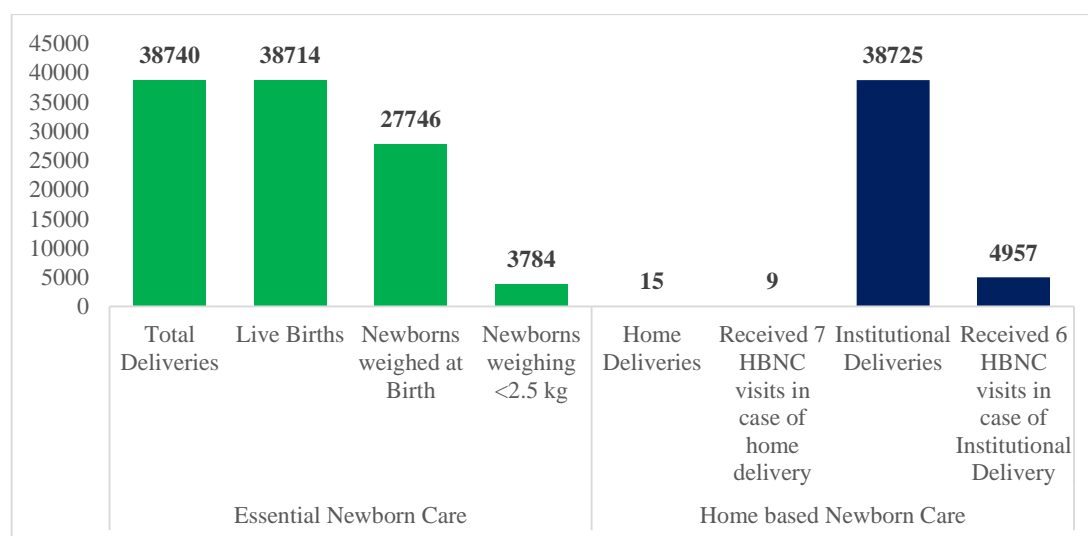
4. Child Health

The RMNCH+A under the National Health Mission also comprehensively integrates interventions that improve child health and addresses factors contributing to Infant and under-five mortality. Reduction of infant and child mortality has been an important precept of the health policy of the Government of India and it has tried to address the issue right from the early stages of planned development. The National Population Policy (NPP) 2000, the National Health Policy 2002 and National Rural Health Mission (NRHM – 2005 – 2012) have laid down the goals for child health.

4.1 Neonatal Health

The district has observed 38725 institutional deliveries, of the total 38740 deliveries during the reference period as presented in *figure 5*. Of the total newborns, 71.7 percent were weighed at birth. 3784 newborns had a birth weight of less than 2.5 kg. Of the total home deliveries in the district, 60 percent newborns received 7 HBNC visits, whereas only 13 percent of newborns received 6 HBNC visits against the total institutional deliveries.

Figure 5: Neonatal health Indicators, Solapur



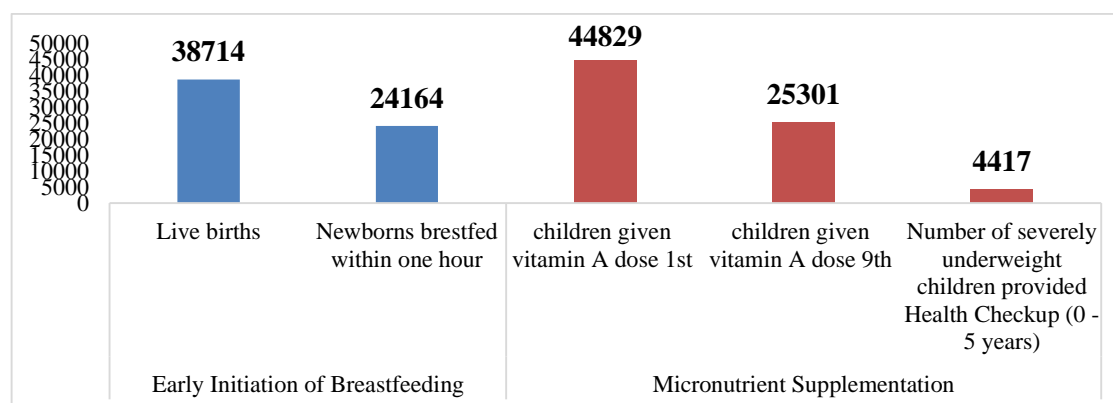
Source: DHO Solapur and HMIS 2019

4.2 Nutrition

Nutrition is known as one of the most effective entry points for human development, poverty reduction and economic development, with high economics returns. Nutrition is fundamental to all the achievement of the other National and Global Sustainable Development Goals. It is critical to check under-nutrition, as early as possible, across the life cycle, to prevent irreversible cumulative growth and development deficits. Factors contributing to under-nutrition during infancy and childhood include low birth weight and poor breast feeding.

