Society of Behavioral Medicine position statement: early care and education (ECE) policies can impact obesity prevention among preschool-aged children

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ABSTRACT

The Society of Behavioral Medicine (SBM) urges policymakers to help prevent childhood obesity by improving state regulations for early care and education (ECE) settings related to child nutrition, physical activity, and screen time. More than three quarters of preschool-aged children in the USA attend ECE settings, and many spend up to 40 h per week under ECE care. ECE settings provide meals and snacks, as well as opportunities for increasing daily physical activity and reducing sedentary screen time. However, many states' current policies do not adequately address these important elements of obesity prevention. A growing number of cities and states, child health organizations, medical and early childhood associations, and academic researchers are beginning to identify specific elements of policy and regulations that could transform ECE settings into environments that contribute to obesity prevention. Let's Move! Child Care recommends a set of straightforward regulations addressing nutrition, physical activity, and screen time in ECE settings. These emerging models provide local and state leaders with concrete steps to implement obesity prevention initiatives. We provide a set of recommendations based upon these models that will help state and local policymakers to improve current policies in ECE settings.

KEYWORDS

Early care and education, Child care, Obesity, Prevention, Health Policy

INTRODUCTION

In the USA, approximately 76 % of children ages 3–5 years attend early care and education (ECE) [1]. ECE settings include preschools, child care centers, day care homes/family homes, Head Start, and pre-kindergarten programs. Children of working parents spend nearly 40 h per week in ECE [1]. ECE settings typically provide 1–2 meals and snacks on average per day [2] and also provide opportunities to be physically active and reduce overall screen time. Given that nearly 23 % of American children ages 2–5 years are overweight or obese [3], ECE settings represent an

Implications

Practice: Administrators and providers at early care and education settings should strive to meet recommended guidelines set forth by Let's Move! Child Care for diet, physical activity, and screen time during ECE hours.

Policy: Policymakers should improve state regulations for ECE settings con align with Let's Move! Child Care recommendations and should use available tools for assessing areas for change and regulation of policy implementation.

Research: Continued research is needed to identify which ECE settings are meeting standards for diet, physical activity, and screen time and to further evaluate the longitudinal health benefits for children who attend ECE settings that comply with national recommendations.

important opportunity for reducing and preventing obesity among young children. Policies and regulations regarding nutrition, physical activity, and screen time in ECE can help to ensure that children meet recommended guidelines. However, many states' current policies do not adequately address obesity prevention. Ensuring that ECE settings provide healthy food and regular, structured physical activity can help establish long-term healthy habits among young children [4, 5].

THE PROBLEMS

Nutrition

Proper nutrition in early childhood helps to prevent obesity and promote healthy growth. ECE settings typically provide children with 1–2 meals per day and snacks. The Child and Adult Care Food Program (CACFP) is a federal nutrition assistance program that provides reimbursement to ECEs for purchasing

nutritious foods [6]. Both federally funded and private facilities serving low-income families can participate in CACFP. ECE settings participating in CACFP are only reimbursed for food items that comply with CACFP nutrition guidelines. These guidelines require the provision of fruits and/or vegetables, grains/breads, and meats/meat alternatives in age-appropriate portion sizes. Additional requirements include the following: milk must be low fat, fruit or vegetable juice must be 100 % juice with no added sugar, and bread must be made from whole grain or enriched meal or flour: http://www.fns.usda.gov/sites/default/files/Child_Meals.pdf. Children attending ECE settings that comply with CACFP consume more nutritious diets than those who do not [7–9].

Unfortunately, there are many ECE settings that do not participate in CACFP and are not required to follow CACFP guidelines. Additionally, monitoring of compliance with the guidelines varies significantly by state [4, 10]. Further, ECE settings participating in CACFP are allowed to provide foods that do not comply with guidelines as long as they are not seeking reimbursement for those foods. In 2012, The American Academy of Pediatrics (AAP), American Public Health Association, and National Resource Center for Health and Safety in Child Care and Early Education collaborated to develop guidelines to address obesity prevention in child care settings [11]. In their report titled *Caring for Our Children* (CFOC), they recommend that all ECE settings, regardless of funding source, provide preschool-aged children with foods and beverages that comply with CACFP standards.

Physical activity

Physical activity improves overall health and prevents obesity, in addition to promoting the development of motor skills among young children [12]. The National Association for Sport and Physical Education recommends that preschool children engage in at least 60 min of structured physical activity and 60 min of unstructured physical activity daily [13]. CFOC recommends that 3- to 6-year olds be allowed 90–120 min of overall physical activity per 8-h day [11]. Activity levels of children attending ECE settings, however, are generally below these guidelines [14–16]. Regulations for physical activity in ECE settings vary across states. On average, state ECE regulations only include one third of the 17 physical activity standards recommended by CFOC [17]. Larson and colleagues note that barriers to regular physical activity in ECE settings include inadequate outdoor play space, sedentary staff who do not promote physical activity, and withholding physical activity time as punishment [4].

