के बी अग्रवाल अप सचिव <sup>भा.प्र.</sup>से.

K B Agarwai
IAS
Additional Secretary



भारत सरकार स्वास्थ्य एवं परिवार कल्याण मंत्रालय निर्माण भवन, नई दिल्ली - 110011 Government of India Ministry of Health & Family Welfare

D.O. No. NHSRC/11-12/CP/08/MoHFW 621
Dated- 01st October, 2015

Dear Sh. De,

Sub: Involvement of ASHAs for prevention and control of Acute Encephalopathy Syndrome (AES) to minimize morbidity and mortality due to AES among children in Malda District.

I am writing to you with regard to recent findings and recommendations of a study by the National Centre for Disease Control regarding Acute Encephalopathy Syndrome among children in District Muzaffarpur. The study showed high mortality among young children probably limited to a toxin found in litchis. Acute Encephalopathy Syndrome is also seasonal between May and July.

In order to prevent death among children during the transmission acason (May-July), the community needs to be sensitized about AES, its signs and symptoms, importance of early referral and proventive measures. Since ASIIAs are the first point of contact for the community, they can play an active role in delivering the key messages to the community. In addition ASHA Facilitators and ANMs who are the first contact person for the ASHA also need to be trained. A Joint training would be both effective and efficient.

Please find attached the letter from the DGHS to the Principal Secretary of the respective State with study findings (Annexure 1), a proposed training strategy (Annexure 2) and an Information Brochure for ASHAs/ASHA Facilitators on "Role of ASHAs in Prevention and Control of Acute Encephalopathy Syndrome" (Annexure 3). These documents have been developed to help your State to mount an effective prevention and management response.

State is advised to conduct a priot of attached brochure with ASHAs/ ASHA Facilitators of one block so that appropriate changes (if any) can be made in the brochure. State should plan to complete the pilot and subsequent training of frontline workers before the month of April, 2016, as AES outbreaks are seen in the months of May to July. Funding for the activity would be through the National Vector Borne Disease Control Programme (NVBDCP). The training of ASHAs would be through existing structures and can be undertaken at the PHC monthly meeting.

Please let us know if you need any clarifications.

With negards,

Yours sincerely,

(K.B. Agarwal)

Shri Malay Kumar De Principal Secretary (H&FW), Government of West Bengal Dr. Jagdist: Prasad MS MCh. FIACS Thrector General of Health Services



भारत तरकार स्वास्थ्य एवं परिवार कल्याण मंत्रालय स्वास्थ्य येवा महानिवेशालय निर्माण भवन, नई विल्ली-110 308 GOVERNMENT OF INDIA MINISTRY OF HEALTH & FAMILY WELFARE DIRECTORATE GENERAL OF HEALTH SERVICES NIRMAN BHAWAN, NEW DELHI-110 108 Tel: 23061063 23061438 (O), 23081924 (F)

E-mail dghs@nic.in

4<sup>th</sup> March 2015

दिनाक/Dated ..

D.O. No. A.1-4/2012/EPID/NCDC

Dear Shri Malay Kumar De,

As you may be aware, Acute Encephalitis Syndrome (AES) is one of the major public health problem in the country and in recent times Malda in West Bengal has been witnessing this outbreak of unexplained etiology. A similar outbreak has been reported for some years in Muzaffarpur, Bihar and our experts have been making special efforts to establish a definite clinic-epidemiological linkage supported by lahoratory confirmation of either a source of infection or non-infectious etiological agent.

In years 2013-2014, the National Centre for Disease Control in collaboration with other partnering institutions, NVBDCP, ICMR and technical support from the US CDC conducted detailed and systematic investigations into the outbreaks of unexplained neurological illness happening in Muzaffarpur. These investigations have now shown findings which can be useful to plan strategies to reduce mortality and morbidity. The presentation of these outbreaks has many similarities with those happening in Malda district of West Bengal and therefore we share with you the findings and recommendations made for Muzaffarpur district outbreaks along with a brief description of Malda district outbreak presentation (as shared by School of Tropical Medicine, Kolkata) for your perusal.

Some of the important aspects and recommendations related to Mużaffarpur outbreak which may be of use in Malda situation also are listed below for your consideration:

• Hypoglycaemia was a characteristic finding in substantial proportion of cases in both Muzaffarpur and Malda outbreaks and the observations from both districts have revealed that timely assessment and correction of the same reduced mortality and enabled quick recovery. It would be useful to sensitise your health staff on this aspect of this illness. Providing adequate number of glucometers and training the health professionals at all level health centres on hypoglycaemia correction protocol would possibly save many lives. The morbidity may further be averted if the parents are sensitised to provide children a good quantity of complex carbohydrate meal before bed time such as to maintain normal levels of

suggest minimising consumption of litchi fruits among young children in rural areas of this district, till further investigations.

