



Maternal medical conditions

Changes to coding of pre-eclampsia and gestational hypertension over time in the NSW Perinatal Data Collection

Data on certain maternal medical conditions have been collected in the NSW Perinatal Data Collection (PDC, formerly known as the NSW Midwives Data Collection) since 1990. This includes data on existing and gestational diabetes and chronic and pregnancy-induced hypertensive conditions. Monitoring the outcomes associated with these conditions for both mothers and babies is important to feed back to clinicians responsible for antenatal care.

The purpose of this paper is to describe changes in the way some of these conditions have been defined over time and how this has affected the reporting of long-term trends in HealthStats NSW, where the consistent time trend begins in 2011.

CURRENT TERMS USED

Diabetes mellitus

Diabetes mellitus includes pre-existing or pre-gestational diabetes, and is equivalent to the following ICD-10-AM codes: O24.0–O24.3 or O24.5.

Gestational diabetes

Gestational diabetes includes diabetes diagnosed during the current pregnancy, and is equivalent to the following ICD-10-AM codes: O24.4 or O24.9.

Chronic hypertension

Chronic hypertension includes essential or secondary hypertension and may be referred to as pre-existing hypertension, and is equivalent to the following ICD-10-AM codes: O10 or O11.

Pregnancy-induced hypertensive disorders

Pre-eclampsia and gestational hypertension are two types of pregnancy-induced hypertensive disorders.

Pre-eclampsia

Pre-eclampsia is equivalent to the following ICD-10-AM codes: O14 and O15.

Gestational hypertension

Gestational hypertension is equivalent to the following ICD-10-AM code: O13.

HISTORICAL CHANGES TO DEFINITION AND LABELLING OF PREGNANCY-INDUCED HYPERTENSION

In the period 2007–2010, pre-eclampsia was labelled Pregnancy-induced hypertension, proteinuric and gestational hypertension was labelled Pregnancy-induced hypertension, non-proteinuric in the NSW Perinatal Data Collection (PDC).

These labels reflected definitions used in ICD-9-CM and ICD-10-AM, where the label for the code O13 (Gestational hypertension now) was Gestational (pregnancy induced) hypertension without significant proteinuria and the label for the code O14 (Pre-eclampsia now) was Gestational (pregnancy induced) hypertension with significant proteinuria. These labels were used in ICD-9-CM up to 1998 and subsequently in ICD-10-AM up to 2010.

The following changes were implemented in the PDC in 2011 and in ICD-10-AM in 2013:

