

INTRODUCTION

Genital tract trauma can occur following vaginal childbirth and it is one of the major causes of post-partum haemorrhage .

	2011		2012	
	N	%	N	%
PPH (<1500mls)	141	24.74%	75	16.38%
Massive PPH (>1500mls)	12	5.91%	12	9.52%

Table 1: Post Partum Haemorrhage secondary to Genital Tract Trauma in 2011 – 2012

** % = Cases of PPH secondary to genital tract trauma / Total cases of PPH x100

As routine episiotomy is no longer performed since 2010, this study analyses the impact of selective episiotomy on genital tract trauma in Malaysian tertiary hospitals in the year of 2011-2012. The rate of 3rd and 4th degree perineal tears were analysed in patients with episiotomy with or without instrumentation.

METHODOLOGY

This is a retrospective review based on data from the National Obstetrics Registry from 1st January 2011 to 31st December 2012. A total of 260,959 deliveries were analysed and in this study there were 372 cases of 3rd and 4th degree perineal tears that were reviewed.

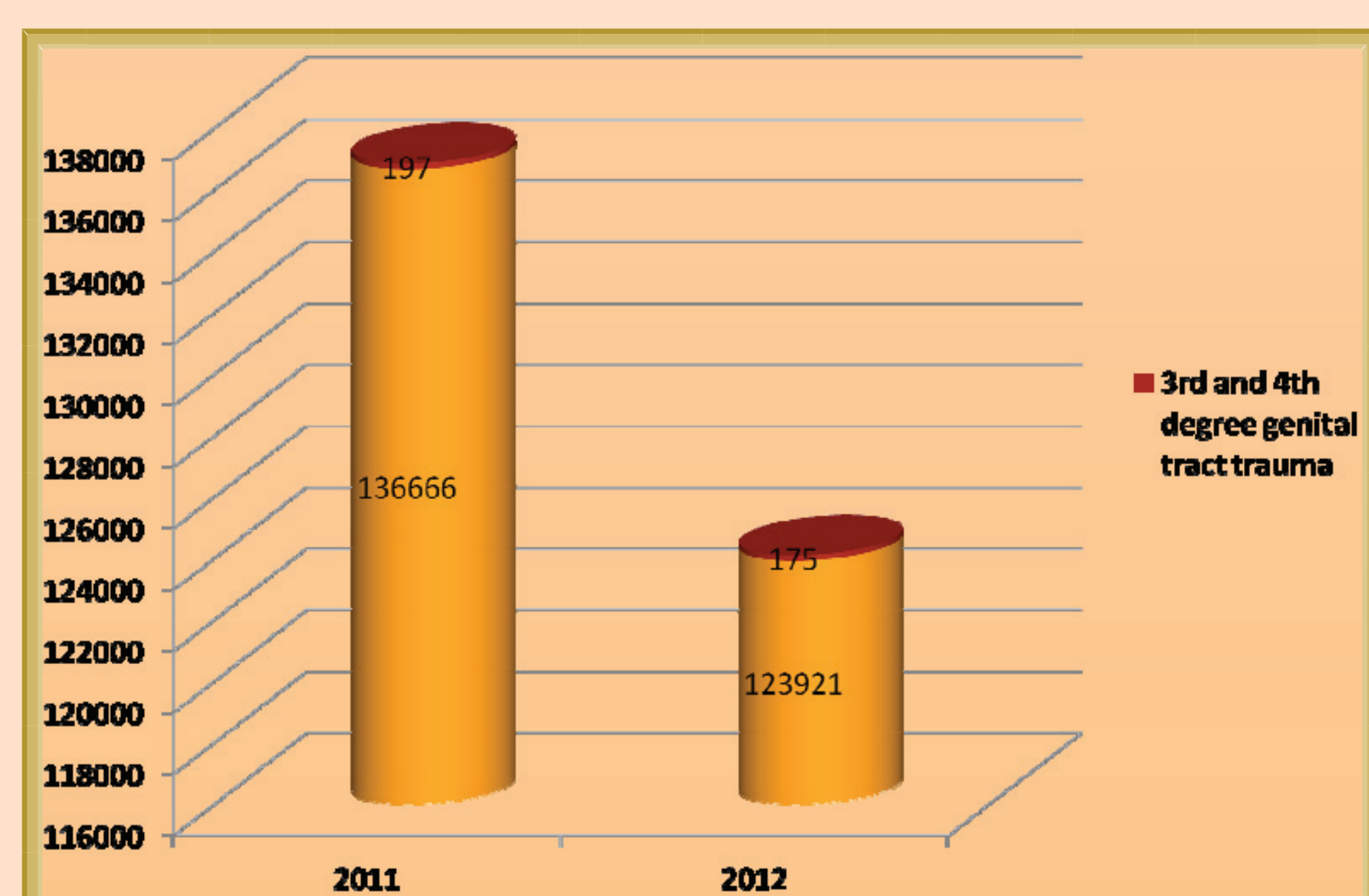
RESULTS

There were a total of 136,863 deliveries in 2011 and 124,096 deliveries in 2012. 31201 deliveries had episiotomy in 2011 whereas there were 29089 such deliveries in 2012.

Year	Total Delivery	Episiotomy	Episiotomy rate
2011	136863	31201	22.8%
2012	124096	29089	23.4%

