Maternal Mortality Amongst the Rural Malays

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IN THIS AGE OF science, space technology, and landing of the first human on the moon, we in Malaysia have still not found the way to make pregnancy less hazardous for our pregnant mothers.

There is no doubt about the fact that Malaysia has made considerable development in the medical and health fields and provided its inhabitants with a fair amount of such facilities. The progress made in hospital development, control and eradication of communicable diseases, national family programmes, dental health services and rural health services have been quite impressive. In rural health services a sizeable number of health centers, sub-centers and midwife clinics were constructed throughout the country. In addition, the major rural health services already provided, include nutrition, maternal and child care, public health nursing, environmental sanitation, etc. The crude death rates as shown in vital statistics for West Malaysia 1969 for all races have declined over the past decades from 9.7 per thousand in 1959 to 7.2 per thousand.

In this short article one would attempt to analyse in general term some of the problems associated with maternal mortality amongst the rural Malay mothers. The accuracy and comments on some of the points and statistics may be debatable amongst readers who are a specialist in their own respective fields. If they are debatable then it would all be for the better for all those who have their own special interests in this field. However, there is no doubt in the author's mind that unless there are active research programmes in the field of rural obstetrics any discussion on this complex subject will always be in general terms.

In Malaysia and other developing countries such as India and Africa the problems associated with maternal death are much more serious than those in well developed countries such as Britain, America, Sweden and Australia. It has been said by practising obstetricians that our pregnant women face the same problems as the British women 30 years ago. In Britain the probability of a woman dying during pregnancy is 0.25 per thousand, while women in a poor rural area in West Malaysia run a risk of dying twenty times more than their western counterparts.

On analysing the recent available statistics from the Department of Statistics, on Vital Statistics West Malaysia 1969, it is obvious that the great majority of those who died during pregnancy were Malay women (Table I and Table II).

These findings have been confirmed by several research workers in Malaysia. The table shows that the Malays accounted for 81.7% out of the total maternal deaths in 1969. It also shows that incidence varies between 50% in Negri Sembilan to 100% in Trengganu. Even in the more developed state of Selangor, 69.1% of Malay women died out of 55 maternal deaths. In addition these statistics also show that the districts of Mersing, Muar, Ulu Trengganu, Selama, Ulu Perak, Sik, Kota Bharu and Ulu Kelantan are some of the worse areas as far as maternal death is concerned.

The Population and Housing Census 1970 of Malaysia showed that in West Malaysia 14.9% of the Malays lived in the urban areas leaving 86.1% in the rural areas. This is confirmed by Table III

Table I

States	Total Maternal Death	Malays	Percentage
Johore	62	49	79
Kedah	66	58	88.8
Kelantan	70	66	94.3
Melaka	9	7	77.7
Negri Sembilan	14	7	50
Pahang	38	34	89
Penang	15	11	73.3
Perak	104	78	75
Selangor	55	38	69.1
Trengganu	30	30	100
Perlis	6	5	83.3
Total	469	383	81.7

Table II

States	No. of Live Birth	Malay Maternal Mortality Rate	State Maternal Mortality Rate
Johore	24,798	1.97	1.39
Kedah	23,316	2.49	2.08
Kelantan	24,200	2.73	2.74
Melaka	7,652	0.91	0.63
Negri Sembilan	7,681	0.91	0.83
Penang	6,916	1.60	0.66
Perak	25,246	3.09	1.90
Perlis	2,865	1.74	1.61
Selangor	18,509	2.05	1.07
Trengganu	14,707	2.04	1.96
Pahang	10,612	3.21	2.25

which shows that 80.84% of live birth (1969 Vital Statistics) occurred in Malay mothers who live in rural areas. It is the distribution between urban and rural areas that is relevant for this article. Table IV shows the rural distribution of the Malay population for some of the districts mentioned earlier. One can see that these areas are heavily populated by Malays. In the five districts of Mersing, Ulu Trengganu, Sik, Ulu Kelantan and Ulu Perak there is not a single town which has a population attaining the size of an urban area – 10,000 and over inhabitants, and these are rural districts where the Malays accounted for between 66.0 to 98.0 per cent.

