The St Vincent’s Declaration outlined commitments to improve diabetes care in Europe. One amongst its several ambitious goals was to achieve pregnancy outcomes in women with diabetes that approximate those of women without diabetes. Given that most European governments were co-signatories and the declaration had support of the World Health Organization (WHO) Regional Office for Europe and the International Diabetes Federation (IDF), it was reasonable to expect that swift action would be taken. Alas, even after a quarter of a century most targets, including the one on pregnant women with diabetes, remain elusive.

Like elsewhere in the world, the prevalence of diabetes in Europe among all age groups, including people of reproductive age, is increasing. It already affects about 60 million people, and is projected to increase to 71 million people by 2040. There is an equally high burden of pre-diabetes: approximately 32 million, which is likely to increase to about 37 million by 2040.

Overweight, obesity, and increasing maternal age increase the risk for hyperglycaemia in pregnancy (HIP). Approximately one in three pregnant women in Europe are obese or overweight. The age at childbirth continues to rise, and in many countries over 20% of births are to women aged 35 years or older. More than one-third of people with diabetes and a majority of people with prediabetes remain undiagnosed, particularly the young and women, as they have never been tested given that diabetes is mistakenly believed to only affect the elderly. As a consequence, apart from the rising rates of gestational diabetes mellitus (GDM), Europe must also contend with the increasing burden of previously undiagnosed type-2 diabetes in pregnancy (DIP). It should therefore be no surprise that hyperglycaemia in pregnancy (HIP) is one of the most common medical conditions affecting women during pregnancy. According to IDF, an estimated 14% of live births in Europe may be affected by hyperglycaemia during pregnancy. Non-white immigrant mothers who account for a significant proportion of pregnancies are even more vulnerable.

Although higher weight and maternal age are risk factors for HIP, in practice, only half of the women with HIP have these factors. The sensitivity to detect GDM using risk factors is poor, thus supporting the need for universal testing. There is no consensus on the optimal approach to testing for HIP in Europe, particularly on the utility of continued use of risk-based testing versus universal testing. There is evidence of both immediate and long-term health and economic benefits of testing, diagnosis, and management of HIP, and of providing postpartum preventive care; however, some doctors express concerns that universal testing and (consequently) increased diagnosis of GDM would place additional logistical and economic challenges to healthcare systems, as oral glucose tolerance tests (OGTTs) are time consuming and incur costs. On the other hand, the problem of complex protocols for testing based on risk factors, which place high demands on healthcare providers, with consequently lower compliance and missed diagnoses, has not been acknowledged.

Inadequately managed (and by corollary undiagnosed) HIP significantly increases the risk of pregnancy complications: hypertension, obstructed labour, postpartum haemorrhage, infections, stillbirths, premature delivery, both large and small for gestational age babies, congenital anomalies, newborn deaths as a result of respiratory problems, hypoglycaemia, and birth injuries. The risk and
number of these complications are directly related to the level of maternal hyperglycaemia.  

Although infant and maternal mortality in Europe is generally quite low, and continues to decline, perinatal mortality and morbidity remains a major concern. The incidence of preterm and very preterm births, fetal growth restriction, and congenital anomalies has increased in many countries, reflecting limited achievements in preventing high-risk situations. About one-third of all fetal deaths and 40% of all neonatal deaths in Europe were among babies born before 28 weeks of gestation. The proportions of live births with birthweights under 2500 g vary from under 4% to slightly over 9%. Stillbirths have also declined less rapidly, and in many cases their causes remain unknown. Increased clinical and community awareness of the risks associated with common pre-gestational and gestational medical disorders (e.g. diabetes and hypertension), and the implementation of best-practice guidelines, might improve management and reduce the associated stillbirth rates.