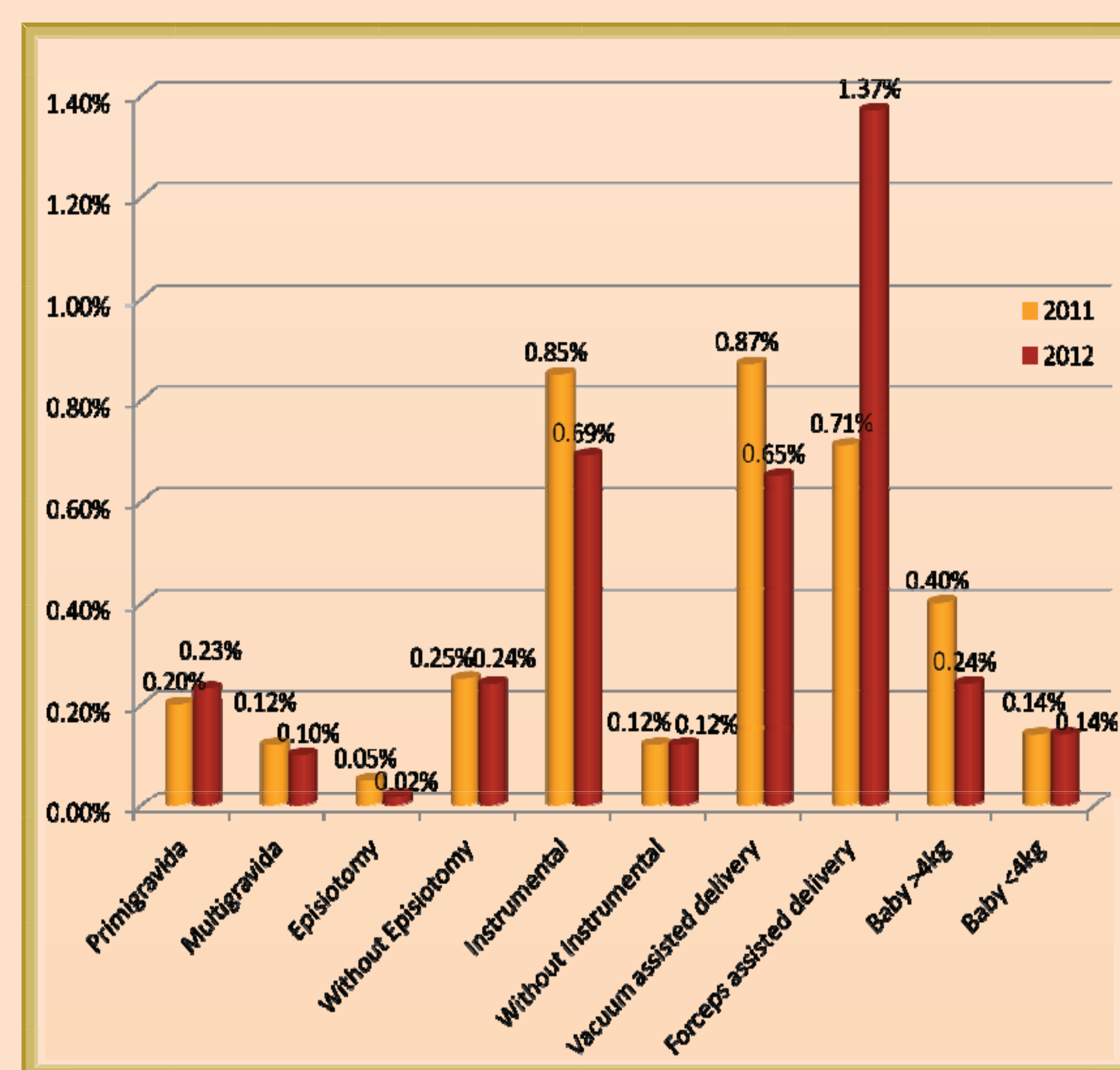
Table 2: Episiotomy Rate in 2011 - 2012

197 deliveries in 2011 and 175 deliveries in 2012 were complicated