



## Case Investigation Report on Maternal Death and Case Fatality Rate on DVT Among Pregnant Women at the Bangem Health District from Epidemiological Week 42- 47, 2020

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### Abstract

Maternal mortality is defined as the death occurring in women, while pregnant or within 42 days of termination of pregnancy irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy, its management but not from accident or incidentally [1]. It is currently at 342/100,000. Maternal mortality is a very devastating event as the dream of every pregnant woman is to see her child talk less of losing her own life. This is relatively better compared to ten years ago when the rate was at 680/100,000 deaths [2]. Maternal mortality can be caused by postpartum hemorrhage, uterine rupture, disseminated intravascular coagulation, antepartum hemorrhage, septic abortion, Malaria, HIV/AIDS, anemia [1].

**Keywords:** Maternal Mortality; Pregnant Women; Bangem

The case of maternal death from the Bangem health district (BHD) died in the community on her way to the hospital and she suffered a deep vein thrombosis which finally led to a pulmonary embolism. Deep Vein thrombosis (DVT) is a rare medical condition that affects the deep veins of the leg. It forms clots which could eventually cause a pulmonary emboli. It leads to a clot and affects 1/100 pregnant women. Risk factors include long journeys, illness like diabetes mellitus, fractures, post surgery, hormone replacement therapy, heart failure, older people, pregnancy, obesity, dehydration [3].

It is not known what proportion of pregnant women in the Bangem health district suffer from DVT. There has been no study

on the case fatality rate due to DVT in the BHD. Writing this case investigation report and getting data during this CAFETP training will aid us have an idea and hence implement way of better improving maternal health which goes with the sustainable development goals.

### Objectives

- To do a case investigation on the maternal death which occurred at Bangem on 22/11/2020 at the community.
- To determine the prevalence of DVT from Epid week 42-47.
- To determine the CFR for DVT.

## Methods

We received a notification form of maternal death from the director of Bangem district hospital on 22/11/2020 and due to the severity on the event, we then went to the field and used the investigation report template (Minsante) on the same day [4].

We went further to carry on a follow up on DVT among pregnant women in the district hospital from 42 to 47. The demographic data, the comorbidities of the patient, were gotten from carer/her hospital as she arrived death.

The team for the investigation were the DMO (CAFETP Trainee), director, the health area chairperson, and the midwife. we interviewed the caregivers, relatives, and others who came along with parturient. Administrative approvals were gotten with informed consent.

We conducted a retrospective community and hospital based study involving pregnant women who were recruited during the epidemiological week 36 to 47(12 weeks). Firstly, the community houses and hospitals and health centers were sensitised and all pregnant women were systematically recruited. Pregnant women with any identifiable risk factors were identified. We also obtained informed consent from all participants. Data were collected by use of a structured investigation form adapted and used by all districts (Ministry of Public health Cameroon).

## Results

She was a 38 year old female, G2p1 farmer living in Tombel. She kept on having persistence L calf pain/chest for 4 days prior to her coming to the hospital. She had a history of long distance travel and had separated from her husband but was currently in a relationship with a man living in a village in BHD. She had no history of alcohol consumption or smoking. She also did not report with any immunoallergies. She did only 1 ANC. On exam, she unfortunately arrived at the hospital already death and immediately her corpse was taken to the mortuary where an autopsy done which showed massive clots on Left coronary artery. It was such a tragedy. The dead fetus too was extracted from her through Caesarian section.

The prevalence of maternal death among the 31 participants recruited was 3.22% and the main cause was DVT [5]. Two (6.5%) of the participants had DVT giving a case fatality rate of 50%. The

identifiable risk factors were long journey travel, obesity in the case.

## Discussion

The pregnancy was most likely the cause of her DVT. She had 2 risk factors. Long distance travel delays venous return and possibility of forming clots especially in pregnant women. Obesity favors formation of arteromas and hence the possibility of developing pulmonary embolism post DVT.

## Conclusion and Recommendations

The prevalence of DVT in pregnancy in Bangem is low. Pregnancy leads to DVT. But then women are encouraged to do their regular antenatal consultations so that the risk factors can be identified and avoid its complications. Pregnant women at the third trimester of pregnancy should not travel long distances. Cardiac ultrasounds should be done in all pregnant women with persistent chest pain and calf pain especially with Homan' sign positive.

## Bibliography

1. Mafany Njie M. Maternal perinatal death report (2016).
2. Regional delegation of public health sitrep (2020).
3. Akame Valery. Case report (2020).
4. Ministry of public health. Cameroon frontroneline field epidemiology training (2020).
5. District health information system. Ministry of Public health, Cameroon (2020).

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