Most of the maternal deaths in Europe, as elsewhere in the world, directly result from haemorrhage, hypertension, thromboembolic disease, sepsis, and obstructed labor, the risks for which are considerably increased with HIP. With the introduction of targeted interventions, there are declining rates of direct maternal deaths within Europe. Therefore, efforts to further improve maternal health will have to be refocused on the reduction of maternal morbidity and indirect causes of mortality. Addressing obesity and HIP may help lower maternal and newborn morbidity and mortality by lowering the risk of pregnancy complications such as preterm births, stillbirths, congenital anomalies, and small and large babies, which are critical problems for maternal and child health in Europe. Without preventive care almost half of women with gestational diabetes go on to develop type-2 diabetes, and a significant proportion develop premature cardiovascular disease within 10 years of childbirth. Children born to women with HIP are also at very high risk of obesity, early onset type-2 diabetes, and cardiovascular disease, whereby HIP perpetuates these conditions into the next generation.

Focusing on maternal obesity and HIP screening during pregnancy provides a unique opportunity to integrate services that would lower traditional maternal and perinatal morbidity and mortality indicators, and address the inter-generational prevention of obesity, diabetes, hypertension, and cardiovascular disease. But how can we achieve this when we bury our heads in the sand and continue to disregard the basic premise of testing all pregnant women for hyperglycaemia? It is unbelievable that healthcare funding has not been prioritised for this, and for targeted, preventive postpartum care and health promotion for high-risk mother and child pairs.

An important reason for the lack of progress on the St Vincent’s goal related to pregnancy in women with diabetes perhaps was the lack of ownership and involvement of obstetricians. Most of the attention on gestational diabetes, including setting diagnostic cut-off values in the past, has been based on the future risk of type-2 diabetes, with scant attention paid to perinatal outcomes, particularly among women with so-called ‘mild gestational hyperglycaemia’. Studies in the last decade have shown significant associations between adverse pregnancy outcomes and levels of maternal glucose considered within the nondiabetic range. Meta-analysis of randomised controlled trials shows that treatment of gestational hyperglycaemia improves pregnancy outcomes. Therefore, the recent focus of the International Federation of Gynecology and Obstetrics (FIGO) on hyperglycaemia in pregnancy, resulting in the release of pragmatic guidelines at the FIGO World Congress in Vancouver in 2015, and the subsequent setting up of a working group on HIP, is very welcome.

FIGO demands greater attention on the links between maternal health and non-communicable diseases in the sustainable developmental goals agenda: in particular, to gestational hyperglycaemia and its propensity to fuel the global diabetes, obesity, and cardiovascular disease pandemic. FIGO also asks for public health measures to increase the awareness, access, affordability, and acceptance of preconception counselling, and the prenatal and postnatal services for women of reproductive age to be prioritised. This stance is in line with the UN declaration on non-communicable diseases, and with the policy brief of the European Institute of Women’s Health (EIWH; http://eurohealth.i.e/wp-content/uploads/2013/02/women_and_diabetes_policy_brief.pdf).

FIGO also recommends that all pregnant women should be tested for hyperglycaemia during pregnancy using a one-step procedure as a minimum standard, and encourages all countries and its member associations to adapt and promote strategies to ensure this.

Following a pregnancy complicated by GDM, the postpartum period provides an important platform to initiate beneficial health practices for both mother and child to reduce the future burden of obesity, diabetes, and cardiovascular diseases. FIGO recommends that obstetricians should establish links with family doctors, internists, paediatricians, and other healthcare providers to support the postpartum follow-up of mothers with HIP and their children. A follow-up programme linked to the child’s vaccination and regular health check-up visits provides an opportunity for continued engagement with the high-risk mother and child pair.

FIGO seeks greater international research collaboration to address the knowledge gaps to better understand the links between maternal health and non-communicable diseases,
The FIGO universal testing for hyperglycaemia in pregnancy

and create evidence-based best practice standards for the testing, management, and care of women with GDM.

The FIGO guideline has received widespread support and recognition from many professional organisations across the world, particularly from Europe, Australia, Canada, and the developing world, including organisations in India, China, and Africa. The European Association of Perinatal Medicine (EAPM), the European Board and College of Obstetrics and Gynaecology (EBCOG), and the International Association of Diabetes in Pregnancy Study Groups (IADPSG) were amongst the first to endorse and support the document. It is about time that health planners and policy makers in Europe pay heed to these recommendations, and take appropriate steps to implement the necessary actions.

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