Remarks:

- Early linkage to antenatal and postnatal care is essential.
- Information on how to monitor possible side-effects and harms (e.g. iron toxicity due to overdosing; child poisoning) is essential.
- Folic acid is to be taken up to 12 weeks gestation.

Background

The use of iron and folic acid supplements during pregnancy is an effective and recommended intervention to reduce maternal anaemia, puerperal sepsis, low birthweight and preterm birth *(3, 7)*. The use of folic acid supplements is recommended as early as possible during pregnancy, and ideally prior to pregnancy, to prevent neural tube defects *(3, 8)*. Postpartum use of iron supplements (either alone or with folic acid) may also reduce the risk of anaemia in settings with a high prevalence of maternal anaemia *(9)*.

Despite the efficacy of these supplements, the use of iron and folic acid supplementation during pregnancy is not reaching its potential impact, because of a lack of consistent use; this is attributed to a range of issues, including supply and demand factors *(10–14)*, side-effects, cost and access.

Promoting over-the-counter or home-use folic acid or iron and folic acid supplementation when planning a pregnancy (before pregnancy), during pregnancy and/or postpartum (after delivery) may help to expand the delivery of micronutrient supplements beyond the clinical care setting and ultimately improve maternal, fetal and newborn health outcomes.

Summary of evidence and considerations for the new recommendation

The WHO Guideline Steering Group selected to compare the self-management of iron and folic acid, or folic acid supplements with provider-initiated provision in relation to pregnancy.

The PICO (population, intervention, comparator, outcome) questions were:

- Should individuals who are planning pregnancy self-manage the use of folic acid supplements or be offered only provider-led management of such supplements?
- Should pregnant individuals self-manage the use of iron and folic acid supplementation as per international guidance (currently either a daily dose of 30–60 mg of elemental iron and 400 µg [0.4 mg] of folic acid, or an intermittent [e.g. weekly] dose of 120 mg of elemental iron and 2.8 mg of folic acid) or be offered only provider-led management of such supplements *(3)*?
- Should postnatal individuals self-manage the use of iron (with or without folic acid) supplementation for at least three months after delivery as per international guidance (currently either a daily dose of 30–60 mg of elemental iron and 400 µg [0.4 mg] of folic acid, or an intermittent [e.g. weekly] dose of 120 mg of elemental iron and 2.8 mg of folic acid) or be offered only provider-led management of such supplements *(10)*?

A systematic review was conducted of the extant literature in three areas relevant to these questions: the effectiveness of the intervention on maternal and/or fetal and newborn outcomes in the pre-pregnancy, pregnancy or postpartum periods; the values and preferences of end users; and the cost and/or cost-effectiveness of the intervention during pre-pregnancy, pregnancy and postpartum periods. The review was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines *(15)*. The protocol was published at PROSPERO, the international prospective register of systematic reviews (registration number CRD42020205548). The systematic review has been published in a peer-reviewed journal *(16)*.

Results

Of 2587 unique citations identified, no studies met the inclusion criteria. The articles were excluded generally because they lacked the outcomes of interest, lacked comparison groups or focused on supplement use in general and did not specifically look at folic acid or iron and folic acid supplementation. Lastly, no articles presented cost or cost-effectiveness data.

Certainty of the evidence for the recommendation

No direct evidence was identified and the overall certainty of the evidence was very low.

Rationale for the strength and the direction of the recommendation

The GDG noted that that this intervention was already widely used in many countries with no major concerns or controversy. Harms related to possible toxicity or poisoning were discussed and the GDG agreed that health literacy and education around this self-care intervention would be an important component to promote its correct use. The question of how best to build health literacy, however, was an important research gap that should be addressed. The GDG deemed that, overall, the balance of large benefits and trivial harms was in favour