Obstetric performance of the rural primigravidae 1965 to 1968, in Kuantan, Pahang.

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STUDIES ON THE OBSTETRIC performance of primigravidae in the tropics were made by Llewellyn-Jones (1965) and Thomson and Baird (1967). Llewellyn-Jones' study was on the effect of age and social status on obstetric efficiency of the primigravidae in Kuala Lumpur. Thomson and Baird's study was limited to Western Nigeria, Hongkong, Sarawak and Sabah. It is well known that efficient reproduction depends on the interaction of a number of socio-economic factors. In the author's study, the first in

Data:

The data obtained was tabulated as follows :—

TABLE I

Ethnic Group/Hospital Deliveries/Year

Ethnic Group	1965	1966	1967	1968	Total
Malays	38	46	48	66	198
Chinese	172	169	167	199	707
Indians	25	24	29	35	113
Total :	235	239	244	300	1018

Table I shows that there was an increase in the number of hospital deliveries from 235 (1965) to 300 (1968) The table also shows that there was an increase in all ethnic groups. It must be stated that many Malay primigravidae do not seek hospital confinement, but it was encouraging to note that there was a noticeable increase amongst the Malays from 1965 to 1968.

a rural area, an attempt was made to see if ethnic factors had any effect on the obstetric performance of the rural primigravidae in Kuantan, Pahang.

Method and Materials

The prospective study was carried out from January 1968 to December 1968 at the Department of Obstetrics and Gynaecology, Maternity Hospital, Kuantan. The data obtained for 1968 were then compared with a retrospective study of the records of all primigravidae delivered at the General Hospital, Kuantan from January 1965 to December 1967

TABLE II

Ethnic Group/Year/Age

Ethnic Group	Year	Age in years					
		< 14	15-19	20-24	25-29	30-34	35+
Malays	1965	0	7	23	6	1	1
	1966	0	11	23	9	3	0
	1967	2	15	20	10	1	0
	1968	0	18	33	9	6	0
Total :		2	51	99	34	11	1
Chinese	1965	0	30	85	45	7	5
	1966	0	31	82	44	11	1
	1967	0	37	66	58	6	0
	1968	0	33	93	60	11	2
Total :		0	131	326	207	35	8
Indians	1965	0	16	5	4	0	0
	1966	0	11	10	2	1	0
	1967	0	16	7	5	1	0
	1968	0	14	13	7	1	0
Total :		0	57	35	18	3	0

Table II shows that for the Malays and the Chinese, the majority were in the age group 20 to 24 years similar to the findings of Llewellyn-Jones (1965) in Kuala Lumpur but for the Indians the majority were in the 15 to 19 age group. The table also shows that there was an increase in the age of primigravidae in 1968 when compared with those in 1965. Primigravidae below the age of 15 years or above 36 years accounted for only 11 cases out of a total of 1018, an incidence of 1.8%.

TABLE III

Ethnic Group/Year/Duration of labour in hours

Ethnic Group	Year	Labour in hours					
		0-6	6-12	12-18	18-24	24-48	48+
	1965	10	16	6	3	2	1
	1966	13	19	8	4	1	1

TABLE V

Ethnic Group/Year/Weight of babies

Ethnic Group	Year	Weight in lbs.					
Indians	1965	5	13	6	1	0	0
	1966	4	10	9	1	0	0
	1967	8	5	12	4	0	0
	1968	4	11	16	3	0	0
Total :		21	39	43	9	0	0

Table V shows that for all ethnic groups, the majority of babies weighed between 6 to 7 pounds. For the Malays and Indians, the second largest group belonged to the 5 to 6 lb. groups, but for the Chinese it was in the 7 to 8 lb. group.

TABLE VI

Ethnic Group/Year/Postpartum blood loss/Retained placenta

Ethnic Group	Year	Blood loss in ozs.					Retained placenta
		0-5	6-10	11-15	16-20	20+	
Malays	1965	3	18	10	3	2	2
	1966	7	29	5	1	4	2
	1967	10	31	3	1	3	5
	1968	38	25	1	1	1	1
Total :		48	103	19	6	10	10
Chinese	1965	23	119	18	5	7	3
	1966	30	101	19	13	6	5
	1967	41	95	19	8	4	3
	1968	99	90	4	3	3	2
Total :		193	305	60	29	20	13
Indians	1965	8	15	1	0	1	0
	1966	7	10	3	3	1	1
	1967	7	16	6	0	0	0
	1968	16	14	5	0	0	0
Total :		38	55	15	3	2	1

Table VI shows that for all the ethnic groups for the years 1965 to 1967, the average post-partum blood loss was 6 to 10 ozs. For 1968, all the ethnic groups showed a reduction in post-partum blood loss to 0 to 5 ozs. There was also a lower incidence for all ethnic groups of post-partum haemorrhage and retained placenta. The explanation for this was the introduction of the author's method for the management of the third stage of labour. In this method, 1 cc of Syntometrine was given to the patient by intramuscular injection after the birth of the baby and the placenta was delivered by controlled cord traction. (Dr. Thambu 1970).

TABLE VII

Ethnic Group/Year/Foetal loss

Ethnic Group	Year	Fresh stillbirth		Macerated stillbirth		Neonatal death		
		< 5 lbs.	> 5 lbs.	< 5 lbs.	> 5 lbs.	< 5 lbs.	< 5 lbs.	
Malays	1965	0	2	0	2	1	2	7
	1966	1	1	1	1	2	1	7
	1967	0	1	1	0	0	2	4
	1968	1	0	0	1	0	0	2
Total :		2	4	2	4	3	5	
Chinese	1965	0	2	0	0	1	1	4
	1966	0	0	0	0	2	1	3
	1967	0	1	1	0	1	1	4
	1968	0	0	0	0	1	0	1
Total :		0	3	1	0	5	3	
Indians	1965	0	0	1	0	0	0	1
	1966	0	0	0	0	0	0	0
	1967	1	1	0	0	1	0	3
	1968	0	0	0	0	0	0	0
Total :		1	1	1	0	1	0	

Table VII shows a remarkable reduction in foetal loss for all ethnic groups from 1965 to 1968.

