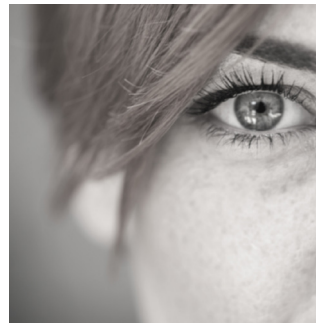
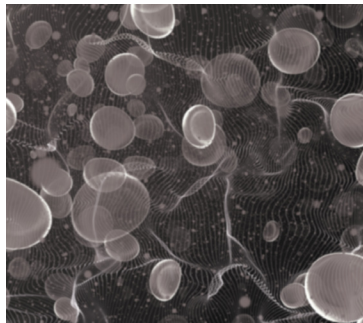


WPL POLICY TOOLKIT IRON DEFICIENCY AND WOMEN'S HEALTH: A PRACTICAL TOOLKIT FOR PARLIAMENTARIANS

with the support of Vifor Pharma



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TERMS

Iron Deficiency (ID)

Iron Deficiency Anemia (IDA)

Heavy Menstrual Bleeding (HMB)

Postpartum Hemorrhage (PPH)

Patient Blood Management (PBM)

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EXECUTIVE SUMMARY

This toolkit provides an overview of the alarming impacts that iron deficiency (ID) and iron deficiency anemia (IDA) have on women's health, in addition to underscoring their adverse socio-economic effects. An analysis of current disease burden and management strategies finds that inadequate attention, awareness and resources are being dedicated to this issue, despite the fact that in all but two countries ID and IDA remain a moderate to severe health risk.

Contemporary global health standards sometimes fail to appropriately address women's unique healthcare requirements. For women with heavy menstrual bleeding (HMB) and pregnant women who suffer from ID and IDA, these disparities present an acute problem.

After providing a comprehensive overview of iron deficiency and iron deficiency anemia in women, this toolkit highlights target areas for political action, in addition to producing a step by step plan of action. It serves as a 'one-stop-shop' for policymakers to spearhead a collaborative, multidisciplinary policy response that will help significantly reduce the presence of ID and IDA in women within the next few years.

IRON DEFICIENCY & IRON DEFICIENCY ANEMIA: AT A GLANCE

The Big Picture:

- Iron deficiency is the most common deficiency worldwide
- ID is the leading cause of anemia (anemia is when the body cannot make enough healthy red blood cells)
- Iron deficiency and anemia are treatable medical conditions

Women of reproductive age are particularly vulnerable:

- 50% of pregnant women are iron deficient
- Almost 42% of pregnant women and 30% of non-pregnant women suffer from anemia
- In a survey conducted in Europe, 63% of women with heavy menstrual bleeding were diagnosed with iron deficiency or iron deficiency anemia
- While the rate of ID/IDA is decreasing globally, the disease burden gap between men and women is growing

The potential consequences of ID and IDA are severe:

- The rate of maternal death is twice as high in pregnant women with anemia
- Infants and fetuses are at risk of impaired neurocognitive development and medical abnormalities
- Women with HMB are 26.8% more likely to be admitted to emergency care for related complications than those without ID/IDA
- There is an increased societal and economic burden when ID & IDA are misdiagnosed or treated insufficiently

Why is it still a problem?

- A lack of gender-specific medical and public awareness makes it difficult for women to receive adequate treatment and diagnosis

What can we do?

- Launch a gender-sensitive awareness campaign for the public and medical communities, that will encourage an adequate contribution of attention and resources

IRON DEFICIENCY & IRON DEFICIENCY ANEMIA: AN OVERVIEW

What is it?

Iron is an essential nutrient for the functioning of the immune system, development of cognitive functions, oxygen transport and many other core processes. Iron deficiency is a medical condition that develops when not enough iron is available to meet the body's needs.

Iron deficiency is the leading cause of anemia. Iron deficiency anemia occurs when the body does not have a sufficient amount of iron to produce enough healthy red blood cells. It can be directly linked to blood loss. Both diseases have a high symptom burden and if left untreated can have serious health consequences, in addition to economic and social repercussions.

Who is it affecting?

Women of reproductive age with heavy menstrual bleeding (HMB) and pregnant women are particularly vulnerable because of sustained regular and abnormal blood loss. According to a comprehensive global literature review, 50% of pregnant women worldwide are iron deficient.

