

Abstract

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Role of zinc in maternal and child mental health.

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BACKGROUND: Mental health problems in women, children, and adolescents are a significant public health issue. Given current barriers to the effective treatment of these problems, researchers are looking to the field of nutrition for potential alternatives to better understand and address mental health issues.

OBJECTIVE: The purpose of this article was to review current evidence on the relation between zinc and mental health disorders with a focus on 2 mental health problems that commonly affect women and children: depression and attention-deficit hyperactivity disorder (ADHD).

METHODS: A literature search of the databases Medline and PsychInfo was conducted with the use of key terms. The review included articles from 1975 to May 2008, but focused on articles published in recent years. Relations between zinc concentrations and behavior in animals; the relation between zinc deficiency, depression, and ADHD in patient and community samples; and the potential biological mechanisms for these relations were explored.

RESULTS: The data support a relation between low concentrations of zinc and mental health problems, especially in at-risk populations. Evidence for the potential use of zinc in treating mental health problems comes mainly from patient populations and is strongest when zinc is given in combination with pharmacologic treatment. Less conclusive evidence exists for the effectiveness of zinc alone or in general community samples.

CONCLUSIONS: Recommendations for further research in this area are provided.

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