Final Report

On

Preventive Measures

AT

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For

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1.0 INTRODUCTION:

Preventive Health Measures encompass a variety of interventions that can be undertaken to prevent or delay the occurrence of disease or reduce further transmission or exposure to disease. Preventive health measures are an important part of health promotion efforts and have been recognized as a cost-effective way to identify and treat potential health problems before they develop or worsen. These measures may focus on community assessment, planning and coordination; education and brief counselling; as well as strategies involving policy, advocacy and system changes.

The prevention of disease is a major role of public health programs. In developing and implementing prevention programs the environmental & social factors are increasingly recognized as important components, depending on many reasons.

The main objective is to prevent unnecessary loss of life, poor health, and inefficient use of health care to make sure preventive health measures are:

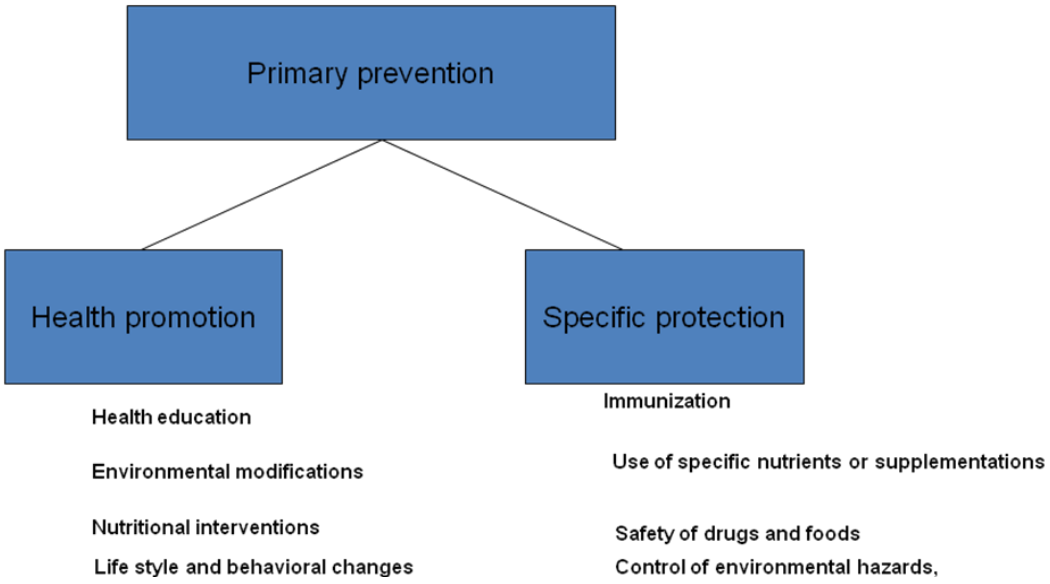
- Used to improve health at the individual and population levels
- Provided for high-risk population groups and in high-risk geographic areas.
- Integrated with other health promotion efforts.

Disease prevention policies refer to interventions that aim to lower the risk of disease and delay the onset of poor health. Prevention policies can apply to primary, secondary and tertiary settings: primary is designed to avert disease or injury; secondary prevention is designed to reverse or retard progression of an existing condition while tertiary is designed to ameliorate the effects of a disease or condition.

1.1 Objective of the Study:

- To identify the present preventive measure practices and schemes prevailing in the districts/blocks.
- To identify the present service delivery mechanism for various services under preventive measures, and to see the present status of the preventive measure practices.
- To understand the gaps in implementation of the measures for prevention of the spread of the disease, and to evaluate the preparedness of the system in addressing the emergency.
- To understand the beneficiary apprehension and experience on the service availability.
- To propose appropriate policy measures for improving the preventive measure in the identified blocks/ districts.