Almost 42% of pregnant women and 30.2% of non-pregnant women suffer from anemia. Negative impacts as a result of IDA in pregnant women will also put the health of the fetus at risk and, in severe cases, can hinder infants' neurocognitive development.

Meanwhile, according to a survey conducted in Europe, 63% of women with heavy menstrual bleeding were diagnosed with iron deficiency or iron deficiency anemia.

What are the consequences?

Iron deficiency and iron deficiency anemia not only worsen women's daily quality of life by inducing extreme fatigue and weakness (negatively impacting social relationships, work productivity and general well-being), but they also increase the chance of life-threatening health complications.

Consequences may include:

Pregnant Women:

- The rate of maternal death is twice as high in women with severe anemia
- Impaired physical abilities, increased risk of cardiac failure, poor wound healing
- Increased risk of postpartum hemorrhage (PPH)
- Anemia in the 1st or 2nd trimester increases the risk of preterm & low birth weight deliveries

Fetus & Child:

- Spontaneous abortion, low birth weight & medical abnormalities
- Long term implications may include: reduced milk production, impairment of mother-child interactions & inhibited neurodevelopment

Surgical Operations:

- Both pregnant women and women with HMB who undergo surgery, such as caesarean sections, have 1) a higher probability of death, 2) increased length of hospital stay and/or chance of re-hospitalisation and 3) increased need for blood transfusion
- Women with obstetrical bleeding experience 9 times the need for blood transfusions, a 33% increase in the length of hospitalisation and a 50% increase in related medical costs

Women with Heavy Menstrual Bleeding (HMB):

- Women with HMB are 24% more likely to need a blood transfusion and 26.8% more likely to be admitted to emergency care for related complications

Evidence also indicates an increased societal and economic burden when iron deficiency and iron deficiency anemia are misdiagnosed or treated incorrectly. The ID diagnosis pathway can last up to 36 weeks, during which time failure to treat ID can result in unnecessary treatments, absence from work and increased health expenditure.

Furthermore, anemia in pregnant women and women with HMB presents a substantial cost on its own as it is associated with longer hospitalisations, a higher chance of re-hospitalisation as well as an increased demand for blood transfusions. This could amount to thousands of euros in otherwise avoidable payments.

Meanwhile, preterm and low birth weight deliveries related to maternal iron deficiency and iron deficiency anemia significantly increase the burden on healthcare systems: women may expect 25 times the average cost of hospitalisation and a 6.7 times increase in the length of hospital stay.

Iron deficiency and anemia are both preventable and manageable medical conditions. Both carry a high symptom burden and, in addition to correlated increases in individual healthcare and medical costs, are detrimental to women's health and to their quality of life. The ensuing consequence for societies, and economies, is that women are not able to participate to their fullest potential at work, in relationships, as mothers and as active community members.

What does treatment currently look like?

Existing therapies include oral tablets and different types of intravenous infusions, which are used for severe cases or for patients who do not respond well to oral treatment. Sound iron nutrition and dietary plans can also help reduce the risk of ID and IDA, however, once ID has occurred it cannot be effectively addressed through dietary intake alone and involves a lengthy recovery process.

Patient Blood Management offers a compelling solution, particularly for surgical operations: it is a patient centered management programme that optimises the patient's own blood to improve outcomes. Ideally, it must be started several weeks before the surgery to maximise success. However, given the novelty of the approach, a standard practice and timely supplementation procedure have yet to be agreed upon.

IRON DEFICIENCY & IRON DEFICIENCY ANEMIA: AN UNDERSTANDING

If it is treatable, why does iron deficiency still present a significant problem for women?

The simple answer is that iron deficiency on its own is not a life-threatening medical condition and, while ID is the leading cause of anemia, anemia may be analysed independently. As a result, in combination with low clinical visibility and a high chance of mis-diagnosis, iron deficiency is often overlooked as a serious health concern. In spite of extant treatment, women with HMB, non-pregnant women and pregnant women continue to suffer in large numbers from ID and IDA.

This explanation introduces a disconcerting question: are healthcare systems across the world appropriately and adequately addressing women's unique healthcare needs?

Why do iron deficiency and iron deficiency anemia need effective policy action?

Despite the existence of successful treatment and management programmes, there remains a stunning lack of awareness surrounding iron deficiency and anemia in both medical and civic communities.