Screen time

The American Academy of Pediatrics discourages screen time (TV, computer, video games, cell phone, etc.) for children under 2 years [18]. The AAP recommends that children older than 2 years limit their screen time to less than 2 h per day [18]. CFOC

recommends that ECE settings limit screen time to 30 min per week during child care hours [11]. Among children aged 2–5, screen time can interfere with physical activity time [19], which may contribute to weight gain. Television viewing, in particular, can expose children to advertisements that promote unhealthy foods, and research shows that such ads influence children's food preferences [8, 20]. Removing or limiting screen time may not in and of itself decrease sedentary behavior [21, 22]. Thus, exposure to food marketing may be a more important rationale for limiting specific types of screen-based activity than the sedentary nature of screen time in child care in general. The National Association for the Education of Young Children advises that quality technology and screen time can enhance learning and relationships, though they should not replace exploration, physical activity, creative play, or social interactions [23]. Therefore, specific types of screen time may be more desirable than limiting all screen time in general. Similar to regulations for nutrition and physical activity, the amount of screen time provided by ECE settings is poorly monitored in most states.

Let's Move! Child Care: strategies for change

ECE interventions to improve nutrition, physical activity, and limit screen time are a key component of Michelle Obama's Let's Move! obesity prevention initiative. Specifically, the Let's Move! Child Care goals related to preschool children are the following: (1) serve fruits and vegetables at every meal, eat meals family style when possible, and avoid serving fried foods; (2) provide 1–2 h of physical activity throughout the day; (3) limit screen time to no more than 30 min per week during child care hours; and (4) provide water and avoid sugary drinks.

Let's Move! Child Care (<http://www.healthykidshealthyfuture.org/home/collaborate.html>) also includes a 5-step process for state and local leaders to help them to implement strategies for obesity prevention in ECE settings. Figure 1 depicts the spectrum of opportunities, or obesity prevention approaches, that leaders can use to address obesity across states and types of ECE settings. It is not necessary to pursue all of the opportunities to promote change, but it is suggested that multiple coordinated opportunities be pursued to improve ECE standards for diet, physical activity, and screen time [10, 23]. The spectrum can serve as a guide to help leaders implement obesity prevention efforts in ECE settings:

1. Assess partnerships: Change requires the support of multiple stakeholders. Most states have ongoing obesity prevention initiatives already in place, so it is important to identify existing and potential stakeholders. Stakeholders may include state and local health departments, child care agencies, CACFP sponsoring organizations, ECE providers, and parents of children in care.

2. Assess efforts to date: Identify previous or current prevention efforts and assess them.
3. Create a state profile: Use the state profile worksheet to determine how your state is doing in terms of meeting the CFOC guidelines.
4. Determine feasibility of options: Identify the gaps in policies and programs and decide which gaps should be addressed first based on resources, priorities in your state, and timing.
5. Develop an action plan: Plan for first and next steps including timelines for completion of each step.

Let's Move! Child Care includes worksheets and relevant resources for each step:

<http://www.healthykidshealthyfuture.org/home/collaborate.html>

SUMMARY AND RECOMMENDATIONS

Childhood obesity is a significant public health concern. Most children in the USA spend between 30–40 h a week in child care settings, most of which are regulated to some degree by the state governments in terms of nutrition, physical activity, and screen time. Most children do not meet recommended guidelines in any of these areas associated with obesity, and the degree to which states monitor compliance varies. Stronger state regulations based on CFOC recommendations and enforcement of these regulations may reduce rates of childhood obesity. A growing number of cities and states, child health organizations, medical and early childhood associations, and academic researchers are beginning to identify specific elements of policy and regulations that could transform ECE settings into environments that contribute to obesity prevention. Let's Move! Child Care recommends a set of straightforward regulations addressing nutrition,

physical activity, and screen time in ECE settings. These emerging models provide local and state leaders with concrete steps to implement obesity prevention initiatives. We provide a set of recommendations based upon these models that will help state and local policymakers to improve current policies and implement obesity prevention initiatives in ECE settings. We recommend that policymakers refer to the Let's Move! Child Care steps to assess current state policies in ECE settings and to identify areas for improvement using the spectrum of opportunities for change (Fig. 1).

Based on CFOC, CACFP, and Let's Move! Child Care recommendations for nutrition, physical activity, and screen time, SBM recommends that policymakers consider the following regulations for ECE settings:

- Nutrition
  1. Provide healthy foods in age-appropriate portions during meals and snacks (see CACFP, CFOC, and Let's Move! guidelines)
- Physical activity and sedentary screen time
  2. Increase of physical activity during child care hours help children to obtain as close to 120 min per day as possible
  3. Decrease sedentary behavior to no more than 30 min at a time
  4. Decrease entertainment screen time in child care to less than 30 min weekly
- Eliminate children's exposure to food and beverage marketing in child care settings
- Educate child care providers about how unhealthy foods and beverages are marketed through screen time (television, computer,

Fig 1 | Spectrum of opportunities

educational media with food and beverage industry sponsors)

We also recommend that local and state officials monitor adherence to these regulations using the Let's Move! Child Care or other more comprehensive assessment tools [24].

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