Minutes of the Meeting held in regards to feasibility of utilizing prophylactic low dose aspirin to combat pre-eclampsia and eclampsia and updation of labour room protocol.

Date and Time: 1st June, 2023 at 1:00 PM.

Venue: Swasthya Bhawan

List of participants:

1. Prof. (Dr.) Debasis Bhattacharyya, DME, Dept. of H&FW, Govt. of West Bengal
2. Dr. Shyamali Rudra Basu, ADHS (Maternal Health), Dept. of H&FW, Govt. of West Bengal
3. Prof. (Dr.) Narayan Jana, Professor, Gynaecology and Obstetrics, CSS
4. Prof. (Dr.) Piklu Chowdhury, Professor, Gynaecology and Obstetrics, Rampurhat GMCH
5. Prof. (Dr.) Shelley Seth, Professor, Gynaecology and Obstetrics, RG Kar MCH

Prof. (Dr.) Debashis Bhattacharya, DME, Dept. of H&FW, Govt. of West Bengal initiated discussion in the meeting.

After detailed discussion, following decisions were taken unanimously:

1. The expert group after examining evidences and comments/suggestions received into introducing low dose aspirin for high risk pregnant women placed their recommendations and after further deliberation, the Guideline for the use of low-dose aspirin for prevention of preeclampsia was finalised..
2. In view of the recent changes in treatment/management protocols and in order to comprehensively cover all the obstetric care and management strategies a new Labour Room protocol replacing the Labour Room protocol for the state of West Bengal currently in force vide Memo. No. H/SFWB/1L-1-2013/2113(53) dated 17/12/2013 is to be prepared.
   a. An expert committee under the chairmanship of the DME, Department of H&FW, Govt. of West Bengal is being formed for developing the new labour room protocol with the following members.
      i. Dr. Narayan Jana
      ii. Dr. Somajita Chakraborty
      iii. Dr. Piklu Chaudhuri
      iv. Dr. Shelly Seth
      v. Dr. Sukumar Mitra

The meeting ended with a vote of thanks to and from the chair.

01/6/2023

Prof. (Dr.) Debasis Bhattacharyya
Director of Medical Education
Health & Family Welfare Department
Govt. of West Bengal

Memo. No. SFWB/2381A/1(17) Dated: 1.06.2023

Copy forwarded for information and necessary action to:

1. MD, NHM & Secretary, Dept. of H&FW, West Bengal
2. The Director of Health Services, Dept. of H&FW, West Bengal
3. Senior Special Secretary cum AMD, NHM, Dept. of H&FW, West Bengal
4. PO-I, NHM & Deputy Secretary, Dept. of H&FW, West Bengal
5. PO-II, NHM & Deputy Secretary, Dept. of H&FW, West Bengal
6. The DDHS (FW), Dept. of H&FW, West Bengal
7. The DDHS (HA), Dept. of H&FW, West Bengal
8. The ADHS (MH),Dept. of H&FW, West Bengal
9. Prof. (Dr.) Narayan Jana, Professor, Gynaecology and Obstetrics, CSS
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11. Prof. (Dr.) Shelley Seth, Professor, Gynaecology and Obstetrics, RG Kar MCH
12. Prof. (Dr.) Sukumar Mitra, Professor, Gynaecology and Obstetrics, NRSMCH
13. Prof. (Dr.) Somajita Chakrabarty, Professor, Gynaecology and Obstetrics, CNMCH
14. The DADHS & SNO- MCDSR, Dept. of H&FW, West Bengal
15. Sr. PA to the Principal Secretary, Dept. of H&FW, West Bengal
16. Mr. Srutarshi Paul, State Consultant, Maternal Health, RMNCH+A, NHM, West Bengal
17. Office Copy

SFWO & Jt.DHS (FW)
Dept. of Health & Family Welfare
Govt. of West Bengal

GUIDELINE FOR THE USE OF LOW-DOSE ASPIRIN FOR PREVENTION OF PREECLAMPSIA

Background

Preeclampsia is a complex multisystem disorder complicating **2-8%** of all pregnancies [1]. Preeclamsia, eclampsia and related complications are responsible for **14% of all maternal deaths [2]**. It also contributes to a high perinatal mortality and severe morbidity and long-term disability to the mother and their babies. Therefore, prevention of preeclampsia is a **global priority especially** for the low- and middle-income countries where the incidence of complications and mortality are higher.