RMNCH implementation in terms of nutrition includes calcium, iron and vitamin A supplementation to improve maternal and infant survival. With regards to the same, *figure 6* depict that, 24164 newborns in the district were breastfed within 1 hours of birth which accounts to 62.4 percent of the total live births. Early initiation of breastfeeding is crucial to child nutrition and should be promoted. Number of children given Vitamin A dose 1 is 44829 while the number of children given Vitamin A dose 9 is 25301. Whereas 4417 severely underweight children were provided health check –up during the same time.

Figure 6: Status of Child Health Nutrition, Solapur 2019 -20



Source: DHO Solapur and HMIS 2019

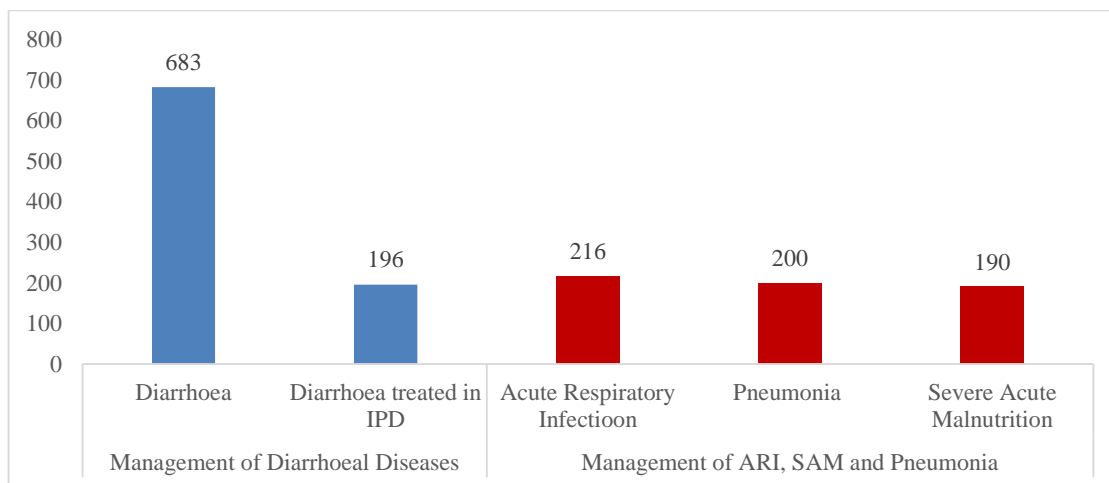
4.3 Management of Common Childhood Illnesses

Every year about 8 million children in developing countries die before they reach their fifth birthday, of which many during the first year of life. Eight in ten of these deaths are due to neonatal conditions, acute respiratory infection, diarrhoea, malaria or severe malnutrition or combination of these conditions.

In India, common childhood illness in children under 5 years of age include fever, acute respiratory infections, diarrhoea and malnutrition (43%) and often in combination. As shown in *figure 7*, in Solapur district 683 children were suffered with diarrhoea of which 29 percent were treated at IPD. As for Pneumonia and acute respiratory infection, 200 children and 216 children

respectively were admitted during the reference period. While 190 children were admitted in NRC of severe acute malnutrition during the same time.

Figure 7: Status of childhood disease in Solapur during 2019 – 20



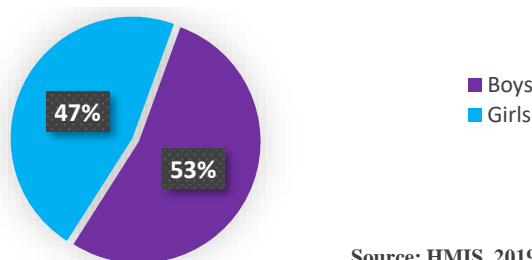
Source: DHO Solapur and HMIS 2019-20

4.4 Immunization

Immunization Programme is one of the key interventions for protection of children from life threatening situations, which are available. Immunization programme under NHM, is one of the major public health intervention in the country.

Table 13 depicts the immunization coverage scenario of Solapur district. In Solapur, total 51,107 newborns have received BCG vaccination and 35,327 of them has received OPV 0 vaccination at birth. DPT vaccination was reportedly updated to Pentavalent vaccine, where the latter promisingly safeguard the child’s life against not just three preventable life-threatening diseases but five diseases, including Hepatitis B and Haemophilia influenza type B as well. Measles and Rubella (MR) vaccination successfully administered to 46,343 children. Overall the district has administered to total 45,882 children for full immunization, of which 53% are male children and 47% are female children (**Fig. 8**)

Figure 8: Fully Immunized children by gender, Solapur 2019 -20



Source: HMIS, 2019 - 20

Table 13: Block wise status of immunization coverage in Solapur, 2019 -20

District	BCG 0	OPV 0	Pentavalent			Measles & Rubella	Full Immunization
			1	2	3		
Solapur	51,107	35,327	45,958	43,702	44,866	46,343	45,882

Source: HMIS, DHO Solapur, 2019 -20

4.5 Rashtriya Bal Swasthya Karyakram (RBSK)

National Health Mission has made certain noteworthy progress in reducing child mortality. However, a dire need prevails to improve survival outcome which would be reached by early detection and management of childhood conditions in a comprehensive manner.

