Position Statement

diabetes australia

GESTATIONAL DIABETES IN AUSTRALIA

August 2020

ABOUT THIS POSITION STATEMENT

The position statement has been developed to inform women who may be at risk of, or who develop, gestational diabetes mellitus (GDM) and also to inform the community, policy makers and health care providers. It is not intended as a clinical guidance document for health professionals.

This position statement addresses the diagnosis, management and post-pregnancy care of women who develop GDM. It provides an overview of key issues relating to GDM and its impact and makes recommendations about the care and support women should receive.

There are three main types of diabetes affecting women in pregnancy:

1. pre-existing type 1 diabetes
2. pre-existing type 2 diabetes
3. gestational diabetes (GDM) which is first detected during pregnancy and is different to type 1 diabetes or type 2 diabetes

This position statement only addresses GDM, People with diabetes should always consult a health care professional before making decisions about their diabetes care.

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Key Points:

1. GDM is the fastest growing type of diabetes in Australia. The number of women diagnosed annually has more than doubled over the past decade. In 2019:
   - almost 41,000 women were diagnosed with GDM
   - 8,231 women registered with a repeat diagnosis of GDM
   - 34 per cent of women with GDM required insulin therapy
   - 9 per cent of women with GDM were aged over 40 years
2. Over the next decade more than 500,000 Australian women are expected to develop GDM.
3. The factors contributing to the growing rate of GDM include the age and weight of women becoming pregnant, excessive weight gain during pregnancy and Australia's changing ethnic makeup. Recent changes to the diagnostic process and criteria have also contributed.
4. Women with GDM are at a higher risk of serious complications during labour and birth that can have a lifelong impact. With appropriate care and support during pregnancy, many of these complications are preventable.
5. Women with GDM are seven times more likely to develop type 2 diabetes later in life. Children born to mothers with GDM are also at higher risk of developing type 2 diabetes later in life. Access to post-pregnancy support is important and may help disrupt the intergenerational cycle of type 2 diabetes.
6. Babies born to women with GDM are more likely to have longer hospital stays and twice as likely to be admitted to special care nurseries or neonatal intensive care units than children born to mothers without diabetes.
7. Women who are diagnosed with GDM may experience a range of psychological challenges including anxiety, guilt and distress. It is critical these women can access support from qualified health professionals and peer support.
8. The increasing number of women developing GDM is putting great pressure on health services, particularly the maternity hospitals where most women receive antenatal and pregnancy care. The maternity hospitals and related services simply cannot keep up with the increasing numbers. The increasing demand is leading to delays in commencing management of GDM in some services, and care being delivered by clinicians who lack appropriate training and expertise in GDM. This may impact on the quality of advice and care provided to the woman/family.
9. Diabetes in pregnancy is a major priority in the *Australian National Diabetes Strategy 2016-2020*. However, the Australian Government and the State and Territory Governments have provided little detail about their plans to address the growing rate of GDM and its impact on Australian families.
10. There is a need for increased funding for hospitals to support optimal management of women with GDM. This should include funding to support diagnostic and management pathways tailored to local circumstances.

11. The impact of GDM on the mother and baby varies depending on individual risk level for pregnancy complications. Women at higher-risk require more specialised GDM management support while women at lower-risk require less specialised, more generalised support. Protocols should be developed to optimise the use of local health resources to ensure women receive a level of care appropriate to their level of risk of pregnancy complications.

12. GDM education and care is not covered by Medicare or by many private health insurance funds. This means many women receiving pregnancy care in the private sector either pay private practitioners or, if they are unable to meet these costs, try to access services through an already over-burdened public system. Some women with GDM miss out on diabetes education altogether.

13. A new Medicare item is needed for women with GDM to support credentialled diabetes educators, accredited practising dietitians and other allied health professionals in delivering essential GDM services.

14. New approaches are needed for pre-pregnancy planning, support and management during pregnancy, and post-pregnancy follow-up for ongoing type 2 diabetes screening and to prevent the development of type 2 diabetes. These include:
    - more encouragement for women to plan pregnancies and to attend pre-pregnancy assessment with their GP or local pre-pregnancy services
    - more support to help women optimise their weight before pregnancy
    - better access to expert diabetes education and dietetic support during pregnancy
    - ensuring families receive the right follow up, services and support in the years after GDM
    - improving type 2 diabetes screening after GDM
    - providing type 2 diabetes risk reduction/prevention programs for women/families in the years after GDM

Background

Gestational diabetes is the fastest growing type of diabetes in Australia. The number of women diagnosed with the condition annually has more than doubled since 2008-09. In 2019, almost 41,000 women were diagnosed with the condition.