TABLE VIII

Perinatal Mortality

Year	Perinatal mortality
1965	49.7%
1966	41.7%
1967	45.1%
1968	10.0%

Table VIII shows that in 1965, the perinatal mortality was 49.7% and this was reduced over the years to 10.0% in 1968.

TABLE IX

Maternal Mortality

Year	Maternal Mortality
1965	0/1000
1966	9/1000
1967	0/1000
1968	0/1000

TABLE III

Ethnic Group/Year/Duration of labour in hours

Ethnic Group	Year	Labour in hours					
Malays	1967	14	15	6	2	3	0
	1968	24	34	6	1	1	0
Total :		61	84	26	10	7	2
Chinese	1965	54	79	23	7	8	1
	1966	45	76	34	5	7	2
	1967	44	82	24	11	6	0
	1968	72	88	31	3	5	0
Total :		215	325	112	26	26	3
Indians	1965	9	11	5	0	0	0
	1966	6	11	5	2	0	0
	1967	6	14	5	1	2	0
	1968	12	17	5	2	1	0
Total :		33	53	20	5	3	0

Table III shows that for all ethnic groups, the average duration of labour was 6 to 12 hours but for 168, there was a slight shift to 0 to 6 hours. The explanation for this was that in 1968 the author carried out clinical trials of Algapan to shorten the duration of labour (Dr. Thambu 1971).

TABLE IV

Ethnic Group/Year/Type of Delivery

Ethnic Group	Year	Type of Delivery			
		Spontaneous vaginal delivery	Assisted Breech Delivery	Forceps	L.S.C.S.
Malays	1965	24	2	8	5
	1966	31	6	6	3
	1967	30	9	2	7
	1968	45	6	5	10
Total :		30(65.9%)	23(11.6%)	21(10.6%)	25(12.6%)
	1965	140	5	19	8
	1966	143	4	16	6

TABLE IV

Ethnic Group/Year/Type of Delivery

Ethnic Group	Year	Type of Delivery			
		Spontaneous vaginal delivery	Assisted Breech Delivery	Forceps	L.S.C.S.
Chinese	1967	147	5	10	5
	1968	164	8	11	16
Total :		594(84.0%)	22(3.1%)	56(7.9%)	35(4.9%)
Indians	1965	22	1	1	1
	1966	20	2	1	1
	1967	26	1	1	1
	1968	30	2	1	2
Total :		98(86.2%)	6(5.3%)	4(3.5%)	5(4.5%)

Table IV shows that spontaneous vaginal delivery was higher amongst the Indians (86.2%) and Chinese (84.4%) than the Malays (65.9%). Table IV also shows that the incidence of forceps delivery and the Caesarean section rates were higher in the Malays (forceps 10.6% and Caesarean section 12.6%) than in the Chinese (forceps 7.9% and Caesarean section 4.9%) and Indians (forceps 3.5% and Caesarean section 4.5%). The incidence of breech deliveries was also higher in the Malays. The reason for the higher incidence of complications in labour amongst the Malays would be explained by the fact that the average Malay primigravidae does not seek hospital delivery unless her pregnancy or labour has been complicated by other factors.

TABLE V

Ethnic Group/Year/Weight of babies

Ethnic Group	Year	Weight in lbs.					
		< 5	5-6	6-7	7-8	8-9	9+
Malays	1965	5	11	13	9	0	0
	1966	7	8	18	10	2	0
	1967	5	11	17	12	3	0
	1968	8	20	26	10	2	0
Total :		25	50	74	41	7	0
Chinese	1965	8	31	76	53	4	0
	1966	10	28	75	53	3	0
	1967	5	27	75	50	9	1
	1968	8	35	78	68	8	2
Total :		31	121	304	224	24	3

Maternal mortality for 1965 to 1968 — 1.96%/1000.

Table IX shows that the maternal mortality for 1965 to 1968 was 1.96 per thousand. The maternal mortality for a similar study on primigravidae at Kuala Lumpur by Llewellyn-Jones (1965) was 0.76 per thousand.

Comments

The sociological aspects of obstetrics have been discussed in detail by Baird (1949) Llewellyn-Jones (1965) and Thompson and Baird (1967). The previous study on Malaysian women was by Llewellyn-Jones (1965) on the relationship between age, social class and the obstetric performance of the primigravidae in Kuala Lumpur.

The author's study has shown that the good obstetric performance of the rural primigravidae in Kuantan was due to the important factor that most of them were in their early twenties. It is well known that the best reproductive performance are maintained by women in their twenties. Thus the obstetric problems of the very young or the elderly primigravidae only accounted for 1.8% in this study. The author feels that with the family planning services available, a woman should be advised to plan and have her first baby in her early twenties.

The reduction in the perinatal mortality from 49.7% in 1965 to 10.0% in 1968 reflects the improvement in the ante-natal care in the rural areas. More primigravidae are seeking the services of the health clinics and the hospitals.

Thompson and Baird (1967) have pointed out that the most efficient childbearing requires youth, good health, physique and good ante-natal and hospital obstetric care. The above factors are further influenced by the interaction of social and environmental factors. The author's study on the rural primigravidae in Kuantan has shown that the obstetric performance of the Malays, Chinese and the Indians were similar and the apparent difference seen in the data obtained could be explained by the cultural and environmental factors and could not be attributed to ethnic differences.

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