with 3rd and 4th degree perineal tears.



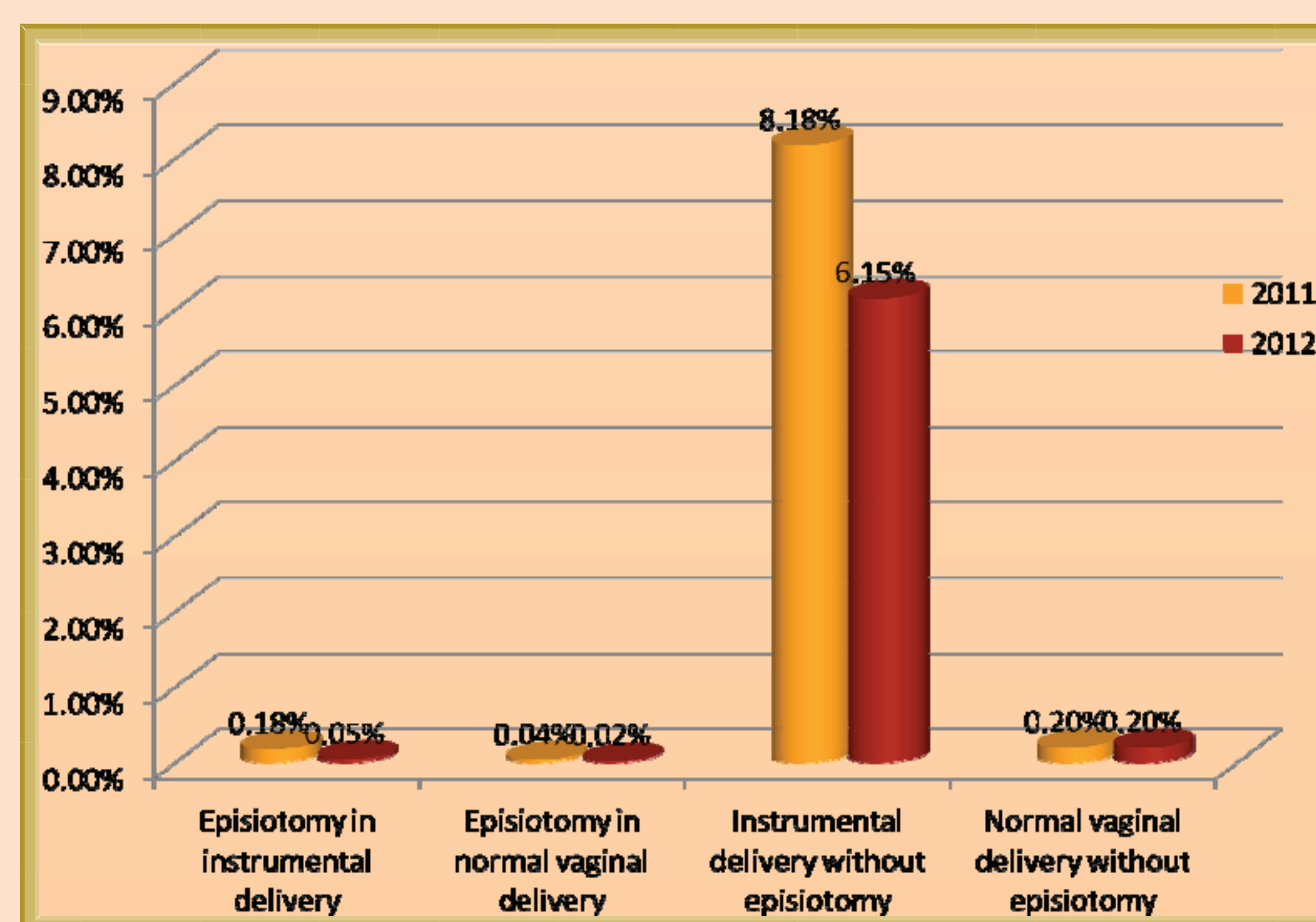
Graph 1: 3rd and 4th Degree perineal tears in 2011 - 2012