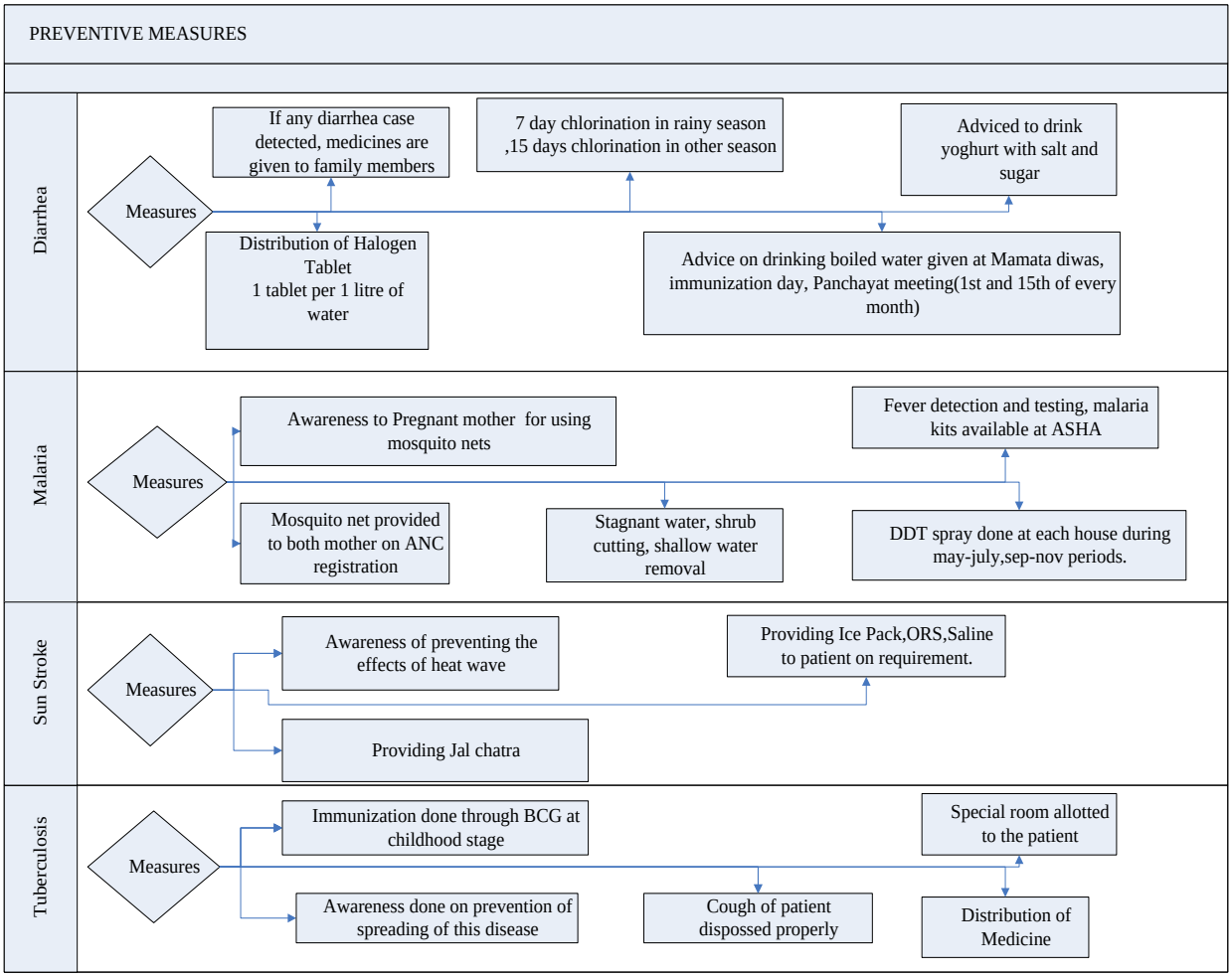
2.0 CURRENT PREVENTIVE MEASURE PRACTISES:



Primary prevention reduces the incidence of disabilities by preventing risk factors which cause impairment. If primary prevention efforts succeed, they completely eliminate any possibility that disability will occur. Primary prevention is aimed at the general population rather than at an identified "high risk" group. The goal is to protect healthy people from developing a disease or injury in the first place. Some examples of primary prevention include:

- Education about good nutrition, the importance of regular exercise, and the dangers of tobacco, alcohol and other drugs
- Education and legislation about proper seatbelt and helmet use
- Regular exams and screening tests to monitor risk factors for illness
- Immunization against infectious disease
- controlling potential hazards at home and in the workplace

Figure 1: Major Preventive Measures Practices



2.1 Diarrhoea preventions:

Diarrhoea is having more frequent, loose, which may be referred to as 'stools'. Diarrhoea is a contaminated after being in contact with someone else who has it or you may get it from food poisoning after eating contaminated food or drinking contaminated water. Almost everyone has diarrhoea at some point in his or her life. Diarrhoea that comes on suddenly and lasts for no longer than a couple of days are usually referred to as "**Acute Diarrhoea**". Most people with acute diarrhoea recover on their own efforts. Diarrhoea that lasts more than two weeks is thought of as "**Chronic Diarrhoea**". Typically, chronic diarrhoea requires medical care to find the underlying cause and treat complications, such as dehydration.

2.1.1 Measures for prevention of Diarrhoea:

Currently, following steps have been implemented by ASHA and HW (Health Worker) in the block level to control and prevent the impacts of diarrhoea.

- Advice on drinking boiled water and sensitization about other health issues are given at Mamata Diwas (monthly twice), immunization day (every Wednesday), Panchayat meeting (1st and 15th of every month).
- Bleaching powder remains the most commonly used drinking water disinfectant. Sterilization of water is done through Chlorination of open water sources weekly during rainy season and fortnight during other seasons.
- Distribution of Halogen tablets to the specific interior region of the block for the family who solely depend on open source of water like water streams, well etc.
- If any suspected victim of diarrhoea was found, medicines are provided and precautions are explained to the family members of patient, i.e., ORS is provided and Yoghurt milk with sugar / salt is advised to patient to recover from dehydration.
- The chronic diarrhoea patients are also referred to the nearby CHC and/ or PHC for first referral but PHCs are not having adequate facilities to handle all these emergency cases up to some extent.

2.1.2 Observations & Performance Measures

(A) Gumma Block:

- During the field study at sample villages, it was observed that no such preventive activities have been carried out regularly.
- Similarly no such data is maintained confirming the receipt and distribution of Bleaching Powder neither at CHC nor at PHC/ Sub Centre level. Thus its gives a hedge picture on the entire supply, storage & distribution of Bleaching Powder sourced from CHC to the village/ beneficiary level.

