



The blood loss assessment using the plastic bag for the vaginal delivery at Champasak Provincial Hospital



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Background

Postpartum haemorrhage (PPH) is defined as a blood loss more than 500ml within the first 24 hours after childbirth. In 2014 the team of maternal death surveillance and response reported that 54% of the cause of maternal death is PPH in Lao PDR. Champasak Provincial Hospital used to visually assess the blood loss amount after childbirth. However, we introduced the plastic bag to measure the blood loss amount for the vaginal delivery case in January 2018 in order to diagnose PPH precisely and initiate a proper treatment immediately.

Objectives

To assess outputs of the new method; blood loss assessment using the plastic bag for the vaginal delivery.
To develop the model of the blood loss assessment using the plastic bag for the vaginal delivery cases.

Methods

Method of the trial and analysis

- Champasak Provincial Hospital introduced the plastic bag to measure the blood loss amount accurately for the vaginal delivery case in January and February 2018. The plastic bag was used for 179 delivery cases in that period then the number of PPH immediately after childbirth and PPH occurring several hours after childbirth were counted.
- Feedback of this new method in Champasak Provincial Hospital was discussed in a small group among health providers usually working in the delivery unit.

Preparation



The normal weighing scale (50,000kip) and the plastic bag (15,000kip/16bags) are needed for this model.

One side of the plastic bag should be cut and open the bag to be a triangle shape.

Procedure of the blood loss assessment using the plastic bag



1. The blue plastic sheet is put on the delivery bed.
2. The plastic bag is put on the blue plastic sheet.
3. After delivery of the placenta, open the plastic bag.
4. Collect the blood and gauze inside the plastic bag.
5. Measure the amount of blood loss using the scale. Subtract the gram of gauze that you used and put inside plastic bag.
6. Record the amount of blood loss on a medical record.

Results

PPH analysis

The plastic bag identified 4 cases as PPH immediately after childbirth. All 4 cases were provided a proper treatment following the national protocol and resulted in a non-severe PPH which is defined as a blood loss less than 1000ml. There were another 3 cases diagnosed as PPH after 4 to 13 hours from childbirth even though there were no symptoms immediately after delivery.

Blood loss amount immediately after birth	Number of case
0-100g	46
101-200g	89
201-300g	36
301-400g	3
401-500g	1
500g-1000g	4
More than 1000g	0
Total	179

Blood loss amount immediately after birth	Timing of diagnosis for PPH
Case1	700g
Case2	860g
Case3	600g
Case4	700g
Case5	300g
Case6	80g
Case7	80g

Table1: Blood loss amount immediately after childbirth for 179 cases used the plastic bag

Table2: Timing of diagnosis for 7 PPH cases

Feedback from the small group discussion

Good points

- This method and procedure are easy to implement.
- It can be conducted at low cost. We can buy all equipment in the local market.
- Using the plastic bag is also useful to keep clean around the delivery bed after childbirth.

Improvement opportunities

- We don't have proper commodities to measure the blood loss amount such as the sterile plastic bag with scale line.
- Some cases were diagnosed PPH after few hours from childbirth so we cannot diagnose all PPH cases by this new method.
- We couldn't use the plastic bag when delivery cases occurred at the same times because there is not enough time to prepare the bag.

Conclusions

We found that the new method using the plastic bag is effective to diagnose PPH immediately after childbirth. Therefore, we strongly recommend to introduce this method in other health facilities in Lao PDR.

The introduction of the plastic bag highlighted the next improvement opportunities on detection of the sign of PPH that occurs late and now Champasak Provincial Hospital try to strengthen the monitoring system after childbirth. Also the patient compliance staying in the hospital at least 24 hours after childbirth is important to achieve it.