Gender inequalities in both national and international health care systems have led to a gross oversight in the management, treatment and diagnosis of iron deficiency and iron deficiency anemia in women. While reports demonstrate an overall decrease in ID and IDA globally, the disease burden gap between men and women is growing. This means that, although anemia levels continue to decline rapidly in men, women are still remarkably vulnerable.

Iron deficiency and iron deficiency anemia point to the current healthcare system's neglect of certain gender-specific needs. A lack of specialised training, education and awareness amplify the consequences of this problem, even in countries with state of the art healthcare systems.

By addressing the following target areas, policymakers can set appropriate standards for the diagnosis, treatment and management of ID/IDA in women. Practical and direct policy action is absolutely necessary, as the missing link between reducing ID in women and its contemporary status as a common deficiency is accurate awareness and attention.

IRON DEFICIENCY & IRON DEFICIENCY ANEMIA: A PRAGMATIC POLICY APPROACH

What simple steps can be taken to begin tackling the problem?

To help women currently experiencing symptoms of iron deficiency and iron deficiency anemia, policymakers must draw the public eye's attention. This can be done by presenting important basic figures and symptoms to the general population through different media channels. Women will then be able to initiate a productive dialogue with healthcare practitioners, while further concrete steps are taken to alleviate the problem.

What specific measures should be taken to help women suffering from ID & IDA?

The first step in mitigating the effects of iron deficiency for women is to create greater awareness both within and outside of the medical community. By legitimising this health concern, policymakers can direct much needed resources to the problem. It is highly recommended that parliamentarians take the following steps:

1. Design and implement a cross-country public awareness campaign using a mix of media channels, in conjunction with the women's healthcare community, to inform and educate the public. This should include 1) publicising useful information in general practitioners', gynecologists' and medical insurance offices, 2) requiring medical practitioners to initiate a discussion about ID & IDA with all women of reproductive age and 3) publishing important nutrition and dietary information regarding iron supplementation.
2. Partner with medical professionals to create standard treatment guidelines for ID/IDA in women's healthcare, to be actualised across countries worldwide and within EU Member States.
3. Request specialised training for both general practitioners and gynecologists that covers: 1) Methods to appropriately diagnose ID/IDA and correctly identify risk factors in women, 2) Strategies to comprehensively treat and manage ID/IDA depending on specific case requirements, including dietary recommendations, oral treatment and intravenous therapies, 3) Inclusion of iron deficiency management programmes in maternal and women's healthcare standards.

What is a reasonable reduction timeline?

WHO analysis suggests that with the appropriate iron-supplementation, anemia could be eliminated in women by up to 50% by the year 2025. To meet this target, policymakers must oversee the integration of gender-sensitive, effective policies and treatments into both primary and women's healthcare systems.

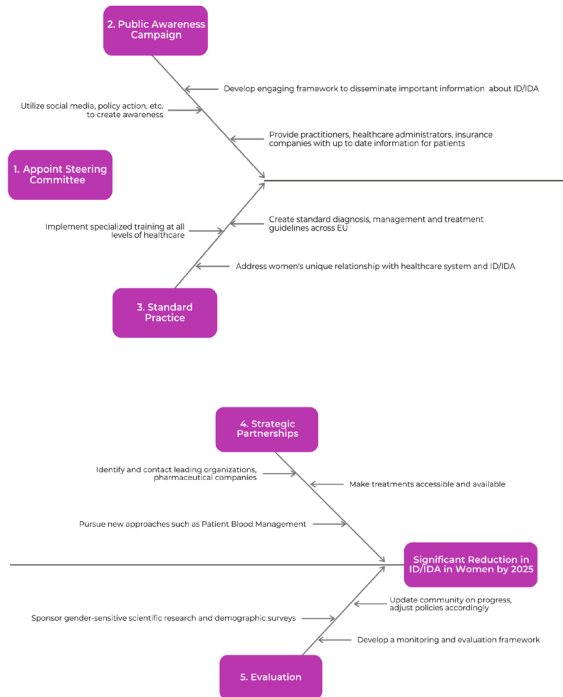
As a global leader in healthcare and women's issues, Europe must provide an example for others to follow. Member States are equipped with the tools to significantly reduce this pervasive deficiency, its severe health risks and its negative socio-economic impacts.