- During the study it was observed that distribution of halogen tablet was found to be rare in this region in spite of people dependent upon open water source. There is also no trace of maintenance of any MIS on the entire distribution of halogen to the beneficiary.
- It's also revealed that no standard norms exist for the distribution of either Halogen Tablet and/ or Bleaching Powder to the beneficiary.
- Other medical facilities i.e. ORS and medicines are available at ASHA and HW level. There is provision of MHU team to tackle the mass diarrhoea outburst if any.

(B) Chhendipada Block:

- During the field study at sample villages, it was observed that preventive activities have been carried out regularly.
- Similarly Bleaching Powder available at ground level is equivalent to rain drop to ocean. Thus its gives a hedge picture on the entire supply, storage & distribution of Bleaching Powder sourced from CHC to the village/ beneficiary level.
- During the study it was observed that distribution of halogen tablet was found to be rare in this region in spite of people dependent upon open water source. There is also no trace of maintenance of any MIS on the entire distribution of halogen to the beneficiary.
- It's also revealed that no standard norms exist for the distribution of either Halogen Tablet to the beneficiary.
- Other medical facilities i.e. ORS and medicines are available at ASHA and HW level. There is provision of MHU team to tackle the mass diarrhoea outburst if any.

(C) Nimapara Block:

- During the field study at sample villages, it was observed that preventive activities have been carried out regularly.
- During the field study it was observed that availability and distribution of halogen tablets and Bleaching powder in this region is sufficient but the process of distribution is not spontaneous.
- The distribution depends upon the complaints lodged by the beneficiaries.
- However no proper MIS System exists for monitoring the distribution of Halogen tablets to the beneficiary.
- Other medical facilities i.e. ORS and medicines are available at ASHA and HW level. There is provision of MHU team to tackle the mass diarrhoea outburst if any.

2.2 Malaria Prevention:

Malaria is a mosquito-borne infectious disease. The disease is transmitted by the biting of mosquitoes, and the symptoms usually begin within 10 to 15 days after being bitten. In those who have not been appropriately treated disease may recur months later.

2.2.1 Measures for prevention of Malaria:

- Paracetamol tablets are available as part of the ASHA kit and also in the health facilities. Paracetamol usually brings down fever from any cause within half an hour. However, paracetamol does not cure the disease that is causing the fever. RDT (Rapid Diagnosis Test) is done at ASHA level towards the suspected patients of malaria with the aid of the Malaria Test Kit as supplied to the ASHA.
- Awareness to Pregnant mother for using mosquito nets is carried out during counselling. Long Lasting Insecticidal Nets (LLIN) are provided to the pregnant mother on ANC registration at the village level in other districts but there is no such services available at Chhendipada block. Auxiliary Nurse Midwives (ANM) ensured they were issued to pregnant

women during Village Health and Nutrition Days (VHND), immunization days, antenatal check-ups or other appropriate events.

- Disinfecting water sources, wells in the village, promoting activities relating to mosquito eradication (stagnant water treatment, shrub cutting, and shallow water removal) are done under the observation of Gaon Kalyan Samiti (GKS).

Sensitization at Nimapara block

2.2.2 Observations & Performance Measures:

(A) Gumma Block:

- There is minimal practice of DDT spray currently by the health department when compared to other districts. The DDT spray is not so appreciating amongst the tribal; as the period during Sep-Nov clashes with the Diwali, Christmas and other festive seasons. The tribal's clean their wall surface before the festive season thus nullifies the impact/ effectiveness of the DDT spray.
- Distribution of LLIN is available at Gumma block.

- Mosquito nets have been provided to the ante natal mothers, but unfortunately all mothers are not covered under Mo-Mashari scheme due to shortage of supply in the year 2013-14

Particulars	No. of ante natal mother	Supplied LLIN
Quantity	1782	1500

(B) Chhendipada Block:

- There is no practice of DDT spray currently by the health department when compared to other districts.
- Distribution of LLIN is also not available at Chhendipada block.

Beneficiary interaction in Chendiapada Block

(C) Nimapara Block:

- It is observed that in Nimapara block, spray of DDT by the health department is not spontaneous; it is done on the basis of complaints/demands lodged by beneficiary's area wise.
- It is also observed that the spray of DDT is not regular and the same is done mostly in rainy season.
- In Nimapara Block, the community participation for effective administration of health service is found. The residents/beneficiaries made a group, where one individual becomes the nodal, and the complaints thus received are forwarded to the health department for

necessary action. This practice is observed in Ratilo village and is termed as Gramya Swasthya Sangathana.

- In Nimapara Block, observation of malaria campaign programme carried out at ground level. In the campaign the activities include Movement of publicity van, updating the swasthya kanth at GKS level, and organization of sensitization meeting/rally etc.
- Campaigning done on the eve of anti-malaria day and anti-malaria month at Village level.