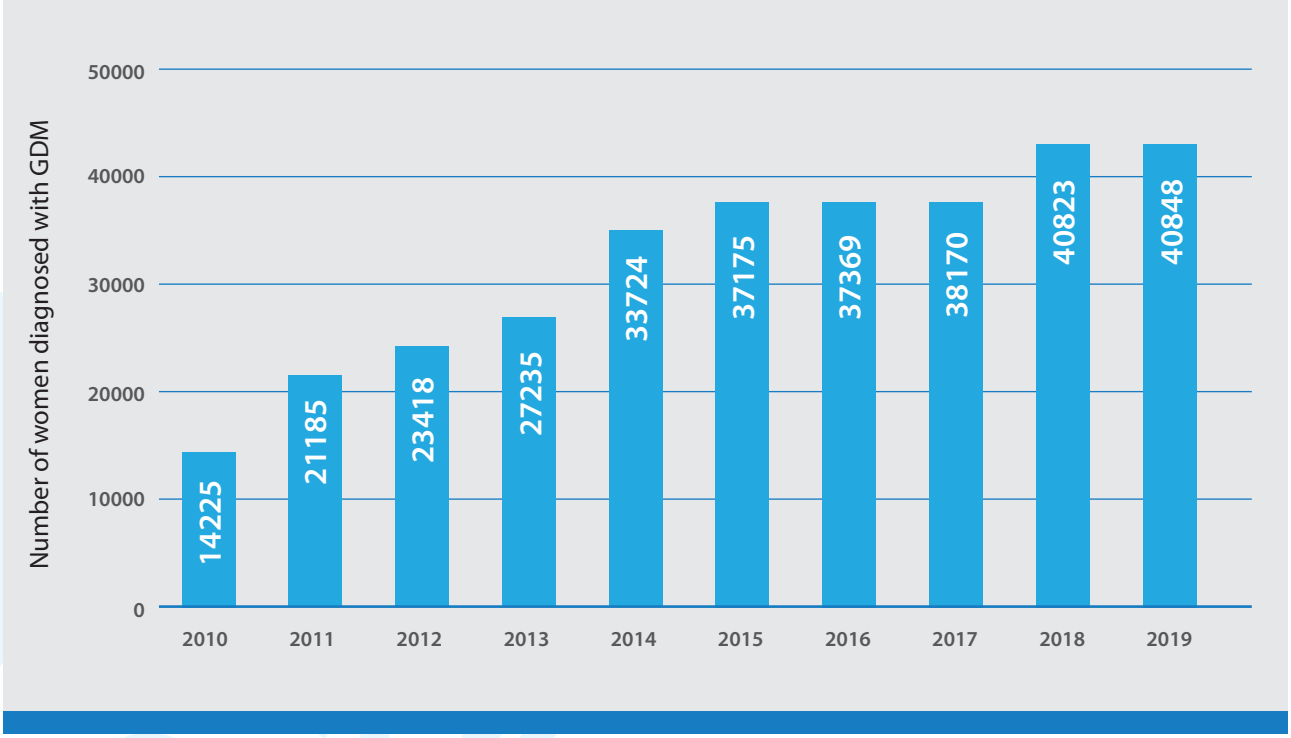
Having GDM makes the pregnancy higher risk for both mother and baby. Babies born to mothers with GDM are more likely to be born earlier, via caesarean, and have higher birth weights. The babies may have low blood glucose levels or respiratory problems which may require admission to a neonatal intensive care unit.

There is also the more severe, but less common, risk of shoulder dystocia (where the baby's shoulders become wedged during labour). With appropriate management and care, these risks can be reduced or eliminated.