Rashtriya Baal Swasthya Karyakram (RBSK) is an important initiative aiming at early identification and early intervention for children from birth to 18 years to cover 4 'D's viz. Defects at birth, Deficiencies, Diseases, Development delays including disability. Child Health Screening and Early Intervention Services under RBSK envisages to cover 30 selected health conditions for Screening, early detection and free management.

Table 13 depicts the status of RBSK activities in the district for the years 2019 -20. In Solapur, total 4,093 schools and 4,747 Aganwadies were covered, where 959,792 children were diagnosed. 396 cases were identified with some problems, where the major problems were Heart disease, Orthopaedic, Cleft lip & Palate, Appendix, Squint/Cataract, ENT, Club foot, Dental surgeries and others.

Table 14: Status of RBSK Programme in Solapur, 2019 - 20

Parameters	Status
Number of School	4093
Number of Aganwadi	4747
Children Diagnosed	959792
Heart Disease	55
Orthopaedic	52
Cleft lip & Palate	43
Appendix	35
Squint/Cataract	33
ENT	28
Hernia	27
Club foot	16
Dental surgeries	7
Hydrocele	3
Down syndrome	3
Chromosomal disorder	2
<i>Others</i>	92

Source: DHO Solapur, 2019 -20

5. Family Planning

Family planning offers a choice of freedom to Women for determining her Family size; number of children and control the spacing of pregnancies. A women’s freedom to choose “when to become pregnant” has a direct impact on her health and well-being as well as the neonates. This could be achieved only by providing privilege of choices for contraception methods. By reducing rates of unplanned pregnancies, family planning also reduces the need for unsafe abortions.

Table 15 depict the achievement of Solapur on family panning during 2019 – 20, where female sterilization was dominated under permanent sterilization. Apart from this, the condom distribution was satisfactory in the district with a total of 1,70,920 condoms distributed during 2019 – 20.

Table 15: Status of Family Planning in Solapur during 2019 -20

	Sterilization		IUCD	Oral Pills	Condoms
	Male	Female	Insertions		
Solapur	38	9,445	9,602	86,146	1,70,920

Source: DHO Solapur and HMIS 2019 -20

6. Information Education Communication (IEC)

Information, Education and Communication (IEC) is a public health system approach aiming at changing or reinforcing health- related behaviour in a target audience, concerning a specific problem and within a pre –define period of time, through communication methods and principles. Under IEC, posters, flyers, leaflets, brochures, booklets, messages for health education sessions, radio broadcaster or TV spots, etc. are printed/produced and circulated/broadcasted as a means of promoting desired & positive behaviour in the community. IEC Materials play a crucial role in generating awareness and promoting healthy behaviour.

The visited facilities had put in place the procured IEC material in place except SC Korti as it was recently repainted for being one of the Health and Wellness Centre (Service under HWC is not started yet). Though, IEC material was placed in all the visited facilities, but some of the important posters of JSY, JSSK were missing in all the visited facilities.

7. Community Process

The Accredited Social Health Activist (ASHAs) have been established as the first port of call for all health related and allied activities at the community level. Community health workers like ASHAs play strategies role in the area of public health. The bottom up approach of NHM

especially draws attention to the role of ASHAs all the more. They help in educating and mobilizing the masses to adopt healthy behaviours.

The broad working status of ASHAs is highlighted in **Table 16**. In the Solapur district there were total 2,718 ASHA workers were required, of 2,703 are currently working and 15 have been left in last quarter. All the ASHA workers are having necessary drugs, kits and family planning methods. Apart from this 2,656 ASHAs has trained module 6 & 7 to implement the HNBC schemes in the district. All the ASHA workers are being paid on time with average incentive of ₹1262, where highest incentive was ₹10000 and lowest incentive was ₹200 during April – October, 2019.

Table 16: Status of ASHAs worker in Solapur, 2019 – 20

Parameters	Number & Status
Number of ASHAs required	2718
Number of ASHAs available	2703
Number of AHSAs left	15
Number ASHA workers trained module 6 & 7 for implementing HBNC schemes	2656
Availability of ORS, Zinc, FP methods to all AHSAs	Yes

Source: DHO Solapur, 2019 -20

8. Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy

Mainstreaming of AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homeopathy) system of Medicine is a major vision of NHM. The AYUSH system, especially Ayurveda and Homeopathy play an important role in the Health Care Delivery System.

