Making the case for an obstetric medicine subspecialty in South Africa

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Obstetric medicine is a subspecialty of internal medicine that involves the management of medical conditions that may affect the course of pregnancy. It is an established subspecialty in many parts of the world, with recognised training programmes and an active international society; however, no formal training programme has been developed in South Africa (SA) as yet. Medical problems are responsible for the majority (60%) of maternal deaths in SA and women of childbearing potential are disproportionately affected by medical conditions such as HIV and obesity. Obstetric physicians would play a complementary role in the care of pregnant patients and could contribute to improving maternal health and lowering the maternal mortality rate in SA.

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Obstetric medicine is a subspecialty of internal medicine that involves the management of medical conditions that may affect the course of pregnancy. These medical problems may arise during pregnancy (e.g. peripartum cardiomyopathy, acute renal failure or even complicated gestational diabetes) or may predate the pregnancy (e.g. asthma, HIV).[1-3] Obstetric medicine is an established subspecialty in many parts of the world, including Canada, Australia, New Zealand, the UK and the USA, and it continues to expand as the prevalence of chronic medical disorders in pregnancy increases.[3,4] An international society, the International Society of Obstetric Medicine (ISOM), is active in education and strengthening ties among the global obstetric medicine community, and is represented worldwide by various regional societies.[5]

The subspecialty has been practised for more than 30 years in Australasia, with more than 50 practising obstetric physicians. In addition to this a training curriculum has been developed by the Society for Obstetric Medicine of Australia and New Zealand (SOMANZ) and an Obstetric Medicine Certificate is awarded by them to trainees who complete the requirements.[6] A Canadian programme for training in obstetric medicine has been developed; however, it is not yet a recognised subspecialty.[7,8] In the USA most obstetric physicians practise as such after gaining experience in clinical practice; one university and hospital does offer a structured training programme.[4] The UK has had a number of training sites for many years[2] and recently the Certificate of Completion of Training (CCT) and Higher Specialist Training (HST) credentials in obstetric medicine have been announced, paving the way for full recognition as a subspecialty.[9]

Obstetric medicine training in South Africa

A formal training programme has not yet been developed in South Africa (SA) but numerous general as well as subspecialist physicians have shown an interest in the complexities of caring for obstetric patients with medical comorbidities. Recently the care of medically complicated pregnancies has become an exit outcome for the College of Physicians, although exposure to cases during clinical training is limited and not standardised.[1]

Obstetricians are also assessed on medical problems in pregnancy at their exit examinations for the College of Obstetricians and Gynaecologists. They are exposed to pregnant patients with medical comorbidities during the course of their training. However, the majority of these patients are co-managed by physicians and obstetricians.[1]

Maternal-fetal medicine subspecialists

Obstetricians who have completed a subspecialty certificate in maternal and fetal medicine (MFM) are responsible for the care of high-risk pregnancies and often provide consultative services to other obstetricians. They investigate and manage medical and surgical disorders of both the mother and the fetus, often in consultation with physicians and physician subspecialists.[10] As of 28 May 2020, only 3% (40) of the 1 313 obstetrician-gynaecologists registered with the Health Professions Council of South Africa (HPCSA) are registered maternal-fetal specialists.[11] The majority of these doctors work as general obstetricians in addition to performing their MFM work.

Why the need for obstetric medicine?

Measuring a need for obstetric physicians requires multifaceted instruments. Maternal mortality rate (MMR) is a coarse but useful instrument used to compare outcomes between all countries, but does not accommodate for disease, resources, training, experience or patient volumes.

SA has made great strides in reducing maternal mortality over the past three decades through the implementation of a number of policies and training programmes. The National Committee for Confidential Enquiry into Maternal Deaths (NCCEMD) has reported a 29% reduction in maternal deaths in 8 years (2009 - 2017).[12-14]

Despite SA having one of the lowest MMRs in Africa (135/100 000 as of 2017),[14] and an MMR much lower than the sub-Saharan

and global averages of 533/100 000 and 211/100 000 respectively, the rate is far higher than that seen in Australia (6/100 000), New Zealand (9/100 000), the UK (7/100 000), Canada (10/100 000) and the USA (19/100 000).[15] It is difficult, however, or near impossible, to compare SA's MMR to these high-income countries, as they have access to more resources, lower doctor-to-patient ratios, and differently resourced populations.

Between 1952 and 2017 the UK reduced its MMR from 68/100 000 to 7/100 000, mainly through advances in obstetric care, the appropriate management of 'surgical' problems that arise in pregnancy (such as obstetric haemorrhage and prolonged labour) and a change in the quality of life of its inhabitants. Today more than 80% of the UK's maternal deaths are as a result of medical problems, highlighting the role for obstetric physicians.[16]

In SA, medical problems, as identified by the NCCEMD, also make up the majority (60%) of maternal deaths, with non-pregnancy-related sepsis being the most common cause of maternal death (25%) and hypertensive disorders the second most common (17.7%). Other medical conditions, including embolism, adverse drug reactions and general medical problems account for the remaining 17% of the above-mentioned medical problems.[14] HIV, obesity and pre-eclampsia are three high-incidence diseases endemic to our country which are associated with increased maternal morbidity. The burden of HIV remains high in SA, with women still disproportionately affected by it.[17] Approximately 36% of women of childbearing potential in SA are obese, a concern given the known association between obesity and adverse pregnancy outcomes.[17,18] Both these conditions may fall within the scope of primary healthcare providers, but may easily complicate, requiring specialised care.

SA has a very high incidence of hypertensive disorders in pregnancy. Improved maternal care also reduces a country's long-term chronic disease burden with diseases such as ischaemic heart disease and chronic renal failure.[19,20]

Conclusions

We believe that obstetric physicians have a complementary role to play in the care of pregnant patients in SA and that, when they work in concert with general obstetricians, maternal-fetal specialists and specialist physicians, further inroads into improving maternal health and lowering the MMR in SA can be made. A formalised training programme and identified training sites will create a platform for standardised training and patient care.

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