



Maternal health and perinatal health

Courtesy of Prof. Shane Higgins' website

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What is perinatal health?

Perinatal health is defined as the health of both fetuses/babies and women before birth, during birth and for a short period of time after delivery.

What types of issues does perinatal health address?

Some of the main issues that fall under the speciality of perinatal health are:

- A woman's access to good prenatal care
- Addressing any pre-existing health conditions, or health issues that present during pregnancy – such as diabetes, hypertension, obesity etc.
- Dealing with substance use during pregnancy – such as alcohol, tobacco and other classes of drugs
- Addressing the emotional and psychological well being and health of the Mum-to-be
- Dealing with perinatal depression
- Coping with labour induction and C-sections, which the woman may have required medically
- Low birth weight and preterm births
- Fetal anomalies (birth defects)
- Breastfeeding
- Abusive head trauma to baby (Shaken Baby Syndrome)
- Perinatal morbidity and stillbirths

What is the perinatal period?

Although the length of time differs to some extent, the perinatal period is essentially the period of time shortly before and after birth. The beginning of the perinatal period can start from the 20th to 28th week of pregnancy, and it can continue to 1 to 4 weeks after birth.

Maternal health and perinatal health

The [World Health Organisation \(WHO\)](#) consider that the perinatal period commences at 22 weeks of completed gestation, which is 154 days. The WHO, along with the specialists, regard the link between perinatal health and maternal health as being highly important and closely connected.

What does a perinatal specialist do?

A perinatal specialist is an ob/gyn who looks after women with higher risk pregnancies. Not all ob/gyns are perinatal specialists, so it may be that your ob/gyn could refer you to one. If this happens, you should be told the reason for referral. Perinatal specialists are also known as maternal-fetal specialists.

How does perinatal differ from prenatal?

The pre-natal period encompasses the entire period of pregnancy leading up to birth, whereas the perinatal period is the shorter time from the 20th to 28th week of pregnancy, which can continue to 1 to 4 weeks after birth.

Additionally both of these periods are studied from a psychological perspective: pre-natal psychology and perinatal psychology. These specialities explore the psychological and psycho-physiological implications of what occurs during these two periods and how this can affect the developing baby.

The birth itself falls under this scope, with questions arising about the baby's level of perception and consciousness during the prenatal and perinatal periods.

How is perinatal death defined?

Perinatal death is defined as death that occurs during the perinatal period. This includes early neo-natal deaths and stillbirths, which are also known as fetal deaths. Further below, we examine perinatal morbidity specifically in Ireland.

What is maternal health?

Maternal health focuses on caring for women's health while they are pregnant, during childbirth and after delivery, during the postpartum period.

For women who enjoy good physical, emotional and psychological health, and have a perfectly healthy pregnancy, the chances are that pregnancy can be a very fulfilling and positive experience. This is especially the case for the aforementioned women, assuming also that they have a strong support network, a good relationship with their partner, if they are in a stable relationship and they are not dealing with any other complications, such as financial or workplace issues.

Maternal health and perinatal health

However, even in a first world country such as Ireland, this is not the case for everyone. Plenty of women cannot tick all of these boxes, and for various reasons, pregnancy may not be as easy an experience as it could be for some others.

Additionally, if a woman has experienced a miscarriage or a difficult pregnancy previously, then she may find her next pregnancy to be challenging.

In other countries, especially poverty stricken ones, pregnancy can be an entirely different story. It can be a journey of hardship, ill health, suffering which may even end in death.

Maternal health seeks to address not only the physical side of a woman's well-being but also to focus more holistically on her overall well-being. The idea is that each woman should enjoy good, balanced health, making both pregnancy and motherhood fulfilling and positive experiences.

The [World Health Organisation \(WHO\)](#) published a new set of guidelines on 15th February 2018, about maternal health, which can be seen here. [Making childbirth a positive experience](#)

Maternal death rate Ireland

Ireland has a maternal death rate of 6.5 in every 100,000 women, which translates into 1 maternal death for every 15,301 women. While this is a low rate, for example, when compared to UK's rate of 8.8 in each 100,000 women or America's rate of 26.7 in every 100,000 women, there is always room for improvement.

The **Maternal Death Enquiry Ireland (MDE)** which published these figures, also revealed that 66% of these deaths were caused by pre-existing health conditions. In fact 33% of [maternal deaths in Ireland](#) were caused by heart disease.

Suicide accounted for a significant number of maternal deaths, which brings us back to the importance of both maternal health and perinatal health.

Addressing heart disease in pregnancy and the post-partum period

A study carried out in 2017, by authors Reza Ashrafi and Stephanie L. Curtis, entitled Heart Disease and Pregnancy, evaluated this topic well.

To begin with pregnancy poses the Mum's-to-be heart with an especially unique physiological challenge. This means that there are numerous health management challenges to deal with in order to have a successful outcome for both the mother and baby. Additionally, the term heart disease encompasses a number of health conditions, related to the heart. For example, many patients present with **congenital heart disease**.

Maternal health and perinatal health

Assuming the pregnancy is planned, than ideally the woman who is trying to conceive has the opportunity to work with her medical team during the preconception period, as well as throughout her pregnancy and post-partum period.

A vital aspect of the preconception period is counselling. Also the woman will be attended by a specialist multi-disciplinary medical team, who will be able to care for her and offer her, potentially, the most successful outcome for both her and her baby.

Risk assessment for each individual case is carried out. The health and key conditions of the woman are evaluated, in order to clinically assess the best treatment and management plan for the expectant Mum-to-be. This will be achieved by the teamwork of a joint obstetric-cardiology medical team. A delivery plan will also be decided upon, which will, where possible, focus on managed vaginal delivery.

After a successful delivery, post-partum follow up is vital. This follow-up will evaluate any possible deterioration that can occur, while monitoring for **peripartum cardiomyopathy**; a rare condition that may occur duringn the post-partum period.

There are a few conditions that have been historically associated with complications that occur specifically in the post-partum period. These include Marfan Syndrome and long QT.

Also the medical team will evaluate and decide on the reintroduction of the woman's cardiac medications, which may have been changed during her pregnancy.

Women who suffer from heart disease will need to recover even more than other women after pregnancy, before considering conceiving again. This follow up period is ideal also for the medical team to talk to the woman about contraception or other methods, in order to avoid an unplanned pregnancy.