In Solapur, a total of 15 Health facilities are providing AYUSH service, of which 6 are providing inpatient facilities. During April – October, 2019, 50,549 patients received AYUSH service in Solapur district, where Malshiras block being the highest service provider with 9861 AYUSH services and Solapur North being the lowest with zero AYUSH services.

Table 17: Status of AYUSH services in Solapur, 2019 -20

Sr. No.	Details	April – October, 2019
1	Number of facilities with AYUSH health system	15
2	No. Health Facilities have AYUSH Inpatient service	6
3	No. of patients who received treatment	50,549

Source: DHO Solapur, 2019 -20

9. Disease Control Programme

Several National Health Programmes such as National Vector Borne Disease Control, Leprosy Eradication, TB Control, Blindness Control and Iodine Deficiency Disorder Control Programmes, etc. come under the umbrella of National Disease Control Programme (NDCP). The status of some communicable and non-communicable disease in the district has been discussed below.

9.1 Communicable Disease

Table 18 summarizes the status of communicable disease in Solapur district during April – October 2019. During April – October, 2019, total 182,442 cases were screened for malaria, of which 59 cases were found positive. Similarly, 12,784 cases of Tuberculosis were screened, of which 778 cases were found positive.

Table 18: Status of Communicable Diseases Programme, Solapur 2019 – 20

Name of the Disease	No. of cases screened	No. of cases detected
Malaria	182,442	59
Tuberculosis	12784	778

Source: DHO Solapur, 2019 -20

9.2 Non-communicable Disease

Non-communicable diseases (NCDs) are the leading cause of adult mortality and morbidity worldwide. Several programmes which cater to Mental Health, Blindness, Diabetes, Hypertension, Heart Disease, Cancer etc. are covered under NHM.

There was no separate data available for non-communicable disease. Though from HMIS data, it was observed that 21616 cases of diabetes and 21290 cases of hypertension has been treated in the health facilities.

10. Health Management Information System

Health Management Information System (HMIS) under National Health Mission (NHM) is integral to assessing the progress, quantifying output as well as outcome of interventions and decision making.

As per the observation of the monitoring team, HMIS data in the district faces some errors, the primary cause of which remains the shortage of manpower. Well trained data entry operator or statisticians are not available in most of the facilities. In such a scenario, paramedical staffs are

mostly allotted to complete the task which leads to multitude of errors. It was further reported that data validation and error is not being considered while reporting and uploading the data.

As presented in *table 19*, there has been some progress with regards to HMIS while the system still has wide scope of improvements.

Table 19: HMIS/MCTS status in Solapur, 2019 -20

Parameters	Status
Is HMIS implemented at all the facilities?	Yes
Is MCTS implemented at all the facilities?	Yes
Is HMIS data analysed and discussed with concerned staff at state and district level for necessary corrective action to be taken in future?	Yes
Do programme managers at all level use HMIS data for monthly reviews?	Yes
Is MCTS made fully operational for regular and effective monitoring of services delivery including tracking and monitoring of severely anaemic women, low birth weight babies and sick neonates?	Yes
Is the service delivery data uploaded regularly?	Yes
Is the MCTS call centre set up at the District level to check the veracity of data and service delivery	Yes
Is HMIS data analysed and discussed with staff at all levels for necessary corrective action to be taken in future?	Yes

Source: DHO Solapur, 2019 -20

11. Health and Wellness Centre

AYUSHMAN BHARAT is the flagship scheme of the MoHFW, and is launched in the district in last financial year. Total **68 PHCs** and **362 SCs** has been sanctioned as Health and Wellness Centre in the district.

PRC team visited two of them (PHC Gadegaon and SC Korti). Team observed that nothing has been done yet in respect of HWC except painting of the buildings. No HR has been deployed.

12. Budget Utilization

The budget utilization summary for Solapur district is presented in *Table 20*. 40 percent of the total sanctioned budget for the PIP has utilized for various scheme/programme during April – October 2019.

Table 20: Budget utilization parameters, Solapur 2019 -20

Scheme/Programme	2019 -20		
	Sanctioned	Utilized	Percent
Service Delivery – Facility based	42077357	8979541	21%
Service Delivery – Community based	6507772	2435274	37%
Community Intervention	123260038	64134710	52%
Untied Fund	21409000	8726022	41%
Infrastructure	111436000	23287000	21%
Procurement	22311734	6121883	27%
Referral Transport	5513691	2941399	53%
Human Resources	109566229	59530289	54%
Training	3335376	320500	10%
Review, Research, Survey and Surveillance	500000	0	0%
IEC/BCC	2713460	749595	28%
Printing	1245752	0	0%
Quality Assurance	3331024	0	0%
Drug Warehousing and Logistics	20550746	567953	28%
PPP	1961000	0	0%
Programme Management	45843000	22290874	49%
Total	503062268	200085040	40%

Source: DHO Solapur, 2019 -20

13. Facility Wise Observation

The observations made by the monitoring team during the visit to various health facilities are listed below. The points summarize the broad status of the health facilities with regards to infrastructure, service delivery, manpower, drugs and equipment, NHM programmes etc.