2.3 Tuberculosis (TB) Prevention:

Tuberculosis (TB) is a widespread, and in many cases fatal, infectious disease. It is spread through the air when people who have an active TB infection cough, sneeze, or otherwise transmit respiratory fluids through the air. In India today, two deaths occur every three minutes from tuberculosis (TB). But these deaths can be prevented. With proper care and treatment, TB patients can be cured. RNTCP or the Revised National Tuberculosis Control Program is the State-run Tuberculosis Control Initiative of the Government of India. It incorporates the principles of Directly Observed Treatment-Short Course (DOTS).

2.3.1 Measures for prevention of TB:

Currently, following steps have been implemented by ASHA and HW (Health Worker) in the block level to control the TB.

- BCG immunization is made available at birth stage of infants as prevention for TB.
- Distribution of Medicine: Under DOTS, the medicines are administered to the TB patient under direct observation of a trained DOT provider thus ensuring successful treatment completion. The DOT Provider may be health workers, ASHA and Anganwadi Workers, who is acceptable and accessible to the patient and accountable to the health system.
- Awareness on prevention of spreading TB (i.e., Cough of patient to be disposed properly, Special room allotted to the patient) by the DOT provider.

2.3.2 Observations & Performance Measures:

(A) Gumma Block:

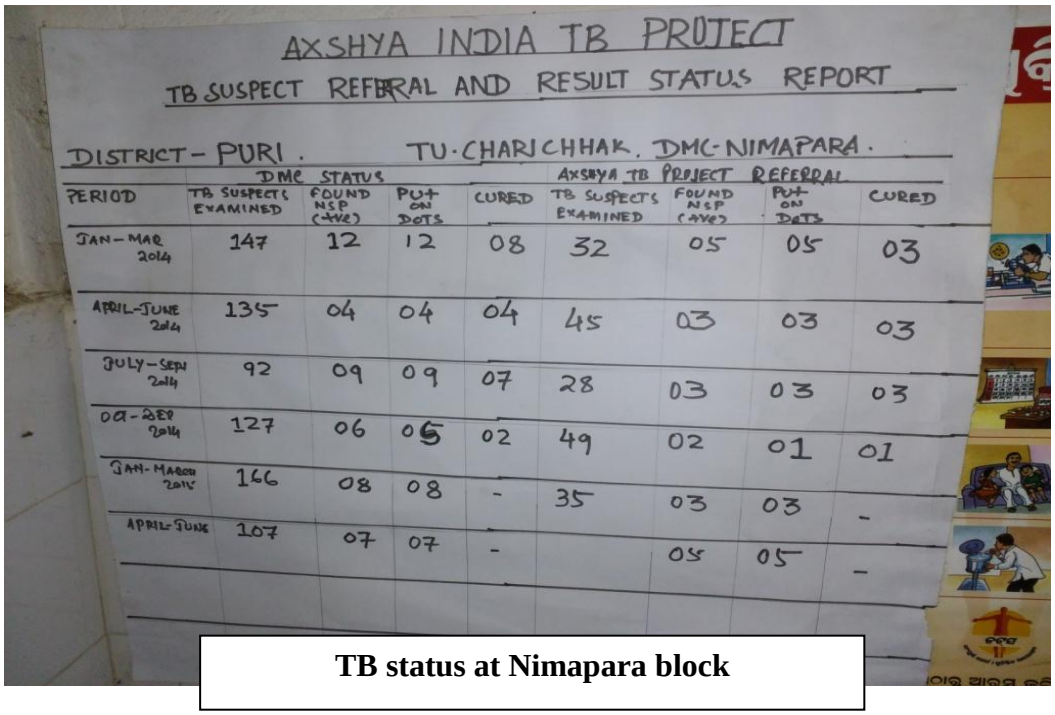
- From field study it was observed that TB testing facility is available at CHC level.
- BCG immunization was given to infants at birth (within 1st year if not given earlier).But it was found that the immunization to be 82% successful in the year 2013-14 at Gumma block.
- It was observed that only few cases of TB were found in Gumma block, merely 3 cases per year on an average and, sufficient resources and facilities to control and prevent the TB are available at block level. The current need is to achieve 100 % success in immunization to control TB in long run.

(B) Chhendipada Block:

- Currently TB testing facility is available only at CHC and is free of cost to the susceptible patients.
- BCG immunization was given to infants at birth (with in 1st year if not given earlier). But it was found that the immunization achieved in 89% in the year 2013-14 at Chhendipada block.

(C) Nimapara Block:

- It was found that BCG immunization at Nimapara Block is 94%. The reason behind low penetration of BCG is lack of awareness among the beneficiaries about the immunization schedule.
- It was observed that no cases of TB were found in Nimapara block. Sufficient resources and facilities were available to control and prevent the TB at block level. The current need is to achieve 100 % success in immunization to control TB in long run.



AXSHYA INDIA TB PROJECT

TB SUSPECT REFERRAL AND RESULT STATUS REPORT

DISTRICT - PURI. TU-CHARICHHAK, DMC-NIMAPARA.

