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Social and behavioral predictors of gestational weight gain: A review

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Keywords

Abstract

Introduction

Associations between inadequate and excessive gestational weight gain (GWG) and adverse perinatal outcomes are well documented. Less is known about potential determinants of GWG. Much of the existing research has focused on pre-pregnancy BMI, diet, and physical activity, leaving other social and behavioral determinants relatively unexplored.

Objective

To review empirical studies that treat GWG as an outcome and summarize the biological, behavioral, social, and environmental risk factors associated with GWG. Strengths, weaknesses, and gaps in the literature will be discussed.

Methods

This review was limited to observational studies published in English 2000-2020. Searches of Pubmed and Google Scholar eg. (gestational OR pregnancy) "weight gain" AND ("risk factor" OR predictor) identified 1062 papers, and from these, the title and abstract were used to identify 16 papers meeting inclusion criteria. Screeners abstracted key findings from each paper into a spreadsheet, and findings were compiled into categories.

Results

Race/ethnicity, family income, parity, maternal age, hypertension, alcohol consumption, smoking status, self-efficacy, paternal BMI, certain genetic variations, # prenatal visits, screen time, place, and if pregnancy was planned were found to be contributors to inadequate or excessive GWG. Few studies included mothers age <17 years or multifetal pregnancies.

Significance

This work will serve as a valuable guide for future researchers, policy makers, and program managers studying gestational weight gain, particularly in relation to vulnerable and understudied subgroups, in order to develop programs and policy to better address unmet needs.