Preventing Birth Defects: Community-Wide Campaigns to Promote the Use of Folic Acid Supplements

Task Force Finding and Rationale Statement

Intervention Definition
If a woman has enough folic acid in her body before she is pregnant, it can reduce the risk of a pregnancy affected by neural tube birth defects (NTD). Community-wide campaigns to promote the use of folic acid supplements are designed to disseminate information to women of childbearing age or intending to become pregnant, regarding the use of supplements containing folic acid. These campaigns involve the dissemination of coordinated educational and motivational messages and materials within the community. Educational content can be delivered through:

- Mass media messages and articles
- Community activities and promotions
- Distribution of small media (posters, flyers, brochures, etc.)

Task Force Finding (June 2004)
The Community Preventive Services Task Force recommends community-wide education campaigns to promote the use of folic acid supplements among women of childbearing age on the basis of sufficient evidence that these approaches are effective in increasing the number of these women who consume folic acid supplements.

Rationale
The U.S. Public Health Service recommends that all women of childbearing age consume 400 micrograms (0.4 milligrams) of folic acid each day in order to reduce the risk of a pregnancy affected by a neural tube birth defect (CDC). The U.S. Preventive Services Task Force recommends that women of childbearing age take a daily supplement containing 400-800 micrograms (0.4-0.8 milligrams) of folic acid (USPSTF).

The evidence considered in this systematic review indicates that community-wide education campaigns are effective in increasing the number of women who regularly take a recommended supplement. Evidence was considered sufficient based on the findings from sixteen studies from eleven countries. Although individual community-wide educational campaigns differed in composition, overall the considered studies observed a median improvement of 6 percentage points in use with an interquartile interval of 2.5 to 20.5 percentage points. The median relative change in the use of folic acid supplements was an increase of (30%).

Eight studies evaluated measurements of change in rates of neural tube birth defects in association with community-wide education campaigns. Although the overall median change observed was a reduction of 24% (interquartile interval [IQI]: -44.2% to +5.6%), individual studies were, in general, underpowered and findings were inconsistent. In addition, the measurements of change from several of the studies conducted in the United States and Australia are potentially confounded by folic acid fortification. Several studies from European countries (which have not implemented folic acid fortification policies) have demonstrated little or no change in NTD rates in the intervals since adopting and disseminating official recommendations.
The data presented here are preliminary and are subject to change as the systematic review goes through the scientific peer review process.

Disclaimer
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