Rationale of low-dose aspirin for prevention of preeclampsia

The primary pathophysiology of preecampsia is faulty placentation early in pregnancy due to deficient trophoblastic invasion of spiral arterioles of uterus leading to underperfusion of placenta. Placental ischaemia subsequently causes release of biochemical factors into maternal circulation, which are responsible for the maternal syndrome [3].

Deficient intravascular production of **prostacycline, a vasodilator** and excessive production of **thromboxane, a platelet derived vasoconstrictor** and stimulant of platelet aggregation has also been demonstrated in preeclampsia [4].

Low-dose aspirin selectively i**nhibit the cyclooxygenase pathway in** platelet but not in the vascular endothelium, thereby **diminishing the synthesis of thromboxane** and not prostacycline. This is the proposed benefit of low dose aspirin in prevention or delaying the onset of preeclampsia [5].

Evidences and recommendations

Cochrane review, 2019 (Duley *et al* included 60 trials on 36,716 women, RR 0.82, 95% CI 0.77 to 0.88) has concluded that the use of aspirin **reduced the risk of proteinuric preeclampsia by 18% (Relative risk 0.82) [6].** Both international and national guidelines, **ACOG (2018) [7], WHO (2021) [8], NICE guideline (2019) [9], FOGSI/ICOG (2019) [10]** have recommended use of low-dose aspirin for prevention of preeclampsia.

Low-dose Aspirin (LDA) in Pregnancy

1. Who should receive low-dose aspirin?

Women are considered high risk of developing pre-eclampsia if they have one or more of the following risk factors: Type 1 or 2 Diabetes mellitus, chronic hypertension, chronic renal disease, SLE, Antiphospholipid syndrome, previous history of pre-eclampsia, pregnancy by ART [11].

Women are regarded as being at moderate risk of developing pre-eclampsia if they have any two of the following risk factors: primigravidity, family history of pre-eclampsia, age greater than 35 years or less than 19 years, multiple pregnancy, obesity (BMI at booking > 35) [11].

Although most of the Guidelines selected cases on the basis of high and moderate risk factors, the present expert group, in view of community implementation, simplicity and clarity, suggested 10 clear-cut indications for starting Aspirin to make the selection process easier at the grass root level.

INDICATIONS OF ASPIRIN

Sr. No	High risk Conditions	Mark yes/no
1	Previous history of preeclampsia	
2	Chronic hypertension	
3	Chronic renal disease	
4	SLE or Antiphospholipid syndrome	
5	Type 1or type 2 Diabetes mellitus	
6	Pregnancy by ART	
7	Multiple pregnancy	
8	BMI at booking >35	
9	Elderly Primigravida (age >35 years)	
10	Teenaged Primigravida (age <19 years)	

 # If yes is marked in any one of these conditions, aspirin is indicated

All indications will be based on History, clinical examination and review of past and present clinical records.

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2. When should low-dose aspirin be started?

After screening during booking visit for antenatal care, low-dose aspirin is to be started from 12 weeks of gestation. If women come late for booking, low-dose aspirin may be started anytime up to 28 weeks of gestation (as per recommendation of ACOG [7], WHO [8]).

3. What is the recommended dose? When should low-dose aspirin be taken?

In accordance to the latest recommendation of WHO [8], 75 mg dose orally after dinner is recommended.

4. When to stop low-dose aspirin?

Routine: The recommended time of stopping low-dose aspirin is at 36 weeks +6 of gestation [7, 8].

Emergency: If warning signs appear like vaginal bleeding /labour pain, it should be stopped immediately. The decision regarding stopping aspirin in other situations is to be individualized as per discretion of the treating obstetrician.