The monitoring team visited the following health facilities comprising one each SDH, CHC, PHC and SC. Since DH and Women Hospital are not available, hence not visited by the monitoring team.

13.1 Sub- District Hospital: Akluj

Sub – District Hospital was located in Malshiras block and was 13 km and 116 km away from Taluka and District headquarter respectively. The facility was a 50 bedded hospital and easily accessible from nearest road head.

The Medical Officer-in-charge at the facility was observed to be highly efficient and orderly in keeping the health facility functional as well as systematic to the fullest, given its infrastructure and Human Resource provided at the health facility (*Table 21*).

Table 21: Status of Human Resource at the SDH Akluj 2019 -20

Sr. No.	Position Name	Sanctioned	Filled	Vacant
1	OBG	1	1	-
2	Anaesthetist	1	-	1
3	Paediatrician	1	1	-
4	General Surgeon	1	1	-
5	ENT	1	1	-
6	MOs	2	2 bonded	-
7	SNs	12	11 (3 bonded)	1
8	LTs	1	-	1
9	Pharmacist	3	3	-
	Total	23	20	3

Source: SDH Akluj 2019 – 20

The following observations are made by the monitoring team, who visited the SDH Akluj:

- ✦ The SDH was running in government building but there was a shortage of space as some of the services were handling without wards. It has staff quarters for MOs and SNs in its premises and all in good condition.
- ✦ There was no sitting facility in the immunization ward as all the beneficiaries who had come to vaccinate their child, were sitting in ground floor.
- ✦ The SDH have 24*7 water supply, however it lacked with power backup since last one year, which poses major functioning issues.
- ✦ There was a functional labour in SDH but lacked with attached clean toilet.
- ✦ All the necessary equipment's were available in the facility, with regards to OT equipment's functional Laparoscopes and C-arm units were not there. Ultrasound Scanners and CT Scanners were also not available at the facility whereas X-ray unit was not working since last 15 days.
- ✦ All the drugs were available at the facility except IFA blue, for which they asked to nearest PHC whenever it was needed (as per MS of the facility). With regards to supplies, sanitary napkins were available at the time of monitoring visit.



Figure 9: Kayakalp Certificate, SDH Akluj

- ✚ The blood bank unit was not available at the facility, hence no blood bags, and refrigerator (for blood storage) available at the facility
- ✚ In the facility, all mothers were asked to stay for 48 hours after birth and provided diet free of cost. However, JSY payments were not made to all the eligible beneficiaries. These payments were initiated through PFMS mode from THO office.
- ✚ In the facility, total 7 types of training which comprises BeMOC, SBA, MTP/MVA, NSSK, IUCD insertion, PPIUCD, and Immunization & cold chain, have provided to the 50 health personnel's.
- ✚ All the necessary registered were available and maintained properly except blood bank and updated micro plan as these were not required due to unavailability of blood bank.
- ✚ The JSY payments were not paid to all the beneficiaries as there were 230 expected beneficiaries are there, of which 96 has been paid.
- ✚ The facility has provided 433 home to facility, 160 inter facility and 178 facilities to home, transport services to the women for ANC/INC/PNC under the JSSK programme. Whereas 55 newborns and 20 newborns also got home to facility and inter facility transport services respectively.

Table 22 highlights the services delivery indicators of the SDH. During the reference period, the facility had provided only 1751 IPD services against the 39,385 OPD service. At the same time, institute has conducted 193 C – section deliveries against the 460 institutional deliveries of which 104 were assisted with ventous/forceps and 26 obstetric complications were managed. Whereas almost all the neonates were initiated breastfeeding within one hours of birth.



Figure 10: PIP Monitoring team with Staffs of SDH

The institute had conducted 77 post-partum family planning and 91 MTPS in first trimester. Apart from these family planning methods, institute had performed 9 IUCD insertions, 1 tubectomy and 3 minilap during the April – October 2019. At the same time 630 adults has attended the ARSH clinic for their health advice.