PERIOD	DMC STATUS				AXSHYA TB PROJECT REFERRAL			
	TB SUSPECTS EXAMINED	FOUND NSP (+ve)	PUT ON DOTS	CURED	TB SUSPECTS EXAMINED	FOUND NSP (+ve)	PUT ON DOTS	CURED
JAN-MAR 2014	147	12	12	08	32	05	05	03
APRIL-JUNE 2014	135	04	04	04	45	03	03	03
JULY-SEPT 2014	92	09	09	07	28	03	03	03
OCT-DEC 2014	127	06	05	02	49	02	01	01
JAN-MARCH 2015	166	08	08	-	35	03	03	-
APRIL-JUNE	107	07	07	-		05	05	-

TB status at Nimapara block

2.4 Heat Stroke Prevention:

Heat wave can be defined as a condition of atmospheric temperature that leads to physiological stress, which sometimes can claim human life. Therefore, it is anticipated that there will be an increase in the number of deaths due to greater frequency and severity of heat waves. Unpredictable heat waves may change geographic risk in certain regions of the state, due to limitations of physiological adaptability. For example, some remote rural India is grossly devoid of electricity supply and artificial sources of cooling of living areas, where a high proportion of children and poor elderly might be living, thereby make the regions more vulnerable to heat extremes.

2.4.1 Measures for prevention of Heat stroke:

- Awareness of preventing the effects of heat wave at village level.
- Provision of Jal Chatra at Panchayat level.
- Provision of treatment of Heat stroke patients.

Sun stroke room at Nimapara CHC

Sun stroke room at Jarapada PHC, Chhendipada

2.4.2 Observations & Performance Measures:

(A) Gumma Block:

- During the field visit, it was observed that Jal chatra (Water shed) has been provided to people during the summer season at Panchayat level under the observation of Gaon Kalyan Samiti (GKS).No Heat stroke cases are found to be registered at CHC as discussed with staffs of CHC.

- Ice Pack, ORS, air cooler facility and Saline provisions are only available at CHC to support any dehydration cases due to heat waves. PHCs are in need to be upgraded to tackle heat stroke cases.
- Suitable surveillance systems are not yet available, however, such systems might allow rapid tracking of cases of heat-related emergencies, and provide services.

(B) Chendipada Block:

- During the field visit, people responded that Jal chatra has been provided during the summer season at Panchayat level under the observation of Gaon Kalyan Samiti (GKS).
- Dedicated rooms are available to provide treatment to Patients with Air condition and air coolers at 2 CHCs and 4 PHCs. Ice Pack, ORS and Saline provisions are available at CHCs to support any dehydration cases due to heat waves.
- Suitable surveillance systems are not yet available.

(C) Nimapara Block:

- During the field visit, people responded that Jal Chatra has been provided during the summer season at Panchayat level under the observation of Gaon Kalyan Samiti (GKS).
- Dedicated rooms are available to provide treatment to Patients with air coolers at 2 CHCs at Nimapara Block. Ice Pack, ORS and Saline provisions are available at CHCs to support any dehydration cases due to heat waves. PHCs are not equipped competitively as of CHCs.
- Suitable surveillance systems are not yet available, however, such systems might allow rapid tracking of cases of heat-related emergencies, and provide services.

3.0 BEST PRACTISES IN PREVENTIVE MEASURES AT CHHENDIPADA BLOCK:

3.1 Any Measles cases if happens are reported to the block administration by ASHA and MPHW and blood sample collected and send to the DHH for testing.

3.2 12 Anti –malaria task force meeting at GKS level with PRI, ward member, AWW were held. At Block level in presence of BDO, CDPO, forest department, local industries staff (supported by MCL, Jindal and Monnet industries) in June ahead of monsoon to plan the actions to be implemented.

3.3 Awareness and meeting at block level in month of June and July for anti malaria, anti filarial campaign respectively. August is selected for anti diarrhoea campaign. Nidhi Mausa Rath/Cart has been used to spread health awareness at village level.

3.4 Two SCs had been selected in the Chhendipada block based on high PFR (Plasmodium Falcifarum Rate), which can tend to brain malaria and special attention is provided by providing mosquito nets dipped with anti mosquito chemicals (delta metharane solutions).

3.5 Team visit (Malaria Technical Supervisor), Public Health Education Officer (PHEO), Health Supervisor for eradication of malaria cases around affected 100 families and 4 no. of malaria sibira (camp) had been held at Chendipada block.

3.6 Provision of Swastha Kantha at Sub Centre and new PHC level for awareness and dissemination of various health related message on different health schemes.

3.7 Some awareness activities in the form of art and dance through Palla, Dasakathia and social regional dance are organized to promote health awareness but the same is limited due to shortage of funds at GKS level.

Table 1: Summary of findings

	GUMMA	CHHENDIPADA	NIMAPARA
DIARRHEA	• No such preventive activities have been carried out regularly. • No MIS of distribution of bleaching powder from CHC to the village/ beneficiary level. • Distribution of halogen tablet was found to be rare. There is also no trace of maintenance of any MIS on the entire distribution of halogen to the beneficiary. • It's also revealed that no standard norms exist for the distribution of either Halogen Tablet and/ or Bleaching Powder to the beneficiary.	• Preventive activities have been carried out regularly. • No MIS on Bleaching Powder and availability is minimal at ground level. • Distribution of halogen tablet was found to be rare. There is also no trace of maintenance of any MIS on the entire distribution of halogen to the beneficiary. • It's also revealed that no standard norms exist for the distribution of either Halogen Tablet to the beneficiary.	• Preventive activities have been carried out regularly. • No MIS is maintained on distribution of bleaching powder. • It was observed that availability and distribution of halogen tablets and Bleaching powder in this region is sufficient but the process of distribution is not spontaneous. • The distribution depends upon the complaints lodged by the beneficiaries.

