

Maternal Health Care at the Crossroads

N Sivalingam, FRCOG

Introduction

The laudable decline in maternal mortality ratios in Malaysia from 1,085 per 100,000 live births in 1933 to about 40 in the early 1990's illustrates the commitment of the government towards providing effective maternal health care over that period. In the 25-year period between 1971-1995, 0.38% of the GDP was spent in building facilities for a comprehensive far reaching network of community and hospital based services and expenditure to operate this. Brave measures that lay the foundation to maternal health were the professionalisation of midwifery between 1933-1957, and the subsequent introduction of the National Registration System in the 1950's to document births and maternal deaths. This was a necessary introduction as a result of a WHO initiative to make maternal and child health care top national priority in 1948. Improving access to health care for mothers and children and service utilisation by rural poor formed the thrust of our nation between 1957-1975 with a slow shift from home deliveries to hospital-based deliveries.

The referral chain was indeed a critical factor in reduction of maternal mortalities since 1960's. Improvements in transport and transfer of indicated cases from rural health centres to base hospitals and the involvement of trained personnel in managing high risk pregnancies contributed immensely to the rapid decline in maternal mortality ratios. The introduction of a national quality assurance programme with national indicators for obstetrics in 1986 together with a shared care approach involving the

hospital clinician and the rural health provider reinforced existing strategies.

Against this background, the formalisation of a Confidential Enquiry into Maternal Deaths in Malaysia (CMED) in 1991, based on the UK model, saw improvements in data collection and analysis of such data. Recommendations based on the reports generated by the CMED Committee since 1991¹ (five reports have been produced so far and the triennial report for 1997-2000 is awaited) saw the development of clinical guidelines and health training modules for postpartum haemorrhage, hypertensive disorders in pregnancy and cardiac disease in pregnancy to remedy shortfalls in clinical management. Postpartum haemorrhage and hypertensive disorders in pregnancy continue to be leading causes of death in Malaysia. Associated medical disorders have moved up the scale to contribute to indirect causes of deaths. The absolute number of mortalities have plateaued at about 250 per 100000 in spite of both rigorous maternal and child health reviews and targeted remedial measures based on the recommendations of the CEMD posing a question to clinicians, health administrators and the public whether existing strategies need to be reviewed through different analytical approaches².

This issue of the Malaysian Medical Journal contains a number of articles that indirectly refer to the need for a re-look at our policies in providing maternal health care in the light of changing demography and evolving disease patterns. The colour coding system introduced as

a triaging strategy to identify pregnant patients at risk and the need for skilled attendance during pregnancy and delivery have been in vogue since 1989. This univariate stratification system is being questioned as to its effectiveness by Ravindran et al ³ in their article based on data from 1,112 subjects where the colour coding had been used. Research now categorically shows that identifying high-risk pregnancies is not an effective way of reducing maternal deaths, as it is not sensitive enough to describe the course of pregnancy. Even women who are healthy and have received some antenatal care, around 40% will develop problems during pregnancy with 15% developing life-threatening complications. Estimates from WHO show the reduction in maternal mortality resulting from antenatal /community based interventions to be 26% ⁴.

The CMED Reports (1991-1996) showed the presence of remediable factors related to late intervention and delay in care to have contributed to mortalities. Maternal care among Orang Asli population, immigrant groups and those with existing medical disorders have been of concern. Home deliveries and attendance by untrained personnel have fallen to less than 5% in Peninsular Malaysia. Some 30% of deliveries in urban areas are now taking place in the private sector. How these changes have impacted on maternal health needs evaluation and review. The WHO estimates that 74% of preventable deaths are attributable to lack of access to essential care in developing countries. Access to health care in Malaysia may not only refer to the logistics of the matter but adequate and rapid intervention and early referral irrespective of a delivery occurring in an institute or at home. Apart from developing clinical skills in recognising the sick patient and dealing with her disease, one must be complemented by the ready availability of support services such as operating facilities and blood / blood products.

The rapid introduction of medical technology and life style changes will have an impact on maternal health. With improvements in health standards

and the availability of cardiac surgery, more women with corrected congenital heart disease go through pregnancy with reduced morbidity and mortality. There is a change in the pattern of occurrence of disease with a higher number of congenital heart disease patients compared to rheumatic heart disease in pregnancy in the West. This is related to better living standards. Similar trends will be seen in Malaysia in time to come and strategies will need to be in place for such demographic changes with emphasis being put on corrective surgery for congenital heart disease and valvular heart disease before the woman reaches reproductive life. This should improve pregnancy outcome in both mother and fetus.