The institute has referred 149 women for the follow up during the reference period, of which 92 had normal deliveries and 41 were from C-Section. The following more health services has been provided at the facility during April – October 2019:

Table 22: Health Service Delivery Indicator of SDH Akluj, 2019 -20

Services	April – October, 2019
OPD	39,385
IPD	1,751
No. of pregnant women given IFA tablets	309
Number of deliveries conducted at SC	460
No. of assisted deliveries (Ventous/Forceps)	104
No. of C Section conducted	193
Number of obstetric complications managed	26
No. of neonates initiated breastfeeding within 1 hours	454
Number of children screened defects at births under RBSK	02
No of NBSU admission	78
No. of pregnant women referred	149
No. of children fully immunized	115
No. of IUCD Inserted	9
No. of Minilap	03
No of Tubectomy	01
No of women who accepted post-partum FP services	77
No. of MTPs conducted in first trimester	91
No. of Adolescents attending ARSH clinic	630
No. of still births	3

Source: SDH Akluj records, 2019 -20

13.2 Rural Hospital/Community Health Centre: Karkamb

Community Health Centre Karkamb was located in Pandharpur Block and 23 km and 79 km away from Taluka and District headquarter respectively.

The following observations are made by the monitoring team, who visited the CHC Karkamb:

- ✚ The CHC has all the mandatory physical infrastructure except New Born Care Corner, Nutritional Rehabilitation Centre and ARSH Clinic. Thus there was no NBSU admissions.



Figure 11: Discussion with MS of CHC Karkamb over health services.

- ✚ The facility was well equipped with all the equipment's except needle cutter and radiant warmer. With regard to drugs supply, all the essential drugs were available except IFA tablets (blue). Appropriate drug storage was also available.

- + All the lab tests were available at the facility. In the current financial year total 1160 haemoglobin test has been conducted. Apart from that 1695 Malaria, and 87 HIV test were also conducted at the facility.
- + The blood bank unit was not available at the facility, hence no blood bags, and refrigerator (for blood storage) available at the facility.
- + All records were available, updated and correctly filled, except updated micro plan, Infant/Neonatal Death Review and JSY register, which were not available. Also all the IEC material were correctly displayed, except JSSK and JSY entitlements
- + As the additional support services, the facility undertakes regular fumigation, last being on November 11th, 2019. And also had functional laundry and diet services.
- + Under the JSSK programme, total 196 women had provided home to facility transport service, while 49 women and 9 children were provided inter facility transport service.
- + In terms of HR, one post of each MO, Lab Technician and Radiographer were not filled.
- + All the five sanctioned post under NHM were filled in SDH Akulj.

Table 23: Regular Staff under CHC Karkamb in Solapur District

Sr. No.	Name of Post	Sanctioned Post	Filled up Post	Vacant Post
1	MS	1	0	1
2	MO	3	2	1
4	Dental Specialists	1	0	1
5	Asst. superintendent	1	0	1
6	Jr. Clark	2	2	0
8	X-ray tech.	1	0	1
9	Lab tech	1	1	0
10	Lab asst.	1	0	1
11	Pharmacist	1	1	0
12	Staff nurse	7	7	0
13	Dental asst.	1	0	1
14	Peon	1	1	0
15	Ward boy	4	3	1
16	Sweeper	2	0	2
	Total	27	17	10
NHM Staff				
17	Medical Officer AYUSH	1	1	0
18	Dental MO	1	1	0
19	NBSU Staff Nurse	1	1	0
20	Driver	2	2	0
	Total	5	5	0

Source: CHC Karkamb, 2019 -20



Figure 12: PIP Monitoring team with staffs of CHC Karkamb

13.3 Primary Health Centre: Gadegaon

The Primary Health Centre (PHC), Gadegaon is also situated at Pandharpur Block and 70 km away from the District Headquarter, covering a population of 39715 in its periphery. Total 17 post are sanctioned to this PHC, which consist of 2 MOs, 3 ANMs, 1 Pharmacist, 1 LHV, 3 Health Assistant, 1 Lab Technician, 5 Peon and 1 Clerk. Out of which 1 post of Health Assistant and 3 post of Peons are vacant. The PHC has selected as one of the Health Wellness Centre in the district.

Table 24: Regular staff at PHC Gadegaon, Block Pandharpur District Solapur

Sr. No.	Name of the post	Sanctioned	Filled	Vacant
1	Medical officer	2	2	0
2	ANM	3	3	0
3	Pharmacist	1	1	0
4	LHV	1	1	0
5	HA	3	2	1
6	LT	1	1	0
7	Peon	5	2	3
8	Clark	1	1	0
	Total	17	13	4
		NHM POST		
9	Driver	1	1	0
	Total	1	1	0

The following observations are made and reported by the monitoring team on the PHC Gadegaon:

- ✚ The facility was easily accessible and run in the government building. It has staff quarter in its premises for MOs, SNs and Others staffs. And the overall cleanliness at the facility was up to the mark.
- ✚ Shortage of Mifepristone tables was observed. The non- availability had persisted for last 2 months prior to the evaluation.
- ✚ Record maintenance with regards to OPD, IPD, ANC, PNC registered was proper and complete. The IEC material, Citizen Charter was also efficiently displayed at the PHC with regards to visibility as well as coverage of schemes/programme except JSY and JSSK for the IEC material was not displayed.
- ✚ All the laboratory equipment's and other equipment's were available and functioning.