- As characteristically most cases report sickness in early morning hours, availability of a trained medical professional during night in the months of May to July at all PHCs/CHCs in the district is essential for early detection and management of cases.
- There is a strong requirement to strengthen diagnostic and critical care capacity at all levels of health care to enable timely diagnosis and management of these acute encephalopathy cases. This includes providing for adequate laboratory facilities, specialised diagnostic and life-saving equipments for managing critically ill patients, and adequate numbers of trained specialised professionals in paediatrics, neurology and critical care. If needed, we can provide short training of your paediatricians in intensive care at our specialised hospitals at Delhi or elsewhere.

Our experts would be visiting Muzaffarpur shortly to apprise your team about the findings and related recommendations of this study. It would be appreciated if you could arrange their meeting with your senior officials and the AES Task Force.

We would also continue to further investigate this year into some specific aspects of this illness at Muzaffarpur and look forward to your extended support in this regards.

Many thanks for your support in this collaborative endeavour.

With regards,

Yours sincerely,

(Dr. Jagdish Prasad)

#### Enclosed:

- 1. Brief summary note on Muzaffarpur findings 2013-14, and related data/laboratory details
- 2. Recommendations related to findings from Muzaffarpur 2013-14

Shri Brijesh Mehrotra Principal Secretary (Health), Department of Health, Government of Bihar, New Secretariat, Vikas Bhavan, Patna, Bihar-15

# Copy to:-

- 1. P.S. to Hon'ble HFM, MoHFW, Government of India, Nirman Bhavan, New Delhi 11
- 2. P.S. to Secretary Health and Family Welfare, Government of India, Nirman Bhavan, New Delhi 11
- 3. Secretary (H) cum Executive Director, SHSB, Pariwar Kalyan Bhavan, Sheikhpura, Patna-14
- 4. Director in Chief, Directorate Health, Vikas Bhavan, New Secretariat, Patna-14
- 5. Regional Director (Health and Family Welfare), Govt. of India, 5th Floor, Indira Bhavan, R.C. Singh Path (Bailey Road), Patna-1.



के 👊 अग्रवाल अपर सचिव भा.प्र.से.

K B Agarwal
IAS
Additional Secretary



भारत सरकार स्वास्थ्य एवं परिवार कल्याण मंत्रालय निर्माण भवन, नई दिल्ली - 110011 Government of India Ministry of Health & Family Welfare

D.O. No. NHSRC/11-12/CP/08/MoHFW Dated- 01st October, 2015

Dear Shu Mehrotza,

Sub: Involvement of ASHAs for prevention and control of Acute Encephalopathy Syndrome (AES) to minimize morbidity and mortality due to AES among children in Muzaffarpur District

I am writing to you with regard to recent findings and recommendations of a study by the National Centre for Disease Control regarding Acute Encephalopathy Syndrome among children in District Muzaffarpur. The study showed high mortality among young children probably limited to a toxin found in litchis. Acute Encephalopathy Syndrome is also seasonal between May and July.

In order to prevent death among children during the transmission season (May-July), the community needs to be sensitized about AES, its signs and symptoms, importance of early referral and preventive measures. Since ASHAs are the first point of contact for the community, they can play an active role in delivering the key messages to the community. In addition ASHA Facilitators and ANMs who are the first contact person for the ASHA also need to be trained. A Joint training would be both effective and efficient.

Please find attached the letter from the DGHS to the Principal Secretary of the respective State with study findings (Annexure 1), a proposed training strategy (Annexure 2) and Information Brochure for ASHAs/ASHA Facilitators on "Role of ASHAs in Prevention and Control of Acute Encephalopathy Syndrome" (Annexure 3). These documents have been developed to help your State to mount an effective prevention and management response.

State is advised to conduct a pilot of attached brochure with ASHAs/ ASHA Facilitators of one block so that appropriate changes (if any) can be made in the brochure. State should plan to complete the pilot and subsequent training of frontline workers before the month of April, 2016, as AES outbreaks are seen in the months of May to July. Funding for the activity would be through the National Vector Borne Disease Control Programme (NVBDCP). The training of ASHAs would be through existing structures and can be undertaken at the PHC monthly meeting.

Please let us know if you need any clarifications.