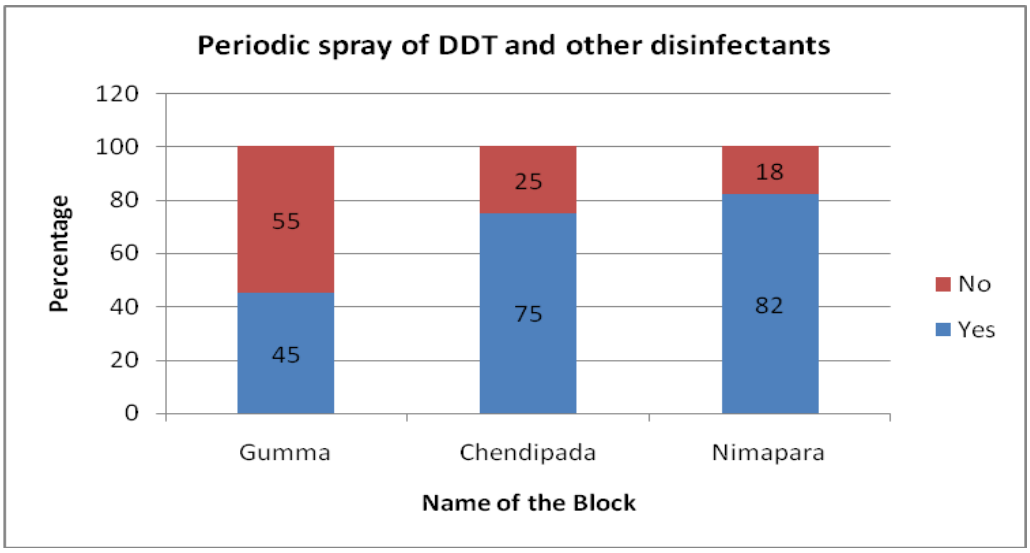
MALARIA	• There is minimal practice of DDT spray. • Distribution of LLIN is available at Gumma block. • No MIS of DDT spray is maintained.	• There is no practice of DDT spray currently. • Distribution of LLIN is not available at Chendipada block. • There is also no proper MIS available for the monitoring of the DDT distribution activity at the block.	• Spray of DDT by the health department is not spontaneous; it is done on the basis of complaints lodged by beneficiary's area wise. • Distribution of LLIN is not available • In Nimapara Block, the community participation for effective administration of health service is found.
TUBERCULOSIS	• BCG immunization at Gumma Block is 82%. • Lack of awareness. • Only 3 cases per year	• BCG immunization achieved is 89 % at Chhendipada block. • 0 cases of TB	• BCG immunization at Nimapara Block is 94%. • 0 cases of TB

SUN STROKE	• People responded that Jal Chatra has been provided during the summer season at Panchayat level under the observation of Gaon Kalyan Samiti (GKS). • Dedicated rooms are available to provide treatment with air coolers at CHCs at Gumma, • PHCs are in need to be upgraded to tackle heat stroke cases.	• People responded that Jal Chatra has been provided during the summer season at Panchayat level under the observation of Gaon Kalyan Samiti (GKS). • Dedicated rooms are available to provide treatment to Patients with Air condition and air coolers at CHCs and PHCs.	• People responded that Jal Chatra has been provided during the summer season at Panchayat level under the observation of Gaon Kalyan Samiti (GKS). • Dedicated rooms are available to provide treatment to Patients with Air condition and air coolers at CHCs only. • PHCs are in need to be upgraded to tackle heat stroke cases.