*** Available evidences suggest that timing of discontinuation is not related to maternal or fetal bleeding manifestations. Use of aspirin alone in absence of any other anticoagulant therapy is not a contraindication to neuroaxial blockage (epidural/spinal anaethesia) [7].**

5. Who will screen for risk factors and who will prescribe low-dose aspirin?

Screening for risk factors to be done at subcentre/PHC/BPHC/PMSMA clinics/Higher facilities by ANM/medical officers/obstetricians as appropriate.

Based on risk factors and excluding contraindications, medical officers/obstetricians will prescribe low-dose aspirin. It may also be prescribed through telemedicine by the obstetricians

***Risk factor and date of start of aspirin to be mentioned in MCP card in RED COLOUR.**

6. How safe is low-dose aspirin for the mother and the baby?

As per available evidences there is no risk of fetal malformation or any bleeding manifestation in the new born [12]. There is also no evidence of increased incidence of postpartum haemorrhage and bleeding during pregnancy after low-dose aspirin use [13]. Low-dose aspirin has been widely used over the last 3 decade in pregnant woman and its safety profile is well established.

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7. When not to use low-dose aspirin? Be alert in the following conditions –

(a) Active bleeding in pregnancy (Threatened miscarriage, Expanding retroplacental haematoma and APH)

(b) Known bleeding disorders (Von Willebrands disease, Idiopalhic thrombocytopenic, purpura, diagnosed cases of coagulation factor deficiency and severe gestational thrombocytopenia)

(c) Undiagnosed Bleeding manifestations: (History suggestive of epistaxis, gum bleeding, per rectal bleeding, ecchymosis, purpuric spots)

(d) Hypersensitivity to aspirin or other NSAIDs

(e) Active peptic ulcer disease

Caution: Those receiving NSAIDS, corticosteroids: Gastroprotective agents to be considered.

8. How to counsel women regarding low-dose aspirin?

(a) A serious high blood pressure disorder, called preeclampsia, occurs in some pregnant women, during pregnancy or soon after childbirth. Preeclampsia can lead to a condition that causes seizures, stroke, and demise of baby.
(b) You have a risk factor which will make you susceptible for development of preeclampsia.
(c) Low-dose aspirin may reduce the risk of preeclampsia in some women. Hence it is prescribed to you so that you won't develop this serious disorder.
(d) Aspirin is safe in pregnancy and it will not harm you or your baby and will not increase chances of bleeding during pregnancy or after delivery.
(e) Aspirin should not to be taken in empty stomach, and it should be taken after a meal, preferably after dinner.
(f) You are asked to contact ANM/ Medical officer/obstetrician if there is vaginal bleeding/ bleeding from gum, nose, any other site, itching, rashes, pain abdomen, excessive vomiting or any other condition you find abnormal during the course of therapy.

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4.Scott W. Walsh .Preeclampsia: An imbalance in placental prostacyclin and thromboxane Production.Am J Obstet Gynecol. ; 152(3), June 1985, P 335-340.

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6. DuleyL,MeherS,Hunter KE , Seidler A L, Askie L M Antiplatelet agents for preventing pre-eclampsia and its complications.Cochrane Database of Systematic Reviews , version published 30th October 2019.

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To be filled by the MO/CHO/ANM in duplicate (one copy to be attached to the MCP card for the PW and one copy to be retained by the ANM for record)

Name of the PW: ______________________ Age: ________

Address: ______________________

____

Contact No: ______________________

Matri Ma ID: ______________________

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9	Elderly Primigravida (age >35 years)	
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 # If yes is marked in any one of these conditions, aspirin is indicated
All indications will be based on History, clinical examination and review of past and present clinical records.

Details of Aspirin use:

Prescribed By (Name of the MO): ______________________

Mode (telemedicine/prescription): ______________________

Date of initiation of Aspirin (Date & weeks): ☐☐/☐☐/☐☐ DD/MM/YY

________ weeks

Continued till (Date & Weeks): ☐☐/☐☐/☐☐ DD/MM/YY

________ weeks

Complication if Any: ______________________

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