Yours sincerely,

(K.B. Agarwal)

Shri Brijesh Mehrotra Principal Secretary (Health & FW) Government of Bihar, Patna.

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(7. Jagdish Prasad M.S., M.Ch., FIACS Director General of Health Services



भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
स्वास्थ्य सेवा महानिदेशालय
निर्माण भवन, नई दिल्ली-110 108
GOVERNMENT OF INDIA
MINISTRY OF HEALTH & FAMILY WELFARE
DIRECTORATE GENERAL OF HEALTH SERVICES
NIRMAN BHAWAN, NEW DELHI-110 108
Tel.: 23061063, 23061438 (O), 23061924 (F)
E-mail: dghs@nic.in
4<sup>th</sup> March 2015
दिनांक/Dated......

### D.O. No. A.1-4/2012/EPID/NCDC

Dear Shri Brijesh Mehrotra,

This is in continuation to my earlier D.O. of even number dated 5<sup>th</sup> March, 9<sup>th</sup> April 2014, and 15<sup>th</sup> May 2014 about sharing the findings and related recommendations of the study on so called Acute Encephalitis Syndrome (AES) outbreaks of Muzaffarpur carried out during the year 2013 as well as the plan and implementation of the study in the year 2014 with an aim to reduce mortality and morbidity due to this unexplained neurological illness.

In 2014, the National Centre for Disease Control in collaboration with other partnering institutions, NVBDCP, ICMR and technical support from the US CDC conducted detailed and systematic clinico-epidemiological, laboratory and environmental investigations into the outbreak happening in Muzaffarpur. These investigations have now shown findings which can be useful to plan strategies to reduce mortality and morbidity. The findings and recommendations are enclosed.

We have deliberated on these findings and some of the important aspects and recommendations related to it are listed below for your consideration:

- Hypoglycaemia was a characteristic finding in large proportion of cases and the observations revealed that timely assessment and correction of the same reduced mortality and enabled quick recovery. It would be useful to sensitise your health staff on this aspect of this illness. Providing adequate number of glucometers and training the health professionals at all level health centres on hypoglycaemia correction protocol would possibly save many lives. The morbidity may further be averted if the parents are sensitised to provide children a good quantity of complex carbohydrate meal before bed time such as to maintain normal levels of glucose throughout the night hours. On similar lines all efforts should be made to reduce malnourishment among these rural low socioeconomic group children.
- The investigations revealed detection of metabolites of certain compounds in case-patient urine specimens; these compounds are known to be naturally present in fruits of litchi family and to have hypoglycaemic action. In light of such findings it would be advisable to educate the parents on this potential risk and

- glucose throughout the night hours. On similar lines all efforts should be made to reduce malnourishment among these rural low socio-economic group children.
- The Muzaffarpur investigations revealed detection of metabolites of certain compounds in case-patient urine specimens; these compounds are known to be naturally present in fruits of litchi family and to have hypoglycaemic action. Both Muzaffarpur and Malda are high litchi cultivation regions. In light of such findings it would be advisable to educate the parents on this potential risk and suggest minimising consumption of litchi fruits among young children in rural areas of this district, till further investigations.
- As characteristically most cases report sickness in early morning hours, availability of a trained medical professional during night in the months of May to July at all PHCs/CHCs in the district is essential for early detection and management of cases.
- There is a strong requirement to strengthen diagnostic and critical care capacity at all levels of health care to enable timely diagnosis and management of these acute encephalopathy cases. This includes providing for adequate laboratory facilities, specialised diagnostic and life-saving equipments for managing critically ill patients, and adequate numbers of trained specialised professionals in paediatrics, neurology and critical care. If needed, we can provide short training of your paediatricians in intensive care at our specialised hospitals at Delhi or elsewhere.

Following request from Director Health Services-cum-Ex-officio Secretary, NCDC experts has deliberated upon findings of the Malda outbreak investigations shared by STM Kolkata and NCDC would consider further laboratory evaluation of the specimens available with STM, Kolkata after ascertaining its condition. It would also support Investigations of future outbreaks in Malda. Two Epidemic Intelligence Sorvice Officers from NCDC would be visiting Malda soon to assess the situation and gather additional data that could illuminate more about these recurrent outbreaks.

I am deputing our experts to visit vivest Bengal shortly to discuss with your officers at Kolkata and assess the situation in Malda district. This would provide an opportunity to apprise about the findings and related recommendations of the Muzaffarpur study. It would be appreciated if you could arrange their meeting with your officials and scientists involved with Malda investigations and AES control activities.