The outcome of a successful pregnancy depends on many factors such as nutrition, level of education, housing conditions, economic conditions, the availability and utilisation of the medical services. The maternal mortality rate of a country or a race is one of the most important parameters of any country or a race. It is a very reliable index which reflects the above factors, that is the standard of general health and the way of life of a particular race.

It is not surprising, therefore, that the death rate is higher amongst the Malays than the other races because of the fact that a great majority of them live in rural areas. As a result of their remoteness from major towns with available medical facilities they are in a disadvantageous position as far as the availability of medical services are concerned. There are glaring differences between the income of an urban and a rural household. The lowest income group will be found in the traditional rural sector where the major economic activities are to be found in uneconomic smallholder rubber, single crop paid, inshore fishing, etc. The Malays total the majority in these activities.

The Household Budget Survey 1957-1958, gives some indication of the low income of the rural Malay. According to the Survey about 75% of the rural Malay households in West Malaysia earned an income of less than $150.00 per month. On the other hand, 33% of Malay households in urban areas were in the same income group. One can conclude that unless the socio-economic standards of the rural Malays are improved, the death rate of the pregnant rural Malay mothers will always be much higher than their more fortunate sisters.

Another important factor which the pregnant Malay mother has to face is the availability of medical services. It is obvious that the most highly equipped obstetric hospitals with trained and experienced medical staff are located in the urban areas. The Malay mothers because of the fact that they live in remote areas are deprived of these facilities. The problem of Malay mothers who live in these areas will be much more acute if transport or other forms of communications such as telephone services are not readily available. In these cases the mothers would be exsanguinated by the time help is obtained.

Table III

States	Metropolitan and Urban Malays		Rural Malays		Total Live Birth
	Live Birth	%	Live Birth	%	
Perak	3,728	14.75	21,547	85.25	25,275
Penang	1,343	19.39	5,586	80.61	6,929
Pahang	1,822	17.04	8,871	82.96	10,693
Negri Sembilan	802	17.04	6,839	89.50	7,641
Melaka	237	3.11	7,406	96.89	7,643
Kelantan	2,958	12.18	21,346	87.82	24,304
Kedah	1,787	7.65	21,586	92.35	23,373
Johore	9,923	40.02	14,875	59.98	24,879
Perlis	—	—	2,817	100.00	2,817
Selangor	4,632	25.14	13,799	74.86	18,431
Trengganu	4,655	31.97	9,909	68.03	14,564
Total	24,585	19.16	134,581	80.84	166,468

Table IV

District	Total Population	Total Malay Population	Total Rural Population	Malay Rural Population	% of Malay Rural Population Total to Rural Population
Muar	279,161	157,927	205,615	134,010	65.2
Mersing	34,657	24,523	34,657	24,523	70.7
Ulu Trengganu	33,694	33,275	33,694	33,275	98.8
Sik	39,051	34,307	39,051	34,051	87.2
Kota Bharu	207,837	187,374	126,481	124,753	98.6
Ulu Kelantan	62,536	41,327	62,536	41,327	66.1
Ulu Perak	61,809	54,762	61,809	54,762	88.6

It has been said that an efficient medical service is a luxury which very few developing countries could afford. At the moment Malaysia with her limited economic resources and manpower will find it difficult to provide the same medical services to her population as the more affiuent countries such as Britain, America and Sweden. However, at this important period of her history when she is undergoing a marked social reform and economic development she should realise that there is an urgent need to improve the obstetric care of the rural Malay mothers. Most obstetricians will agree that the practice of obstetric is basically a science of preventive medicine. The signs and symptoms of obstetric conditions appear early in pregnancy. These can usually be easily detected by an experienced obstetrician in the antenatal clinic. Lack of antenatal clinics and obstetrician in rural areas would mean that most of these mothers will be deprived of this vital anternatal care. Consequently their illness will be in an advanced state by the time they seek medical help.