Table 25 highlights the service delivery indicators of PHC Gadegaon. The facility had 13940 OPDs and 543 IPDs in 2019 -20. OPD to IPD ratio is a good indicator of manner in which inpatient service is being utilized in the facilities. For PHC Gadegaon, OPD to IPD conversation rate is at 4 percent.

Table 25: Status of Service delivery at PHC Gadegaon

Services	April – October, 2019
OPD	13940
IPD	543
Percentage of women registered in the first trimester	90%
ANC 1 registration	495
ANC 4 coverage	435
No. of pregnant women given IFA tablets	495
Number of deliveries conducted at PHC	67
No. of neonates initiated breastfeeding within 1 hours	67
No of pregnant women referred	20
No. of sick children referred out	3
No. of children fully immunized	399
Measles and Rubella coverage	399
No. of children given Vitamin A	435
No of IUCD inserted	113
No of Tubectomy	46
No of Mini lap	103
No of women who accepted post-partum FP service	25

Source: PHC Gadegaon, 2019 -20

Statistically, such a lower rate indicates that the type of inpatient care in relation to the demand for medical services is poor. However, for PHC Gadegaon the situation that does not hold true. The facility is fully equipped with services and has a potential to cater to a varied case mix.

*Figure 13: Monitoring Team with PHC Gadegaon staff*

13.4 Sub- Centre: Korti

Sub- Centre (SC) Korti is situated 2 km away from Gadegaon PHC at Block Pandharpur. SC Korti is providing its services to only one village with 6300 catchment population. A separate functional Labour room was constructed with attached clean toilet. Approximately 3 deliveries are taking place in a month in this SC. The SC has been selected for HWC Programme, hence got repainted recently due to which all the important timing of service availability is not there.



Figure 14: PIP Monitoring team with staffs of SC Korti

The following observations are made and reported by the monitoring team on the SC Korti:

- ✚ The facility was located at the nearest habitation and was run in a government building in which ANM quarter is attached. It was well maintained and equipped with 24*7 piped water supply and electricity. ANM was residing in the SC, though the electricity back-up was not available since last one year.
- ✚ Complaint/suggestion box was not installed at the facility. Also Pictorial toolkit of all the important programme of NHM was not present at the facility at time of visit.
- ✚ The Humane Resource assigned at the facility was: 2 ANM, 1 MPW –male, 1 Peon (part – time) and 3 ASHA. The ANMs were well trained and know all the health parameters measurement.
- ✚ All the essential equipment's were available except Blood sugar testing kits. Similarly, all the essential drugs were available except Inj. Magnesium Sulphate and Misoprostol tablets.
- ✚ All the Essential Medical supplies were available at the SC. Hence, 21 IUCD were inserted in the current financial year.
- ✚ All records were available and well maintained except referral in and out and VHND register. Though the records were available for Untied and AMG, but Grant-in-aids were not issued since last one year towards the SC.
- ✚ Though the separate register for referral register was not available, but SC has referred 23 pregnant women for ANC check-ups in the current financial year.

- ✚ Payment under JSY were not available since it was paid from Taluka Health Office.
- ✚ The Sub Centre has delivered the following services during the current financial year, 2019 – 20.

Services	April – October, 2019
Percentage of women registered in the first trimester	92%
ANC 1 registration	87
ANC 4 coverage	91
No. of pregnant women given IFA tablets	87
Number of deliveries conducted at SC	19
No. of neonates initiated breastfeeding within 1 hours	19
No. of sick children referred out	5
No. of children fully immunized	69
Measles and Rubella coverage	69
No. of children given Vitamin A	325
No. of children given IFA Syrup	424
No. of still births	1
Neonatal deaths	1

Source: SC Korti records, 2019 – 20

14. Conclusion and Recommendations

14.1 Conclusion

Programme Implementation Plan (PIP) is a crucial document under NHM through which identifying and quantifying health programme in public health address the challenges for further Improvement. The Population Research Centre, GIPE, Pune undertook this work and monitored the many states across the country. Programme Implementation Plan has focused on major key points such as facility based services, interaction with community based workers, utilization of untied fund, infrastructure, status of Human Resources, training of HR, quality in health facility, IEC, budget utilization, maternal and child health and disease control programme which support to state for the process of planning to smooth health services. The Population Research Centre (PRC), Pune team has visited SDH Akluj, CHC Karkamb, PHC Gadegaon and SC Korti.