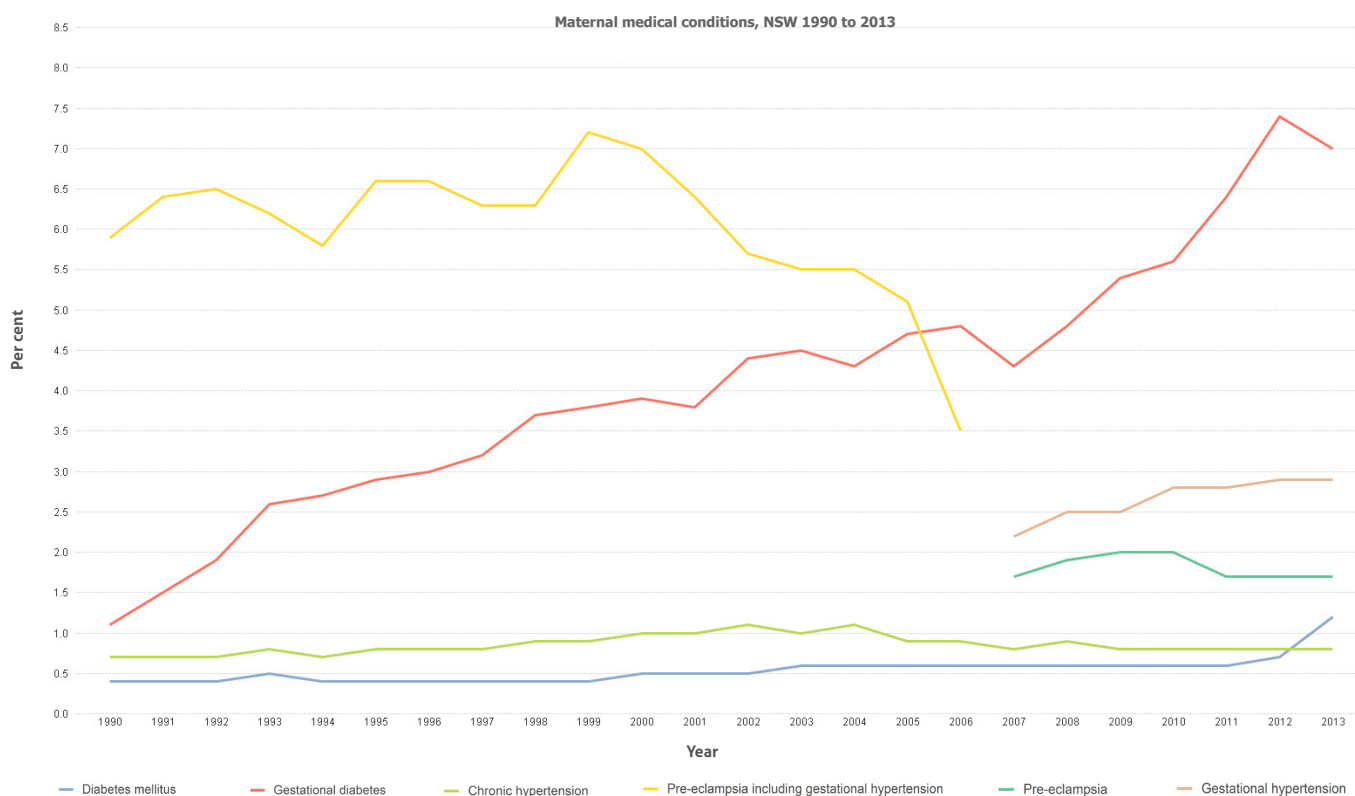
- The references to proteinuria were omitted from the definitions. In ICD-10-AM, Gestational hypertension (O13) has been defined as Gestational hypertension, NOS (not otherwise specified) only and no longer included Mild pre-eclampsia.
- Pre-eclampsia (O14) has included Mild to moderate pre-eclampsia, O14.0 (with the addition of 'mild' to a previously existing label of Moderate pre-eclampsia), existing Severe pre-eclampsia O14.1, existing Pre-eclampsia, unspecified, O14.9 and HELLP syndrome, O14.2 (from 2010).

The changes that can be observed in the trend line of Pre-eclampsia including gestational hypertension (which was called Pre-eclampsia in the PDC data from up to and including 2006), subsequent division into two separate conditions and the change of their definitions in 2010, all reflect continuing difficulties with reaching consensus on the classification and diagnostic criteria for the hypertensive disorders of pregnancy, especially the significance of proteinuria.

The International Society for the Study of Hypertension in Pregnancy issued a statement: The classification, diagnosis and management of the hypertensive disorders of pregnancy: A revised statement from the ISSHP, 2014. This is a revision to the statement issued in 2001. In the 2014 statement, the Society maintains its earlier recommendation that proteinuria should not be a mandatory element of diagnosis of pre-eclampsia for clinical purposes, while it should be included in the criteria for enrolling patients in scientific research (Tranquilli et al. 2014, Brown et al. 2001).

The current clinical practice guidelines for antenatal care recommend the screening of pregnant women in the first trimester of pregnancy for a range of maternal medical conditions (AHMAC 2014). These include existing and gestational diabetes and chronic and pregnancy-induced hypertension. Changes over time to antenatal screening guidelines, including issues such as lowering the threshold for clinical action in relation to gestational diabetes, also affect the trends in these conditions.

Impact of the change



Source: NSW Perinatal Data Collection (SAPHARI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

REFERENCES

Australian Health Ministers' Advisory Council. 2014. Clinical Practice Guidelines: Antenatal Care – Module II. Australian Government Department of Health, Canberra. Available at: <http://www.health.gov.au/antenatal>

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Tranquilli AL, Dekker G, Magee L, Roberts J, Sibai BM, Steyn W, Zeeman GC, Brown MA. The classification, diagnosis and management of the hypertensive disorders of pregnancy: A revised statement from the International Society for the Study of Hypertension in Pregnancy (ISSHP). *Pregnancy Hypertens* 2014; 4(2): 97-104.