## LETTER TO EDITOR

## Caesarean Section Rates in Government Hospitals in Malaysia, 2000-2001

## J Ravindran, FRCOG

Department of O&G, Seremban Hospital, 70300 Seremban, Negeri Sembilan

Sir,

There has been widespread concern about rising caesarean section rates in the world. Various reviews have documented the wide variation worldwide in caesarean rates. For instance, in the mid-to-late 1980s the caesarean rate was 32% in Brazilian states, 25% in the United States, 5% in Jamaica and 7% in Czechoslovakia<sup>1</sup>. It is believed that the rising trend is due to the general trend towards lowering the threshold for caesarean section for all indications<sup>2</sup> and the resulting rise in repeat caesarean deliveries are the reasons for most of the observed increase3. Currently there also seems to be some controversy about caesarean section performed on the request of the mother. One unit reported a rate of 1 in 200 or 0.5% of caesarean section on maternal request alone with no other contributing factors4.

There are no national statistics available in Malaysia regarding the caesarean section rate in this country that encompasses data from both private and public sector deliveries. Some evidence for the rising trend in caesarean section rates comes from individual hospital annual reports. For example, the caesarean section rate in Seremban Hospital with an average of 9500 deliveries per year rose from 11.1% in 1991 to 17.2% in 2001.

I report for the first time the caesarean section rates for public hospitals in Malaysia for the years 2000 and 2001. The statistics are obtained from the Health Management Information Systems (HMIS), a computerised records system that captures the discharge diagnosis of all patients from the 119 government hospitals throughout the country. It shows that the caesarean section rate for government hospitals was 10.5% in 2000 and 11.0% in 2001. The rate was higher in Peninsular Malaysia (11.1% and 12.1% respectively). The caesarean section rate is therefore not unduly high in Malaysia when compared to other countries. In the United Kingdom, the rate increased from 18% in 1997-1998 to 22% in 2000-20015. Malaysia has therefore half the caesarean section rate as compared to the United Kingdom.

There is, however, a gross state variation in caesarean section rates. Malacca had the highest caesarean section rate in the country (20.5% and 22.3% in both years). Kelantan had the lowest rates (6.8% and 7.5%). One in 5 women would experience a caesarean section in Malacca whereas one in 15 women would have the same risk in Kelantan. A simplistic explanation of the differential being due to the urban-rural divide does not seem to the case when it is noted that Selangor recorded a rate of 8.7% and 10.8% respectively, lower than the national average. A rate of 12 to 15%

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Corresponding Author: J Ravindran, Department of O&G, Seremban Hospital, 70300 Seremban, Negeri Sembilan

is often stated to be acceptable if sections are performed strictly on medical grounds<sup>5</sup>.

It would seem essential to establish a national register for caesarean sections that encompasses both private and government hospitals so that audit procedures can be put in place that ensure that every caesarean section is a needed one. The caesarean section rates in government hospitals could also be included as a national indicator in the Ministry of Health Quality Assurance System to ensure a more in depth analysis regarding the state differentials in the rate.

Table II: Distribution of various Shigella serogroups in Malaysia

State	2000			2001		
	Caesarean	Total	Caesarean	Caesarean	Total	Caesarean
	sections	deliveries	section rate (%)	sections	deliveries	section rate
Perlis	499	4467	11.2	420	4194	10.0
Kedah	3523	33746	10.4	3835	30864	12.4
Penang	1986	15900	12.5	2108	14727	14.3
Perak	4894	37335	13.1	4245	33494	12.7
Selangor	2703	30990	8.7	3662	33770	10.8
Wilayah P	3140	20239	15.5	3221	20575	15.7
Negeri Sembilan	2026	15805	12.8	2229	14638	15.2
Melaka	2297	11224	20.5	2382	10655	22.3
Johor	5835	48647	12.0	<i>5717</i>	45939	12.4
Pahang	291 <i>7</i>	22809	12.8	2329	21,496	10.8
Terengganu	1430	20366	7.0	1485	19630	7.6
Kelantan	2095	30682	6.8	2168	28777	7.5
Total						
Peninsular Malaysia	32625	292702	11.1	33801	278759	12.1
Sabah	3529	43231.	8.2	3297	44588	7.4
Sarawak	3163	39955	7.9	3044	37859	8.0
Total	39317	375888	10.5	40142	361206	11.1

## References

- Notzon FC, Cnattingius S, Bergsjo P et al. Caesarean section delivery in the 1980s: International comparison by indication. Am J Obstet Gynaecol 1994; 170: 495-504.
- 2. Leitch CR, Walker JJ. The rise in caesarean section rate: the same indications but a lower threshold. Br J Obstet Gynaecol 1998; 105: 621-26.
- 3. Porreco RP, Thorp JA. The caesarean birth epidemic: trends, causes and solutions. Am J Obstet Gynaecol 1996; 175: 369-74.
- Groom KM, Paterson-Brown S. Caesarean section on demand. In: Sturdee D, Olah K, Purdie D, Keane D (eds) The Yearbook of Obstetrics and Gynaecology Vol 10 RCOG Press, London, 2002: 175-85.
- Mayor S. Caesarean section rate in England reaches 22%. BMJ 2002; 324: 1118.