Hooi et al ⁵ have reported the successful management of renal transplant patients in Malaysia. The article is timely in providing health givers local information on the issues related to management of organ recipient (kidney transplant) pregnant patients. The effect of immunosuppressives on the growing fetus is always a factor for concern, so are the problems of organ dysfunction and graft rejection. Some vital information is mentioned in the article with regards to the need for delaying pregnancy till well after the initial phase where high doses of immunosuppressives are required and the rapid return of fertility after organ transplant, which is often not the case in patients undergoing dialysis for end stage renal failure. The need for combined care involving a multidiscipline team to supervise recipients in the management of expected complications like pre-eclampsia, hypertension, growth restriction and prematurity cannot be over-emphasised. Close scrutiny of their report will indicate a high percentage of unplanned pregnancies (54%). Counseling women suffering from severe medical disorders and those who have the potential of getting pregnant should not only lie within the ambit of the maternal health care giver but should be done by all health care givers especially where chronic medical disorders like renal disease, heart disease and collagen disease are concerned, as clinical management would often be initiated by non-

obstetric physicians before the onset of pregnancy. Establishing well documented short and long term management plans for such patients with regards to the impact of the disease on pregnancy and the influence of pregnancy on the disease will be effective in pregnancy care in view of a rapidly 'migrating female population' in this country, especially when shared health care is the order of the day! Attending physicians should educate patients on their ailments and provide adequate data, which can be held by the patient for reference by other parties. The patient-held record innovated by the Ministry of Health would be an ideal vehicle until the universal introduction of a smart card for all individuals.

New technology related to assisted conception techniques (ART) have not been addressed squarely in Malaysia largely due to the delay in the introduction of legislation and regulation in this field. The Human Embryo and Fertilization Authority (HEFA) in UK issues guidelines that govern all aspects of this new technique. It is now timely for appropriate bodies in this country to address ART rapidly as this sensitive science not only needs regulation but also peer review to obtain best results especially with regards to patient complications and pregnancy outcome. Clear definitions for pregnancy (viz. clinical pregnancy vs. take-home baby) and accepted success with various techniques (viz in-vitro fertilization, intracytoplasmic sperm injection, etc) will be useful to consumers. Women who become pregnant after IVF or GIFT are at an increased risk of multiple pregnancy, preterm labour, low birth weight and perinatal death⁶. In the UK almost 50% of all babies resulting from IVF are from multiple pregnancies. Currently HEFA guidelines allow for the transfer of no more than three embryos⁷. The Royal College of Obstetricians and Gynecologists guidelines recommends no more than two embryos⁸.

The recent public debate on reproductive human cloning in the local media incited responses from health authorities, religious scholars and social activists. Whilst Malaysia took a stand on the

prohibition of reproductive human cloning following the initiative of Germany and France at the First Ad-hoc Committee Meeting on an International Convention Against Reproductive Cloning of a Human Being (where the author was alternate delegation leader to the United Nation) held during 25 February - 1 March 2002, we were silent on stem cell research. Stem cells may be derived from the bone marrow (haemopoietic stem cells), cord blood or from the inner cell mass of one-week-old embryos. Whilst the use of adult stem cells evokes little controversy, the generation of embryos for this purpose needs to be discussed and a national consensus reached, in view of the issue of embryo destruction. Sensitive issues like cloning and embryonic derived stem cell research cannot be discussed in isolation, as they will form extensions of legislation and regulation related to human fertilisation and embryology. We must remind ourselves that the field of reproductive medicine opens new frontiers from which benefits may be derived if applied appropriately. In the absence of legislation rogue scientists may abuse it.

Two other maladies that are affecting pregnancies in developing and developed countries are AIDS and substance abuse (including the effects of smoking in pregnancy.) There is sufficient local data on the former but what is needed is documentation of long-term sequelae and how treatment strategies will impact on maternal and perinatal outcomes. There is scant dependable data on how widespread substance abuse and smoking is among the pregnant population. Certainly more robust national data will assist health workers and the population at large to develop effective national strategies against this social disease.

It appears that obstetrics in Malaysia is now at the crossroads. While maternal mortalities continue to occur, we need to review events from a different perspective to identify the 'hard core' group that appear to be the cause for the plateauing of maternal deaths over the last decade. As medical technology advances, the

effect of improvement in health through organ transplant, corrective surgery for congenital heart disease, valvular heart disease and ART will pose new issues to practicing maternal health

providers. Traditional approaches to such problem will need to be reviewed in line with changing demography and social illnesses.

References

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