The subject of maternal mortality is complex since its prevention is closely intertwined with socio-economic condition of the country. However,

there are several areas in the obstetric services which could be improved and these are as follows:–

(a) There should be more obstetric centers set up in the rural areas itself which should be used purely for antenatal and post-natal care. The center should be staffed by personnel well trained in the care of diseases of pregnant women. One of the ways to obtain this type of staffing is for trainee obstetricians from obstetric hospitals to attend these centers two or three times a week. At the moment many of these maternity clinics are staffed by trained midwives whose quality and experience varies.

(b) The obstetric center itself could be expanded at a later date to include delivery beds and operating theatre. This would eliminate the need to transfer complicated cases to the nearest general hospitals which may involve a travelling distance of thirty to fifty miles. Many of these mothers are in no condition to undertake such a journey. It is not uncommon in one's experience to find that quite a number of these mothers died in transit or soon after they reached the hospital.

(c) Flying squad services provided by most obstetric hospitals should be fully utilised. When the obstetric centers have been fully developed, the establishment of such an obstetrical service, will take time, experience, manpower and relocation of necessary funds to the rural areas. In the meantime one could minimise the risk to the mothers if high-risk cases could be reviewed from time to time at major obstetric hospitals. High-risk cases should include, all primigravidas, women over 30 years, women with four or more children, those with medical complications such as pre-eclampsia, accidental haemorrhage and post-partum haemorrhage, those who had history of stillbirth or neo-natal death and those who had any implications developing in current pregnancy.

The flying squad team should be sent to these centers where they will assess the case and carry out the definitive treatment. This would include a Caesarean operation, if necessary. At the moment flying squad services are used to evaluate the patient at the clinics or the patient's home and from there the patients are transferred to the general hospital. The author would like to emphasize again that many of these patients are in no condition to undertake such a long journey. The composition of the flying squad should consist of a trained obstetrician, an assistant and an anaesthetist. Its equipments should consist of at least an anaesthetic machine, resuscitative equipments and adequate supply of blood.

The author is well aware that these suggestions are not new and startling. Some aspects of this scheme is already incorporated in the existing obstetric service throughout West Malaysia. In highlighting these problems the author would like merely to appoint out to the deficiency in quality and quantity of the service.

The pregnant rural Malay mothers themselves must realise that even if the government is able to provide them with these centers, they will still run a considerable risk during their obstetric career, unless they themselves make some effort to see a trained obstetric personnel during their period of confinement. Lourdenadin in this review on the hazards of childbirth in West Malaysia has shown that 72.9 per cent of maternal death avoidable factors. He commented that this was mainly due to absence of antenatal care and delay in seeking admission into hospital. For their own safety and well-being the mothers themselves must utilise the services provided by these centers. It is not good enough for Malay mothers to obtain their obstetric knowledge from their mothers and grandmothers much of which is misleading and extremely harmful. Protein diet is one of the essential foods for the pregnant mother during her confinement. Yet one often hears the Malay mothers being warned by their ill-informed medical well wishers, to avoid meat, prawn, fish, etc. Some of the common causes of death to the pregnant women are postpartum haemorrhage, ante-partum haemorrhage, pre-eclampsia and obstructed labour. Many of these causes are preventable and the only way they can be prevented is for the mother to utilise the facilities of rural health services.

Summary

This paper shows that the incidence of maternal mortality is higher amongst the Malays, than the other races in West Malaysia. One of the main reasons for this high maternal mortality amongst the Malays was due to the fact that many of the Malay mothers live in rural areas, where there is poor availability of medical services and experienced manpower.

In order to diminish this high maternal mortality rate, it has been suggested that obstetric centers and the Flying Squad Service should be developed, in order to manage complicated obstetric cases.

The Malay mothers themselves are advised to make use of these services since it has been found that many of these mothers died because of absence of antenatal care and delay in seeking medical advice.

References

Baird D., and Thomson A. M. (1969): British Perinatal Mortality Survey Livingstone. Pg. 1.

Lourdenadin S. (1968): 4th Asian Congress of Obstetric and Gynaecology.