Member States should aim for a 6% reduction in anemia in women of reproductive age per year (2020-2025) in line with the WHO assembly's global target. In order to correctly assess this target, policymakers should:

1. Conduct and/or collect 1) result(s) of baseline survey(s) that will help measure the impact of this programme on women's health and, 2) a cost-benefit analysis of women's ID/IDA treatment programmes throughout Member State hospitals that will give more insight into best practice options.
2. Develop 1) an evaluation framework that will allow politicians and healthcare practitioners to monitor progress and make any necessary adjustments to meet the target goal and 2) a set of thresholds for diagnosis and treatment based on standard practice guidelines.
3. Appoint a steering committee of medical professionals and (women) parliamentarians to oversee the aforementioned goals and to ensure their effective implementation in line with the 2025 time frame.

REDUCING IRON DEFICIENCY & IRON DEFICIENCY ANEMIA: AN ACTION PLAN

What does this plan look like? What steps are involved?



Step by Step

1. Design and implement a cross-country public awareness campaign using both social and print media, in conjunction with the women's healthcare community, to inform and educate the public. This may also include 1) publicising useful information in general practitioners', gynecologists' and insurance offices, 2) requiring medical practitioners initiate a discussion about ID & IDA with all women of reproductive age and 3) publishing important nutrition and dietary information regarding iron supplementation.
2. Partner with medical professionals to create standard treatment guidelines for ID/IDA in women's healthcare, to be actualised in countries across the world.
3. Request specialised training for both general practitioners and gynecologists that cover: 1) Methods to appropriately diagnose ID/IDA and correctly identify risk factors in women, 2) Strategies to comprehensively treat and manage ID/IDA depending on specific case requirements, including dietary recommendations, oral treatment and intravenous therapies, 3) Inclusion of iron deficiency management programmes in maternal and women's healthcare standards.
4. Support increased access to treatment, research and medication by fostering partnerships with the healthcare and pharmaceutical communities, in addition to supporting new viable approaches such as Patient Blood Management.
5. Conduct and/or collect 1) result(s) of baseline survey(s) that will help measure the impact of this programme on women's health and, 2) a cost-benefit analysis of women's ID/IDA treatment programmes throughout Member State hospitals that will give more insight into best practice options.
6. Develop 1) an evaluation framework that will allow politicians and healthcare practitioners to monitor progress and make any necessary adjustments to meet target goal and 2) a set of thresholds for diagnosis and treatment based on standard practice guidelines.
7. Appoint a steering committee of medical professionals and (women) parliamentarians to oversee the aforementioned goals and to ensure their effective implementation in line with the 2025 time frame.

What are the benefits of a successful reduction strategy?

The benefits of a successful reduction strategy are numerous. First and foremost, there would be a decrease in the rate of severe and life-threatening risks associated with iron deficiency anemia in women with HMB, pregnant women, fetuses and infants.

By improving medical providers and practitioners' ability to correctly diagnose and treat anemia in women hospitalised with obstetrical bleeding, individual patients could experience considerable benefits such as fewer blood transfusions and a decreased need for postdischarge medical services.

For women living with iron deficiency and anemia, a successful reduction strategy would allow many of them to experience a vast improvement in their overall mood and energy levels. Studies for both non-pregnant women and pregnant women demonstrate the palpable effects that iron deficiency and anemia have on social and emotional functioning, mental health and physical pain. By reducing these negative impacts, more women will be able to enjoy a healthy lifestyle, including the ability to complete regular daily activities such as work and exercise.

Additionally, countries should witness a decrease in unnecessary and/or inflated expenditure related to ID/IDA diagnosis and treatment in women. This will save individuals, hospitals and medical practitioners substantial amounts of time and money.

Finally, a competent reduction strategy will spearhead an important conversation in women's healthcare and ensure that women are given adequate access to health services that cater to their unique needs.

CONCLUSION

The evidence is clear: iron deficiency and iron deficiency anemia not only place a significant burden on women's health and well-being, but on society as well. A lack of gender-sensitive health care awareness, standard guidelines and tailored medical solutions make women even more vulnerable to ID and anemia at all stages of their lives.

If policymakers follow the concrete steps outlined in this toolkit, then we will observe a palpable decrease in iron deficiency and iron deficiency in women of reproductive age, women with HMB and pregnant women over the next five years. As rates of ID and IDA in women continue to decrease, so too will gratuitous expenditures, hospital visits and time spent away from work and relationships.

Societies and economies will notice a measurable positive impact if women are able to reach their full potential. Properly preventing, treating and managing iron deficiency and iron deficiency anemia in an effective and gender-conscious manner is an important step for European Union Member States to take if they wish to make this a reality.

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