While diabetes usually 'goes away' after pregnancyfor most women, it is associated with a dramatic increase in risk, for both mother and baby, of developing type 2 diabetes in coming years. Published evidence suggests about 60 per cent of women with GDM will develop type 2 diabetes within 10-20 years.[1]

Over the next decade more than 500,000 Australian women are expected to develop GDM. These women and their children will be at a higher risk of developing type 2 diabetes and heart disease. This is creating an "intergenerational" diabetes epidemic.

A small percentage of women diagnosed with GDM may have actually developed type 1 diabetes or type 2 diabetes either before or during the pregnancy. These diagnoses will need review after the birth, but there may be some uncertainty for a time about the diagnosis.



Source: National Diabetes Services Scheme data

The dramatic increase in the number of women diagnosed with GDM is placing a huge demand on health care services. Many hospitals and health care providers are struggling to provide timely support and services during pregnancy. Women who don't receive appropriate specialised care, both during and after pregnancy, are at higher risk of developing short- and long-term complications. The increased demand on health care services also has the potential to divert antenatal obstetric and diabetes services away from other high-risk pregnancies.

To meet these challenges Australia must invest more to have appropriately qualified and adequately resourced diabetes and obstetric health care teams with the necessary experience and expertise in managing GDM and diabetes in pregnancy. It is important to note that not all women with GDM are at the same level of risk. Some women may require less intensive and less specialised care.

More resources and support are needed for diabetes services within the public health system, usually within diabetes centres or services, as well as in private diabetes services.

Reducing the impact of GDM is addressed in Goal 4 of the *Australian National Diabetes Strategy 2016 – 2020.* While the strategy calls for pre- and post-pregnancy support, there is little detail available about plans for delivering this support. Investing in diabetes education during pregnancy may help reduce the likelihood that women diagnosed with GDM develop the condition in subsequent pregnancies. It may also reduce the risk for both mother and baby of developing type 2 diabetes later in life.

It is imperative we break the intergenerational cycle of type 2 diabetes to help reduce the long-term impact of the type 2 diabetes epidemic.

Who is at Risk?

Women with an increased risk of gestational diabetes include those who:

- have had GDM in a previous pregnancy
- are older, especially aged 40 years or over
- are First Nations women
- are from an African, Melanesian, Polynesian, South Asian, Chinese, Southeast Asian, Middle Eastern, Hispanic and South American backgrounds
- have a family history of type 2 diabetes or a first-degree relative (mother or sister) with a history of gestational diabetes
- are above the healthy weight range
- have gained weight rapidly in the first half of pregnancy
- have previously had elevated blood glucose levels or insulin resistance
- have polycystic ovary syndrome
- have previously had a large baby (especially weighing more than 4,500g)
- are currently taking some types of antipsychotic or steroid medications.

GDM may also occur in women with no known risk factors. It can also occur in women with very healthy diets and those who are exercising regularly.

What's contributing to the increase in the number of women diagnosed with GDM

Pregnant women in Australia:

- Almost half of pregnant women are overweight or obese[2]
- The average age of women falling pregnant has increased from 26.3 years in 1978 to 30.7 years in 2020[3]
- The number of Australians with ethnic backgrounds at a higher risk of GDM has doubled since 2000[4]

First Nations communities

First Nations mothers are 1.6 times more likely to develop GDM than non-Indigenous women.[5] Importantly, First Nations women who develop GDM have a higher rate of complicated pregnancies including induced labour, premature birth, caesarean section delivery, hypertension and longer hospital stays than mothers without diabetes in pregnancy.[5]

Short- and Long-Term Maternal Outcomes

Mothers with GDM are at an increased risk of a range of pregnancy and birth complications, have longer stays in hospital and are at an increased long-term risk of developing type 2 diabetes. Women with GDM:

- are more likely to experience pre-eclampsia[6, 7] (a hypertensive condition which, if left untreated, can put the mother at greater risk of seizure and possible death and the baby at risk of poor growth in the womb as well as premature birth)
- are more likely to give birth to larger babies increasing the risk of birth trauma due to the size of the baby[8]
- have a higher incidence of caesarean deliveries and induced labour than women without diabetes in pregnancy[5]
- are at an increased risk of depression during and post-pregnancy.[9, 10]

GDM will often recur in future pregnancies. Up to 70 per cent of women diagnosed with GDM will develop it again in future pregnancies.[11] Seventeen per cent of women in 2017 registered on the NDSS with GDM had a previous GDM diagnosis.