4.0 BENEFICIARY RESPONSE:

4.1 Regular spray of DDT and disinfection of water bodies:

Figure 2: Periodic Spray of DDT and other disinfectant

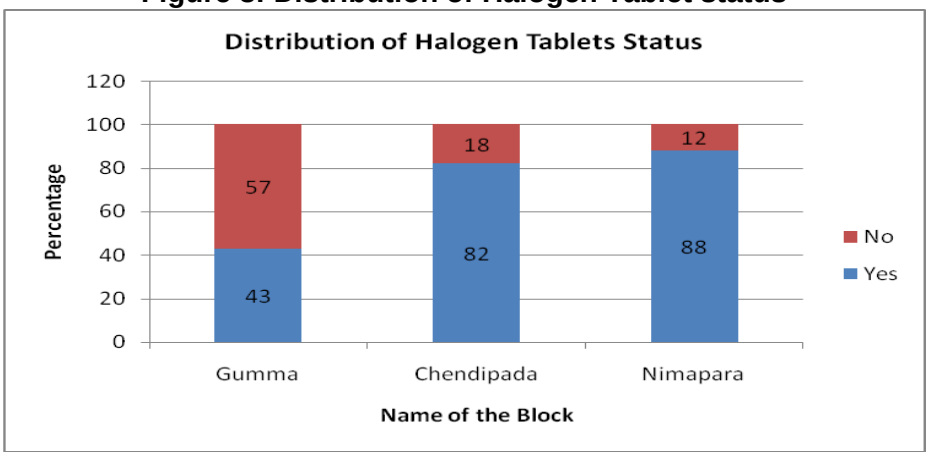


(**Source: Primiary data though FGD of the beneficiary)**

- The beneficiary response analysis reveals that the DDT spray is less in Gumma with only 45 % of the respondents witnessed the spray of DDT in their locality.
- However, the same is better in Chendipada block of Angul and Nimapara Block of Puri with 75% & 82% of the beneficiaries witnessed the spray of DDT respectively in the water bodies of their locality.
- The poor monitoring and MIS has led to the irregularity in the supply and distribution of DDT and other disinfectants at the village level which is a concern amongst the beneficiary; this can be inferred from the above graph.

4.2 Distribution of Halogen Tablets for disinfection of water bodies:

Figure 3: Distribution of Halogen Tablet status

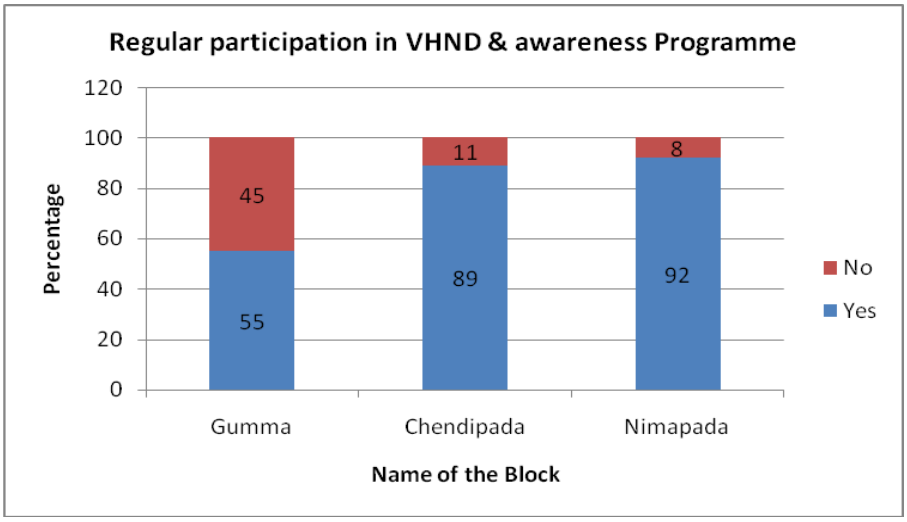


Source: Primiary data though FGD of the beneficiary)

- From the beneficiary response it is observed that 43% in Gumma, 82% in Chendipada & 88 % in Nimapara have acknowledged the receipt of Halogen tablets for disinfection of drinking water.
- There is no MIS exist measuring and tracking the availability, supply and distribution of halogen tablets, which lead to a irregularity in the supply causing dissatisfaction amongst the beneficiary.

4.3 Regular participation in VHND and other awareness programme:

Figure 4: Regular participation in VHND and Awareness Programme



Source: Primiary data though FGD of the beneficiary)

- From the beneficiary response it is understood that the awareness towards VHND programmes are 89% and 92% in Chendipada & Nimapara respectively but the same is only 55% in Gumma Block.

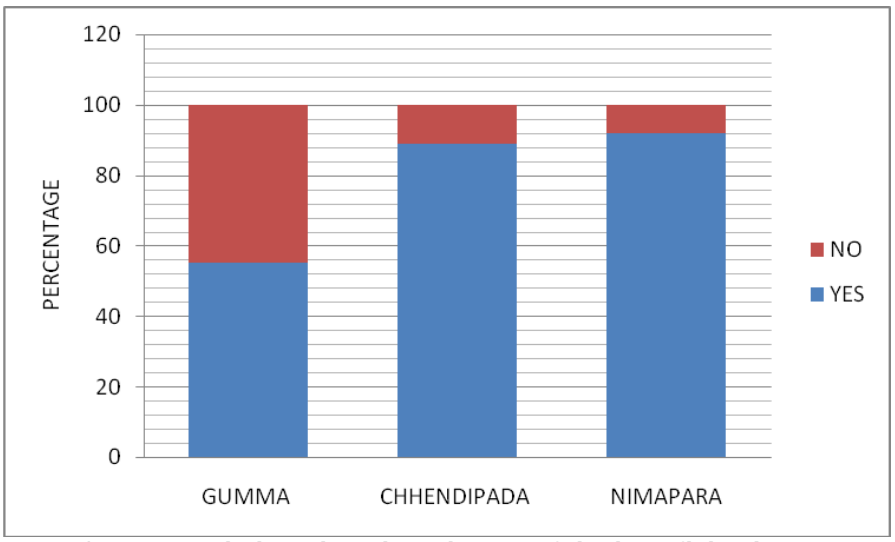
Beneficiary interaction in Chhendipada Block

- The participation in the Village Health Nutrition Day ensures the addressing of the malnutrition cases by referring them to the Mamta Diwas held at the CHC level.
- The ANM and ASHA present at the VHND carry out the basic health check up of both mother and child and check the neonatal death and mother mortality.
- The poor participation is due to the non awareness and the out of pocket expenditure involved towards conveyance and attending the Mamata Diwas at CHC level.

