

White tag colour coding and its outcomes

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Introduction

The risk approach system using colour coding has been used in Malaysia since 1989. All antenatal mothers were colour coded according to the severity of the risk factors. Four colours were used namely red, yellow, green and white. A self adhesive coloured tag indicating the color coded is placed at the right hand corner of the antenatal card. Red code signifies a life threatening condition and patient requires immediate hospital referral and admission. Yellow code indicates that patient requires antenatal monitoring by a doctor. Green code indicates that complication may develop in these patients and hence requires monitoring by a senior nurse. White code indicates that patients are at no or low risk and can be monitored by the community nurse or midwife. White code has been further subdivided into white I and white II. White I indicates, patient should have a hospital delivery where else white II indicates that patients can have a home delivery attended by a trained midwife or at an alternative birthing centre (ABC) but in fact all women are encourage to deliver at hospital.

Methodology

This is a review looking at risk level at booking by the color coding system from 14 tertiary hospitals in 2010 from the National Obstetric Registry. From 1st January 2010 to 31st Dec 2010 there were a total of 136,856 women who delivered.

Results

14 major government hospitals in Malaysia participated in this study which contributes to the total number of 136,856 deliveries. Of this 2.2% were coded red, 7.5% were coded yellow, 49.3% were coded green where else white I and white II was 3.1% and 5.5% respectively. Missing data as well as no coding was available in 18.7% of the cases. This was mainly seen from Hospital Likas Sabah and Hospital Tuanku Jaafar Seremban (Table 1). The majority of antenatal mothers with colour coding white I and II had self-referred themselves to hospital and this accounted to 74.1 % and 75% of the cases. About 9.9% of the cases that were color coded white II and 3.1% of cases that were coded white I were referred from health clinic as well as from the district hospitals (Table2). The reason for this could be these mothers developing complications during the antenatal or intrapartum, but the color code was not changed. The white colour coding is expected to have good outcomes if they are monitored appropriately but from this review there's still a small amount of women having bad outcomes. 84% of the white II coding successfully delivered vaginally while 3% required assistance either by vacuum or forceps. 12% of cases coded white II had a caesarean section. 75.6% of white I delivered vaginally whilst 5.7% had instrumentation and 17.9% were delivered by caesarean section (Table

3). Baby's outcomes for white I and II coding with Apgar score > 7 at 5 minutes were good at 95.7% and 95.1% respectively.

Conclusion

Appropriate colour coding does help to identify high risk pregnancy and ensure appropriate action to be taken with for good obstetric outcomes. Malaysia has adopted the principle of hospital delivery except for those with white tag II which were suitable for delivery at home or ABC. White tag mother should deliver at district hospital or ABC. Doctors at health clinic should play a bigger role in educating patient and encouraging them to deliver at district hospital or ABC to help decongest the load in the tertiary hospitals remembering also that tertiary hospitals manage high risk pregnancies.

Limitation of Study

Missing data from the participating hospitals.

References

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