The most significant long-term impact of GDM is the sevenfold increase in risk of developing type 2 diabetes.[12] International evidence suggests about five per cent of women with GDM will develop type 2 diabetes within six months of giving birth and up to 60 per cent will develop type 2 diabetes within 20 years.[13] GDM is also associated with a significant increase in a woman's risk of developing cardiovascular disease at a younger age.[14, 15] This has the potential to further compound the strain on health resources.

Short- and Long-Term Impacts for Babies/Children

Babies born to mothers with GDM are more likely to experience a range of short-term complications:

- premature birth[16]
- macrosomia (a larger baby)[17]
- shoulder dystocia (where one of the baby's shoulders becomes stuck preventing/delaying the birth of the baby's body)[17]
- neonatal hypoglycaemia[18]
- respiratory distress syndrome[19]
- hypocalcaemia (low calcium levels in the blood)[20]

In the longer term, children born to mothers with GDM are at an increased risk of childhood obesity and developing type 2 diabetes.[21, 22]

Impact on the health care system

Women with GDM are more likely to have longer stays in hospital. They are twice as likely to have a pre-pregnancy stay of two to six days' duration or seven or more days, compared to mothers without diabetes.[5] They are also 30 per cent more likely to have a post-pregnancy stay of seven or more days compared to women without diabetes.[5]

Babies born to women with GDM are also more likely to have longer hospital stays than babies born to mothers without diabetes. These babies are also more than twice as likely to be admitted to special care nurseries or neonatal intensive care units than children born to mothers without diabetes.[5]

Longer stays in hospital and the more complex care required increases healthcare costs. A 2013 Australian study estimated the per patient cost of GDM was $3,200 during pregnancy and in the early postnatal period[23], while a 2012 Finnish study found the total health care costs of treating a woman with GDM were 25 per cent higher than for women without GDM.[24]

Access to care

The level of support and education available for women with GDM during pregnancy is inconsistent and often lacking. For instance, many women are unable to access dietetic support from dietitians with experience in pregnancy which is essential for managing blood glucose levels and ensuring optimal nutrition.[25] Difficulties in timely access to essential diabetes education after diagnosis are increasingly being reported. This can increase maternal anxiety and risks to the baby and lead to a mother requiring additional treatment and medication to manage glucose levels.

This situation is especially pronounced in rural areas with a recent audit showing rural women are less likely to receive education or medical treatment and are less likely to achieve optimal glucose management.[26]

Women with GDM should (whenever possible) have access to a multidisciplinary team that incorporates:

- a credentialled diabetes educator (CDE) with expertise in GDM management
- accredited practicing dietitian
- an obstetrician
- a midwife
- an endocrinologist/diabetes physician
- their primary care doctor (GP).

The National Gestational Diabetes Register

The National Gestational Diabetes Register and follow up system, established in 2011 as part of the National Diabetes Services Scheme, provides an information and reminder service for women diagnosed with GDM and their GPs.

It is designed to encourage women to engage with their GP and other health professionals to have regular follow up and also to manage their health aiming to prevent, or at least delay, progression to type 2 diabetes.

Women and their nominated GP are sent communications from the National Gestational Diabetes Register at registration, after the birth of their baby, and then annually for 5 years. These include screening reminders and information about reducing the risk of developing type 2 diabetes.

Support and education

There is good evidence that post pregnancy lifestyle support and care can improve both short and long-term health outcomes for mother[27] and child. This includes reducing the risk of developing type 2 diabetes among women who have had GDM and have already developed impaired glucose tolerance.[28]

Unfortunately, post-pregnancy support is often uncoordinated and, in many cases, unavailable due to a lack of adequate resources and a shortage of staff required to provide follow up care.[29] Additionally, fragmentation between post-pregnancy services and the primary care sector, coupled with a lack of a clear referral pathways, contributes to a lack of ownership and responsibility for post-pregnancy care.

A clear support and referral pathway for the coordinated postnatal care of women with GDM is necessary. The National Gestational Diabetes Register and follow up system could be further enhanced to better connect clinical and primary care services for women. Other initiatives such as general practice incentives and improved access to allied health services through Medicare could improve the delivery of postnatal follow-up screening and care.

END NOTES

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