4.4 Seasonality based preventive measures:

- The seasonality based preventive measures include cleaning and dis-infection of sewerage bodies, cleaning of bushes/shrubs, setting-up Jalachatras, preparedness for distribution of medicines/ ORS, creating and sensitizing the local residents on hygiene and contamination .

Figure 5: Seasonality based preventive measures



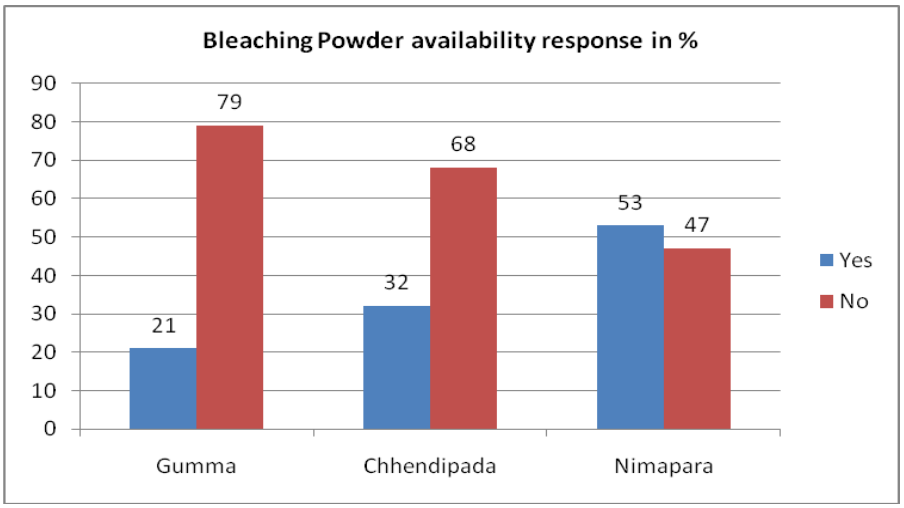
(**Source: Primiary data though FGD of the beneficiary)**

- 92 % of the beneficiaries in Nimapara, 89% in Chendipada and 55% in Gumma responded that they experience the initiatives planned by the govt. authorities for managing the seasonality based preventive activities in their locality.

4.5 Bleaching Powder distribution status:

- The **Figure 7** confirms that bleaching powder distribution is not sufficient at village level. As part of the dis-infection activities, bleaching powder is distributed and sprayed at the public places.
- However, the same is very poor in Gumma and relatively better in Chendipada and Nimapara Block.
- It's also observed that, no MIS is maintained either at District and/or Block level for monitoring the distribution/usage of bleaching powder which lead to the discrepancy in the supply and distribution of bleaching powder to the beneficiary.

Figure 6: Bleaching Powder distribution status



(**Source: Primiary data though FGD of the beneficiary)**

Beneficiary interaction in Gumma Block

5.0 SWOT ANALYSIS:

5.1 Strengths:

- Coordination and common strategy on state and national level for different diseases.
- Multi-sector participation from primary to tertiary.
- Dedicated resources to specific problems.
- Active participation of tertiary level (AWW level)

5.2 Weaknesses:

- Inadequate partnering process experience (supply and demand gap)
- Uneasiness to work with different sectors
- Dedicated man power not available at some parts of the block.
- No proper system for monitoring the activities and/or resources.

5.3 Opportunities:

- Funding mechanisms to support partnerships through schemes.
- Empowers communities
- Social change – institutional reform.

5.4 Threats:

- Local social/political/economic environment.
- Inability to access external resources.

6.0 CONCLUSION & POLICY OPTIONS:

- The current study reveals the backdrop in planning, implementation and monitoring of preventive measures at rural level due to lack of resource and support, thus the district administration may prepare an annual plan with compiling the block level information which may be regularly monitored. A system may be developed for monitoring the preventive measurement practices at various levels. **(Refer: Table 1)**

- The activity may be systematically planned with identification of Nodal officer at Block level, defining the roles and fixing the time line would strengthen the preventive measure activities at the block level.
- Similarly no data and/or MIS are maintained for monitoring various activities and services meant for the preventive measure at the Block level. **(Refer: Table 1),** thus Real-time monitoring of stocks and activities would help in improving the service response for various preventive measure activities. (**Refer 4.1 & 4.2, 4.5**)
- Necessary planning of the activities to be taken up for preventive measure may be made well in advance at CHC level and subsequent indent/ requisition for supply of materials may also be made for onward distribution to the beneficiary. (**Refer 2.1, 4.1 & 4.2, 4.5**)
- Regular monitoring and reporting of activities with tracking of the usage and distribution of supplies meant for preventive measure would further streamline the preventive measure activities at the block level. **(Refer 4.1, 4.2, 4.5)**
- Necessary awareness and sensitisation programme may be made for the various initiatives of Govt. for preventive measure against various diseases **(Refer 4.3).**
- Compensatory pay may also be paid to poor working mothers for attending the scheduled immunization against various diseases for mother and child.