With regards,

Yours sincerely,

(Dr. Jagdish Prasad)

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#### Enclosed.

- 1 Brief summary note on Malda findings 2014 shared by STM, Kolkata
- 2 Brief summary note on Muzaffarpur findings 2013-14, and related data/laboratory details
- 3. Recommendations related to findings from Muzaffarpur 2013-14

Shri Malay Kumar De
Principal Secretary (H&FW),
Department of Health & Family Welfare,
Government of West Bengal,
Swasthya Bhawan, 4th Floor, 'B' Wing,
GN - 29, Sector- V, Bidhan Nagar, Salt Lake City
Kolkata – 700091, West Bengal

## Copy to -

- 1: P.S. to Hon'ble HFM, MoHFW Government of India, Nirman Bhavan, New Delhi 11
- 2. P.S. to Secretary Health and Family Welfare, Government of India, Nirman Bhavan, New Delhi 11
- Commissioner of Family Welfare and & Mission Director (NHM), Swasthya Bhawan, GN - 29, Sector- V, Salt Lake City, Kolkata – 700091, WB
- 4. Director of Health Services-cum-Ex-officio Secretary, Swasthya Bhawan, GN 29, Sector- V, Salt Lake City, Kolkata 700091, WB
- Regional Director (Health and Family Welfare), Govt. of India, JC Block (Block-C), Sector III, Salt Lake, Kokata – 700098, WB

# Training Strategy for training ASHAs/ASHA Facilitators for Prevention and Control of

## **Acute Encephalopathy Syndrome**

The Information Brochure for training ASHAs on Acute Encephalopathy Syndrome (Annexure 3) has been designed to ensure that ASHAs are aware of the signs and symptoms and undertake activities related to prevention and management of AES. After this training; ASHAs would also be able to counsel parents and family on how to recognize signs and undertake immediate next steps.

## **Training Strategy**

- Orientation meeting of District Programme Managers (DPM), District community mobilizers (DCM), Block Programme Managers (BPM) and Block community mobilizers (BCM) should be conducted through NVBDCP Cell of the State.
- Medical officers of the concerned Blocks and PHCs would serve as trainers of the ASHA and ASHA Facilitators and ANMs.
- These trained medical officers would then train ASHAs/ASHA Facilitator/ANMs on the Information Brochure "Role of ASHAs in Prevention and Control of Acute Encephalopathy Syndrome"
- State may either fix a day for these trainings or may utilize the opportunity of monthly ASHA PHC meeting (which is normally conducted in the last week of the month or the first week of month). However it is important to conduct this training in Early/Late April as AES outbreaks are seen in months of May to July.
- The total duration of the training would be half a day.
- State should ensure the availability of Printed copies/Photocopies of the Information Brochure for all ASHAs, ASHA Facilitators/ANMs.
- ASHAs should be provided with the list of :
  - 1. PHCs equipped with glucometer for the provision of treatment of hypoglycaemia for AES cases
  - 2. Facilities designated as referral centres
  - 3. Contact numbers of designated staff
  - 4. Contact numbers of Ambulance/Emergency transport services
- The training involves the following components:
  - ➤ Understanding of AES, its mode of spread and signs & symptoms
  - > Role of the ASHA in:

Preventive measures to be taken during the season

Immediate action at the community level

Knowledge about referral sites and contacting appropriate person

### **Roles of ASHA Facilitator:**

- Conducting an additional cluster meeting with her ASHAs and obtaining from them information on village/VHSNC meeting regarding AES.
- Follow up with her ASHAs and monitors the organization of village level meetings

In those cases where the meetings are not conducted, ASHA Facilitator to ensure that the ASHAs organize these meetings and create awareness on AES.

ASHA Facilitators would be eligible for an additional Rs. 200 if she is able to successfully undertake the roles mentioned above. Additional funds for this activity can be drawn from the budget of State NVBDCP cell.

### **Role of ASHA:**

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- Early Identification and immediate referral of the cases
- Organizing transport and referring the patient to a facility where the child can be treated.
- Creating awareness and counseling the community
- Undertake household visits where there are children less than 15 years and families living in the vicinity of Litchi farms
- Delivering Key messages to the community for Prevention and Management

ASHA is eligible to receive Rs. 300 per case as incentive if she refers a case of AES case to the nearest CHC/DH/Medical College. She is also eligible for Rs. 150 as wage loss compensation to ASHAs if the training is organized separately (not combined with PHC monthly meeting). Additional funds required for the payment of wage loss compensation can be drawn from the budget of State NVBDCP cell.