

CLOSING THE GAPS IN POSTPARTUM CARE:

SUPPORTING INFORMED DECISION MAKING



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INTRODUCTION

The purpose of this paper is to inform women and healthcare professionals (including midwives, GPs, pharmacists and birth workers) of the often overlooked, vital importance of iron during pregnancy and the postpartum period. It provides quotes, data-driven information and offers solutions that enable women and their families to take ownership of their postpartum health.

Historically, there has been a lack of integrated physical and mental health care for women during the weeks and months following birth, and most recently a lack of specialist services to support women and their families at this time.

BACKGROUND

There is a significant increase in iron requirements during pregnancy and the postpartum period. Physiological iron requirements are around three times higher in pregnancy than they are in menstruating women. Iron absorption is regulated by the size of body iron stores. The diets of women in developing countries do not contain sufficient bioavailable iron to meet these needs during the second and third trimesters even if iron stores are adequate at the beginning of pregnancy.¹ Iron deficiency anaemia (IDA) is more likely in women of reproductive age because of menstrual blood loss. However, extremes of blood loss such as regular blood donation, diets of low bioavailability and the challenges of pregnancy all markedly increase the risk of iron deficiency.²

Pregnancy is associated with an increase in blood volume of 48% leading to haemodilution and physiological anaemia. The heart is displaced upwards, the myocardium thickens and cardiac output increases.³ These haemodynamic changes are essential during pregnancy because they supply extra blood

to the fetoplacental unit and the expanding maternal organs, such as the breasts, uterus, skin and kidneys. A recent meta-analysis study examined blood volume changes in 347 women across the three trimesters of uncomplicated pregnancies and noted volume increases of 6% in the first trimester, rising to 26% in the second and peaking at 48% in the third trimester just prior to delivery.⁴

Extensive literature review revealed that iron deficiency is a global nutritional problem. The WHO reports the global prevalence of IDA is 37% in pregnant women⁵ and NICE guidelines 2023 report the UK prevalence of anaemia is estimated to be 23% in pregnant women⁶. This indicates that IDA in pregnant women is a problem both in developed and developing nations.

Maternal Iron Deficiency Anaemia increases the risk of serious pregnancy complications, including maternal death, postpartum hemorrhage, stillbirth, and preterm birth⁷, and emerging data also suggests that maternal IDA can also affect the mental health of pregnant women. IDA during pregnancy may also increase the risk of neonatal anaemia and neurodevelopmental, cognitive and behavioral disorders.^{8,9}

Gastrointestinal side effects of standard oral iron are common, such as constipation and nausea or in severe cases vomiting. Compliance with oral iron supplementation is lower during pregnancy, with many women reporting the side effects of oral iron to be worse than those related to anaemia. During pregnancy IDA is identified via standard care pathways including routine blood tests. However, postnatally women do not receive blood tests unless there is further clinical indication. Usually stemming from suspected infection or postpartum hemorrhage (PPH). Yet all women bleed after birth and many become anaemic. NHS Blood and Transplant (NHSBT) found the prevalence of iron deficiency anaemia in pregnancy, in some centres, to be as high as 30.4% and 41.3% in the puerperium.⁷

Postpartum care has long been described as the 'Cinderella' service maternity care offers - by women and healthcare professionals alike. In a National Childbirth Trust (NCT) survey: left to your own devices - the postnatal care experiences of 1,260 first-time mothers, 1 in 8 women were highly critical of their postnatal care. Their feedback reflects fragmentation of care, poor planning and communication between healthcare professionals, and insufficient advice about emotional recovery. Furthermore, women continue to report receiving insufficient or inconsistent information on baby's feeding, particularly after giving birth to their first baby.¹⁰ These findings highlight the importance of supporting new mothers, and their families, to better understand postpartum recovery.

A lack of postnatal care has far reaching consequences. Reports of postnatal mental health problems recently hit record level highs. Up to 20% of mothers experience a mental health problem and many go unreported in fear of repercussions. Postpartum depression is one of the most common mental disorders in the postnatal period.

Iron is of central importance to many vital processes because iron is a catalytic component of crucial metabolic enzymes in the citric acid cycle, mitochondrial respiration, replication, or neurotransmitter synthesis.¹³

According to NHS 2021¹⁴: Untreated iron deficiency anaemia:

- Can make you more at risk of illness and infection, as a lack of iron affects the immune system.
- May increase your risk of developing complications that affect the heart or lungs, such as an abnormally fast heartbeat (tachycardia) or heart failure.
- In pregnancy, can cause a greater risk of complications before and after birth.

Furthermore, IDA can impact cognitive function alongside mood. Following childbirth, anemia is associated with fatigue. There is also a growing body of evidence emerging that suggests a relationship between anemia during pregnancy and after pregnancy and increased risk of postnatal depression.^{15,16}

RECOMMENDATIONS

Preventive measures could be instrumental in changing this narrative. Currently, UK guidelines do not recommend iron supplementation during pregnancy, unless clinically advised.¹⁷ As women are recommended to take vitamin D and folate (folic acid) low dose iron should be considered as standard during pregnancy. Although not routinely recommended postnatally, iron supplementation can be helpful for energy levels and repair whilst bleeding and recovering from birth. If a woman is not taking iron, healthcare professionals need to consider the impact of IDA on both mental and physical wellbeing.

Mothers typically focus on caring for their newborn and often neglect their needs, which can become catastrophic. Healthcare professionals need to remind postnatal mothers to report symptoms, investigate maternal concerns and encourage mothers to address their symptoms – considering the role of iron supplementation. Active iron is clinically proven to increase iron levels by 94% whilst avoiding gastrointestinal symptoms such as nausea and constipation.¹⁸

CONCLUSION

The postnatal period does not really end at eight weeks, many mothers are often recovering from birth emotionally and physically for some time. Equipping new mothers with knowledge surrounding the importance of iron at this stage in their life may reduce postnatal anaemia and could even impact the prevalence and severity of postnatal depression and other health implications, previously outlined, easing the transition to motherhood.

This guideline was written with the hope that healthcare professionals can use it to provide consistent and high-quality care, whilst taking into consideration each family's individual situation and needs, in order to reduce the impacts of anaemia postnatally and to support families in this new phase.

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