The rate was higher in primigravida without episiotomy, instrumental delivery and macrosomic baby (Graph 2)



Graph 2: Rate of 3rd and 4th Degree Perineal Tears by Parity, Use of Episiotomy, Instrumental Delivery and Weight of Baby in 2011- 2012

Further analysis shows that episiotomy in instrumental vaginal delivery reduces the rate of 3rd and 4th degree perineal tears (6.15-8.18% to 0.05-0.18%).



Graph 3: Rate of 3rd and 4th Degree perineal tears by use of Episiotomy among normal delivery and Instrumental delivery in 2011 - 2012

3rd and 4th degree tears in spontaneous vaginal delivery with episiotomy was 0.04% in 2011 and 0.02% in 2012 as compared to 0.20% in both years without episiotomy. When analysed by parity and birth weight, the data shows that it occurs in all subgroups.

Baby <4kg				Baby >4kg			
Primid with 3 rd /4 th degree tear		Multip with 3 rd /4 th degree tear		Primid with 3 rd /4 th degree tear		Multip with 3 rd /4 th degree tear	
2011	2012	2011	2012	2011	2012	2011	2012
N	%	N	%	N	%	N	%
4	0.02	3	0.02	6	0.06	2	0.02
0	0	0	0	0	0.00	0	0.00

Table 3: Rate of 3rd and 4th perineal tears among normal delivery (Without Instrumental) with episiotomy in 2011 – 2012
** % = Cases compared to total deliveries in that category

Baby <4kg				Baby >4kg			
Primid with 3 rd /4 th degree tear		Multip with 3 rd /4 th degree tear		Primid with 3 rd /4 th degree tear		Multip with 3 rd /4 th degree tear	
2011	2012	2011	2012	2011	2012	2011	2012
N	%	N	%	N	%	N	%
52	0.48	27	0.52	77	0.14	74	0.13
1	0.72	1	0.77	7	0.68	4	0.35

Table 4: Rate of 3rd and 4th perineal tears among normal delivery (Without Instrumental) without episiotomy in 2011 – 2012
** % = Cases compared to total deliveries in that category

The rate of 3rd and 4th degree perineal tears among those without episiotomy were 0.48-0.52% in primigravida and 0.13-0.14% in multipara without a macrosomic baby. Those with macrosomic baby and without episiotomy, the rate of 3rd and 4th degree perineal tears were 0.72-0.77% in primigravida and 0.35-0.68% in multipara. There was no reported case of 3rd and 4th degree perineal tears among the delivery of macrosomic baby with episiotomy.

DISCUSSION

The episiotomy rate was 22.8% in 2011 and 23.4% in 2012. Instrumental delivery without episiotomy was associated with a high incidence of 3rd and 4th degree tears. The rate of 3rd and 4th degree perineal tears among instrumental deliveries can be reduced with episiotomy and the rate will be similar to those with normal vaginal delivery without episiotomy. Among normal delivery without episiotomy, the rate of perineal tears is higher among primigravida as expected. However, there is no significant increase in the rate of perineal tears among those with macrosomic baby (both primid and multip). This can be partially explained by the increased use of ultrasound during antenatal follow up, earlier detection of suspected macrosomic baby and the offer of lower segment caesarean section as the mode of delivery.

LIMITATION

Due to the nature of this study, there were missing data and the actual incidence rate may be under-reported.

CONCLUSION

The episiotomy rate was well within the target set by the Ministry of Health. Further emphasis on the selective usage of episiotomy can greatly reduce such risk of 3rd and 4th degree tears. This study supports the use of episiotomy in instrumental delivery and the delivery of macrosomic babies.

REFERENCES

- Carroli G, Mignini L. Episiotomy for vaginal birth. Cochrane Database of Systematic Reviews 2009, Issue 1. Art. No.: CD000081. DOI: 10.1002/14651858.CD000081.pub2.
- National Obstetrics Registry 2011, 2012. Ministry of Health, Malaysia.