The district has total 11 blocks, where 1 Medical College, 3 Sub – District Hospitals, 14 Community Centre, 77 Primary Health Centre and 427 Sub-Centre are functioning and all are functioning in Government building and among the SDH and CHC, total 15 AYUSH department are functioning. Apart from these health services, 68 PHC and 362 SCs has selected as Health and Wellness Centre under AYUSHMAN Bharat programme. For transport facility, district have 104 ambulances. Deficient of human resources especially the main pillar of three tier health system in India i.e. ANM and MPW was observed in the district. Apart from these post, district has also lack with the services of RCH officer, ADHO, Specialist MOs and MOs (6) as these all the post are vacant. During April

– October, total 864 health personnel have trained under various programme head at district HFW Training Centre.

In Solapur, the male sterilization is almost negligible with respect to their female counter part. During the same period, district has experienced 38714 live births and almost all the births has been taken place in health institution. JSY is functioning well but the utilization of free services under JSSK is low in the district. There were total 31 maternal deaths occurred during April – October, 2019 owing to high bleeding, severe hypertension, high fever and other causes.

Among the live births only 13 percent of the newborns has received 6 HBNC visits in the district. RBSK programme is functioning to screen the defect child and cure them from the disease by referring them to health facilities. Currently 2703 ASHAs are working in the district and 15 are post are vacant in the district.

14.2 Recommendations

Based on the monitoring the following recommendations for improving the service delivery in the district are made -

- ✓ There is urgent need to fill up the vacant post of Specialist MOs, ANM and MPW to tackle problem related to service delivery care.
- ✓ Shortage of some drugs was observed at the visited CHC and PHC, it should be ensure the supply match with demand as per requirement of health facility.
- ✓ The district has observed the shortfall of ambulances and drivers, which needs to be fill up on urgently basis to provide the transport services to the beneficiaries.
- ✓ The X-ray department of SDH was not functioning because of unavailability of X-ray technician due to which patients are forced to go private facility to have X-ray. It is utmost important to be taken care immediately on priority basis.
- ✓ The blood storage unit at SDH Akluj and CHC Karkamb needs to be establish.
- ✓ In SC Korti, the electricity power back facility was not working since last 6 months prior to evaluation. The repairing of power back needs to be done immediately to avoid any health hazard at night.
- ✓ In order to ensure good quality of data and proper reporting into HMIS portal, it must be resolved the data entry operator post at community health centre.

- ✓ Supervisory visits by DPM, Statistical Officer, and other coordinator of various programme should be conducted in regular interval to ensure adherence to the standards and norms with respect to various activities. Systematic review may be conducted to understand the existing demand-supply gaps in public health facilities and must be timely rectified.

List of acronyms and Abbreviations

ANC	Ante Natal Care	MOIC	Medical Officer In- Charge
MDR	Maternal Death Review	BMW	Biomedical waste
ANM	Auxiliary Nurse Midwife	NBCC	New Born Care Corner
MMU	Mobile Medical Unit	NBSU	New Born Stabilization Unit
AYUSH	Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy	NSSK	Navjat Shishu Suraksha Karyakram
MoHFW	Ministry of Health and Family Welfare	SNCU	Special New Born Care Unit
BEMOC	Basic Emergency Obstetric Care	BSU	Blood Storage Unit
CHC	Community Health Centre	CMO	Chief District Medical Officer
PIP	Programme Implementation Plan	DPM	District Programme Manager
RBSK	Rashtriya Bal Suraksha Karyakram	HMIS	Health Management Information System
NSV	No Scalpel Vasectomy	PRC	Population Research Centre
DMPA	Depot Medroxyprogesterone Acetate	IEC	Information, Education and Communication
OPD	Out Patient Department	RKS	Rogi Kalyan Samiti
ECG	Electrocardiography	RCH	Reproductive Child Health
EMOC	Emergency Obstetric Care	IPD	In Patient Department
PNC	Post Natal Care	PPP	Public Private Partnership
FRU	First Referral Unit	OPV	Oral Polio Vaccines
DH	District Hospital	OCP	Oral Contraceptive Pill
IYCF	Infant and Young Child Feeding	VHND	Village Health and Nutrition Day
TT	Tetanus Toxoid	LT	Laboratory Technician
MCTS	Mother and Child Tracking System	ALOS	Average Length of Stay
IMEP	Infection Management and Environment	IUCD	Plan Intra Uterine Contraceptive Device
RPR	Rapid Plasma Reagin	SBA	Skilled Birth Attendant
JSSK	Janani Shishu Suraksha Karyakram	JSY	Janani Suraksha Yojana
SKS	Swasthya Kalyan Samiti	LHV	Lady Health Visitor
SN	Staff Nurse	LSAS	Life Saving Anaesthetic Skill
TFR	Total Fertility Rate	M&E	Monitoring and Evaluation